



PERFORMANCE

VEHICLES • PARTS • RACING

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Supersedes All Previous Catalogs

2013 CATALOG

Camaro Parts for **STREET, STRIP & TRACK!**



CAMARO
TAKES TO THE TRACK WITH
1LE AND ZL1 KITS

See page 16

COPO CAMARO
RETURNS TO NHRA!

Find out how you can build your own on page 48

COPO



PERFORMANCE

Welcome to the 2013 Chevrolet Performance Catalog

Chevrolet Performance is based on a tradition of excellence in **performance vehicles, parts & motorsports**. Thanks to hard work from our motorsports teams, the amazing dedication of our vehicle development groups, and the passion of our Chevrolet fans, we are coming off of one of the most successful years in our 101-year history.

It takes an incredible effort from hundreds of men and women to win in NASCAR, IndyCar, NHRA, and ALMS. This same commitment goes into every award-winning Chevrolet vehicle that we bring to market, and our engineers apply the latest technologies in the automotive industry to their respective programs. That same great engineering goes into every high-performance part that you'll find in the catalog that you hold in your hands right now. We call it "technology transfer"; and it guarantees that you are getting the most value for your high-performance dollar, while enjoying the same testing, validation, and quality control that our vehicles receive.

For 2013, Chevrolet Performance engineers have been hard at work developing a new line of Camaro parts specific for the latest generation Camaro. These parts will allow you to bring your V-8 or V-6 Camaro up to the standards of the 1LE or ZL1. But, there's so much more going on at Chevrolet Performance! Here's a hint at just some of the new products available in 2013:

NEW CAMARO PARTS

COPO Camaro Parts: 2012 marked the historic return of the COPO Camaro to the Chevrolet lineup. And, for 2013, Chevrolet Performance is making many of the COPO Camaro parts available to you. Crate engines, engine parts, the COPO hood, graphics packages, rims, and more are now available.

ZL1 Camaro Parts: You can now buy the same heavy-duty drivetrain/rear end, shifter, and massive Brembo brakes that are used on the ZL1 Camaro for installation in your Camaro.

1LE Camaro Parts: The SCCA-certified 1LE road race suspension is now available for your Camaro as a parts kit.

NEW HIGH-PERFORMANCE ENGINES & POWERTRAIN

Connect & Cruise Crate Powertrain System: It's an LS engine, transmission, electronics and harnesses in one package. This year, the Crate Powertrain System expands to include the affordable 5.3L LS engine.

E-ROD: Emissions compliance and horsepower can live together! Our E-ROD line of crate engines ranges from 350 to 556 horsepower with CARB certification.

LSX: The LSX crate engine portfolio continues to grow. This year, the LSX376 has been re-imagined with 1,000 hp capabilities.

Supporting Parts: SuperMatic torque converters, LS9 engine harness and controller, engine components and more are waiting to help you round out your shopping list for the perfect powertrain project.

EXPANDED CUSTOMER SERVICE

Dealer Network: With over 3,000 Chevrolet Dealers standing by to help you find the right high performance car or high performance part, you can be confident that we've got you covered.

Stay Connected: FaceBook, Twitter, Instagram, YouTube, Pinterest ... We're there!

FUEL: Our monthly email newsletter is jammed with facts, tips, and insider information that every Chevrolet Performance enthusiast will want. Sign up for FUEL at ChevroletPerformance.com.

theBlock.com: Want daily news on all things Chevrolet and the world of high performance parts? Check out theBlock.com. You'll find an entire community of like-minded Chevrolet Performance fans waiting to share their experiences with you.

Thank you for considering genuine Chevrolet Performance parts for your project vehicle, and thank you for being a member of our team. You have helped Chevrolet be a dominant force on the street, strip, and track for over 100 years.

Every effort is made to make this catalog comprehensive and factual. We reserve the right, however, to make changes at any time, without notice, to materials, equipment, specifications, and availability. Specifications, dimensions, measurements, ratings, and other numbers are based upon design and engineering information, prototypes and laboratory tests. Since some information may have been updated since the time of printing, please check with your dealer for complete details.

The parts listed in this catalog are intended primarily for use in race or "off-highway" vehicles only. Federal law restricts the removal, modification or knowingly making inoperative of any part or element of design installed in compliance with an applicable Federal Motor Vehicle Safety Standard or any part of federally required emission control systems on a motor vehicle used on public roads. Further, many states have enacted laws with various penalties for tampering with, or otherwise modifying any required emission or noise control system. Parts which have been granted an exemption by the California Air Resources Board (CARB) are noted as such.

Unless specifically noted to the contrary herein, vehicles equipped with Chevrolet Performance Parts may not meet Federal Motor Vehicle Safety Standards and emissions regulations and should not be operated on public roads. Chevrolet Performance customers are responsible for ensuring their use of Chevrolet Performance Parts complies with applicable federal, state and local laws, regulations and ordinances.

Many parts intended for racing or other "off-highway" use are not designed or tested for crashworthiness or to meet the safety needs of the motoring public, and may adversely affect the original intended performance or handling characteristics of the vehicle. These parts are designed and intended to be used with experts supervising their installation and use, to help assure the proper and safe operation of the vehicle.

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BUILD YOUR OWN COPO

with help from Chevrolet Performance!

Thousands of racers raised their hands last year for the 69 COPO Camaro produced by Chevrolet – and more have expressed interest for the next batch of factory-built drag racers. Unfortunately, production can't meet the demand, but Chevrolet Performance is helping racers build their own COPO Camaros with the core components used in the production models.

It all starts with one of our Camaro bodies-in-white – the same as the production COPO cars. They make great starting points. To make things even easier, Chevrolet Performance will be offering a limited supply of body-in-white rolling chassis; details coming soon. Sign up for the COPO mailing list at chevroletperformance.com to get updates. After that, select one of the three COPO Camaro crate engines – including a naturally aspirated 427 and two supercharged 327 options – to power your self-assembled COPO.

Chevrolet Performance also offers several specialty components used on the production COPO Camaros, including the unique composite hood and provisions for mounting a solid rear axle. We are compiling a comprehensive list of other official COPO Camaro components available from the manufacturers who supplied them for the production cars, as well. Many of these will be sold under license from Chevrolet, which will be listed in the COPO "build book." This detailed "assembly" manual will be available in December.

See the special COPO section starting on page 48 for a complete look at all the parts offered from Chevrolet Performance. Details on the COPO crate engines begin on page 50. **And for the latest news on the COPO Program and new parts, as well as to express your interest in buying a 2013 COPO, sign up for the COPO mailing list at chevroletperformance.com.**



17802825 – COPO 427 CID



17802827 – COPO 327 CID



2012 Production COPO Camaro

COPO MAILING LIST IS THE DIRECT LINE FROM THE CENTRAL OFFICE

After a successful launch that saw the construction of 69 all-new COPO Camaro race cars for 2012, the Central Office at Chevrolet isn't backing off the throttle. The COPO Program heads into the 2013 season with a green light to building a 2013 edition race car.

The best way to stay on top of all the news and updates for the COPO Program is by enrolling in the COPO mailing list at chevroletperformance.com. It's also the best way to raise your hand and indicate your interest about any future product plans. Thousands of inquiries were submitted for the 69 cars built in 2012, so it's important for the Central Office to know your interest as soon as possible.

Things move quickly at the Central Office – as quickly as a COPO Camaro on the drag strip – and you don't want to miss a single update. Sign up at chevroletperformance.com and stay on top of it all!



17802826 – COPO 327 CID

NEW ZL1 AND 1LE PARTS FOR CAMARO SS



19299460 – ZL1 Short-Throw Shifter Kit

Chevrolet Performance is proud to offer new Camaro performance parts from the production Camaro ZL1 and 1LE models, giving 2010 and up Camaro owners the opportunity to upgrade their car with the brakes, suspension and other components that make these purposeful performance models so effective on the street and track.

From the ZL1 comes **huge stopping power** with production-based kits, including racing-style front two-piece, 14.6-inch front rotors and six-piston Brembo calipers with aluminum housings and rear 14-inch rotors paired with four-piston aluminum calipers – all with the ZL1 logo. Also available is the **complete ZL1 rear driveline system**, which includes a larger, stronger 9.9-inch cast iron differential housing, stronger axles, heavy-duty limited-slip differential and more. And for those using the LSA supercharger or LSA crate engine to build a supercharged Gen 5 Camaro, we now offer the **ZL1 supercharger**, which features front water inlet/outlet provisions for greater firewall clearance. It also looks bad in black, with an aggressive ribbed appearance.

Additional ZL1 parts include its **short-throw shifter** and low-restriction air filter element – both of which are direct replacements in a Camaro SS.

From the production Camaro **1LE performance package**, Chevrolet Performance offers a **complete track pack kit**, including larger-diameter stabilizer bars and more. We even have the 1LE's chassis-stiffening strut tower brace. Additional components include the unique **3.91-ratio rear gear** and unique PCV valve that ensures oil separation and drain-back during high-load cornering. These parts helped the production Camaro SS with the 1LE package circle Virginia International Raceway in less than three minutes.

No matter if you're building for the street, road course or drag strip, Chevrolet Performance is your first source for high-performance parts for the fifth-generation Camaro!



ZL1 HD Driveline Kit

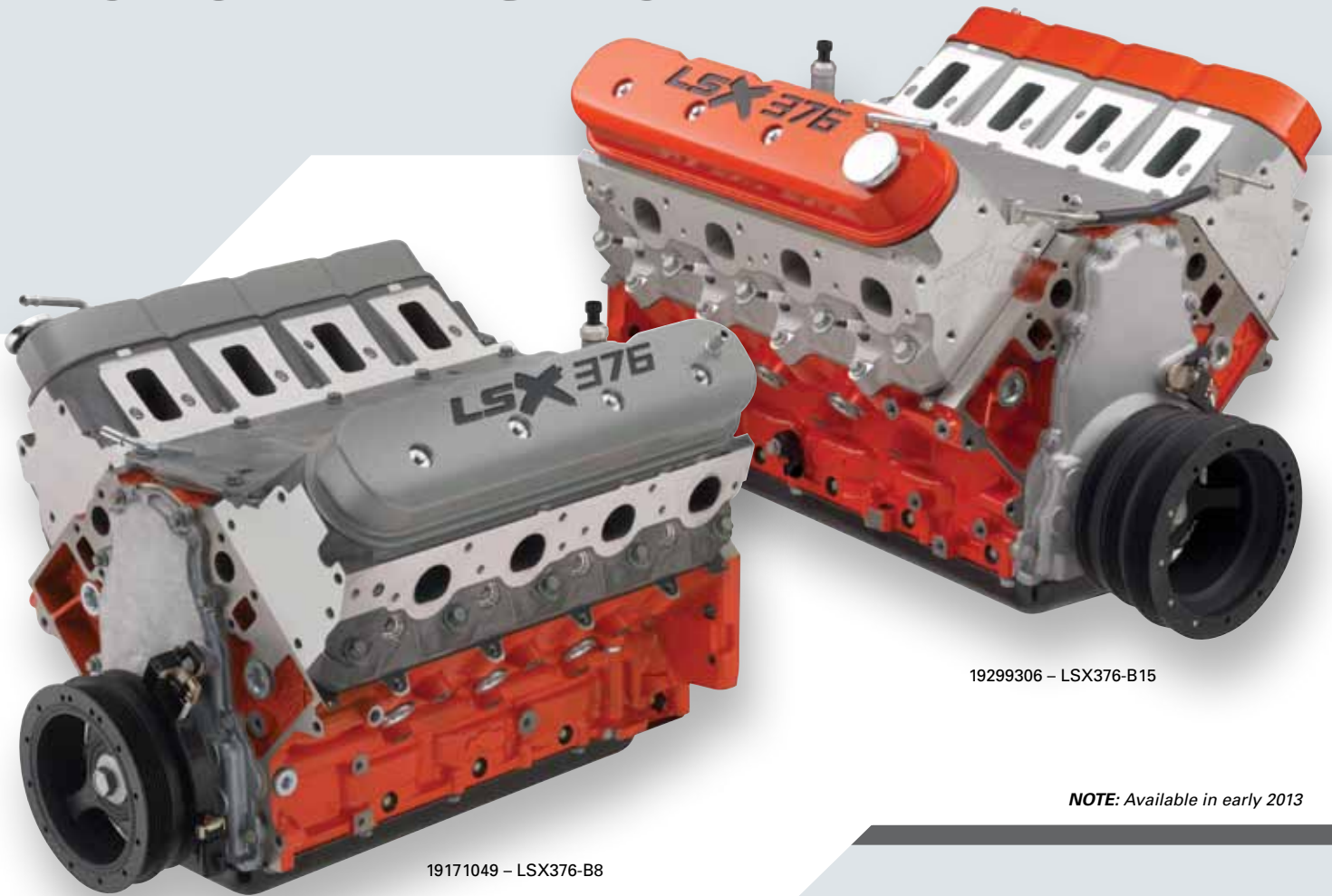


ZL1 HD Brake Conversion Kits



1LE Camaro Track Pack

Chevrolet Performance's **NEW BOOST-READY** LSX CRATE ENGINES



19171049 – LSX376-B8

19299306 – LSX376-B15

NOTE: Available in early 2013

If you're building an engine for supercharger or turbocharged horsepower, start with one of Chevrolet Performance's new boost-ready LSX376-B8 or LSX376-B15 crate engines – and yes, "B" is for boost! Each is designed with strong internal parts that hold up to the pressure of forced induction.

The new LSX376-B8 – part number 19171049 – is our most affordable boost-capable crate engine and is rated for engines producing up to 8 pounds of boost. It uses the robust LSX Bowtie standard-deck block, adds blower-friendly 9.0:1 forged pistons and combines them with the LS3's high-flow, rectangular-port heads to create an affordable

foundation for supercharged and turbocharged combinations. For engines producing up to 15 pounds of boost, there's the LSX376-B15 – part number 19299306 – which builds on LSX376-B8's foundation with an all-forged rotating assembly and incorporates the LSX-LS3 cylinder heads with additional 6-bolt-per-cylinder clamping force.

No matter which engine you select, you'll have the strong foundation necessary to support your force-fed engine project, with the durability to make it last. See page 140 for more details on the LSX376-B8 and page 142 for the LSX376-B15.



CARB CERTIFIES E-ROD LSA ENGINE **FOR PRE-OBD-II VEHICLES!**

19257456 – Automatic Transmission
 19257460 – Manual Transmission

California Air Resources Board (CARB) has issued an Executive Order (EO) for Chevrolet Performance's E-ROD LSA supercharged crate engine package. This enables enthusiasts to install the engine kit in 1995-and-earlier cars and trucks that predate OBD II on-board emissions diagnostics. That's more than 20 million vehicles in California alone!

The E-ROD LSA is rated at 556 horsepower and 551 lb.-ft. of torque. It is the same basic power plant that comes in the award-winning Cadillac CTS-V and is the basis for the Camaro ZL1 powertrain. The engine features a unique aluminum cylinder block casting that houses a forged steel crankshaft and integrated piston-cooling oil jets, along with high-flow cylinder heads that support the airflow enabled by a 1.9L supercharger with four-lobe, high-twist rotors. The E-ROD LSA comes fully dressed, from the top of the charge-cooled supercharger assembly to the ignition system.

Executive Order D-126-33 for the E-ROD LSA is the third in the E-ROD lineup to be cleared for use in California. Both manual

and automatic versions of the E-ROD LSA – part numbers 19257460 and 19257456, respectively – are covered by the order. All E-ROD systems include complete emissions equipment, such as catalytic converters and a fuel tank evaporative emissions canister, along with an engine control module calibrated for a balance of performance and efficiency.

The engine control module included with each E-ROD crate engine system is designed for true stand-alone performance in older vehicles. All that's needed to get a vehicle running with the engine controller are power and ground sources, a high-pressure fuel pump and an electric cooling fan. Chevrolet Performance also offers a guide for installing an LS-family engine in an older vehicle. It is available under part number 88959384.

See page 110 for more details on the E-ROD systems and the different crate engine kits.



NEW LS9 CRATE ENGINE CONTROLLER

With Chevrolet Performance's new controller kit for the supercharged LS9 crate engine – part number 19299462 – you can install the uncompromising powerhouse in your project car and get it running without the need for third-party calibration. Of course, the LS9 is the same 638-hp supercharged masterpiece that comes standard in the 205-mph Corvette ZR1. Engine features including titanium valvetrain components, efficient "TVS" four-lobe supercharger and integrated intercooler make it world-class execution of high-performance engineering.

All of Chevrolet Performance's controller kits are based on production-style systems, but with several features that are required only for late-model production vehicles "turned off". That means an easier installation and no trouble codes.

The kit includes the controller, oxygen sensors and mounting bosses, a mass airflow meter and mounting boss, a throttle pedal assembly for the engine's electronic throttle, and more. See page 293 for more details.



NEW 5.3L POWERTRAIN JOINS GROUNDBREAKING CONNECT & CRUISE LINEUP

Last year, Chevrolet Performance took the crate engine concept to new heights, with the innovative Connect & Cruise powertrain systems – factory-engineered and all-inclusive engine and transmission kits that included the necessary controllers and other components. For 2013, we've added the new Connect & Cruise 5.3L/4L65-E.

The new Connect & Cruise 5.3L/4L65-E kit – part number CPSLC94L65E – is our most affordable system. The 5.3L engine shares the same displacement as the original 327-cubic-inch small-block of the 1960s, making it a great choice for those who want a 21st-century edition of the 327 for a resto-mod vintage vehicle. It is rated at 326 horsepower and because the 5.3L engine was originally engineered for truck applications, it offers a broad, flat torque curve that's ideal for giving older trucks and full-size hot rods an excellent feeling of low-end performance.

Other Connect & Cruise systems include the Corvette-derived 430-hp LS3 paired with a 4L65-E four-speed transmission – part number CPSLS34L65E – or the 556-hp supercharged LSA engine, which is matched with the 4L85-E transmission – part number CPSLSA4L85E.



CPSLC94L65E –
Connect & Cruise
5.3L/4L65-E Kit

CONNECT & CRUISE CRATE POWERTRAIN REBATES AVAILABLE IN 2013!

All of the Connect & Cruise Crate Powertrain Systems by Chevrolet Performance are eligible for generous factory rebates in 2013. This consumer-direct rebate makes a great package an even better deal! The consumer simply purchases one of several complete Connect and Cruise systems from a GM Dealer, or from a performance retailer; fills out the rebate form, and mails it in, along with a copy of the purchase invoice or repair order. If you are replacing or upgrading

your performance car powertrain, the Connect & Cruise Powertrain System is the smart way to go! (See page 114 for qualifying Connect & Cruise Powertrain Systems)

Check with your Chevrolet Performance Dealer or performance retailer for details, or go to chevroletperformance.com for more information.

NEW



SUPERMATIC TORQUE CONVERTERS DELIVER TAILORED PERFORMANCE

No two project vehicles are alike and Chevrolet Performance helps ensure optimal performance of your powertrain system with new torque converters. They're designed for GM's 4L60- and 4L80-series automatic transmissions, including Chevrolet Performance SuperMatic transmissions. Two versions are offered for each transmission family, each tailored to match the power outputs of the variety of Small-Block, Big-Block and LS crate engines from Chevrolet Performance. See page 184 for more details on each of them, along with the specifications that will allow you to pick the converter that's just right for your application – and match the converter with one of our SuperMatic transmissions for durable, factory-engineered performance that will have you cruising in no time!

5.3L HIGH-OUTPUT CAM KIT ADDS 25 MORE HORSEPOWER!



88958775 – High-Output Camshaft Kit

The 5.3L engine used in Chevy and GMC trucks and SUVs is an economical and popular swap for older vehicles. Developed as a truck engine, it was designed with a broad torque band that's great for low-rpm grunt, but Chevrolet Performance's engineers have developed a new high-output camshaft kit – part number 88958775 – that extends the 5.3L's performance range with more high-rpm horsepower – up to 25 more horsepower! You get the same great torque, but with more of the high-revving

horsepower you want from a performance engine. The kit includes the new, higher-lift camshaft and a complementing set of valve springs. It makes a great upgrade for retro-fit installations, including our own, economically priced LC9 5.3L crate engine – part number 19256513 – or an upgrade to your existing late-model truck equipped with a 5.3L engine.

NOTE: Available in early 2013

ADD 40 HP TO THE LS3 WITH OUR NEW LS3 HEAD & LS7 CAM KIT

Chevrolet Performance has engineered a new cylinder head and camshaft package for LS3-powered Camaros and Corvettes that pumps up the engine output an additional 40 horsepower! That's a 9% gain over stock! We've done that with our CNC –ported LS3 cylinder head that flows more than 350cfm (intake side), with 276cc intake runners and 2.165"/.6590" valves. The high-lift LS7 camshaft makes the most of the heads' generous airflow attributes, with .558"/.558" lift and 211 degree/230 degree duration at .050" and a 121 degree lobe separation angle. And more than just a bolt-on (tuning required) for Camaros and Corvettes, this high-power kit fits other LS-family engines with at least 4.000" bores. See page 21 for more details.

NOTE: Available in early 2013

19300535 – LS3 Head & LS7 Cam Kit



CHEVY SONIC B-SPEC CONCEPT

Demonstrates a Fun, Affordable Approach to Racing

Acclaimed for its balanced handling and sporty driving experience, the Chevy Sonic has been transformed by Chevrolet Performance for the track as a B-Spec race car concept. Developed to demonstrate the car's capabilities in the increasingly popular B-Spec subcompact classes in SCCA and Grand Am series, it conforms to their showroom-stock guidelines, with modifications limited to safety features and chassis/suspension enhancements designed for the rigors of racing.

Like the other vehicles in B-Spec classes, the Sonic race car concept's 1.8L engine remains unchanged from its factory specifications, although an air restrictor is employed to equalize its output with other competitors.

Chevrolet Performance has developed a B-Spec components kit for Sonic racers. It includes the suspension and other parts required to transform a production Sonic into a competitive race car. Safety features, such as the roll cage, safety seat, window net and racing harnesses, would be sourced separately by the builder.



The components kit includes:

- Front strut coil-over assemblies and mounts
- Adjustable front stabilizer bar links
- Inlet air restrictor
- Rear shock coil-over assemblies and mounts
- Rear axle shim kit
- Recalibrated ECM and EBCM

The Sonic B-Spec competition kit is anticipated to be ready for sale in the first quarter of 2013. Check with your Chevrolet Performance Dealer or retailer for price and availability. You can also get the latest product updates at chevroletperformance.com – or even better, go to the Web site and sign up for FUEL, our free monthly performance e-newsletter, for all the latest and greatest from Chevrolet Performance!



THE MARK OF FACTORY-ENGINEERED PERFORMANCE!

Be on the lookout for this under-hood badge – the official mark of Chevrolet Performance. It can be found in the engine bay of the high performance vehicles specifically prepared by Chevrolet Performance engineers. You'll see the Bowtie Performance badge on current special performance vehicles like the 580-horsepower ZL1 Camaro and the limited production COPO Camaro drag race car. Tested on race tracks around the world, with

technology derived from IndyCar, NASCAR, and NHRA competition, this Chevrolet Performance badge tells you that only the best has gone into the vehicle that bears it. It's also your guarantee that the legacy of Chevrolet Performance flows from our professional racing efforts to the high-performance street car and high-performance parts that you can buy at any Chevrolet Performance Dealer.



FULL-SCALE HOT WHEELS CAMARO CONCEPT IS 1:1 FUN!



One of the most valuable Hot Wheels cars is the original Custom Camaro from 1968. It was part of the iconic toy line's original series and helped establish Hot Wheels' high-performance attitude. Forty-five years later, the spirit of the Custom Camaro is recreated in this full scale – and fully amazing – concept vehicle from Chevrolet. Designers from the Hot Wheels and Camaro studios collaborated on the design, which captures the original toy's distinctive cues, including a “dual-dome” hood, “zoomie-pipes” side-exit exhaust outlets, blacked-out taillight panel, bright five-spoke 18-inch “mag” wheels, featuring a bold red line and a Kinetic Blue paint scheme.


This cool-blue concept also has a green streak. It's powered by Chevrolet Performance's emissions-compliant E-ROD LS3 engine, which is rated at 430 horsepower.

Although this full-scale collectible is only a concept, Chevrolet is offering a Hot Wheels package for production Camaros in 2013. It includes five-spoke wheels, Hot Wheels identification and other special cues.

The Hot Wheels Camaro concept debuted at the 2012 SEMA Show and will be on tour throughout 2013 at races, car shows and cruises, collector car auctions and other large automotive events.

More information about the 2012 SEMA Show and the Hot Wheels production model are available on [THE BLOCK.com](http://THEBLOCK.com) – the Chevrolet Performance-powered social media site for car enthusiasts.



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Learn about new Chevrolet Performance products before they show up in next year's catalog. Sign up for the FUEL eNewsletter and get the latest news, learn about the biggest events, and hear from the most prominent names in the Chevrolet Performance universe. All delivered right to your inbox every month.

SUBSCRIBE AT CHEVROLETPERFORMANCE.COM.

SEE YOU ON THE BLOCK

Powered by  PERFORMANCE

Are you on The BLOCK? It's a new online community powered by Chevrolet Performance that blends online "bench racing" with interactive features of enthusiasts' vehicles and projects, along with insider info on new parts, the latest Chevrolet factory-performance models, as well as Chevrolet racing activities, to create a performance-oriented social community like no other.

The BLOCK is also the first source for information on the latest new parts and accessories, as well as the bulletin board for all things related to Chevrolet racing – from the wheels-up action of the LSX Challenge Series and the fender-rubbing rivalries in NASCAR, to the dirt-slinging scrums in circle track.

When you sign up at theblock.com, a unique, easy-to-use QR code is assigned specifically to your profile. It's designed to be placed in the window of your vehicle, allowing other enthusiasts to scan it and instantly call up the profile and details about the car – including a restoration history, racing sponsorship details, car-show awards and even videos linked on the profile.

The BLOCK also offers members a platform to reach a broader audience of enthusiasts, enabling greater visibility for their vehicle ahead of a classic car auction or to help promote a club's upcoming car show. The platform even affords greater



exposure for racing sponsors – more so than narrower regional or single-vehicle forums. And speaking of forums, members can request to start a forum for specific vehicles or topics, further broadening the scope and reach of The BLOCK.

**The BLOCK has it all except one thing – YOU!
SIGN UP TODAY.**



CHEVROLET PERFORMANCE



CAMARO CORVETTE SILVERADO SONIC



BUILD YOUR NEW CHEVY YOUR WAY, WITH FACTORY-ENGINEERED PARTS AND ACCESSORIES FROM CHEVROLET PERFORMANCE!

Whether you've just purchased your first Chevy or your fortieth, personalization and performance are as much a part of the ownership experience as the Bowtie in the grille.

Chevrolet Performance is your first choice when it comes to taking your new Chevrolet to the next level, whether you're driving a new Camaro or Sonic – or Corvette, Silverado or Suburban. We are the source for factory-engineered performance parts and appearance accessories.

Available through your Chevy Dealer and other authorized retailers, Chevrolet Performance parts and accessories are

designed and validated to the same standards as regular-production parts – and they're engineered to deliver the best performance in the industry. We back them with a worry-free warranty, too, so you can be confident about your investment.

Go to chevroletperformance.com for the latest lineup of performance parts and accessories – and don't forget to log on to THEBLOCK.com, so you'll always know when the latest parts are introduced.

Enjoy your new Chevy – and make it absolutely yours with Chevrolet Performance!



Camaro Performance Upgrades



Camaro 1LE 3.91 Gear Kit **NEW** 22813040

This lower (higher numerically) ratio rear drive gear will increase effective rear wheel torque multiplication in 2010 - 2013 SS Camaros by 13% (over standard 3.45 ratio) in a manual transmission-equipped car, and 20% (over standard 3.27) in an automatic-equipped car. This gearset is the original equipment ratio found in the 1LE 2013 Camaro package.

NOTE: This change will affect the indicated vehicle speed. Recalibration is required for accurate speedometer reading.

The kit includes:

PART NUMBER	DETAIL	QTY
14012691	Spacer-diff DRV P/GR BRG	1
92230391	Nut-diff DVR P/GR	1
12479028	Bolt/Screw-diff R/GR	10
22813041	Gear Set-diff ring & DVR Pinion	1

Camaro 1LE PCV System **NEW** 23102311

Crankcase ventilation system designed for the track-oriented Camaro 1LE package, designed for excellent oil separation and crankcase return during high-performance driving and high-load cornering. Simple catch-can-type design screws into oil-fill port in the rocker cover of V-8 and V-6 models.





Camaro 1LE Track Pack **NEW** 231023311

Give your 2010+ Camaro SS or Camaro V6 greater capability in curves with the same suspension components used in the production 1LE performance package. Contents include a larger, 27-mm solid front stabilizer bar, and 28-mm solid rear stabilizer bar for improved body control, as well as ZL1 wheel bearings, toe links and rear shock mounts for improved on-track performance.

Match these components with the 1LE 3.91 rear axle gear (p/n 22813040) and PCV system (p/n 23102311) for the ultimate in Camaro bolt-on handling performance. NOTE: Production Camaro SS models with the 1LE package use ZL1-based 20 x 10-inch front and 20 x 10-inch rear aluminum wheels, with 285/35ZR20 Goodyear Eagle Supercar G:2 tires front and rear.

The system includes:

PART NUMBER	DETAIL	QTY
22812942	Front Stab Bar Asm (bar, links, bushing, clamp, nut)	1
22786260	Rear Stab Bar Asm (bar, bushing, clamp, bolt)	1
22761221	Rear Stab Bar Link	1
22812982	Front Strut Asm, LH (strut, spring, mount)	1
22812983	Front Strut Asm, RH (strut, spring, mount)	2
22981391	Rear Shock	4
22922445	Rear Shock Mount, LH	4
22922446	Rear Shock Mount, RH	4
22845487	Rear Toe Link	4
20941932	Rear Cradle Bushing, Front	4
20941933	Rear Cradle Bushing, Rear	4
23102312	Installation Instructions	4

Camaro 1LE Strut Tower Brace **NEW** 22756880

Standard on the Camaro 1LE, this lightweight, aluminum underhood tower-to-tower brace enhances chassis stiffness, contributing to a firmer feel behind the wheel and more-direct steering response. It is a direct bolt-on for 2011+ Camaro SS and V-6 models. Kit includes the brace and installation hardware.



NEW BIG BRAKES for Camaro V6 & SS

Camaro ZL1 Brembo Front Brake Kit **NEW** 22959672

Upgrade the front brakes on your 2010-and-later Camaro SS or V-6 model with the larger brakes from the supercharged Camaro ZL1 – including racing-style two-piece, 14.6-inch front rotors and six-piston Brembo aluminum calipers, in red with the ZL1 logo. That compares with the 12.6-inch rotors/single-piston calipers on V-6 models and 14-inch rotors/four-piston calipers on SS models.

The ZL1 two-piece rotors offer greater resistance to warping and potentially longer rotor life, as well as reduced weight. The design features a separate cast iron rotor brake ring mounted to an aluminum "hat" that attaches the brake assembly to the wheel hub. The hat and brake ring cool at different rates, which helps the rotor dissipate heat more effectively. This racing-style disc design enhances braking performance under track operating conditions. Kit includes two rotors, two calipers and mounting hardware.

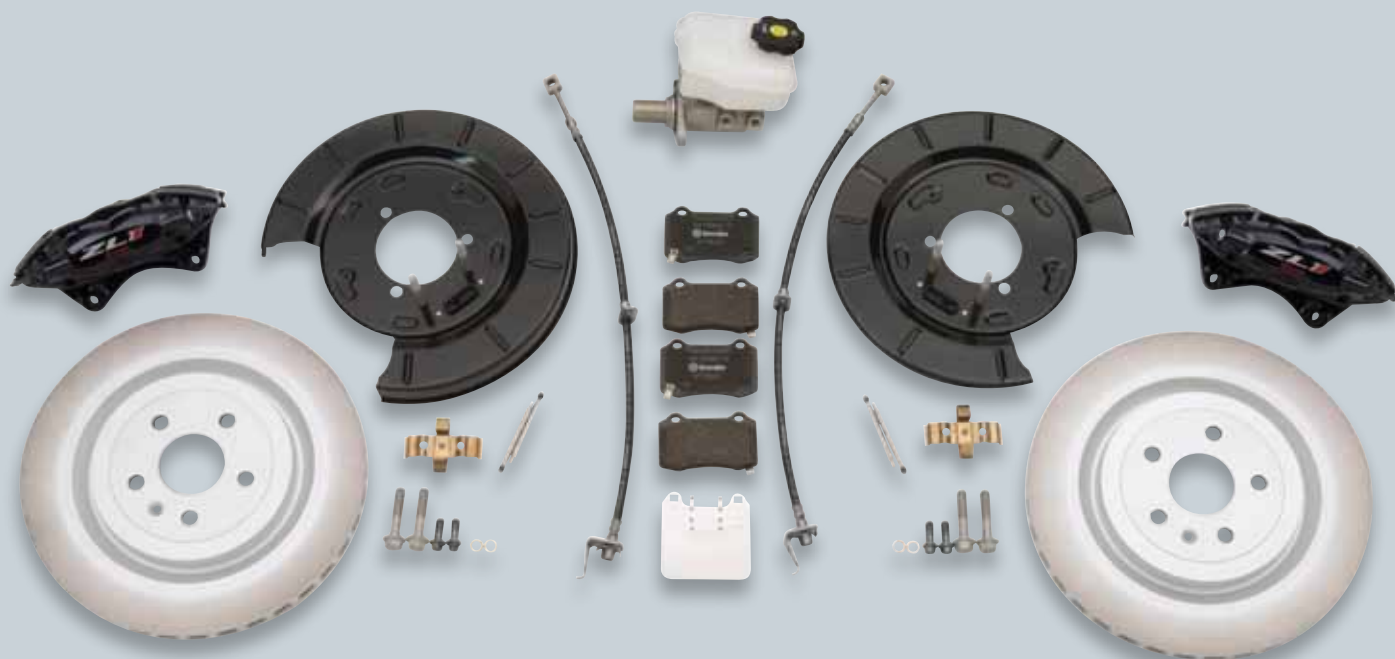
NOTE: Requires 20" wheels for caliper clearance.



The system includes:

PART NUMBER	DETAIL	QTY
22960684	Front Installation Sheet	1
20795300	ZL1 Front LH Rotor	1
20944529	ZL1 SPO Front LH Caliper	1
20944530	ZL1 SPO Front RH Caliper	1
25940448	SPO Front Caliper Pin Kit	1
25940447	SPO Front Service Pad Kit	2
20944523	ZL1 Front LH Hose	1
20944532	ZL1 Front LH Shield	1
20795302	ZL1 Front RH Rotor	1
20944522	ZL1 Front RH Hose	1
20944531	ZL1 Front RH Shield	1
11570788	Caliper to Knuckle Bolts	4
11569590	Front & Rear Hose Bolts	2
21012386	Front & Rear Hose Washers	4
22942442	Chevrolet Perf. Badge	1





Camaro ZL1 Brembo Rear Brake Kit **NEW** 22989384

Complement the ZL1 front brake upgrade on your 2010+ Camaro V-6 or add ZL1 style to your Camaro SS. The kit includes 14.4-inch rotors and four-piston aluminum rear calipers, in red with the ZL1 logo. Factory Camaro V-6 models come with 12.4-inch rotors and single-piston calipers. Camaro SS models feature the same 14.4-inch rotors and similar four-piston aluminum calipers, but without the ZL1 logo. Kit includes two rotors, two calipers and mounting hardware.

NOTE: Requires 20" wheels for caliper clearance.

The system includes:

PART NUMBER	DETAIL	QTY
22989385	V6 Rear Installation Sheet	1
11515781	Rear Caliper to Knuckle Bolts	4
92245929	Rear Rotor	2
20944518	ZL1 SPO Rear RH Caliper	1
20944519	ZL1 SPO Rear LH Caliper	1
89047744	SPO Rear Pad Kit	1
89047728	SPO Rear Caliper Pin Kit	2
92227529	ZL1 Rear LH Shield	1
92229716	ZL1 Rear RH & LH Hose	2
92227530	ZL1 Rear RH Shield	1
21012386	Front & Rear Hose Washers	4
22788972	V8 Master Cylinder	1
11569590	Front & Rear Hose Bolts	2

SS V8 Camaro ZL1 Rear Conversion Kit **NEW** 23104466 (not shown)

Make your SS rear brakes match the looks of your front ZL1 conversion. Includes "ZL1" calipers and pads, hardware and instruction sheet.

The system includes:

PART NUMBER	DETAIL	QTY
—	V8SS Rear Installation Sheet	0
20944518	ZL1 SPO Rear LH Caliper	1
20944519	ZL1 SPO Rear RH Caliper	1
89047744	SPO Rear Pad Kit	1
89047728	SPO Rear Caliper Pin Kit	2
21012386	Front & Rear Hose Washers	4



Camaro ZL1 HD Driveline Kit – Manual Transmission NEW 22959394

If you're building an ultimate-performance 2010-and-later Camaro, Chevrolet Performance's Camaro ZL1 Driveline Kit delivers the strength required to put big power to the pavement. This kit features the specialty components from the production Camaro ZL1, including a larger, stronger 9.9-inch cast iron differential housing, stronger axles and heavy-duty limited-slip differential. This patent-pending system is designed to ensure that ZL1's tremendous power is delivered smoothly to the ground. A rear-differential cooler is incorporated and reduces temperatures in the differential by more than 100° F (fluid lines must be installed). Asymmetrical halfshafts – a 60mm hollow shaft on the right and a 33mm solid shaft on the left – offer different torsional stiffness rates, which work with the limited-slip differential to minimize the chance of wheel hop on hard launches. Also included is a stronger ZL1 prop shaft.

The system includes:

PART NUMBER	DETAIL	QTY
20931145	Propshaft	1
20931133	RDM	1
22960153	RDM Plug/cap	2
22863142	LH Halfshaft	1
22863143	RH Halfshaft	1
22960154	Trans Flange	1
89059464	Trans Flange Nut	2
89059465	Trans Flange Washer	1
22960155	I-Sheet	1
11611234	Driveshaft Nut	1
11611965	Driveshaft Washer	2
11611335	Prop to Trans Bolt	3
11611336	Prop to Trans Nut	3
11515758	Prop to Frame Bolt	2
11516878	RDM to Cradle Bolt	3
11516078	RDM to Cradle Nut	3

Camaro ZL1 HD Driveline Kit – Automatic Transmission NEW 22959395 (not shown)

All the performance advantages of kit #22959394 described above, but for vehicles equipped with an automatic transmission.

The system includes:

PART NUMBER	DETAIL	QTY
22960156	Propshaft	1
20931134	RDM	1
22960153	RDM Plug/Cap	2
22863142	LH Halfshaft	1
22863143	RH Halfshaft	1
24256909	Trans Flange	1
24256278	Trans Flange Nut	1-
22960155	I-Sheet	1
11611234	Driveshaft Nut	2
11611965	Driveshaft Washer	2
11611335	Prop to Trans Bolt	3
11611365	Prop to Trans Nut	3
11611336	Prop to RDM Bolt	3
11515758	Prop to Frame Bolt	2
11516878	RDM to Cradle Bolt	3
11516078	RDM to Cradle Nut	3

Camaro ZL1 Short-Throw Shifter Kit NEW 19299460

Get quicker, more precise shifts in your manual-transmission Camaro SS with Chevrolet Performance's Camaro ZL1 shifter kit. This is the same shifter used in the production ZL1, which delivers shorter shifts than the shifter in the SS. The kit includes the shifter, installation hardware and a sueded microfiber shift knob with contrast stitching.



LS3 High-Performance Heads-and-Cam Kit* NEW
19300535

Increase the power of the LS3 engine in your Corvette or Camaro SS by 40 hp with Chevrolet Performance's high-performance heads-and-cam kit. Developed by Chevrolet Performance engineers as a direct replacement for the factory-installed heads and camshaft (tuning required), the kit includes our CNC-ported LS3 cylinder heads, which flow more than 350 cfm (intake side), with 276cc intake runners and 2.165"/1.590" valves. The high-lift LS7 camshaft makes the most of the heads' generous airflow attributes, holding the big valves open so the engine can process more air. This kit fits other LS-family engines with at least 4.000" bores. Contents include the camshaft and fully assembled cylinder heads. Head gaskets and cylinder head bolts must be purchased separately.



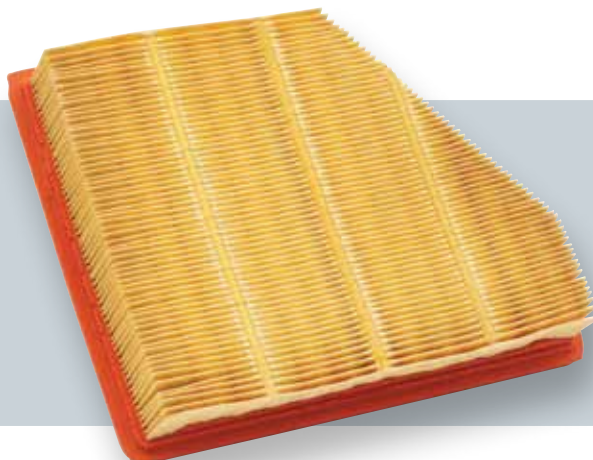
LS3 CNC-Ported Cylinder Head*
88958758

It flows nearly 10-percent more than the stock cylinder head to promote greater power across the rpm band.



ZL1 Low-Restriction Air Filter NEW
9222965

The 580-horsepower supercharged LSA engine in the Camaro ZL1 draws air through a special, low-restriction air filter element. It is a direct replacement for the air filter element in 2010+ Camaro SS models.



ZL1 Fuel Pump
19258436

The high-capacity fuel pump module from the 2012 Camaro ZL1 drops right into 2010+ Camaro fuel tanks and supports about 600 hp.



**The use of this engine or component in a new Chevrolet vehicle voids the vehicle powertrain warranty and may result in adversely affecting vehicle performance. In some cases, use of certain Performance components may result in the failure of other components or systems, thus voiding the warranty of the failed component or system. Chevrolet Performance components installed in new vehicles do retain their regular warranty coverage unless otherwise noted.*

These engines and components have not been tested or validated by GM Engineering for use in these vehicles. Installation of components or engines in non-original applications may require fabrication or modifications that affect other vehicle systems. Certain engines may require modifications to the vehicle for fit and operation.

The installation and operation of these components or replacement engines in new vehicles is intended for off-road operation only.



CAMARO EXTERIOR

A. Convertible Top Products Tonneau Cover

When the convertible top is down, this Tonneau Cover provides a finished look to Camaro's sculpted rear shoulders.

PART NUMBER	YEAR	DETAIL
20967601	2011-2012	Convertible Top Products Tonneau Cover
22792013	2011-2012	Convertible Top Products Tonneau Cover
22804475	2011-2012	Convertible Top Products Tonneau Cover
22872149	2011-2013	Convertible Top Products Tonneau Cover

B. Decal/Stripe Package – Fender Hash Marks

Add Fender Hash Marks to the front fenders of your Camaro to accentuate the vehicle's powerful style lines.

PART NUMBER	YEAR	DETAIL
22798334	2012-2013	Stripe Package - Victory Red
22798335	2012-2013	Stripe Package - Satin Black
22798337	2012-2013	Stripe Package - Orange
22798338	2012-2013	Stripe Package - White Pearl
22798339	2012-2013	Stripe Package - Cyber Grey
22798340	2012-2013	Stripe Package - Light Silver

C. Decal/Stripe Package - Gill Stripes

Add Gill Stripes to the rear quarter side vents of your Camaro to accentuate the vehicle's powerful style lines.

PART NUMBER	YEAR	DETAIL
20972524	2011-2013	Stripe Package - Black

D. Decal/Stripe Package – Heritage Stripes

Give your Camaro a classic look with these Heritage Stripes. Available in a variety of colors.

PART NUMBER	YEAR	DETAIL
20968499	2010-2013	Stripe Package - White
20968500	2010-2013	Stripe Package - Black
20990192	2010-2013	Stripe Package - Silver
20990193	2010-2013	Stripe Package - Gray
20990194	2010-2013	Stripe Package - Red
20990195	2010-2013	Stripe Package - Orange

E. Decal/Stripe Package - Hockey Stick Stripes

This Hockey Stick Stripe Kit gives your Camaro a classic look and contemporary style. Available in Black, Cyber Gray and White.

PART NUMBER	YEAR	DETAIL
22768986	2011-2013	Stripe Package - Cyber Gray
22768987	2011-2013	Stripe Package - Black
22768988	2011-2013	Stripe Package - White
92227577	2010-2010	Stripe Package - Black
92227579	2010-2010	Stripe Package - Cyber Gray
92227581	2010-2010	Stripe Package - White



A Tonneau Cover



B Fender Hash Marks



C Gill Stripes



D Heritage Stripes



E Hockey Stick Stripes

F. Decal/Stripe Package - Hood and Hockey Stick

Give your Camaro that classic look with contemporary style with this Hood and Hockey Stick Stripe Kit. Available in Black, Cyber Gray and White.

PART NUMBER	YEAR	DETAIL
92248297	2010-2013	Stripe Package - White, For Use on Coupe Models
92248300	2010-2013	Stripe Package - Cyber Gray, For Use on Coupe Models
92248303	2010-2013	Stripe Package - Black, For Use on Coupe Models

G. Decal/Stripe Package - Nose and Spear Stripes

Give your Camaro a sporty look with this Nose and Spear Stripe package. Available in Black, Orange, Silver and Gray.

PART NUMBER	YEAR	DETAIL
22844274	2011-2013	Stripe Package - White, For Use on Base Models
22844275	2012-2013	Stripe Package - Black, For Use on Base Models
22844276	2012-2013	Stripe Package - Gray, For Use on Base Models
22844277	2012-2013	Stripe Package - Orange, For Use on Base Models
22844278	2012-2013	Stripe Package - Red, For Use on Base Models
22844279	2012-2013	Stripe Package - Silver, For Use on Base Models
22844281	2012-2013	Stripe Package - White, For Use on SS Models
22844282	2012-2013	Stripe Package - Black, For Use on SS Models
22844283	2012-2013	Stripe Package - Gray, For Use on SS Models
22844284	2012-2013	Stripe Package - Orange, For Use on SS Models
22844285	2012-2013	Stripe Package - Red, For Use on SS Models
22844286	2012-2013	Stripe Package - Silver, For Use on SS Models

H. Decal/Stripe Package - Rally Stripes

Give your Camaro a classic appearance with these Rally Stripes. Available in several colors.

PART NUMBER	YEAR	DETAIL
22774078	2011-2013	Stripe Package - Orange, For Use on Convertible Models with T43 Spoiler
22774079	2011-2013	Stripe Package - Black, For Use on Convertible Models with T43 Spoiler
22774080	2011-2013	Stripe Package - White, For Use on Convertible Models with T43 Spoiler
22774081	2011-2013	Stripe Package - Gray, For Use on Convertible Models with T43 Spoiler
22774082	2011-2013	Stripe Package - Silver, For Use on Convertible Models with T43 Spoiler
92225513	2010-2013	Stripe Package - Black, For Use on Coupe Models
92225515	2010-2013	Stripe Package - Orange, For Use on Coupe Models
92225517	2010-2013	Stripe Package - Silver, For Use on Coupe Models
92225519	2010-2013	Stripe Package - Gray, For Use on Coupe Models
92225521	2010-2013	Stripe Package - White, For Use on Coupe Models



F Hood and Hockey Stick Stripes



G Nose and Spear Stripes



H Rally Stripes

Camaro Exterior Continued

A. Decal/Stripe Package Synergy Stripes

Give your Camaro a classic appearance with these Synergy Stripes. Available in several colors.

PART NUMBER	YEAR	DETAIL
20968494	2011-2013	Stripe Package - White, For Use on Convertible Models
20968495	2010-2013	Stripe Package - White, For Use on Coupe Models
20968496	2011-2013	Stripe Package - Black, For Use on Convertible Models
20968497	2010-2013	Stripe Package - Black, For Use on Coupe Models
20990181	2011-2013	Stripe Package - Silver, For Use on Convertible Models
20990182	2011-2011	Stripe Package - Gray, For Use on Convertible Models
20990183	2011-2013	Stripe Package - Red, For Use on Convertible Models
20990185	2011-2013	Stripe Package - Orange, For Use on Convertible Models
20990187	2010-2012	Stripe Package - Silver, For Use on Coupe Models
20990188	2010-2011	Stripe Package - Gray, For Use on Coupe Models
20990189	2010-2013	Stripe Package - Red, For Use on Coupe Models
20990190	2010-2013	Stripe Package - Orange, For Use on Coupe Models
22828302	2012-2013	Stripe Package - Gray, For Use on Convertible Models
22828303	2012-2013	Stripe Package - Gray, For Use on Coupe Models
22828304	2013-2013	Stripe Package - Blue, For Use on Convertible Models
22828305	2013-2013	Stripe Package - Blue, For Use on Coupe Models

B. Fuel Door

Personalize the exterior of your Camaro with this attractive Satin Nickel Fuel Door. Features the Camaro logo.

PART NUMBER	YEAR	DETAIL
92212671	2010-2013	Satin Nickel

C. Grille - Upper

Go for the ultimate in customization with this sporty Upper Grille Insert in Carbon Flash Surround (GAR). Designed for perfect fit and easy installation, it replaces the existing grille on your Camaro.

PART NUMBER	YEAR	DETAIL
20999484	2011-2013	Inferno Orange Surround (GCR) - With Bowtie Emblem
20999485	2011-2013	Rally Yellow Surround (GCO) - With Bowtie Emblem
20999486	2011-2013	Victory Red Surround (GCN) - With Bowtie Emblem
20999487	2011-2012	Cyber Gray Surround (GBV) - With Bowtie Emblem
20999488	2011-2013	Black Surround (GBA) - With Bowtie Emblem
20999489	2011-2013	Summit White Surround (GAZ) - With Bowtie Emblem
20999490	2011-2011	Red Jewel Surround (GAQ) - With Bowtie Emblem
20999491	2011-2012	Imperial Blue Surround (GAP) - With Bowtie Emblem
20999492	2011-2013	Silver Ice Surround (GAN) - With Bowtie Emblem
22755094	2012-2013	Crystal Red Surround (GBE)
22755095	2012-2012	Carbon Flash Surround (GAR)
22828288	2013-2013	Blue Surround (GXH)
22828289	2012-2013	Ashen Gray Surround (GLJ)
92208704	2010-2013	Black with Dark Argent Surround - No Bowtie Emblem



A Synergy Stripes



B Fuel Door



C Grille-Upper

D. Ground Effects

This Ground Effects package creates a dramatic, ground-hugging look for your Camaro. Package includes a front splitter, side rockers, and a rear diffuser with chrome exhaust bezels. Available in Dark Argent Gray and select body colors. Not compatible with Quarter Flares/Splash Guards.

PART NUMBER	YEAR	DETAIL
22745042	2011-2011	Red Jewel (GAQ) - For Use on SS Model Vehicles
22745043	2011-2012	Imperial Blue (GAP) - For Use on SS Model Vehicles
22745044	2012-2012	Carbon Flash (GAR) - For Use on SS Model Vehicles
22745045	2011-2013	Inferno Orange (GCR) - For Use on SS Model Vehicles
22745046	2012-2013	Crystal Red (GBE) - For Use on SS Model Vehicles
22745047	2011-2013	Silver Ice (GAN) - For Use on SS Model Vehicles
22745048	2011-2011	Cyber Gray (GBV) - For Use on SS Model Vehicles
22745049	2011-2013	Black (GBA) - For Use on SS Model Vehicles
22745050	2011-2013	Summit White (GAZ) - For Use on SS Model Vehicles
22745051	2011-2013	Victory Red (GCN) - For Use on SS Model Vehicles
22745052	2011-2013	Rally Yellow (GCO) - For Use on SS Model Vehicles
22745167	2011-2011	Red Jewel (GAQ) - For Use on Base Model Vehicles
22745168	2011-2012	Imperial Blue (GAP) - For Use on Base Model Vehicles
22745169	2012-2012	Carbon Flash (GAR) - For Use on Base Model Vehicles
22745170	2011-2013	Inferno Orange (GCR) - For Use on Base Model Vehicles
22745171	2012-2013	Crystal Red (GBE) - For Use on Base Model Vehicles
22745172	2011-2013	Silver Ice (GAN) - For Use on Base Model Vehicles
22745173	2011-2011	Cyber Gray (GBV) - For Use on Base Model Vehicles
22745174	2011-2013	Black (GBA) - For Use on Base Model Vehicles
22745175	2011-2013	Summit White (GAZ) - For Use on Base Model Vehicles
22745176	2011-2013	Victory Red (GCN) - For Use on Base Model Vehicles
22745177	2011-2013	Rally Yellow (GCO) - For Use on Base Model Vehicles
22781380	2010-2013	Argent - For Use on SS Model Vehicles
22781381	2010-2013	Argent - For Use on Base Model Vehicles
22828284	2013-2013	Blue Ray (GXH) - For Use on SS Model Vehicles
22828285	2013-2013	Blue Ray (GXH) - For Use on Base Model Vehicles
22828286	2012-2013	Ashen Gray (GLJ) - For Use on SS Model Vehicles
22828287	2012-2013	Ashen Gray (GLJ) - For Use on Base Model Vehicles
22901447	2013-2013	Blue (GHF) - For Use on SS Model Vehicles
22901448	2013-2013	Blue (GHF) - For Use on LT Model Vehicles
92207441	2010-2010	For Use on Base Model Vehicles
92208008	2010-2010	For Use on SS Model Vehicles

E. Splash Guards Front and Rear Molded

These Front and Rear Quarter Flares are not your typical molded splash guards. Designed specifically for your Camaro, they add the look of ground-huggin' muscle while helping to protect your vehicle from mud, dirt, snow, salt and gravel. Available in select body colors.

PART NUMBER	YEAR	DETAIL
22794779	2011-2012	Front and Rear Quarter Flares, Not For Use with Ground Effects - Imperial Blue (GAP)
22794780	2012-2012	Front and Rear Quarter Flares, Not For Use with Ground Effects - Carbon Flash
22794781	2012-2013	Front and Rear, Crystal Red
22809726	2011-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Summit White (GAZ)
22901416	2013-2013	Blue (GHF)
22909306	2012-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Ashen Gray (GLJ)
92214927	2010-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Victory Red (GCN)
92214928	2010-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Inferno Orange (GCR)
92214929	2010-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Rally Yellow (GCO)
92214930	2010-2011	Front and Rear Quarter Flares, Not For Use with Ground Effects - Red Jewel (GAQ)
92214931	2010-2013	Front and Rear Quarter Flares, Not For Use with Ground Effects - Black (GBA)
92229701	2010-2011	Front and Rear Quarter Flares, Not For Use with Ground Effects - Cyber Gray (GBV)
92229704	2010-2012	Front and Rear Quarter Flares, Not For Use with Ground Effects - Silver (GAN) Spoiler Kit



D Ground Effects



E Splash Guards

Camaro Exterior Continued

A Vehicle Cover

Protect your pride and joy with a fitted, indoor or outdoor Vehicle Cover. Our covers are custom-contoured to fit your Camaro's curves like a glove.

PART NUMBER	YEAR	DETAIL
20960814	2010-2013	Indoor - Black with Camaro Logo
20960815	2011-2013	Indoor - Silver with Camaro Logo
20960816	2011-2013	Indoor - Red with Camaro Logo
22863449	2012-2013	Indoor - Black with ZL1 Logo
22863451	2012-2013	Outdoor - Red with ZL1 Logo
22863452	2012-2013	Outdoor - Gray with ZL1 Logo
22863454	2013-2013	Outdoor - Red with ZL1 Logo
22863455	2013-2013	Outdoor - Gray with ZL1 Logo
92215993	2010-2013	Outdoor - Red with Black Stripes, Camaro Logo - Coupe
92215994	2010-2013	Outdoor - Gray with Black Stripes, Camaro Logo - Coupe
92223303	2011-2013	Outdoor - Red with Black Stripes, Camaro Logo - Convertible
92223304	2011-2013	Outdoor - Gray with Black Stripes, Camaro Logo - Convertible



A Vehicle Cover

B. Windscreen

Minimize air turbulence in the passenger compartment of your Camaro when you have the top down.

PART NUMBER	YEAR	DETAIL
92219688	2011-2013	Windscreen



B Windscreen

C. Spoiler Kit

Personalize the look of your Camaro with a custom race-inspired Spoiler. Available in two distinct styles and select body colors. For Blade Spoiler, a replacement emblem is not included in kit and must be purchased separately. The High Wing Spoiler should only be installed on Camaro Coupes without a factory spoiler. The mounting holes for the High Wing Spoiler are completely different than the factory spoiler.

PART NUMBER	YEAR	DETAIL
20970397 *	2010-2013	High Wing, Paint to Match
20979729 *	2010-2013	High Wing, Black (GBA)
20979730 *	2010-2013	High Wing, Victory Red (GCN)
20979732 *	2010-2011	High Wing, Cyber Gray (GBV)
20979733 *	2010-2013	High Wing, Silver Ice (GAN)
20979734 *	2010-2013	High Wing, Inferno Orange (GCR)
20979735 *	2010-2013	High Wing, Rally Yellow (GCO)
20979736 *	2010-2013	High Wing, Summit White (GAZ)
22737409 *	2011-2013	Blade, Summit White (GAZ)
22737410 *	2011-2012	Blade, Imperial Blue (GAP)
22738911 *	2012-2013	High Wing, Crystal Red (GBE)
22738912 *	2012-2012	High Wing, Carbon Flash (GAR)
22738913 *	2012-2013	Blade, Crystal Red (GBE)
22738914 *	2012-2012	Blade, Carbon Flash (GAR)
22819094 *	2011-2012	High Wing, Imperial Blue (GAP) Shown: Carbon Flash (GAR)
22828266 *	2013-2013	Blade, Blue (GXH)
22828267 *	2012-2013	High Wing, Ashen Gray (GLJ)
22828268 *	2012-2013	Blade Wing, Ashen Gray (GLJ)
22828269 *	2013-2013	High Wing, Blue Ray (GXH) Shown: Carbon Flash (GAR)
22901454 *	2013-2013	High Wing, Blue (GHF)
22901455 *	2013-2013	Blade, Blue (GHF)
92228473	2011-2013	Spoiler Decklid Emblem, RS Logo, Red
92228474	2011-2013	Spoiler Decklid Emblem, SS Logo, White
92228475	2011-2013	Spoiler Decklid Emblem, SS Logo, Red
92234281 *	2011-2013	Blade, Victory Red (GCN)
92234283 *	2011-2013	Blade, Black (GBA)
92234287 *	2011-2011	Blade, Cyber Gray (GBV)
92234289 *	2011-2013	Blade, Silver Ice (GAN)
92234291 *	2011-2013	Blade, Inferno Orange (GCR)
92234293 *	2012-2013	Blade, Rally Yellow (GCO)

* Not for use on convertible models



C Spoiler Kit - High Wing, Victory Red



C Spoiler Kit - Blade, Ashen Gray

CAMARO INTERIOR

D. Auxiliary Gauge Pack

Keeps tabs on vital vehicle functions with this Auxiliary Gauge Package. Includes Oil Pressure, Battery Volt, Oil Temperature, and Transmission Fluid Temperature gauges.

PART NUMBER	YEAR	DETAIL
22901397	2012-2012	V6 (LFX) with 6-Speed Manual Transmission (MV5) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)
22901399	2012-2012	V8 (LS3) with 6-Speed Manual Transmission (M10) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)
22901401	2012-2012	6-Speed Automatic Transmission (MYB or MYC) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)
92247187	2010-2011	V6 (LLT) with 6-Speed Manual Transmission (MV5) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)
92247188	2010-2011	V8 (LS3) with 6-Speed Manual Transmission (M10) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)
92247189	2010-2011	6-Speed Automatic Transmission (MYB, MYC) - Not For Use with Factory Multifunction Aux Gauge (UMQ), or KPH Speedometer (U19)

E. Door Sill Plates

Accent and help protect the entry area of your Camaro with these Door Sill Plates.

PART NUMBER	YEAR	DETAIL
92223800	2010-2013	Door Sill Plates - Front Set, Chevrolet Script Logo - Bright and Black



D Auxiliary Gauge Pack



E Door Sill Plates

CAMARO PERFORMANCE

A. Engine Cover

Give your Camaro's V-6 or V-8 engine a stylish, show-quality upgrade with this engine cover. They are available to match most exterior colors, allowing you to complement or contrast the color choices to suit your style. (V-6 engine cover shown.)

PART NUMBER	YEAR	DETAIL
12643075	2012-2013	V6 (LFX) - Crystal Red (GBE)
12643076	2012-2012	V6 (LFX) - Carbon Flash (GAR)
12643077	2012-2013	V8 (LS3 and L99) - Crystal Red (GBE)
12643078	2012-2012	V8 (LS3 and L99) - Carbon Flash (GAR)
12654765	2013-2013	V6 (LFX) - Blue Ray (GXH)
12654766	2013-2013	V8 (LS3 and L99) - Blue Ray (GXH)
92219186	2010-2013	V6 (LFX) - Black (GBA)
92219188	2010-2013	V6 (LFX) - Rally Yellow (GCO)
92219192	2010-2013	V6 (LFX) - Inferno Orange (GCR)
92219193	2010-2011	V6 (LFX) - Red Jewel (GAQ)
92219194	2010-2013	V6 (LFX) - Victory Red (GCN)
92247654	2010-2013	V8 (LS3 and L99) - Victory Red (GCN)
92247656	2010-2013	V8 (LS3 and L99) - Black (GBA)
92247663	2010-2013	V8 (LS3 and L99) - Rally Yellow (GCO)
92247664	2010-2013	V8 (LS3 and L99) - Inferno Orange (GCR)
92247671	2010-2011	V8 (LS3 and L99) - Red Jewel (GAQ)



A Engine Cover

B. Performance Exhaust Upgrade Package

Upgrade the look and sound of your Camaro's exhaust system with one of our tuned, emissions-legal bolt-on exhaust kits. They deliver a great performance sound and reduced restriction, which promotes increased power - especially when combined with other performance parts.

PART NUMBER	YEAR	DETAIL
92206990	2010-2013	V6 (LLT, LFX) Exhaust Upgrade Kit, Round Tip - For Use on Vehicles without Ground Effects
92206992	2010-2013	V8 (LS3) Exhaust Upgrade Kit, Round Tip - For Use on Vehicles without Ground Effects
92225672	2010-2013	V8 (LS3) Exhaust Upgrade Kit, No Tip - For Use on Vehicles WITH Ground Effects
92225673	2010-2013	V6 (LLT, LFX) Exhaust Upgrade Kit, No Tip - For Use on Vehicles WITH Ground Effects
92231570	2010-2013	V8 (LS3) Track Pack, For Off-Road Use Only, Round Tip - For Use on Vehicles without Ground Effects



B Exhaust Upgrade Package

CAMARO WHEELS

C. Wheels

Personalize your Camaro with these attractive 20 and 21-inch split-five-spoke Accessory Wheels, validated to GM specifications. Use only GM-approved wheel and tire combinations.

PART NUMBER	YEAR	DETAIL
19257813	2010-2013	21-inch Wheels - EA576 - 21 Inch x 8.5 Inch Front Wheel - Cast Aluminum, Polished
19257815	2010-2013	21-inch Wheels - EA573 - 21 Inch x 9.5 Inch Rear Wheel - Cast Aluminum, Polished
19257817	2011-2013	21-inch Wheel - EA575 - 21 Inch x 8.5 Inch Front Wheel - Medium Gray Metallic Painted with Machine Face
19257819	2011-2013	21-inch Wheel - EA572 - 21 Inch x 9.5 Inch Rear Wheel - Medium Gray Metallic Painted with Machine Face
19257821	2011-2013	21-inch Wheel - EA170 - 21 Inch x 8.5 Inch Front Wheel - Painted Blade Silver with Polished Spokes and Flange
19257823	2011-2013	21-inch Wheel - EA171 - 21 Inch x 9.5 Inch Rear Wheel - Painted Blade Silver with Polished Spokes and Flange
19257894	2011-2013	21-inch Wheel - EA172 - 21 Inch x 8.5 Inch Front Wheel - Red Flange Stripe with Black Spokes
19257896	2011-2013	21-inch Wheel - EA173 - 21 Inch x 9.5 Inch Rear Wheel - Red Flange Stripe with Black Spokes
19258029	2011-2013	21-inch Wheel - EA287 - 21 Inch x 8.5 Inch Front Wheel - Painted Silver Spokes with Red Flange
19258031	2011-2013	21-inch Wheel - EA288 - 21 Inch x 9.5 Inch Rear Wheel - Painted Silver Spokes with Red Flange
19260585	2013-2013	20-inch Wheel - EA585 - 20 Inch x 8 Inch Front Wheel - Multi-Spoke Chrome
19260586	2013-2013	21-inch Wheel - EA586 - 21 Inch x 8.5 Inch Front Wheel - 21-Inch x 9.5 Inch Rear Wheel - Multi-Spoke Painted Silver
92229349	2010-2013	21-Inch x 8.5 Inch Wheel - EA279 - Black Painted/Polished Rim Flange - 4 Pack
92229351	2010-2013	21-Inch x 8.5 Inch Wheel - EA280 Polished Spokes and Rim Flange w/Black Accents - 4 Pack
92229353	2010-2013	21-Inch x 9.5 Inch Wheel - EA281 - Black Painted/Polished Rim Flange - 4 Pack
92229355	2010-2013	21-inch x 9.5 Inch Wheel - EA282 Polished Spokes and Rim Flange w/Black Accents - 4 Pack



C 21-inch Split-Five-Spoke Silver Painted and Polished Wheel



C 21-inch Five-Spoke Polished Wheel



C 21-inch Five-Spoke Black Painted Polished Wheel



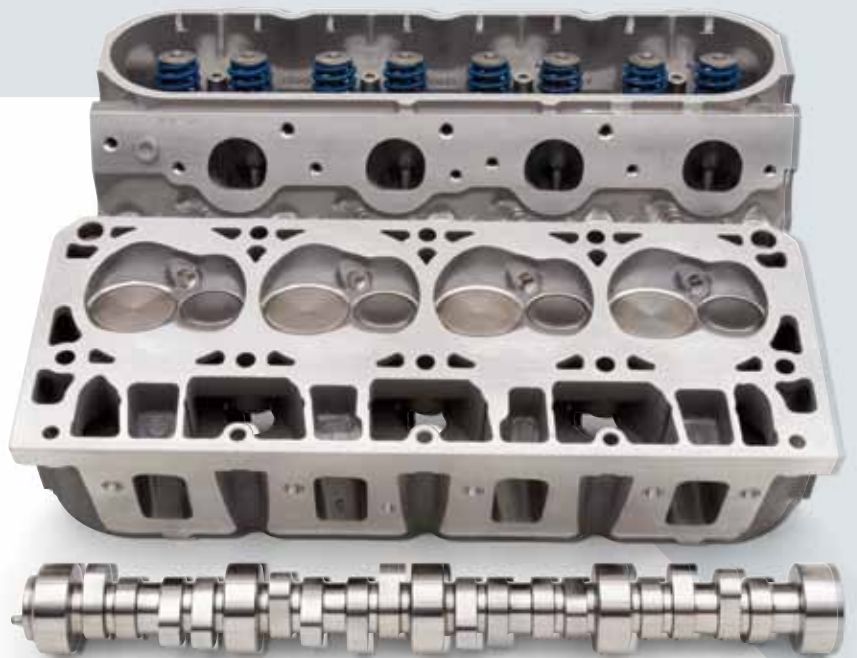
C 21-inch Five-Spoke Polished Wheel with Black Accents

Corvette Performance Upgrades



**LS3
High-Performance Heads-and-Cam Kit*
19300535 NEW**

Increase the power of the LS3 engine in your Corvette to 470+ hp and 440 lb.-ft. of torque with Chevrolet Performance's high-performance heads-and-cam kit. Developed by Chevrolet Performance engineers as a direct replacement for the factory-installed heads and camshaft (tuning required), with 276 cc intake runners and 2.165"/1.2590" valves. The high-lift camshaft makes the most of the heads' generous airflow attributes, with .591"/.591" lift and 211°/230° duration @.05" and a 121° lobe separation angle. This kit fits other LS-family engines with at least 4" bores. Contents include the camshaft and fully assembled cylinder heads. Head gaskets and cylinder head bolts must be purchased separately.





Engine Cover Badge 19154724

This underhood accessory celebrates the connection between the high-tech LS7 engine and the classic big block Corvettes of the past. The 427 Engine Cover Badge is designed to mount over the 7.0 Liter text on the stock engine cover without drilling.

Engine Performance Date Plate 19154739

Showcase your engine performance with this Performance Data Plate. It includes displacement, horsepower, torque and compression ratio. Easily attaches to the radiator support underneath the hood.

CHEVROLET PERFORMANCE

LS Polished Aluminum Valve Covers - Black* 19156428 (not shown)

Show off your Corvette's engine with distinctive, engraved valve covers that are available with a variety of logos – and even polished.

LS Polished Aluminum Valve Covers - Red* 19156429

Show off your Corvette's engine with distinctive, engraved valve covers that are available with a variety of logos – and even polished.



Engine Cover 19159030

Carry your sense for detail right under the hood with this alternate finish Engine Cover. Available in various finishes. Not for use on Corvette Z06.

**The use of this engine or component in a new Chevrolet vehicle voids the vehicle powertrain warranty and may result in adversely affecting vehicle performance. In some cases, use of certain Performance components may result in the failure of other components or systems, thus voiding the warranty of the failed component or system. Chevrolet Performance components installed in new vehicles do retain their regular warranty coverage unless otherwise noted.*

These engines and components have not been tested or validated by GM Engineering for use in these vehicles. Installation of components or engines in non-original applications may require fabrication or modifications that affect other vehicle systems. Certain engines may require modifications to the vehicle for fit and operation.

The installation and operation of these components or replacement engines in new vehicles is intended for off-road operation only.



CORVETTE EXTERIOR

A. Bodyside Molding Package

Specifically-designed Bodyside Moldings enhance the exterior appearance of your Corvette Coupe or Convertible (not for use on Z06). Available in select colors and Prime.

PART NUMBER	YEAR	DETAIL
17802204	2005-2009	Victory Red (74U)
17802205	2005-2007	Blue (19U)
17802206	2005-2008	Silver (67U)
17802207	2005-2011	Black (41U)
19166384	2005-2013	Prime - price does not include charge for painting accessory.
19202373	2010-2010	Torch Red (70U)-



A Bodyside Molding Package



B Center Caps- Designer

B. Center Caps - Designer

Give your Corvette a racing edge by adding a personalized Center Cap to your wheels. Available designs include "Jake", "Elwood", "Carbon" and "Z52" in the colors to match your wheels.

PART NUMBER	YEAR	DETAIL
19259068	2012-2012	Center Cap - Gray with Elwood Graphic
19259069	2012-2012	Center Cap - Gray with Jake Graphic
19259070	2012-2012	Center Cap - Silver with Elwood Graphic
19259071	2012-2012	Center Cap - Silver with Jake Graphic
19259072	2012-2012	Center Cap - Silver with Z52 Graphic
19259073	2012-2012	Center Cap - Chrome with Jake Graphic
19259074	2012-2012	Center Cap - Chrome with Elwood Graphic
19259075	2012-2012	Center Cap - Chrome with Z52 Graphic
19259076	2012-2012	Center Cap - Gray with Z52 Graphic
19259077	2012-2012	Center Cap - Black with Carbon Graphic "Carbon" and Crossed-Flag Logo



C Corvette Decal

C. Decal/Stripe Package Corvette Decal

Make a bold statement by adding a Silver "CORVETTE" decal to the windshield of your 'Vette.

PART NUMBER	YEAR	DETAIL
20912923	2010-2013	Decal Package, Windshield - Silver

D. Decal/Stripe Package CSR Stripes

Add visual punch to your Corvette with race-inspired decals. Competition Gray stripes give your 'Vette a custom look.

PART NUMBER	YEAR	DETAIL
20912920	2010-2012	Stripe Package - Cyber Gray, For Use on Z06 or ZR1 Models
20912921	2013-2013	Stripe Package - Cyber Gray, For Use on Coupe Models



D CSR Stripes

E. Decal/Stripe Package Fender Hash Marks

Add visual punch to your Corvette with race-inspired decals. Fender Hash Marks in gray give your 'Vette a custom look. Available in Gray, Red, Silver or White.

PART NUMBER	YEAR	DETAIL
19243069	2010-2013	Fender Stripe Package - White, Not For Use on Grand Sport Models
19243072	2010-2013	Fender Stripe Package - Red, Not For Use on Grand Sport Models
19243075	2010-2013	Fender Stripe Package - Silver, Not For Use on Grand Sport Models
19243078	2010-2013	Fender Stripe Package - Gray, Not For Use on Grand Sport Models
20827889	2010-2013	Fender Stripe Package - White, For Use on Grand Sport Models
20850696	2010-2013	Fender Stripe Package - Red, For Use on Grand Sport Models
20850697	2010-2013	Fender Stripe Package - Gray, For Use on Grand Sport Models
20850698	2010-2013	Fender Stripe Package - Silver, For Use on Grand Sport Models



E Fender Hash Marks

F. Decal/Stripe Package Full Length Racing

Add visual punch to your Corvette with a race-inspired stripe package. Designed to highlight the center section of the car. Available in Black Metallic, Pearl White and Calicove Blue.

PART NUMBER	YEAR	DETAIL
22783845	2012-2013	Stripe Package - Black Metallic, For Use on Coupe Models
22783846	2012-2013	Stripe Package - Pearl White, For Use on Coupe Models
22783847	2012-2013	Stripe Package - Calicove Blue, For Use on Coupe Models
22783849	2012-2013	Stripe Package - Black Metallic For Use on Convertible Models
22783850	2012-2013	Stripe Package - Pearl White For Use on Convertible Models
22783851	2012-2013	Stripe Package - Calicove Blue For Use on Convertible Models
22783853	2012-2013	Stripe Package - Black Metallic For Use on Z06 & Grand Sport Coupe Models
22783854	2012-2013	Stripe Package - Pearl White For Use on Z06 & Grand Sport Coupe Models
22783855	2012-2013	Stripe Package - Calicove Blue For Use on Z06 & Grand Sport Coupe Models
22783857	2012-2013	Stripe Package - Black Metallic For Use on Grand Sport Convertible Models
22783858	2012-2013	Stripe Package - Pearl White For Use on Grand Sport Convertible Models
22783859	2012-2013	Stripe Package - Calicove Blue For Use on Grand Sport Convertible Models
22783861	2012-2013	Stripe Package - Black Metallic For Use on ZR1 Models
22783862	2012-2013	Stripe Package - Pearl White For Use on ZR1 Models
22783863	2012-2013	Stripe Package - Calicove Blue For Use on ZR1 Models
22800490	2012-2013	Stripe Package - Black Metallic For Use on Z06 Models
22800491	2012-2013	Stripe Package - Pearl White For Use on Z06 Models
22800492	2012-2013	Stripe Package - Calicove Blue For Use on Z06 Models

G. Decal/Stripe Package GT1 Stripes

Your Corvette will turn heads with this race-inspired GT1 Stripe Package. Graphics feature Corvette Racing "Jake" mascot, ALMS Championships and driver flags. Available in Black or Yellow.

PART NUMBER	YEAR	DETAIL
20912914	2013-2013	Stripe Package - Yellow Jake For Use on Z06 or Grand Sport Models
20912915	2013-2013	Stripe Package - Black Jake For Use on Convertible Models
20912916	2013-2013	Stripe Package - Yellow Jake For Use on Convertible Models
20912917	2013-2013	Stripe Package - Yellow Jake For Use on Coupe Models
20912918	2010-2012	Stripe Package - Black Jake For Use on Z06 or Grand Sport Models
20912919	2013-2013	Stripe Package - Black Jake For Use on Coupe Models



F Full Length Racing Decal/Stripes



G GT1 Stripes

Corvette Exterior Continued

A. Decal Package Jake CSR Decal

Give your Corvette a racing edge by adding a Cyber Gray "Jake" Decal. Jake is Corvette's official Racing Mascot. Not for use on Convertible models.

PART NUMBER	YEAR	DETAIL
20912922	2010-2013	Decal Package, Roof Panel Side - Cyber Gray, Not For Use on Convertible Models



A Jake CSR Decal



B Decal Package Racing Numbers

B. Decal/Stripe Package Racing Numbers

Show off your racing spirit by adding Racing Numbers to your Corvette. They look great with the Oval Racing Decal. Both come in packages of two so you can adorn both doors with the number-decal combination of your choice. Numbers 0-9 available.

PART NUMBER	YEAR	DETAIL
20907687	2010-2013	Decal Package - Number "1" (Quantity of 2)
20907688	2010-2013	Decal Package - Number "2" (Quantity of 2)
20907689	2010-2013	Decal Package - Number "3" (Quantity of 2)
20907690	2010-2013	Decal Package - Number "4" (Quantity of 2)
20907691	2010-2013	Decal Package - Number "5" (Quantity of 2)
20907692	2010-2013	Decal Package - Number "6" (Quantity of 2)
20907693	2010-2013	Decal Package - Number "7" (Quantity of 2)
20907694	2010-2013	Decal Package - Number "8" (Quantity of 2)
20907695	2010-2013	Decal Package - Number "9" (Quantity of 2)
20907696	2010-2013	Decal Package - Number "0" (Quantity of 2)
20907697	2010-2013	Decal Package - Oval with Chevy Bowtie (Quantity of 2)



C Decal/Stripe Racing Stripes

C. Decal/Stripe Package Racing Stripes

Add visual punch to your Corvette Convertible with a race-inspired stripe package. Designed to highlight the center section of the car, it includes a custom cut-out for the C6 hood emblem. Available in three color combinations: Black with Silver Accent, Silver with Black Accent, or Silver with Red Accent.

PART NUMBER	YEAR	DETAIL
17802432	2005-2013	Stripe Package - Silver with Black Accent, For Use on Coupe Models
17802433	2005-2013	Stripe Package - Black with Silver Accent, For Use on Coupe Models
17802434	2005-2013	Stripe Package - Silver with Red Accent, For Use on Coupe Models
17802458	2005-2013	Stripe Package - Silver with Black Accent, For Use on Convertible Models
17802459	2005-2013	Stripe Package - Black with Silver Accent, For Use on Convertible Models
17802460	2005-2013	Stripe Package - Silver with Red Accent, For Use on Convertible Models
19243462	2010-2013	Stripe Package - Black with Silver Accent, For Use on Z06 Models
19243466	2010-2013	Stripe Package - Silver with Black Accent, For Use on Z06 Models
19243470	2010-2013	Stripe Package - Silver with Red Accent, For Use on Z06 Models



D Decal/Stripe Stinger Stripes

D. Decal/Stripe Package Stinger Stripes

Give your Corvette a custom appearance with these race-inspired Stinger Stripes. Available in Black, Silver or White.

PART NUMBER	YEAR	DETAIL
20911757	2011-2013	Stripe Package - Black
20911758	2011-2013	Stripe Package - Silver
20911759	2011-2013	Stripe Package - White

E. Door Handles

Dress up your Corvette by replacing the standard back door handles with body-colored or chrome Door Handles.

PART NUMBER	YEAR	DETAIL
12499161	2005-2013	Outside, Chrome
12499863	2005-2007	Outside, Blue (19U)
12499864	2005-2005	Outside, Red (27U)
12499865	2005-2008	Outside, Silver (67U)
12499866	2005-2006	Outside, Orange (71U)
17800130	2005-2005	Yellow (79U)
17800131	2005-2005	Red Magnetic (86U)
17800474	2005-2013	Outside, White (10U)
17800648	2005-2009	Outside, Victory Red (74U)
17802412	2005-2013	Outside, Yellow (45U)
17802413	2006-2007	Outside, Monterey Red (80U)
17803340	2007-2009	Outside, Atomic Orange (83U)
19166216	2008-2011	Outside, Jetstream Blue (85U)
19166217	2008-2013	Outside, Crystal Red (89U)
19202629	2009-2013	Outside, Silver (17U)
19202632	2009-2013	Outside, Gray (57U)
19212457	2009-2013	Outside, Red (70U)
20922591	2010-2013	Outside, Inferno Orange (28U)
20922591	2010-2013	Outside, Inferno Orange (28U)
20922591	2010-2013	Outside, Inferno Orange (28U)
20922592	2010-2013	Outside, Supersonic Blue (GLB)
20922592	2010-2013	Outside, Supersonic Blue (GLB)
20922592	2010-2013	Outside, Supersonic Blue (GLB)
20922592	2010-2013	Outside, Supersonic Blue (GLB)

F. Front End Cover

Made out of a heavy-duty vinyl, this black Front-End Cover helps to protect the nose of your Corvette from stone chips and road debris. It features the crossed-flags Corvette logo.

PART NUMBER	YEAR	DETAIL
19202113	2001-2004	Corvette Flags Logo, Includes Hood Cover, Black
19202129	2005-2013	For Coupe and Convertible with Front License Plate Provision, Crossed-Flag Logo, Black
19202139	2005-2013	For Coupe and Convertible without Front License Plate Provision, Crossed-Flag Logo, Black

G. Grille

This fine-screen mesh, stainless steel Grille Insert dresses up the front of your Corvette, while providing protection from road debris. Mounts behind the existing grille. Mesh coordinates with the Side Cove Inserts and Exhaust Plate Screen, sold separately.

PART NUMBER	YEAR	DETAIL
17801009	2005-2013	Bright Finish

H. Hood Emblem

This 427 Hood Emblem celebrates the link between the high-tech LS7 Engine and the Big Block Engine of the past.

PART NUMBER	YEAR	DETAIL
17803320	2006-2013	427



E Door Handles



F Front End Cover



G Grille



H Hood Emblem

Corvette Exterior Continued

A. Spoiler Kit

Add style to your Corvette with a body-color Rear Spoiler that replaces the standard black spoiler. Or change the rear profile completely with the full-width or Z06 design spoiler.

PART NUMBER	YEAR	DETAIL
12499314	2005-2006	C6 Design, Orange (71U)
12499315	2005-2008	C6 Design, Silver (67U)
12499316	2005-2005	Red
12499317	2005-2007	C6 Design, Blue (19U)
17800557	2005-2013	C6 Design, White (10U)
17800559	2005-2005	Red Magnetic
17800856	2005-2009	C6 Design, Victory Red (74U)
17802348	2006-2009	Z06 Design, Victory Red (74U)
17802349	2006-2007	Z06 Design, Blue (19U)
17802350	2006-2008	Z06 Design, Silver (67U)
17802351	2005-2013	Z06 Design, Yellow (45U)
17802358	2005-2013	C6 Design, Yellow (45U)
17802359	2006-2007	C6 Design, Monterey Red (80U)
17803339	2007-2009	C6 Design, Atomic Orange (83U)
19158349	2007-2009	Z06 Design, Atomic Orange (83U)
19166222	2008-2013	C6 Design, Jetstream Blue (85U)
19166223	2008-2013	C6 Design, Crystal Red (89U)
19169711	2008-2013	Z06 Design, Jetstream Blue (85U)
19169712	2008-2013	Z06 Design, Crystal Red (89U)
19172807	2005-2013	Full Width, Prime
19172808	2005-2009	Full Width, Victory Red (74U)
19172809	2005-2013	Full Width, Yellow (45U)
19172810	2005-2008	Full Width, Silver (67U)
19172811	2005-2011	Full Width, Black (41U)
19172812	2008-2013	Full Width, Jetstream Blue (85U)
19172813	2008-2013	Full Width, Crystal Red (89U)
19172841	2009-2013	Z06 Design, Gray (57U)
19211165	2009-2013	Full Width, Silver (17U)
19211166	2009-2013	Full Width, Gray (57U)
19211167	2007-2010	Full Width, Atomic Orange (83U)
19211168	2009-2013	C6 Design, Silver (17U)
19211169	2009-2013	C6 Design, Gray (57U)
19211170	2009-2013	Z06 Design, Silver (17U)
19212313	2009-2013	Z06 Design, Torch Red (70U)
19212315	2009-2013	C6 Design, Torch Red (70U)
19212626	2009-2013	Full Width, Torch Red (70U)
20921723	2010-2013	C6 Design, Inferno Orange (28U)
20921724	2010-2013	C6 Design, Supersonic Blue (GLB)
20921725	2010-2013	Full Width, Inferno Orange (28U)
20921726	2010-2013	Full Width, Supersonic Blue (GLB)
20921727	2010-2013	Z06 Design, Inferno Orange (28U)
20921728	2010-2013	Z06 Design, Supersonic Blue (GLB)

Mesh Package (Not Shown)

These woven Mesh Inserts provide a finished, upscale look to your Corvette Coupe or Convertible.

PART NUMBER	YEAR	DETAIL
12499871	2005-2013	Rear Exhaust Grille Mesh Insert - Bright, For Use on Coupe and Convertible Models, Will Not Work With Cat-Back Exhaust or OE Performance Exhaust (NPP)
12499872	2005-2013	Side Cove Mesh Package - 2 Piece Set, For Use on Coupe and Convertible Models
17802352	2006-2013	Side Cove Mesh Package - 5 Piece Set for Z06
19212219	2010-2011	Front Fascia, Left and Right Hand Quarter Panel Mesh Inserts - 3 Piece Set, For Use on Grand Sport Models (Z16)
19212219	2010-2011	Front Fascia, Left and Right Hand Quarter Panel Mesh Inserts - 3 Piece Set, For Use on Grand Sport Models (Z16)



A Spoiler Kit - Full Width, Victory Red



A Spoiler Kit - Full Width, Yellow



A Spoiler Kit - Full Width, Jetstream Blue

B. Underhood Liner

Go ahead and pop the hood to show off your engine compartment. This Underhood Liner attaches to your hood to provide a detailed appearance and is available with a color Corvette crossed-flags logo. Underhood lamp sold separately.

PART NUMBER	YEAR	DETAIL
19213932	2010-2013	Jake Skull Logo, Black
19214017	2005-2013	Crossed-Flag Logo, Use with Underhood Lamp, For Use on Vehicles without Super Sport Performance Package (SSC)
19214019	2006-2013	Crossed-Flag and Z06 Logo, Use with Underhood Lamp
20912376	2010-2013	Grand Sport Logo, For Use on Vehicles without Super Sport Performance Package (SSC)

C. Windscreen

Minimize air turbulence in the passenger compartment of your Corvette when you have the top down with this Convertible Windscreen. Constructed of black aluminum with see-through black mesh, it features a Corvette logo that is visible only from behind.

PART NUMBER	YEAR	DETAIL
19156012	2005-2013	Includes Storage Bag, Black Available
22926264	2013-2013	Windscreen with 427 Logo Future

D. Vehicle Cover

These Vehicle Covers help protect your finish, and feature Corvette-specific logos. The interior Dust Covers, designed for interior storage, shield the surface of your Corvette from dust and dirt. An all-weather outdoor Vehicle Cover provides waterproof, breathable outdoor protection. Each cover includes a duffle-style storage bag, which can also be used to stash miscellaneous items.

PART NUMBER	YEAR	DETAIL
19158333	2001-2004	With Corvette Logo, Gray
19158372	2005-2013	Indoor Dust Cover, Color Crossed-Flag Logo, Black
19158373	2006-2013	Indoor Dust Cover, Color Z06 Logo, Black
19158374	2005-2013	Indoor Dust Cover, Color Crossed-Flag Logo, Red
19158375	2006-2013	Indoor Dust Cover, Color Z06 Logo, Red
19158376	2005-2013	Outdoor All Weather, Color Crossed-Flag Logo, Gray
19158377	2005-2013	Outdoor All Weather, Color Crossed-Flag Logo, Red
19158378	2005-2013	Outdoor All Weather, Color Crossed-Flag Logo, Black & Red
19158379	2006-2013	Outdoor All Weather, Color Z06 Logo, Black
19201939	2005-2013	Outdoor All Weather, Color Crossed-Flag Logo, Black
19243659	2010-2013	Indoor Dust Cover, Grand Sport Logo, Black
19243659	2010-2013	Indoor Dust Cover, Grand Sport Logo, Black
19243660	2010-2013	Outdoor All Weather, Grand Sport Logo, Black
19243660	2010-2013	Outdoor All Weather, Grand Sport Logo, Black
19243661	2010-2013	Indoor Dust Cover, ZR1 Logo, Black
19243661	2010-2013	Indoor Dust Cover, ZR1 Logo, Black
22894586	2013-2013	Indoor Dust Cover, 60th Anniversary Logo, Blue
22894589	2013-2013	Outdoor All Weather, 60th Anniversary Logo, White & Silver Stripes
22894590	2013-2013	427 Logo on Front and Rear, Black



B Underhood Liner



C Windscreen



D Vehicle Cover

CORVETTE INTERIOR

A. Shift Knob

Color key your interior with a Transmission Shift Knob and Boot Package. These can be used to either complement your existing color or add an element of contrast to your interior.

PART NUMBER	YEAR	DETAIL
17800061	2005-2005	Manual Shift Knob with Boot - Gray Leather
17802193	2008-2013	Manual Shift Knob with Boot - Cashmere/ Ebony Leather
17802194	2008-2013	Manual Shift Knob with Boot - Titanium/ Ebony Leather
19211324	2008-2013	Manual Shift Knob with Boot - Cashmere/ Ebony Leather
19211324	2008-2013	Manual Shift Knob with Boot - Cashmere/ Ebony Leather
19211324	2008-2013	Manual Shift Knob with Boot - Cashmere/ Ebony Leather
19211325	2008-2013	Manual Shift Knob with Boot - Red/Ebony Leather
19211326	2008-2013	Manual Shift Knob with Boot - Titanium/ Ebony Leather
19211326	2008-2013	Manual Shift Knob with Boot - Titanium/ Ebony Leather
19211326	2008-2013	Manual Shift Knob with Boot - Titanium/ Ebony Leather
22737332	2011-2013	Automatic Transmission Shift Knob with Boot - Ebony Leather with Blue Stitching
22737333	2011-2013	Automatic Transmission Shift Knob with Boot - Ebony Leather with Red Stitching
22737334	2011-2013	Automatic Transmission Shift Knob with Boot - Ebony Leather with Yellow Stitching



A Shift Knob

B. Deck Lid Liner

Show your attention to detail throughout your Corvette. This Rear Deck Lid Liner features the Corvette crossed-flags logo and adds a more refined look to your Convertible.

PART NUMBER	YEAR	DETAIL
10376974	2005-2006	Ebony
12499967	2005-2013	Crossed-Flag Logo, Ebony



B Deck Lid Liner

C. Door Sill Plates

These Door Sill Plates add the finishing touch to the entry area of your Corvette, while protecting the paint as you enter and exit the cockpit. Available in several different looks to complement your 'Vette.

PART NUMBER	YEAR	DETAIL
17800062	2005-2013	Door Sill Plates - Corvette Script Logo, Brushed Aluminum
17802220	2006-2013	Door Sill Plates - Z06 Logo, Black with Brushed Aluminum
17802221	2005-2013	Door Sill Plates - Corvette Script Logo, Bright
17802223	2005-2013	Door Sill Plates - Corvette Script Logo, Competition Gray
19169550	2005-2013	Door Sill Plates - Corvette Script plus Crossed-Flag Logo, Brushed Aluminum with Black Checker-Board Pattern



C Door Sill Plates

D. Wheels 18-inch

Make a dramatic modification to the appearance of your Corvette with these 7-spoke forged chrome wheels. Features the crossed-flags logo on the center cap. Not for use on Z06 or Grand Sport Models. Use only GM-approved wheels and tire combinations.

PART NUMBER	YEAR	DETAIL
12499621	2005-2006	18-inch Wheel - C6SM18 Front, Painted Silver
12499622	2005-2006	18-inch Wheel - C6GM18 Front, Painted Gunmetal
17800906	2005-2013	18-inch Wheel - C6900F Front - 15 Spoke Polished Not For Use on Z06 or Grand Sport
19259064	2012-2013	18-inch Wheel - C8991F Front - Sterling Silver
19259065	2012-2013	18-inch Wheel - C8992F Front - Chrome
88967777	2005-2013	18-inch Wheel - C6898F Front - 7 Spoke Chrome Not For Use on Z06 or Grand Sport

E. Wheels 19-inch

Make a dramatic modification to the appearance of your Corvette with these 15-spoke forged polished aluminum wheels. Features the crossed-flags logo on the center cap. Not for use on Z06 or Grand Sport Models. Use only GM-approved wheels and tire combinations.

PART NUMBER	YEAR	DETAIL
12499625	2005-2006	19-inch Wheel - C6SM19 Rear, Painted Silver
12499626	2005-2006	19-inch Wheel - C6GM19 Rear, Painted Gunmetal
17800902	2005-2013	19-inch Wheel - C6898R Rear - 7 Spoke Chrome, Not For Use on Z06 or Grand Sport
17800908	2005-2013	19-inch Wheel - C6900R Rear - 15 Spoke Polished, Not For Use on Z06 or Grand Sport
19259066	2012-2013	19-inch Wheel - C8994R Rear - Sterling Silver
19259067	2012-2013	19-inch Wheel - C8995R Rear - Chrome



D Wheels 18-inch



E Wheels 19-inch

Sonic Performance Upgrades



SONIC EXTERIOR

A. Grille

Add color and contrast to the front end of your Sonic with this painted Grille Surround. Other coordinating parts available include the Mirror Caps and Rear Spoiler.

PART NUMBER	YEAR	DETAIL
95942043	2012-2013	Inferno Orange Metallic (GCR)
95942044	2012-2012	Black (GBA)
95942045	2012-2013	Summit White (GAZ)
95942046	2012-2013	Silver Ice Metallic (GAN)



A Grille - Inferno Orange Metallic



A Grille - Black



A Grille - Summit White



A Grille - Silver Ice Metallic

B. Spoiler Kit

This one-piece, custom-molded Flushmount Spoiler Kit adds a sporty flair to your Sonic. Available in select body colors.

PART NUMBER	YEAR	DETAIL
95072943	2013-2013	Paint to Match, Z-Spec for use on Hatchback only
95072944	2013-2013	White (GAZ), Z-Spec for use on Hatchback only
95072945	2013-2013	Carbon Flash (GAR), Z-Spec for Hatchback onl*
95072946	2013-2013	Silver (GAN), Z-Spec for Hatchback only
95072947	2013-2013	Gray (GBV), Z-Spec for Hatchback only
95072948	2013-2013	Red (GCN), Z-Spec for use on Hatchback only
95072949	2013-2013	Blue (GTS), Z-Spec for Hatchback only
95072950	2013-2013	Crystal Claret (GBE), Z-Spec for us on Hatchback only
95103587	2012-2013	Summit White (GAZ), for use on Sedan only - Replaces 95940490
95103588	2013-2013	Carbon Flash (GAR), for use on Sedan only
95103589	2012-2013	Silver Ice Metallic (GAN), for use on Sedan only - Replaces 95908899
95103590	2012-2013	Gray (GBV), for use on Sedan only - Replaces 95940492
95103591	2012-2013	Red (GCN), for use on Sedan only - Replaces 95940491
95103592	2013-2013	Luxo Blue Metallic (GTS), for Sedan only
95103593	2012-2013	Crystal Red (GBE), for use on Sedan only - Replaces 95940494
95103595	2012-2012	Black (GBA), for use on Sedan only - Replaces 95940489
95103596	2012-2013	Inferno Orange Metallic (GCR), for use on Sedan only - Replaces 95940491
95103597	2012-2013	Paint to Match, for use on Sedan only - Replaces 95908897
95248643	2013-2013	Inferno Orange Metallic (GCR), for use on Hatchback only
95271828	2012-2013	Summit White (GAZ), for use on Sedan only
95271829	2013-2013	Carbon Flash (GAR), for use on Sedan only
95271830	2012-2013	Silver Ice Metallic (GAN), for use on Sedan only
95271831	2012-2013	Gray (GBV), for use on Sedan only
95271832	2012-2013	Red (GCN), for use on Sedan only
95271833	2013-2013	Luxo Blue Metallic (GTS), for Sedan only
95271834	2012-2013	Crystal Red (GBE), for use on Sedan only
95271835	2012-2012	Black (GBA), for use on Sedan only
95271837	2012-2013	Inferno Orange (GCR)
95276628	2013-2013	Summit White (GAZ), Z-Spec for use on Hatchback only
95276629	2013-2013	Black Granite (GAR), Z-Spec for Hatchback only
95276630	2013-2013	Silver Ice (GAN), Z-Spec for Hatchback only
95276631	2013-2013	Cyber Gray (GBV), Z-Spec for Hatchback only
95276632	2013-2013	Victory Red (GCN), Z-Spec for use on Hatchback only
95276633	2013-2013	Blue Topaz (GTS), Z-Spec for Hatchback only
95276634	2013-2013	Crystal Red (GBE), Z-Spec for us on Hatchback only
95276635	2013-2013	Inferno Orange (GCR), for use on Hatchback only
95908897	2012-2013	Paint to Match, for use on Sedan only
95908899	2012-2013	Silver Ice Metallic (GAN), for use on Sedan onl
95940489	2012-2012	Black (GBA), for use on Sedan onl
95940490	2012-2013	Summit White (GAZ), for use on Sedan only
95940491	2012-2013	Inferno Orange Metallic (GCR), for use on Sedan only
95940492	2012-2013	Gray (GBV), for use on Sedan only
95940493	2012-2013	Victory Red (GCN), for use on Sedan only
95940494	2012-2013	Crystal Red (GBE), for use on Sedan only
95942507	2012-2013	Inferno Orange Metallic (GCR), for use on Hatchback only
95942508	2012-2013	Summit White (GAZ), for use on Hatchback only
95942509	2012-2012	Black (GBA), for use on Hatchback only
95942510	2012-2013	Silver Ice Metallic (GAN), for use on Hatchback only
95972315	2012-2013	Paint to Match, for use on Hatchback only



B Spoiler Kit - Black



B Spoiler Kit - Inferno Orange Metallic



B Spoiler Kit - Silver Ice



B Spoiler Kit - Summit White

SONIC WHEELS

A. 16-Inch Wheels

Customize your Sonic with these painted aluminum wheels, validated to GM specifications. Existing components must be re-used when installing these wheels; Center Caps, Valve Stems, Lug Nuts, Tires and Wheel Lock Kit.

PART NUMBER	YEAR	DETAIL
19259632	2012-2013	16-inch Wheel - JA972 Alloy -10 Spoke, White
19259634	2012-2013	16-inch Wheel - JA973 Alloy - 10 Spoke, Black

B. 17-Inch Wheels

Customize your Sonic with these painted aluminum wheels, validated to GM specifications. Existing components must be re-used when installing these wheels; Center Caps, Valve Stems, Lug Nuts, Tires and Wheel Lock Kit.

PART NUMBER	YEAR	DETAIL
19259636	2012-2013	17-inch Wheel - JA974 Alloy - 5 Spoke, White
19259638	2012-2013	17-inch Wheel - JA975 Alloy - 5 Spoke, Black
19260808	2013-2013	17-Inch Wheels - JA350 Alloy - 17 Inch x 6.5 Inch
19300314	2013-2013	17-Inch Wheels - JA758 Z-Spec Black - 17-Inch x 6.5 Inch
19300316	2013-2013	17-Inch Wheels - JA761 Z-Spec White - 17-Inch x 6.5 Inch
19300318	2013-2013	17-Inch Wheels - JA762 Z-Spec Silver - 17-Inch x 6.5 Inch

SONIC INTERIOR

Mirror Package (Not Shown)

Go for the ultimate in personalization for your Sonic with these unique Mirror Caps.

PART NUMBER	YEAR	DETAIL
95174807	2012-2013	Inferno Orange Metallic (GCR)
95174808	2012-2013	Summit White (GAZ)
95174809	2012-2012	Black (GBA)
95174810	2012-2013	Silver Ice Metallic (GAN)



A 16-Inch Wheels



A 16-Inch Wheels



B 17-Inch Wheels



B 17-Inch Wheels

SONIC EXTERIOR

C. Door Handles

These body-color Door Handles with a Chrome Stripe replace the factory door handles to give your Sonic a stylish, more personalized appearance.

PART NUMBER	YEAR	DETAIL
95031498	2012-2013	Front and Rear Sets - Sedan - Crystal Red (GBE), with Chrome Stripe
95031499	2012-2012	Front and Rear Sets - Sedan - Black (GBA) with Chrome Stripe
95031500	2012-2013	Front Set - Hatchback - Crystal Red (GBE), with Chrome Stripe
95031501	2012-2012	Front Set - Hatchback - Black (GBA), with Chrome Stripe
95937907	2012-2012	Front and Rear Sets - Sedan - Paint to Match with Chrome Stripe
95937909	2012-2012	Front and Rear Sets - Hatchback - Paint to Match with Chrome Stripe
95938935	2012-2013	Front and Rear Sets - Sedan - Luxo Blue Metallic (GTS), with Chrome Stripe
95938937	2012-2013	Front Set - Hatchback - Luxo Blue Metallic (GTS), with Chrome Stripe
95964664	2012-2013	Front and Rear Sets - Sedan - Gray (GBV), with Chrome Stripe
95964665	2012-2013	Front and Rear Sets - Sedan - Victory Red (GCN), with Chrome Stripe
95964666	2012-2013	Front and Rear Sets - Sedan - Inferno Orange Metallic (GCR) with Chrome Stripe
95964711	2012-2013	Front Set - Hatchback - Silver Ice Metallic (GAN), with Chrome Stripe
95964717	2012-2013	Front Set - Hatchback - Summit White (GAZ), with Chrome Stripe
95964718	2012-2013	Front Set - Hatchback - Gray (GBV), with Chrome Stripe
95964719	2012-2013	Front Set - Hatchback - Victory Red (GCN), with Chrome Stripe
95964720	2012-2013	Front Set - Hatchback - Inferno Orange Metallic (GCR), with Chrome Stripe

D. Pedal Cover

Enhance the appearance of your Sonic with these accessory Pedal Covers. Available for automatic or manual transmission.

PART NUMBER	YEAR	DETAIL
95057349	2012-2013	Manual 6-Speed
95057350	2012-2013	Automatic Transmission
95970279	2012-2013	Brake, Accelerator and Clutch Pedals. For Use on Vehicles With Manual Transmission
95970280	2012-2013	Brake and Accelerator Pedal. For Use on Vehicles with Automatic Transmission

SONIC INTERIOR

E. Cargo Tray

This custom-modeled, heavy duty Cargo Tray features a nonskid surface and a raised outer lip that helps contain cargo and spills. Fits perfectly in the cargo area of your Sonic.

PART NUMBER	YEAR	DETAIL
95493487	2012-2013	Manual 6-Speed
95971429	2012-2013	Automatic Transmission



C Door Handles



D Pedal Cover



E Cargo Tray

Silverado Performance Upgrades



SILVERADO WHEELS

A. 20-inch Wheels

Customize your Silverado with these 20-Inch 5-Spoke Chrome Wheels. Available with center caps that feature the Chevy bowtie logo. Use only GM-approved wheel and tire combinations. See gmaccessorieszone.com for important tire and wheel information.

PART NUMBER	YEAR	DETAIL
17800926	2007-2011	20-inch Wheel - CK925 Chrome
17800929	2007-2011	20-inch Wheel - CK928 Chrome
17800946	2007-2013	20-inch Wheel - CK945 Chrome
17800949	2007-2013	20-inch Wheel - CK948 Chrome
17800952	2007-2013	20-inch Wheel - CK951 Chrome
17800995	2007-2011	20-inch Wheel - CK994 Chrome
17800998	2007-2013	20-inch Wheel - CK997 Chrome
19170371	2007-2013	20-inch Wheel - CK370 Chrome
20917095	2009-2011	20-inch Wheel - CK988 Chrome
88967768	2007-2007	20-inch Wheels - CK925, Base Part
88967872	2007-2007	20-inch Wheels - CK997, Base Part

B. 22-Inch Wheels

These beautiful 22-inch 12-Spoke-Split chrome wheels take maximum advantage of Silverado's ability to handle larger-diameter wheels. Faceted forms available in a lustrous finish to make an emphatic styling statement. Use only GM-approved wheel and tire combinations. See www.gmaccessorieszone.com for important tire and wheel information.

PART NUMBER	YEAR	DETAIL
17800367	2008-2013	22-inch Wheel - CK366 Chrome
17800376	2008-2013	22-inch Wheel - CK375 Chrome
17800911	2008-2013	22-inch Wheel - CK910 Chrome
17800914	2008-2013	22-inch Wheel - CK913 Chrome
17800917	2008-2013	22-inch Wheel - CK916 Chrome
17800920	2008-2013	22-inch Wheel - CK919 Chrome
17800923	2008-2011	22-inch Wheel - CK922 Chrome
20917092	2009-2011	22-inch Wheel - CK369 Chrome



A 20-Inch Wheels



B 22-Inch Wheels

SILVERADO BED PRODUCTS

C. Tonneau Cover - Hard Folding

The Hard Folding Tonneau Cover's innovative easy-to-use clamps require no tools for installation. The flat and smooth tri-fold design allows easy opening and closing; this cover is rustproof, non-corrosive, and water resistant. Available in two lightweight, durable materials; textured vinyl or woven acrylic cloth, both black. Requires Bed Rail Protectors.

PART NUMBER	YEAR	DETAIL
19299038	2011-2013	Tonneau Cover by Fold-a-Cover®, 5'8" Short Box, Front and Rear Locking, Black
19299039	2011-2013	Tonneau Cover by Fold-a-Cover®, 6'6" Short Box, Front and Rear Locking, Black
19299040	2011-2013	Tonneau Cover with Personal Caddy® by Fold-a-Cover®, 5'8" Short Box, Front and Rear Locking, Black
19299041	2011-2013	Tonneau Cover with Personal Caddy® by Fold-a-Cover®, 6'6" Short Box, Front and Rear Locking, Black
20962145	2007-2013	5'8" Short Box, Base High Gloss Vinyl Cover, Black
20962145	2007-2013	5'8" Short Box, Base High Gloss Vinyl Cover, Black
20962146	2007-2013	5'8" Short Box, Premium Ragtop Cover, Black
20962147	2007-2013	6'6" Standard Box, Base High Gloss Vinyl Cover, Black
20962148	2007-2013	6'6" Standard Box, Premium Ragtop Cover, Black
20962149	2007-2013	8' Long Box, Base High Gloss Vinyl Cover, Black
20962150	2007-2013	8' Long Box, Premium Ragtop Cover, Black

D. Tonneau Cover - Hard Shell

Secure your cargo under this lockable, lightweight, molded-composite Hard Tonneau Cover. Designed to complement Silverado styling, the cover features struts for easy opening and closing, and a quick-release mechanism for easy removal. Available in select body colors. Light-duty models will require the heavy-duty tailgate protector.

PART NUMBER	YEAR	DETAIL
19243686	2007-2008	5'8" Short Box, Blue (25U)
19243686	2007-2008	5'8" Short Box, Blue (25U)
19243686	2007-2008	5'8" Short Box, Blue (25U)
22870548	2009-2012	6'6" Standard Box, Blue (37U)
22870551	2007-2012	5'8" Short Box, White (50U)
22870555	2007-2012	5'8" Short Box, Red (74U)
22870556	2007-2012	5'8" Short Box, Gray (46U)
22870561	2007-2012	6'6" Standard Box, Red (74U)
22870562	2007-2012	6'6" Standard Box, Gray (46U)

E. Tonneau Cover- Soft Folding

This Soft Tonneau Cover is constructed of durable, lightweight black grained vinyl to help protect truck bed cargo from the elements. The tri-fold design allows for quick and easy installation and removal. Required Bed Rail Protectors.

PART NUMBER	YEAR	DETAIL
22802416	2007-2013	Black Tri-Fold, 8' Long Box
22802417	2007-2013	Black Tri-Fold, Crew Cab, 5' 8" Short Box
22802418	2007-2013	Black Tri-Fold, 6'6" Standard Box

F. Tonneau Cover - Soft Roll-up

Shield the cargo in your Silverado and help protect the bed itself from harsh weather with this Soft Roll-Up Tonneau Cover. Constructed with integrated crossbows, it easily rolls up to allow full access to the bed and features an embossed Chevy Bowtie logo.

PART NUMBER	YEAR	DETAIL
22890206	2007-2013	Soft Tonneau Cover - 5'8" Short Box
22890207	2012-2013	Soft Tonneau Cover - 6'6" Standard Box
22890208	2007-2013	Soft Tonneau Cover - 8' Long Box



C Tonneau Cover - Hard Folding



D Tonneau cover - Hard Shell



E Tonneau cover - Soft Folding



F Tonneau cover - Soft Roll-up

Silverado Bed Products Continued

A. Tool Box

Built to last, these diamond-patterened aluminum Tool Boxes can handle up to 250 lbs. of storage. Stationary Tool Box features a removeable sliding tray with rubber mat, dual gas shocks for smooth opening and closing, and a one-touch latching mechanism. It mounts securely to the bed of your Silverado without drilling. Features the Bowtie logo. Side Storage box can be secured at any position along the MS rails. The integrated handle makes it easy to remove and carry.

PART NUMBER	YEAR	DETAIL
19170990	2007-2013	Stationary Tool Box - GMC or Bowtie Logo, Diamond Patterened
19260344	2010-2013	Gull Wing Tool Box by UWS - a division of Thule®
19299117	2007-2013	Cross Over Deep Well Aluminum Toolbox by UWS A Division of Thule®
19299118	2007-2013	Cross Over Deep Well Toolbox (For Use with Aluminum Full Ladder Rack) by UWS A Division of Thule®



A Tool Box

B. Tubular Bed Rails

Enhance the appearance of your Silverado with these stylish Tubular Bed Rails constructed of 2-inch diameter stainless steel tubing with chrome finish.

PART NUMBER	YEAR	DETAIL
12496053	2001-2001	Mild Steel, Chrome, 2 Tube, Chrome, 6'6" Standard Box
12496057	2001-2001	Steel, Chrome, 8' Long Box
12499728	2001-2001	Chrome, 2 inch Tube, 8' Long Box
19172752	2007-2013	5'8" Short Box, Chrome
19172753	2007-2013	6'6" Standard Box, Chrome



B Tubular Bed Rails

SILVERADO EXTERIOR

Brush Grille Guard (Not Shown)

This tubular Brush Brille Guard for your Silverado features a Bull Bar Skid Plate design that adds style and protection whether you're driving on city streets or off-road terrain.

PART NUMBER	YEAR	DETAIL
19202506	2011-2013	For Use on Heavy Duty 2500 and 3500 Models, Bright Chrome

C. Molded Hood Protector

Deflect road debris and insects while helping to shield the hood of your Silverado from stone damage with this custom-designed Molded Hood Protector. Provides a precise fit by following your hood's contour. Available in Chrome and Smoke.

PART NUMBER	YEAR	DETAIL
12495773	2001-2001	No Logo, Smoke
12499131	2001-2001	Smoke
19154552	2007-2008	Light Duty, Smoke
19154556	2007-2011	Light Duty, Chrome
19156924	2007-2010	For Use on Heavy Duty Models, Chrome
19170209	2007-2010	For Use on Heavy Duty Models, Smoke
19170880	2007-2013	For Use on Light Duty Models, Smoke
19172839	2011-2013	For Use on Heavy Duty 2500 and 3500 Models, Smoke
19243804	2007-2013	For Use on Light Duty Models, Chrome



C Molded Hood Protector

D. Grille

Go for the ultimate in personalization with a sporty Grille. The light duty chrome model features a chrome mesh center with your choice of body-color or chrome surround. The heavy duty model is available with chrome surround only.

PART NUMBER	YEAR	DETAIL
19154230	2007-2008	For Use on Light Duty Models, Blue (25U) Surround with Chrome Mesh
19154892	2007-2010	For Use on Heavy Duty Models, Chrome Surround with Chrome Mesh
19172049	2007-2010	For Use on Light Duty Models, Billet Style, Polished Stainless
19211824	2008-2009	For Use on Light Duty Models, Red (66U) Surround with Chrome Mesh
20955212	2010-2010	For Use on Light Duty Models, Carbon (58U) Surround with Chrome Mesh
22767482	2007-2011	For Use on Light Duty Models, White (50U) Surround with Chrome Mesh
22767483	2007-2011	For Use on Light Duty Models, Red (74U) Surround with Chrome Mesh
22767484	2011-2011	For Use on Light Duty Models, Steel Green (GGU) Surround with Chrome Mesh
22767485	2007-2012	For Use on Light Duty Models, Chrome Surround with Chrome Mesh
22767486	2010-2011	For Use on Light Duty Models, Taupe Gray (GGW) Surround with Chrome Mesh
22767487	2010-2011	For Use on Light Duty Models, Silver (GGZ) Surround with Chrome Mesh
22767488	2007-2011	For Use on Light Duty Models, Stealth Gray (46U) Surround with Chrome Mesh
22767489	2007-2011	For Use on Light Duty Models, Black (41U) Surround with Chrome Mesh
22767490	2009-2011	For Use on Light Duty Models, Blue (37U) Surround with Chrome Mesh



D Grille

SILVERADO PERFORMANCE

E. Exhaust Tip - OE or Cat-Back

Add a sporty appearance to your Silverado with Single- or Dual-walled Exhaust Tips made from highly polished, T-304 stainless steel and available in straight or angle cuts.

PART NUMBER	YEAR	DETAIL
17802979	2001-2001	5", Duramax Logo, Single Wall, Angle Cut, Chrome
17802980	2001-2001	6", Duramax Logo, Single Wall, Angle Cut, Chrome
19156355	2009-2010	Cat-Back Exhaust Tip - No Logo, Single Exhaust, Dual Wall, Oval, Highly Polished For Use on 6.2L (L92) Engine
19156357	2009-2010	Cat-Back Exhaust Tip - No Logo, Single Exhaust, Dual Wall, Straight Cut, Highly Polished, For Use on 6.2L (L92) Engine
19156360	2010-2010	Cat-Back Exhaust Tip - No Logo, Single Exhaust, Dual Wall, Angle Cut, Highly Polished For Use on 6.2L (L92) Engine
19159428	2007-2013	OE Exhaust Tip - For use only with Rear Fascia Kit - No Logo, Single Exhaust, Dual Wall, Rectangular, Highly Polished
22799810	2007-2013	Bowtie Logo, Angle Cut, Single Wall, For OE Exhaust Only, Chrome
22799812	2007-2013	Bowtie Logo, Straight Cut, Dual Wall, For OE Exhaust Only, Chrome
22799814	2007-2013	Bowtie Logo, Dual Wall, Angle Cut, Highly Polished
22799816	2009-2011	OE Exhaust Tip - Dual Wall, Angle Cut, No Logo, For use on Vehicles with Ground Effects and 6.2L (L92, L94, L9H) Engines



E ExhaustTip - OE or Cat-Back



2013

COPO PROGRAM



17802827
COPO 327 CID

17802826
COPO 327 CID

OFFICIAL COPO CAMARO ASSEMBLY COMPONENTS FROM CHEVROLET PERFORMANCE

Chevrolet's COPO Camaro program developed the first-ever factory-built Camaro drag-racing specialty cars designed to be competitive with the quickest in NHRA's Stock Eliminator and Super Stock classes, where the national records for the quarter-mile contests are in the 9-second range.

Chevrolet Performance is proud to offer COPO Camaro production-based assembly parts to help racers build their own COPO from a Camaro body-in-white. These are the same parts

specified for the construction of the 69 production models in 2012 – all designed and validated by GM engineers to meet O.E.M. levels of performance, strength and quality. When the body and chassis are complete, simply drop in one of the COPO crate engines (see page 50) and your home-built COPO will be corralling the other pony cars and drag-strip challengers at the track.



17802825
COPO 427 CID

NOTE: Headers not included with crate engine

COPO CRATE ENGINES

DELIVERS A FACTORY-ENGINEERED ADVANTAGE AT THE 'TREE'

The power behind Chevrolet's winning COPO Camaro program is a trio of factory-engineered racing engines tailored for NHRA's Stock and Super Stock classes. Those engines are now available from Chevrolet Performance for racers to use in home-built COPO Camaros and other race cars.

The COPO crate engines include a naturally aspirated 427 engine (7.0L) – the same displacement as the original COPO Camaros from 1969 – and two supercharged 327 (5.3L) engines – one using an LS9 block and 2.9L supercharger and the other using an LSX block and 4.0L supercharger. Both of the supercharged engines use Whipple twin-screw blowers.

The engines are built to specifications to make them eligible for competition in Stock and Super Stock. Chevrolet Performance engineers designed and tested the engines with the same methods used to develop our production and race engines, ensuring their performance and durability.



COPO 427

17802825

425 HP

The COPO 427 for A Stock competition uses the large-bore cylinder block and high-flow cylinder heads of the LS7 engine and complements them with a high-compression rotating assembly to deliver big power from its large displacement. Its lightweight aluminum block and heads revive the spirit of the original ZL1 all-aluminum 427 big-block that helped forge the COPO legacy in 1969.

SPECS

Displacement:	427 cu in (7.0L)
Compression Ratio:	13.5:1
Cylinder Block:	LS7 cast aluminum
Bore x Stroke (in):	4.125 x 4.100
Crankshaft:	forged steel
Connecting Rods:	forged steel
Pistons:	forged dome
Cylinder Heads:	LS7 aluminum
Induction:	natural
Intake Manifold:	Holley
Camshaft Type:	hydraulic roller
Camshaft Lift (int./exh.):	.595/.595-inch



COPO 327- 2.9L S/C

17802826

500 HP

Sized to fit the regulations of NHRA AA Stock, this smaller-displacement racing engine packs a big supercharged punch. The engine breathes via a force-fed air charge through high-flow LS7 cylinder heads. The supercharger is a twin-screw design from Whipple.

SPECS

Displacement:	327 cu in (5.3L)
Compression Ratio:	10.2:1
Cylinder Block:	LSX cast iron
Bore x Stroke (in):	4.065 x 3.150
Crankshaft:	forged steel
Connecting Rods:	forged steel
Pistons:	forged dome
Cylinder Heads:	LS7 aluminum
Induction:	boosted
Supercharger:	2.9L Whipple
Camshaft Type:	hydraulic roller
Camshaft Lift (int./exh.):	.650/.650-inch
Camshaft Duration (int./exh.):	244/255 deg. @.050-inch



COPO 327- 4.0L S/C

17802827

550 HP

The most powerful supercharged COPO crate engine is designed for NHRA's A Super Stock class and uses a large, 4.0L compressor to generate tremendous horsepower. Its foundation is the sturdy LSX cylinder block, with a tough, all-forged rotating assembly and the big-displacement Whipple blower. Like the other COPO crate engines, this one uses the high-flow LS7 heads to move as much air as possible.

SPECS

Displacement:	327 cu in (5.3L)
Compression Ratio:	10.2:1
Cylinder Block:	LSX cast iron
Bore x Stroke (in):	4.065 x 3.150
Crankshaft:	forged steel
Connecting Rods:	forged steel
Pistons:	forged dome
Cylinder Heads:	LS7 aluminum
Induction:	boosted
Supercharger:	4.0L Whipple
Camshaft Type:	hydraulic roller
Camshaft Lift (int./exh.):	.650/.650-inch
Camshaft Duration (int./exh.):	244/255 deg. @.050-inch



COPO ENGINE COMPONENTS

The factory-engineered COPO Camaro racing engines deliver the power to win, and Chevrolet Performance is proud to offer many of the same components that go into hand-assembled engines for the production cars and our very own COPO 427 (7.0L) and 327 (5.3L) crate engines. Use them to build your own high-performance engine for the street or strip, starting with our lightweight LS7 cylinder block – the same used in the COPO 427 engine – or the durable and economical LSX Bowtie block.

A. 17802818

COPO LS7 CNC Head Assembly

The high-revving horsepower of the COPO racing engines is enabled by the high-flow LS7 CNC cylinder head, which features a 12-degree valve angle for efficient airflow at high rpm. The head is fully CNC machined and the 356-T6 aluminum casting features 275cc (nominal) intake ports, 90cc exhaust ports and 70cc combustion chambers. There's also a thick, 5/8" deck for exceptional (nominal) strength. The assembled head includes:

- 2.205" titanium intake valves
- 1.615" sodium-filled exhaust valves
- Max-Life Beehive-type valve springs
- Valve retainers and locks
- Intake and exhaust stem seals
- Intake lash cap

B. 17802804

COPO LS7 CNC Head

All the same high-flow attributes as the assembled head described above, but delivered unassembled. Valves and valvetrain components must be purchased separately.



A COPO CNC-Cylinder Head Assembly (Combustion Chamber)



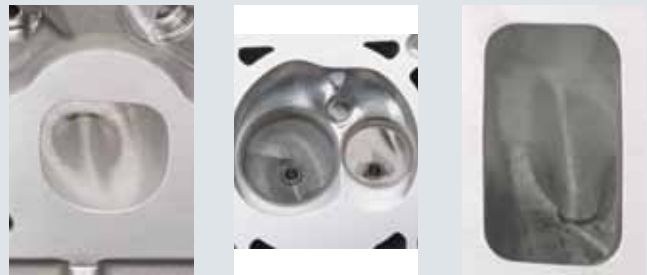
A COPO CNC-Cylinder Head Assembly (Exhaust)



B Bare COPO CNC-Cylinder Head (Combustion Chamber)



B Bare COPO CNC Cylinder Head (Intake)



B Close-up shots of the COPO-specific CNC porting applied to a LS7 head. Intake, exhaust and combustion chambers are optimized for COPO drag-race engines



COPO LS7-Style Exhaust Header Gasket **C**

C. 12594171

COPO LS7-Style Exhaust Header Gaskets

High-performance exhaust header gaskets designed for the high-temperature operation of the COPO racing engines. Fits the exhaust port configuration of LS7-style cylinder heads. Package includes two gaskets.

D. 12591644

COPO LS7-Style Intake Valve

Lightweight titanium 2.205" intake valve, as used on the COPO racing engines and production LS7 engine. Use to assemble COPO LS7 CNC Bare Head 17802804. Sold individually. Eight required per engine.



COPO LS7-Style Intake Valve **D**



COPO LS7-Style Exhaust Valve **E**

E. 12578455

COPO LS7-Style Exhaust Valve

Sodium-filled 1.615" exhaust valve stands up to the high temperatures experienced by racing engines, especially supercharged applications. Use to assemble COPO LS7 CNC Bare Head 17802804. Sold individually. Eight required per engine.

F. 12579615

COPO LS7-Style Intake Rocker Arm

Durable, pedestal-mount cast iron rocker arm with 1.8 ratio. Unique offset design accommodates the LS7's valve arrangement. Self-aligning design with self-locking rocker arm nut. Sold individually. Eight required per engine.



COPO LS7-Style Intake Rocker Arm **F**



COPO LS7-Style Exhaust Rocker Arm **G**

G. 12579617

COPO LS7-Style Exhaust Rocker Arm

Durable, pedestal-mount cast iron rocker arm with 1.8 ratio. Self-aligning design with self-locking rocker arm nut. Sold individually. Eight required per engine.



COPO ENGINE COMPONENTS

A. 12586665

Oil Pump

Production-style, standard-volume gerotor-type oil pump for engines using a conventional wet-sump lubrication system. Bypass spring opens at 32 psi.



A Oil Pump

B. 19299313

Damper/Hub Pulley Kit

Special Chevrolet Performance/ATI competition-approved harmonic damper with front hub adapter, pulley and engine damper.



B Damper/Hub Pulley Kit

C. 12581276

Timing Chain Kit

Durable timing chain kit with three-bolt camshaft sprocket. Kit includes Camshaft sprocket, crankshaft sprocket and chain.

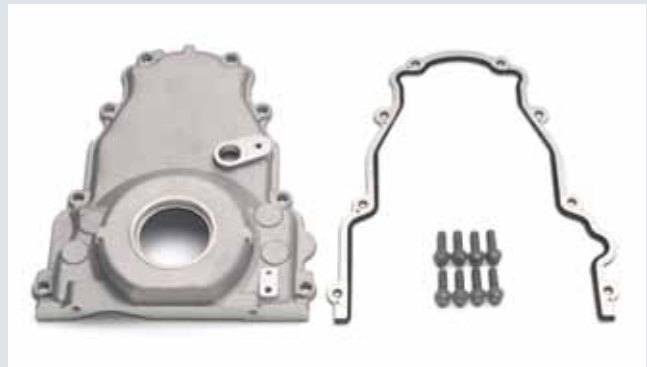


C Timing Chain Kit

D. 12633906

Front Engine Block Cover Kit

Front engine cover for Gen IV Small-Block. Kit includes camshaft sensor and harness, cover gasket, front crankshaft seal and bolts.



D Front Engine Block Cover Kit

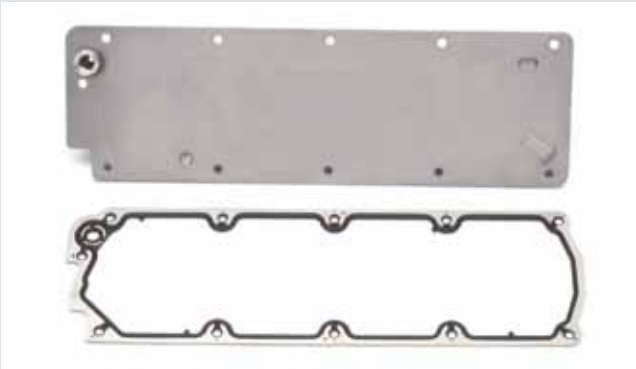


Rear Cover Kit **E**

E. 12633904

Rear Engine Block Cover Kit

Rear engine cover for Gen IV Small-Block. Kit includes cover, cover gasket and rear crankshaft seal.



Valley Cover Kit **F**

F. 12570471

Valley Cover Kit

Engine block valley cover for Gen IV Small-Block (without Active Fuel Management). Kit includes aluminum cover, bolts, gasket and O-rings.

G. 19299624 Air Induction Tube

19299625 Air Filter

Air Intake – 5.3L (327) Engine with 2.9L Supercharger

Air intake system for use with 5.3L supercharged COPO crate engine 17802826, with 2.9L supercharger.



Air Induction Tube **G**

H. 19300087 Air Induction Tube

19300088 Air Filter

Air Intake – 5.3L (327) Engine with 4.0L Supercharger

Air intake system for use with 5.3L supercharged COPO crate engine 17802827, with 4.0L supercharger.

19299621 Air Induction Tube (not shown)

19299622 Air Filter (not shown)

Air Intake – 7.0L (427) Engine

Air intake system for use with 7.0L 427 COPO crate engine 17802825, with 4.0L supercharger.



Air Induction Tube **H**



COPO ENGINE CONTROL MODULE AND HARNESS

PART NUMBER	DETAIL	PART NUMBER	DETAIL
19299289	Engine Control Harness	19299294	Engine Control MEFI 5-327/4.0
19299610	Engine Control Jumper (427)	19299620	Crank Case Breather Cam
19299611	Injector Harness (427)	19299546	Alternator Mount Kit
19299612	Injector Harness (327)	10480003	Alternator
19299290	Engine Control Harness Jumper (327) Both	12223861	Map Sensor
19299291	Engine Control Harness Jumper (327)/4.0L	12569240	Map Sensor (427)
19299292	Engine Control MEFI 5-427	10480003	COPO LS Starter Assembly
19299293	Engine Control MEFI 5-327/2.9		

COPO VEHICLE COMPONENTS

Build your own COPO Camaro race car with the same parts used on the production models, including the unique, lightweight hood emblazoned with the COPO name and drivetrain mount kits that make installing a high-performance powertrain and racing-style solid rear axle easier – and without time-consuming fabrication. Start with one of Chevrolet Performance Camaro bodies-in-white and build your COPO your way!

A. 19243374

Camaro Body-in-White

Chevrolet Performance's Gen 5 Camaro Body-in-White is the smart choice and affordable foundation on which to build a COPO replica or other Camaro race car. It includes an assembled body structure, including the front fenders, hood, roof, doors, rear quarters and trunk lid. The structure also includes the complete floorpans and chassis rails. It is delivered as an painted body shell (color availability is limited), with no additional components or materials. The bodies do not have vehicle identification numbers, so they may be used only as racing vehicles that will never be licensed for street driving.



A Body-in-White

B. 22950678

COPO Camaro Cowl-Induction Style Hood

Lightweight composite hood with high-rise cowl-induction styling to clear tall racing engines, featuring the Chevrolet Bowtie logo embossed on the underside. Designed for hinged/strut opening or adaptable to racing hood pins. Delivered ready to paint.



B COPO Camaro Cowl-Induction Hood (Top)



B COPO Camaro Cowl-Induction Hood (Underside)



Rear Suspension Installation Kit **C**

**C. 22950680
COPO Rear Suspension Installation Kit**

This kit includes brackets and other hardware to mount a solid rear axle and coil-spring suspension in place of the production-style independent rear suspension. Tailored design is a direct fit. Made of heavy-gauge steel. Requires welding.

**D. 22950652
COPO Powertrain Mounting Kit**

Heavy-duty engine mounts and transmission mount for installation of racing engine and transmission in the fifth-generation Camaro body. Conforms to NHRA Stock and Super Stock class guidelines.

**E. 22950650
COPO Switch Kit**

Powertrain switch kit includes switches and jumper connector to plug into COPO wiring harness (not included). Switches include engine start/stop, ignition, fuel pump and auxiliary fan.

NOTE: Camaro production radio panel not included - COPO factory installation replaces radio screen with switch kit.



Powertrain Mounting Kit **D**



Switch Kit **E**

COPO Build Book Coming in December

The COPO Build Book will provide all the information you need to build you own COPO Camaro including specs, part numbers and more.

***For the latest information,
head to chevroletperformance.com.***



COPO VEHICLE COMPONENTS

A. 22950679

Gauge Panel

Auxiliary gauge panel, as used in the COPO Camaro production vehicles. Holds four 2-5/8-in. gauges (not included) and includes jumper connector for the COPO wiring harness (not included). (See page 56 for harness listing.) Mounts on the instrument panel.

GAUGES

B. 3699-00406

Tachometer

5" Tach, 10,000 RPM with shift indicator light.

C. 3653-00406

Oil Pressure

2-5/8" Oil pressure - 0-100PSI

D. 3699-00406

Water Temperature

2-5/8" Water Temperature - 120°- 240°

E. 3699-00406

Voltmeter

2-5/8" Voltmeter - 8-18 volts

F. 3699-00406

Transmission Temperature

2-5/8" Trans Temperature - 100°- 260°

G. 3699-00406

Fuel Pressure

NOTE: GM License Parts. See page 356 for more information.



A COPO Gauge Housing



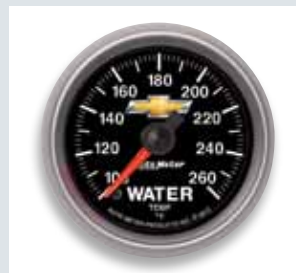
A COPO Gauge Panel with Chevy Performance Gauges (Not sold as a complete unit)



B Tachometer



C Oil Pressure



D Water Temperature



E Voltmeter



F Transmission Temperature



G Fuel Pressure



COPO Camaro Graphics Package **H**

H. COPO Camaro Graphics Package

Dress your Camaro race car in authentic COPO body-side graphics. High-quality die-cut vinyl available in inferno orange, blue, white and black. Kit includes fender and hood graphics.

22951639 Inferno Orange

22951636 Blue (not shown)

22951637 White (not shown)

22951638 Black (not shown)

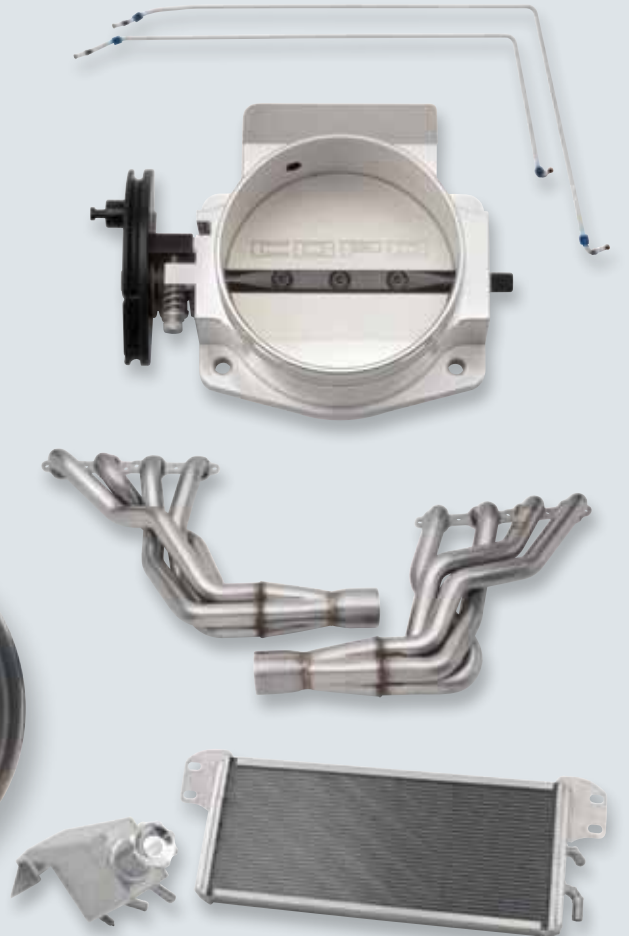


COPO CAMARO

COPO Camaro Parts, Build Your Own COPO (The Rest of the Story)

The previous pages illustrate many of the special parts needed to build your own version of the 2012 COPO Camaro drag race car. These parts are serviced by Chevrolet Performance and are available from your Performance dealer or retailer. Additionally, there are some major COPO components that soon will be available as Chevrolet-Licensed Products. Examples of these include the wheels, intercooler, throttle body, headers, etc. These licensed products are built to the same spec, from the same manufacturer that supplied the factory COPO build. Check with your dealer, or online at ChevroletPerformance.com for the latest listing of licensed COPO suppliers.

See you on the track!



CRATE ENGINES

CHEVROLET PERFORMANCE CRATE ENGINES DELIVER POWER, DURABILITY AND VALUE

There's nothing more important to your project vehicle than its engine and that's why you should rely on Chevrolet Performance. Our range of ready-to-go crate engines offers the performance you want, with value and peace of mind.

When you select a Chevrolet Performance crate engine, you will save time and eliminate the guesswork about a costly rebuild or reconditioned used engine. Even better, our crate engines deliver greater power than most stock-type rebuilds and we offer more high-performance combinations than you can shake a camshaft at – from classic Small-Blocks and torque-building Big-Blocks to production- and high-performance LS engines.

Each of our crate engines is designed, validated and built with the same quality and performance standards that go into GM production engines. We didn't sacrifice drivability for a couple additional horsepower. We deliver great performance matched with uncompromising drivability.

Importantly, every Chevrolet Performance crate engine is built with brand-new parts. That goes for everything from the cylinder block and heads to the rotating assembly and more. There are no reconditioned or remanufactured components. That gives you greater assurance that the engine you invest in will deliver on its promise of performance.

For the ultimate in crate-engine convenience, check out our Connect & Cruise powertrain systems, which match a high-performance LS crate engine with complementing transmission – including all the necessary controllers and installation hardware. See page 114 for more details.

We also offer the emissions-friendly line of E-ROD crate engine packages, which include features such as catalytic converters and an evaporative emission canister. Each of our E-ROD engine packages is certified by California Air Resources Board with an Executive Order number, making them legal for installation in more than 20 million pre-1996 vehicles in California. See page 110 for more information.

Take the guesswork out of powering your project vehicle with a Chevrolet Performance crate engine and enjoy the drive!

*Featured here is the LSX454R P/N 19260835.
For more information, see page 146.*





Crate Engine Quick Reference Chart

CHEVY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19244450	350/290 HP Deluxe Kit	350 cu in	—	290	326	A	92	
12499529	350/290 HP—Economy Performance Engine	350 cu in	352	290	332	A	93	
19210009	350 HO Turn-Key—with Iron Vortec Heads	350 cu in	575	330	380	A	94	
19210008	350 HO Deluxe—with Iron Vortec Heads	350 cu in	481	330	380	A	95	
19210007	350 HO Base—with Iron Vortec Heads	350 cu in	298	330	380	A	95	
19201330	ZZ4 350 Turn-Key—with Aluminum Heads	350 cu in	511	355	405	A	96	
24502609	ZZ4 350 Base—with Aluminum Heads	350 cu in	379	355	405	A	97	
12561723	ZZ4 350 Partial Engine	350 cu in	223	N/A	N/A	A	97	
12499120	Ram Jet 350—PFI with Iron Vortec Heads	350 cu in	517	350	400	A	98	
19201331	Fast Burn 385 Turn-Key—with Aluminum Vortec Heads	350 cu in	511	385	385	A	100	
12496769	Fast Burn 385 Base—with Aluminum Vortec Heads	350 cu in	466	385	385	A	101	
12499101	HT383 Base—Performance Engine	383 cu in	405	340	435	A	102	
12499106	383 Partial Engine	383 cu in	335	N/A	N/A	A	103	
17800393	HT383E	383 cu in	450	340	435	A	104	
12498772	ZZ383 with Aluminum Vortec Heads	383 cu in	397	425	449	A	106	

LS FAMILY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19259918	LC9 5.3L	5.3L	—	315	335	B	120	
19244096	LS327/327 Deluxe Kit	5.3L	—	332	352	B	122	
19165628	LS327/327—Base Assembly	5.3L	433	332	352	B	123	
19258770	LS3 6.2L—Corvette Gen IV V-8	6.2L	415	430	424	B	124	
19258768	LS376/480—EFI LS3 Gen IV V-8	6.2L	415	480	475	C	126	
19244552	LS376/515—Carbureted LS3 Gen IV V-8	6.2L	415	515	469	C	128	
19259233	LS376/525—EFI LS3 Gen IV V-8	6.2L	415	525	489	C	130	
19260164	LSA 6.2L SC	6.2L	—	556	551	D	132	
19244099	LS9 6.2L SC	6.2L	—	638	604	N/A	134	
19244098	LS7 7.0L—Corvette Z06	7.0L	440	505	470	C	136	

LSX FAMILY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19171049	LSX376-B8	6.2L	—	450	444	C	140	
19299306	LSX376-B15	6.2L	—	450	444	C	142	
19244611	LSX454—Base Assembly	7.4L	—	620	590	N/A	144	
19260835	LSX454R	7.4L	—	770	612	N/A	146	

*RECOMMENDED TRANSMISSIONS

A **24216083**
Hydra-Matic 4L60-E
Four-Speed Automatic
See page 186 for details

B **19156260**
Hydra-Matic 4L65-E
Four-Speed Automatic
See page 186 for details

C **19244043**
Hydra-Matic 4L70-E
Four-Speed Automatic
See page 186 for details

D **19154550**
Hydra-Matic 4L85-E
Four-Speed Automatic
See page 186 for details

CHEVY BIG-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19166392	Anniversary Edition 427	427 cu in	460	430	444	D	150	
19166393	ZZ427/480	427 cu in	520	480	490	D	152	
12568774	454 HO—with Iron Heads and Roller Cam	454 cu in	590	425	500	D	154	
12498778	454 Partial Engine	454 cu in	361	N/A	N/A	D	155	
12498777	ZZ454/440—440 Horsepower with Aluminum Heads	454 cu in	522	440	500	D	156	
88890534	HT502—Truck Replacement Engine	502 cu in	557	3	512	D	158	
12568782	502 Partial Engine	502 cu in	402	N/A	N/A	D	159	
12568778	502 HO—with Iron Heads and Roller Cam	502 cu in	602	450	550	D	160	
19201332	ZZ502 Deluxe—Assembled Kit, with Aluminum Heads	502 cu in	611	502	567	D	162	
12371171	ZZ502 Deluxe—Unassembled Kit, with Aluminum Heads	502 cu in	602	502	567	D	163	
12496963	ZZ502 Base Engine, with Aluminum Heads	502 cu in	504	502	567	D	164	
12371204	ZZ502 Base—Unassembled Kit, with Aluminum Heads	502 cu in	532	502	567	D	165	
12499121	Ram Jet 502—PFI with Aluminum Heads	502 cu in	608	502	565	D	166	
19201333	ZZ572/620 Deluxe	572 cu in	580	620	650	D	168	
12498792	ZZ572/620 Base	572 cu in	514	620	650	D	169	
19201334	ZZ572/720R Deluxe	572 cu in	—	720	685	D	170	
12498826	ZZ572/720R Base	572 cu in	—	720	685	D	171	

CIRCLETRACK RACING ENGINES

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19258602	CT350	350 cu in	451	350	390	N/A	174	
88958603	CT355	350 cu in	402	355	405	N/A	176	
88958604	CT400	350 cu in	466	400	400	N/A	178	
19271821	CT525	376 cu in	415	525	471	N/A	180	

GM PARTS ENGINES

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
12607031	2.2L L61/2.4L LE5	134 cu in	—	135–143	142	N/A	190	
19178808	2.8L I-4/3.5L I-5	2.8L	—	175	185	N/A	191	
89060432	3.5L LX9	3.5L	—	200	220	N/A	191	
19168948	3.8L V-6	3.8L	—	200	230	N/A	191	
12575091	4.2L I-6 LL8	256 cu in	—	275	275	N/A	191	
12491869	4.3L LU3	262 cu in	—	180–200	245–260	N/A	192	
12491851	4.8L LR4/LY2	292 cu in	—	275	285–290	N/A	192	
12491854	5.3L LM7/L59	325 cu in	—	285	325–330	N/A	192	
10067353	5.7L Gen 0	350 cu in	—	195	N/A	N/A	192	
12568758	5.7L Gen I	350 cu in	—	N/A	N/A	N/A	193	
12491857	6.0L LQ4/LQ9	364 cu in	—	300–325	360–370	N/A	193	
12491355	7.4L L19/L29	454 cu in	—	230–270	N/A	N/A	193	
89017618	8.1L L18	496 cu in	—	225–340	350–455	N/A	193	

NOTE: Weights include crates and all packaging material. Approximate crate weight is 30 lbs.

WARRANTY INFORMATION



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile limited warranty.



Chevrolet Performance include a 12-month or 12,000-mile limited warranty.



Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



GM Parts Engines offer a 36-month or 100,000-mile limited warranty when the engine is installed in a recommended application.



Torque Converter Quick Reference Chart

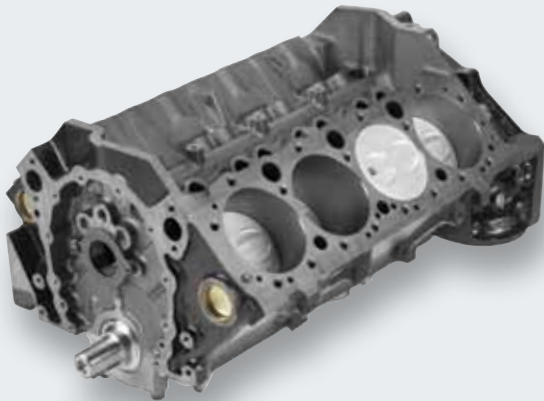
AUTOMATIC TRANSMISSION TORQUE CONVERTER MATCH LISTING								
Part Number	Description	Displac.	H/P	Torque	4L60 Family		4L80 Family	
					Fits SuperMatic 4L65-E and 4L70-E (LS bell)		Fits SuperMatic 4L85-E	
CHEVY SMALL BLOCK V-8					Converter P/N	Stall Range	Converter P/N	Stall Range
19244450	350/290 Horsepower Deluxe	350	290	332	19299800	2400-2800	N/R	
19210009	350 HO Turn-Key - with Iron Vortec Heads	350	330	380	19299800	2400-2800	N/R	
19201330	ZZ4 Turn-Key - with Aluminum Heads	350	355	405	19299800	2400-2800	N/R	
12499120	Ram Jet 350 - PFI with Iron Vortec Heads	350	350	400	19299800	2400-2800	19299804	2400-2800
19201331	Fast Burn 385 Turn-Key - with Aluminum Vortec Heads	350	385	385	19299801	3000-3400	19299805	3000-3400
12499101	HT383 Base - Performance Engine	383	340	435	19299800	2400-2800	19299804	2400-2800
12498772	ZZ383 - High Performance Engine	383	425	449	19299801	3000-3400	19299805	3000-3400
CHEVY LS/LSX V-8								
19244097	LS3 - Corvette Gen IV V-8	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19244805	LS3 - E-Rod Kit Automatic	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19244549	LS376/480 - LS3 Gen IV V-8	6.2	480	475	19299803	3000-3400	19299807	3000-3400
19171225	LS376/515 - Carbureted LS3 Gen IV V-8	6.2	515	469	19299803	3000-3400	19299807	3000-3400
19259232	LS376/525 LS3 Gen IV ASA Camshaft	6.2	525	489	19299803	3000-3400	19299807	3000-3400
19211708	LSA - Supercharged Gen IV V-8	6.2	556	551	N/R		19299806	2400-2800
19201990	LS9 - Supercharged Gen IV V-8	6.2	638	604	N/R		19299806	2400-2800
17802397	LS7 - 2006 Corvette Z06	7.0	505	470	19299803	3000-3400	19299807	3000-3400
	Optional LS7 (depending on application)	7.0	505	470	19299802	2400-2800	19299806	2400-2800
19171049	LSX376-B8	6.2	450	444	19299802	2400-2800	19299806	2400-2800
19299306	LSX376-B15	6.2	450	444	N/R		N/R	
19244611	LSX454	7.4	620	590	N/R		19299807	3000-3400
19257880	LSX454R	7.4	750+	680+	N/R		N/R	
CHEVY BIG BLOCK V-8								
19166393	ZZ427/480	427	480	490	19299801	3000-3400	19299805	3000-3400
19166392	427 - Anniversary Edition	427	430	444	19299801	3000-3400	19299805	3000-3400
12568774	454 HO - with Iron Heads and Roller Cam	454	425	500	19299800	2400-2800	19299804	2400-2800
12498777	ZZ454/440 - 440 Horsepower with Aluminum Heads	454	440	500	19299800	2400-2800	19299804	2400-2800
88890534	HT502 - truck replacement engine	502	377	512	19299800	2400-2800	19299804	2400-2800
12568778	502 HO - with Iron Heads and Roller Cam	502	450	550	19299800	2400-2800	19299804	2400-2800
12496963	ZZ502 Base Engine, with Aluminum Heads	502	502	567	19299801	3000-3400	19299805	3000-3400
19201332	ZZ502 Deluxe - (Deluxe/Assembled) with Aluminum Heads	502	502	567	19299801	3000-3400	19299805	3000-3400
12499121	Ram Jet 502 - PFI with Aluminum Heads	502	502	565	19299801	3000-3400	19299805	3000-3400
12498793	ZZ572/620 Deluxe	572	620	650	N/R		19299805	3000-3400
12498827	ZZ572/720R Deluxe	572	720	685	N/R		19299805	3000-3400

Different Levels of Engine Assemblies

Recognizing that each customer has unique needs, Chevrolet Performance offers four distinct levels of Crate Engines, covering the gamut from starter Partial engines to complete Turn-Key engines that are ready to be dropped into your favorite vehicle. This variety gives builders the opportunity to customize an engine as much or as little as they need to, to meet their expectations.

Partial Engine

This is for the builder who wants to start essentially from the block up. These engines typically include the block and reciprocating assembly. It allows the builder to choose the heads, cam and intake combination he/she wants.



Base

The Base engine assembly typically includes, block, crank, pistons, cam, heads and valve covers, but allows the builder to pick the carburetor/injection system and intake manifold they desire.



Deluxe

The Deluxe crate engines are essentially ready to fire up, as they ship with the distributor installed, harmonic balancer bolted on and the carburetor in the crate. All you need to do is put the parts together and go!



Turn-Key

We told our engineers to have some fun and assemble engines the way they think it should be done ... we then took their combinations, built them up and put them in a crate that ships right to your dealer. The Turn-Key engines represent an outstanding value, and they are perfect for enthusiasts who have built a chassis and need reliable power to get it down the road.



Real World PERFORMANCE



“The 350 crate engine gives us more power at a great price.”

– Tom Kuhr

The traditional-style hot rods built by NEHR Speedcraft are unique. Their hand-built retro-style cars use a unique chassis design that gives them a classic look and ground-hugging stance, with exceptional handling capability and on-road comfort. They used to be powered by remanufactured engines, but co-owner Tom Kuhr now specifies the Chevrolet Performance 350/290 HP crate engine as the standard power plant.

“The 350 crate engine gives us more power at a great price,” says Kuhr. “They’re basically ready to go out of the box. We dress them up to fit the style of the car for the customer and we’re done. It’s really the easiest, most cost-effective way to build performance into our cars.”

And with a power-to-weight ratio that’s comparable to a Corvette, the 290-horsepower 350/290 HP gives the NEHR Speedcraft cars contemporary power to match their traditional designs.

“LS engines have changed the game when it comes to building high-performance engines.”

— Brian Thomson

As a professional engine builder, Brian Thomson, of Thomson Automotive, knows customers want the most horsepower bang for their buck. That's why many of his projects begin with an LS crate engine from Chevrolet Performance.

“LS engines have changed the game when it comes to building high-performance engines,” says Thomson. “As a builder who wants to give the greatest value to my customers, I tell them an LS crate engine will get them most of where they want to be with their performance goal. From there, we'll experiment with a camshaft or some other components, but the power, durability and convenience of the crate engines make them the most cost-effective starting points.”





“A few years ago, you would never have thought about being able to build a street car that makes 1,000 horsepower at the tires, but this combination has proven absolutely reliable both on and off the track.”

– Larry Dye

They do things big down in Texas and when it comes to building fast fifth-generation Camaros, nobody does it like Lewisville-based ADM Performance. They've built a number of super-quick Gen-5 cars using LSX-based engines, including Larry Dye's 1,200-horsepower street/strip Camaro SS. It uses a twin-turbo system and a shot of nitrous.

“A few years ago, you would never have thought about being able to build a street car that makes 1,000 horsepower at the tires, but this combination has proven absolutely reliable both on and off the track,” says Dye. “Using the LSX block as the foundation for this engine was the right choice. It's more than strong enough and enabled us to make the power we wanted and then some. It's the future for ultimate-performance street-and-strip cars.”

Dye's subtle Camaro gives few clues to the performance potential packed under the hood. The Cyber Gray Metallic SS is devoid of large scoops, wings and other typical race car accoutrements – and the dark-tinted side windows conceal the roll bar inside. In fact, the car retains all of its interior convenience features. It's a 1,200-horsepower modern muscle car with SiriusXM Satellite Radio and air conditioning. It does get hot in Texas, you know.

“There’s nothing like having a Big-Block under the hood – it’s all power, all the time.”

- Steen Gilbert

Steen Gilbert’s yellow 1970 Chevelle SS is no garage queen. Powered by a 572-cubic-inch Chevrolet Performance crate engine, it has been a fixture at local cruise events and is the veteran of several Hot Rod PowerTour excursions. A 4L80 four-speed automatic overdrive transmission gives the classic Chevelle a great balance of on-demand power and drivability.

“There’s nothing like having a Big-Block under the hood – it’s all power, all the time,” says Gilbert. “With the four-speed transmission and air conditioning blowing cold, it’s an easy-going highway cruiser, but the moment you even breathe on the gas pedal, all that torque hits hard and the feeling is incredible. I wouldn’t have my Chevelle any other way.”

Gilbert has put thousands of miles on his 572-powered Chevelle, most of them cruising America’s highways and byways. He doesn’t always use every pound-foot of torque from the engine on those drives, but when the need arises, they’re ready and waiting.



COPO 427

PUT THE POWER OF THE COPO CAMARO IN YOUR RACE CAR!

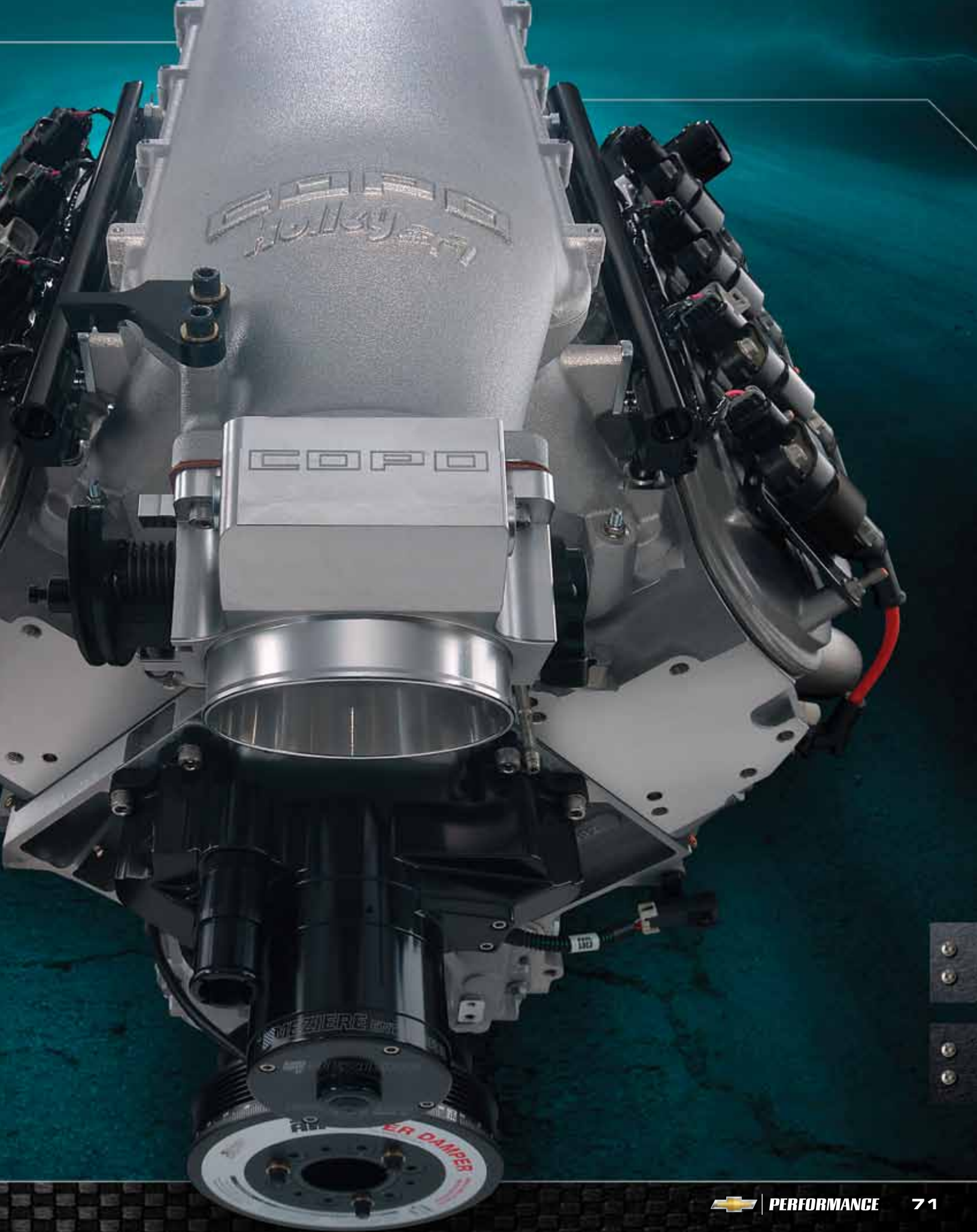
When the original COPO Camaros were built, you had to know the right people to get one of those special-order muscle cars, which were designed for Stock and Super Stock racing supremacy. Today, you just have to contact your favorite Chevrolet Performance retailer to order the same high-compression, high-power COPO 427 engine used in the new COPO Camaro program and start your own legacy of winning!

Image shown is the COPO 427 Engine P/N 17802825.

To learn more about this engine, please turn to page 50.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





CHEVROLET
Holley EFI

COPO

MEZIERE

COPO
ER DAMPER

350/290 HP DELUXE

GREAT POWER, GREAT LOOKS AND GREAT VALUE – THIS ENGINE HAS IT ALL!

Chevrolet Performance's 350/290 HP Deluxe takes our most popular crate engine and delivers it with a show-winning complement of chrome accessories – and it's more than a pretty face! The 350/290 HP Deluxe delivers great power and excellent low-end torque with a tough, all-new assembly – including a brand-new block with four-bolt mains. Forget rebuilding, this crate engine has the looks and the power you need at a great price.

Image shown includes the 350/290 HP Deluxe Engine P/N 19244450 along with the following additional Chevrolet Performance parts:

350/290 HP Engine	19244450
670-cfm Holley Carburetor	19170092
Intake Manifold	10185063
HEI Distributor	93440806
Push-In Oil Filter Cap	12341993
Chrome Water Neck	12342024
Spark Plus Wires	12361051
Balancer	12551537
Black Crinkle Steel Air Cleaner with Bowtie Center Nut	141-752*
Black Crinkle Tall Valve Covers	141-751*
Black Crinkle Valve Cover Hold Down Clamps	141-757*
Black Crinkle Valve Cover Wing Nuts	141-756*
Spark Plug Wire Loom Kit	141-638*
Black Crinkle Bowtie Logo Breather Cap	141-754*
Black Crinkle Timing Chain Cover	141-753*
Bowtie Logo Freeze Plug Inserts	141-232*

To learn more about this engine, please turn to page 92.

** For more information on these and other Licensed Parts, turn to page 356.*

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





FAST BURN 385

HEADS (AND SHOULDERS) ABOVE THE CROWD

Fast Burn aluminum cylinder heads are complemented by a rock-solid bottom end to create a competition-gobbling Small-Block. Don't waste time pinching yourself. It's real. Make it yours with the following Chevrolet Performance Parts.

Image shown includes the Fast Burn 385 Engine P/N 19201331 along with the following additional Chevrolet Performance parts:

Fast Burn 385 Base Engine	12496769
Billet HEI Distributor	88961867
Street Performance Fuel Pump	12355612
Push-In Oil Filler Cap	12341993
Chrome Water Neck	12342024
Balancer	24502534
Chrome, Two-Piece Die-Cast Aluminum Valve Colors	141-912*
Chrome Breather Cap	141-616*
Bowtie Emblem Freeze Plug Inserts	141-232*
Chrome Timing Chain Cover	141-215*

To learn more about this engine, please turn to page 100.

** For more information on these and other Licensed Parts, turn to page 356.*

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





LS376/525

MODERN LS PERFORMANCE WITH AN OLD-SCHOOL EDGE!

Our power-mad engineers have been at it again, tinkering with the factory formulas for LS performance to come up with the high-output LS376/525. They took the proven LS3 production engine and matched it with the racing-developed "ASA" camshaft. You'll hear the power at idle, because the LS376/525 will remind you of vintage muscle car engines – making it a perfect match for a resto-mod classic!

Image shown includes the LS376/525 Engine P/N 19259233 along with the following additional Chevrolet Performance parts:

**Corvette Accessory Drive System
with A/C19155067**

To learn more about this engine, please turn to page 130.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





LS9 6.2L SC

THE FACTORY-ENGINEERED FORCED-INDUCTION POWERHOUSE FROM THE CORVETTE ZR1!

Chevrolet Performance is thrilled to offer the supercharged LS9 engine for your high-performance project. It is the most powerful production engine ever from Chevrolet and helps propel the Corvette ZR1 to a 205-mph top speed, thanks to a high-tech roster of components, including titanium intake valves and a sixth-generation supercharger – which helps the “blower” deliver greater power across the entire rpm band.

Image shown includes the LS9 6.2L Engine P/N 19244099 along with the following additional Chevrolet Performance parts:

Corvette Engine Cover12631086

Deluxe Accessory Drive Kit19243524

To learn more about this engine, please turn to page 134.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.

LSX454R

A STRATEGIC WEAPON FOR WINNING ON THE DRAG STRIP!

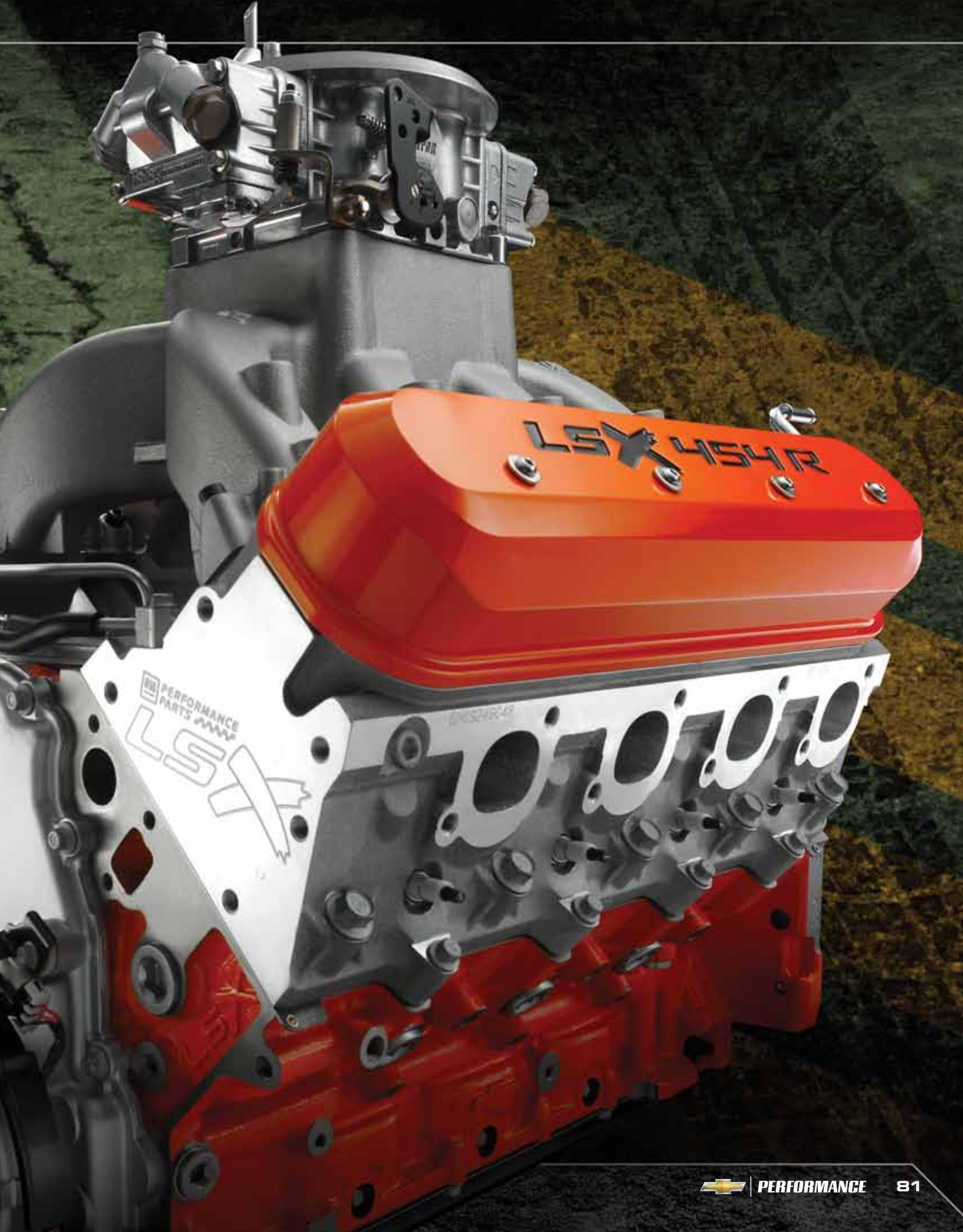
Chevrolet Performance designed the LSX454R for the heads-up, high-rpm demands of drag racing, delivering at least 750 horsepower that will help you win races. It is a high-compression, solid-roller combination that uses our six-bolt, 11-degree LSX DR cylinder heads. They feature raised ports that provide tremendous airflow. Top off the assembly with your Dominator-type (included) carburetor and hang on!

Image shown is the LSX454R Engine P/N 19260835.

To learn more about this engine, please turn to page 146.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.







LSX376-B8

BUILD BOOST AFFORDABLY AND DURABLY!

When you build a forced-induction engine with one of Chevrolet Performance's new LSX376-B8 or LSX376-B15 crate engines, you're starting with a foundation designed for boost. Each uses the tough LSX Bowtie block and high-flow rectangular, LS3-style port heads. The LSX376-B8 is our most affordable and is rated for engines producing up to 8 pounds of boost, while the LSX376-B15's all-forged rotating assembly is good for up to 15 pounds of boost.

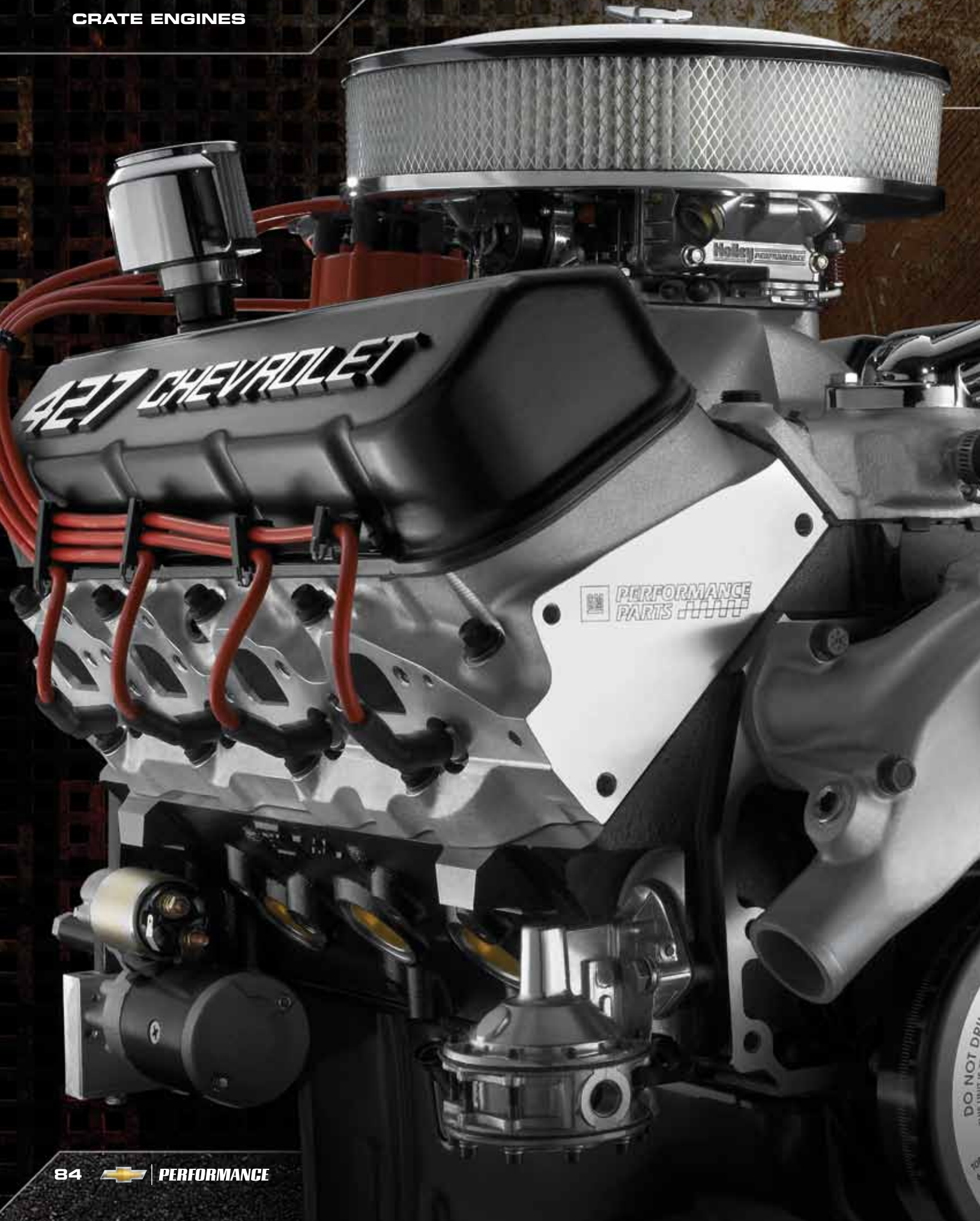
Image shown includes the LSX376-B8 Engine P/N 19171049 along with the following additional Chevrolet Performance parts:

ZL1 Supercharger19300534
Accessory Drive Kit19155067

To learn more about this engine, please turn to page 140.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





ZZ427/480

A CLASSIC COMBINATION WITH MODERN DRIVABILITY!

Chevrolet Performance has recreated the classic L88 Big-Block combination in the ZZ427/480, with 480 horsepower and 490 lb.-ft. of torque. Like the original, it features a forged steel crankshaft and high-flow, oval-port aluminum cylinder heads. It's got a smooth hydraulic camshaft, which delivers great drivability and a broader rev range than the original-type cam. Update your classic with this modern version of the iconic L88!

Image shown includes the ZZ427/480 Engine P/N 19166393 along with the following additional Chevrolet Performance parts:

- Chrome Air Cleaner and Bowtie Nut12342080**
- Chrome Water Neck12342024**
- High-Torque Mini Starter12361146**
- Street Performance Fuel Pump12355614**

To learn more about this engine, please turn to page 152.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





ZZ502/502

NOW WE'RE TALKING TORQUE!

With its impressive 502 horsepower and incredible 567 lb.-ft. of torque, Chevrolet Performance's classic ZZ502/502 demands your full attention – and a suspension tuned to harness its tremendous twisting power. In Deluxe form, it comes complete from the oil pan to the carburetor. If your car's chassis can handle it, the ZZ502/502 has all the grunt you need for the street.

Image shown includes the ZZ502/502 Deluxe Engine P/N 19201332 along with the following additional Chevrolet Performance parts:

Chrome Air Cleaner and Bowtie Nut	12342071
Chrome Water Neck	12342024
Chrome High-Torque Mini Starter	12363128
Billet HEI Distributor	88961867
Push-In Oil Filler Cap	12341993
ZZ572 Breather	25534355
Wire Loom Kit	12495502
Fuel Pump Block-Off Plate	12341999
Big-Block Balancer	88962814
Chrome, Black/Red Logo Valve Covers	141-813*

To learn more about this engine, please turn to page 162.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.



ZZ572/720R

YOUR TICKET TO 9-SECOND ETS!

If you're looking to get your race car into the 9s, the ZZ572/720R delivers the potential, with at least 720 horsepower and 685 lb.-ft. of torque. It's the biggest, baddest and most-powerful big-block available from Chevrolet Performance, featuring an all-forged rotating assembly, rectangular-port aluminum cylinder heads with huge 113cc intake ports and 2.25/1.88-inch valves. You don't mess around with the ZZ572/720R – you win!

Image shown includes the ZZ572/720R Deluxe Engine P/N 19201334 along with the following additional Chevrolet Performance parts:

Chrome Water Neck12342024

Street Performance Fuel Pump12355614

To learn more about this engine, please turn to page 170.

NOTE: Engine may not come with all the parts shown on photo. See your dealer for more details.





CRATE ENGINES

SMALL-BLOCK



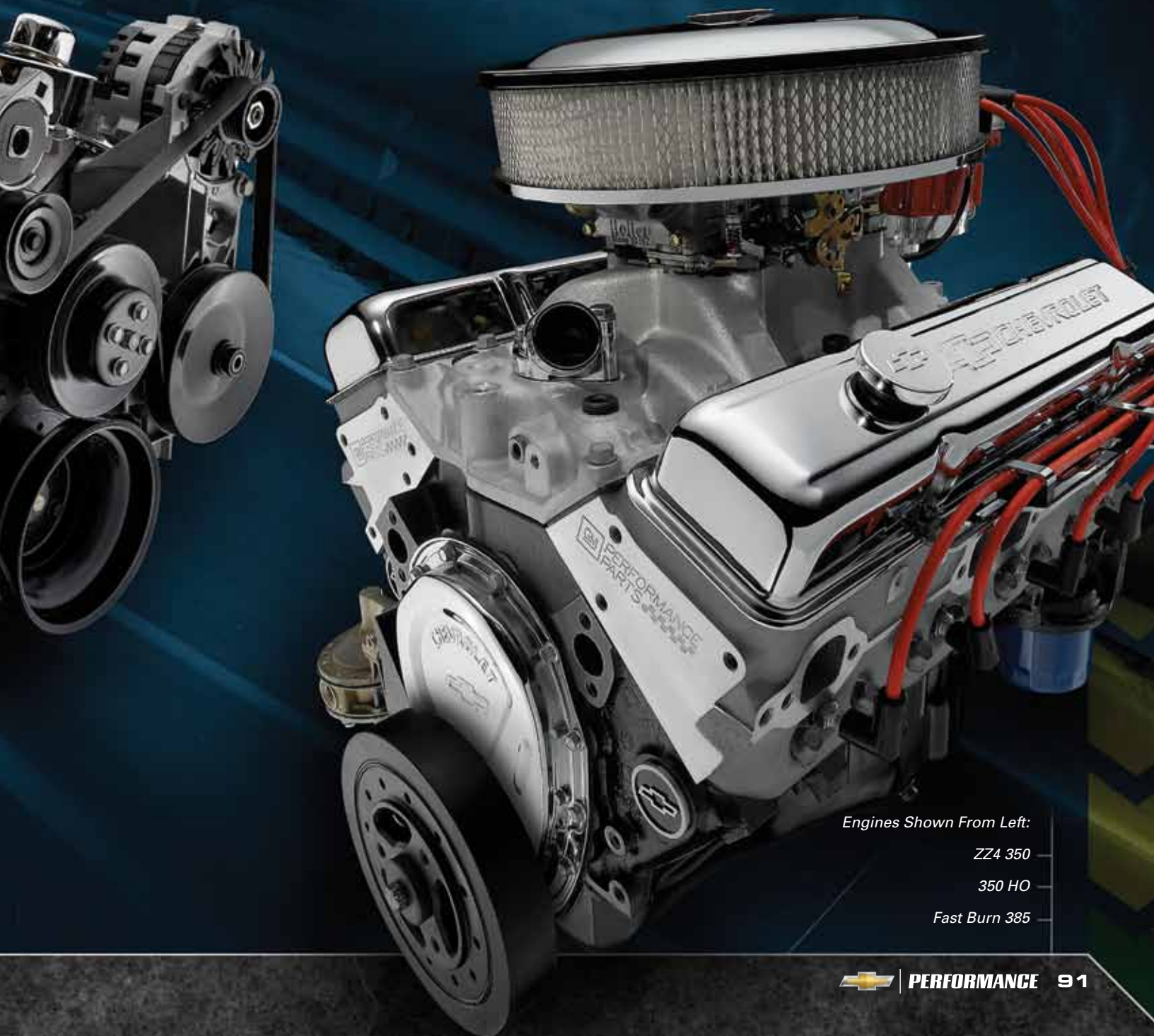
AN AMERICAN ICON FOR NEARLY 60 YEARS

The classic Small-Block. It's the V-8 engine America grew up with and continues to offer enthusiasts and builders great power, application flexibility and value.

Chevrolet Performance's range of Small-Block crate engines has something for everyone and every budget, from our 350/290 Deluxe budget performer to our classic ZZ4 – and even 383 "stroker" combinations – we've got the small-block to match your project.

All of our Small-Block crate engines are built with brand-new parts, from the cylinder block and rotating assembly to the heads and all the supporting accessories. The blocks feature durable four-bolt main caps, too, which you won't find in many salvage yard core engines. Better still, each is backed by a 24-month/50,000-mile warranty for worry-free performance.

The Small-Block is part of the fabric of America. With a Chevrolet Performance crate engine, you're not just installing an engine – you're building history.



Engines Shown From Left:

ZZ4 350

350 HO

Fast Burn 385



350/290 HP Deluxe

19244450  

■ 290 hp @ 5,250 rpm

■ 326 lb.-ft. @ 3,750 rpm

Forget the rebuild – our best crate engine value comes with classic chrome style!

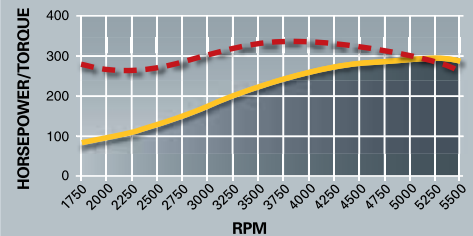
The 350/290 HP Deluxe combines Chevrolet Performance’s most popular crate engine with an aluminum intake manifold* and chrome dress-up kit to create one of the most stylish and value-driven engines on the market. The chrome dress-up parts include the valve covers (with push-in breathers and “T-bar”-style hold-downs), timing cover and air cleaner.

Like all of our crate engines, the 350/290 HP Deluxe starts with a brand-new block. And it’s a strong one, with four-bolt mains. It also includes a smooth hydraulic camshaft and durable aluminum pistons that deliver an 8.0:1 compression ratio. It’s a powerful, durable engine that makes a great alternative to rebuilding with your old two-bolt block.

Chevrolet Performance has all the parts you need to get your 350/290 HP engine running, too, from the starter and distributor to the plug wires and more. If you want even more power, our high-performance cylinder heads will take this stout Small-Block to the next level.

**Chevrolet Performance recommends Holley 670-cfm carburetor P/N 19170092 for use with the 350/290 HP Deluxe (shown in photo on opposite page).*

350/290 HP DYNO CHART



Horsepower: 290 @ 5250 rpm

Torque (lb-ft): 326 @ 3750 rpm

INSTALLATION NOTES

- Use neutral balance harmonic damper P/N 12551537
- Use internally balanced flexplate P/N 471529 for automatic transmission or flywheel P/N 14085720 for manual transmission (not included)
- Power ratings based on tests with Holley 670-cfm carburetor P/N 19170092 (not included)
- Does not accept Chevrolet Performance roller lifter assemblies
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- See the Valve Covers section on page 186 for selection of chrome, polished and aluminum valve covers
- Pre-1986-style 2-pc rear main seal block
- Recommended for use in vehicles with 6,000 GVW or less

350/290 HP TECH SPECS

Part Number:	19244450	Camshaft Duration (@.050 in):	222° intake / 222° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 93438648):	Iron; 76cc chambers
Displacement (cu in):	350	Valve Size (in):	1.94 intake / 1.50 exhaust
Bore x Stroke (in):	4.000 x 3.480	Compression Ratio:	8.0:1
Block (P/N 10066034):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 10089648):	Stamped steel
Crankshaft (P/N 93426651):	Nodular iron	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	87 octane
Pistons (P/N 93422884):	Cast-aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 3896962):	Hydraulic flat tappet	Maximum Recommended rpm:	5,300
Camshaft Lift (in):	.450 intake / .4600 exhaust	Balanced:	Internal

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.





Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



*Shown with 670-cfm carburetor (not included)

12499529  

350/290 HP

The 350/290 crate engine is also available without the manifold and chrome dress-up kit. Use this even more economical version to build the final combination to your specifications.



24216083

Hydra-Matic 4L60-E Four-Speed Automatic Transmission

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 370 lb.-ft. of torque.



See page 186 for details

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!

93440806 HEI Distributor

See page 347 for details



12361146 High-Torque Mini-Starter

See page 342 for details



19212657 Transmission Controller

See page 188 for details



12497698 Serpentine Accessory Drive System

See page 230 for details



12361056 Spark Plug Wires, GM Performance 135° Boot

See page 343 for details



12355612 Fuel Pump, Street Performance

See page 350 for details



SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



350 HO Turn-Key

19210009  

■ 330 hp @ 5,000 rpm

■ 380 lb.-ft. @ 3,800 rpm

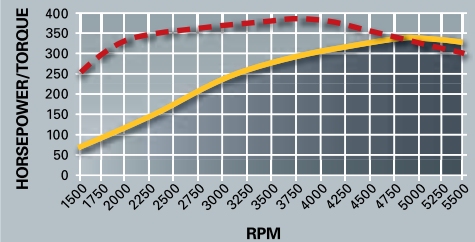
From air cleaner to oil pan, this affordable and powerful 350 comes with it all

The classic 350 Small-Block engine has powered countless project cars since its introduction in the 1967 Camaro – and it is easy to understand why: it makes great power and torque in a compact, affordable package. That’s exactly what you get in our 350 HO Turn-Key crate engine.

Construction begins with a brand-new engine block with four-bolt mains, which delivers greater strength than that old two-bolt block you were thinking of rebuilding. We also add a set of brand-new Vortec iron heads and a hydraulic flat-tappet camshaft with 0.435/0.460-inch lift specs. It gives the engine the idle quality of a true muscle car without the need for periodic lash adjustments.

As one of Chevrolet Performance’s Turn-Key engines, the 350 HO Turn-Key comes with the intake manifold and distributor installed. It also includes the carburetor, front-accessory kit, starter, fuel pump and spark plug wires. It’s just about everything you need to get this classic 350 up and running in your project vehicle.

350 HO DYNO CHART



Horsepower: 330 @ 5000 rpm

Torque (lb-ft): 380 @ 3800 rpm

INSTALLATION NOTES

- Comes with externally balanced flexplate for automatic transmission; requires externally balanced flywheel for manual transmission. See chart on page 227
- Has right-side oil dipstick
- Requires fuel line from fuel pump to carburetor
- Fuel pump pressure is pre-set; fuel pressure regulator not required
- Some assembly and minor engine tuning required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

350 HO TECH SPECS

Part Number:	19210009	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy Small-Block V-8	Valve Size (in):	1.940 intake / 1.500 exhaust
Displacement (cu in):	350	Compression Ratio:	9.1 nominal
Bore x Stroke (in):	4.000 x 3.480	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 14088526):	Nodular iron	Water Pump (P/N 88894341):	Cast iron, long-style
Connecting Rods (P/N 10108688):	Powdered metal steel	Flexplate (P/N 14088765):	12.750"
Pistons (P/N 12514101):	Cast-aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502476):	Hydraulic flat tappet	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Lift (in):	.435 intake / .460 exhaust	Maximum Recommended rpm:	5,500
Camshaft Duration (@.050 in):	212° intake / 222° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.







19210008  

350 HO Deluxe

Like the 350 HO Turn-Key crate engine, the 350 HO Deluxe is rated at 330 horsepower and 380 lb.-ft. of torque. The intake manifold, carburetor and distributor are included, but not installed.



19210007  

350 HO Base

All the same, important, power-building elements as the Turn-Key and Deluxe versions, but it comes without an intake manifold, carburetor or distributor.

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



24216083
Hydra-Matic 4L60-E
Four-Speed Automatic
Transmission

See page 186
for details



19212657
Transmission
Controller

See page 188
for details



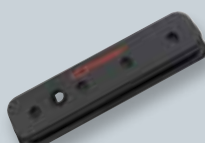
12361146
High-Torque
Mini-Starter

See page 342
for details



12497985
Chrome-Finish
Aluminum Valve Covers,
Center Bolt Design

See page 219
for details



12497979
Aluminum Black
Crinkle Valve Covers,
Center Bolt Design

See page 219
for details



12342024
Chrome Water
Neck

See page 238
for details

SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

ZZ4 350 Turn-Key



19201330  

■ 355 hp @ 5,400 rpm

■ 405 lb.-ft. @ 3,600 rpm

Affordable high-performance with everything you need to get running!

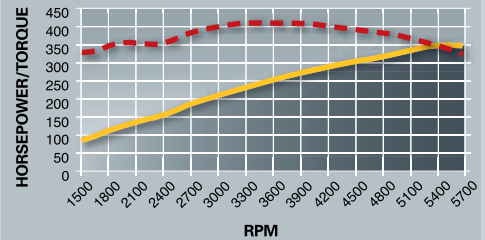
The ZZ4 350 crate engine is Chevrolet Performance's original affordable crate engine. In Turn-Key form, it comes with everything you need to get it running in your project vehicle.

High-flow aluminum heads are the keys to the ZZ4's robust 355 hp and 405 lb.-ft. of torque. They boast 163cc intake runners, raised exhaust ports and tight, 58cc combustion chambers that enhance compression and power. The heads feature 1.94/1.50-inch valves for efficient performance.

The rest of the ZZ4 350 is comprised of premium materials, including a brand-new, four-bolt block, forged steel crankshaft, high-silicon pistons and a hydraulic roller camshaft. It also includes an aluminum intake, Holley four-barrel carburetor and HEI distributor, as well as a starter, water pump, fuel pump and front-end accessory drive kit – including an air conditioning compressor, alternator and more!

If you want to finish off the engine yourself, try the ZZ4 350 Base engine (P/N 24502609) at a lower price. It includes only the intake manifold, distributor, water pump, damper and flexplate.

ZZ4 350 DYNO CHART



Horsepower: 355 @ 5400 rpm Torque (lb.-ft.): 405 @ 3600 rpm

INSTALLATION NOTES

- Comes with 12.75-inch externally balanced 153-tooth automatic transmission flexplate. Change to externally balanced flywheel for manual transmission applications. See chart on page 227
- Requires fuel line from fuel pump to carburetor
- Fuel pump pressure is pre-set; fuel pressure regulator not required
- Some assembly and minor engine tuning required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ4 350 TECH SPECS

Part Number:	19201330	Camshaft Duration (@.050 in):	208° intake / 221° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12556463):	Aluminum; 58cc chambers
Displacement (cu in):	350	Valve Size (in):	1.940 intake / 1.500 exhaust
Bore x Stroke (in):	4.000 x 3.480	Compression Ratio:	10:1
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 10089648):	Stamped steel
Crankshaft (P/N 12556307):	Forged steel	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 10159436):	High-silicon aluminum with offset pins	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 10185071):	Steel hydraulic roller	Maximum Recommended rpm:	5,800
Camshaft Lift (in):	.474 intake / .510 exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





24502609  

ZZ4 350 Base

Chevrolet Performance offers the ZZ4 350 Base crate engine for customers who want to finish it off with their own accessories. It includes the intake manifold, HEI distributor, cast-iron water pump, damper and flexplate.



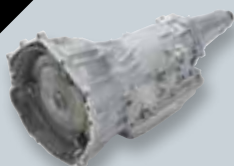
12561723  

ZZ4 Partial Engine

For customers in search of a replacement Partial engine for their ZZ-series engine, this is it! It includes the ZZ4 350's bottom end, with forged steel crankshaft, LT1-style high-silicon aluminum pistons and connecting rods.



SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



24216083
Hydra-Matic 4L60-E
Four-Speed Automatic
Transmission (Gen 0/1)

See page 186
for details



19212657
Transmission
Controller

See page 188
for details



12370838
Roller Rocker Arm
Set, 1.5:1 Ratio

See page 217
for details



12342024
Chrome Water
Neck

See page 238
for details



12497979
Aluminum Black
Crinkle Valve Covers,
Center Bolt Design

See page 219
for details



12497985
Chrome-Finish
Aluminum Valve Covers,
Center Bolt Design

See page 219
for details

SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



Ram Jet 350



12499120  

■ 350 hp @ 5,200 rpm

■ 400 lb.-ft. @ 3,500 rpm

Modern performance with vintage style!

Chevrolet Performance's unique Ram Jet 350 combines the classic look of the original Rochester mechanical injection system with the dependability and optimized performance of contemporary electronic port fuel injection.

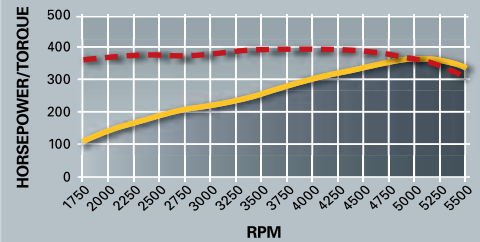
We've taken our proven 350 Small-Block and topped it with an exclusive port fuel injection system that emulates the look of Chevy's factory fuel injection systems from the 1950s and '60s. It's the perfect choice for a resto-mod hot rod from the original Rochester era.

We deliver the Ram Jet 350 with the following components to make it easier to install and start:

- Unique intake manifold and plenum that is 9.75 inches tall – plenty of clearance to fit under the hood of most vehicles without modifications
- MEFI 4 engine controller
- Wiring harness
- Detailed instructions

The bottom end of the engine is our stout 350 with a brand-new block, a hydraulic roller cam, Vortec iron heads and a pump-gas-friendly 9.4:1 compression ratio.

RAM JET 350 DYNO CHART



Horsepower: 350 @ 5200 rpm

Torque (lb-ft): 400 @ 3500 rpm

INSTALLATION NOTES

- Comes with externally balanced, manual transmission flywheel; change to externally balanced flexplate for automatic transmission applications. See chart on page 227
- Installer to supply 12-volt power source and fuel
- See instructions for fuel pump recommendation
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- IMPORTANT! For a safe, proper and trouble-free engine break-in, the MEFI 4 computer has a "green" mode that controls rpm during the break-in period. During this period, engine speed is limited to 4,000 rpm in the first hour, 4,500 rpm in the second hour and 5,500 rpm in the third hour

RAM JET 350TECH SPECS

Part Number:	12499120	Camshaft Duration (@.050 in):	196° intake / 206° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12528913):	Vortec iron; 64cc chambers
Displacement (cu in):	350	Valve Size (in):	1.940 intake / 1.500 exhaust
Bore x Stroke (in) :	4.000 x 3.480	Compression Ratio:	9.1 nominal
Block:	Cast iron with 2-bolt main caps	Rocker Arms (P/N 12367346):	Aluminum roller style
Crankshaft (P/N 10243068):	Cast-iron	Rocker Arm Ratio:	1.6
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 12571703):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 14097395):	Hydraulic roller	Maximum Recommended rpm:	5,500
Camshaft Lift (in):	.460 intake / .481 exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



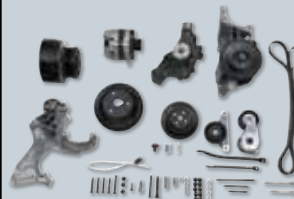
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



SELECT THE PARTS BELOW TO FINISH YOUR RAM JET 350 CRATE ENGINE AND GET IT RUNNING IN LESS TIME!



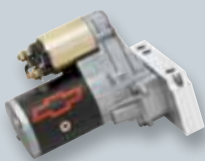
24216083
Hydra-Matic 4L60-E Four-Speed Automatic Transmission
 Electronically controlled four-speed over-drive transmission. Suitable for engines producing up to 370 lb.-ft. of torque.
See page 186 for details



12497698
Serpentine Accessory Drive System
 The complete kit you need to finish off the crate engine in your vehicle.
See page 230 for details



19212657
Transmission Controller
See page 188 for details



12361146
High-Torque Mini-Starter
See page 342 for details



12341670
Chrome Short Valve Covers
See page 218 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 219 for details



12342024
Chrome Water Neck
See page 238 for details




10465143
Lightweight Starter (remanufactured)
See page 342 for details

SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

Fast Burn 385 Turn-Key



19201331  

■ 385 hp @ 5,600 rpm

■ 385 lb.-ft. @ 4,000 rpm

Building on the 'ZZ' legacy for more power!

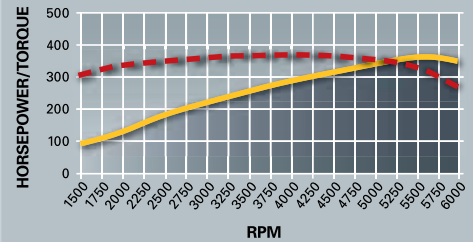
Our engineers grafted the bottom end of the legendary ZZ4 with the horsepower-building Fast Burn cylinder heads to create the Fast Burn 385. The result is 385 horsepower and a satisfying 385 lb.-ft. of torque – with no less than 300 lb.-ft. from 1,500 rpm to 5,700 rpm.

The foundation is a sturdy iron block with four-bolt mains, a forged steel crankshaft, an aggressive hydraulic roller camshaft and durable high-silicon pistons. As a Turn-Key crate engine, it comes with the distributor, carburetor and balancer installed – along with a starter, fuel pump, air conditioning pump, alternator, front-end accessory drive kit and more – all in one convenient, all-inclusive package!

The lightweight, Vortec-style Fast Burn aluminum heads have large, 210cc intake runners and 2.00/1.55-inch valves. Their 62cc combustion chambers are uniquely shaped to promote quicker, more complete combustion.

If you want to finish off the engine yourself, try the Fast Burn 385 Base engine (P/N 12496769) at a lower price. It includes only the intake manifold, distributor, water pump, damper and flexplate.

FAST BURN 385 DYNO CHART



Horsepower: 385 @ 5600 rpm

Torque (lb.-ft): 385 @ 4000 rpm

INSTALLATION NOTES

- Comes with 12.750-inch externally balanced 153-tooth automatic transmission flexplate. Change to externally balanced flywheel for manual transmission applications. See chart on page 227
- Requires fuel line from fuel pump to carburetor
- Fuel pump pressure is pre-set; fuel pressure regulator not required
- Some assembly and minor engine tuning required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

FAST BURN 385 TECH SPECS

Part Number:	19201331	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Engine Type:	Chevy Small-Block V-8	Valve Size (in):	2.000 intake / 1.550 exhaust
Displacement (cu in):	350	Compression Ratio:	9.72:1 nominal
Bore x Stroke (in):	4.000 x 3.480	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12556307):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 10159436):	Hypereutectic aluminum	Maximum Recommended rpm:	5,800
Camshaft Type (P/N 10185071):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.474 intake / .510 exhaust		
Camshaft Duration (@.050 in):	208° intake / 221° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.







12496769  

Fast Burn 385 Base

It has the same forged crankshaft, hydraulic roller cam and high-flow Fast Burn heads as the Turn-Key crate engine – but delivered without the carburetor, fuel pump, starter and other accessories.



12561723  

ZZ4 Partial Engine

The Fast Burn 385 is based on the popular ZZ4 engine and this partial engine assembly includes the forged steel crankshaft, LT1-style high-silicon pistons and connecting rods.

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



24216083
Hydra-Matic 4L60-E
Four-Speed Auto-
matic Transmission

See page 186
for details



19212657
Transmission
Controller

See page 188
for details



12497985
Chrome-Finish
Aluminum Valve Covers,
Center Bolt Design

See page 219
for details



12370838
Roller Rocker Arm
Set, 1.5:1 Ratio

See page 217
for details



12342024
Chrome Water
Neck

See page 238
for details



12480127
Short Aluminum
Valve Covers

See page 218
for details

HT383

12499101  



■ 340 hp @ 4,500 rpm

■ 435 lb.-ft. @ 4,000 rpm

Extra cubic inches deliver greater torque for your truck!

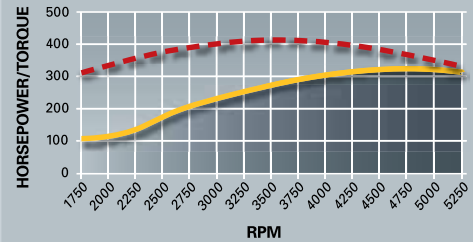
Got a pre-1980 GM truck with a tired Small-Block? Forget the rebuild or reconditioned used engine and take your trusty truck's capability to the next level with our big-torque HT383 stroker crate engine.

Its extra displacement and unique parts are designed to build a wide, flat torque curve that hits the 400 lb.-ft. mark by 2,500 rpm and doesn't dip below it through the 4,000 rpm peak (435 lb.-ft.). It also makes 340 horsepower. That's power and torque you simply won't get with a stock-type rebuild.

The HT383 features a brand-new engine block with four-bolt mains – an upgrade for most production engines that came with two-bolt mains – along with a forged steel crankshaft and a smooth hydraulic roller camshaft. Its 9.1:1 compression ratio allows it to run on regular unleaded gasoline, too.

We deliver the HT383 with an aluminum intake manifold, ready for you to swap over the accessories from your tired engine. It's also backed by a 24-month/50,000-mile (80,000 km) limited warranty.

HT383 DYNO CHART



Horsepower: 340 @ 4500 rpm

Torque (lb.-ft.): 435 @ 4000 rpm

INSTALLATION NOTES

- Requires addition of carburetor, ignition and starter (not included)
- Rochester Quadrajets or Holley 770-cfm carburetor recommended
- Comes with 12.75-inch externally balanced 153-tooth automatic transmission flexplate. Requires externally balanced flywheel for manual transmission. See chart on page 227
- Has right-side oil dipstick
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

HT383 TECH SPECS

Part Number:	12499101	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy Small-Block V-8	Valve Size (in):	1.940 intake / 1.500 exhaust
Displacement (cu in):	383	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.000 x 3.800	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 88962516):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12489436):	4340 forged steel	Water Pump (P/N 88894341):	Cast iron
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Recommended Fuel:	87 octane
Pistons (P/N 12499103):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 14097395):	Hydraulic roller	Maximum Recommended rpm:	5,000
Camshaft Lift (in):	.431 intake / .451 exhaust	Balanced:	External
Camshaft Duration (@.050 in):	196° intake / 206° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12499106 

383 Partial Engine

The heart of the HT383 is available as a partial engine. It comes with 4.000-inch-bore/3.800-inch-stroke reciprocating assembly already installed, including a forged steel crankshaft, heavy-duty connecting rods and durable aluminum-alloy pistons.



24216083

Hydra-Matic 4L60-E Four-Speed Automatic Transmission

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 370 lb.-ft. of torque.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!

19212657
Transmission
Controller

See page 188
for details



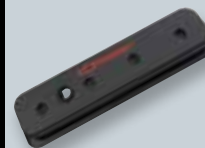
19170092
Carburetor, Holley
670-cfm

See page 348
for details



12497979
Aluminum Black
Crinkle Valve Covers,
Center Bolt Design

See page 219
for details



93440806
HEI Distributor

See page 347
for details



10465143
Lightweight Starter
(remanufactured)

See page 342
for details



12497985
Chrome-Finish
Aluminum Valve Covers,
Center Bolt Design

See page 219
for details



SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



17800393  

■ 340 hp @ 4,500 rpm

■ 435 lb.-ft. @ 4,000 rpm

10% Greater hp than stock! A high-torque direct replacement for 1996-99 GM full-size trucks and SUVs

The Chevrolet Performance HT383E crate engine is an affordable and more powerful emissions-legal direct replacement for the tired 350 engine in your 1996-99 full-size GM truck or SUV. The larger displacement delivers up to 10 percent more horsepower and more usable torque for effortless towing. It is extra power you won't get with a stock-type rebuild or reconditioned used engine.

The HT383E is designed to replace the L31 5.7-liter engine in half-ton models of the Silverado, Suburban, Tahoe, Sierra and Yukon. You simply swap the intake manifold, throttle body, exhaust manifolds and other accessories from your old 350 onto the HT383E and install it in your truck with no further modifications.

The engine uses a brand-new four-bolt-main block, a forged steel crankshaft, a smooth roller camshaft and durable iron Vortec heads, helping it deliver the dependable power you expect from the venerable Small-Block V-8. It even comes with a new distributor, water pump and other components that would be replaced during a rebuild.

GREATER TORQUE – ENHANCED TOWING

BETTER ALTERNATIVE TO A REBUILD

INCLUDES ALL NEW PARTS

INSTALLATION NOTES

- Requires the reuse of the stock intake manifold, wiring harness, and fuel injection system
- Due to calibration variances between half-, three-quarter- and one-ton vehicles, this engine is designed for half-ton trucks and SUVs only
- This engine is not emissions-legal in CA or states that have adopted CA emissions regulations
- Comes with 12.75-inch externally balanced 153-tooth automatic transmission flexplate. Requires externally balanced flywheel for manual transmission. See chart on page 227
- Has right-side dipstick
- Not available as a Partial
- Performance recalibration of ECU will significantly increase torque and horsepower

HT383E TECH SPECS

Part Number:	17800393	Camshaft Duration (@.050 in):	196° intake / 206° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Displacement (cu in):	383	Valve Size (in):	1.940 intake / 1.500 exhaust
Bore x Stroke (in):	4.000 x 3.800	Compression Ratio:	9.1:1
Block (P/N 88962516):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 10089648):	Stamped steel
Crankshaft (P/N 12489436):	4340 forged steel	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Water Pump (P/N 88894341):	Cast-iron
Pistons (P/N 12499103):	Hypereutectic aluminum	Recommended Fuel:	87 octane
Camshaft Type (P/N 14097395):	Hydraulic roller	Maximum Recommended rpm:	5,000
Camshaft Lift (in):	.431 intake / .451 exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.

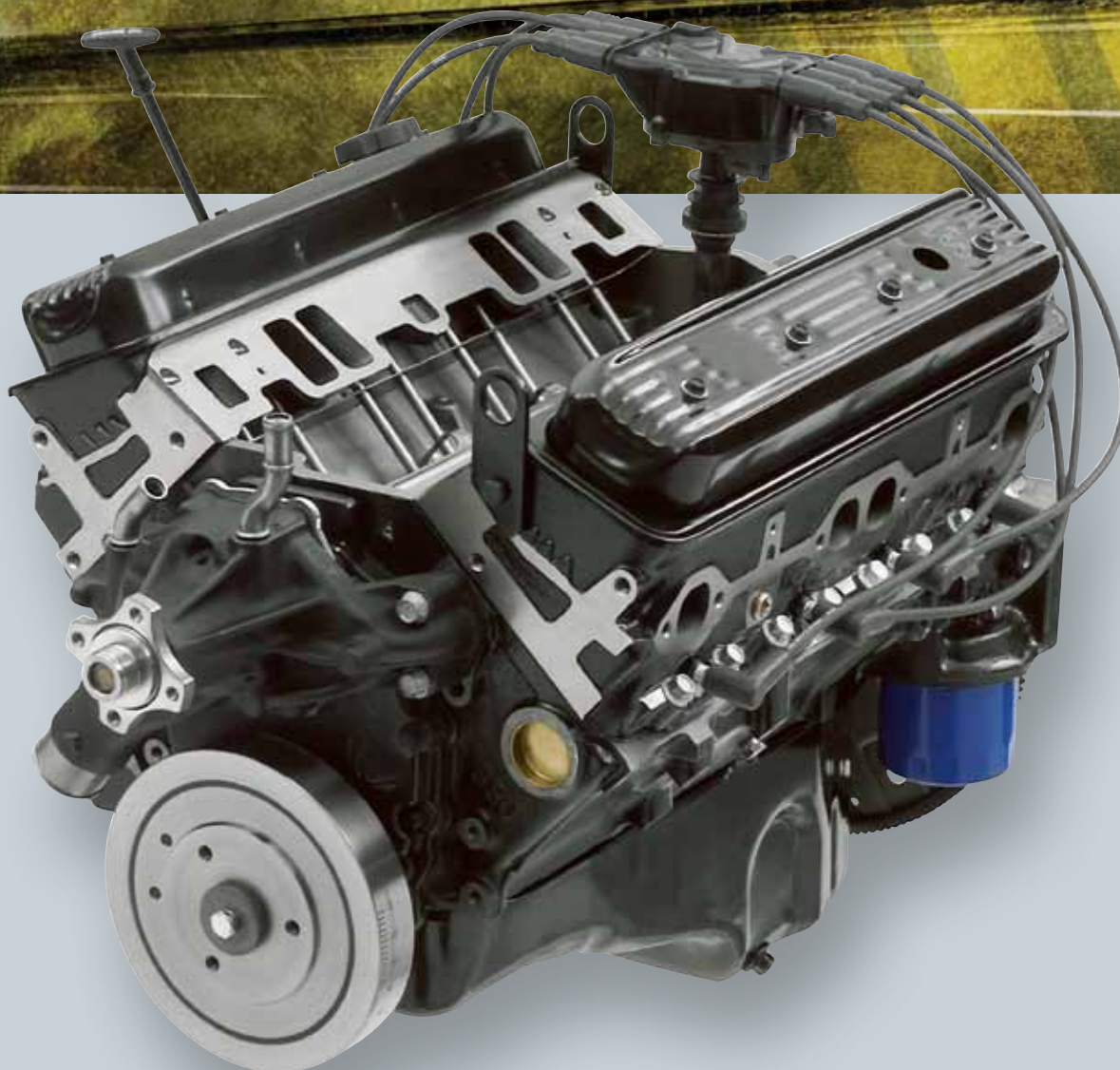


Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

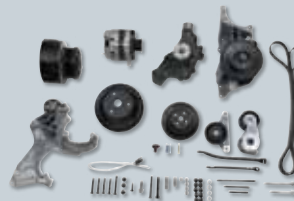




SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



24216083
Hydra-Matic 4L60-E Four-Speed Automatic Transmission
 Electronically controlled four-speed over-drive transmission. Suitable for engines producing up to 370 lb.-ft. of torque.
See page 186 for details



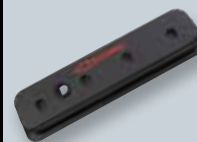
12497698
Serpentine Accessory Drive System
 The complete kit you need to finish off the crate engine in your vehicle.
See page 230 for details



19212657
Transmission Controller
See page 188 for details



12361056
Spark Plug Wires, GM Performance 135° Boot
See page 343 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 219 for details



10465143
Lightweight Starter (remanufactured)
See page 342 for details




12370838
Roller Rocker Arm Set, 1.5:1 Ratio
See page 217 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 219 for details

ZZ383

12498772  

■ 425 hp @ 5,400 rpm

■ 449 lb.-ft. @ 4,500 rpm



The classic Small-Block stroker as only Chevrolet Performance can do it!

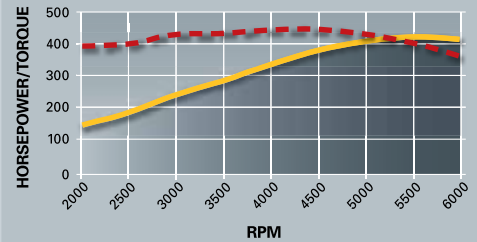
The ZZ383 delivers Big-Block power with Small-Block efficiency. We use the sturdy 383 bottom end, including a brand-new block with four-bolt mains; a forged crankshaft and heavy-duty rods, and finish it off with Fast Burn cylinder heads to enable 425 horsepower and 449 lb.-ft. of torque.

The Fast Burn heads use high-flow intake runners, 2.00/1.55-inch valves and a unique combustion chamber design to process air quickly and efficiently. A roller camshaft with more than 0.500-inch lift on both the intake and exhaust sides helps this potent engine maximize airflow. It is complemented by friction-reducing aluminum roller-tip rocker arms.

The ZZ383 comes in Base crate engine form, with a cast iron water pump and balancer. The induction system, ignition system and other accessories must be purchased separately. Use high-rise intake P/N 12496822 and Holley 770-cfm four-barrel carburetor P/N 19170093 to achieve the listed horsepower and torque ratings.

Your Chevrolet Performance dealer has everything you need to finish off the engine – including chrome dress-up parts!

ZZ383 DYNO CHART



Horsepower: 425 @ 5400 rpm Torque (lb-ft): 449 @ 4500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, ignition, intake manifold, fuel pump, and starter (not included)
- 425-horsepower rating achieved during GM testing with high-rise single-plane intake manifold (P/N 12496822) and a 770-cfm carburetor with vacuum secondaries
- Chevrolet Performance dual-plane intake manifold (P/N 12366573) may be used to avoid hood clearance problems, but peak power may decrease by approximately 15-20 horsepower
- Comes with 12.750-inch automatic transmission flexplate. Requires 1986-1999 350-style externally balanced flywheel for manual transmission. See chart on page 227
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

TECH SPECS

Part Number:	12498772	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Engine Type:	Chevy Small-Block V-8	Valve Size (in):	2.000 intake / 1.550 exhaust
Displacement (cu in):	383	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.000 x 3.800	Rocker Arms (P/N 12367345):	Aluminum roller style
Block (P/N 88962516):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12489436):	4340 forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 12499103):	Hypereutectic aluminum	Maximum Recommended rpm:	6,000
Camshaft Type (P/N 19210723):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.509 intake / .528 exhaust		
Camshaft Duration (@.050 in):	222° intake / 230° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12499106  

383 Partial Engine

The heart of the HT383 is available as a partial engine. It comes with 4.000-inch-bore/3.800-inch-stroke reciprocating assembly already installed, including a forged steel crankshaft, heavy-duty connecting rods and durable aluminum-alloy pistons.



24216083

Hydra-Matic 4L60-E Four-Speed Automatic Transmission

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 370 lb.-ft. of torque.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!

19212657 Transmission Controller

See page 188 for details



12480127 Short Aluminum Valve Covers

See page 218 for details



12496822 Intake Manifold, Vortec Design

See page 233 for details



12497698 Serpentine Accessory Drive System

See page 230 for details



93440806 HEI Distributor

See page 347 for details



12361146 High-Torque Mini-Starter

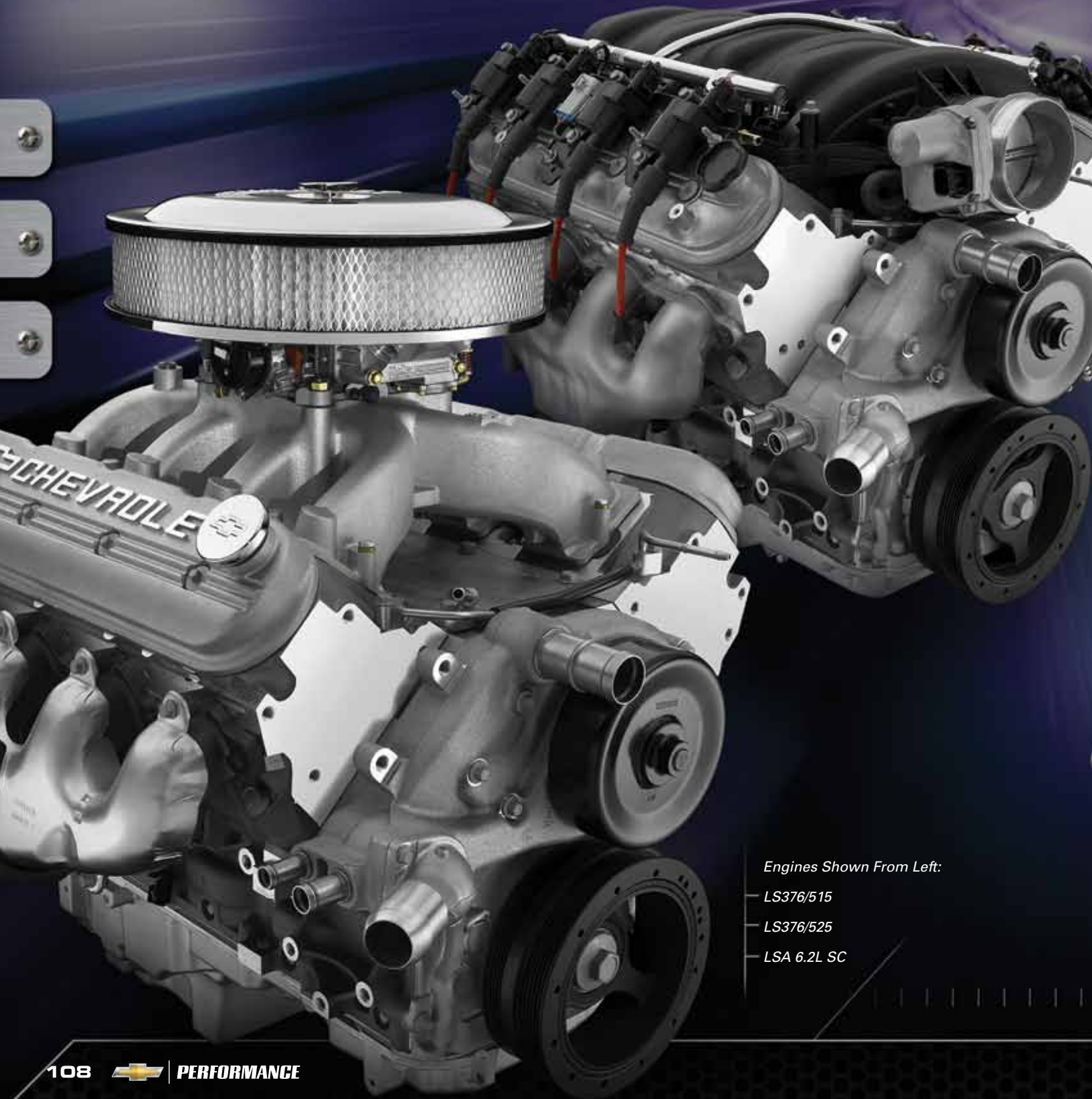
See page 342 for details



SEE PAGE 194 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

Small-Block

LS SERIES



Engines Shown From Left:

— LS376/515

— LS376/525

— LSA 6.2L SC

A NEW GENERATION OF PERFORMANCE

The LS engine family is changing the way enthusiasts build cars and trucks – and you see these powerplants more and more under the hoods of vintage vehicles of all makes and models. Great durability, easy adaptability and almost unlimited performance potential make LS engines great swap candidates for everything from resto-mod muscle cars and street rods to trucks and even imports!

Chevrolet Performance offers a broad range of production-based and specialty LS crate engine packages, from economical 5.3L engines to the 638-hp supercharged LS9 from the Corvette ZR1. We've even got specially designed engines, including the new LSX376-B8 and LSX376-B15, with lower compression and forged pistons that are ready for your supercharger or turbo system.

Our E-ROD lineup of LS crate engines is designed to be compliant with California emissions requirements and each carries a CARB EO number that makes it legal for pre-1996 vehicles. E-ROD systems include emissions equipment and supporting components – and represent the future of hot rodding. No other OE manufacturer offers a similar, emissions-certified crate engine package.

Whether you're building a vintage car or a late-model tuner, powering it with an LS engine puts your performance on the leading edge of technology. Exclusively available from Chevrolet Performance!



E-ROD Crate Engine Systems

CARB-certified performance and efficiency for your pre-1996 project vehicle!

Chevrolet Performance's groundbreaking E-ROD crate engine packages are the only OEM crate engine solutions that enable authorized, emissions-compliant high-performance engine replacements for approximately 20 million pre-1996 cars, trucks and SUVs in California, regardless of the make, model or original powertrain.

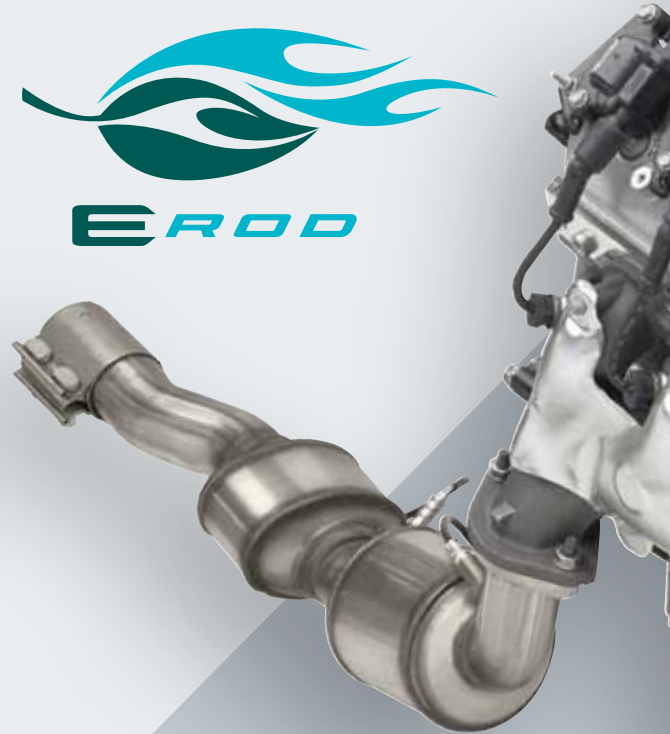
They deliver on the expectations of a new generation of hot rodders and custom car builders, for whom greater fuel economy and lower emissions play more important roles in their projects.

The E-ROD LSA kit is the latest system to receive a California Air Resources Board Executive Order number, following the original E-ROD LS3 and E-ROD 5.3L. The E-ROD LSA is the same basic power plant that comes in the award-winning Cadillac CTS-V. This supercharged engine is rated at 556 horsepower and 551 lb.-ft. of torque – and it's CARB-certified for 1995-and-earlier vehicles that predate OBD II onboard emissions diagnostics.

All E-ROD systems include complete emissions equipment, such as catalytic converters and a fuel tank evaporative emissions canister, along with an engine control module calibrated for a balance of performance and efficiency.

E-ROD means guilt-free, street-legal high-performance for your vintage car or truck. Put one of these systems to work in your next project! Exclusively available from Chevrolet Performance!

New for 2013, E-ROD Engine Systems can be delivered as a complete "Connect & Cruise" engine and transmission system! See page 116 for more information.



E-ROD 5.3L System



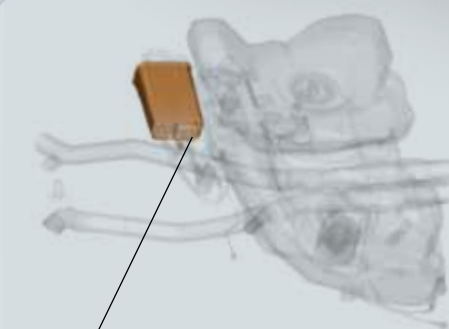


Chevrolet Performance's E-ROD '55 Chevy knocks down 23 mpg!

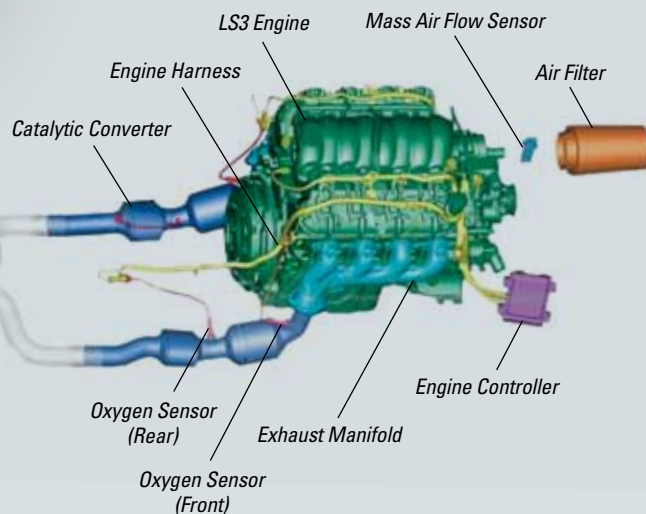
Great fuel economy and hot rodding aren't typically associated with one another, but when the Chevrolet Performance E-ROD 1955 Chevrolet Bel Air hit the road for last summer's Hot Rod Power Tour, it delivered an impressive average of 23 mpg on the drive from Florida to Michigan. That was with a 430-horsepower LS3 V-8 under the hood and emissions performance comparable to a new Camaro SS.

In fact, the E-ROD Chevy's fuel economy was only a couple of MPG off the EPA-rated highway fuel economy for a 2011 Camaro SS with a six-speed transmission – and the '55 was running a four-speed automatic.

Our E-ROD engines not only deliver big power, they help save at the pump!



Emissions Canister



Power your project with the only CARB-certified OEM hot rod crate engines!



Chevrolet Performance leads the industry with E-ROD crate engine systems and supporting components that enable enthusiasts to build a car that complies with the law, satisfies their desire for a cleaner hot rod and doesn't sacrifice the performance.

All of our E-ROD crate engine systems – 5.3L, LS3 and LSA – are certified by California Air Resources Board (CARB) and carry Executive Order numbers. This enables enthusiasts to install the engine kit in 1995- and-earlier cars and trucks that predate OBD II on-board emissions diagnostics.

All engine systems are offered in automatic- and manual- transmission calibrations and each includes the engine controller and other necessary components, including:

- Exhaust manifolds
- Catalytic converters
- Oxygen sensors and sensor bosses
- Fuel tank evaporative emissions canister
- Mass airflow sensor and sensor boss
- Accelerator pedal (for use with the electronic throttle body)
- Air filter
- Instruction manual

NOTE: New for 2013, E-ROD Engine Systems can be delivered as a complete "Connect & Cruise" engine and transmission system! See page 116 for more information.

About the E-ROD engine controller

The engine control module included with each E-ROD crate engine system is designed for true stand-alone performance in older vehicles. All that's needed to get a vehicle running with the engine controller are power and ground sources, a high-pressure fuel pump and an electric cooling fan. Chevrolet Performance recommends a 58-psi (400 kPa) fuel pump for the 5.3L and LS3 engines; and a 65-psi (450 kPa) fuel pump for the LSA.

Chevrolet Performance's specially calibrated engine controller does not engage a number of features associated with production-model systems, eliminating the possibility of "trouble codes" being set. It also includes a SES (service engine soon) LED indicator embedded in the fuse box.



E-ROD 5.3L SYSTEM

CARB EO # D-126-31

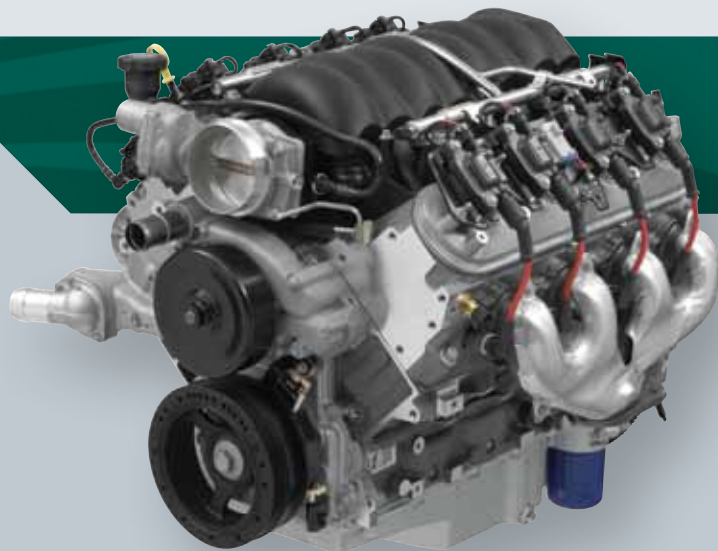
19258004 Automatic transmission calibration

19258008 Manual transmission calibration

The 5.3L engine shares the same displacement as the original 327-cubic-inch Small-Block of the 1960s, making it a great choice for customers who want a 21st-century edition of the 327 for a resto-mod vintage Chevy. Because the 5.3L engine was originally engineered for truck applications, it offers a broad, flat torque curve that's ideal for giving older trucks and full-size hot rods an excellent feeling of low-end performance. It makes 300 lb.-ft. by only 2,000 rpm and holds above that level all the way to 5,500 rpm.

SPECS

5.3L (327 cu in)
326 hp @ 5300 rpm
350 lb-ft @ 4400 rpm
9.5:1 compression ratio
Cathedral-port cylinder heads
Hydraulic roller camshaft with .467"/.479" lift



E-ROD LS3 SYSTEM

CARB EO # D-126-30

19244805 Automatic transmission calibration

19256487 Manual transmission calibration

The LS3 is the power behind the Chevy Corvette and Camaro SS. It's rated at 430 hp in this new Crate Powertrain kit, offering the lightweight advantage of an aluminum cylinder block, aluminum heads and a composite intake manifold over cast iron engines in early cars. It's backed by the 4L65-E four-speed overdrive automatic, which enables great highway cruising performance and fuel economy with the durability of hardened internal parts and five-pinion gearsets.

SPECS

LS3 6.2L (376 cu in)
430 hp @ 5900 rpm
424 lb-ft @ 4600 rpm
10.7:1 compression ratio
L92-style rectangular-port cylinder heads
Hydraulic roller camshaft with .550"/.522" lift

CRATE ENGINES LS-SERIES

E-ROD LSA SYSTEM

CARB EO # D-126-33

19257456 Automatic transmission calibration

19257460 Manual transmission calibration

The Cadillac CTS-V's 6.2L supercharged LSA engine delivers 556 hp with refinement that is rare in the world of high performance. It is smooth, quiet and well-balanced – all while delivering breathtaking power. The engine features a unique aluminum cylinder block casting that houses a forged steel crankshaft and integrated piston-cooling oil jets, along with high-flow cylinder heads that support the airflow enabled by a 1.9L supercharger with four-lobe, high-twist rotors. The E-ROD LSA comes fully dressed, from the top of the charge-cooled supercharger assembly to the ignition system.

SPECS

6.2L (376 cu in)
556 hp @ 6100 rpm
551 lb-ft @ 3800 rpm
9.1:1 compression ratio
L92-style rectangular-port aluminum cylinder heads
Hydraulic roller camshaft with .492"/.480" lift

In addition to the E-ROD system, the builder will need to source additional components to complete the assembly and get the vehicle running. They include:

- Fuel tank
- Fuel lines (re-circulating or returnless)
- Fuel pump
- Fuel tank vent line from the tank to the evaporative emissions canister
- Pure line from the canister to the engine purge solenoid
- Air induction system that incorporates the mass airflow sensor
- Exhaust system behind the catalytic converters

Each E-ROD engine requires a front-end accessory drive system suitable for the vehicle. The instruction manual includes recommendations for the accessory drive kit, as well as the transmission, gear ratios and more. Chevrolet Performance offers two configurations of the accessory drive systems to suit different applications; and each allows the installer to easily delete air conditioning. Check pages 278-283 for application and part number.

Chevrolet Performance recommends the LS1 Engine Installation Guide P/N 88959384, which illustrates basic procedures and offers helpful tips on installing an LS engine into older vehicles.

NOTE: E-ROD systems do not come with a transmission. Chevrolet Performance recommends the Hydra-Matic 4L65-E or 4L85-E – four-speed automatic overdrive transmissions, along with SuperMatic transmission controller P/N 19257634 or 19257661.



New "Connect & Cruise"

CRATE POWERTRAIN SYSTEMS

Power your project with the next level of crate-engine convenience, assurance and value!

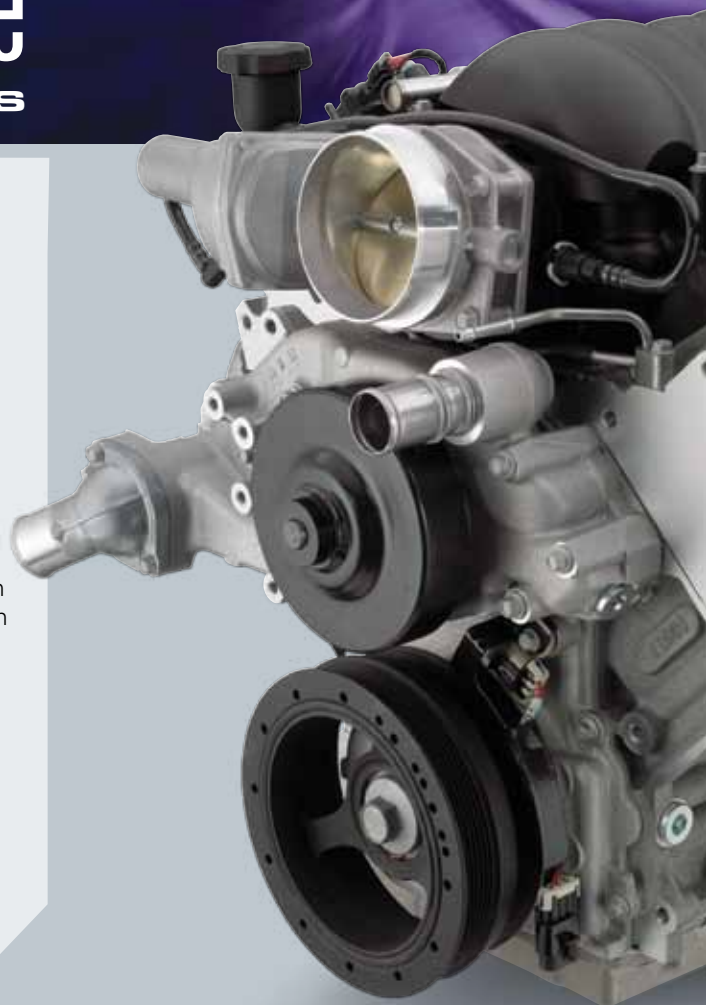
Chevrolet Performance pioneered the concept of crate engines more than four decades ago, and continues to lead the industry with our unprecedented Connect & Cruise crate powertrain systems – factory-engineered engine-and-transmission combinations that include all the electronic control modules, wiring harnesses and other key components.

Three Connect & Cruise systems are offered, including the all-new 5.3L/4L65-E kit, with 326 horsepower. It carries part number CPSLC94L65E and is our most affordable Connect & Cruise system. Other systems include the Corvette-derived 430-hp LS3 paired with a 4L65-E four-speed transmission – part number CPSLS34L65E – or the 556-hp supercharged LSA engine, which is matched with the 4L85-E transmission – part number CPSLSA4L85E.

Chevrolet Performance engineers matched the engines and transmissions for optimal performance and durability, so you can wring out every horsepower from them with total confidence! The specially calibrated controllers are designed for retrofit installations in older vehicles, for easier and quicker installation and operation without the need for third-party tuning.

New for 2013, "E-ROD Connect & Cruise" Systems deliver the emissions-friendly E-Rod engine of your choice, plus the correct transmission and controller to make it all work together. See page 116 for more information.

When it comes to performance innovations that save time, money and guesswork, Chevrolet Performance once again leads the way!



GET THE COMPLETE PACKAGE!

Each Crate Powertrain system includes:

- Brand-new, fully assembled crate engine
- Brand-new or remanufactured transmission – 4L85-E is reman in 2013
- SuperMatic transmission control module
- Calibrated engine control module
- Two oxygen sensors and mounting bosses (for installation in the exhaust system)
- Mass airflow meter and mounting boss (for installation in the air intake system)
- Throttle pedal assembly (for use with the electronically operated throttle)
- Assembled wiring harness with fuse box and necessary cam sensor and MAP sensor jumpers
- Oil pressure sensor that is compatible with the harness
- Instruction sheet.



*CPSLS34L65E
Connect & Cruise Kit shown*



Connect & Cruise Crate Powertrain Rebates Available in 2013!

Check with your Chevrolet Performance Dealer or performance retailer for details, or go to chevroletperformance.com for more information.



Our new “Connect & Cruise” crate powertrain systems are engineered for total performance!

The convenience of a crate engine, the assurance of factory-validate performance and the value of an inclusive package – that’s what you get with Chevrolet Performance’s Connect & Cruise crate powertrain systems. They’re available in 5.3L/4L65-E, LS3/4L65-E and supercharged LSA/4L85-E combinations.

Each kit delivers a brand-new, fully assembled crate engine, a brand-new or remanufactured electronically controlled overdrive transmission, electronic control modules for both, and the engine control hardware to get it all running in your project vehicle – including the mass airflow sensor, oxygen sensors and even the special throttle pedal for the engines’ electronic throttle bodies.

Chevrolet Performance engineers matched the engines with their respective transmissions, ensuring they are up to the task of channeling big power with absolute dependability.

The engine controller is specially calibrated to run the engine without some of the production-vehicle features that aren’t required in an older vehicle. That means no “trouble” codes and no need for third-party tuning. Better still, the systems’ unique SuperMatic transmission controllers are designed to work with the engine controllers for a seamless, “plug and play” installation that is quick, easy and intuitive. Detailed instructions outline all the necessary steps.

The engineers did all the hard work of designing and calibrating perfectly matched powertrain systems – and we’ve covered them with a 24-month/50,000-mile limited warranty (see chevroletperformance.com or your Chevrolet Performance retailer for complete details).

All you have to do is install them and start cruising!

Exclusively available from Chevrolet Performance!

E-ROD “Connect & Cruise” Powertrain Systems

New for 2013: In addition to the standard LC9, LS3, and LSA “Connect & Cruise” Systems, we have included the emissions-certified E-ROD engine family for enthusiasts that are required or want to have low-emissions engine swaps.

E-ROD “Connect & Cruise” Systems go the extra step by including EO-certified engines, with exhaust manifolds and catalytic converters; engine control modules, engine harness, transmission, torque converter, transmission controller and all of the hardware needed to complete the installation.

E-ROD “Connect & Cruise Systems are available for the LC9, LS3 and LSA E-Rod packages. See your Chevrolet Performance Dealer or Retailer for more information.



LSA "CONNECT & CRUISE" CRATE POWERTRAIN SYSTEM

CPSLSA4L85E

Powering the Cadillac CTS-V Series and the new Chevy Camaro ZL1, the LSA is supercharged powerhouse that's good for 556 horsepower. It uses a high-helix, high-efficiency Twin Vortices supercharger to expand the effective boost range from low to high rpm. The 4L85-E four-speed overdrive transmission channels the LSA's torque to the axle with exceptional strength and precision. It's a supercharged combo for all hot rods!

SPECS

ENGINE:	LSA 6.2L (376 cu in)	556 hp @ 6100 rpm supercharged	551 lb.-ft. @ 3800 rpm	9.1:1 compression ratio
TRANS:	4L85-E four-speed automatic	High-performance valve body and clutches	2.48:1 first gear ratio 0.75 overdrive ratio	32-11/16 inches long (approx.)

LSA System Components

- 19244100** – LSA Crate Engine
- 19259293** – Engine Control System
- 19154550** – 4L85-E SuperMatic Transmission w/Torque Converter
- 19257661** – SuperMatic Transmission Control System
- 19125597** – Flywheel Kit
- 19259119** – 4L80 Family Transmission Installation Kit
 - Dust covers
 - Necessary Hardware

LS3 "CONNECT & CRUISE" CRATE POWERTRAIN SYSTEM

CPSLS34L65E

The LS3 is the power behind the Chevy Corvette and Camaro SS. It's rated at 430 hp in this new Connect & Cruise kit, offering the lightweight advantage of an aluminum cylinder block, aluminum heads and a composite intake manifold over cast iron engines in early cars. It's backed by the 4L65-E four-speed overdrive automatic, which enables great highway cruising performance and fuel economy with the durability of hardened internal parts and five-pinion gearsets.

SPECS

ENGINE:	LS3 6.2L (376 cu in)	430 hp @ 5900 rpm	424 lb.-ft. @ 4600 rpm	10.7:1 compression ratio
TRANS:	4L65-E four-speed automatic	Five-pinion gearsets	3.06:1 first gear ratio 0.70 overdrive ratio	30-3/4 inches long (approx.)

LS3 System Components

- 19258770** – LS3 Crate Engine
- 19258270** – Engine Control System
- 19260380** – 4L65-E Transmission without Torque Converter
- 19299802** – SuperMatic Torque Converter
- 19257634** – SuperMatic Transmission Control System
- 19259117** – 4L60 Family Transmission Installation Kit
 - Flexplate
 - Dust covers
 - Necessary Hardware

5.3 "CONNECT & CRUISE" CRATE POWERTRAIN SYSTEM

CPSLC94L65E

The 5.3L engine shares the same displacement as the original 327-cubic-inch Small-Block of the 1960s, making it a great choice for customers who want a 21st-century edition of the 327 for a resto-mod vintage Chevy II or mid-year Corvette. It is rated at 326 horsepower, and because the 5.3L engine was originally engineered for truck applications, it offers a broad, flat torque curve that's ideal for giving older trucks and full-size hot rods an excellent feeling of low-end performance. It makes 300 lb.-ft. by only 2,000 rpm and holds above that level all the way to 5,500 rpm. It peaks at 4,400 rpm with 335 lb.-ft.

SPECS

ENGINE:	5.3L (327 cu in)	326 hp @ 5400 rpm	335 lb.-ft. @ 4400 rpm	9.5:1 compression ratio
TRANS:	4L65-E four-speed automatic	Five-pinion gearsets	3.06:1 first gear ratio 0.70 overdrive ratio	30-3/4 inches long (approx.)

LS3 System Components

- 19259918** – LC9 Crate Engine
- 19256514** – Engine Control System
- 19260380** – 4L65-E Transmission without Torque Converter
- 19299802** – SuperMatic Torque Converter
- 19257634** – SuperMatic Transmission Control System
- 19259117** – 4L60 Family Transmission Installation Kit
 - Flexplate
 - Dust covers
 - Necessary Hardware

NOTE: The engine and transmission are delivered separately. The transmission must be attached to the engine by the installer. A torque converter is included with each kit.

Chevrolet Performance recommends the LS1 Engine Installation Guide (part number 88959384), which illustrates basic procedures and offers helpful tips on installing an LS engine in older vehicles.

NOTE: Installing an electronically controlled automatic transmission in an older vehicle with a mechanical speedometer requires an aftermarket signal converter.



Engine Control Modules and Harnesses



A precisely calibrated engine control module is essential to making your fuel-injected LS engine perform in your older vehicle – and Chevrolet Performance is your source for controllers that are designed for easy, “plug-and-play” installation and, in most applications, no need for third-party tuning adjustments.

Unlike production controllers that may or may not come with a used engine, our controllers are calibrated for installation in older vehicles. That means many of the features required for late-model production vehicles are “turned off,” because they’re not required in older cars and trucks. That means features that may trigger a diagnostic trouble code and possibly affect performance – requiring additional tuning – are not enabled.

Our inclusive kits deliver all the components required to plug into the engine and get it running – from the controller itself and the accompanying wire harness to the mass airflow sensor, oxygen sensors and even a throttle pedal assembly for engines equipped with an electronic throttle body. The kits also include detailed instructions to help you do it right the first time, even if you have no experience.

MOST KITS INCLUDE:

- **Two oxygen sensors**
- **Two oxygen sensor mounting bosses (for installation in the exhaust system)**
- **A mass airflow meter**
- **A mass airflow meter mounting boss (for installation in the air intake system)**
- **A throttle pedal assembly (for use with the electronically operated throttle)**
- **A specific oil pressure sensor that is compatible with the harness (when needed)**
- **A complete wiring harness with fuse box and necessary cam sensor and MAP sensor jumpers**
- **The programmed controller**
- **An instruction sheet**

Each Chevrolet Performance controller kit is a true stand-alone system. All that’s needed to get a vehicle running with it are power and ground sources, a high-pressure fuel pump and an electric cooling fan.

QUICK INSTALLATION TIPS

Installing the ECM – The ECM is the brain of the controller. It is weather-resistant and can be mounted under the hood, but it should be placed to avoid extreme heat and away from potential splash. Chevrolet Performance does not recommend mounting it directly to the engine.

Accelerator pedal – Chevrolet Performance’s controller kits are designed for use with factory-type electronic throttles (no conventional throttle cable) that require a matched accelerator pedal. The pedal contains an electronic sensor that conveys to the controller when and how much to open the throttle. The pedal should be mounted at least 2.5 inches to the right of the brake pedal and 2 inches below it. There should be at least 0.75-inch clearance between the pedal and the transmission tunnel/center console. The pedal has a wire harness that connects to the controller, requiring it to be fed through the firewall – possibly requiring a new hole. Use a grommet on the hole to prevent chafing of the harness.

MAF – The mass airflow meter that comes with some Chevrolet Performance controller kits must be mounted in a 4-inch-diameter tube that has at least a 6-inch-long straight section. The kit includes the bracket and mounting bosses onto which the meter is secured on the tube – the tube must be cut to allow the meter to hang inside of it. The meter sensor must be mounted at the center of the straight section, making sure that is at least 10 inches from the throttle body. Orienting the MAF is essential for proper operation. The meter’s sensor should be mounted with the connector end pointed between horizontal and fully upright.

Oxygen sensors – The oxygen sensors (one for each side of the exhaust) must be inserted in the exhaust stream ahead of the catalytic converters (if used). Holes are simply drilled into the exhaust tubing and the mounting bosses welded to them. After that, the oxygen sensors simply screw onto the mounting bosses and are connected to the wire harness.



LS7 Controller and Wiring Harness Kit

19256514**5.3L Engine Controller Kit (not shown)**

- Specially programmed for retrofit applications, for quicker and easier adaptation of GM's popular 5.3L V-8 for countless hot rod projects
- Works with 2007-2009 5.3L engines with the following engine codes: LC9 (2007-2009), LH8 (2008-2009), LY5 (2007-2009), LMF (2008-2009) and LMG (2007-2009)
- Does not engage cylinder-deactivating Active Fuel Management and other features not required for retrofit installations
- For individual engine controller, use P/N19256515 (included in kit)

19166568**LS2 Controller Kit (not shown)**

- Includes all the components required to run your LS2 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19166570 (included in kit)
- Only works with 58X reluctor wheel engines

19258270**LS3 Controller Kit (not shown)**

- Includes all the components required to run the LS3 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19258271 (included in kit)

19258267**LS376/480 Controller Kit (not shown)**

- Includes all the components required to run your LS376/480 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19258268 (included in kit)

19259261**LS376/525 Controller Kit (not shown)**

- Includes all the components required to run LS376/525 crate engine, P/N19259261
- Max rpm 6,600
- For individual engine controller, use P/N 19259291 (included in kit)

19258553**LS7 Controller Kit, 2006-2012**

- Includes all the components required to run your 2006-2012 LS7 crate engine
- For individual engine controller, use P/N 19258554 (included in kit)
- Max rpm 7,100
- Will not run 2009 LS7s

19259293**LSA Controller Kit (not shown)**

- Includes all the components required to run LSA crate engine
- Max rpm 6,200
- For individual engine controller, use P/N 19259294 (included in kit)



LSX Ignition Controller

19299462 NEW**LS9 Controller Kit (not shown)**

- Two oxygen sensors
- Two oxygen sensor mounting bosses (for installation in the exhaust system)
- A mass airflow meter
- A mass airflow meter mounting boss (for installation in the air intake system)
- A throttle pedal assembly (for use with the electronically operated throttle)
- A complete wiring harness with fuse box
- The programmed controller
- An instruction sheet

19244481**LSX454 Controller Kit for Manual Transmission (not shown)**

- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N19244481 (included in kit)

19299840**LSX454 Controller Kit for Automatic Transmission (not shown)**

- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N19299841

NOTE: The controller will not function in a production vehicle unless all kit components are used. These controllers will not operate any of the production gauges. Aftermarket gauges are required.

19171130**LSX Ignition Controller**

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible with all LS-Series ignition coils

12480112**ECU, LS1 V-8 (not shown)**

- Calibrated for the LS1 Camaro/Firebird engine and can be used in a street rod or other early-model vehicles

NOTE: Use with Camaro/Firebird LS1 engine and wire harness P/N 12480113.

12480054**ECU, LS1/ASA Racing (not shown)**

- LS1 ECU is similar to P/N 16238212, but is calibrated for ASA racing only
- Use with wire harness P/N 12480055

12480055**Wire Harness, LS1, ASA Racing (not shown)**

- Designed for ASA racing ECU P/N 12480054 only



LC9 5.3L



19259918  

■ 315 hp @ 5,400 rpm

■ 335 lb.-ft. @ 4,000 rpm

An affordable LS crate engine with power and durability!

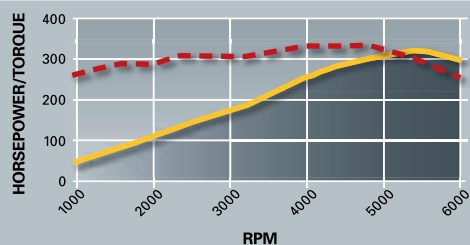
If you're looking for an affordable alternative to a used LS engine for your swap project, check out Chevrolet Performance's new LC9 5.3L engine. It is based on the workhorse powerplant used in hundreds of thousands of GM trucks, including the Chevrolet Silverado and Suburban. It's rated at 315 horsepower and tuned to deliver exceptional torque at low rpm.

Available in two configurations: a conventional 5.3L assembly, or the E-ROD version that also includes performance-enhancing camshaft phasing.

The LC9 5.3L system features a complete Chevrolet Performance controller system, aluminum engine block, intake manifold, throttle body, and fuel rail. It's a great choice for hot rod cruisers and off-roader projects, where torque and dependability are the priority in maximum horsepower.

Check out our *LS1 Engine Kit Installation Guide P/N 88959384* for details on installing an LS engine in a vintage vehicle.

LC9 5.3L DYNO CHART



Horsepower: 315 @ 5400 rpm Torque: (lb-ft) 335 @ 4000 rpm

INSTALLATION NOTES

- 14-inch automatic transmission flexplate included
- **Kit includes complete new engine and Chevrolet Performance controller system**
- Components to complete FEAD are listed on page 282
- Check hood clearance for interference
- Chevrolet Performance muscle car oil pan kit P/N 19212593 may be required for installation on older vehicles
- Intended for pre-1976 street vehicles or off-road vehicles
- Not intended for marine applications

LC9 5.3L TECH SPECS

Engine Type:	LS-Series Gen IV Small-Block V-8	Camshaft Duration (@.050 in):	196° intake / 201° exhaust
Displacement (cu in):	327 (5.3L)	Cylinder Heads (P/N 12598594):	Aluminum; cathedral port
Bore x Stroke (in):	3.620 (96 x 92 mm)	Valve Size (in):	1.890 intake / 1.550 exhaust
Block (P/N 12551360):	Cast-aluminum with 6-bolt, cross-bolted main caps	Compression Ratio:	9.5:1
Crankshaft (P/N 12553480):	Nodular iron	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Connecting Rods (P/N 12568734):	Powdered metal steel	Rocker Arm Ratio:	1.7:1
Pistons (P/N 12571545):	Hypereutectic aluminum	Recommended Fuel:	87 octane
Camshaft Type (P/N 12561721):	Hydraulic roller	Maximum Recommended rpm:	6,000
Camshaft Lift (in):	.467 intake / .479 exhaust	Reluctor Wheel:	58X
		Balanced:	Internal



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





Also available as an E-ROD system



19258004 Automatic Transmission

19258008 Manual Transmission



E-ROD System – LC9 5.3L

CARB certified - E.O. number D-126-33

The LC9 5.3L E-ROD is Chevrolet Performance's most affordable system. A great choice for resto-mod builds, the LC9 5.3L system includes the engine controller and delivers true high performance horsepower in a low-emissions package!

Each engine requires a front-end accessory drive system suitable to the vehicle. The instruction manual includes recommendations for the accessory drive kit, as well as the transmission, gear ratios and more.

See page 112 for more system information or visit your Chevrolet Performance Authorized Center.

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19260380
Hydra-Matic 4L65-E
Four-Speed Automatic
Transmission

See page 186 for details



19257634
Transmission Controller

See page 188 for details



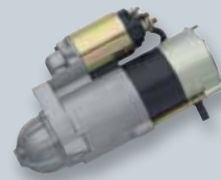
19299802
SuperMatic™
Torque Converter

See page 184
for details



19258433
LC9 5.3L
Accessory Drive
System

See page 282
for details



10465385
LS-Series Starter

See page 342
for details

LS327/327 Deluxe



19244096  

■ 327 hp @ 5,500 rpm

■ 347 lb.-ft. @ 4,600 rpm

Vintage displacement and modern technology combine for great performance!

Our affordable LS327/327 Deluxe crate engine has the same 327-cubic-inch displacement of the high-revving Small-Blocks from the 1960s, offering you a great, value-minded retro-fit crate engine for a vintage Chevy or street rod – with 327 horsepower.

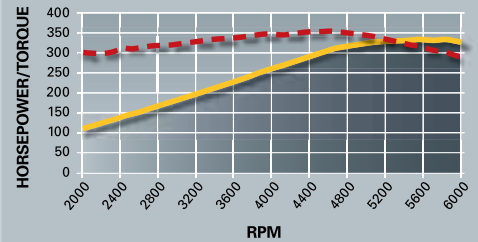
It's based on production 5.3L engines found in GM trucks and SUVs, but Chevrolet Performance engineers gave it a hotter cam, Grafel-coated high-silicon pistons and more. An iron engine block reinforces the engine's strength and keeps down the cost.

And as one of our Deluxe crate engines, it comes with almost everything you need to get it running, including a high-flow, spider-type intake manifold, ignition coils, coil brackets and more. Add our Holley carburetor P/N 19170093 to finish it off!

Check out our *LS1 Engine Kit Installation Guide P/N 88959384* for details on installing an LS engine in a vintage vehicle.

NOTE: Deluxe engine is shipped as a long block assembly. Intake manifold, coils, plug wires and water pump are included, but not installed.

LS327/327 DYNO CHART



Horsepower: 327 @ 5500 rpm

Torque (lb-ft): 347 @ 4600 rpm

INSTALLATION NOTES

- Not for Active Fuel Management applications
- Ignition control system not included
- Includes oil pan
- Includes water pump
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

LS327/327 TECH SPECS

Part Number:	19244096	Camshaft Duration (@.050 in):	196° intake / 201° exhaust
Engine Type:	LS-Series Small-Block V-8	Cylinder Heads (P/N 12559865):	Aluminum; cathedral port
Displacement (cu in):	327 (5.3L)	Valve Size (in):	1.890 intake / 1.550 exhaust
Bore x Stroke (in):	3.780 x 3.620 (96 x 92mm)	Compression Ratio:	9.5:1
Block (P/N 12551360):	Cast-iron with 6-bolt, cross-bolted iron main caps	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Crankshaft (P/N 12553480):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12568734):	Powdered metal steel	Recommended Fuel:	87 octane
Pistons (P/N 12571545):	Hypereutectic aluminum	Maximum Recommended rpm:	6,000
Camshaft Type (P/N 12561721):	Hydraulic roller	Reluctor Wheel:	24X
Camshaft Lift (in):	.467 intake / .479 exhaust	Balanced:	Internal



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





19165628   

LS327/327 Base

All the great, value-driven attributes that go into the LS327 Deluxe crate engine, but delivered without the intake manifold, ignition coils and coil brackets at a lower cost. Finish it your way, with fuel injection or a carburetor.

19244041



LS Finishing Kit

For builders who already have an LS engine with cathedral-port heads, we offer the same finishing kit that completes the LS327 Deluxe crate engine. It includes the intake, ignition coils, coil brackets, shields, plug wires, gaskets and installation hardware.

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



**19260380
Hydra-Matic 4L65-E
Four-Speed Automatic
Transmission**

See page 186
for details



**19212657
Transmission
Controller**

See page 188
for details



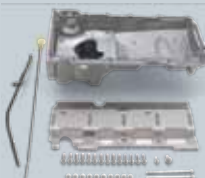
**19155067
Corvette Accessory
Drive Kit**

See page 279
for details



**19299802
SuperMatic™
Torque Converter**

See page 184
for details



**19212593
Muscle Car Oil
Pan Kit**

See page 285
for details



**19170093
Carburetor, Holley
770-cfm**

See page 348
for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS3 6.2L

19258770  

■ 430 hp @ 5,900 rpm

■ 424 lb.-ft. @ 4,600 rpm



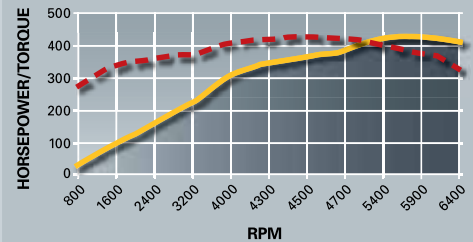
Direct from the Corvette and Camaro to your project vehicle!

The LS3 6.2L is the 430-hp standard engine in the Chevrolet Corvette and is a fantastic combination of high-technology and uncompromising performance. Our LS3 crate engine comes complete, from the Corvette-specific oil pan to the ignition system. It also includes the EFI intake manifold assembly with injectors and throttle body, exhaust manifolds, water pump, balancer, 58X reluctor wheel and 14-inch automatic-transmission flexplate.

Inside, the LS3 is filled with components designed for high performance and longevity. The aluminum block is filled with a sturdy reciprocating assembly that combines with L92-type rectangular-port heads to deliver a 10.7:1 compression ratio. A high-lift, hydraulic roller camshaft delivers a whopping 0.551-inch of lift on the 2.16-inch intake valves and 0.522-inch lift on the 1.59-inch exhaust valves, enhancing the LS3's tremendous airflow and broad torque curve.

The Corvette oil pan doesn't suit all installation applications. Use a vehicle-specific oil pan for original LS-powered vehicle or Chevrolet Performance's Muscle Car Oil Pan Kit P/N 19212593 for older vehicles.

LS3 6.2L DYNO CHART



Horsepower: 430 @ 5900 rpm Torque (lb-ft): 424 @ 4600 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- LS3 Controller Kit, P/N 19258270, available for non-Corvette applications. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 292)
- Includes Corvette wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Non-Corvette applications require flexplate P/N 12602448
- Front-end accessory drive kits are available in two configurations (see page 279 for application).

LS3 6.2L TECH SPECS

Part Number:	19258770	Cylinder Heads (P/N 12629063):	Aluminum L92-style port; as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.165 intake / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Block (P/N 12623967):	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19207287):	Hypereutectic aluminum	Maximum Recommended rpm:	6,600
Camshaft Type (P/N 12603844):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.551" intake / .522" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	204° intake / 211° exhaust		



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Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





Also available as an E-ROD system



19257230 Automatic Transmission

19257234 Manual Transmission

E-ROD System — LS3 6.2L

CARB certified - E.O. number D-126-30 or D-126-32

This system meets California's aftermarket requirements for pre-OBD-II vehicles and delivers high-performance with low emissions. The LS3 engine is built with components designed for high-performance and longevity. It's the perfect complement for a street rod or special-construction sports car.

Each engine requires a front-end accessory drive system suitable to the vehicle. The instruction manual includes recommendations for the accessory drive kit, as well as the transmission, gear ratios and more.

See page 112 for more system information or visit your Chevrolet Performance Authorized Center.

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



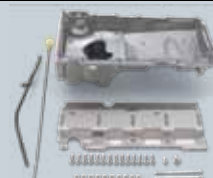
19260380
Hydra-Matic 4L65-E
Four-Speed Automatic
Transmission

See page 186
for details



19257634
Transmission
Controller

See page 188
for details



19212593
Muscle Car
Oil Pan Kit

See page 285
for details



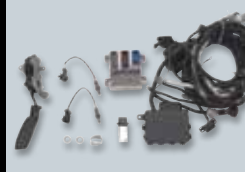
19299802
SuperMatic™
Torque Converter

See page 184
for details



19155067
Corvette Accessory
Drive Kit

See page 279
for details



19258270
LS3 Controller Kit

See page 293
for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS376/480

19258768  

■ 480 hp @ 5,750 rpm

■ 475 lb.-ft. @ 4,500 rpm



Our 'Hot Cam' adds 50 hp to the already-potent LS3!

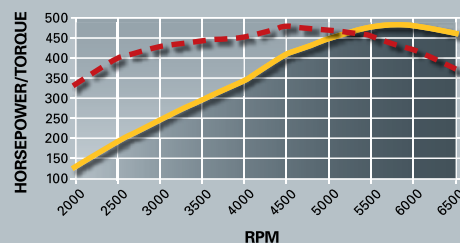
Our engineers never stop tinkering. When they took a production LS3 6.2L (376 cubic inches) engine and swapped the stock camshaft for the racing-inspired LS Hot Cam (P/N 88958753), the result was a stunning 480 horsepower and 475 lb.-ft. of torque. That's nearly 12 percent more power and torque from a simple camshaft change!

We wasted no time in adding that terrific combination – dubbed LS376/480 – to our crate engine portfolio. The key to the power boost is the Hot Cam's 0.525-inch lift on both the intake and exhaust sides, along with 219-degree/228-degree duration specs. That's less lift on the intake side than the stock LS3 cam, but considerably more duration, allowing the valves to stay open a little longer to draw in more air from the rectangular-port L92-style heads.

Use the LS376/480 with controller kit P/N 19258267, which includes a special pedal for use with the engine's electronically controlled throttle.

Check out our LS1 Engine Kit Installation Guide P/N 88959384 for details on installing an LS engine in a vintage vehicle.

LS376/480 DYNO CHART



Horsepower: 480 @ 5750 rpm

Torque (lb-ft): 475 @ 4500 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- LS376/480 Controller Kit, P/N 19258267, available for non-Corvette applications. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 292)
- Includes Corvette wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Non-Corvette applications require flexplate P/N 12637677
- Front-end accessory drive kits are available in two configurations (see page 279 for application).

LS376/480 TECH SPECS

Part Number:	19258768	Cylinder Heads (P/N 12629063):	Aluminum L92-style port; as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.165 int / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Block (P/N 12623967):	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19207287):	Hypereutectic aluminum	Maximum Recommended rpm:	6,600
Camshaft Type (P/N 88958753):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	219° intake / 228° exhaust		



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

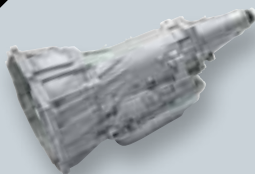


Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 A durable, easy-cruising four-speed overdrive automatic transmission that is electronically controlled for more precise, fuel-saving performance.
See page 186 for details



19257634
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 188 for details



19299803
SuperMatic™ Torque Converter
See page 184 for details



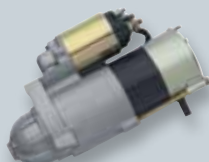
92246731
Camaro 6-Speed Transmission
See page 188 for details



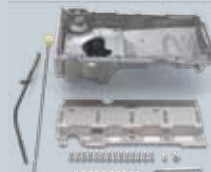
19258267
LS376/480 Controller Kit
See page 293 for details



19155067
Corvette Accessory Drive Kit
See page 279 for details



10465385
LS-Series Starter
See page 342 for details





19212593
Muscle Car Oil Pan Kit
See page 285 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS376/515



19244552  

■ 515 hp @ 6,500 rpm

■ 469 lb.-ft. @ 5,000 rpm

Affordable LS3-based high-performance for the street or track!

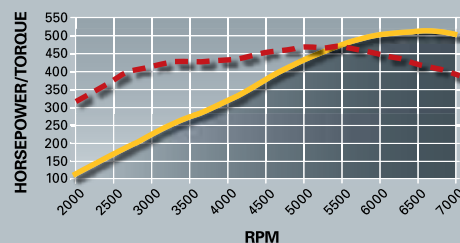
Using the LS3 engine as its foundation, the LS376/515 crate engine adds Chevrolet Performance's racing-derived ASA Cam and a carbureted intake system to produce 515 horsepower at a stellar 6,500 rpm and 469 lb.-ft. of torque at 5,000 rpm. It's the perfect high-performance option for a classic project car or race car.

The assembly includes a Corvette oil pan and LS3 cylinder heads, with high-flow, rectangular-port intake passages, as well as our unique, spider-type carburetor intake manifold. At the heart of the engine is the ASA cam, which extends the performance range of the LS3 with more duration. That means it holds the valves open longer, enabling greater airflow at higher rpm. Wind it out yourself and you'll see what we mean!

You'll need our LSX controller P/N 19171130 and Holley 770-cfm carburetor P/N 19170093 to finish off and fire up this bad boy!

Check out our LS1 Engine Kit Installation Guide P/N 88959384 for details on installing an LS engine in a vintage vehicle.

LS376/515 DYNO CHART



Horsepower: 515 @ 6500 rpm

Torque (lb-ft): 469 @ 5000 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- Use LSX ignition controller P/N 19171130 (includes harness) (page 293)
- Includes Corvette wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- 770-cfm carb P/N 19170093 recommended for daily street use
- Non-Corvette applications require flexplate P/N 12637677
- Front-end accessory drive kits are available in two configurations (see page 279 for application).

LS376/515 TECH SPECS

Part Number:	19244552	Cylinder Heads (P/N 12629063):	Aluminum L92-style port; as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.165 int / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Block (P/N 12623967):	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19207287):	Hypereutectic aluminum	Maximum Recommended rpm:	6,600
Camshaft Type (P/N 88958770):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	226° intake / 236° exhaust		



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



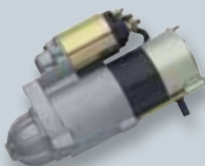
19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 A durable, easy-cruising four-speed overdrive automatic transmission that is electronically controlled for more precise, fuel-saving performance.
See page 186 for details



19212657
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 188 for details



19299803
SuperMatic™ Torque Converter
See page 184 for details



10465385
LS-Series Starter
See page 342 for details



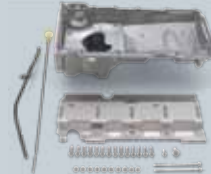
19155067
Corvette Accessory Drive Kit
See page 279 for details



19170093
Carburetor, Holley 770-cfm
See page 348 for details



19171130
LSX Controller
See page 293 for details





19212593
Muscle Car Oil Pan Kit
See page 285 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS376/525



19259233  

■ 525 hp @ 6,300 rpm

■ 489 lb.-ft. @ 4,400 rpm

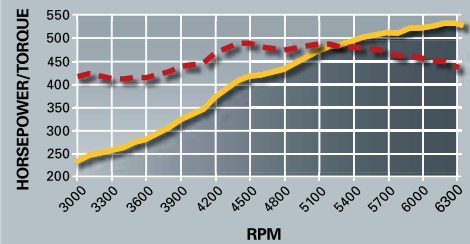
Fuel-injected ferocity for performance cars of all ages

What do you get when you take Chevrolet Performance's aggressive ASA camshaft – developed for the high-rpm world of circle-track racing – and slip it into an LS3 6.2L engine? The answer is 525 horsepower in one of our most powerful production-based crate engines. We call it the LS376/525 and if take-no-prisoner performance is what you're looking for in your new Camaro or resto-mod Chevelle, this is it!

The ASA camshaft is a hydraulic roller with .525-inch lift on both sides, along with 226 degrees duration on the intake side and 236 degrees on the exhaust side. Coupled with a tight, 110-degree lobe separation angle, it helps the engine deliver excellent throttle response and breathe exceptionally well at high rpm. And for durability, we complement the cam with higher-rate valve springs.

You'll need tuning to make the most of the engine in a late-model GM vehicle. If you plan to use the LS376/525 in a vintage car, you'll need controller kit P/N 19259261, which includes the throttle pedal to match its electronically controlled throttle body. Check out our LS1 Engine Kit Installation Guide P/N 88959384 for details on installing an LS engine in a vintage vehicle.

LS376/525 DYNO CHART



Horsepower: 525 @ 6,300 rpm Torque (lb.-ft.): 489 @ 4,400 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- Use LS376/525 Enginer Controller Kit P/N 19259261 (page 293)
- Includes Corvette wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Non-Corvette applications require flexplate P/N 12637677
- Front-end accessory drive kits are available in two configurations (see page 279 for application).

LSX376/525 TECH SPECS

Part Number:	19259233	Cylinder Heads (P/N 12629063):	Aluminum L92-style port, as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.165 intake / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression ratio:	10.7:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roll trunnion
Block (P/N12623967):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roll trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19207287):	Hypereutectic aluminum	Maximum Recommended RPM:	6,600
Camshaft Type (P/N 88958770):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	0.525" intake / 0.525" exhaust	Balanced:	Internal
Camshaft Duration (@0.050 in):	226° intake / 236° exhaust		

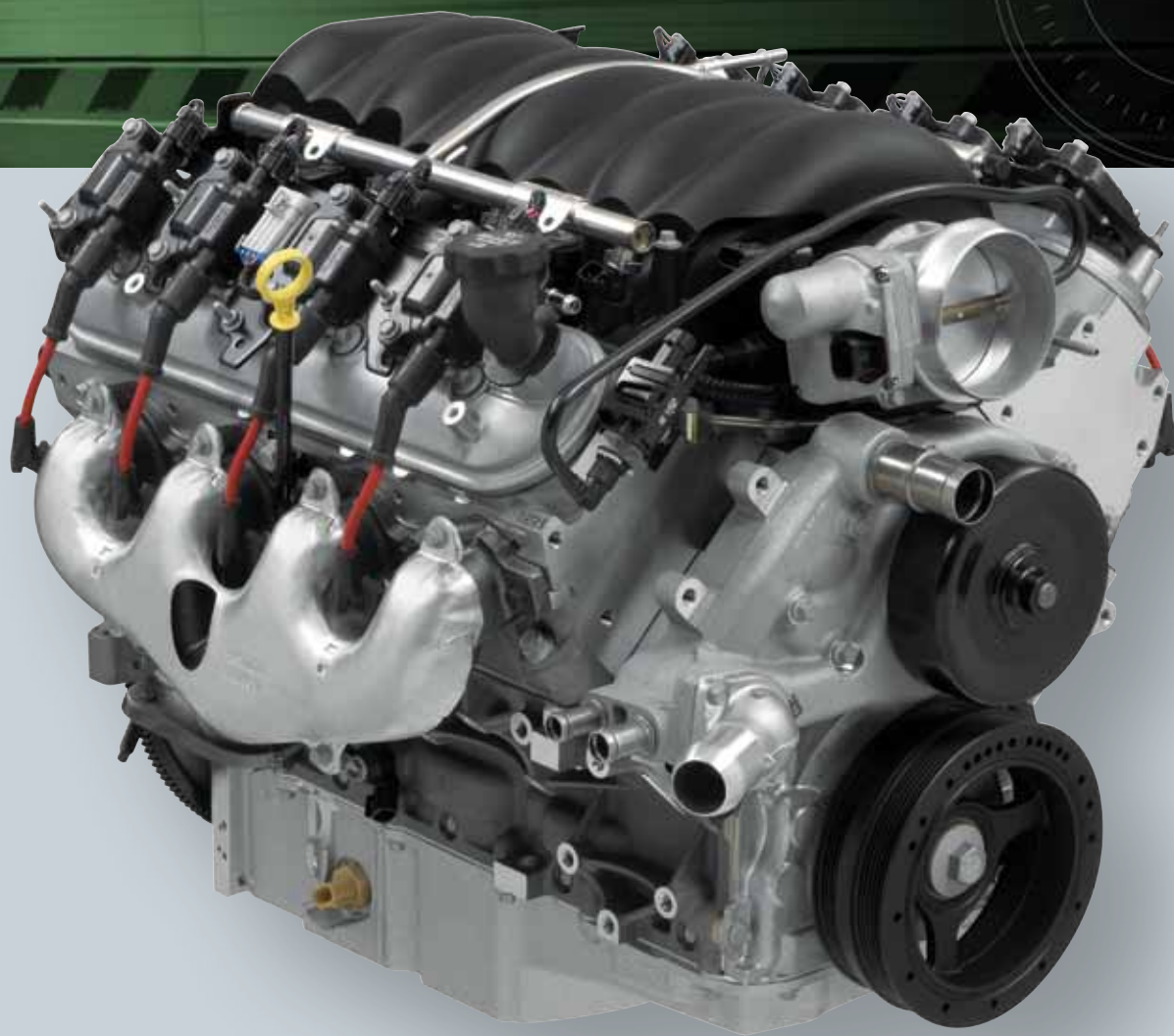


Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 A durable, easy-cruising four-speed overdrive automatic transmission that is electronically controlled for more precise, fuel-saving performance.
See page 186 for details



19257634
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 188 for details



19299803
SuperMatic™ Torque Converter
See page 184 for details



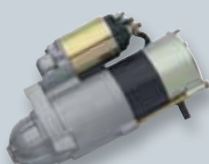
92246731
Camaro 6-Speed Manual Transmission
See page 188 for details



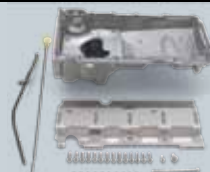
19259261
LS376/525 Controller Kit
See page 293 for details



19155067
Corvette Accessory Drive Kit
See page 279 for details



10465385
LS-Series Starter
See page 342 for details



19212593
Muscle Car Oil Pan Kit
See page 285 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LSA 6.2L SC



19260164  

■ 556 hp @ 6,100 rpm

■ 551 lb.-ft. @ 3,800 rpm

More than 550 supercharged horsepower with exceptional refinement!

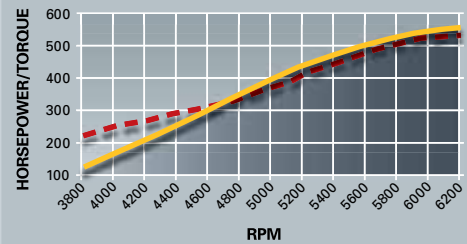
The Cadillac CTS-V's 6.2L supercharged LSA engine delivers 556 horsepower with refinement that is rare in the world of high performance. It is smooth, quiet and well-balanced – all while delivering breathtaking power.

A unique aluminum cylinder block casting houses a forged steel crankshaft and super-tough reciprocating parts, integrated piston-cooling oil jets and high-flow cylinder heads that support the airflow enabled by a 1.9L, sixth-generation supercharger with four-lobe, high-twist rotors. The advanced rotor design broadens the supercharger's effective range, enhancing low-rpm torque and high-rpm horsepower.

Chevrolet Performance's LSA 6.2L supercharged crate engine package comes fully dressed, from the top of the charge-cooled supercharger assembly to the ignition system, water pump, balancer and more. It is a less-costly alternative to the LS9 engine and makes a great transplant for any off-road LS-powered vehicle or pre-1976 car or truck. It also comes with conventional wet-sump lubrication system.

NOTE: This engine includes an 8-bolt crankshaft flange that may require an adapter for use with some transmissions.

LSA DYNO CHART



Horsepower: 556 @ 6100 rpm Torque (lb-ft): 551 @ 3800 rpm

INSTALLATION NOTES

- Assembly does not include any electronics or accessory drive components
- LSA Controller Kit P/N 19259293, available for non-original applications. Kit includes ECM, wiring harness, O² sensors and throttle pedal for ETC operation.
- Coolant pump included P/N 20945282
- Intended for pre-1976 street vehicles or any off-road vehicle
- 8-bolt crank flange
- Not intended for marine applications
- Includes dual mass flywheel P/N 24240678
- See page 280 for LSA Accessory Drive System

LSA 6.2L TECH SPECS

Part Number:	19260164	Cylinder Heads (P/N 12604860):	Aluminum L92-style port; as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.160 intake / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Block (P/N 12623968):	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12603616):	Forged Steel with 8-bolt flange	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12604857):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 12625119):	Hypereutectic aluminum	Maximum Recommended rpm:	6,600
Camshaft Type (P/N 12623064):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.492" intake / .480" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	198° intake / 216° exhaust		

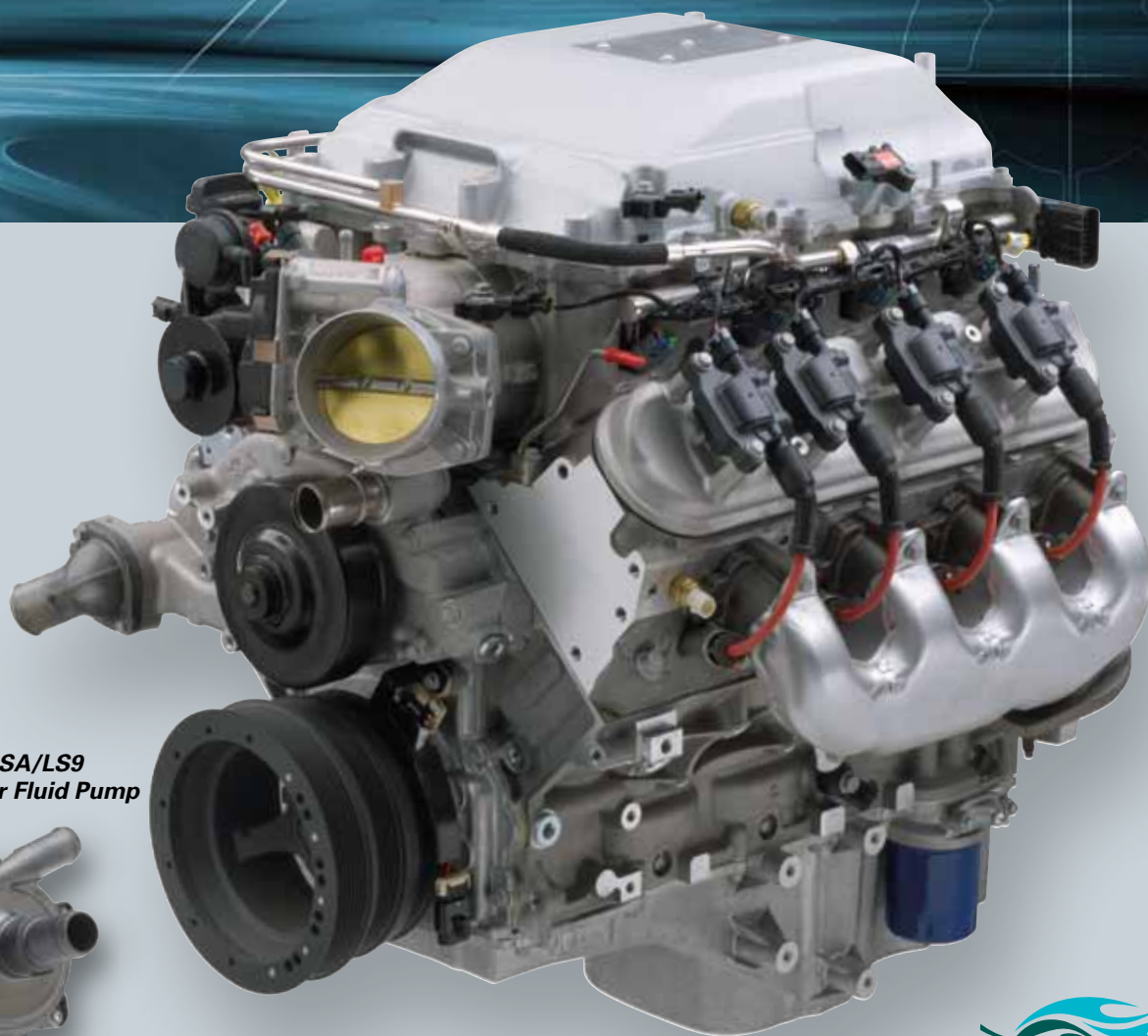


Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





**Includes LSA/LS9
Intercooler Fluid Pump
20945282**



Also available as an E-ROD system



19257456 Automatic Transmission

19257460 Manual Transmission



E-ROD System LSA 6.2L NEW

CARB certified - E.O. number D-126-33

Chevrolet Performance has taken the E-ROD concept to a higher plateau, with the E-ROD LSA package. The new system includes the engine controller and is centered on the same 6.2L supercharged engine found in the Cadillac CTS-V series, rated at 556 hp and 551 lb.-ft. of torque.

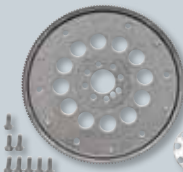
Each engine requires a front-end accessory drive system suitable to the vehicle. The instruction manual includes recommendations for the accessory drive kit, as well as the transmission, gear ratios and more.

See page 110 for more system information or visit your Chevrolet Performance Authorized Center.

SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550
SuperMatic™ 4L85-E
4-Speed Transmission
See page 186
for details



19125597
8-Bolt Crankshaft
Adapter Kit
See page 187
for details



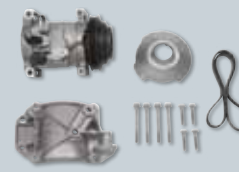
19257661
Transmission
Controller
See page 188
for details



10465385
LS-Series Starter
See page 342
for details



19243525
LSA Accessory
Drive System
w/o AC
See page 280
for details



19244106
LSA Accessory
Drive System AC
add-on kit
See page 280
for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LS9 6.2L SC

19244099  

■ 638 hp @ 6,500 rpm

■ 604 lb.ft. @ 3,800 rpm

World-conquering supercharged performance from the Corvette ZR1!

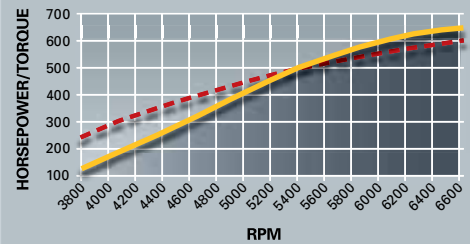
Chevrolet Performance is thrilled to offer the LS9 6.2L supercharged in a fully dressed crate engine package that includes every one of the Corvette ZR1's 638 horsepower!

The LS9 is a technological marvel. High-rpm-validated lightweight reciprocating parts, including titanium intake valves, are used, along with high-flow cylinder heads that draw the charge forced on them by a sixth-generation supercharger. It has a high-helix (twist) design that helps the "blower" deliver greater power at the low-end and sustains it longer through the rpm band for broad, on-demand power, whether off-idle or at speed.

Chevrolet Performance's LS9 crate engine assembly includes the dry sump oil pan and provisions for the charge cooler's liquid cooling system. You'll need an external oil tank,* external coolant tank* (for the charge cooler) and ECU/wire harness to get the baddest production LS engine of them all up and running in your project vehicle. It also includes a 9-bolt crankshaft flange that may require an adapter for use with some transmissions.

**Not currently available from Chevrolet Performance. Check with your Chevrolet Performance dealer for updates.*

LS9 DYNO CHART



Horsepower: 638 @ 6500 rpm Torque (lb-ft): 604 @ 3800 rpm

INSTALLATION NOTES

- 14" manual transmission flywheel included
- Assembly does not include any electronics - use LS9 Controller Kit P/N 19299462 to operate engine
- Forged pistons with oil-spray cooling
- Includes Corvette dry sump oil pan - requires production or aftermarket oil lines and oil tank (not included)
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Crankshaft has unique 9-bolt flywheel mounting pattern

LS9 TECH SPECS

Part Number:	19244099	Cylinder Heads (P/N 12621774):	Aluminum L92-style ports; as cast with 68cc chambers
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	2.160 titanium intake / 1.590 hollow, sodium-filled exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Block:	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12641693):	Forged Steel with 9-bolt flange	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12624231):	Forged titanium	Recommended Fuel:	92 octane
Pistons (P/N 19180414):	Forged aluminum	Maximum Recommended rpm:	6,600
Camshaft Type (P/N 12638427):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.562" intake / .558" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	211° intake / 230° exhaust		



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

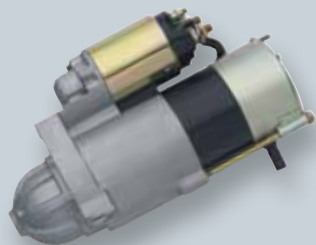




Includes LSA/LS9
Intercooler Fluid Pump
20945282



SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



10465385
LS-Series Starter
See page 342 for details



19299462
LS9 Controller Kit **NEW**
See page 293 for details



19243524
LS9 Accessory Drive
System w/AC
See page 281 for details



19260557
Camaro ZL1 Fuel Pump
See page 351 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS7 7.0L



19244098  

■ 505 hp @ 6,300 rpm

■ 470 lb.-ft. @ 4,800 rpm

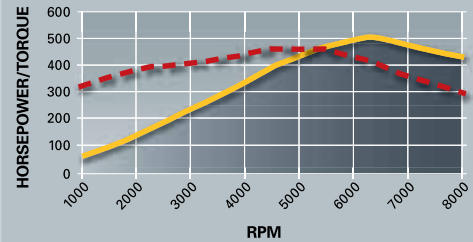
A living legend with 427 classic cubic inches!

In annals of high-performance engines, the Corvette Z06's LS7 will be remembered as a benchmark in naturally aspirated power. It will also go down as one of the most popular LS crate engines ever offered, with 505 horsepower and 470 lb.-ft. of torque.

Within its classic 427-cu-in displacement, engineers extracted Big-Block grunt from its high-revving Small-Block package. It features a unique, big-bore cylinder block that is anchored with a forged crankshaft, featherweight titanium connecting rods and friction-coated pistons. But it's the airflow capability of the cavernous, CNC-ported heads that enables its tremendous power. Large-volume, straight-passage intake runners channel air directly through 2.20-inch titanium intake valves.

Chevrolet Performance's LS7 7.0L crate engine package includes a production-style engine with the dry sump oil pan. You'll need to supply the external oil supply and oil lines to the engine, but the rest of the assembly is fully dressed, including the manifold assembly with injectors and electronically controlled throttle body, and log-style exhaust manifolds. Use our LS7 controller kit P/N 19258553 to get it running in your project vehicle.

LS7 7.0L DYNO CHART



Horsepower: 505 @ 6300 rpm Torque (lb-ft): 470 @ 4800 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- LS7 Controller Kit P/N 19258553 available for non-Corvette applications. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 292)
- Comes assembled with 14-inch Corvette Z06 168-tooth flywheel
- LS7 is the same size and mounts the same as other LS-Series engines
- Use oil hose adapters P/N 25534412 to adapt to AN -12 fittings
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- See page 279 for front end accessory drive kit options

LS7 7.0L TECH SPECS

Part Number:	19244098	Cylinder Heads (P/N 12578449):	CNC ported LS7-style ports
Engine Type:	LS-Series Small-Block V-8		70cc CNC combustion chambers
Displacement (cu in):	427 (7.0L)	Valve size (in):	2.200" titanium intake, 1.610" sodium-filled exhaust
Bore x Stroke (in):	4.125 x 4.000 (104.8 x 101.6mm)	Compression Ratio:	11.0:1
Block (P/N 12602689):	Cast-aluminum with 6-bolt steel main bearing caps	Rocker Arms:	Investment-cast, roller trunnion
Crankshaft (P/N 12641692):	Forged steel	Rocker Arm Ratio:	1.8:1 (offset, intake only)
Connecting Rods (P/N 12586258):	Forged titanium	Recommended Fuel:	91 octane
Pistons:	Hypereutectic aluminum	Maximum rpm:	7,000
Camshaft Type (P/N 12638426):	Hydraulic roller	Reluctor Wheel:	58X
Camshaft Lift (in):	.591 intake / .591 exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	211° intake / 230° exhaust		



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

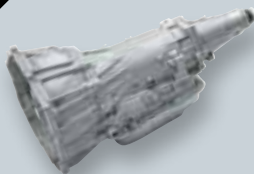


Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



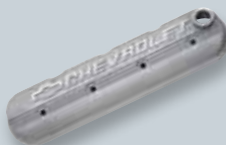
19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 A durable, easy-cruising four-speed overdrive automatic transmission that is electronically controlled for more precise, fuel-saving performance.
See page 186 for details



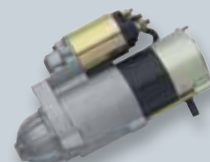
19257634
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 188 for details



19299802
SuperMatic™ Torque Converter
See page 184 for details



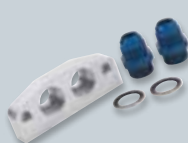
25534398
LS Valve Cover
See page 271 for details



10465385
LS-Series Starter
See page 342 for details



19155067
Corvette Accessory Drive Kit
See page 279 for details



25534412
Oil Hose Adapters
See page 258 for details



19258553
LS7 Controller Kit
See page 293 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

CRATE ENGINES

Small-Block

LSX SERIES



Engines Shown From Left:

LSX376

LSX454

LSX454R



MAXIMUM LS PERFORMANCE FOR THE STREET OR STRIP

Chevrolet Performance designed the LSX lineup of crate engines for one reason: Maximum performance.

LSX crate engines are based on the high-performance LSX Bowtie block, which is designed to support extreme performance combinations, including supercharging, turbocharging and nitrous. Our LSX cylinder heads complement the block with tremendous airflow and six-bolts-per-cylinder clamping strength that supports those power adders. They also use tough, forged rotating parts that stand up to the greatest of high-performance demands.

Our range of LSX crate engines includes the economical and boost-ready LSX376-B8 and the dual-purpose LSX454. The LSX376-B8 was designed as the perfect foundation for a blower, turbo or nitrous, while the LSX454 performs great with either a carburetor or fuel injection.

The ultimate LSX crate engine is the LSX454R – a 750+horsepower track killer that will help you cruise the quarter-mile in 9 seconds or less. We designed it for one thing: Winning.

If your car can handle the power, LSX crate engines have what it takes to keep you in front of the competition.



LSX376-B8

19171049  



■ 450 hp @ 5,900 rpm*

■ 444 lb.-ft. @ 4,600 rpm*

An affordable foundation for forced induction!

Boost on a budget! That's what you get with the LSX376-B8. Chevrolet Performance takes the economical LSX Bowtie standard-deck block, adds blower-friendly 9.0:1 forged pistons and combines them with the LS3's high-flow, rectangular-port heads to create an affordable foundation for supercharged and turbocharged combinations.

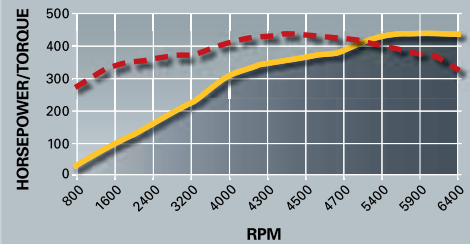
The LSX376-B8 is designed for lower-boost applications, up to about 8 pounds. That's suitable for most supercharger and turbo kits that are designed to be used with production-based applications.

We deliver the LSX376-B8 without an intake manifold and other accessories to keep the price lower and enable the installer to tailor the induction system to suit the blower or turbo system. Put this great engine in a vehicle originally equipped with an LS engine to give it a stronger bottom end for forced induction, or drop it into a street rod or classic muscle car body for a modern update.

*Horsepower and torque ratings were derived by GM Engineering using a normally aspirated LSX376 with LS3 EFI. Your power numbers may vary, based on induction system and componentry.

Check out our *LS1 Engine Kit Installation Guide #88959384* for details on installing an LS engine in a vintage vehicle.

LSX376-B8 DYNO CHART



Horsepower: 450 @ 5900 rpm Torque (lb-ft): 444 @ 4600 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Requires LSX Ignition Controller P/N 19171130 for carbureted applications
- Standard LS 6-bolt crank flange
- Assembly shipped without intake manifold or oil pan (dust shield installed for shipment)
- Recommended max boost - 8 PSI

LSX376-B8 TECH SPECS

Part Number:	19171049	Cylinder Heads (P/N 12615879):	LS3 rectangular port, with "as cast" 68cc chambers
Engine Type:	LSX-Series Gen IV Small-Block V-8	Valve Size (in):	2.160 intake / 1.590 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression ratio:	9:1
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92 mm)	Rocker Arms (P/N 12569167 int):	Investment-cast, roll trunnion
Block (P/N 19244055):	LSX cast-iron with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roll trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	87 octane
Pistons (P/N 19244016):	Forged aluminum	Maximum Recommended RPM:	6,600
Camshaft Type (P/N 12603844):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	0.551" intake / 0.522" exhaust	Balanced:	Internal
Camshaft Duration (@0.050 in):	204° intake / 211° exhaust		



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

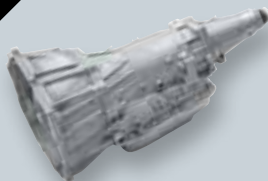


Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 Features five-pinion gearsets, heat-treated state shaft splines, induction-hardened turbine shaft, seven-plate clutch and specific valve-body calibration.
See page 186 for details



19212657
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 188 for details



19244035
LSX-LS3 Single-Plane Standard Deck 4-bbl Intake Manifold
See page 288 for details

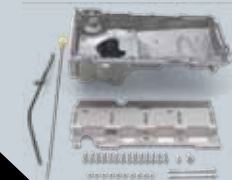


19244037
LSX-LS3 Dual-Plane Standard Deck 4-bbl Intake Manifold
See page 288 for details

LSX376 COMPLETION COMPONENTS

Electronic Fuel Injection
 LS3 intake manifold **12638197**
 Ignition coil kit **19257878**
 Engine controller kit **19258270**
 High flow / 60PSI (400kPa) fuel pump (not available from Chevrolet Performance)

Carburetor Fuel System
 Intake manifold (Single plane) **19244035**
 Intake manifold (Dual plane) **19244037**
 Carburetor **19170095**
 Air cleaner **12342071**
 Ignition controller **19171130**
 Ignition coil kit **19257878**
 Fuel pump **6472657**



19212593
Muscle Car Oil Pan Kit
See page 285 for details



12638197
LS3 Intake Manifold Assembly
See page 286 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LSX-SERIES ENGINE COMPONENTS

LSX376-B15

19299306  

■ 450 HP @ 5900 rpm*

■ 444 LB-FT @ 4600 rpm*

NEW! Forged internals and 6-bolt LSX heads that support more boost!

For builders who want to stretch the performance of a turbocharged or supercharged combination, we've got just the foundation you need: Chevrolet Performance's new LSX376-B15, featuring a durable, all-forged rotating assembly to handle up to 15 pounds of boost.

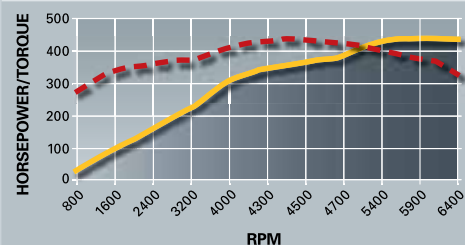
Chevrolet Performance's engineers started with the tough LS steel Bowtie standard-deck block, added a forged steel crankshaft, forged rods and forged pistons, then topped off the short-block assembly with high-flow, rectangular-port LSX-LS3 6-bolt aluminum heads for supercharged and turbocharged combinations.

We deliver the LSX376-B15 without an intake manifold and other accessories, allowing you to tailor the induction system and other features to suit the forced-induction setup of your choice. It's perfect as an economical replacement for a late-model performer or a great choice to build a high-boost power plant for a Pro Touring classic.

*Horsepower and torque ratings were derived by GM Engineering using a normally aspirated LSX376 with LS3 EFI. Your power numbers may vary, based on induction system and componentry.

Check out our *LS1 Engine Kit Installation Guide #88959384* for details on installing an LS engine in a vintage vehicle.

LSX376-B15 DYNO CHART



Horsepower: 450 @ 5900 rpm Torque (lb-ft): 444 @ 4600 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Requires LSX Ignition Controller P/N 19171130 for carbureted applications
- LSX 8-bolt crank flange
- Assembly shipped without intake manifold or oil pan (dust shield installed for shipment)
- Recommended max boost - 15 PSI

LSX376-B15 TECH SPECS

Part Number:	19299306	Cylinder Heads (P/N 19201805):	LSX-LS3 rectangular port; with
Engine Type:	LSX-Series Gen IV Small-Block V-8		"as cast" 68cc chambers and
Displacement (cu in):	376 cu in (6.2L)		6-bolt attachment
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92 mm)	Valve Size (in):	2.160 intake / 1.550 exhaust
Block (P/N 19260095):	LSX cast-iron with 6-bolt, cross-bolted main caps	Compression ratio:	9:1
Crankshaft (P/N 12603616):	Forged 4340 steel	Rocker Arms (P/N 12569167 int):	Investment-cast, roll trunnion
Connecting Rods (P/N 12607475):	Forged powdered metal	Rocker Arms (P/N 10214664 exh):	Investment-cast, roll trunnion
Pistons (P/N 19259381):	Forged aluminum	Rocker Arm Ratio:	1.7:1
Camshaft Type (P/N 12638426):	Hydraulic roller	Recommended Fuel:	87 octane
Valve Lift (in):	0.560" intake / 0.555" exhaust	Maximum Recommended RPM:	6,600
Camshaft Duration (@0.050 in):	210° intake / 230° exhaust	Reluctor Wheel:	58X
		Balanced:	Internal



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

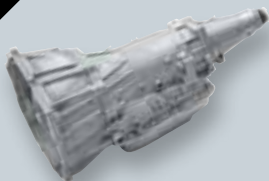


Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19299055
SuperMatic™ 4L70-E Four-Speed Automatic Transmission
 Features five-pinion gearsets, heat-treated state shaft splines, induction-hardened turbine shaft, seven-plate clutch and specific valve-body calibration.

See page 186 for details



19212657
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.

See page 188 for details



19244035
LSX-LS3 Single-Plane Standard Deck 4-bbl Manifold

See page 288 for details



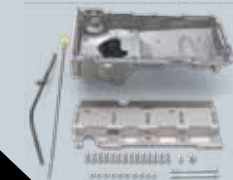
19300534
ZL1 Supercharger

See page 353 for details



22901367
LSA Intercooler Fluid Pump

See page 353 for details



19212593
Muscle Car Oil Pan Kit

See page 285 for details



19300534
LS3 Intake Manifold Assembly

See page 286 for details



19258436
Camaro ZL1 Fuel Pump Module

See page 351 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



PERFORMANCE 143

LSX454

19244611  

■ 620 hp @ 6,200 rpm

■ 590 lb.-ft. @ 4,800 rpm



Big-Block performance built from our LSX Small-Block!

One of the most legendary engines in muscle car history was the Chevy 454 Big-Block. With the LSX Bowtie block, Chevrolet Performance engineers were able to build a 21st-century 454 with the latest technology – and it requires no more space under the hood than a production LS engine.

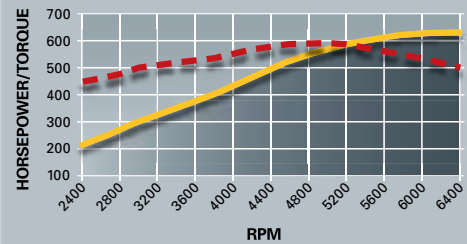
The LSX454 is filled with an all-forged, super-tough rotating assembly and features a pair of our new, deep-breathing LSX six-bolt cylinder heads. It also comes dressed with great-looking, orange powder-coated valve covers with engraved “LSX454” logos.

We deliver the LSX454 without an intake manifold and other accessories. With a carburetor and high-flow Chevrolet Performance intake manifold, the LSX454 is good for about 620 horsepower and 600 lb.-ft. of torque, or about 580 hp and 600 lb.-ft. with fuel injection.

Use LSX-LS7 single-plane carbureted intake manifold P/N 19244033. The LSX454 valve covers do not include provisions for mounting ignition coil brackets. Aftermarket or custom relocation brackets must be obtained. It also includes an 8-bolt crankshaft flange that may require an adapter for use with some transmissions.

Check out our *LS1 Engine Kit Installation Guide P/N 88959384* for details on installing an LS engine in a vintage vehicle.

LSX454 DYNO CHART



Horsepower: 620 @ 6200 rpm Torque (lb-ft): 590 @ 4800 rpm

INSTALLATION NOTES

- Assembly does not include any electronics
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Requires LSX Ignition Controller P/N 19171130 when using a carburetor
- Requires the purchase and installation of an oil pan (see page 251) (dust shield installed for shipment)
- LSX 8-bolt crank flange
- Requires premium fuel

LSX454 TECH SPECS

Part Number:	19244611	Cylinder Heads (P/N 19201806):	Aluminum LSX-LS7 port; with "as cast" 70cc chambers
Engine Type:	LSX-Series Gen IV Small-Block V-8	Valve Size (in):	2.200 titanium intake/1.610 hollow, sodium-filled exhaust
Displacement (cu in):	454 cu in (7.4L)	Compression ratio:	11.0:1
Bore x Stroke (in):	4.185 x 4.125 (106.3 x 104.8 mm)	Rocker Arms (P/N 12579615 int):	Investment-cast, roll trunnion
Block (P/N 19244057):	LSX cast-iron with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 12579617 exh):	Investment-cast, roll trunnion
Crankshaft (P/N 19244018):	4340 forged steel with 8-bolt flange	Rocker Arm Ratio:	1.8:1
Connecting Rods (P/N 19166964):	4340 forged steel	Recommended Fuel:	92 octane
Pistons (P/N 19166958):	Forged aluminum	Maximum Recommended RPM:	6,500
Camshaft Type (P/N 19166972):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	0.648" intake / 0.648" exhaust	Balanced:	Internal
Camshaft Duration (@0.050 in):	236° intake / 246° exhaust		

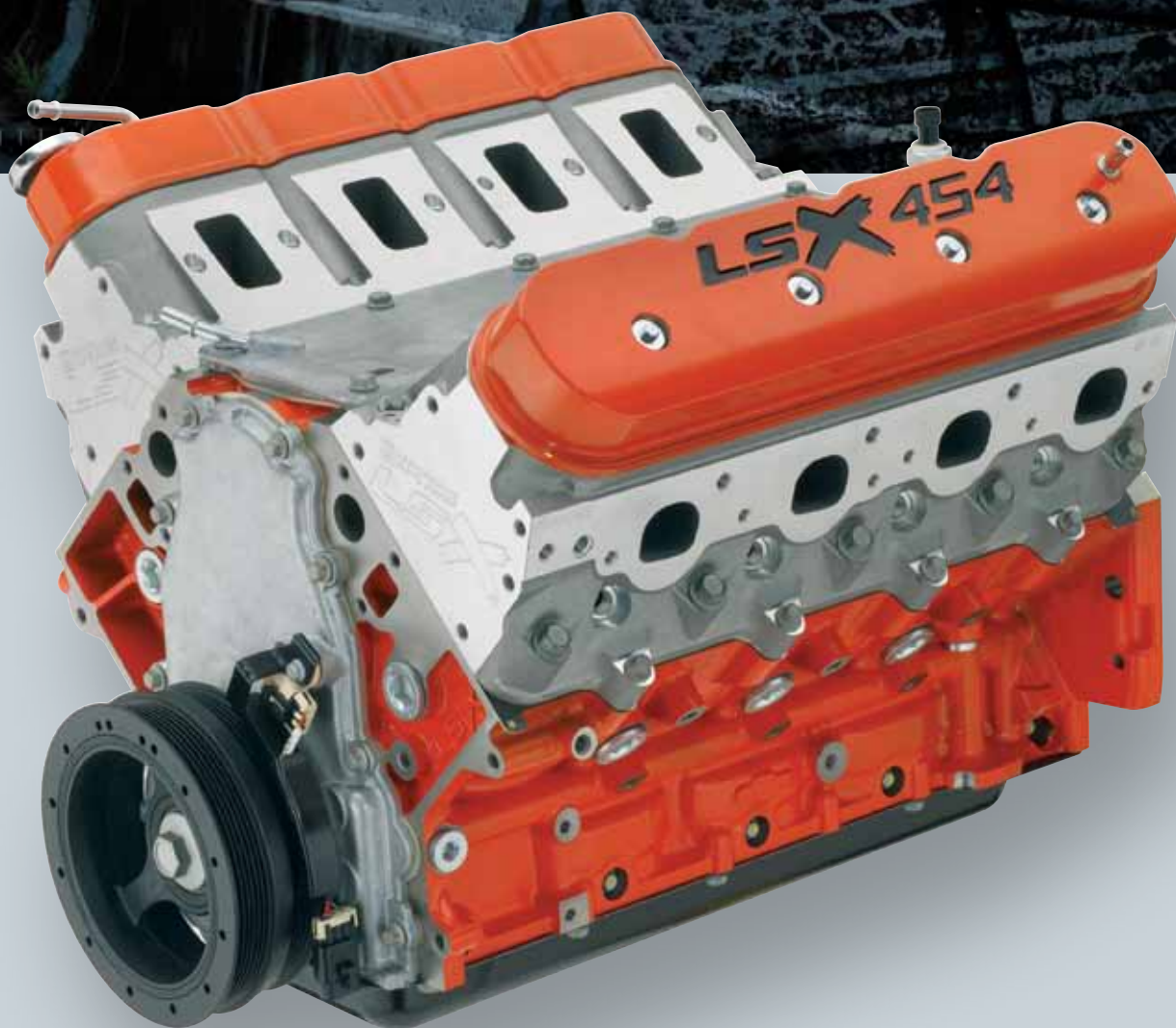


Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



**19244481 Manual
19299840 Automatic
LSX454 Engine Controller Kit**
See page 293 for details



**12610435
LS7 Production Intake Manifold
Assembly**
See page 286 for details



**19300175
Supermatic 4L85-E**
*See page 186
for details*



**19244033
LSX-LS7 Standard
Deck 4-bbl Manifold**
*See page 288
for details*



**19299807
SuperMatic™
Torque Converter**
*See page 184
for details*



**19171130
LSX Ignition
Controller**
*See page 293
for details*

**LSX454 COMPLETION COMPONENTS
Electronic Fuel Injection**

- LS7 intake manifold: **12610435**
- Ignition coil kit: **19257878**
- Engine controller kit: **19244481**
- High flow / 60PSI (400kPa) fuel pump
(not available from Chevrolet Performance)


Carburetor Fuel System

- Intake manifold: **19244033**
- Carburetor: **19170095**
- Ignition controller: **19171130**
- Ignition coil kit: **19257878**
- Fuel pump: **6472657**

SEE PAGE 240 FOR OUR COMPLETE LINE OF LSX-SERIES ENGINE COMPONENTS



LSX454R

19260835  

■ 770 hp @ 7000

■ 612 lb.-ft. @ 5600

Quite simply the most powerful crate engine ever from Chevrolet Performance!

Drag racers take note! Chevrolet Performance's new LSX454R crate engine delivers 770 horsepower that will help you stay in front of the competition. More than the most powerful LS engine in our portfolio, it is the most powerful crate engine we've ever offered!

Our engineers designed the LSX454R for the unique, high-rpm demands of drag racing. It is a high-compression, solid-roller combination that uses our new LSX DR cylinder heads. These 11-degree, six-bolt aluminum heads feature raised ports that provide tremendous airflow. We complement them with an exclusive, high-rise open-plenum intake manifold and a Dominator-type carburetor to complete the assembly.

The LSX454R's bottom end includes our LSX Bowtie cylinder block and an all-forged rotating assembly. And while we rate the engine at 770+ horsepower in its naturally aspirated form, we know that there is room for more.

Use the LSX454R as the centerpiece of a new race car built with our GEN V Camaro body-in-white for the ultimate modern drag strip star. With 770+ horses under the hood, it will perform as good as it looks!

Check out our *LS1 Engine Kit Installation Guide P/N 88959384* for details on installing an LS engine in a vintage vehicle.

LSX454R DYNO CHART



Horsepower: 770 @ 7000 rpm Torque (lb-ft): 612 @ 5600 rpm

INSTALLATION NOTES

- Intended for off-road use only!
- Requires Race Fuel (110 Octane Minimum)
- Not intended for Marine Use
- Requires LSX Ignition Controller P/N 19171130
- Oil pan not included (see page 251)
(Dust shield installed for shipment)
- LSX 8-bolt crank flange
- Uses 4500-series carburetor (included)

LSX454R TECH SPECS

Part Number:	19260835	Cylinder Heads (P/N 19166979):	Drag race cylinder heads
Engine Type:	LS-Series Small-Block V-8	Valve size (in):	6-bolt LSX aluminum
Displacement (cu in):	454 cu in (7.4L)	Compression Ratio:	2.250" x 6.370" intake
Bore x Stroke (in):	4.185 x 4.125 (106.3 x 104.8 mm)	Rocker Arms (P/N 19201808):	1.625" x 6.400" exhaust
Block (P/N 19244057):	LSX cast iron with 6-bolt cylinder head attachment	Rocker Arm Ratio:	13:1:1
Crankshaft (P/N 19244018):	4340 forged steel	Recommended Fuel:	Shaft mounted with needle bearing fulcrum and tip
Connecting Rods (P/N 19166964):	4340 forged steel	Maximum rpm:	1.9:1
Pistons (P/N 19166958):	4032 forged aluminum	Reluctor Wheel:	Race fuel (110 octane minimum)
Camshaft Type (P/N 19166975):	Mechanical roller	Balanced:	7,100
Camshaft Lift (in):	.738 intake / .738 exhaust		58X
Camshaft Duration (@.050 in):	250° intake / 270° exhaust		Internal



Chevrolet Performance Racing Crate Engines are excluded from limited warranty.

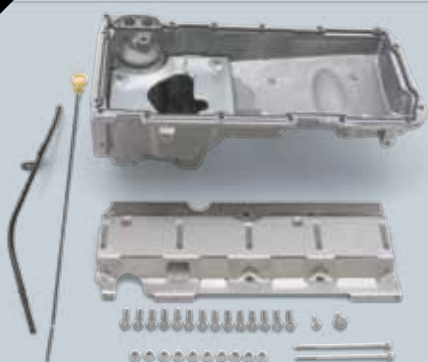


Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





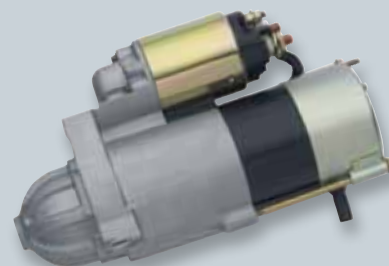
SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19212593
Muscle Car Oil Pan Kit
See page 285 for details



19171130
LSX Ignition Controller
See page 293 for details



10465385
LS-Series Starter
See page 342 for details

SEE PAGE 240 FOR OUR COMPLETE LINE OF LSX-SERIES ENGINE COMPONENTS

BIG-BLOCK



TORQUE FOR THE STREET, STRIP OR TOWING

Chevrolet Performance Big-Block crate engines are all about one thing: Torque. They deliver the all-conquering grunt to haul your vintage Camaro down the drag strip or haul it to the drag strip behind your trusty tow rig.

Our lineup of assembled, ready-to-install engines offers something for every budget and project – and you'll be on the road quicker, with little or no time required for fine-tuning. Use our classic 454 HO for your classic cruiser, our 502 HO to re-power your truck for great towing capability or our ZZ572-620 to turn your Chevy II into a drag-strip Super-Nova!

Chevrolet Performance Big-Block crate engines are built with the latest version of the cylinder block design, which is stronger in many key ways to previous production engines – and they are all built with brand-new parts. Save yourself the trouble of rebuilding – or even finding a good, rebuildable core. Most carry a 24-month/50,000-mile warranty for worry-free performance.

When you need maximum torque, turn to Chevrolet Performance for the ultimate in big-block choices!



Engines Shown From Left:

ZZ427/480

Ram Jet 502

ZZ572/720R

Anniversary Edition 427



19166392  

■ 430 hp @ 5,800 rpm

■ 444 lb.-ft. @ 3,800 rpm

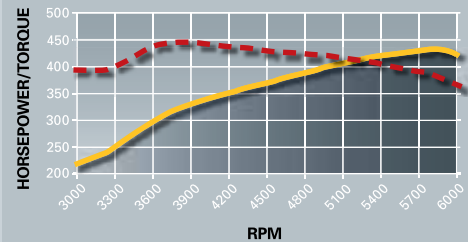
A limited-edition crate engine that honors the legendary ZL1!

At the height of the muscle car wars, a few enterprising, dealer-backed racers worked the loopholes of Chevrolet's COPO ordering system to create a handful of factory-built, supercars that weren't found in any brochure or order guide. They were equipped with an all-aluminum 427 engine dubbed the ZL1. It was similar in specification to the legendary L88 427, but with an aluminum block that saved about 100 pounds.

Chevrolet Performance commemorates the ZL1 with the Anniversary Edition 427 – an aluminum-block crate engine that mimics the original in spirit, but with design upgrades that make it a street-friendly option for resto-mod and tribute projects. Our modern aluminum cylinder block features strength-enhancing design tweaks, screw-in galley plugs and more. We also use a hydraulic roller camshaft in place of the ZL1's original-type flat-tappet cam, making for smoother street operation and greatly reduced maintenance.

Only 427 examples of this unique engine were built, with each numbered crate engine including a special owner's kit with an authenticity certificate, special 427 emblems and more.

ANNIVERSARY 427 DYNO CHART



Horsepower: 430 @ 5800 rpm

Torque (lb-ft): 444 @ 3800 rpm

INSTALLATION NOTES

- Due to crate fitment, the carburetor is shipped in a separate box and needs to be installed by an engine installer
- Requires addition of starter and fuel pump (not included)
- Clutch linkage bosses are drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- Comes with an internally balanced 14" automatic transmission flexplate; use flywheel P/N 12582964 and 11.500" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ANNIVERSARY EDITION 427 TECH SPECS

Part Number:	19166392	Compression Ratio:	10.1:1
Engine Type:	Aluminum Chevy Big-Block V-8	Rocker Arms (P/N 12361323):	Aluminum roller style
Displacement (cu in):	427	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.250 x 3.750	Distributor (P/N 19212081):	HEI type
Block (P/N 88958696):	Cast-aluminum with 4-bolt main caps	Carburetor (P/N 19170093):	770-cfm
Crankshaft (P/N 19171620):	Forged steel	Water Pump (P/N 19168602):	Aluminum short-style
Connecting Rods (P/N 19211226):	Forged steel	Spark Plugs and Wires:	Included
Pistons (P/N 19171618):	Forged aluminum	Flexplate (P/N 12561217):	14"
Camshaft Type (P/N 12366543):	Hydraulic roller	Recommended Fuel:	92 octane
Valve Lift (in):	.527" intake / .544" exhaust	Ignition Timing:	Base 10° BTDC, 36° Total
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Maximum Recommended rpm:	6,400
Cylinder Heads (P/N 19211799):	Aluminum oval port, 110cc chambers	Balanced:	Internal
Valve Size (in):	2.190 intake / 1.880 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





Limited Edition!

Individually Serial Numbered!

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550
SuperMatic™ 4L85-E
Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.

See page 186 for details



19212657
Transmission Controller

Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.

See page 188 for details



19172805
Serpentine Accessory Drive Belt
System With Air Conditioning

See page 324 for details



12355614
Fuel Pump, Street Performance
(Chevy Big-Block)

See page 350 for details



12342071
Air Cleaner

See page 331 for details



12342024
Chrome
Water Neck

See page 331 for details



12363128
Chrome High
Torque Mini Starter

See page 342 for details

ZZ427/480



19166393  

■ 480 hp @ 5,800 rpm

■ 490 lb.-ft. @ 3,800 rpm

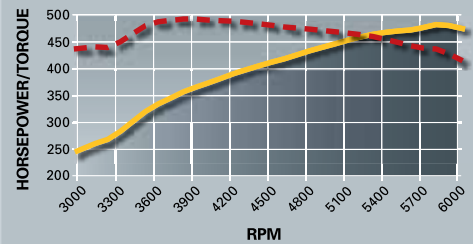
The Classic L88 427 updated for the 21st century!

Between 1967 and 1969, the legendary L88 was the ultimate expression of Chevy's Big-Block power, combining a rigid iron cylinder block with lightweight aluminum cylinder heads and a single four-barrel carburetor. That raspy rat engine was rated at 480 horsepower, although the figure was generally thought to be on the conservative side.

Chevrolet Performance has recreated that classic Big-Block combination in the ZZ427/480 – including the 480 horsepower rating (and it just might be a little on the conservative side, too). Like the original, it features a forged steel crankshaft and high-flow, oval-port aluminum cylinder heads. We've upgraded the camshaft from the original's mechanical flat-tappet design to a smoother hydraulic roller, which delivers great drivability characteristics and a broader rev range. A 10.1:1 compression ratio means it will perform great on pump gas, too.

Whether you're building a '69 COPO Camaro resto-mod tribute, a modified mid-year Corvette or a street-tire class winner, the ZZ427/480 is the heritage-inspired crate engine that delivers the performance that built the Big-Block's legendary reputation.

ZZ427/480 DYNO CHART



Horsepower: 480 @ 5800 rpm Torque (lb-ft): 490 @ 3800 rpm

INSTALLATION NOTES

- Due to crate fitment, the carburetor is shipped in a separate box and needs to be installed by an engine installer
- Requires addition of starter and fuel pump (not included)
- Clutch linkage bosses are drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- Comes with an internally balanced 14" automatic transmission flexplate. See page 323 for a listing of manual transmission flywheels offered by Chevrolet Performance. Requires flywheel designed for internally balanced engines.
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ427/480 TECH SPECS

Part Number:	19166393	Compression Ratio:	10.1:1
Engine Type:	Chevy Big-Block V-8	Rocker Arms (P/N 19210726):	Aluminum roller style
Displacement (cu in):	427	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.250 x 3.750	Distributor (P/N 19212081):	HEI type
Block (P/N 19170538):	Cast-iron with 4-bolt main caps	Carburetor (P/N 19170093):	770-cfm
Crankshaft (P/N 19171620):	Forged steel	Water Pump (P/N 19168602):	Aluminum short-style
Connecting Rods (P/N 19211226):	Forged steel	Spark Plugs and Wires:	Included
Pistons (P/N 19171618):	Forged aluminum	Flexplate (P/N 12561217):	14"
Camshaft Type (P/N 12366543):	Hydraulic roller	Recommended Fuel:	92 octane
Valve Lift (in):	.527 intake / .544 exhaust	Ignition Timing:	Base 10° BTDC, 36° Total
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Maximum Recommended rpm:	6,400
Cylinder Heads: (P/N 19211799):	Aluminum oval port, 110cc chambers	Balanced:	Internal
Valve Size (in):	2.190 intake / 1.880 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550
SuperMatic™ 4L85-E
Four-Speed Transmission
 Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.
 See page 186 for details



19212657
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
 See page 188 for details



19172805
Serpentine Accessory
Drive Belt System
With Air Conditioning
 See page 324 for details



12361146
High Torque
Mini Starter
 See page 342 for details



12341999
Fuel Pump
Block-Off Plate
 See page 305 for details



12342024
Chrome
Water Neck
 See page 331 for details




12355614
Fuel Pump, Street
Performance
(Chevy Big-Block)
 See page 350 for details



12342071
Air Cleaner
 See page 331 for details



454 HO

12568774  

■ 425 hp @ 5,250 rpm

■ 500 lb.-ft. @ 3,250 rpm

Chevrolet Performance's most economical Big-Block crate engine delivers 500 lb.-ft.!

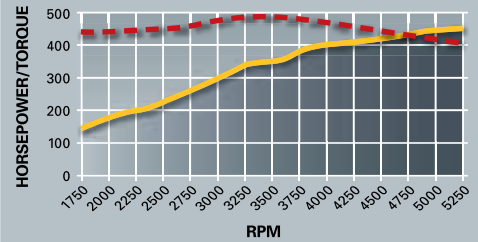
Chevrolet Performance's 454 HO crate engine is classic in its own time, offering enthusiasts an affordable Big-Block combination with performance specs that will make you think it's 1970 all over again – with 425 horsepower and 500 asphalt-wrinkling lb.-ft. of torque.

The foundation of the 454 HO is a brand-new, updated cylinder block, which incorporates many strength and performance design enhancements – making it a smart and economical alternative to rebuilding. We also add an all-forged reciprocating assembly for maximum durability, a roller camshaft and a set of rectangular-port iron cylinder heads.

We deliver the 454 HO with a water pump, balancer, 14-inch flexplate and aluminum intake manifold. Add a carburetor, ignition system and starter and your budget Big-Block will be ready to roar. All of the necessary parts are available from Chevrolet Performance.

If you want the strength and convenience of the 454 HO bottom end, but want to add your own heads and induction system, use our 454 Partial engine P/N 12498778.

454 HO DYNO CHART



Horsepower: 425 @ 5250 rpm

Torque (lb.-ft): 500 @ 3250 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, fuel pump, distributor and ignition system (not included)
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- Comes with an externally balanced 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

454 HO TECH SPECS

Part Number:	12568774	Cylinder Heads (P/N 12562920):	Iron rectangular port; 118cc chambers
Engine Type:	Chevy Big-Block V-8	Valve Size (in):	2.190 intake / 1.880 exhaust
Displacement (cu in):	454	Compression Ratio:	8.75:1
Bore x Stroke (in):	4.250 x 4.000	Rocker Arms (P/N 12523976):	Stamped steel
Block (P/N 19170538):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 14096983):	Forged steel	Water Pump (P/N 19168606):	Cast-iron, long-style
Connecting Rods (P/N 19170198):	Forged steel	Flexplate (P/N 10185034):	14"
Pistons (P/N 10215228):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5,500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.





Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12498778  

454 Partial Engine

The sturdy foundation of the 454 HO is the starting point of a custom engine build. Use externally balanced flywheel for manual transmission applications.



19154550

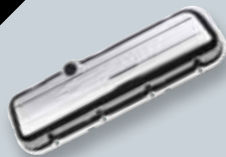
SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



12342093 Short Chrome Bowtie Valve Cover

See page 318 for details



12606096 Lightweight Starter

See page 342 for details



19212657 Transmission Controller

See page 188 for details



93440806 HEI Distributor

See page 347 for details



12355614 Fuel Pump, Street Performance (Chevy Big-Block)

See page 350 for details



19170093 Carburetor, Holley 770-cfm

See page 348 for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



ZZ454/440

12498777  

■ 440 hp @ 5,250 rpm

■ 500 lb.-ft. @ 3,250 rpm

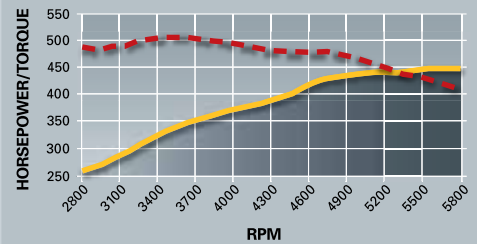
Oval-port aluminum heads deliver big power in an affordable package!

Our engineers took the 454 HO – with its super-tough, all-forged reciprocating assembly – and matched it with a set of higher-flow, oval-port aluminum cylinder heads to pick up an additional 15 horses, while still offering 500 lb.-ft. of torque. We dubbed it the ZZ454/440 and it's an affordable high-performance Big-Block for any chassis you can stuff it in.

The ZZ454/440 uses our new cylinder block casting for greater strength and performance, while the aluminum heads use smaller, 110cc combustion chambers to boost compression to 9.6:1, up from 8.5:1 on the 454 HO. We then match the airflow capability with a high-lift, hydraulic roller camshaft that delivers great idle quality and requires no periodic lash adjustments.

Our crate engine package includes the ZZ454/440 assembled with a water pump, balancer, aluminum intake manifold and a 14-inch flexplate. Your Chevrolet Performance dealer can hook you up with the carburetor, starter, ignition system and other accessories required to get this big-power Big-Block started.

ZZ454/440 DYNO CHART



Horsepower: 440 @ 5250 rpm

Torque (lb-ft): 500 @ 3250 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, distributor and ignition system (not included)
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance
- Comes with an externally balanced 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ454 TECH SPECS

Part Number:	12498777	Cylinder Heads (P/N 12363392):	Aluminum oval port; 110cc chambers
Engine Type:	Chevy Big-Block V-8	Valve Size (in):	2.190 intake / 1.880 exhaust
Displacement (cu in):	454	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.250 x 4.000	Rocker Arms (P/N 12368082):	Stamped steel
Block (P/N 19170538):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 14096983):	Forged steel	Water Pump (P/N 19168606):	Cast-iron, long-style
Connecting Rods (P/N 19170198):	Forged steel	Flexplate (P/N 10185034):	14"
Pistons (P/N 10215228):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5,500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12498778  



454 Partial Engine

The sturdy foundation of the 454 HO is the starting point of a custom engine build. Use externally balanced flywheel for manual transmission applications.

19154550



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications. See page 186 for details

SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19170093
Carburetor,
Holley 770-cfm
See page 348
for details



12606096
Lightweight Starter
See page 342
for details



19212657
Transmission
Controller
See page 188
for details



12342071
Air Cleaner
See page 331
for details



12368383
Spark Plug Wire Set
See page 343
for details



88961867
Distributor,
Aluminum Billet HEI
See page 347
for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



88890534  

■ 377 hp @ 4,500 rpm

■ 512 lb.-ft. @ 3,300 rpm

An affordable, high-performance alternative to rebuilding!

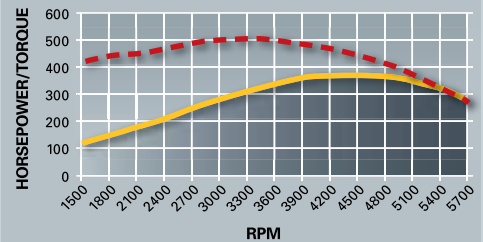
If you're thinking about repowering your trusty Big-Block-powered truck, don't bother with a rebuild or reconditioned used engine. Chevrolet Performance's HT502 crate engine is an affordable alternative with more power and greater durability.

The HT502 is rated at 377 horsepower and a whopping 512 lb.-ft. of trailer-tugging torque. That's more than the factory ever offered and more than you'll get with a stock-type rebuild. It is uniquely suited to pre-1978 trucks, but is adaptable to a variety of applications.

We build the HT502 with a forged crankshaft, rods and pistons for maximum strength; and they're installed in a new version of the Big-Block cylinder block. It is updated for greater strength and performance capability. A conservative 8.75:1 compression ratio ensures pump-gas performance at all altitudes and engine loads.

Our assembly comes with heads and a balancer installed. An induction system, ignition, starter, water pump and other accessories are required to finish the engine. All necessary components are available from Chevrolet Performance.

HT502 DYNO CHART



Horsepower: 377 @ 4500 rpm

Torque (lb.-ft.): 512 @ 3300 rpm

INSTALLATION NOTES

- Requires the addition of carburetor, intake manifold, water pump, starter, distributor and ignition system (not included)
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- 502 engines now have a mechanical fuel pump boss!
- Comes with an externally balanced 14" automatic transmission flexplate. Use externally balanced flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

HT502 TECH SPECS

Part Number:	88890534	Cylinder Heads (P/N 12562917):	Iron oval port; 118cc chambers
Engine Type	Chevy Big-Block V-8	Valve Size (in):	2.07 intake / 1.73 exhaust
Displacement (cu in):	502	Compression Ratio:	8.75:1
Bore x Stroke (in):	4.47 x 4.00	Rocker Arms (P/N 12523976):	Stamped steel
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Flexplate (P/N 10185034):	14"
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Recommended Fuel:	92 octane
Pistons (P/N 12533507):	Forged aluminum	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Type (P/N 12552296):	Hydraulic roller	Maximum Recommended rpm:	5,500
Camshaft Lift (in):	.480 intake / .483 exhaust	Balanced:	External
Camshaft Duration (@.050 in):	204° intake / 209° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12568782  

502 Partial Engine

This brand-new Partial engine includes forged reciprocating components, as well as the balancer, oil pan and timing chain set.



19154550

SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!

19170093 Carburetor, Holley 770-cfm

See page 348 for details



12606096 Lightweight Starter

See page 342 for details



19212657 Transmission Controller

See page 188 for details



19168602 Aluminum Water Pump, Short-Style

See page 324 for details



93440806 HEI Distributor

See page 347 for details



14097092 Intake Manifold, Oval Port (iron)

See page 328 for details



SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



502 HO

12568778  

■ 450 hp @ 5,250 rpm

■ 550 lb.-ft. @ 3,500 rpm

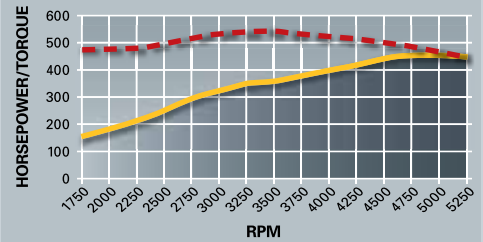
Affordable Big-Block performance with huge torque and 450 hp!

With 450 horsepower and 550 lb.-ft. of torque, our 502 HO crate engine has power on tap for every need – whether it’s a ‘69 Chevelle at the drag strip or the Suburban that towed it there!

The 502 HO is all about torque. It hovers just below the 500 lb.-ft. mark at only 1,500 rpm and arcs gently above the 500 lb.-ft. level by 2,800 rpm, remaining there through 4,200 rpm. All those axle-twisting pound feet are rooted in a stronger, updated four-bolt cylinder block that houses a forged steel crankshaft, forged and shot-peened rods and forged aluminum pistons. In other words, it’s a super-stout assembly that is as durable as it is powerful.

Iron, rectangular-port cylinder heads keep the 502 HO affordable and our crate engine assembly includes an aluminum, dual-plane intake manifold, a water pump, 14-inch flexplate, balancer and more. You add the carburetor, starter and ignition system – all available at ChevroletPerformance.com.

502 HO DYNO CHART



Horsepower: 450 @ 5250 rpm

Torque (lb-ft): 550 @ 3500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, fuel pump, starter, distributor and ignition system (not included)
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance
- 502 engines now have a mechanical fuel pump boss!
- Comes with an externally balanced 14" automatic transmission flexplate. Use flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

502 HO TECH SPECS

Part Number:	12568778	Cylinder Heads (P/N 12562920):	Iron rectangular port; 118cc chambers
Engine Type:	Chevy Big-Block V-8	Valve Size (in):	2.190 intake / 1.880 exhaust
Displacement (cu in):	502	Compression Ratio:	8.75:1
Bore x Stroke (in):	4.470 x 4.000	Rocker Arms (P/N 12523976):	Stamped steel
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Water Pump (P/N 19168606):	Cast-iron, long-style
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Flexplate (P/N 10185034):	14"
Pistons (P/N 12533507):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 8° BTDC, 30° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5,500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12568782  

502 Partial Engine

This brand-new Partial engine includes forged reciprocating components, as well as the balancer, oil pan and timing chain set.



19154550

SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!

19170093
Carburetor,
Holley 770-cfm

See page 348
for details



12355614
Fuel Pump, Street
Performance
(Chevy Big-Block)

See page 350
for details



19212657
Transmission
Controller

See page 188
for details



19172805
Serpentine Accessory
Drive Belt System
With Air Conditioning

See page 324
for details



93440806
HEI Distributor

See page 347
for details



12368383
Spark Plug Wire Set

See page 343
for details



SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



ZZ502/502 Deluxe

19201332  

■ 502 hp @ 5,200 rpm

■ 567 lb.-ft. @ 4,200 rpm

Our most popular Big-Block crate engine for the street and strip!

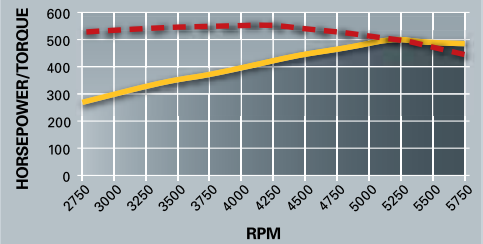
Chevrolet Performance's ZZ502/502 is one of the industry's benchmark crate engines, offering excellent value with a proven combination of performance that is suitable for the street or strip. With more than 500 horsepower and 567 lb.-ft. of torque, it demands your full attention and a chassis that is strong enough to harness its frame-straining twisting power.

All ZZ502 crate engines are manufactured with GM's updated cylinder block casting that is stronger and better supports high-performance applications. A forged crankshaft, along with forged rods and pistons, anchors the bottom end, while our popular oval-port aluminum heads offer excellent airflow characteristics. Torque tops the 500 lb.-ft. mark by approximately 2,500 rpm and doesn't dip below it until about 5,000 rpm.

Our ZZ505/502 Deluxe package comes complete from the oil pan to the carburetor, including an HEI distributor, plug wires, starter, water pump, balancer and an aluminum intake topped with a Holley 870-cfm four-barrel.

We've taken care of the engine's details. You need to make sure your car can handle the ZZ502/502!

ZZ502/502 DYNO CHART



Horsepower: 502 @ 5200 rpm

Torque (lb-ft): 567 @ 4200 rpm

INSTALLATION NOTES

- Due to crate fitment, the carburetor is shipped in a separate box and needs to be installed by an engine installer
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- 502 engines now have a mechanical fuel pump boss!
- Comes with an externally balanced 14" automatic transmission flexplate. Use flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ502/502 DELUXE TECH SPECS

Part Number:	19201332	Compression Ratio:	9.6:1
Displacement (cu in):	502	Rocker Arms (P/N 12368082):	Stamped steel
Bore x Stroke (in):	4.470 x 4.000	Rocker Arm Ratio:	1.7:1
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	Distributor (P/N 93440806):	HEI type
Crankshaft (P/N 10183723):	Forged steel	Carburetor (P/N 19170094):	870-cfm
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Water Pump (P/N 19168602):	Aluminum, short-style
Pistons (P/N 12533507):	Forged aluminum	Spark Plugs and Wires:	Included
Camshaft Type (P/N 12366543):	Hydraulic roller	Starter (P/N 12606096):	Included
Camshaft Lift (in):	.527 intake / .544 exhaust	Flexplate (P/N 10185034):	14"
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Recommended Fuel:	92 octane
Cylinder Heads (P/N 12363390):	Aluminum oval port; 110cc chambers	Ignition Timing:	Base 8° BTDC, 30° Total
Valve Size (in):	2.250 intake / 1.880 exhaust;	Maximum Recommended rpm:	5,800
	stainless steel	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.





Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.






See page 165 for ZZ502 Base Engine details.

12371171  

ZZ502 Deluxe Kit

Chevrolet Performance offers the ZZ502 Deluxe kit for those who want to build their own deluxe engine. Includes partial engine and components (not assembled).



12568782  

502 Partial Engine

This brand-new Partial engine includes forged reciprocating components, as well as the balancer, oil pan and timing chain set.



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550
SuperMatic™
4L85-E Four-Speed
Transmission

See page 186
for details



19212657
Transmission
Controller

See page 188
for details



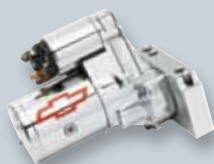
12342024
Chrome Water Neck

See page 331
for details



19172805
Serpentine Accessory
Drive Belt System
With Air Conditioning

See page 324
for details



12363128
Chrome High
Torque Mini Starter

See page 342
for details



12341999
Fuel Pump
Block-Off Plate

See page 305
for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

ZZ502/502 Base



12496963  

■ 502 hp @ 5,200 rpm

■ 567 lb.-ft. @ 4,200 rpm

The DIY foundation for big torque!

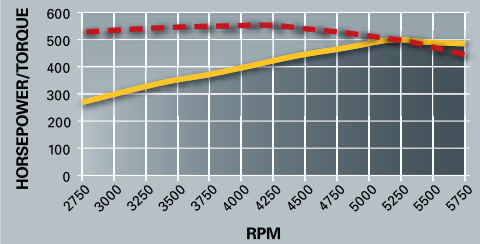
It's simple: We offer the ZZ502/502 Base crate engine for builders who want the super-strong bottom end and high-flow aluminum oval-port cylinder heads, but also want to finish the engine their way.

The ZZ502/502 Base Engine uses our new cylinder block casting that is stronger and better suited to high-performance combinations. A forged steel crankshaft, forged rods and forged pistons form the reciprocating assembly, with a smooth-operating hydraulic roller camshaft delivering big 0.527/0.544-inch lift. The lightweight aluminum heads boast 110cc combustion chambers and big, 2.25-inch intake and 1.88-inch exhaust valves.

We rate the ZZ502/502 Base engine at 502 horsepower and 567 lb.-ft. of torque when it is finished with Chevrolet Performance aluminum intake manifold P/N 12363406 and Holley 870-cfm carburetor P/N 19170094. The other parts you need to complete the engine – including chrome dress-up parts – are available from your dealer and ChevroletPerformance.com.

The ZZ502/502 Base is a great foundation. It's up to you to make the most of it.

ZZ502/502 DYNO CHART



Horsepower: 502 @ 5200 rpm

Torque (lb-ft): 567 @ 4200 rpm

INSTALLATION NOTES

- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- 502 engines now have a mechanical fuel pump boss!
- Comes with an externally balanced 14" automatic transmission flexplate. Use flywheel P/N 14096987 and 11" clutch assembly for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ502/502 BASETECH SPECS

Part Number:	12496963	Cylinder Heads (P/N 12363390):	Aluminum oval port; 110cc chambers
Engine Type:	Chevy Big-Block V-8	Valve Size (in):	2.250 intake / 1.880 exhaust; stainless steel
Displacement (cu in):	502	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.470 x 4.000	Rocker Arms (P/N 12368082):	Stamped steel
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Ignition Timing:	Base 8° BTDC, 30° total
Pistons (P/N 12533507):	Forged aluminum	Maximum Recommended rpm:	5,800
Camshaft Type (P/N 12366543):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.527 intake / .544 exhaust		
Camshaft Duration (@.050 in):	224° intake / 234° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.






See page 163 for ZZ502 Deluxe Engine details.

12371204  



ZZ502 Base Kit

Nothing is quite as satisfying as building your own high-performance Big-Block. With the ZZ502 Base Kit, every part is engineered to work together to deliver 502 horses!

12568782  



502 Partial Engine

This brand new Partial engine includes forged reciprocating components, as well as the balancer, oil pan and timing chain set.

SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550 SuperMatic™ 4L85-E Four-Speed Transmission

See page 186 for details



19212657 Transmission Controller

See page 188 for details



19131359 High-Rise Intake Manifold, Rectangular Port

See page 328 for details



19172805 Serpentine Accessory Drive Belt System With Air Conditioning

See page 324 for details



19168602 Aluminum Water Pump, Short-Style

See page 324 for details



19170095 Carburetor, Holley 850-cfm

See page 348 for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

Ram Jet 502 with calibrated controller and wiring harness



12499121  

■ 502 hp @ 5,100 rpm

■ 565 lb.-ft. @ 3,200 rpm

Outrageous style and fuel-injected drivability – all with Big-Block power!

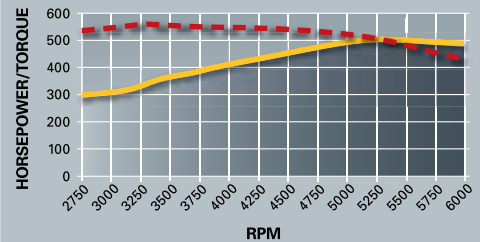
The Ram Jet 502 blends the legendary torque and performance of the Big-Block with a modern port fuel injection system and tunnel ram-style high-rise intake manifold. It's a combination that offers uncompromising performance in a visually stunning presentation.

The unique Ram Jet fuel injection system stands 11 inches tall at its highest point and consists of a two-piece manifold/plenum assembly, eight injectors, a throttle body, and an updated MEFI 4 controller. Setup instructions are included, making it a simple, "plug-and-play" installation.

Supporting the unique induction system is a robust bottom end with an all-forged rotating assembly and a smooth hydraulic roller camshaft. The heads are high-flow aluminum oval-port parts from Chevrolet Performance.

You'll need to check your ride for clearance before closing the hood over the Ram Jet 502. Then again, it looks so impressive, you may just want to cruise around with the hood off!

RAM JET 502 DYNO CHART



Horsepower: 502 @ 5100 rpm

Torque (lb-ft): 565 @ 3200 rpm

INSTALLATION NOTES

- The Ram Jet 502 requires a 12-volt power source (and ground), coolant, exhaust system, fuel feed and fuel return line (to the fuel tank). An in-tank fuel pump is recommended
- Clutch linkage bosses are now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- IMPORTANT! For a safe, proper and trouble-free engine break-in, the MEFI 4 computer has a "green" mode that controls rpm during the break-in period. During this period, engine speed is limited to 4,000 rpm in the first hour, 4,500 rpm in the second hour and 5,500 rpm in the third hour

RAMJET 502 TECH SPECS

Part Number:	12499121	Valve Size (in):	2.250 intake / 1.880 exhaust;
Engine Type:	Chevy Big-Block V-8		stainless steel
Displacement (cu in):	502	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.470 x 4.000	Rocker Arms (P/N 12368082):	Stamped steel
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Distributor (P/N 1104060):	HEI type
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Throttle Body (P/N 17113524):	Included
Pistons (P/N 12533507):	Forged aluminum	Water Pump (P/N 19168602):	Aluminum, short-style
Camshaft Type (P/N 12366543):	Hydraulic roller	Flexplate (P/N 10185034):	14"
Camshaft Lift (in):	.527 intake / .544 exhaust	Recommended Fuel:	92 octane
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Ignition Timing:	Base 8° BTDC, 30° Total
Cylinder Heads (P/N 12363390):	Aluminum oval port;	Maximum Recommended rpm:	5,800
	110cc chambers	Balanced:	External

NOTE: Distributor with melonized steel gear MUST be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19154550
SuperMatic™ 4L85-E
Four-Speed Transmission
 Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.
 See page 186 for details



19212657
Transmission Controller
 Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
 See page 188 for details



12342024
Chrome Water Neck
 See page 331 for details



12606096
Lightweight Starter
 See page 342 for details



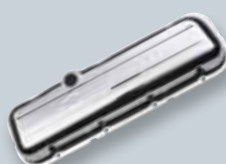
25534374
Orange Powder-Coated Valve Covers
 See page 316 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
 See page 324 for details



25534323
Black Powder-Coated Valve Covers
 See page 316 for details



12342093
Short Chrome Bowtie Valve Cover
 See page 316 for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

ZZ572/620 Deluxe



19201333  

■ 620 hp @ 5,500 rpm

■ 650 lb.-ft. @ 4,500 rpm

The most powerful Big-Block street engine from Chevrolet Performance!

The ZZ572/620 is the ultimate expression of Chevrolet Performance's engineering capability.

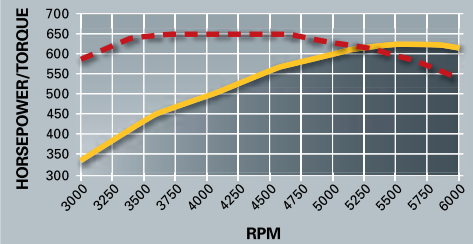
We build the ZZ572 with huge 4.560-inch bores and add a forged 4.375-inch-stroke crankshaft. To make sure those cylinders are packed with every cubic centimeter's worth of atmosphere, we use a camshaft with incredible 0.632/0.632-inch lift and 254°/264° duration specifications.

Aluminum rectangular-port heads with 310cc intake passages complement the airflow capability offered by the big-bore bottom end. They also feature 118cc raised exhaust ports and 118cc combustion chambers. The valves are big, too – measuring 2.250 inches on the intake side and 1.880 inches on the exhausts.

Chevrolet Performance delivers the ZZ572/620 Deluxe with an 850-cfm carburetor, HEI distributor, aluminum water pump and distinctive orange powder-coated valve covers that proudly proclaim the 572 legend.

For the builder who wants the foundation of this Big-Block powerhouse, but wants to finish it with the induction system of his choice, we offer the ZZ572/620 Base engine P/N 12498792. It comes with the bottom end fully assembled – including the forged crankshaft, rods and pistons – along with the unique 0.632-inch-lift roller camshaft.

ZZ572/620 DYNO CHART



Horsepower: 620 @ 5500 rpm

Torque (lb-ft): 650 @ 4500 rpm

INSTALLATION NOTES

- Due to crate fitment, the carburetor is shipped in a separate box and needs to be installed by an engine installer
- Clutch linkage boss is now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- Requires addition of starter and fuel pump (not included)
- Gen VI tall-deck block has machined mechanical fuel pump boss
- Comes with a 14" automatic transmission flexplate. Requires internally balanced flywheel for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- You do have a strong transmission and rear axle, don't you?

ZZ572/620 DELUXE TECH SPECS

Part Number:	19201333	Valve Size (in):	2.250 intake / 1.88 exhaust; stainless steel
Engine Type:	Chevy Tall Deck Big-Block V-8	Compression Ratio:	9.6:1
Displacement (cu in):	572	Rocker Arms (P/N 12361323):	Aluminum roller style
Bore x Stroke (in):	4.560 x 4.375	Rocker Arm Ratio:	1.7:1
Block (P/N 19212195):	Cast-iron with 4-bolt main caps	Distributor (P/N 88961867):	HEI
Crankshaft (P/N 88961554):	Forged steel	Carburetor (P/N 19170095):	850-cfm
Connecting Rods (P/N 88962926):	Forged steel, shot peened	Water Pump (P/N 19168602):	Aluminum, short-style
Pistons (P/N 88962925):	Forged aluminum	Spark Plugs and Wires:	Included
Camshaft Type (P/N 19210721):	Hydraulic roller	Flexplate (P/N 12561217):	14"
Camshaft Lift (in):	.632 intake / .632 exhaust	Recommended Fuel:	92 octane
Camshaft Duration (@.050 in):	254° intake / 264° exhaust	Ignition Timing:	Base 8° BTDC, 36° Total
Cylinder Heads (P/N 12499255):	Aluminum rectangular port, 118cc chambers	Maximum Recommended rpm:	6,000
		Balanced:	Internal

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.





Chevrolet Performance Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12498792  

ZZ572/620 Base Engine

The ZZ572/620 features rectangular-port aluminum cylinder heads that deliver 9.6:1 compression ratio in a pump-gas-friendly package.



19154550

SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications. See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



12361146 High Torque Mini Starter

See page 342 for details



12355614 Fuel Pump, Street Performance (Chevy Big-Block)

See page 350 for details



19212657 Transmission Controller

See page 188 for details



19172805 Serpentine Accessory Drive Belt System With Air Conditioning

See page 324 for details



12342024 Chrome Water Neck

See page 331 for details



12341999 Fuel Pump Block-Off Plate

See page 305 for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

ZZ572/720R Deluxe



19201334  

■ 720 hp @ 6,250 rpm

■ 685 lb.-ft. @ 4,500 rpm

Our baddest, most powerful Big-Block engine is ready for the strip!

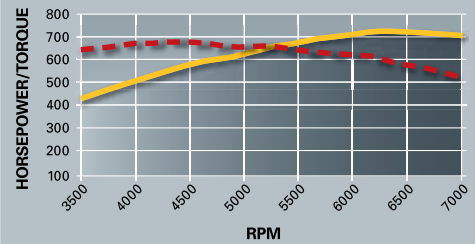
A 10-second car is quick, but the ZZ572/720R could achieve that with a couple of its spark plugs left in the pits. It is the king of all Rat engines and is capable of pulling your bracket racer or heads-up challenger down the 1320 in the 9-second range.

The ZZ572/720R's true value lies in its ready-to-run status when delivered. Rather than waiting weeks for a racing engine shop to build a custom combination, we deliver the ZZ572/720R fully assembled; just bolt on the included Dominator-style 1150-cfm carburetor, along with a starter and fuel pump (not included) and you're ready to go.

The ZZ572/720R is built with the best stuff we can find, including an all-forged rotating assembly, rectangular-port aluminum cylinder heads with 113cc intake ports and 2.25/1.88-inch valves. There's also a solid roller camshaft with 0.714/0.714-inch lift.

If you're building the ultimate dual-purpose car, the ZZ572/720R is suitable for limited forays on the street. It has a 12.0:1 compression ratio, so make sure you've got access to 110-octane gasoline before hitting the local cruise night!

ZZ572/720R DYNO CHART



Horsepower: 720 @ 6250 rpm Torque (lb-ft): 685 @ 4500 rpm

INSTALLATION NOTES

- Due to crate fitment, the carburetor is shipped in a separate box and needs to be installed by an engine installer
- Clutch linkage boss is now drilled and tapped. When using cast-iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance
- Requires addition of starter, ignition coil, and fuel pump (not included)
- Gen VI tall-deck block has machined mechanical fuel pump boss
- Comes with a 14" automatic transmission flexplate. Requires internally balanced flywheel for manual transmission applications
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Big sticky slicks will help hook up this monster!

ZZ572/720 TECH SPECS

Part Number:	19201334	Valve Size (in):	2.250 intake / 1.880 exhaust
Engine Type:	Chevy Tall Deck Big-Block V-8		stainless steel
Displacement (cu in):	572	Compression Ratio:	12:1
Bore x Stroke (in):	4.560 x 4.375	Rocker Arms (P/N 12361323):	Aluminum roller style
Block (P/N 19212195):	Cast-iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 88961554):	Forged steel	Distributor (P/N 10093387):	Electronic ignition
Connecting Rods (P/N 88962926):	Forged steel, shot peened	Carburetor (P/N 19170096):	1150-cfm Dominator
Pistons (P/N 88963227):	Forged aluminum	Water Pump (P/N 19168602):	Aluminum, short-style
Camshaft Type (P/N 19210722):	Mechanical roller	Spark Plugs and Wires:	Included
Camshaft Lift (in):	.714 intake / .714 exhaust	Recommended Fuel:	110 octane race gas
Camshaft Duration (@.050 in):	278° intake / 282° exhaust	Ignition Timing:	Base 8° BTDC, 36° Total
Cylinder Heads (P/N 88961160):	Aluminum rectangular port, 118cc chambers	Maximum Recommended rpm:	6,750
		Balanced:	Internal

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.





Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.





12498826  

ZZ572/720R Base Engine

GM Performance Parts offers the racing-oriented ZZ572/720R in Base Engine form, allowing the builder to order the long-block assembly and add the induction system, ignition system and other accessories separately.

19154550

SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks. Includes torque converter for Big-Block applications.

See page 186 for details



SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



**12606096
Lightweight Starter**

See page 342 for details



**12355614
Fuel Pump, Street Performance (Chevy Big-Block)**

See page 350 for details



**19212657
Transmission Controller**

See page 188 for details



**19172805
Serpentine Accessory Drive Belt System With Air Conditioning**

See page 324 for details



**12342024
Chrome Water Neck**

See page 331 for details



**12341999
Fuel Pump Block-Off Plate**

See page 305 for details

SEE PAGE 294 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

CIRCLE TRACK



Engines Shown From Left:

- CT350
- CT355
- CT400
- CT525

Chevrolet Performance Circle Track engines do not come with fuel pumps, carburetors or air cleaners.



THE POWER TO WIN WITH THE DURABILITY TO LAST!

You race to win. Chevrolet Performance CircleTrack crate engines are engineered to perform – and perform reliably. That means less time under the hood and more time in front of the pack, chasing the checkered flag!

From our entry-level, 350-horsepower CT350 Small-Block to the 525-horsepower CT525 LS-Series engine, Chevrolet Performance CircleTrack crate engines are designed to match your performance needs with series requirements. In fact, many series specify the use of Chevrolet Performance sealed crate engines. They're affordable, too!

More than a purpose-built racing engine, our CircleTrack crate engines deliver dependable performance. That saves time and money, allowing you to focus on the more important aspects of your racing program. CircleTrack crate engines are built with brand-new parts, from the cylinder block and rotating assembly to the heads and all the supporting accessories. In fact, our 350 small-block engines feature blocks with four-bolt mains – a strength-enhancing design most used blocks don't have.

When you start a race with a Chevrolet Performance CircleTrack crate engine under the hood, you're halfway to the winner's circle!

CT350



19258602  

■ 350 hp @ 5,000 rpm

■ 390 lb.-ft. @ 3,800 rpm

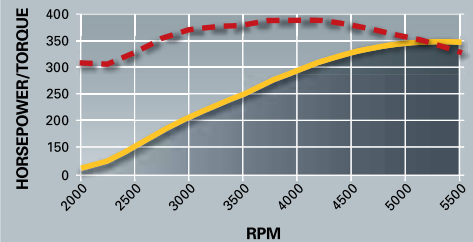
Chevrolet Performance's most economical Circle Track crate engine!

Chevrolet Performance's CT350 delivers 350 horsepower from a classic 350 cubic-inch combination. It's just the thing budget-conscious racers can depend on for competitive performance and low-maintenance durability.

The CT350 is based on the popular 350 HO high-performance street crate engine, including a stout four-bolt-main block and Vortec-style iron cylinder heads. The Vortec heads and unique dual-pattern camshaft help deliver more than 300 lb.-ft. of torque at 2,000 rpm and hold it above that mark through 5,500 rpm – it peaks at 390 lb.-ft. at 3,800 rpm. With that much pulling power, you can hold a gear longer, keeping the engine in its sweet spot for quicker laps.

We complete the CT350 with an 8-quart Circle Track racing oil pan, balancer, HEI distributor and an aluminum high-rise, dual-plane intake manifold. Add your carburetor, starter, spark plugs, wires and water pump – all available at www.ChevroletPerformance.com – and you'll be ready to roll into the winner's circle!

CT350 DYNO CHART



Horsepower: 350 @ 5000 rpm

Torque (lb.-ft.): 390 @ 3800 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, water pump, plug wires and exhaust system (not included)
- Requires an externally balanced flywheel (not included). See page 195 for flywheel selection
- The 8-quart Circle Track oil pan is 8 inches deep at the sump. It will clear most GM rear-steer chassis with stock engine location

CT350 TECH SPECS

Part Number:	19258602	Camshaft Duration (@.050 in):	212° intake / 222° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Displacement (cu in):	350	Valve Size (in):	1.940 intake / 1.500 exhaust
Bore x Stroke (in):	4.000 x 3.480	Compression Ratio:	9.12 Nominal
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 10089648):	Stamped steel
Crankshaft (P/N 10243068):	Nodular iron	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 94672680):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 24502476):	Hydraulic flat tappet	Maximum Recommended rpm:	5,500
Camshaft Lift (in):	.435 intake / .460 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



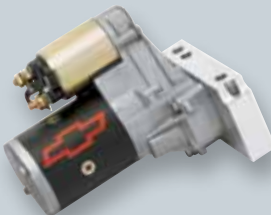


SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



88894341
Water Pump,
Long-Style

*See page 229
for details*



12361146
High-Torque
Mini-Starter

*See page 342
for details*



12342071
Air Cleaner,
Classic Design

*See page 349
for details*



12355612
Fuel Pump, Street
Performance

*See page 350
for details*



19170092
Carburetor,
Holley 670-cfm

*See page 348
for details*





24502521
Spark Plug
Wire Set

*See page 343
for details*

CT355



88958603  

■ 355 hp @ 5,250 rpm

■ 405 lb.-ft. @ 3,500 rpm

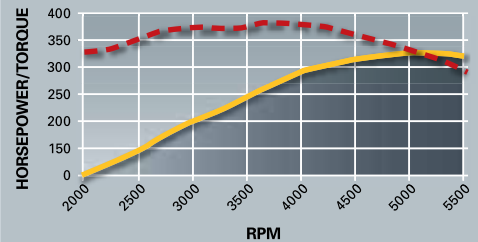
The versatile ZZ4 350 adapted for Circle Track competition!

Renowned for its deep reserve of torque, responsive power and great dependability, the ZZ4 350 crate-engine is one of Chevrolet Performance's most popular crate engines – and our engineers have adapted that combination as a winning, affordable racing engine in the CT355!

The CT355's strength lies in its ZZ4 bottom end, which includes a block with four-bolt mains, a forged-steel crankshaft and high-silicon pistons. A steel hydraulic roller camshaft actuates valves in the high-flow aluminum ZZ4 heads, which boast 163cc intake ports and 1.94/1.50-inch valves. This combination makes good power and great torque: 355 hp and 405 lb.-ft.

Like our other Circle Track crate engines, the CT355 includes a racing oil pan with a dual kick-out design. It also includes a valve cover breather kit, a special "kool nut" rocker arm nut design, a dual-plane aluminum high-rise intake manifold, cast iron water pump, HEI distributor and balancer. You add the carburetor, starter, spark plugs and wires – all available from www.ChevroletPerformance.com.

CT355 DYNO CHART



Horsepower: 355 @ 5250 rpm

Torque (lb-ft): 405 @ 3500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, plug wires and exhaust system (not included)
- Requires an externally balanced flywheel (not included). See page 195 for flywheel selection.
- The 8-quart Circle Track oil pan is 7 inches deep at the sump. It will clear most GM rear-steer chassis with stock engine location.

CT355 TECH SPECS

Part Number:	88958603	Camshaft Duration (@.050 in):	208° intake / 221° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12556463):	Aluminum; 58cc chambers
Displacement (cu in):	350	Valve Size (in):	1.940 intake / 1.500 exhaust
Bore x Stroke (in):	4.000 x 3.480	Compression Ratio:	10:16 Nominal
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 10089648):	Stamped steel
Crankshaft (P/N 12556307):	Forged steel	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 10159436):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 10185071):	Steel hydraulic roller	Maximum Recommended rpm:	5,800
Camshaft Lift (in):	.474 intake / .510 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.

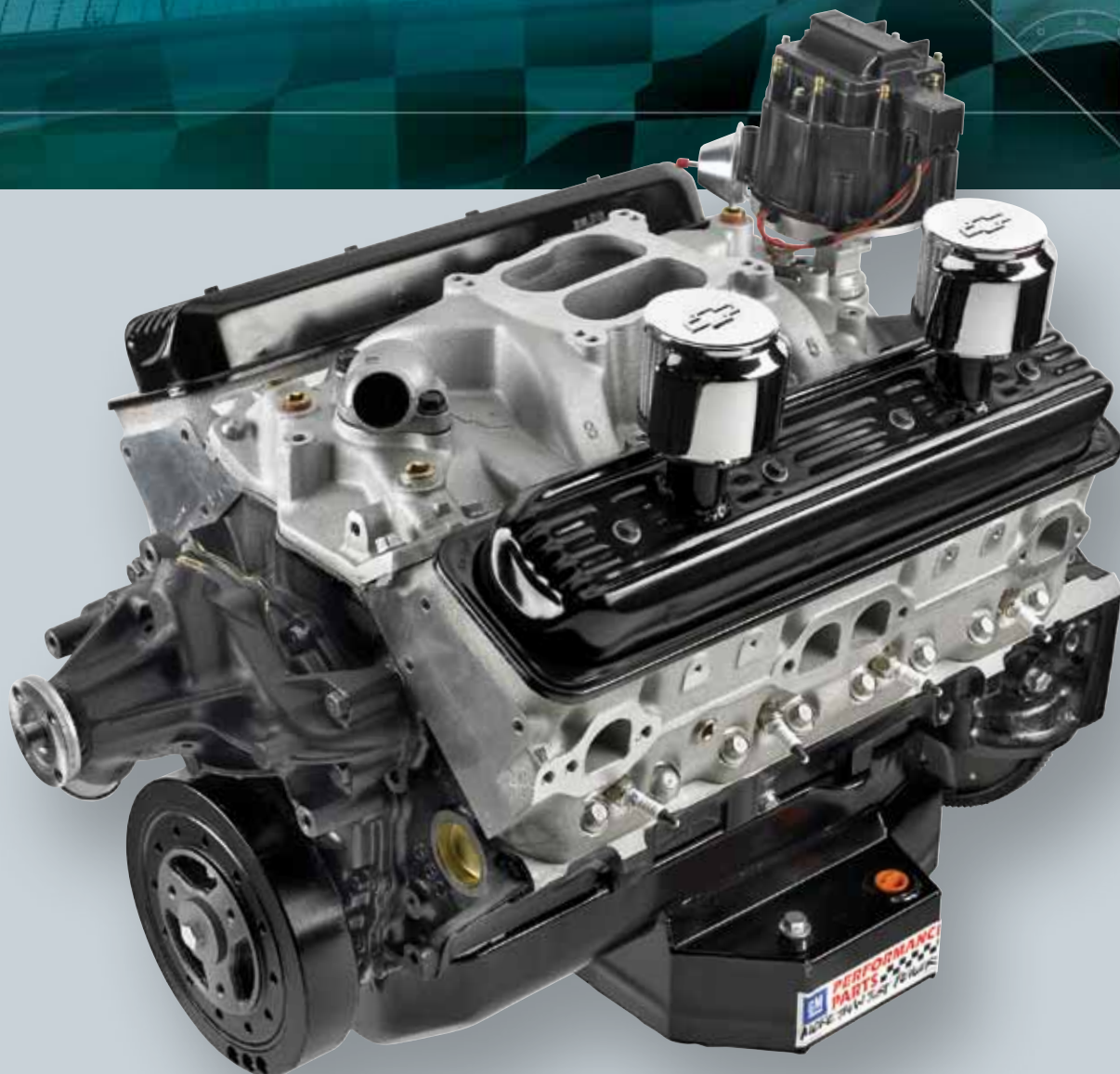


Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

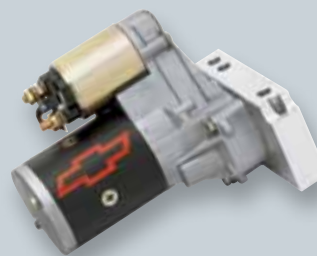




SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19170092
Carburetor, Holley 670-cfm
See page 348 for details



12361146
High-Torque Mini-Starter
See page 342 for details



12355612
Fuel Pump, Street Performance
See page 350 for details



24502521
Spark Plug Wire Set
See page 343 for details



12342080
Air Cleaner, High-Performance Design
See page 349 for details



CT400

88958604  

■ 400 hp @ 5,500 rpm

■ 400 lb.-ft. @ 4,500 rpm

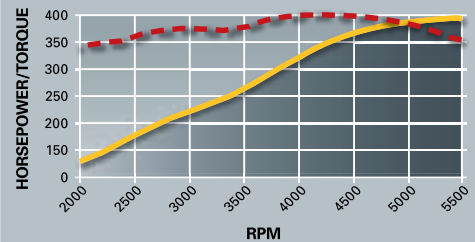
Fast Burn heads deliver race-winning power!

Chevrolet Performance's 23-degree Fast Burn heads have large, 210cc intake runners and 2.00/1.55-inch valves, along with specially shaped combustion chambers that make quick, efficient work of the air/fuel charge. When partnered with an aggressive, high-lift camshaft, you've got a great balance of horsepower and torque – and that's exactly what you get with the CT400 racing engine.

The foundation for the CT400 is our Fast Burn 385 crate engine, including a sturdy iron block with four-bolt mains, a forged crankshaft and high-strength pistons. We've tuned the CT400 for more power, and it's rated at an even 400 horses and 400 lb.-ft. of torque.

Rounding out the package is a racing oil pan with a dual kick-out design, as well as a valve cover breather kit, special aluminum roller rocker arms, a single-plane aluminum high-rise intake manifold and balancer. You add the water pump, carburetor, starter, distributor, spark plugs and wires. They're all available from www.ChevroletPerformance.com.

CT400 DYNO CHART



Horsepower: 400 @ 5500 rpm

Torque (lb.-ft): 400 @ 4500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, ignition, plug wires, water pump, distributor and exhaust system (not included)
- Requires an externally balanced flywheel (not included). See page 195 for flywheel selection
- The 8-quart Circle Track oil pan is 7 inches deep at the sump. It will clear most GM rear-steer chassis with stock engine location

CT400 TECH SPECS

Part Number:	88958604	Camshaft Duration (@.050 in):	208° intake / 221° exhaust
Engine Type:	Chevy Small-Block V-8	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Displacement (cu in):	350	Valve Size (in):	2.000 intake / 1.550 exhaust
Bore x Stroke (in):	4.000 x 3.480	Compression Ratio:	9.72 Nominal
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	Rocker Arms (P/N 19210724):	Aluminum; roller style
Crankshaft (P/N 12556307):	Forged steel	Rocker Arm Ratio:	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 10159436):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 10185071):	Steel hydraulic roller	Maximum Recommended rpm:	5,800
Camshaft Lift (in):	.474 intake / .510 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.



Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

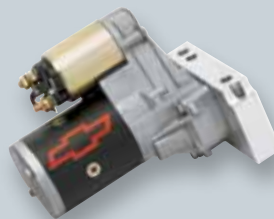




SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



88961867
Distributor, Aluminum Billet HEI
See page 347 for details



12361146
High-Torque Mini-Starter
See page 342 for details



12342071
Air Cleaner, Classic Design
See page 349 for details



12355612
Fuel Pump, Street Performance
See page 350 for details



19170092
Carburetor, Holley 670-cfm
See page 348 for details



24502521
Spark Plug Wire Set
See page 343 for details

CT525



19271821  

■ 525 hp @ 6,700 rpm

■ 471 lb.-ft. @ 5,000 rpm

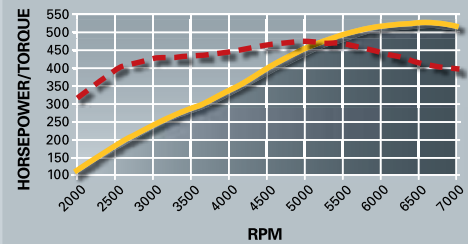
Exclusive LS3-based Chevrolet Performance racing engine is a lightweight powerhouse!

Chevrolet Performance's CT525 6.2L crate engine is based on the latest-generation "LS" engine family and delivers serious power for serious racing series, including Super Late Model and similar. It is rated at 525 hp and 471 lb.-ft. of torque!

This 6.2L engine is similar to the LS3 V-8 that is standard in the Chevrolet Corvette, but we've adapted it to Circle Track racing with a carburetor intake manifold, 6-quart racing oil pan and more. The engine is lightweight and strong, using an aluminum block with cross-bolted 6-bolt main caps and high-flow LS3 rectangular-port cylinder heads.

The CT525 6.2L comes with coil-on-plug ignition, a water pump, exhaust manifolds and an SFI-certified balancer. It also comes with a 14-inch/168-tooth automatic transmission flexplate. All that's needed to complete the assembly is a carburetor, starter and our LSX ignition controller P/N 19171130. All the necessary parts are available online at www.ChevroletPerformance.com.

CT525 6.2L DYNO CHART



Horsepower: 525 @ 6700 rpm

Torque (lb-ft): 471 @ 5000 rpm

INSTALLATION NOTES

- Use LSX ignition controller P/N 19171130 (page 293, not included, shown below)
- Requires addition of carburetor, starter, exhaust system, and front accessory drive system
- Includes 14-inch 168-tooth automatic transmission flexplate
- The 6 quart Circle Track oil pan is designed to clear most GM rear-steer chassis with stock engine location. Requires external oil filter and cooler (will increase capacity to approximately 8 quarts)

CT525 TECH SPECS

Part Number:	19271821	Cylinder Heads (P/N 12629063):	LS3 rectangle port; aluminum
Engine Type:	LS-Series Gen IV Small-Block V-8	Valve Size (in):	as-cast with 68cc chambers
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	2.165 intake / 1.590 exhaust
Bore x Stroke (in):	4.065 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	10.7:1
Block (P/N 12623967):	Cast-aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	Investment-cast, roller trunnion
Connecting Rods (P/N 12607475):	Powdered metal	Recommended Fuel:	1.7:1
Pistons (P/N 19207287):	Hypereutectic aluminum	Maximum Recommended rpm:	92 octane
Camshaft Type (P/N 88958770):	Hydraulic roller	Reluctor Wheel:	6,700
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	58X
Camshaft Duration (@.050 in):	226° intake / 236° exhaust		Internal

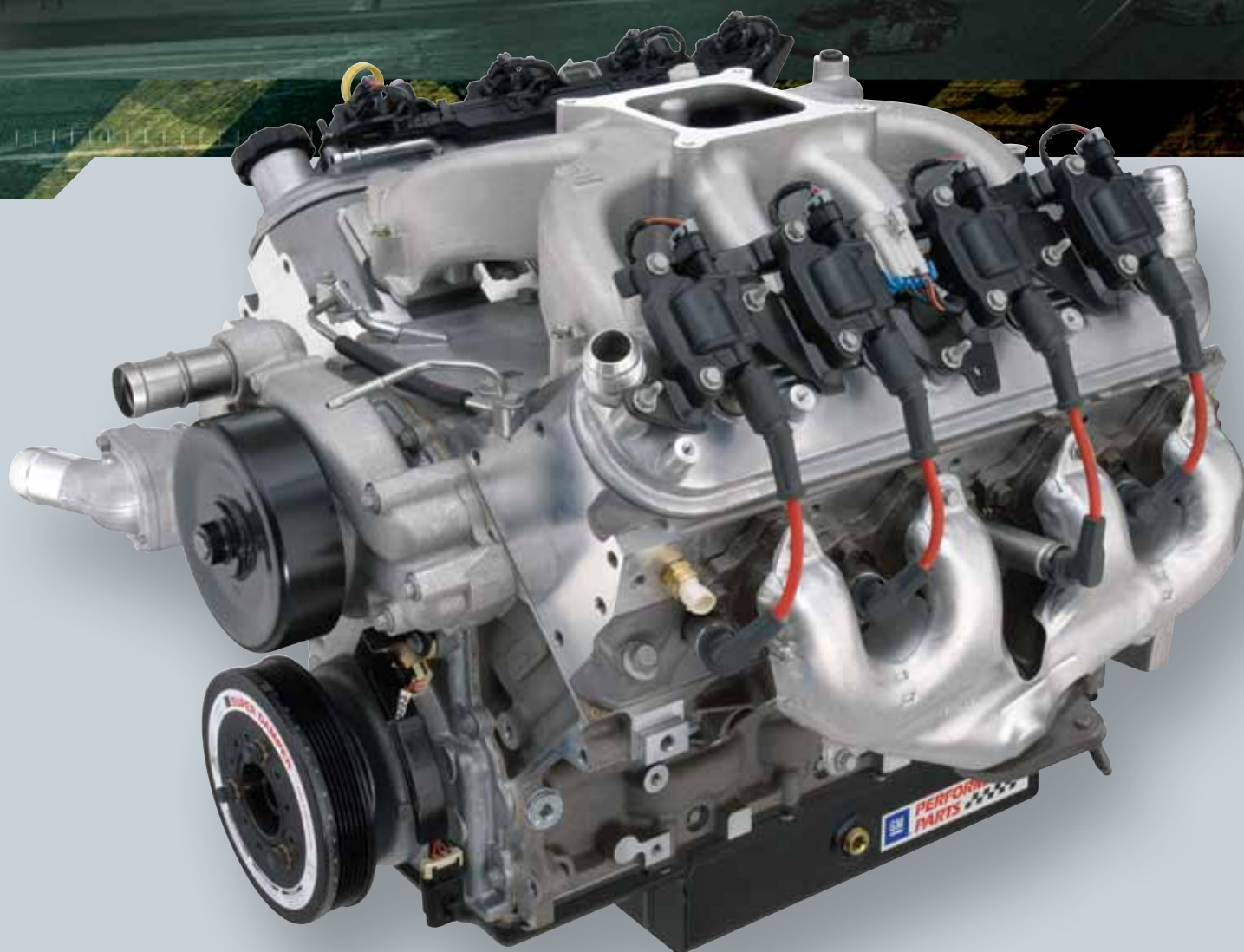


Chevrolet Performance Racing Crate Engines are excluded from limited warranty.



Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



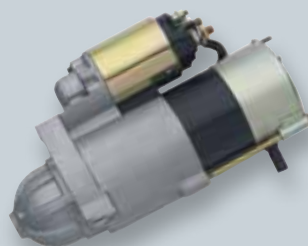


NOTE: Final production version may differ slightly in content from photo shown.

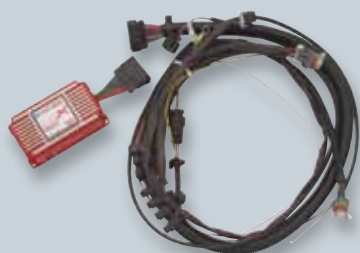
SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19170094
Carburetor,
Holley 870-cfm
See page 348 for details



10465385
LS-Series Starter
See page 342 for details



19171130
LSX Ignition Controller
See page 344 for details



12342071
Air Cleaner, Classic Design
See page 349 for details



TRANSMISSIONS & COMPONENTS

GET IN GEAR WITH A TRANSMISSION TAILORED FOR YOUR POWERTRAIN

Selecting the right transmission greatly enhances the driving enjoyment and performance feel of your vehicle. Chevrolet Performance has you covered with a range of modern, electronically controlled automatic transmissions that offers great strength to match our powerful crate engines.

Each of our electronically controlled automatic transmissions is designed to deliver smooth, consistent and trouble-free performance on the street and stand up to high-power engines, run after run, on the drag strip. Our SuperMatic transmissions offer the ultimate in automatic transmission strength and torque capability – and every Chevrolet Performance transmission is backed by a 12-month warranty.

Chevrolet Performance transmissions also deliver the fuel economy benefits that come with a modern, electronically controlled overdrive transmission. So don't worry about taking your resto-mod for that long drive. It will be comfortable and economical!

Importantly, all of our transmissions are brand-new. They're not rebuilds and you purchase them outright, so there's no need to deal with shipping messy cores. Complement them with our transmission controller kit for plug-and-play operation. Conversion kits are available to enable the use of electronically controlled transmissions in older vehicles.

Differences between 4L60-E 4L65-E 4L70-E (4L60 Family Transmissions)

The Hydra-Matic 4L60 / 4L65 / 4L70 are differentiated primarily by gearset design. Each planetary gearset in the 4L60 has four pinion gears, and five pinion gears in the 4L65 and 4L70. External fit, form and function are identical between the three variants of 4L60-E, 4L65-E, and 4L70-E transmission assemblies.

Maximum engine torque capacity rating for these units are:

Production 4L60-E – 380 lb ft
Supermatic 4L65-E – 430 lb ft
Supermatic 4L70-E – 495 lb ft

Differences between 4L80-E and 4L85-E (4L80 Family Transmissions)

The 4L80-E gearsets have four pinion gears, while the 4L85 comes equipped with five pinion gears in each. External fit form and function are identical between the two variants of 4L80-E and 4L85-E transmission assemblies.

Maximum engine torque capacity rating for these units are:

Production 4L80-E – 440 lb ft
Supermatic 4L85-E – 685 lb ft

IMPORTANT! Chevrolet Performance no longer includes a torque converter with transmissions. We now offer a variety of torque converters for 4L60- and 4L80-series transmissions that are tailored for the wide variety of our crate engines' performance specifications. Select the transmission that's just right for your project vehicle and select the torque converter to match its performance. See page 184-185 for more details.

NOTE: Installing an electronically controlled automatic transmission in an older vehicle with a mechanical speedometer requires an aftermarket signal converter.





Products Shown From Left:

*SuperMatic™
Transmission Control System*

SuperMatic™ Torque Converter

SuperMatic™ 4L85-E Transmission

NEW! PERFORMANCE

SuperMatic Torque Converters!

The SuperMatic Torque converters from Chevrolet Performance are designed to provide long life when matched with a SuperMatic Transmission. Each converter incorporates the following features:

- **Steel Billet Front Cover**
- **Custom Stator**
- **Fully Furnace Brazed Pump and Turbine**
- **"Heavy Duty" Lock-up Clutch**
- **All internal components static balanced**
- **Fully vector balanced as an assembly**
- **Designed for Chevrolet Performance crate engines and transmissions**



PART NUMBER	STALL SPEED	APPLICATION
19299800	2400-2800 RPM stall	4L60/65/70E (late "LS" v-8 transmission) mate to early Gen 1 SB/BB (dual bolt pattern - 10.75" and 11.5")
19299801	3000-3400 RPM stall	4L60/65/70E (late "LS" v-8 transmission) mate to early Gen 1 SB/BB (dual bolt pattern - 10.75" and 11.5")
19299802	2400-2800 RPM stall	4L60/65/70E (late "LS" v-8 transmission) mate to LS v-8 engine (single bolt pattern - 11.062")
19299803	3000-3400 RPM stall	4L60/65/70E (late "LS" v-8 transmission) mate to LS v-8 engine (single bolt pattern - 11.062")
19299804	2400-2800 RPM stall	4L80E/4L85E - mate to early Gen 1 SB/BB (dual bolt pattern - 10.75" and 11.5")
19299805	3000-3400 RPM stall	4L80E/4L85E - mate to early Gen 1 SB/BB (dual bolt pattern - 10.75" and 11.5")
19299806	2400-2800 RPM stall	4L80E/4L85E - mate to LS v-8 engine (extended pilot)(single bolt pattern - 11.062")
19299807	3000-3400 RPM stall	4L80E/4L85E - mate to LS v-8 engine (extended pilot)(single bolt pattern - 11.062")

Converters are a kit that includes converter to flexplate bolts and instructions. No external adapters needed to fit Chevy Performance Crate Engines.

AUTOMATIC TRANSMISSION TORQUE CONVERTER MATCH LISTING

Engine P/N	Description	Displac.	H/P	Torque	4L60 Family		4L80 Family	
					Fits SuperMatic 4L65-E and 4L70-E (LS bell)		Fits SuperMatic 4L85-E	
CHEVY SMALL BLOCK V-8					Conveter P/N	Stall Range	Conveter P/N	Stall Range
19244450	350/290 Horsepower Deluxe	350	290	332	19299800	2400-2800	N/R	
19210009	350 HO Turn-Key - with Iron Vortec Heads	350	330	380	19299800	2400-2800	N/R	
19201330	ZZ4 Turn-Key - with Aluminum Heads	350	355	405	19299800	2400-2800	N/R	
12499120	Ram Jet 350 - PFI with Iron Vortec Heads	350	350	400	19299800	2400-2800	19299804	2400-2800
19201331	Fast Burn 385 Turn-Key - with Aluminum Vortec Heads	350	385	385	19299801	3000-3400	19299805	3000-3400
12499101	HT383 Base - Performance Engine	383	340	435	19299800	2400-2800	19299804	2400-2800
12498772	ZZ383 - High Performance Engine	383	425	449	19299801	3000-3400	19299805	3000-3400
CHEVY LS/LSX V-8								
19244097	LS3 - Corvette Gen IV V-8	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19244805	LS3 - E-Rod Kit Automatic	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19244549	LS376/480 - LS3 Gen IV V-8	6.2	480	475	19299803	3000-3400	19299807	3000-3400
19171225	LS376/515 - Carbureted LS3 Gen IV V-8	6.2	515	469	19299803	3000-3400	19299807	3000-3400
19259232	LS376/525 LS3 Gen IV ASA Camshaft	6.2	525	489	19299803	3000-3400	19299807	3000-3400
19211708	LSA - Supercharged Gen IV V-8	6.2	556	551	N/R		19299806	2400-2800
19201990	LS9 - Supercharged Gen IV V-8	6.2	638	604	N/R		19299806	2400-2800
17802397	LS7 - 2006 Corvette Z06	7.0	505	470	19299803	3000-3400	19299807	3000-3400
	Optional LS7 (depending on application)	7.0	505	470	19299802	2400-2800	19299806	2400-2800
19171049	LSX376 -B8	6.2	450	444	19299802	2400-2800	19299806	2400-2800
19299306	LSX376 -B15	6.2	450	444	N/R		N/R	
19244611	LSX454	7.4	620	590	N/R		19299807	3000-3400
19257880	LSX454R	7.4	750+	680+	N/R		N/R	
CHEVY BIG BLOCK V-8								
19166393	ZZ427/480	427	480	490	19299801	3000-3400	19299805	3000-3400
19166392	427 - Anniversary Edition	427	430	444	19299801	3000-3400	19299805	3000-3400
12568774	454 HO - with Iron Heads and Roller Cam	454	425	500	19299800	2400-2800	19299804	2400-2800
12498777	ZZ454/440 - 440 Horsepower with Aluminum Heads	454	440	500	19299800	2400-2800	19299804	2400-2800
88890534	HT502 - truck replacement engine	502	377	512	19299800	2400-2800	19299804	2400-2800
12568778	502 HO - with Iron Heads and Roller Cam	502	450	550	19299800	2400-2800	19299804	2400-2800
12496963	ZZ502 Base Engine, with Aluminum Heads	502	502	567	19299801	3000-3400	19299805	3000-3400
19201332	ZZ502 Deluxe - (Deluxe/Assembled) with Aluminum Heads	502	502	567	19299801	3000-3400	19299805	3000-3400
12499121	Ram Jet 502 - PFI with Aluminum Heads	502	502	565	19299801	3000-3400	19299805	3000-3400
12498793	ZZ572/620 Deluxe	572	620	650	N/R		19299805	3000-3400
12498827	ZZ572/720R Deluxe	572	720	685	N/R		19299805	3000-3400



AUTOMATIC TRANSMISSIONS AND COMPONENTS

A. 19260380

Hydra-Matic 4L65-E Four-Speed Automatic Transmission (LS-Series V-8)

- Similar in design to the 4L60-E
- Electronically controlled four-speed overdrive transmission
- Features five-pinion gearsets, heat-treated stator shaft splines, induction-hardened turbine shaft, seven-plate clutch and revised valve-body calibration
- Gear ratios: 1st: 3.06, 2nd: 1.62, 3rd: 1.00, 4th: 0.70
- Use adapter kit P/N 19154766 on Gen I and II engines
- Add up to 430 lbs/ft. torque

NOTE: Use with electronic controller P/N 19212657 for carbureted and Ram Jet applications. Use with electronic controller P/N 19257634 with Chevrolet Performance LS fuel injected applications.

B. SuperMatic™ 4L70-E Four-Speed Automatic Transmission 19260380 Two-Wheel Drive

19260961 Four-Wheel Drive NEW

- Based on the 4L60-E/4L65-E
- Increased horsepower and torque capacity
- Features five-pinion gearsets, heat-treated stator shaft splines, induction-hardened turbine shaft, seven-plate clutch and specific valve-body calibration
- Gear ratios: 1st: 3.06, 2nd: 1.62, 3rd: 1.00, 4th: 0.70
- Torque converter not included
- Add up to 495 lbs/ft. torque

NOTE: Use with electronic controller P/N 19212657 for carbureted and Ram Jet applications. Use with electronic controller P/N 19257634 with Chevrolet Performance LS fuel injected applications.

C. 19154550

SuperMatic™ 4L85-E Four-Speed Transmission

- All new parts, including additional clutch plates
- Improved valve body for firmer shifts
- Direct bolt-on for Gen I Small-Block and all Big-Blocks
- Includes torque converter (approx. 2,400 rpm stall behind LSA engine)
- For Small-Block applications, an aftermarket converter is strongly recommended
- Gear ratios: 1st: 2.48, 2nd: 1.48, 3rd: 1.00, 4th: 0.75
- Add up to 685 lbs/ft. torque

NOTE: Use with electronic controller P/N 19212657 for carbureted and Ram Jet applications. Use with electronic controller P/N 19257661 with Chevrolet Performance LS fuel injected applications. Torque converter not included. See automatic transmission torque converter match listing chart on previous page.



A Hydra-Matic 4L65-E Four-Speed Automatic Transmission (LS-Series V-8)



B SuperMatic™ 4L70-E Four-Speed Automatic Transmission (2WD)



B SuperMatic™ 4L70-E Four-Speed Automatic Transmission (4WD)



C SuperMatic™ 4L85-E Four-Speed Transmission

Transmission Installation Kit – 4L60 Series **D**Transmission Installation Kit – 4L80 Series **E**8-bolt Crankshaft Adapter Kit – LSA/LSX454 **F**6-Bolt Crankshaft Adapter Components – LS Engine **G**6-Bolt Crankshaft Adapter – LS Engine, Detail **G**

Transmission Installation Kits – LS Engines

Whether you select one of Chevrolet Performance's electronically controlled automatic transmissions or the high-capacity Tremec TR6060 6-speed manual, we've got the parts you need to complete the installation with an LS engine. Select your transmission then match it with one of the installation kits below for a quicker, easier and hassle-free installation.

D. 19259117

Transmission Installation Kit – 4L60/4L70 Series

- Use with 4L60, 4L65 and 4L70 transmissions on LS engines with 6-bolt crankshaft flange
- Includes flexplate, flexplate covers, fasteners and instruction sheet
- Does not fit LSA, LSX454 or LS9 engines

E. 19259119

Transmission Installation Kit – 4L80 Series

- Use with all LS engines to mate transmission fully with the engine
- Includes flywheel cover, hardware and fastener torque specifications
- Does not include flexplate (see crankshaft adapter kits below)

F. 19125597

8-Bolt Crankshaft Adapter Kit – LSA/LSX454

- Use with LSA, LSX454 and LSX454R crate engines with 8-bolt crankshaft flange
- Includes flexplate, adapter hub and hardware
- Provides the correct converter pilot support for production 4L80/85 style torque converters
- Conventional 6-bolt flexplates do not bolt up to LSA and LSX454 engines – this adapter kit must be used with Supermatic 4L85 trans and torque converter 24217235

G. 6-Bolt Crankshaft Adapter – LS Engine

- For use with Gen I style (Turbo 350/400, 700R4, 4L60, 4L60-E and 4L85-E) transmission on Gen III- and Gen IV-engines
- Flexplate 19260102 has only 11.5" (4L80 style) torque converter bolt pattern. Other applications may need to modify flexplate to use

For 6-Bolt Crankshaft Adapter, order the following parts:

Part Number	Qty.	Part
12563532	1	Crankshaft Spacer
19260102	1	Flexplate
19257940	6	Mounting Bolts

NOTE: For individual flywheel and flexplate components see pages 227, 277 and 323.

Transmission Control Systems

A. SuperMatic™ Transmission Control System

- Pre-programmed – provides full function transmission operation after completing connections
- No laptop programming required
- Only compatible with E-67 based Chevrolet Performance electronic LS engine control systems
- Optional features for personal preferences
 - Gearshift timing
 - Multiple shift patterns
 - Manual shift mode
 - Supports most “Tap Shifters” or wheel-mounted paddles
 - On-Board data logging
- Connect and cruise – simple connections with no additional wiring required. Connect the clearly marked leads to the engine control harness, and you’re ready to cruise!

19257634

- 1996-2008 4L60-E family transmissions
- Fits P/N 19244043 Chevrolet Performance SuperMatic™

19257661

- 1993-Up 4L80-E family transmissions
- Fits P/N 19154550 Chevrolet Performance SuperMatic™

B. 19212657

Transmission Controller, 4L60-E, 4L65-E, 4L70-E, 4L80-E and 4L85-E Automatic

- Required when using a GM electronically controlled automatic transmission (see page 125)
- Includes wiring harness, software and connector for laptop computer
- Controller allows full programming of shifting, as well as part-throttle, wide-open throttle and shift firmness control
- Recommended for carburetor or Ram Jet applications

C. 19154766

Transmission Adapter Kit

- Allows installation of Gen III/IV style 4L60-E/4L65-E transmission onto Gen I and II engine
- Includes spacer ring, shims, dowels, bolts and flexplate
- Works on one-piece rear main seal engines only (e.g., Ram Jet 350)



A SuperMatic™ Transmission Control System



B Transmission Controller, 4L60-E, 4L65-E, 4L70-E, 4L80-E and 4L85-E Automatic



C Transmission Adapter Kit

MANUAL TRANSMISSIONS AND COMPONENTS

D. 92246731

TR6060 Six-Speed Manual Transmission

- A direct replacement trans for your Camaro SS
- Rated to handle 420 lb.-ft. of torque
- Works with any Chevrolet Performance LS crate engines except LSA and LSX454
- Equipped with 26-spline input shaft and a fixed-yoke production style output shaft
- Includes release bearing
- Use with installation kit P/N 19259271

24258817

TR6060 Six-Speed Manual Transmission (not shown)

- High-torque-capacity transmission used in the Cadillac CTS-V Series with the 556-hp/551-lb-ft LSA supercharged 6.2L engine
- Direct fit with LSA and LSX454 crate engines with 8-bolt crankshaft flange
- Equipped with 26-spline input shaft and a fixed-yoke production style output shaft
- Includes release bearing
- Use with installation kit P/N 19259270



D TR6060 Six-Speed Manual Transmission



Transmission Installation Kit – Tremec TR6060 (MG9) – 8-Bolt Flange **E**



Transmission Installation Kit – Tremec TR6060 (M10) – 6-Bolt Flange **F**



LSX/LS7 Clutch Kit **G**

12581400

F23 Manual Transmission '05-'07 Cobalt/G5 (not shown)

- Non-supercharged applications
- 3.84 ratio

E. 19259270

Transmission Installation Kit – Tremec TR6060 (MG9) – 8-Bolt Flange

- Use with TR6060 6-speed transmission P/N 24258817 only with LSA, LSX454 and LSX454R engines
- Includes flywheel with 8-bolt flange, high-strength clutch and pressure plate, dust covers, hardware and instruction sheet
- Clutch release bearing is included with the transmission assembly

F. 19259271

Transmission Installation Kit – Tremec TR6060 (M10) – 6-Bolt Flange

- Use with TR6060 6-speed transmission P/N 92246731 on all LS engines except LSA, LS9, LSX454 and LSX454R
- Includes flywheel with 6-bolt flange, high-strength clutch and pressure plate, dust covers, hardware and instruction sheet
- Clutch release bearing is included with the transmission assembly

G. 24255748

LSX/LS7 Clutch Kit

- 11.5" clutch single disc
- Fits 26 spline shaft
- Pressure plate and clutch disc

24260226

LS9 Clutch Kit (not shown)

- 10.5" clutch dual disc
- Fits 26 spline shaft
- Dual-mass clutch and pressure plate for LS9 Corvette ZR1

12570806

LS2 Clutch Kit (not shown)

- 11.5" clutch single disc
- Fits 26 spline shaft
- Flywheel, clutch and pressure plate kit for LS2 GTO engines

12581650

LS1 Clutch Kit (not shown)

- 11.5" clutch single disc
- Fits 26 spline shaft
- Flywheel with pressure plate and disc for LS1 Camaro engines

19210297*

Release Bearing (actuator) (not shown)

* Included with Trans Kit P/N 92246731

24502513 (not shown)

4L60/700R4 Transmission Swap Kit

- Adapts the 4L60 or 700R4 automatic transmission (non-electronic version) for use in early-model vehicles, with or without an engine management computer
- Includes instruction sheet, throttle valve spring for carbureted engines, a normally-closed fourth-gear clutch switch and wiring connector for the torque converter

NOTE: For individual flywheel and flexplate components see pages 227, 277 and 323.



Engines

As part of General Motors, Chevrolet Performance is able to offer a wide and diverse range of crate engines and partial engines beyond our high-performance Small-Block, Big-Block and LS engines. They are based on regular-production engines and make great swap choices for replacing a tired engine, while also enabling creative engine builders to start with an economical production engine and add their power-building accessories.

The engines are generally delivered fully assembled (minus the induction, ignition and starting systems) and each is backed by a 36-month or 100,000-mile/160,000 km warranty when installed in a recommended application.

See your GM dealer for more details and ordering information.

NOTE: Engines depicted in photographs are representative of several part numbers and may not show all items included.



GM Parts Crate Engines include a 36-month or 100,000-mile/160,000-kilometer limited warranty when installed in a recommended application.

2.2L L61/2.4L LE5

The 2.2L L61 and the 2.4L LE5 engine are the same production engines used in thousands of GM small cars, such as the Cavalier, Cobalt, HHR, Sunfire, G5 and more. They come fully assembled and ready to install – or build it up to higher performance standards and turn your compact commuter car into a compact performer!



2.8L I-4/3.5L I-5

Striking a balance between four-cylinder economy and V-6 power, the Vortec 2800 four-cylinder (I-4) and Vortec 3500 five-cylinder (I-5) engines benefit from the broad, inherent torque and balance of an inline engine design. The I-4 is standard in the Chevrolet Colorado and GMC Canyon midsize pickups; the I-5 is available in both vehicles, as well as the H3 Hummer.



3.5L LX9

Introduced in 2004 in the new Chevy Malibu, the 3500 3.5L V-6 is the standard engine in the Pontiac G6 V-6 and GT models, as well as GM's crossover sport vans: Chevrolet Uplander, Pontiac Montana SV6, Buick Terraza, and Saturn Relay. Rated at 200 hp (149 kw) and 220 lb.-ft. of torque (278 Nm), the engine has broad power bands that produce stirring performance for low-rpm acceleration and high-rpm responsiveness.



3.8L V-6

With its reputation for power and reliability, the 3800 Series III V-6 and 3800 Series III V-6 Supercharged are the "Small-Block Chevy" engines of the V-6 world. The 3800 engine is available new or remanufactured.



4.2L I-6 LL8

Introduced in GM's midsize SUVs, including the Chevy TrailBlazer and GMC Envoy, the unique 4.2L inline-six engine delivers exceptional torque (275 lb.-ft.) and responsive horsepower (275). The engine assembly requires induction, ignition and starting systems, along with other accessories and production-style controller when not used as a direct replacement to re-power a vehicle.



4.3L LU3

Based on the architecture of the original Small-Block V-8, but minus two cylinders, the 4.3L V-6 – also known as the Vortec 4300 – is a popular and powerful motivator in thousands of GM trucks. Engine assemblies are available in new or economical remanufactured options, all built to the exacting standards of regular-production engines.



4.8L LR4/LY2

This economical 4.8L LS-series engine serves as the entry-level V-8 in many GM full-size trucks, where it also is known as the Vortec 4800. It delivers all of the strength, durability and performance attributes of its larger-displacement cousins. It uses the same iron cylinder block as the 5.3L LS, but has a smaller stroke. It is rated at 275 horsepower. Available in new and remanufactured options for 2001-2009 applications.



5.3L LM7/L59

Used in thousands of GM trucks, SUVs and vans since 1999, the 5.3L V-8 that's also known as the Vortec 5300, is respected for its great performance and efficiency. Horsepower is rated starting at 285, with torque at approximately 330 lb.-ft. GM Parts offers the 5.3L in new and economical remanufactured packages for 2001-2011 applications



5.7L Gen 0

10067353 *All new – not remanufactured!*

The classic 350 is offered here in our most economical Small-Block engine assembly. Designed to replace production engines used from 1972-1985, it features a durable, yet value-driven, short-block assembly and iron cylinder heads with early-style perimeter hold-downs. Better still, it includes a stronger four-bolt main block and smooth flat tappet hydraulic camshaft.



5.7L Gen 1

12568758 *All new – not remanufactured!*

This basic 5.7L/350-cubic-inch is designed for 1987-1995 truck applications, as it uses the later-style one-piece rear main seal and cylinder heads with center-style valve cover hold-downs. But it is adaptable to almost unlimited Small-Block applications. The bottom end is durable, with four-bolt mains. Additional details include a gear-driven oil pump assembly and a machined fuel pump pad, but no hole for the fuel pump pushrod. (210HP@4000 and 300 lb.-ft.@2800.)



6.0L LQ4/LQ9

Used in a variety of 2001-07 GM trucks and SUVs, our iron-block 6.0L LS-series engine offers big power and exceptional torque (up to 325 horsepower and 370 lb.-ft. of torque, depending on the application). Our affordable 6.0L engine assembly is delivered without induction or ignition systems, and is offered in brand-new or remanufactured packages.



7.4L L19/L29

Our 7.4L engine assembly delivers the big torque you need for pulling a trailer and other heavy loads. A four-bolt main block enhances strength, and a later-style one-piece rear main seal reduces the chance for an oil leak. Designed for trucks, SUVs and vans built from 1980-2000; offered in new and remanufactured packages. CNG and LPG compatible variations are available.



8.1L L18

The largest regular-production Big-Block engine is the 8.1L L18 engine used in a variety of heavy-duty GM trucks. This workhorse uses durable cast-iron cylinder block and cylinder heads castings and features later-style front camshaft sensing. Depending on the application, the L18 engine produces 225-330 horsepower and up to 450 lb.-ft. of tow-anything torque. Our 8.1L engine assemblies are remanufactured and all are certified for CNG and LPG use.



SMALL-BLOCK COMPONENTS

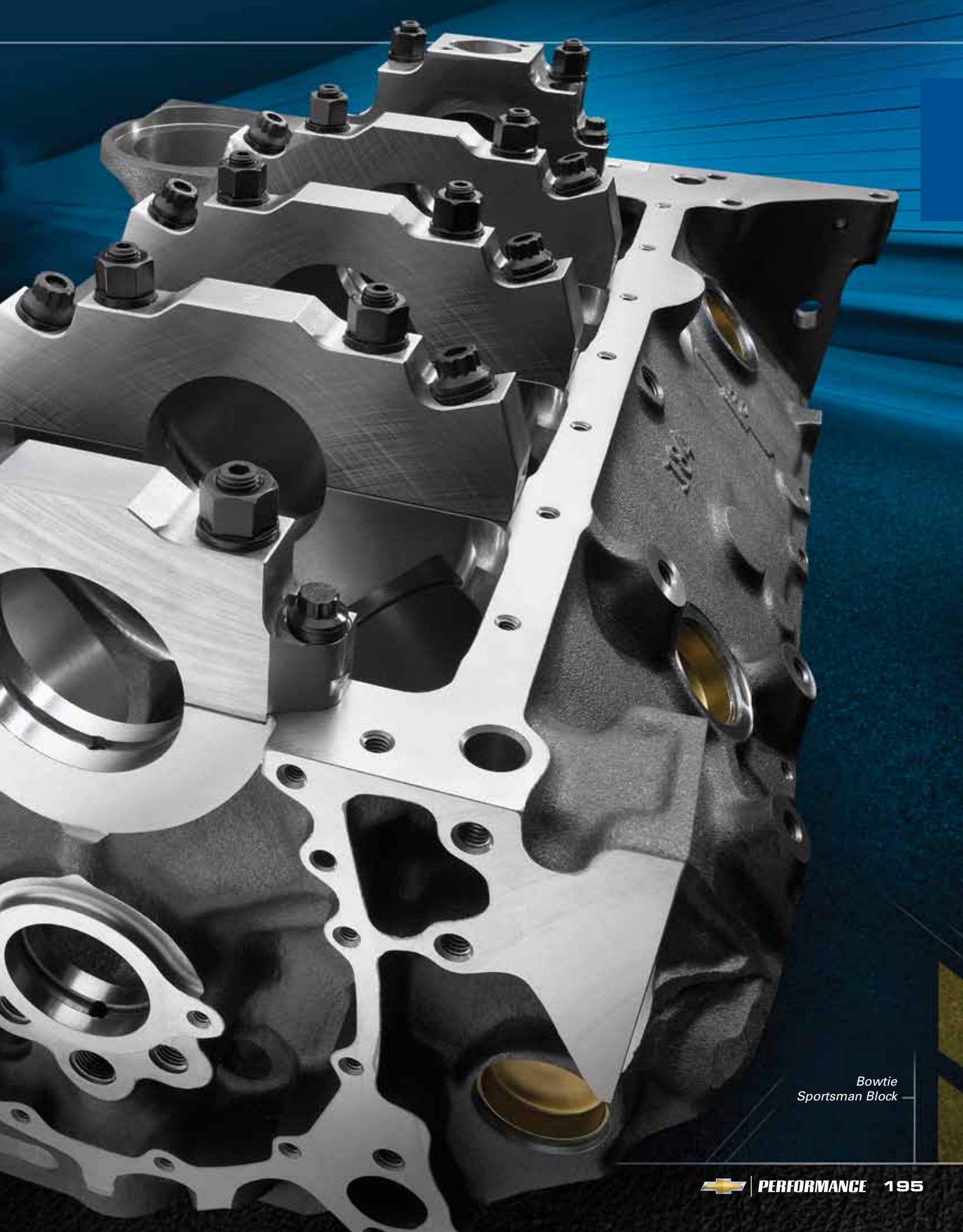
PERFORMANCE PARTS FOR THE GREAT AMERICAN V-8!

With the support of factory engineers, Chevrolet Performance brings nearly six decades of engineering experience to the table with its range of Small-Block components. That means our Small-Block components are designed, tested and validated to the same precise standards as production engines, so you're assured the parts for your engine will perform as promised and fit without compromises.

Our Small-Block parts range starts with brand-new GM cylinder blocks, rotating parts and cylinder heads. There's no reason to settle for used, reconditioned or "seasoned" parts, because Chevrolet Performance parts are competitively priced and often deliver greater strength and performance than used production components. Take our Small-Block cylinder block, for example. We offer only brand-new blocks featuring four-bolt main caps. That's a design feature almost no used cores have.

The Small-Block is an engine like no other in automotive history and nobody knows how to build power in them like Chevrolet Performance. Trust us when you're building your next engine!





*Bowtie
Sportsman Block*

Chevy Small-Block Quick Reference Chart

CAST-IRON SMALL-BLOCKS

Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
10105123	14093638	9.025"	Std	Open	4.000"– 4.030"	4	Straight	Gray iron	350	Wet	1 pc	3.750"	181	350	Street	197
19171109	—	9.025"	Std	Open	4.004"– 4.030"	4	Straight	Gray iron	350	Wet	1 pc	3.800"	181	450	Street	197
10066034	—	9.025"	Std	Open	4.000"– 4.030"	4	Straight	Gray iron	350	Wet	2 pc	3.750"	181	350	Street	197
12480174	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	350	Wet	1 pc	3.750"	196	500	Amateur	198
12480047	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	350	Wet	2 pc	3.750"	208	500	Amateur	199
12480175	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	350	Wet	1 pc	3.750"	196	500	Amateur	199
12480157	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	350	Wet	2 pc	3.750"	196	500	Amateur	199
12480049	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	400	Wet	2 pc	3.750"	208	500	Amateur	199
12480159	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	400	Wet	2 pc	3.750"	196	500	Amateur	199
24502503	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Steel	350	Wet	2 pc	3.750"	208	700	Pro	200

SHORT DECK CAST-IRON BLOCK

Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
24502650	24502650C	8.325"	None	Siamese	3.980"– 4.185"	4	20°	Steel	283	Dry	2 pc	3.250"	167	800	Pro	200

ALUMINUM SMALL-BLOCKS

Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
10185075	10134398	9.025"	Std	Siamese	3.986"– 4.135"	4	20°	Steel	350	Wet	2 pc	3.750"	90	800	Pro	202
10134400	10134398	9.025"	Std	Siamese	4.117"– 4.135"	4	20°	Steel	400	Dry	2 pc	3.750"	89	800	Pro	202
24502495	24502495	9.525"	Std	Siamese	4.117"– 4.135"	4	20°	Steel	400	Dry	2 pc	4.125"	101	850	Pro	202



BUILDER'S TIP

383 Small-Block Basics

If you're building your own 383-cid Small-Block, you probably know you need the 3.750-inch crankshaft from a 400 engine to use in a 350 cylinder block. But it doesn't simply drop in without modifications. The 2.650-inch main journals must be machined down to match the 350 block's 2.450-inch journals; and depending on the rods used, the cylinder block may require machining to prevent interference at the oil pan rail area and bottom of the bores. Fortunately, the 400 crank's 2.100-inch rod journals match the 350's, but the 400 crank is externally balanced. A counterweighted torsional damper and properly balanced flywheel must be used with it.





Production-Based Block (front) **A**



Production-Based Block (rear) **A**

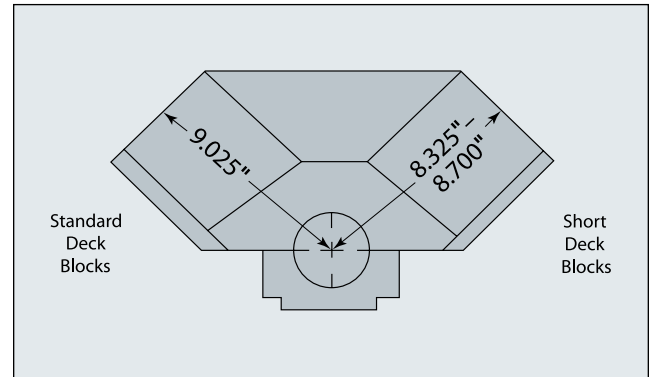


Straight 4-Bolt Mains **A**



Production-Based Block (front, top) **A**

DECK HEIGHT DIAGRAM



PRODUCTION-BASED BLOCKS

When building a mild Small-Block performance engine or a replacement for a stock engine, brand-new, production-based blocks from Chevrolet Performance give you strength, accuracy and peace of mind that can't be assured in a rebuilt core. And unlike so many of the used cores, ours all feature four-bolt main caps for extra strength – there's no reason to settle for a two-bolt block. Each new cylinder block is machined to production-spec tolerances and is manufactured to the exact specifications of pre-1986 or 1986-later engines.

Production-Based Block Technical Notes:

- Standard 350 main journal sizes
- Non-siamese bores
- Production-spec cylinder wall thickness
- Lifter valleys machined for hydraulic-roller and flat-tappet valvetrains

See the chart on page 164 for complete specifications

A. 10105123

350 Bare Block (1986–Later Style), 1-Piece Rear Main Seal

- Cast-iron 4-bolt block
- 4.000" bore
- Machined for hydraulic roller or flat tappets

19171109

383 Bare Block (1986–Later Style), 1-Piece Rear Main Seal

- Cast-iron 4-bolt block
- 4.004" bore
- Torque plate honed
- Clearanced for 3.800" stroker crankshaft
- Machined for hydraulic roller or flat tappets

10066034

350 Bare Block (Pre-1986 Style), 2-Piece Rear Main Seal

- Cast-iron 4-bolt block
- 4.000" bore
- Can be used for 302, 327, or 350 engines
- Machined for flat tappets only
- Used in 1973-1985 GM Goodwrench 350 engines



BOWTIE SPORTSMAN BLOCKS

Step up to serious street/strip performance when you choose a Chevrolet Performance Sportsman Block. These iron blocks provide a rock-solid foundation for any application in the 350–500-horsepower range, be it drag strip, circle track or high-performance street machine. These highly versatile blocks are available in a variety of finish options that enable maximum flexibility for building a wide range of engine combos. Most of the blocks have siamesed cylinder walls¹ and 4-bolt main caps² that are secured with Grade-8 bolts. Chevrolet Performance Bowtie Sportsman Blocks have 9.025-inch deck heights.

NOTE: Bowtie blocks are called out by main journal sizes (i.e., 283, 350 or 400) and then by bore size (i.e., 283, 305, 350 or 400) if the bore is not standard to the main size. Example: P/N 24502650 – “283 Main-350 Bore size” – has standard 283 main journal sizes; however the bore is standard 350 size.

Bowtie Sportsman Block Technical Notes:

- Standard 9.025-inch deck height
- Nominal cylinder wall thickness is 0.340-inch
- Minimum cylinder wall bore thickness on 4.155-inch bore is 0.225-inches (excluding P/N 10051181, 10051183, and 10185047)
- Extra-thick deck surfaces have blind-tapped bolt holes for improved head gasket sealing
- Priority main oiling system
- Main bearing bulkheads are 0.900-inch thick and use Grade-8 bolts
- All five cam bearing locations require 2.000-inch O.D. (1.867-inch I.D.) bearings P/N 12370843 (except block P/N 10051183)
- Tall lifter bore blocks may require clearancing the top of the lifter bores for some roller lifters
- Lifter valley oil scavenging boss below bell housing flange is present, but not drilled and tapped
- Oil dipstick holes are not drilled
- Timing system clearance must be checked

See the chart on page 164 for complete specifications.

4-Bolt 350 Main Blocks

A. 12480174

350 Bowtie Sportsman Block, 1-Piece Rear Main Seal

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 3.980" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores
- Comes with rear seal adapter



A Sportsman Block (front)



A Sportsman Block (rear, for use with 1-piece seal adapter)



2-Piece Rear Main Seal



4-Bolt Splayed Main Caps

¹Siamesed cylinder walls have thicker cylinder wall material with no water between the bores. This allows for a bigger bore; a bigger bore allows for more cubic inches and more power!

²4-bolt mains have more material and more fasteners holding the crank in the block (4-bolts per main instead of just 2). 4-bolt mains help maintain the integrity of the block when you drop the hammer!

350 Bowtie Sportsman Block, 2-Piece Rear Main Seal **B**350 Bowtie Sportsman Block, 2-Piece Rear Main Seal **B****B. 12480047****350 Bowtie Sportsman Block, 2-Piece Rear Main Seal**

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center three mains
- 3.980" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

12480175**350 Main, 400 Bore Size Bowtie Sportsman Block, 1-Piece Rear Main Seal (not shown)**

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center three mains
- 4.117" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores
- Comes with rear seal adapter

12480157**350 Main, 400 Bore Size Bowtie Sportsman Block, 2-Piece Rear Main Seal**

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center three mains
- 4.117" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

4-Bolt 400 Main Blocks**12480049****400 Main, 350 Bore Size Bowtie Sportsman Block, 2-Piece Rear Main Seal**

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center three mains
- 3.980" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

12480159**400 Bowtie Sportsman Block, 2-Piece Rear Main Seal**

- CNC-machined cast-iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center three mains
- 4.117" finished bore
- 4.155" max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

**BUILDER'S TIP****Add 50 HP to Your ZZ4 350**

With its efficient ZZ4 aluminum cylinder heads and forged-steel crank at the bottom end, the ZZ4 350 is a durable, reliable crate engine – but that doesn't mean there isn't room for more power! We've raided the Chevrolet Performance shelves to test a variety of performance-enhancing packages, resulting in a bolt-on combo that makes about 405 horsepower and 393 lb.-ft. of torque.

Here's the recipe:

- **12499712** ZZ4 350 crate engine
- **25534421** Cylinder head (2)
- **12496822** Vortec Eliminator single-plain intake manifold
- **24502586** LT4 "Hot" camshaft
- **19170093** Holley 770-cfm carburetor
- **12370839** 1.6-Ratio rocker arms



CHEVROLET PERFORMANCE RACE BLOCKS

Chevrolet Performance Race Blocks are all about serious horsepower. Precision is the operative word for them, from start to finish, so you can depend on them to get you to the finish line first. Chevrolet Performance Race Blocks use only the highest-grade materials and machining techniques. The blocks are CNC-machined¹ with closer tolerances than Bowtie blocks. Race blocks feature full race-prep machining and 4-bolt splayed² main caps. Chevrolet Performance Race Blocks have proven themselves repeatedly in NASCAR and NHRA-sanctioned races. Chevrolet Performance race blocks have the power and reliability to put your car in the winner's circle.

See the chart on page 164 for complete specifications.

Chevrolet Performance Race Block Technical Notes:

- Precision CNC-machining means +/- 0.001-inch tolerances.
- Cylinder bore wall thickness is 0.225" minimum at 4.155" bore. A sonic bore check data sheet is provided with block
- Nominal wall thickness of cylinder bores is 0.340"
- Cylinder decks, front and rear of case, oil pan rail surfaces and head dowel pins are blueprinted
- Extra-thick deck surfaces have blind-tapped head bolt holes for superior head gasket sealing
- Enlarged cam bosses allow custom machining for larger bearings
- Non-standard cam bearings are required (see each block for details)
- Extra-thick main bearing bulkhead is machined at 5°
- Bearing cap inner bolts are spread 0.210" to allow machining for 400 journal crankshafts
- Premium quality main studs and SAE 8620 steel main bearing caps
- Priority main oiling system
- Billet wet sump rear main cap can be adapted to dry sump with plugs
- 2-piece rear main crankshafts and pre-1986 oil pans are required
- Use of some aftermarket mechanical roller lifters may require clearancing top of lifter bores
- Timing system clearance should be checked before engine assembly
- Lifter valley oil scavenging boss below bell housing flange is not drilled or tapped
- Oil dipstick holes are not drilled

24502503

350 Cast-Iron Bowtie Race Block (not shown)

- Cast-iron competition block right out of the box
- 4-bolt steel mains, 20° splayed caps on center three mains
- 2.000" O.D. cam bearings (1.867" I.D.) required at all five locations
- 3.980" finished bore
- 4.155" max bore (siamese cylinder bores)
- 9.025" deck height
- Oil galleries for dry sump system are oversized and tapped for pipe plugs
- Supplied with sonic data sheet
- Tested to over 700 horsepower!



A Short Deck Race Block (top front)



A Short Deck Race Block (top rear)



A 2-Piece Rear Main Seal



A 4-Bolt Splayed Main Caps



Short Deck Race Block (bottom front) **A**



Short Deck Race Block (bottom rear) **A**



A

A. 24502650

283 Main, 350 Bore Size Short-Deck Bowtie Race Block

- CNC cast-iron competition block designed for drag racing, road racing or restricted oval track racing!
- 4-bolt steel mains, 20° splayed caps on center three mains
- 8.325" deck (Standard deck blocks are 9.025 inches), can be machined to 8.200" deck height
- Camshaft is raised 0.433" to 4.955"
- Cam bearing bores machined for 2.250" O.D. x 1.875 roller bearings
- 3.980" rough bore
- 4.185" max bore (minimum of .250" cylinder bore wall thickness)
- Integral oil restrictors
- Must use Big-Block water pump, must raise water pump with adapters for balancers larger than 6"
- Olds Aurora V-8 bell housing bolt pattern (12.25" max flywheel diameter)
- Lifter holes and cylinder head bolt holes are not drilled
- Will accept standard, SB2.2 and splayed valve lifter patterns
- Can be machined to accept any Small-Block Chevy cylinder head
- Shorter than production pushrods required
- Tested to over 800 horsepower!
- Water jacket core plugs are 1.5" press-in
- Oil galley plugs are AN O-ring style

¹CNC (computer numerical controlled) machining guarantees exact tolerances. Chevrolet Performance Parts offers more CNC-machined blocks than anyone.

²Splayed main caps have additional material for added strength in securing the crankshaft. This reduces the chance of "throwing" a crankshaft.



ALUMINUM RACE BLOCKS

Less weight and the same great horsepower are the benefits of a Chevrolet Performance Aluminum Race Block. Chevrolet Performance Aluminum Race Blocks provide the same competition-level strength and reliability of our cast-iron Race Blocks, but their lighter weight improves chassis dynamics. The super-tough A-356 aluminum competition blocks are CNC-machined to +/- 0.001-inch tolerances. Chevrolet Performance Aluminum Race Blocks are ideal for road racing applications or high horsepower turbocharged engines.*

See chart on page 164 for complete specifications.

Chevrolet Performance Aluminum Race Block Technical Notes:

- Extra-thick deck surfaces with blind-tapped head bolt holes for improved head gasket sealing
- Centrifugally spun cast-iron cylinder sleeves
- 2-piece rear-main crankshafts and pre-1986 oil pans required
- Enlarged cam bosses allow machining for larger cam bearings
- 2.000" O.D. (1.867" I.D.) cam bearings P/N 12370843 required
- Blocks may require clearancing at top of lifter bores (0.842") for some roller lifters
- Timing system clearance should be checked before engine assembly
- Extra thick main bearing bulkhead machined at 5°
- Premium main studs and steel main bearing caps
- Priority main oiling system
- Billet wet sump rear main cap can be converted to dry sump with plugs
- Oil dipstick holes not drilled
- Comes with dowel pins

10185075

350 Aluminum Bare Block

- A-356 aluminum competition block
- CNC-machined
- Siamesed bores with increased wall thickness
- 3.986" rough finished bore
- 4.135" maximum bore
- 350 main size
- Tested to more than 800 horsepower!

10134400

400 Aluminum Bare Block

- A-356 aluminum competition block
- CNC-machined
- Siamesed bores with increased wall thickness
- 4.117" rough-finished bore
- 4.135" maximum bore
- 3.750" maximum stroke
- Splayed 4-bolt steel mains
- 400 main size
- Dry sump use only
- Tested to more than 800 horsepower!

24502495

400 Aluminum Tall Deck Bare Block (not shown)

- A-356 aluminum competition block
- CNC-machined
- Siamesed bores with increased wall thickness
- 4.117" rough-finished bore
- 4.135" maximum bore
- 4.125" maximum stroke
- Splayed 4-bolt steel mains
- 400 main size
- Dry sump use only
- Tested to more than 800 horsepower!



Aluminum Race Block (front)



Aluminum Race Block (rear)



Aluminum Race Block (bottom)

*Proposed applications have not been specifically tested or validated by Chevrolet Performance.



Universal Engine Lift Brackets **A**



Freeze Plug, 1-5/8" brass **B**



Cylinder Sleeve (standard) **C**



Main Bearing Kit 383 Engine (standard) **D**



Main Bearing Bolt Kit, Sportsman Blocks **E**

CYLINDER BLOCK COMPONENTS

A. 12363238

Universal Engine Lift Brackets

- Designed to bolt to the end of cylinder heads for removal and installation of the engine
- Made from 0.200" steel and have .880" x 1.000" hook slots
- Use with 3/8" or 7/16" bolts
- Includes two brackets and two 7/16" bolts

B. 88891749

Freeze Plug, 1-5/8" Brass

- Corrosion-resistant brass freeze plug is recommended for marine applications

10121044

Rear Oil Seal, 2-Piece Design (not shown)

- Rear oil seal for V-8 and V-6 engines with pre-1985 style 2-piece oil seal design
- Used by many NASCAR teams for superior leak protection

C. 12480004

Cylinder Sleeve (standard)

- Standard-bore steel cylinder sleeve for new-design aluminum Small-Block V-8 and 90° V-6 aluminum blocks, including P/N 10134400, P/N 10134351, P/N 10185075, and P/N 10134371

NOTE: Sleeve has 3.980" bore; can be overbored to 4.135".

12480018

Oil Galley Plugs, Aluminum Blocks (not shown)

- Replacement oil galley plugs for all GM aluminum engine blocks, size AN -06

D. 12499102

Main Bearing Kit, 383 Engine (standard)

- Complete main bearing kit for 383-cubic-inch Small-Block V-8 with standard-size mains

E. 12480108

Main Bearing Bolt Kit, Sportsman Blocks

- Sturdy main bearing cap bolts designed specifically for the following Chevrolet Performance Sportsman Racing Blocks: P/N 12480047, P/N 12480049, P/N 12480157, P/N 12480159, P/N 12480174 and P/N 12480175
- Bolts are Grade-8 with 12-point heads and black oxide-coated



FRONT COVER, TIMING POINTERS, FUEL PUMP BLOCK-OFF PLATE

3991435

Timing Pointer, 6.750" and 7" Balancer

- Steel timing pointer bolts onto engines with 6.750" or 7" balancers
- Pointer is not chromed

12342089 ⓘ

Small-Block Chrome Timing Cover

- Attractive chrome cover for 1969–1991 Small-Block V-8 and all 90° V-6 engines
- Direct replacement for covers that use bolt-on timing pointer
- Supplied with GM oil seal (replacement oil seal P/N 10111769)

12562818 ⓘ

Front Cover

- With crank trigger plug
- Includes bolts, seal and gasket

12341998

Small-Block Fuel Pump Block-Off Plate

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included



Timing Pointer, 6.75" and 7" Balancer



Small-Block Chrome Timing Cover



Front Cover With Bolts, Seal and Gasket



Small-Block Fuel Pump Block-Off Plate

ⓘ **TIMING COVERS: ADDITIONAL REQUIRED COMPONENTS**

Part Number	Bolts (Quantity)	Seals (Quantity)	Gasket (Quantity)	Bolt Grommets (Quantity)	Engine Application
12342089	11561767 (10)	12577710 (1)	10108435 (1)	N/A	19258602, 12499711, 19210007, 12496968, 19210007
12562818	10213293 (6) 12551135 (2)	10228655 (1)	N/A	10213294 (8)	12499101, 12499106, 12497317, 88958604, 12499710, 12498772, 12496769, 24502609, 88958603, 12499712, 19201330

SMALL-BLOCK CYLINDER HEADS

Part Number	Description	Casting Number	Material	Port Size	Port Type	Valve Angle	Chbr CC's	Int Vlv	Exh Vlv	Exh Port	Plug Type	Heat Riser	Rocker Stud	Notes	Page Number
12363287	LT4	12555690	Alum	195	—	23	54.4	2.000	1.550	LT4	Angled	No	Screw-in	For LT1 or LT4	208
12480034	Bowtie Phase III	12480034	Iron	184	—	23	64	2.020	1.600	—	Angled	No	Screw-in	Phase 3 Bowtie	206
12497186	Fast Burn	12367712	Alum	210	Vortec	23	62	2.000	1.550	LT4	Angled	No	Screw-in	Bare 12464298	209
12464298	Fast Burn	12367712	Alum	210	Vortec	23	62	2.000	1.550	LT4	Angled	No	Screw-in	Assembly	209
12556463	ZZ4	10088113	Alum	163	—	23	58	1.940	1.500	LT4	Angled	No	Screw-in	ZZ4 Assembly	208
12529093	Vortec	10239906 or 12558062	Iron	170	Vortec	23	64	1.940	1.500	LT4	Straight	No	Press	Bare 12558060	N/S
12558060	Vortec	10239906 or 12558062	Iron	170	Vortec	23	64	1.940	1.500	LT4	Straight	No	Press	Assembly	205
25534351	Small-Port Vortec Bowtie	25534351	Iron	185	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Bare 25534421	207
25534446	Large-Port Vortec Bowtie	25534371	Iron	225	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Bare 25534445	207
25534421	Small-Port Vortec Bowtie	25534351	Iron	185	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Assembly	207
25534446	Large-Port Vortec Bowtie	25534371	Iron	225	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Assembly	207
24502580	18° Semi	10134363	Alum	215	18°	18	60	—	—	18°	Angled	No	Shaft	No seats/guides	210
24502615	15°	10134363	Alum	210	18°	15	35-37	—	—	18°	Angled	No	Shaft	No seats/guides	210
12480129	SB2.2	12480011	Alum	—	SB2.2	SB2.2	48	2.150	1.625	SB2.2	Angled	No	Shaft	No seats/guides	213
12480011	SB2.2 Bare	12480011	Alum	—	SB2.2	SB2.2	48	2.150	1.625	SB2.2	Angled	No	Shaft	No seats/guides	212
88958667	R0X SB2.2	88958667	Alum	—	SB2.2	SB2.2	28	2.150	1.625	SB2.2	—	—	Shaft	No seats/guides	213
12480146	Rough Bare Splay	10185040	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	Rough mach 24502517	211
12480147	Semi-Machined Splay	10185040	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	Semi-mach 12480146	211
24502517	Splayed valve	10185040	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	No seats/guides	211
12480153	R0X splayed	12480153	Alum	—	Splayed	Splay	—	—	—	Splayed	—	—	Shaft	No seats/guides	212





Cast-iron Vortec Cylinder Head (exhaust) **A**



Cast-iron Vortec Cylinder Head (intake) **A**



Cast-iron Vortec Cylinder Head (combustion chamber) **A**

SERVICE REPLACEMENT HEADS

These cylinder heads are direct replacements for OEM heads on 1987-and-newer GM Small-Block V-8 engines. Save time and worry by replacing tired or damaged cylinder heads with new ones from Chevrolet Performance.

Service Replacement Head Technical Notes:

- Cast-iron
- Use 1.940"/1.500" valves
- Straight spark plug design
- No heat risers provided

93438649 ⓘ

Cylinder Head Assembly With Valves For 290 HP (not shown)

This cast-iron cylinder head is for use on 350/290 hp crate engines and Goodwrench base 350 V-8 (P/N 10067353).

- Bare head P/N 93438648
- Standard 6-bolt intake manifold pattern
- 76cc combustion chamber

This head is assembled with the following components:

12550909	Exhaust Valves	10241744	Intake Spring Retainer
10241743	Intake Valves	14042575	Exhaust Spring Retainer
94666580	Valve Springs	10212810	Intake Seals
24503856	Valve Locks	12564852	Exhaust Seals

VORTEC CYLINDER HEADS

An easy way to gain 20-40 horsepower on any 1955-and-newer Small-Block Chevrolet V-8 (except later-style LT1/LT4 engines with reverse-flow cooling) is by installing a set of Vortec cylinder heads. These value-priced cast-iron cylinder heads use modified combustion chambers and high velocity port technology to provide improved performance. Vortec cylinder heads significantly outflow non-Vortec service replacement cylinder heads and earlier OEM cast-iron heads. These cylinder heads are ideal for applications up to 350 horsepower, but they require Vortec-specific intake manifolds.

A. 12558060 ⓘ

Cast-iron Vortec Cylinder Head Assembly

- Completely assembled with 1.940"/1.500" valves
- Uses bare head 12529093
- 64cc combustion chamber
- Straight spark plugs
- No heat risers
- Requires Vortec-specific intake manifold
- Camshafts with more than 0.475" lift require machining valve guide bosses and checking valve seal to valve spring retainer clearance
- Can be machined for 2.020"/1.600" valves
- Rocker arm studs can be pinned or drilled and tapped to 3/8"
- Valve spring seat diameter is 1.280"
- Casting number 10239906 or 12558062

This head is assembled with the following components:

10241743	Intake Valves	10241744	Valve Spring Retainer
12550909	Exhaust Valves	10212810	Intake Seals
10212811	Valve Springs	12564852	Exhaust Seals
24503856	Valve Locks		



Additional components required for installation. See page 213.



THE PHASE 3 CAST-IRON BOWTIE HEAD

The Phase 3 Bowtie cylinder head is a true cast-iron performance head that's designed for off-highway, competition use only. Racers who are required to run a production-style cast-iron cylinder head can obtain optimum performance with this head because it outflows all production cast-iron heads. The Phase 3 casting is extra thick, which allows ample room for port modifications.

A. 12480034

Phase 3 Cast-iron Bowtie Head

- Extra-thick walls for porting
- Machined for 2.020"/1.600" valves
- Exhaust seats are induction hardened
- Valve spring seat is machined for 1.500" competition springs
- 184cc intake runner
- 64cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/8" reach, tapered plugs)
- Requires early model intake manifolds
- Valve spring seat is machined for 1.500" competition springs
- Use P/N 12495497 screw-in studs for 3/8" rocker arms
- Use P/N 3921912 screw-in studs for 7/16" rocker arms
- Use P/N 3973418 guideplates for hardened pushrods



A Phase 3 Cast-iron Bowtie Head (exhaust)



A Phase 3 Cast-iron Bowtie Head (intake)



A Phase 3 Cast-iron Bowtie Head (combustion chamber)



BUILDER'S TIP

Machining the Vortec Head for Greater Valve Lift

The Small-Block Vortec cylinder head delivers great airflow, but is limited to valve lift of about 0.450-inch in stock form – otherwise the valve stem seals will be crushed. The valve guide bosses can be easily machined down to provide greater stem seal clearance. You'll want about 0.050-inch stem-to-retainer clearance at maximum valve lift. Also, the spring seats are easily machined to accept larger-diameter valve springs that are necessary to complement a higher-lift camshaft.



Small- and Large-Port Vortec Bowtie Heads (intake). Bare head shown. **B**



Small-Port Vortec Bowtie Head (exhaust). Bare head shown. **B**



Small-Port Vortec Bowtie Head (chamber). **B**

VORTEC BOWTIE CYLINDER HEADS

Vortec Bowtie cylinder heads are the most powerful cast-iron heads offered by Chevrolet Performance. These upgraded production cylinder heads are ideal for 400-450 horsepower street and racing (great for circle track applications) engines. Vortec Bowtie cylinder heads come with bigger valves, a thicker deck surface and 66cc combustion chambers. The heads provide outstanding low-lift flow numbers (the more air you flow, the more potential power) and Fast Burn performance all in an affordable, cast-iron head.

Vortec Bowtie Cylinder Head Technical Notes:

- Cast-iron small runner or large runner cylinder heads*
- 66cc combustion chambers
- 0.450" deck thickness
- Hardened exhaust valve seats
- Machined for 2.000"/1.550" valves
- Maximum 0.530" valve lift (without modifications)
- Straight spark plug design
- No heat risers
- Drilled and tapped for 7/16"-14 screw-in studs
- Dual bolt patterns for Vortec and early style intake manifolds (early model P/N 10051103; Vortec intakes P/N 12366573, 12496820, 12496821, 12496822 or 12489371)
- Use intake gasket P/N 12529094 for Vortec intakes or dual pattern intake gasket P/N 12497760 for early model intakes or Vortec design intake manifolds
- Dual bolt patterns for perimeter-style and center-bolt valve covers
- Vortec intake manifold three-step torque specs: 2 lb.-ft.; 9 lb.-ft.; 11 lb.-ft.

B. 25534421

Small Port Vortec Bowtie Cylinder Head Assembly

- Completely assembled, ready to bolt on
- 185cc intake ports
- 65cc exhaust ports
- Use Fel-Pro® P/N 1470 exhaust gasket
- **Bare head P/N 25534351, available separately**

25534446

Large Port Vortec Bowtie Head Assembly (not shown)

- Completely assembled, ready to bolt-on
- Improved air flow (281 cfm @ 0.600")
- 225cc intake ports
- 77cc exhaust ports
- 65cc combustion chambers
- Use Fel-Pro® P/N 1470 exhaust gasket (minor trimming may be necessary)
- **Bare head P/N 25534445, available separately**

These heads are assembled with the following components:

12363757	Intake Valves	10212808	Valve Spring Retainers
12363758	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	24503856	Valve Locks
12552126	3/8" Rocker Studs		

*Larger intake and exhaust ports allow for a greater volume of air to pass through the engine. The more air you flow, the more power you can make.



Additional components required for installation. See page 213.



THE ZZ4 ALUMINUM HEAD

The revolutionary lightweight ZZ4 aluminum cylinder head was a key component of the highly successful Corvette L98 Small-Block V-8 engine (1985-1990). Chevrolet Performance offers that same cylinder head as a complete assembly, with D-shaped exhaust ports¹ (they increase post-combustion scavenging for increased power), high-velocity exhaust runners and centrally located spark plugs² that improve air/fuel mixture burn efficiency for increased power potential. The ZZ4 aluminum cylinder head is ideal for a great variety of engine applications.

A. 12556463 ⓘ

ZZ4 Aluminum Cylinder Head Assembly

- Aluminum performance head – used on ZZ4 engines
- Completely assembled with 1.940"/1.500" valves
- 163cc intake port
- 58cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/4" reach, tapered plugs)
- 1.48" Valve spring seat diameter
- Screw-in studs (3/8" top, 7/16" bottom)
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- Raised exhaust ports .100", requires Fel-Pro® gasket P/N 1470
- Use rail type rockers P/N 10089648, or kit P/N 12370838 (roller rockers!)
- Casting P/N 10088113

This head is assembled with the following components:

12550909	Exhaust Valves	19169661	Valve Spring Retainers
10241743	Intake Valves	10212810	Intake Valve Stem Seals
12551483	Valve Springs (16)	10212810	Exhaust Valve Stem Seals
10212809	Valve Spring Shims	24503856	Valve Locks
12552126	3/8" Rocker Studs		

THE LT4 ALUMINUM HEAD

The LT4 aluminum cylinder head represents another benchmark in Chevrolet high performance engine technology. This premium-quality aluminum cylinder head is designed for use on 1992-and-newer LT1 and LT4 Small-Block engines with reverse-flow cooling systems. LT4 aluminum cylinder heads are key components of any contemporary high horsepower GM Small-Block engine buildup.

B. 12363287

LT4 Aluminum Cylinder Head Assembly

- Aluminum performance head
- Can only be used on 1992 – newer LT1 and LT4 engines
- Completely assembled with 2.000"/1.550" valves
- 195cc intake port
- 54.4cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/8" reach, tapered plugs)
- 1.480" Valve spring seat diameter
- Screw-in studs (3/8" top, 7/16" bottom)
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- Raised exhaust ports .100", requires Fel-Pro® gasket P/N 1470
- Use rail type rockers P/N 10089648, or kit P/N 12370838 (roller rockers!)

This head is assembled with the following components:

12555331	Intake Valves	19169661	Valve Spring Retainers
12551313	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	10212809	Valve Spring Shims
12552126	3/8" Rocker Studs	24503856	Valve Locks

¹D-shaped exhaust ports increase the scavenging of the exhaust after combustion. The quicker you can get the exhaust out, the quicker you can get the air/fuel mixture into the combustion chamber. And, that equals big power!

²Centrally-located spark plugs allow for a more efficient flame front and air/fuel mixture burn during combustion, greatly increasing the power potential of the cylinder head.



A ZZ4 Aluminum Cylinder Head Assembly (intake)



A ZZ4 Aluminum Cylinder Head Assembly (exhaust)



A ZZ4 Aluminum Cylinder Head Assembly (combustion chamber)



B LT4 Aluminum Cylinder Head Assembly (intake)



B LT4 Aluminum Cylinder Head Assembly (exhaust)



LT4 Aluminum Cylinder Head Assembly (combustion chamber) **B**



Fast Burn Cylinder Head (intake) **C**



Fast Burn Cylinder Head (exhaust) **C**



Fast Burn Cylinder Head (combustion chamber) **C**

ALUMINUM FAST BURN HEADS

Maximum bolt-on performance for serious street engines is as close as your local Chevrolet Performance dealer when you order a set of Aluminum Fast Burn Cylinder Heads. Fast Burn technology delivers more horsepower by increasing cylinder pressures, which maximizes air/fuel mixture combustion. The 62cc combustion chamber is designed for use with flat-top pistons. The Fast Burn heads require no additional porting for optimum performance, so all you need to do is bolt them on and go. These ultimate 23-degree Small-Block cylinder heads are the same ones used on Chevrolet Performance 425-horsepower ZZ383 crate engines. The heads can be used on any 4.00-inch bore Small-Block with the standard-flow coolant system.

C. 12464298

Aluminum Fast Burn Cylinder Head Assembly

- CNC-machined aluminum performance head
- Completely assembled with 2.000"/1.550" valves
- 210cc intake port, roof raised .240"
- 78cc D-shaped exhaust ports, raised .200", requires Fel-Pro® gasket P/N 1470 (may require minor trimming)
- 62cc combustion chamber, .400" thick deck (can be milled safely to .060")
- No heat riser
- Angled spark plugs (5/8" hex, 3/4" reach, tapered plugs)
- 1.48" Valve spring seat diameter
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- 0.530" max valve lift (without modifications)
- Screw-in studs, (3/8" top, 7/16" bottom)
- Dual bolt patterns for perimeter-bolt and center-bolt valve covers
- Dual bolt patterns for both Vortec and early model intake manifolds
- Uses bare head **P/N 12497186**
- Use production intake gasket P/N 12529094 for Vortec intakes, dual bolt pattern intake gasket P/N 12497760 for early model or Vortec design manifolds (Fel-Pro® P/N 1289 and P/N 1207 may be used)

This head is assembled with the following components:

12555331	Intake Valves	19169661	Valve Spring Retainers
12551313	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	10212809	Valve Spring Shims
12552126	3/8" Rocker Studs	24503856	Valve Locks



Additional components required for installation. See page 213.



ALUMINUM RACING CYLINDER HEADS

The same superior Chevrolet Performance technology that professional NASCAR and NHRA racers have used to win races for decades is available for you to use in your racecar. The Chevrolet Performance Aluminum Racing Cylinder Heads are part of an extensive family of high-performance inline-valve heads, designed specifically for race-winning engines.

Chevrolet Performance Aluminum Racing Cylinder Heads start with castings designed with thicker decks and manifold flange areas. The combustion chambers are designed for competition and air passages are maximized for high-velocity airflow. These cylinder heads thrive on high compression and high rpm. Used in conjunction with optimized short-block, intake and valve-train combos, these heads are part of an "instant-on" powerplant – the kind of engine that will put you in the winner's circle.

Chevrolet Performance engineers dramatically altered the valve architecture to improve airflow and maximize efficiency. These aluminum racing cylinder heads are only available unported, so you must have them custom-ported to your specific requirements.

Aluminum Racing Head Technical Notes:

- Made of 355-T7 aluminum
- Extra-thick decks for angle milling or heavy flat milling
- Extra port material for professional porting
- Recommended for use with 4.000" to 4.155" cylinder bores
- Revised location angled spark plugs (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- Raised and revised location intake and exhaust ports for superior airflow above 0.600" valve lift
- Modified valve angles (not production 23°)
- Longer-than-stock valves required
- Designed for aftermarket shaft-mount rocker systems
- Perimeter-bolt-pattern-type valve covers required
- Specific 18°/15° intake manifold bolt patterns
- Recommended intake manifolds: P/N 24502481, 24502579 or 24502653 (with valley plate P/N 24502654)
- Intake manifold gasket P/N 10185007

24502580

Semi-Finished 18° Cylinder Head

- Fully machined, semi-finished, no seats or guides
- Non-CNC ports and combustion chamber are "as-cast"
- 60cc "as-cast" combustion chambers
- Designed for up to 2.200"/1.625" valves
- 215cc "as-cast" intake ports
- .0800" extra material on deck face, and .055" on intake face

24502615

Semi-Finished 15° Cylinder Head

- Fully machined, semi-finished, no seats or guides
- Non-CNC ported, ports and combustion chamber are "as-cast"
- Great head for NHRA Comp-Eliminator, both V-8 and 4-cylinder applications!
- Casting has been "rolled" 2°, Valve-guides are also tipped 1°
- 210cc "as-cast" intake ports
- 35-37cc "as-cast" combustion chamber
- Capable of over 900 horsepower
- Multi-NHRA world records



15°/18° Cylinder Head (exhaust)



15°/18° Cylinder Head (intake)



15°/18° Cylinder Head (combustion chamber)



Splayed-Valve Head (exhaust) **A**



Splayed-Valve Head (intake) **A**



Splayed-Valve Head (combustion chamber) **A**

SPLAYED-VALVE ALUMINUM RACE CYLINDER HEADS

Chevrolet Performance Splayed-Valve Aluminum Race Cylinder Heads are extremely aggressive, all-out competition heads and not intended for street use. Splayed valves point both intake and exhaust valves at the center of the cylinder bore. As the valves open, they move away from the edges of the bore. That allows maximum-size valves to be installed without increasing bore size. The result is dramatically increased airflow, compared to inline-valve-design cylinder heads.

The castings have a 0.240-inch minimum port wall thickness, which leaves ample room for extensive custom porting. Intake valves are angled 16-degrees to the deck surface and splayed 4-degrees. Exhaust valve angles are 11-degrees with a 4-degree splay. Making more than 1000 naturally aspirated horsepower with these cylinder heads is easily achievable.

Aluminum Splayed Valve Race Head Technical Notes:

- Made of 355-T7 aluminum
- No valve seats or guides provided
- Extra-thick decks for angle milling or heavy flat milling
- Extra port material (0.240") for professional porting
- Completely revised intake and exhaust ports provide ultimate airflow potential
- 45cc "as cast" combustion chambers
- Modified valve angles (16° x 4° intake, and 11° by 4° exhaust)
- Designed for longer-than-stock 2.200" and 1.650" valves
- Valve spring pads accommodate 1.625" diameter springs
- Revised location angled spark plugs (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- Designed for aftermarket shaft-mount rocker systems
- Custom-fabricated intake manifold required
- P/N 10185042 intake manifold gasket required
- Valve cover P/N 10185045 and valve cover gaskets P/N 10185043 required

12480146

Rough-Machined Splayed-Valve Aluminum Cylinder Head (not shown)

- Main surfaces are machined, exhaust bolt pattern is machined
- Head bolt and dowel holes, intake bolt holes, spark plug holes and pushrod holes are not machined
- Valve guides, valve seats, valve spring seats and rocker stands are not machined
- Valve locations and angles may be relocated
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers

12480147

Semi-Machined Splayed-Valve Aluminum Cylinder Head (not shown)

- Main surfaces are machined; exhaust bolt pattern, valve guides and spark plug holes are machined
- Head bolt holes, dowel holes, intake bolt holes, pushrod holes are not machined
- Valve seats, spring seats and rocker stands are not machined
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers
- Same casting as P/N 12480146

A. 24502517

Splayed-Valve Aluminum Cylinder Head

- Semi-machined aluminum race head
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers
- Same casting as P/N 12480146



Splayed-Valve Aluminum Race Cylinder Heads Continued

A. 12480153

Splayed-Valve 4.500 Bore Center Aluminum Cylinder Head

- Semi-machined aluminum race head
- Great for NHRA competition with dual carburetors
- As-cast ports and combustion chambers for professional finishing
- Use mid-deck block P/N 25534429 with 4.500" main bore machining
- Special larger head-bolt pattern, 3/8" fasteners, 19 holes
- 240cc "as-cast peanut" intake ports
- 78cc "as-cast peanut" exhaust ports
- 40cc "as-cast" combustion chambers

88958684

Splayed-Valve 4.500 Bore Center Aluminum Cylinder Head Cubed (not shown)

- Great for NHRA competition with dual carburetors
- 240cc "as-cast peanut" intake ports
- 78cc "as-cast peanut" exhaust ports
- "Cubed" aluminum race head
- Bare head, no seats or guides

SB2.2 NASCAR RACE CYLINDER HEADS

The Chevrolet Performance SB2 NASCAR racing head was designed to improve durability, simplify preparation procedures, and reduce the overall cost of building and maintaining a Small-Block Chevrolet racing engine. It is ideal for single-four-barrel carburetor applications due to having "mirror" design intake ports and all eight ports being angled toward the center of the engine. Spark plug holes were moved toward the bore center for improved combustion efficiency. 48cc combustion chambers permit 12.1:1-compression-ratio flat-top pistons.

Aluminum SB2.2 NASCAR Race Head Technical Notes:

- 355-T7 X-rayed and "hipped" * aluminum competition cylinder heads
- Extra-thick decks for heavy flat milling
- Extra material around ports for professional porting
- Combustion chambers are very small, shallow and wedge shaped
- Precision T-washers installed in all four center head bolt bosses
- Designed for longer-than-stock 2.150" and 1.625" valves
- Valve spring pads accommodate 1.625" diameter springs
- Modified valve angles, 11° x 4° intake and 8° x 0° exhaust
- Designed for aftermarket shaft-mount rocker systems
- Revised location angled spark plugs (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- Requires specific left- and right-hand pistons
- Valve cover P/N 12480006 or P/N 12480012 required
- Replacement AN -08 intake port plugs available as P/N 12480171

B. 12480011

Semi-Finished SB2.2 Aluminum Cylinder Head

- Aluminum NASCAR-accepted head
- Bare head, no seats or guides installed
- Standard .500" guide holes
- As cast "peanut" ports
- 48cc "as-cast" combustion chamber

*HIP is the acronym for Hot Isostatic Pressure. This process puts the heads in a sealed vessel where a vacuum is first used to remove room air and any possible contaminants. The vessel is filled with high pressure nitrogen (up to 30,000-psi) and then heated to the required temperature and sustained for a determined amount of time. The cooling process is also a controlled procedure to ensure maximum strength and proper heat treat. This extreme high pressure and heat removes almost 100% of the internal porosities that are generated during the casting process. The material integrity, strength and fatigue life increases significantly



A Splayed-Valve 4.500 Bore Center Cylinder Head (exhaust)



A Splayed-Valve 4.500 Bore Center Cylinder Head (intake)



A Splayed-Valve 4.500 Bore Center Cylinder Head (combustion chamber)



B SB2.2 Cylinder Head (exhaust)



B SB2.2 Cylinder Head (intake)



SB2.2 Cylinder Head (combustion chamber) **B**



Semi-Finished SB2.2 Design R0X Cylinder Head (exhaust) **C**



Semi-Finished SB2.2 Design R0X Cylinder Head (intake) **C**



Semi-Finished SB2.2 Design R0X Cylinder Head (combustion chamber) **C**

12480129

Semi-Finished SB2.2 Aluminum Cylinder Head (not shown)

- Aluminum NASCAR-accepted head
- Bare head, no seats or guides
- Reduced size .375" diameter guide holes
- "As-cast peanut" ports
- 48cc "as-cast" combustion chamber

C. 88958667

Semi-Finished SB2.2 Design R0X Aluminum Cylinder Head

- Fully CNC-machined aluminum race head
- Has cast ports and combustion chambers for professional finishing
- Machined for 4.500" bore center R0X cylinder block P/N 25534453
- Special spread head-bolt pattern, 3/8" fasteners, 19 holes
- Machined with additional .070" material on deck face
- Valve centerlines moved apart .100" for additional valve clearance and larger valves
- Valve angles are 11° x 4° intake, and 7° x 2° exhaust
- Exhaust port positions are slightly reoriented, but same bolt pattern as standard SB2.2
- "As-cast peanut" intake ports
- "As-cast peanut" exhaust ports
- 28cc "as-cast" combustion chambers

! CYLINDER HEADS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Head Gaskets (Quantity)	Bolts (Quantity)	Spark Plug	Engine Application
93438649	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529, 19157995
93438648	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529
12558060	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	19157986	19258602, 19210009, 12499101, 12497317, 19210007, 19210008
12529093	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	19157986	19258602, 19210009, 12499101, 12497317, 19210007, 19210008
12464298	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	5614210	88958604, 1249772, 12496769
12556463	12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	5614210	24502609, 88958603, 19201331, 19201330
25534446	10105117 (2), 10185054 (2) OR 12363763 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12366573, 12496820, 12496822, 12496820



OVERHAUL GASKET KITS

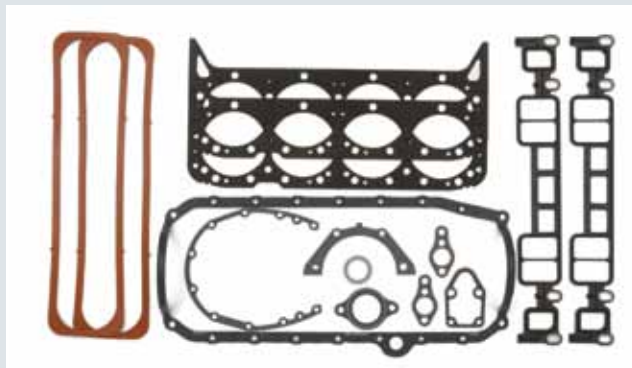
A. 19201171

Rebuild Gasket Kit

- Fits 350 HO and Circle Track engine P/N 88958602 and P/N 19258602

This kit includes the following items:

10105117	2	Head Gaskets
10108676	1	Oil Pan Gasket Set
12555771	1	Rear Main Seal Housing Gasket
89017465	1	Intake Manifold Gasket Set
10105135	1	Water Outlet Gasket
10108435	1	Front Cover Gasket
12560223	1	Fuel Pump Adapter Gasket
3754587	2	Water Pump Gaskets
10108445	1	Distributor Gasket
10046089	2	Valve Cover Gaskets
12554314	1	Crankshaft Rear Main Seal



A Rebuild Gasket Kit

B. 19201172

Rebuild Gasket Kit

- Fits Fast Burn 385, HT383 and Circle Track engine P/N 88958604

This kit includes the following items:

12557236	2	Head Gaskets
10108676	1	Oil Pan Gasket Set
12555771	1	Rear Main Seal Housing Gasket
89017465	1	Intake Manifold Gasket Set
10105135	1	Water Outlet Gasket
12560223	1	Fuel Pump Adapter Gasket
3754587	2	Water Pump Gaskets
10108445	1	Distributor Gasket
10046089	2	Valve Cover Gaskets
12554314	1	Crankshaft Rear Main Seal
10147994	1	Intake Gasket



B Rebuild Gasket Kit

CYLINDER HEAD GASKETS AND HEAD BOLTS

Chevrolet Performance cylinder head gaskets, cylinder head bolts and cylinder head studs are the finest-quality parts available. Their superior construction ensures optimum sealing between cylinder heads and the engine block.

Gasket packages contain one gasket unless otherwise specified. Head gaskets are available in a variety of materials and thicknesses. Use the proper gasket to maintain compression ratios and minimum piston-to-cylinder-head clearances.

C. 10105117

Composition Head Gasket

- Composition head gasket with stainless steel fire ring
- For stock or mildly modified engines with **4.000"** cylinder bores
- Fits cast-iron or aluminum heads
- Used on Ram Jet 350
- 0.028"** compressed thickness

3830711

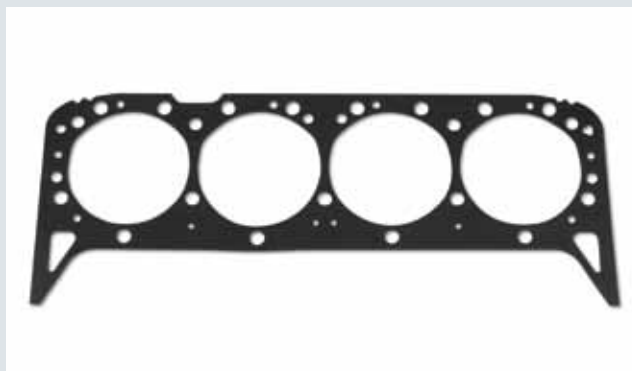
Steel Shim Head Gasket (not shown)

- For stock and mildly modified engines with **4.000"** cylinder bores
- 0.026"** compressed thickness

12557236

Composition Head Gasket (not shown)

- Stainless steel fire rings
- Fits aluminum or cast-iron heads
- Used on ZZ4 and 350 HO engines
- 0.051"** compressed thickness



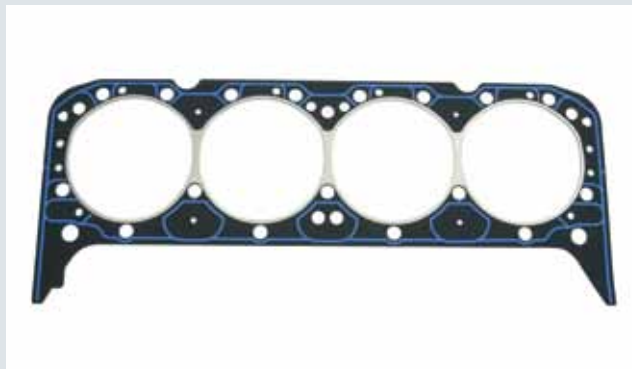
C Composition Head Gasket

D. 10185054

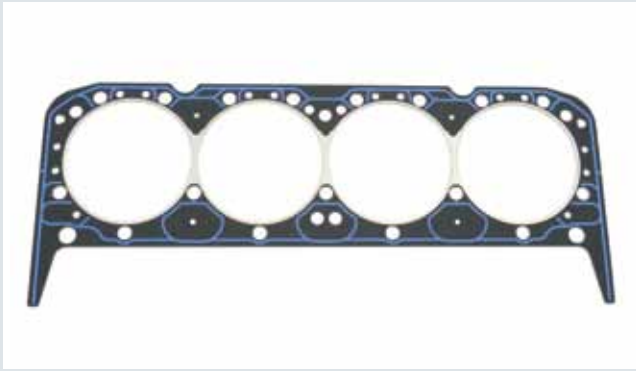
Heavy-Duty Composition Head Gasket

- Teflon-coated
- Pre-flattened wire O-rings around each cylinder
- For competition engines with cylinder bores of **4.000" to 4.125"**
- 0.041"** compressed thickness

NOTE: Drill steam holes when used on 400-ci Small-Blocks. Gasket does not require re-torquing.



D Heavy-Duty Composition Head Gasket



Special Competition Head Gasket **E**

E. 12363763

Special Competition Head Gasket

- Teflon-coated, heavy-duty composition gasket
- Pre-flattened steel fire rings and **4.200"** bore
- For Bowtie, 400 Small-Blocks, and aluminum blocks with cast-iron or aluminum heads
- Revised coolant hole pattern
- No steam holes for production 400 engines
- **0.038"** compressed thickness

NOTE: Gasket does not require re-torquing.

12553160

LT1 Head Gasket (not shown)

- Composition gasket for 1994-2001 iron head LT1 engines
- **0.028"** compressed thickness

10168457

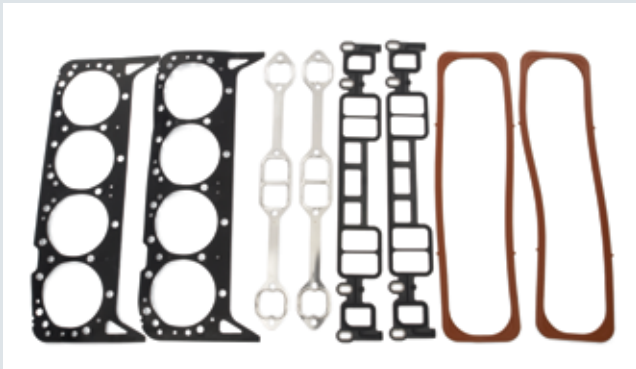
LT1 Head Gasket (Aluminum Head, not shown)

- Composition gasket for 1992-2001 aluminum head LT1 engines
- **0.050"** compressed thickness

F. 12499223

Cylinder Head Installation Kit (5.7L L31 Engine)

- Comprehensive kit
- Includes 2 cylinder head gaskets, 2 valve cover gaskets, 2 intake manifold gasket sets and 2 exhaust manifold gaskets
- **.028"** compressed thickness



Cylinder Head Installation Kit **F**

PART	DESCRIPTION	QTY
10105117	Cylinder Head Gaskets	2
10046089	Valve Cover Gaskets	2
89017465	Intake Manifold Gaskets	2
12550033	Exhaust Manifold Gaskets	2

HEAD BOLTS AND STUDS



Hardened Washer

14011040

Hardened Washer

- 0.450" I.D. x 0.778" O.D.
- Sold individually



Hardened Washer

10051155

Hardened Washer

- 0.450" I.D. x 0.750" O.D.
- Sold individually
- For Phase 6 and raised runner aluminum heads

14044866

Cylinder Head Stud Nut

- Magnafluxed 12-point 4037 steel 7/16"-20 nut
- Sold individually



Cylinder Head Stud Nut, 12 Point

12366569

Cylinder Head Nut Kit (not shown)

- Set of 16 magnafluxed 4037 steel 7/16"-20 12-point P/N 14044866 nuts for aftermarket head studs
- Complete for 1 cylinder head; order 2 per engine

585927

Cylinder Head Dowel Pin

- Dowel pin 5/16" diameter by 9/16" long
- For all Small-Block V-8 and 90° V-6 engines

12495499

Cylinder Head Bolt Kit

- For iron or aluminum heads
- Includes 14 of P/N, 10168525, 4 of P/N, 10168526, 16 of P/N 10168527, and thread sealant



Cylinder Head Dowel Pin



Cylinder Head Bolt Kit





SMALL-BLOCK VALVES

Part Number	Valve Size	Stem Size	Description
Intake Valves			
10241743	1.940"	11/32"	Stock replacement valve used in all of our crate engines except CT350/400, Fast Burn 385 and ZZ383/425
12555331	2.000"	11/32"	Stock replacement valve used in the 1996 LT4 engine, and in our CT350/400, Fast Burn 385 and ZZ383/425 also in LT4 and Fast Burn heads
12363757	2.000"	11/32"	Stainless-steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
Exhaust Valves			
12550909	1.500"	11/32"	Stock replacement valve used in all of our crate engines except CT350/400, Fast Burn 385 and ZZ383/425
12551313	1.550"	11/32"	Stock replacement valve used in the 1996 LT4 engine, and in our CT350/400, Fast Burn 385 and ZZ383/425; also in LT4 and Fast Burn heads

SMALL-BLOCK VALVE SPRINGS



Part Number	Spring Type	Outside Diameter	Pressure at Installed Height	Solid Height	Average Rate (lbs @ in)	Retainer Part Number	Valve Seal Kit	Technical Notes
94666580	Single w/damper	1.241"	80# @ 1.700"	1.150"	267	14003715	10132715	Production spring for 350/290 HP engines
10134358	Single w/damper	1.273"	110# @ 1.700"	1.160"	356	14003974	10132715	Chrome silicone steel; use with aluminum heads P/N 12556463; orange color code
330585	Dual	1.379"	140# @ 1.750"	1.150"	325		10132715	Use with cam P/N 3927140, and all moderate lift racing cams
10206040	Single spring	1.300"	85# @ 1.780"	1.260"	373	10168424	N/A	1992-1993 LT1 production Corvette engine
12551483	Single spring	1.320"	101# @ 1.780"	1.220"	332	10212808	N/A	1996 LT4 Corvette, Z24, CT350/400 and ZZ383 engines
12495494	Spring kit	1.320"	101# @ 1.780"	1.220"	332	10212808	N/A	Kit of 16 springs P/N 12551483 (see above)
10212811	Single spring	1.250"	80# @ 1.700"	1.200"	256	10241744	N/A	CT350/350, 350HO engines
19154761	Spring kit	1.250"	80# @ 1.700"	1.200"	256	10241744	N/A	Kit of 16 Springs P/N 10212811 (see above)

VALVE SPRING COMPONENTS

10212809

LT4 Valve Spring Shim (not shown)

- Lightweight shims as used on 1996 LT4 Corvette special LT service heads P/N 12363287, and Fast Burn heads
- Use with spring P/N 12551483

10185066

Spring Shim (not shown)

- Used on ZZ3 series 350 HO engines
- Spacer is 1.350" O.D. x 0.561" I.D. x .050" thick

3875916

Spring Shim (not shown)

- 55/64" I.D. x 1-31/64" O.D. x 0.015" thick

10212810

Valve Stem Seal (not shown)

- Used on LT4 and ZZ4 heads as well as Chevrolet Performance Parts head assemblies P/N 25534421, 25534431, 12363287 and 12464298.

12511890

Valve Stem Seal Kit (not shown)

- Late-model V-8 seal kit for 11/32" diameter valve stems
- Includes eight intake seals, eight exhaust seals and 16 oil stem seals

NOTE: Check for seal-to-guide interference with high-lift cams.

10241744

Valve Spring Retainer (not shown)

- Used on 350 HO, 350 Ram Jet and HT383

10045007

Valve Spring Retainer (not shown)

- For all ZZ3 series engines

NOTE: When converting ZZ3, ZZ1 or ZZ2 engines to ZZ3 series cap, valve spring shield must be removed and add cap P/N 10045007, seal P/N 460483, and spacer P/N 10185066.

19171528

LT4 Valve Spring Cap Kit (not shown)

- Kit for 5.7L LT4 engines
- Includes 16 P/N 10212808 lightweight retainers
- Use with spring kit P/N 12495494 and key kit P/N 12495503
- Used on ZZ4, Fast Burn, LT4 and iron Vortec Bowtie heads

19169661

Heavy Duty Vortec Valve Spring Retainer (not shown)

- Fits Fast Burn and Vortec Bowtie cylinder heads
- Designed for circle track racing

12495503

Valve Spring Key Kit (not shown)

- Kit includes 32 keys of P/N 24503856 for 11/32" valve stems
- Use on all Small-Block V-8 engines





Rocker Arm Kit, steel, 1.5 Ratio **A**



Roller Rocker Arm Set **B**



Roller Rocker Arm (top) with adjuster nut **B**



Rocker Arm (bottom) **B**



Adjuster Nut for Roller Rocker Arm **C**



"Kool Nut" **D**

ROCKER ARMS

A. 12495490

Rocker Arm Kit, Steel, 1.5 Ratio (set of 16)

- Self-aligning, high-quality rockers have a nominal 1.5:1 ratio
- Includes 16 stamped steel rockers with pivot balls and nuts
- Use P/N 10089648 for single service part; for 3/8" studs

NOTE: Not recommended for mechanical lifter camshafts.

Aluminum Roller Rocker Arm 3/8" Studs

These Chevrolet Performance aluminum roller rocker arms resemble the ones used in the 1996 Corvette LT4 engine, except the trunnions have been machined to fit early-model 3/8-inch rocker studs. The arms are self-aligning with improved stiffness. They will accommodate up to 0.575" valve lift. They are available in 1.5:1 and 1.6:1 ratios.

B. 12370838

Roller Rocker Arm Set, 1.5:1 Ratio

- Set of 16, 3/8" stud 1.5:1 ratio roller rockers
- Use P/N 19210724 for single service part

19210729

Roller Rocker Arm Set, 1.6:1 Ratio (not shown)

- Set of 16, 3/8" stud 1.6:1 ratio roller rockers
- Use P/N 12367346 for single service part

NOTE: When using a high-lift camshaft, check valve spring coil bind, retainer-to-seal clearance and piston-to-valve clearance. Check for adequate pushrod clearance when using on cast-iron heads. It may be necessary to remove valve cover drippers for proper rocker arm clearance.

NOTE: P/N 19210729 cannot be used on ZZ3 engines with orange valve springs.

C. 12367347

Adjuster Nut for Roller Rocker Arm

- 3/8" adjustment nut
- Used on both aluminum rocker arm kits P/N 12370838 and P/N 12370839

D. 88960518

"Kool Nut"

- Special rocker arm nuts are used on GM Circle Track engine P/N 19258602, 88958602
- Can be used with any stamped steel rocker arm

88961233

"Kool Nut" Rocker Arm Kit

- Contains 16 pieces



VALVE COVERS

People can't see the beautiful porting artistry inside your Chevrolet Performance aluminum cylinder heads, but they can, and do, see the valve covers. To make sure your GM engine looks as great as it runs, Chevrolet Performance offers a wide selection of precision-engineered, branded valve covers. The valve covers are either aluminum or stamped steel. They're designed to seal tightly and minimize the chance of oil leakage. Taller competition valve covers are made to easily clear high performance valvetrain components.

NOTE: Valve covers are sold in pairs unless otherwise specified. Valve covers cannot be used with 15° or 18° heads unless otherwise stated.

A. 10185064

Tall Aluminum Valve Covers

- Competition racing valve cover displays the Chevrolet name and Bowtie logo
- Natural cast finish
- No holes for PCV or oil fill, but has bosses for drilling them
- Designed for pre-1986 engines with perimeter hold downs
- Can be used with 15° and 18° heads
- Use P/N 10185052 for single service part

B. 12480127

Short Aluminum Valve Covers

- Cast-aluminum Chevy Bowtie-design valve cover is similar to P/N 10185064 except it is a short style with a PVC hole in both covers (grommets included)
- Natural cast finish
- Designed for pre-1986 engines with perimeter hold downs
- Covers have oil baffle
- Not to be used with the 350/290 crate engine

NOTE: For use with 1.5 ratio stamped rocker arms only.

C. 24502466

Tall Valve Covers, No Logo

- Create your own custom valve covers!
- Cast-aluminum valve cover is similar to P/N 10185064, but has no logo
- Cast with extra material to permit milling a custom logo

NOTE: Sold as single piece. Order 2 per engine.

D. 12341670

Chrome Short Valve Covers

- Short chrome valve covers, with baffle
- For use on pre-1986 engines with perimeter hold downs
- Chevrolet and the Bowtie logo are embossed on top

NOTE: For use with 1.5 ratio stamped rocker arms only.

E. 12497978

Polished Aluminum Valve Covers, Center Bolt Design

- Die-cast aluminum valve covers
- Polished to a bright shine
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980.



A Tall Aluminum Valve Covers



B Short Aluminum Valve Covers



C Tall Valve Covers, No Logo



D Chrome Short Valve Covers



E Polished Aluminum Valve Covers, Center Bolt Design



Aluminum Black Crinkle Valve Covers, Center Bolt Design **F**



Chrome-Finish Aluminum Valve Covers, Center Bolt Design **G**



Circle Track Valve Covers, Center Bolt Design **H**



Original Corvette V-8 Valve Covers **I**



Mid-Year Corvette Valve Covers **J**

F. 12497979 ⓘ

Aluminum Black Crinkle Valve Covers, Center Bolt Design

- Die-cast with black crinkle finish
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980.

G. 12497985 ⓘ

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

- Die-cast with chrome finish
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980 .

H. 25534359 ⓘ

Circle Track Valve Covers, Center Bolt Design

- Sheet metal valve cover kit designed for Gen I design circle track engines equipped with center hold-down cylinder heads
- Covers equipped with 2 breather pipes on 1 cover and no pipes on the other

NOTE: Use breather kit P/N 25534355 (2 come in kit).

I. 3726086

Original Corvette V-8 Valve Covers

- 1956-1959 V-8
- Off-set bolt holes will not fit newer V-8 heads

NOTE: Sold as single piece. Order 2 per engine.

J. Mid-Year Corvette Valve Covers

- These mid-year, finned Corvette valve covers are polished to a high luster

474207

- 1970-1977
- Has breather hole with Corvette "crossed flag" emblem

474208

- 1970-1977
- Has breather hole and an oil-filler cap provision
- Cap not included



Additional components required for installation. See page 220.



ADAPTERS, HARDWARE AND BREATHERS

A. 12497980

Chrome Bolt Kit, Center Bolt Design

- Service replacement parts for 1986-and-newer center hold-down design, die-cast aluminum valve covers in chrome, crinkle, and polished finishes
- Will not fit production valve covers

12356818

Chrome Hold-Down Bolt (not shown)

- Chrome valve cover hold-down bolt
- Used on all 1986-and-newer engines with center hold-down design stamped valve covers

NOTE: Package contains 1 bolt. Order 4 per valve cover.

12338092

Black Hold-Down Bolt (not shown)

- Black valve cover hold-down bolt
- Used on all 1986-and-newer engines with center hold-down design stamped valve covers

NOTE: Package contains 1 bolt. Order 4 per valve cover.

B. 88962074

Oil Baffle Tube

- Pushes easily into most valve covers that have an oil baffle
- Requires breather P/N 25534355; used on ZZ572 engines

C. 25534355

Circle Track Breather

- Special breathers are for circle track valve covers used on circle track and ZZ572 engines
- Chrome breathers are 1-3/8", hose-clamp-style with the Bowtie logo on top
- Installs on the left-side of each valve cover
- Kit includes two breathers



A Chrome Bolt Kit, Center Bolt Design



B Oil Baffle Tube



C CircleTrack Breather

⚠ VALVE COVERS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Gaskets (Qty)	Bolts (Qty)	Grommets (Qty)	Oil Fillers (Qty)	Engine Application
25534359	10046089 (2)	N/A	3989350 (1)	93439687 (1)	19258602, 88958603, 88958604
12497979	10046089 (2)	12497980 (8)	12341988 (8)	N/A	Small-Block
12497985	10046089 (2)	12497980 (8)	12341988 (8)	N/A	Small-Block
12497978	10046089 (2)	12497980 (8)	12341988 (8)	N/A	Small-Block



Push-In Oil Filler Cap **D**



Hold-Down Clamps **E**



Spring Bar Retainer **F**



Spring Bar Retainer, Chrome-Plated **G**

D. 12341993

Push-In Oil Filler Cap

- For valve covers with 1.22" hole

19131218

Chrome Push-In Breather (not shown)

- 2-3/4" O.D. x 1-1/2" tall with 3/4" nipple
- Used on our Fast Burn 385, ZZ4 and 350 engines

E. 12341986

Hold-Down Clamps

- Clamps to minimize distortion of valve cover flanges on 1955-1986 Chevrolet Small-Block V-8 and 90° V-6 engines
- 4 clamps per package; order 2 per engine

F. 14082321

Spring Bar Retainer

- Special steel retainers prevent oil leaks
- Use under the valve cover bolts
- Distribute clamping force over a large area and prevent deformation of the flanges
- Narrow retainers are engineered to fit pre-1986 engines with perimeter-style hold downs

NOTE: Package contains 1 retainer. Order 4 per valve cover.

G. 14044820

Spring Bar Retainer, Chrome-Plated

- Similar to retainer P/N 14082321 described above
- Chrome-plated to match chrome valve covers

NOTE: Package contains 1 retainer. Order 4 per valve cover.

3933964

Valve Cover Gasket (not shown)

- Cork-type gasket
- Fits all valve covers with perimeter hold-down bolts
- 1 gasket per package

10046089

Valve Cover Gasket (not shown)

- For '86 and newer center hold down design valve covers

10185043

Valve Cover Gasket, Splayed Valve Head (not shown)

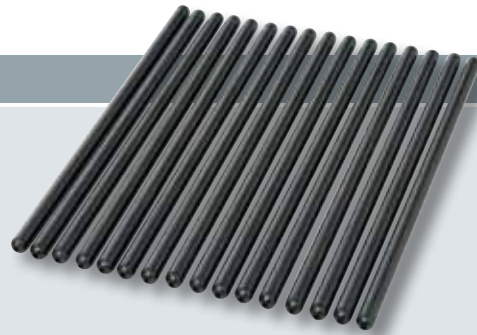
- Used with on splayed-valve V-8 cylinder head P/N 24502517
- Kit includes 2 gaskets



SMALL-BLOCK PUSHRODS

Pushrods are that critical connection between the camshaft and the rocker arms. These seemingly innocuous parts play a very important role in the combustion process. That's why Chevrolet Performance pushrods are designed for heavy-duty street and competition applications. They are case-hardened for use with pushrod guideplates.

Pushrods are available in standard and 0.100-inch extended lengths. The longer pushrods can be used to restore correct valvetrain geometry when using a high-lift camshaft with a small base circle. They are also recommended when longer-than-stock valves are installed.



Heavy-Duty Pushrod Kit (0.100" longer than stock)

Part Number	Material	Diameter	Length	Usage	Description
14044874	1010 steel	5/16"	7.724"	Flat tappet	(1) Heavy-duty heat-treated .075" wall, hardened tip inserts; standard length.
366277	1010 steel	5/16"	7.824"	Flat tappet	(1) Heavy-duty heat-treated .075" wall, hardened tip inserts. +.100 long
10046173	1010 steel	5/16"	7.122"	Hyd. roller	(1) Heavy-duty heat-treated .060" wall, standard length; for use in early ZZ-series engines with guideplates
12371041	1010 steel	5/16"	7.122"	Hyd. roller	(16) Heavy-duty .060" wall, standard length; for use in 2nd design ZZ-series engines without guideplates Use P/N 10241740 for single piece
10241740	1010 steel	5/16"	7.122"	Hyd. roller	(1) Heavy-duty .060" wall, standard length; for use in 2nd design ZZ-series engines without guideplates

SMALL-BLOCK GUIDEPLATES

Part Number	Description	Technical Notes
3973418	Pushrod guideplate (cast-iron head)	For use with production and Bowtie cast-iron cylinder heads with screw-in studs. Can also be used with aluminum Bowtie V-6 head. Should not be used with self-aligning rockers. Pushrod slots are 0.325". For 90° V-6, use on cylinders 1, 2, 5 and 6; guideplate must be ground to clear valve cover hold-down bolts. Four required per head.
14011051	Pushrod guideplate (aluminum Bowtie head)	Hardened steel guideplate has the correct pushrod spacing for aluminum Bowtie heads. Should not be used with self-aligning rockers. Pushrod slots are 0.365". Four required per head.

ROCKER ARM STUDS

3921912

Screw-In Rocker Stud (7/16"; Big-Block style) (not shown)

- Beefy 7/16" Big-Block V-8 rocker studs
- Improve valvetrain stability of any Small-Block V-8 or 90° V-6 racing engine by minimizing rocker stud flex
- Fits any Small-Block V-8 or 90° V-6 cylinder head machined for screw-in studs
- Requires rocker arm for 7/16" stud

12371058

Screw-In Rocker Stud Kit (LT1, LT4 style)

- 3/8" studs are used on all late-model LT1, LT4
- Kit includes 16 pieces; for single stud usage, use P/N 12552126
- Lower thread section is 7/16-14



VALVE LIFTERS AND COMPONENTS



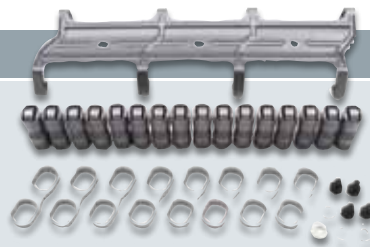
Valve Lifter Guide, "Quick Cam"

88958652

Valve Lifter Guide, "Quick Cam"

- For use on Gen I GM Small-Blocks (block must be drilled and tapped)
- For use with hydraulic roller lifters only
- Makes it possible to remove the camshaft without removing the intake and lifters
- Enough friction in the guide to hold the lifters in place if the rocker arms are backed off and the camshaft is rotated two full revolutions to push up the lifters

NOTE: Package services one lifter bank.



12371042

Hydraulic Roller Lifter Kit

- Designed for 1986-and-later engines
- Second-design lifters are used in late-model 350 HO engines and use a higher checkball spring preload
- Includes 16 lifters of P/N 17120735, 8 valve lifter guides, 1 valve lifter guide retainer, 4 retainer bolts, and 4 retainer washers
- This lifter kit plus pushrod kit P/N 12371041 and a roller-tappet design camshaft converts your engine to a roller-lifter engine
- For single lifter usage, use P/N 17120735



Hydraulic Roller Lifter



Flat Tappet Lifter

12371044

Hydraulic Lifter Kit (set of 16)

- Used on 1986-and-older Gen I- and Gen II-style engines
- Kit includes 16 hydraulic flat tappet lifters of P/N 5232720, and is designed for use with standard-length pushrod kit P/N 12495491 or 0.100" longer kit P/N 12371057
- Use P/N 5232720 for single lifter pieces





SMALL-BLOCK CAMSHAFTS AND COMPONENTS

A great deal of exacting engineering, extensive development/testing, and precision manufacturing practices go into every Chevrolet Performance camshaft. In many ways, the camshaft can be considered the heart of a high-performance engine. This vital function is why Chevrolet Performance puts so much effort into making sure its camshafts deliver maximum power and drivability.



NOTE: IMPORTANT! Distributor with melonized steel gear **MUST** be used with steel camshafts or engine damage will occur.

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in) w/1.5 rocker	Lobe Centerline (deg)	Technical Notes
3896962	Hydraulic flat tappet	I: 222 E: 222	I: .450 E: .460	114	Used in 350/290 HP crate engine
24502476	Hydraulic flat tappet	I: 212 E: 222	I: .435 E: .460	112.5	Used in 350 HO and CT350 engines
14097395	Hydraulic roller design	I: 196 E: 206	I: .431 E: .451	109	For the HT383 truck engine with 1.5 rockers
10185071	Hydraulic roller tappet	I: 208 E: 221	I: .474 E: .510	112	For ZZ3, 350 HO, ZZ4, Fast Burn 385 engines; use with spring P/N 10134358 or 12551483
24502586 (1.5 rocker)	Hydraulic roller (LT4 hot cam)	I: 218 E: 228	1.5 rocker I: .492 E: .492	112	Service only; for all V-8 engines with roller cams. (See note below chart)
24502586 (1.6 rocker)	Hydraulic roller (LT4 hot cam)	I: 218 E: 228	1.6 rocker I: .525 E: .525	112	Service only; for all V-8 engines with roller cams. (See note below chart)
12480002 (1.6 rocker)	Hydraulic roller (LT4 hot cam kit)	I: 218 E: 228	1.6 rocker I: .525 E: .525	112	Same as P/N 24502586 except this is a kit that includes aluminum rockers, valve springs, and retainers
19210723	Hydraulic roller design	I: 222 E: 230	I: .509 E: .528	112	Off-highway use only; contains eccentric for mechanical fuel pump
19244485	Hydraulic roller design	I: 234 E: 242	I: .539 E: .558	112	Off-highway use only; contains eccentric for mechanical fuel pump

The LT4 camshaft P/N 24502586 was designed to be used in many different engines. The following change may be necessary for correct engine assembly: For LT1 and L98 engines (pre-1996) the dowel pin in the end of the camshaft must be pushed in so extension from end of cam is .30" +/- .01". For 1996 LT1 and LT4 engines, the dowel pin is in the correct position extending .620" from the end of the camshaft. This cam has a fuel pump lobe.

Camshaft Kits, Retainers and Rear Cover Kits



350 Hot Cam Kit

12480002**350 Hot Cam Kit**

- Off-highway kit converts production LT1 engine for showroom stock racing
- Improves Small-Block originally equipped with roller tappet camshaft
- Significant horsepower gains
- For roller blocks only
- Includes: 1 P/N 24502586 Camshaft, 16 P/N 19210729 Roller Rocker Arms Kit, 16 P/N 12551483 Valve Springs, P/N 19169661 16 Valve Caps, 16 P/N 10212808, 16 P/N 19210729 Valve Keys, 16 P/N 10212809 Valve Spring Shims, lifters are not included.



Camshaft Retainer



Camshaft Rear Cover Kit

12499229**5.7L Vortec Camshaft Install Kit (not shown)**

- Convenient, inclusive kit
- Includes 2 water pump gaskets, intake manifold gasket set, 2 valve cover gaskets, a distributor gasket and a front crankshaft seal assembly

10088128**Camshaft Retainer**

- First design with 3.620" bolt center as used on ZZZ, ZZ1 and ZZ2 engines

10168501**Camshaft Retainer (not shown)**

- Second design with 3.294" bolt center as used on ZZ3 and ZZ4 engines

24502459**Camshaft Rear Cover Kit**

- Cover and O-ring gasket for sealing rear camshaft hole on all "CNC" aluminum and iron blocks
- Includes bolts



CONNECTING RODS AND COMPONENTS

A. 12495071

Connecting Rod Kit

- High-quality, 5.700" powdered metal (PM) connecting rods
- For competition or street applications below 500 horsepower
- Replaces the old "pink rods" and are the same rods used in LT1 and LT4 Corvette engines
- Includes 8 P/N 10108688 rods, available individually

17803091

383 Connecting Rod Kit, 2nd Design (not shown)

- 383-cubic-inch engines
- Notched to clear camshaft in most stroked Small-Block applications
 - **Second design, with chamfer**
 - Standard .927" pin and 2.100" rod journal
 - Cap held on by stud and nut, not standard type bolt
 - Good to 550 horsepower
 - Use P/N 17803091 for single service part

B. 17800761

Connecting Rod Bearing Kit, 383 Engine (standard)

- 8 heavy-duty bearings
- Second design, without chamfer
- For all 383-cubic-inch engines

C. 12491166

Connecting Rod Stud and Nut Kit, 383 Engine

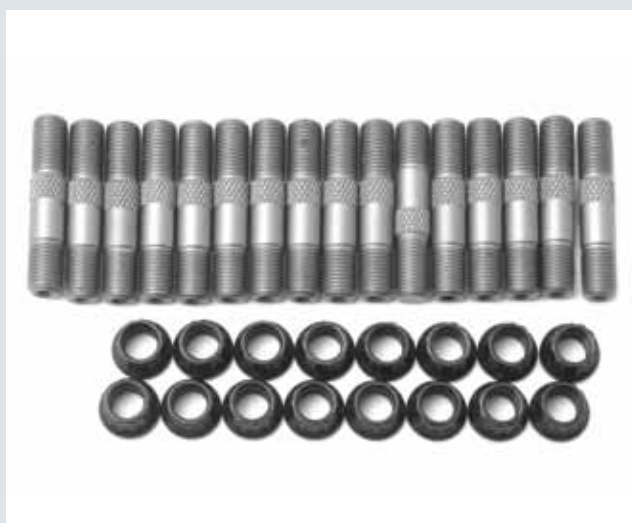
- Studs and 12-point nuts (16 each) for all 383-cubic-inch engines
- Use with connecting rod P/N 12497624



A Connecting Rod Kit



B Connecting Rod Bearing Kit, 383 Engine



C Connecting Rod Stud and Nut Kit, 383 Engine



PISTONS AND PISTON RINGS

Compressing the air/fuel mixture and dealing with the explosive forces inside an engine's cylinders isn't a job for weak parts. That's why Chevrolet Performance pistons are premium quality and factory-tested to withstand the rigors of high-performance street and competition engines. Chevrolet Performance pistons are available in a variety of compression ratios and bore sizes. They're sold individually, unless otherwise specified, and wrist pins are included.



Pistons

Part Number	Engine Size	Compression Ratio	Head Chamber Volume	Size	Pin Type	Technical Notes
93422884	350	8.5:1	76cc	Standard	Pressed	350/290 HP
10159436	350	10:1	58cc	Standard	Pressed	5.7L HO, ZZ4 and LT1; high silicon aluminum
12514101	350	9.1:1	64cc	Standard	Pressed	350-cid 300 hp and 330 hp service engine with "SP" ID
88962542	383	9.1:1 9.7:1	64cc* 62cc*	Standard	Pressed	383 engine, first or second design
88962748	383	9.1:1 9.7:1	64cc* 62cc*	+0.005	Pressed	383 engine, second design
88962749	383	9.1:1 9.7:1	64cc* 62cc*	+0.030	Pressed	383 engine, first or second design
12499103	383	9.1:1 9.7:1	64cc* 62cc*	+0.005	Pressed	Kit containing 8 of P/N 88962748 (383 engine, second design)
12499104	383	9.1:1 9.7:1	64cc* 62cc*	+0.030	Pressed	Kit containing 8 of P/N 88962749 (383 engine, second design)

*Compression ratio based on .028" thick head gasket.

Piston Rings

Part Number	Bore Size	Oversize	Ring Thicknesses	Description
12528817	4.000"	Standard	—	Low tension rings for ZZ4, LT1, and LT4 engines
12499135	4.000"	Standard	—	Premium quality standard-size rings for 1st design 383 engines
12499136	4.000"	+0.030"	—	Premium quality rings for 383 engines
12499107	4.000"	+0.005"	—	Set of 8 ring packs
12499231	4.000"	Standard	—	Set of 8 ring packs of P/N 12528817



BUILDER'S TIP

Cast vs. Forged – Picking the Right Pistons

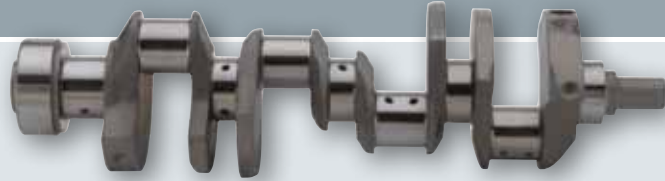
It's the classic engine builder's dilemma: cast or forged pistons? Conventional wisdom holds that forged aluminum pistons are hands-down the stronger option. And while it's true they are generally stronger than hypereutectic cast aluminum pistons, it's not to say cast pistons are weak. In fact, modern hypereutectic pistons are made with higher silicon content and offer exceptional strength, as well as thermal properties that

generally make them quieter. When determining which piston material to use on your project, a good rule of thumb is this: go forged if the engine is targeted at more than 550 horsepower and/or uses a power-adder, such as a supercharger, turbo or nitrous. Otherwise, save a little money and use the sturdy, modern hypereutectic pistons.



CRANKSHAFTS

A crankshaft is that massive piece of convoluted steel that holds the whole engine together. An engine is essentially a pump, and without a strong crankshaft, the pump won't work. Chevrolet Performance puts the same top-quality engineering and manufacturing processes into its crankshafts as it does all its parts. These crankshafts are the same ones used in Chevrolet Performance crate engines. The crankshafts are available in cast-iron and forged steel. Forged crankshafts should be used for higher-horsepower applications.



Crankshaft, 383-Cubic-Inch Forged Steel

14088526

Crankshaft, Cast-iron (not shown)

- Nodular cast-iron with 3.480" stroke and 2.100" diameter rod journals
- 1-piece rear main seal crankshaft for 300- and 330-horsepower engines

NOTE: This crank does not have a pilot bearing.

12556307

Crankshaft, Forged Steel (used in late-style ZZ4 engine; not shown)

- Forged 1053 steel crankshaft used in post-November 1998 ZZ4 engines
- Replaces all cast or steel ZZ4 crankshafts

NOTE: Must be used with connecting rod P/N 10108688 and piston P/N 10159436.

12489436

Crankshaft, 383-Cubic-Inch Forged Steel

- Forged 4340 steel crankshaft used to create 383-cubic-inch engines with 3.800" stroke
- Rod journals are 2.100"
- Mains are standard 350 size

NOTE: Should be used with connecting rods P/N 19169670, bearing kit P/N 17800761, standard pistons P/N 88962748 or 0.030" oversize pistons P/N 88962749, balancer P/N 12498008, and 1986-and-later one-piece crank seal design flywheel or flexplate.

14061685

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications

BALANCERS AND PULLEYS

Balancers are relatively small parts that play a big role in how smooth an engine runs. Balancers are also known as torsional dampers or harmonic balancers, which is indicative of how they help control unwanted crankshaft vibrations. By controlling vibrations, Chevrolet Performance balancers help engines run smoothly, which also extends engine life.



383 Crate Engine Balancer with 1-Piece Crank Seal (P/N 12498008)



Racing Balancer (P/N 24502534 and 24502535)

Small-Block Balancers

Part Number	Engine Application	Outside Diameter	Technical Notes
12551537	1969-up 305 and 350; 90° V-6 competition	6.750"	Smaller size for limited clearance. Timing mark is 10 degrees before keyway centerline. Use with timing pointer P/N 3991435
88960604	1970-74 350; ZZ4 crate engine	8"	Cast-iron. Inertia ring is 1-11/16" wide. Use with timing pointer P/N 3991436. For externally balanced engines
12498008	383 crate engine with 1-piece crank seal	8"	Use with 383 engine components and crankshaft P/N 12489436. For externally balanced engines. Counter weight can be removed for neutral balance
24502534	All racing Accepts standard pulleys	7.074"	NASCAR-approved and specially tuned up to 9000 rpm. Uses standard crank hub diameter
24502535	All racing	7.074"	NASCAR-approved and specially tuned. Use with large-diameter 1.598" crankshaft hub

Pulleys and Bolts

3858533

Crankshaft Pulley, 6-5/8" (not shown)

- Two-groove, high-rpm, 6-5/8" pulley
- For engines with short water pump

NOTE: Can be used with a water pump pulley and belt P/N 9433722 without an idler pulley or alternator.

9440024

Crankshaft Bolt (not shown)

- Positive retention 7/16"-20 x 2-1/4" bolt for engines with tapped crank snouts
- Use with washer P/N 14001829





FLYWHEELS AND FLEXPATES

At the opposite end of the crankshaft from the balancer are flywheels and flexplates, which connect the engine to either manual (flywheels) or automatic (flexplates) transmissions. Chevrolet Performance offers both internally and externally balanced flywheels and flexplates. It is critical that you use the correct design for your engine application.

NOTE: IMPORTANT! All Chevy Small-Block and Big-Block engines with one-piece crankshaft seal require an externally balanced flywheel or flexplate.



Lightweight Flywheel, 1986-up



Standard-Weight Flywheel, 1986-up



12-3/4" Flexplate



14" Flexplate

Small-Block Flywheels

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Clutch Diameter	Starter Ring Gear Teeth	Technical Notes
14085720	1955-1985	12.750"	3.580"	10.400"	153	For 2-piece crank seal. Lightweight nodular iron; weighs approximately 15 pounds
3991469	1955-1985	14"	3.580"	10.400"; 11.000"	168	For 2-piece crank seal
14088646	1986-up	12.750"	3.000"	10.000"	153	For 1-piece crank seal. Lightweight nodular iron; weighs approximately 17 pounds
14088650	1986-up	12.750"	3.000"	10.400"	153	Standard-weight flywheel for 1-piece crank seal
14088648	1986-up	14"	3.000"	11.000"; 11.850"	168	For 1-piece crank seal

Small-Block Flexplates

471598	1970-1985	14"	3.580"	10.750"; 11.500"	168	For internally balanced engine with 2-piece crank seal
471529	1969-1985	12.750"	3.580"	9.750"; 10.750"	153	For internally balanced engine with 2-piece crank seal
14088765	1986-up	12.750"	3.000"	10.750"	153	For externally balanced 1-piece crank seal
12554824	1986-up	14"	3.000"	11.500"	168	Heavy-duty flexplate with increased thickness for 1-piece crank seal, externally balanced
14088761	1986-up	14"	3.000"	10.750"; 11.500"	168	For 1-piece crank seal, externally balanced

Bolts

12337973

Flywheel Bolt (not shown)

- Fits all Chevy Small-Block V-8, Big-Block V-8 and 90° V-6 engines
- Sold individually; 6 required per engine

3727207

Flexplate Bolt (not shown)

- Fits all Chevy Small-Block V-8, Big-Block V-8 and 90° V-6 engines
- Sold individually; 6 required per engine



BUILDER'S TIP

Small-Block Oil Pump Overkill

Over the years, many engine builders have employed Big-Block oil pumps on high-performance Small-Blocks. Unless you're building a dedicated racing engine, that's not necessarily a great idea. There are advantages to the Big-Block pump, but with its 3/4-inch pickup tube, it's very easy to suck all the oil out of a standard-

capacity Small-Block oil pan, starving the engine at higher rpm. For most street/strip combinations, a Small-Block pump with the standard 5/8-inch pickup tube is adequate. If you're going to try the Big-Block pump, make sure to use a large-capacity pan and don't let the oil level get low!



TIMING CHAINS AND SPROCKETS

The timing chain connects the crankshaft to the camshaft and ensures those two key components work in a synchronized manner. Chevrolet Performance's strong, accurate timing chains and sprockets provide top performance and dependable service.

A. 12371043

Single Roller Timing Chain Kit

- Performance kit for all 1987-and-newer engines with roller lifter camshaft, except LT1, LT4 and LS-Series
- Includes chain P/N 14088783, crank sprocket P/N 14088784, cam sprocket P/N 12552129, retainers and bolts

NOTE: Will not work with flat tappet camshafts or LT1 and LT4 engines.

B. 12370835

Extreme-Duty Timing Chain Kit, LT1 and LT4 Engines

- Performance upgrade, extreme-duty timing chain kit for 1995-and-newer LT1 and LT4 engines
- Includes roller timing chain P/N 14088783, crankshaft sprocket P/N 14088784, camshaft sprocket P/N 10214880 and water pump gear P/N 12551728
- Use with pin drive camshaft only

NOTE: To convert 1993 and 1994 engines, use camshaft P/N 12551705, distributor P/N 1104032, timing cover P/N 12552426, vacuum harness P/N 12555323, and vacuum fitting P/N 14082470.

14088783

Roller Timing Chain (not shown)

- Heavy-duty, single-roller chain for ZZ-design 350 HO engine
- Use with crank sprocket P/N 14088784 and cam sprocket P/N 12552129

14088784

Crankshaft Sprocket (not shown)

- Single-roller-type for ZZ-design 350 HO engine

12552129

Camshaft Sprocket (not shown)

- Single-roller-type for ZZ-design 350 HO engine

C. 9424877

Camshaft Bolt

- 5/16"-18 x 0.750" bolt

12554553

Camshaft Dowel Pin (not shown)

12555887

LT4 Timing Chain (not shown)

- Quiet roller design for all LT4 engines
- Use with crank sprocket P/N 12555886 and cam sprocket P/N 12555885

D. 12367600

LT1/LT4 Front Cover Plug

- Covers the hole on the front cover of a 1996 LT4 engine when original distributor is removed and replaced with rear-mounted distributor
- Must be used with 1995 to 1997 timing covers. Will not fit the earlier covers that had non-vented opti-spark units



A Single Roller Timing Chain Kit



B Extreme Duty Timing Chain Kit, LT1 and LT4 Engines



C Camshaft Bolt



D LT4 Front Cover Plug



WATER PUMPS, PULLEYS AND COMPONENTS

E. 88894341

Water Pump, Long-Style

- Late-style cast-iron pump with long mounting legs, reinforced snout and 3/4" diameter shaft
- End of shaft is reduced to 5/8" diameter
- Use with 350 HO, 383 and ZZ4 engines



Water Pump, Long-Style **E**

F. 19168604

Aluminum Water Pump, Short-Style

- Saves weight over comparable iron pump
- Casting has short-style mounting legs used on pre-1982 Corvettes
- Pump has reinforced 3/4" diameter snout and a large hub with dual bolt patterns

NOTE: Pump housing has a boss which can be drilled and tapped for a cam stop. Can be used with the ZZ4 engine with composite front timing cover by exchanging the bolts that hold the rear sheet metal plate to the pump with pan-head bolts P/N 14010976 or equivalent aftermarket bolts.

NOTE: Cam stop boss may interfere on engines with 8" dampener. Some clearancing may be required.



Aluminum Water Pump, Short-Style **F**

25534390

R0X Water Pump Housing with Cassette (not shown)

- Housing bolts directly to the block
- Block openings are spread to 9.400"
- Standard front inlet and outlet openings
- Includes Water Pump Cassette P/N 25534391

G. 3942992

Water Pump Pulley

- Fits 1971-and-newer and short-leg water pumps with large hubs

NOTE: Must be modified to fit water pump with 3/4" shaft.



Water Pump Pulley **G**

H. 3720616

Water Pump Pulley Reinforcement

- Increases stiffness of water pump pulley
- Use with pulley P/N 3942992



Water Pump Pulley Reinforcement **H**



ACCESSORY DRIVE SYSTEM

A. 12497698

Serpentine Accessory Drive System (with Air Conditioning)

- Fits Gen I-style engines
- Deluxe kit includes all the components and hardware necessary to install on an engine with air conditioning, including water pump, alternator, power steering pump and idler bracket; belt included

The system includes:

10055800	Secondary Air Injector Pump Bracket
1134344	Air Compressor Assembly (CR4)
10129569	Idler Belt Pulley Bracket
88894005	Water Pump Kit
10055880	Water Pump Pulley
10055879	Crankshaft Pulley
10463172	Alternator Assembly – 105 AMP (reman)
12117361	Alternator Connector (with lead)
10055798	Drive Belt Tensioner Assembly
10085752	Belt (fan, water pump, A/C, power steering pump, and alternator)
10105212	Alternator and Power Steering Bracket
88985115	Power Steering Pump (reman)
14102096	Power Steering Pulley

12497697

Serpentine Accessory Drive System (without Air Conditioning, not shown)

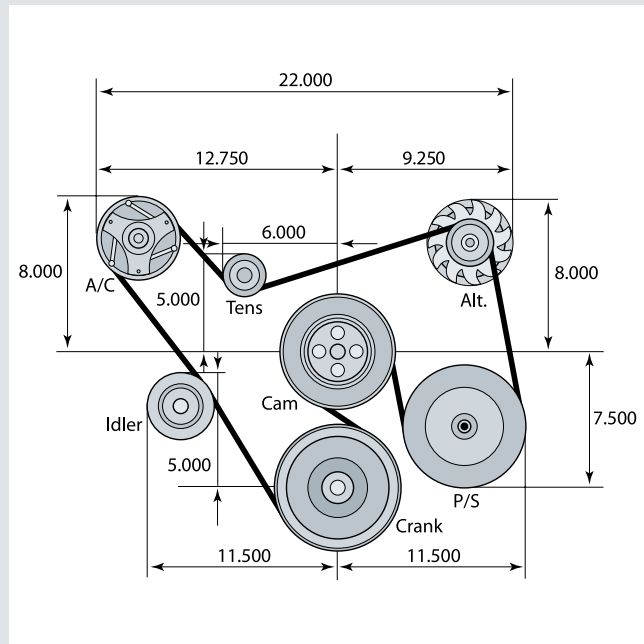
- Fits Gen I-style engines
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The system includes:

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10055880	Water Pump Pulley
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12117361	Alternator Connector (with lead)
10055798	Drive Belt Tensioner Assembly
10085752	Belt (fan, water pump, power steering pump, and alternator)
10105212	Alternator and Power Steering Bracket
88985115	Power Steering Pump (reman)
14102096	Power Steering Pump Pulley



A Serpentine Accessory Drive System (with air conditioning)



A Serpentine Accessory Drive System (with air conditioning)

Oil Pan, 1986-1992 F-car and ZZ4 **B**Oil Pan, Z28-Style **C**CircleTrack "Late Model" Oil Pan **D**Windage Tray **E**Windage Tray **F****OIL PANS, OIL PUMPS, GASKETS AND COMPONENTS**

Oil is your engine's lifeblood and a high-quality Chevrolet Performance oil pan keeps it where it belongs. Our properly designed and manufactured oil pans fit right and, along with matching gaskets, prevent leaks for years of trouble-free service. Chevrolet Performance has oil pans for street and competition applications.

(Oil pans are sold without dipsticks or other hardware unless otherwise specified.)

It's important to note that Chevrolet V-8 and V-6 engines were redesigned in 1986 to include a one-piece rear main seal. That change required a correspondingly new oil pan design. For pre-1986 engines, there is a newer one-piece pan gasket available. Oil pans and gaskets are not interchangeable between early and late design engines. Blocks that have been machined for a one-piece rear main seal require seal adapter P/N 10051118 and must use the newer-style oil pan and gasket.

B. 12557558**Oil Pan, 1986-1992 F-Car and ZZ4**

- Four-quart pan used on ZZ4 crate engines and 1986-92 Camaro and Firebird
- Internal baffling and right-hand dipstick
- Designed for 1-piece rear main and 1-piece oil pan gasket
- Fits with crankshaft seal adapter P/N 10051118

NOTE: Use with oil pan rail reinforcement P/N 12553058 (LH) and 12553059 (RH).

C. 360450**Oil Pan, Z28-Style (2-Piece Rear Main Seal)**

- Four-quart oil pan fits 1970-79 Camaro and 1979 Corvette
- Internal baffling and a left-hand dipstick
- Use with 2-piece rear main seal on 1955-1979 blocks
- Requires gasket P/N 14079399

25534353**CircleTrack "Factory Stock" Oil Pan (not shown)**

- Special black-powder-coated 8-quart circle track pan is used in the Circle Track engine P/N 19258602
- 8" sump has a single 3.5" kickout on the right-hand side
- Includes a fully louvered windage tray, oil scraper, three trap doors, oil level plug, and 3/4" oil pick-up tube
- 8" deep

D. 25534354**CircleTrack "Late-Model" Oil Pan**

- Special black-powder-coated, 8-quart circle track pan is used in the factory stock engines P/N 88958603 and P/N 88958604
- 7" sump has a 3.500" kickout on both sides
- Includes a fully louvered windage tray, three crankshaft scrapers, six trap doors, two runners, an oil temperature fitting provision, oil level plug, and 5/8" oil pick-up tube
- 7" deep
- Oil pickup tube available separately P/N 19171997

10108676**Oil Pan Gasket, 1-Piece Rear Main Seal (not shown)**

- Neoprene 1-piece gasket for 1986-and-newer engines

E. 3927136**Windage Tray**

- Separates the oil in the pan sump from the rotating crank assembly to reduce aeration of the oil
- Aids in oil control and minimizes oil slosh under hard braking
- Use with oil pan P/N 360450

NOTE: Requires five mounting studs P/N 14087508 for 1968-and-later blocks. Use mounting studs P/N 3872718 with pre-1968 blocks. On 400-cubic-inch Small-Blocks the baffle requires modifying by elongating mounting holes. Check tray clearance with long-stroke crankshafts and/or non-stock connecting rods.

F. 12554816**Windage Tray**

- Flat oil pan baffle used with 1986-1996 Corvette pan P/N 10055765
- For 1968-and-newer blocks, use five mounting studs P/N 14087508
- For pre-1968 blocks, use studs P/N 3872718



Oil Pans, Gaskets and Accessories Continued

1255884

Oil Pump, High-Pressure LT1/LT4-Style (not shown)

- Production-style high-pressure 1993-1997 LT1/LT4 oil pump with 1.200" gears
- Produces 60-70-psi oil pressure; screen not included

A. 14044872

Oil Pump, High Volume

- High-volume pump has 1.500" gears for increased volume
- Approximately 25 percent more capacity than a production pump at standard pressure; pick-up not included

10046007

Oil Pump Bolt (not shown)

- Fits all models, 7/16"-14 x 2 3/8"

3998287

Oil Pump Shaft (not shown)

- Fits all 1959-and-newer engines

3764554

Oil Pump Shaft Retainer (not shown)

- Fits all 1959-and-newer engines
- Use with oil pump shaft P/N 3998287

3848911

Oil Pump Spring (not shown)

- Regulates oil pressure at approximately 70 psi
- Use with high-volume pump, P/N 1255884

NOTE: Minimum recommended oil pressure for off-highway use is 65 psi at engine operating speed.

B. 3952301

Oil Filter Adapter

- Mounts a spin-on cartridge for Gen I and II Small-Block V-8s
- Contains a filter bypass valve and requires two attaching bolts, P/N 3951644

24241872

Magnetic Drain Plug (not shown)

- Catches and holds small pieces of metal before they can cause engine damage

DISTRIBUTORS AND IGNITION SYSTEM

C. 93440806

HEI Distributor

- A must for steel roller cams
- Has ignition advance curve for high-performance applications
- Comes with melonized steel gear P/N 19052845

D. 88961867

Distributor, Billet HEI

- Most powerful and durable distributor for Small- or Big-Block Chevrolet engines
- Oversized shaft is guided by a sealed ball bearing and long sintered bushing
- Treated coating on the shaft provides low friction
- Advance assembly features chrome-moly weights that slide on nylon pads for smooth timing advancement through the entire rpm range
- Also included are vacuum advance canister and billet aluminum housing that is CNC-machined for greater accuracy
- High quality cap with brass terminals

10456413

Distributor Gear, Melonized Iron (not shown)

- Melonized iron gear is required for all crate engines and steel roller camshafts

NOTE: This gear is part of distributor assembly P/N 93440806.



A Oil Pump, High Volume



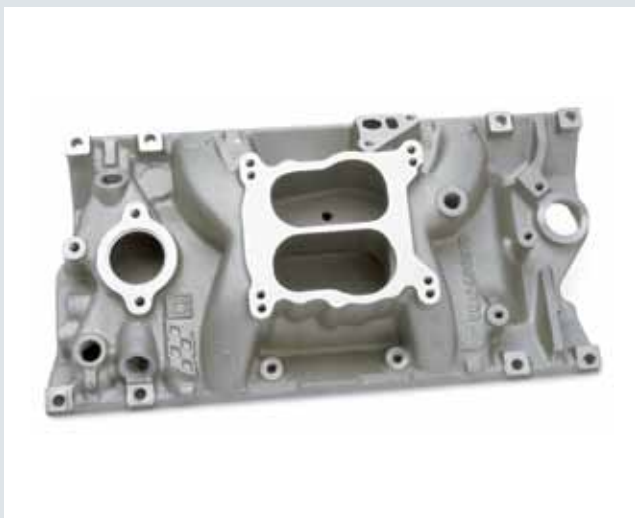
B Oil Filter Adapter



C HEI Distributor



D Billet HEI Distributor

Intake Manifold, ZZ Series **E**Intake Manifold, Vortec Head Design **F**Intake Manifold, Vortec Head Design
(Dual Pattern Carb Mount) **G**

INTAKE MANIFOLDS, GASKETS AND COMPONENTS

Intake manifolds distribute the air/fuel mixture to the appropriate cylinders. Intake manifold design is geared toward the end usage, whether that is a street performance engine or an all-out competition application. The wide range of Chevrolet Performance intake manifolds means there is an ideal manifold for your every need. There are cast-iron and aluminum intake manifolds for carbureted and fuel injected applications. Chevrolet Performance intake manifolds were designed specifically for GM engines, so you know they will deliver O.E. performance.

E. 10185063

Intake Manifold, ZZ Series

- Aluminum manifold used on all ZZ series 350 HO engines
- Can be used on all Small-Blocks through 1986
- Dual-pattern carburetor flange is approximately 1/2" lower than the 1970 LT1 intake, yet produces the same horsepower
- Provisions for all late-model accessory brackets, EGR, and an integral hot-air choke
- A heat shield can be mounted underneath for improved performance

F. 12366573

Intake Manifold, Vortec Head Design

- Designed for 283-400-cubic-inch engines using Vortec cylinder heads P/N 12529093, P/N 12558060, P/N 12497186, P/N 12464298, P/N 25534421, or P/N 25534446
- Has 4-bolts per side to attach it to these cylinder heads
- Aluminum high-rise design maximizes horsepower and delivers a broad torque curve
- Accepts a square-bore 4150-style carburetor and includes externally plumbed hot water crossover passage
- Use manifold gasket P/N 89017465 and eight attachment bolts, P/N 12550027

NOTE: Vortec heads were originally released on 1996-1999 truck engines. Check for hood clearance, especially with Corvette.

G. 12496820

Intake Manifold, Vortec Head Design (Dual Pattern Carb Mount)

- This dual-bolt-pattern aluminum manifold will work with all Vortec cylinder heads P/N 12529093, P/N 12558060, P/N 12497186, P/N 12464298, P/N 25534421, or P/N 25534446
- Will accept Holley or Quadrajets-style carburetors
- Will accept an EGR valve, P/N 17052693
- To block EGR port, use P/N 12556596
- Requires intake manifold gasket P/N 89017465 and 8 special manifold bolts, P/N 12550027



Additional components required for installation. See page 237.



Intake Manifolds, Gaskets and Components Continued

A. 12496821 ⓘ

Intake Manifold, Vortec Head Design for TBI

- Designed for throttle-body fuel injection
- Aluminum intake will work with all Vortec cylinder heads, including P/N 12529093, P/N 12558060, P/N 12497186, P/N 12464298, P/N 25534421, or P/N 25534446
- Also accepts EGR

NOTE: The exhaust manifold from 1996-and-newer pickup trucks with RPO L31 350 engine, P/N 12557828, is drilled and tapped to accept an EGR tube. EGR pipe P/N 10220275 can be used with EGR Valve P/N 17113457 and gasket P/N 12337972. This manifold is primarily intended for use with Vortec heads on pre-1996 engine blocks. Blocks manufactured in 1995 or earlier have thermostat bypass passage from the block directly to the water pump. If manifold is used on 1996 and later engines (which do not have the bypass in the block), you must run a coolant bypass line from the manifold to the 5/8" hose nipple on the water pump (passenger's side). Suggested routing is from the 3/8 NPSF boss on manifold to the water pump.

B. 12496822 ⓘ

Intake Manifold, Eliminator Vortec Head Design

- Designed to deliver the most power and torque with Vortec cylinder head P/N 12529093, P/N 12558060, P/N 12497186, P/N 12464298, P/N 25534421 or P/N 25534446
- Use intake manifold gasket P/N 89017465 and 8 special manifold bolts P/N 12550027

C. 24502592

LT1 Intake Manifold

- Fits 1992-1996 Gen II LT1 engines and permits the use of a carburetor
- Long runners increase engine torque up to 30 lb.-ft. without sacrificing top-end horsepower
- There are no water coolant holes on this manifold

14096011

Cast-iron, High-Rise Intake Manifold (not shown)

- Cast-iron version of the aluminum high rise Z28 intake manifold
- Designed for budget builds, racing classes that mandate a cast-iron intake and marine applications
- Accepts both standard and spread bore 4-bbl carburetors
- Manifold is identified by orange Bowtie logo



A Intake Manifold, Vortec Head Design for TBI



B Intake Manifold, Eliminator Vortec Head Design



C LT1 Intake Manifold



Bowtie Intake Manifold, Raised Runner **D**

D. 10051103

Bowtie Intake Manifold, Raised Runner

- Runners of this single-plane aluminum intake manifold are raised .200" to match the ports of Bowtie cylinder head P/N 10051101
- Air gap beneath the runners isolates the intake charge from hot engine oil
- A 2" carburetor spacer is recommended
- Accepts standard-flange 4-bbl carb
- For competition use only, as there are no heat riser passages

E. 10051102

Bowtie Intake Manifold, Standard Runner

- This standard-runner manifold is based on the raised-runner intake P/N 10051103 (see above)
- Designed for use on Small-Blocks using heavy-duty Bowtie cylinder heads P/N 10134392 and P/N 14011049

F. 12498032

Ram Jet Fuel Injection Manifold Kit (less electronics)

- Retro-fit fuel injection kit will fit V-8 engines using Vortec cylinder heads P/N 12529093, P/N 12558060, P/N 12497186, P/N 12464298, P/N 25534421, or P/N 25534446
- Must be used with an aftermarket ECU and wiring harness with the proper calibration
- The same as used on Ram Jet 350 engine P/N 12499120. (MEFI with ECU and Wire Harness Kit P/N 12499116 is not calibrated for anything other than Ram Jet 350.)

Kit includes the following (as well as brackets, sensors, bolts, nuts, gaskets, and other small parts):

88959339	Instruction Manual	12489371	Intake Manifold
17096144	Throttle Body	1115498	Coil
12097982	Ignition Wire	1104060	Distributor
12498951	Air Cleaner	12553918	Injector Rail
17124248	8 Fuel Injectors	16249939	MAP Sensor
10456126	Knock Sensor	15326386	Engine Temp Sensor
17123897	Fuel Pressure Regulator		

NOTE: It does not include ECU or wiring harness, which must be sourced separately.

12489371

Ram Jet 350 Intake Manifold (not shown)

- Used on the Ram Jet 350 engine assembly P/N 12499120
- Bare manifold only – no throttle body, injector rails, injectors, bracket or other components
- See P/N 12498032 for complete manifold kit



Bowtie Intake Manifold, Standard Runner **E**



Ram Jet Fuel Injection Manifold Kit (less electronics) **F**



Additional components required for installation. See page 237.



Bowtie Competition Manifolds

A. 24502481 ⓘ

Intake Manifold, 18° Competition

- Developed for NASCAR's shorter tracks and works well on Trans-Am-series engines
- Features smaller runners and less plenum volume, which enhances mid-range torque
- Aluminum intake fits 18° heads casting P/N 10134363 and P/N 24502569
- Manifold is ideal for 310-cubic-inch road racing and 358-cubic-inch short track engines
- Manifold flanges are 0.590" thick to promote a good gasket seal
- An auxiliary water line boss at the rear of the casting improves water flow
- Weight 22.5 lbs
- Volume 2700cc



A Intake Manifold, 18° Competition

B. 24502653 ⓘ

Intake Manifold, Spider Design

- A 2-piece 'dry' aluminum manifold "spider" consisting of the runners and plenum only
- The runners, called the spider assembly by racers, along with valley plate assembly – the common term for the bottom section of the intake (see P/N 24502654 below) – are designed for use with the 18° cylinder heads with a date code of June 1996 or newer



B Intake Manifold, Spider Design

C. 24502654 ⓘ

Valley Plate Assembly

- Universal aluminum valley plate is designed for use with 18° cylinder heads
- Can be used with dedicated 2-piece manifold spiders, existing 1-piece intake manifolds which have been properly machined for use as a dry manifold, or fabricated manifold designs
- Valley plate assembly consists of the valley plate P/N 24502652, the inspection cover P/N 24502651, O-ring material and eight retaining bolts
- Valley plate has cast-in integral passages to equalize coolant flow from the front and the rear of the cylinder heads
- Fits heads dated June 1996 and later

NOTE: Important information about gasket matching: Gasket flanges are machined to provide the proper port alignment with standard runner locations. Runners in heads and manifold must be matched by engine builder. Often, the gasket will line up with the top of the port so removal is required at the bottom of the port. Gaskets that can be used with this manifold are: Fel-Pro® P/N 1205 and P/N 1206, and Mr. Gasket® P/N 102. Always match the gasket to the cylinder head you plan to use to ensure a correct fit.



C Valley Plate Assembly

Intake Manifold, Spider Restrictor Design – SB2.2 **D**Intake Manifold, Spider Design – SB2.2 **E**Valley Plate Assembly, SB2.2 **F****NASCAR Intake Manifolds****D. 12480096****Intake Manifold, Spider Restrictor Design – SB2.2**

- Aluminum manifold has more material in the runners and plenum to accept more flexibility in porting
- Designed for NASCAR restrictor-plate racing and is used with valley plate assembly P/N 12370840 (see below)

E. 88958617**Intake Manifold, Spider Design – SB2.2**

- Designed for NASCAR-style racing and high-rpm engines
- Additional aluminum in the runners and plenum allows more flexibility in porting
- Must be used with valley plate assembly P/N 12370840 or P/N 88958659

12370840**Valley Plate Assembly, SB2.2 (not shown)**

- Aluminum valley cover is used with manifold runners P/N 12480096 and P/N 88958617 on SB2.2 cylinder heads for NASCAR racing

F. 88958659**Valley Plate Assembly, SB2.2**

- Aluminum valley cover is used with manifold runners P/N 12480096, P/N 88958617 and P/N 88958691
- Does not incorporate an inspection cover, but has revised integral water passage for improved coolant flow from the front and rear of the cylinder heads
- Uses AN -24 fitting for water outlet; can use reducer for -20 fitting

88958670**Valley Plate Assembly, ROX (not shown)**

- Fits ROX manifold and ROX head P/N 88958667

! INTAKE MANIFOLDS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
12366573	89017465 (1)	12550027 (8)	19258602, 12499710, 12496769
12496820	89017465 (1)	12550027 (8)	12499711, 12499101, 12497317, 12496968
12496822	89017465 (1)	12550027 (8)	88958604, Vortec Heads
10185063	12525810 (1)	14091544 (8), 88891769 (2)	24502906, 88958603, 12499712, 19201330
12489371	89017465 (1)	12550027	12499120, 12495515
12496821	89017465 (1)	12550027 (8)	Vortec Head for TBI
24502481	10185007	N/A	18" high-port racing heads
24502653	10185007	N/A	18" high-port racing heads
24502654	10185007	N/A	18" high-port racing heads



Additional components required for installation.



Covers and Plugs

A. 14094792

Choke Hole Cover

- Covers the choke hole on the 350 HO manifold P/N 10185063
- Use gasket P/N 14096848 and screw P/N 9442184 with washer P/N 9439511

B. 6269414

Cover, EGR Valve

- Covers the EGR valve port on the 350 HO manifold P/N 10185063
- Use gasket P/N 12554530 and screw P/N 9442184 with washer P/N 9439511

C. 12556596

Plug, EGR Pipe Hole

- 7/8"-15 plug is used to seal off EGR pipe holes on intake manifold P/N 12496820 and P/N 12496821

Chrome Water Necks

D. 12342024

Water Neck

- Chrome water neck with neoprene O-ring and chrome bolts
- For 1966-1975 full-size Chevrolet, Camaro, and Chevelle V-8 engines

10108470

Aluminum Water Outlet (not shown)

Intake Manifold Gaskets

E. 10147994

Gasket Kit, 1971-1986 and ZZ350

- For 302-350 high-performance Small-Blocks built from 1971-1986, and all ZZ350 high-performance engines
- Gaskets fit standard intake port location
- Do not use with raised runner cylinder heads
- Includes 2 gaskets

F. 12497760

Gasket Kit, Vortec Design

- Designed for Vortec heads P/N 12529093, P/N 12558060, P/N 12464298 and P/N 12497186 only
- Gasket thickness is 0.120" (1/8"), post size is 1.080" x 2.160" with tapered wall
- Has both early style 6-bolt pattern and Vortec 4-bolt pattern
- Includes 2 gaskets



A Choke Hole Cover



B Cover, EGR Valve



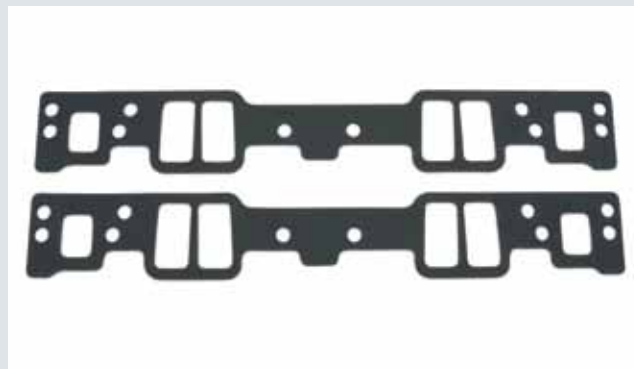
C Plug, EGR Pipe Hole



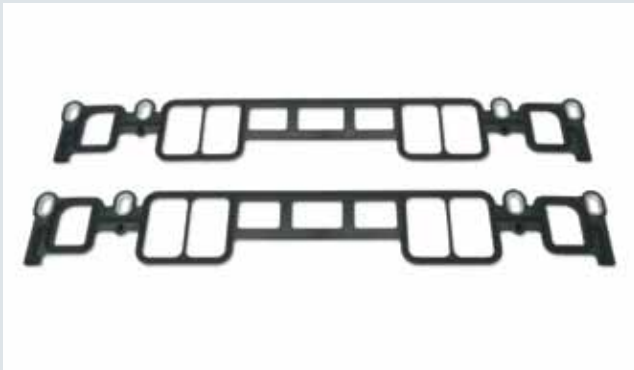
D Water Neck



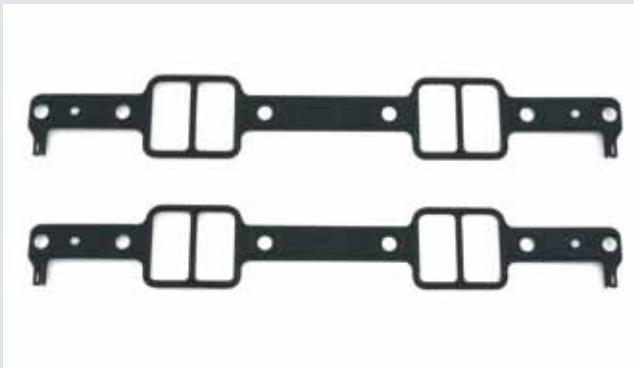
E Gasket Kit, 1971-1986 and ZZ350



F Gasket Kit, Vortec Design



Gasket Kit, Production Vortec Design **G**



Gasket Kit, LT4 **H**



Air Cleaner, Chevrolet-Logo High-Performance Design **I**



Air Cleaner, Chevrolet-Logo Classic Design **J**



Air Cleaner, Ram Jet 350 **K**

G. 89017465

Gasket Kit, Production Vortec Design

- Production gasket for all Vortec-design cylinder heads (4-bolt attachment to cylinder heads P/N 12529093 and P/N 12558060)
- Requires the use of GM attachment bolt P/N 12550027, because the bolt has a ball design on the end that seats in the head so it will not crush the intake manifold gasket
- Includes 2 gaskets

H. 12528884

Gasket Kit, LT4

- Used on the LT4 engine P/N 12371172
- Can be used with all LT4 heads and is designed not to cover part of the cylinder head opening – as production gaskets do
- Includes 2 gaskets

10185042

Gasket Kit, Splayed-Valve (not shown)

- Used only on the splayed-valve V-8 cylinder heads P/N 24502517
- Includes 2 gaskets

10185007

Gasket Kit, 18-Degree High Port Heads (not shown)

- Used only with V-8 18° high port cylinder heads P/N 10134363 and P/N 10134364
- Includes 2 gaskets

12524653

Gasket Kit, LT1 4-bbl Conversion (not shown)

- Required when installing a 4-bbl manifold on any LT1 engine
- Includes 2 gaskets

AIR CLEANERS

I. 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- 14" round high-performance-style air cleaner
- Chrome lid with embossed Chevrolet name
- Fits most 4-bbl and 2-bbl carburetors
- Will not fit Dominator-style carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.750" from top of carburetor gasket area to underside of hood.

J. 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- 14" round classic-style air cleaner
- Chromed lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most 4-bbl and 2-bbl carburetors
- Will not fit Dominator-style carburetors

K. 12498951

Air Cleaner, Ram Jet 350

- Designed for use with throttle body on Ram Jet 350 crate engine, but can be used on other applications



LS-SERIES COMPONENTS

THE MOST COMPREHENSIVE SOURCE FOR LS AND LSX HIGH-PERFORMANCE PARTS – *PERIOD!*

For the high-performance engine builder, the LS/LSX family represents the best of all worlds – performance, durability and value. This adaptable platform also offers unrivaled parts interchangeability, with literally dozens of possible combinations enabled by a proliferation of regular-production and special high-performance cylinder blocks, cylinder heads, induction systems and all the related components.

Quite simply, nobody offers more when it comes to building your LS engine project than Chevrolet Performance. Our array of factory-engineered performance parts has you covered from the throttle body to the oil pan. It includes production-based blocks, heads, cams and more, as well as the expanding portfolio of LSX maximum-performance blocks, forged rotating parts, intakes and more.

We even offer intake manifolds and ignition kits for swapping out production-style fuel injection for carbureted aspiration – just the thing for a more traditional look under the hood of a vintage car or to conform to certain racing rules. We've also got great looking dress-up parts to give your LS a unique look.

No one knows more about LS performance than Chevrolet Performance and no other aftermarket manufacturer comes close to matching our range of performance parts. Turn to us for your LS or LSX engine project!





LSX

LSX

LSX Bowtie Block

The LS Engine Family Tree

Everything you wanted to know about GM's 21st-century Small-Block, but were afraid to ask!

LS HERITAGE

The engine family commonly called the LS series debuted in 1997. General Motors called it the Gen III small-block, with the iron-block versions in trucks and the all-aluminum LS1 version introduced in the then-new C5 Corvette. A year later, the LS1 replaced the LT1 small-block in Camaros and Firebirds. The LS1 displaced 5.7 liters, similar to the previous-generation small-block, but the cubic-inch measurement differed slightly: 346 for the LS1 vs. the traditional 350 cubes.

In 1999, the Gen III platform spawned the higher-performance LS6 that was standard in the Corvette Z06. In 2005, the Gen IV branch of the LS family was born, differing from the Gen III with cast-in provisions for fuel-saving cylinder deactivation, larger displacements and revised camshaft sensing. The performance versions of the Gen IV include the LS2, LS3, LS9 supercharged and LS7.

GM has continued to refer its modern V-8 engine family as Gen III and Gen IV, but to the enthusiasts who quickly grasped the tremendous performance potential of the engines, every engine based on the platform is nicknamed "LS." The range of production engines from the LS platform is wide. On the truck side, iron-block engines have included 4.8L and 5.3L versions, as well as all-aluminum 6.0L and 6.2L premium engines. Car engines include 5.3L, 5.7L, 6.0L, 6.2L and 7.0L displacements – including some configured for front-wheel-drive.

GEN III VS GEN IV

Despite some significant differences between Gen III and Gen IV cylinder blocks, all LS engines share common traits that include:

- 4.400" bore centers (like the original Small-Block)
- 6-bolt, cross-bolted main bearing caps
- Center main thrust bearing
- 9.240" deck height
- 4-bolt-per-cylinder head bolt pattern
- 0.842" lifter bores
- Distributorless, coil-near-plug ignition system

The most distinguishing differences between Gen III and Gen IV cylinder blocks are larger bores (on some engines), different camshaft position sensor locations – front timing cover area on Gen IV blocks and top-rear position on Gen III blocks – and, on most Gen IV blocks, cast-in provisions for GM's Active Fuel Management cylinder deactivation system.

There is great interchangeability between all LS engines, including between Gen III and Gen IV versions. Cylinder heads, crankshafts, intake manifolds and more can be mixed and matched – but the devil is in the details. Not every head matches every intake manifold and not every crankshaft works with every engine combination. Will Handzel's "How to Build High-Performance Chevy LS1/LS6 V-8s" – P/N 88958786 – is a great reference source that outlines the more specific differences and interchangeability among Gen III-based engines.

LS1/LS6

LS1 5.7L (346-cu-in) engines were produced between the 1997 and 2004 model years in the United States (Corvette, Camaro, Firebird and GTO) and stretching into 2005 in other markets (primarily Australia). The LS6 was introduced in 2001 in the Corvette Z06 and was manufactured through 2005, where it also was found in the Cadillac CTS-V. The LS1 and LS6 share a 5.7L displacement, but the LS6 production engine uses a unique block casting with enhanced strength, greater bay-to-bay breathing capability and other minor differences. The heads, intake manifolds and camshaft also are unique LS6 parts.

LS2/L76/L77

In 2005, the LS2 6.0L (364 cu in) engine and the Gen IV design changes debuted. In GM performance vehicles, it was offered in the Corvette, GTO and even the heritage-styled SSR roadster. It was the standard engine in the Pontiac G8 GT (L76) and is now the V-8 offered in the new Chevrolet Caprice Police Pursuit Vehicle (L77). This engine is one of the most adaptable in the LS family, as LS1, LS6, LS3 and L92/L94 cylinder heads work well on it.

LS3/L99

Introduced on the 2008 Corvette, the LS3 brought LS base performance to an unprecedented level: 430 horsepower from 6.2L (376 cu in) – making it the

most powerful base Corvette engine in history. The LS3 block not only has larger bores than the LS2, but a strengthened casting to support more powerful 6.2L engines, including the LS9 supercharged engine of the Corvette ZR1. The LS3 is offered in the Pontiac G8 GXP and is also the standard V-8 engine in the fifth-generation Camaro SS. The L99 version is equipped with GM's fuel-saving Active Fuel Management cylinder deactivation system and is standard on Camaro SS models equipped with an automatic transmission. A unique version of the LS3 used in some Corvette applications incorporates a dry-sump oiling system.

LS4

Perhaps the most unique application of the LS engine in a car, the LS4 is a 5.3L version used in the front-wheel-drive Chevrolet Impala SS and Pontiac Grand Prix GXP. The LS4 has an aluminum block and unique, low-profile front-end accessory system, including a "flattened" water pump, to accommodate the transverse mounting position within the Impala and Grand Prix. It is rated at 303 horsepower and 323 lb-ft of torque.

LS7

A legend in its own time. The LS7 is the standard engine in the Corvette Z06 and its 7.0L displacement (427 cubic inches) makes it the largest LS engine offered in a production car. Unlike LS1/LS6 engines, the LS7 uses a Siamese-bore cylinder block design – required for its big, 4.125-inch bores. Competition-proven heads and lightweight components, such as titanium rods and intake valves, make the LS7 a street-tuned racing engine, with 505 horsepower. LS7 engines are built by hand at the GM Performance Build Center in Wixom, Mich.

LS9

The most powerful production engine ever from GM, the LS9 is the 6.2L supercharged and charge-cooled engine of the Corvette ZR1. It is rated at an astonishing 638 horsepower. The LS9 uses the strengthened 6.2L block with stronger, roto-cast cylinder heads and a sixth-generation 2.3L Roots-type supercharger. Like the LS7, it uses a dry-sump oiling system. It is the ultimate production LS engine. It is built by hand at the GM Performance Build Center in Wixom, Mich.

LSA

This supercharged 6.2L engine is standard in the Cadillac CTS-V series and the 2012 Camaro ZL1. Although similar to the LS9 in design, it is built with several differences, including hypereutectic pistons vs. the LS9's forged pistons; and a smaller, 1.9L supercharger. It also has an eight-bolt flywheel vs. the LS9's nine-bolt pattern. The LSA has a unique charge-cooler design on top of the supercharger – with differences between the Cadillac and Camaro ZL1 applications. Horsepower varies between the CTS and Camaro models, too – it is rated at 556 horsepower in the Cadillacs and approximately 580 horsepower in the Camaro ZL1.

GEN III & GEN IV VORTEC TRUCK ENGINES

Although performance car engines have typically carried "LS" designations, truck engines built on this platform have been dubbed Vortec. They are generally distinguished by iron cylinder blocks and smaller displacements than car engines. Interestingly, a 5.7L Vortec "LS" engine has never been offered. Here's a quick rundown of the previous and current-production LS truck engines:

- 4.8L – The smallest-displacement LS engine (293 cu in); it uses an iron block with 3.78-inch bores and aluminum heads.
- 5.3L – The most common LS truck engine, it uses the same iron block with 3.78-inch bores as the 4.8L, but with a larger, 3.62-inch stroke (327 cu in). Later versions equipped for Active Fuel Management and 2010-and-newer versions feature variable valve timing (cam phasing). Manufactured with iron and aluminum cylinder blocks.
- 6.0L – Used primarily in ¾-ton and 1-ton trucks, the 6.0L (364 cu in) uses an iron block (LY6) or aluminum block (L76) and aluminum heads, with provisions for Active Fuel Management; some equipped with variable valve timing.
- 6.2L – Commonly referred to by its L92, L9H or L94 engine codes, the 6.2L (376 cu in) engine uses an aluminum block and heads, and incorporates advanced technology including variable valve timing. The L92 is used primarily as a high-performance engine for the Cadillac Escalade and GMC Yukon Denali.

GEN III, IV SMALL-BLOCK CRATE ENGINES

Part Number	Description	Liters	CID	Block Material	HP	Torque	Bore	Stroke
19165628	LS327/327	5.3	327	CI	327	347	3.780	3.622
17801267 (discontinued)	LS1	5.7	346	AL	350	365	3.898	3.622
19165484 (discontinued)	LS2	6.0	364	AL	400	400	4.000	3.622
17802134 (discontinued)	LS364/440	6.0	364	AL	440	404	4.000	3.622
19258768	LS376/480	6.2	376	AL	485	475	4.065	3.622
19244552	LS376/515	6.2	376	AL	515	469	4.065	3.622
19259233	LS376/525	6.2	376	AL	525	489	4.065	3.622
19258770	LS3	6.2	376	AL	430	424	4.065	3.622
19260164	LSA	6.2	376	AL	556	551	4.065	3.622
19244099	LS9	6.2	376	AL	638	604	4.065	3.622
19271821*	CT525	6.2	376	AL	525	471	4.065	3.622
19244098	LS7	7.0	427	AL	505	470	4.125	4.000
19171049	LSX376	6.2	376	CI	450	444	4.060	3.620
19244611	LSX454	7.4	454	CI	620	590	4.185	4.125
19260835	LSX454R	7.4	454	CI	750+	700+	4.185	4.125

*For circle-track racing only. Not for street use.

MORE ABOUT THE VORTEC 5.3L

With more than 10 years in service in millions of Chevy and GMC trucks, vans and SUVs, the Vortec 5.3L engine is poised to become the classic 350 small-block of the LS engine family. With millions in service, they are readily available and affordable on the used-engine market. Most feature iron cylinder blocks, but some have an aluminum engine block that is about 80 pounds lighter. Adapting a 5.3L to a hot rod project is easier with GMPP's 5.3L controller kit, part number 19256514, which is tailored to retro-fit installations by "turning off" some of the production features that are unnecessary for a vintage car, including the cylinder-deactivating Active Fuel Management. It covers 2007-2009 applications (non-cam-phased) with the following engine codes:

- LC9 (2007-2009)
- LH8 (2008-2009)
- LY5 (2007-2009)
- LMF (2008-2009)
- LMG (2007-2009)

LSX CRATE ENGINES

Chevrolet Performance LSX series of crate engines is based on the LSX Bowtie Block and uses a number of production-based and LSX high-performance parts to deliver ultimate-performance engines that were never offered in production vehicles. They include:

- LSX376 – An economical crate engine that uses the LSX block, LS3 rotating parts and the LS3 cylinder heads. It is offered without an oil pan or induction system, so that they can be tailored for the project vehicle.
- LSX454 – The displacement of the classic big-block, with an all-forged rotating assembly and LSX-LS7 six-bolt cylinder heads. It is rated at 620 hp with a carburetor and 580 with an LS7 fuel injection system.
- LSX454R – A high-compression (13.1:1) version of the LSX454 designed for drag racing, featuring a mechanical roller cam, high-rise intake and more. It is capable of more than 750 horsepower.

NON-PRODUCTION CYLINDER BLOCKS

C5R: Developed for the factory-backed Corvette racing program, the C5R cylinder block has been manufactured in comparatively small quantities since 2000. They are manufactured with a unique aluminum alloy for greater strength and undergo a variety of specialized machining and inspection processes, including "hipping" to increase strength and X-raying that ensures against unacceptable porosity. A Siamese bore design with 4.117-inch finished bores enables 7.0L (427-cu-in) displacements. The C5R uses billet steel main caps with premium, 4340 fasteners. Racing-quality head studs are also included. All LS series heads will work with the C5R block, but maximum performance depends on maximum airflow.

LSX Bowtie Block (standard and tall-deck): Introduced in 2007, the LSX Bowtie Block is a durable and affordable cast iron casting that was designed to support extreme high-performance combinations, including provisions for six-bolts-per-cylinder head fastening. It has a Siamese bore design with 3.880-inch bores that must be finished to 3.898-inches – with a 4.200-inch recommended maximum bore. Maximum stroke can reach 4.25-inches, but rotating assembly interference on the cylinder must be taken into account for strokes greater than 4.125-inches;

heavy metal is required for crankshaft balancing of larger-stroke combinations. Standard versions feature decks 0.020-inch taller than LS production blocks, with the tall-deck version manufactured with a 9.720-inch semi-finished deck height. The oiling system is a true priority-main system and all LS small-block heads work with the engine. Higher-airflow heads, such as LS7 and C5R, are recommended.

CRANKSHAFTS

Generally, LS crankshafts are similar in design, with identical 2.100-inch rod and 2.560-inch main journal sizes and a common rear main seal. All LS engines use iron crankshafts except the LS7, LS9 and LSA; they used forged steel cranks (4.00-inch stroke on the LS7; 3.62-inch stroke on the LS9 and LSA).

The crankshaft sensing function of the distributorless ignition system depends on reading the toothed reluctor wheel on the crankshaft. Early LS engines mostly used 24-tooth wheels and upgraded a few years ago to 58-tooth (also known as 58X) wheels. When building an LS engine, it is imperative the correct reluctor wheel is used with the compatible crankshaft position sensor and ignition controller.

The crankshafts are mostly interchangeable, but the snouts on LS7 and LS9 crankshafts are approximately 1-inch longer to accommodate their two-stage oil pumps that work with the engines' dry-sump oiling systems – the same goes for certain Corvette applications of the LS3, which is available with a dry-sump system, as well. These forged crankshafts can be used on wet-sump engines by using a few specific components and/or modifications.

SPECIAL NOTE ABOUT CRANKSHAFT BOLT PATTERNS

Almost all LS-engine crankshafts use a 6-bolt flywheel/flexplate bolt pattern, but the LS9 uses a 9-bolt pattern and the LSA and LSX454 engines use an eight-bolt pattern. An adapter must be used to match the LSX454R eight-bolt patterns with a conventional six-bolt flywheel or flexplate.

CONNECTING RODS

LS connecting rods are very similar and interchangeable. Most are made of powdered metal, while the LS7 and LS9 rods are forged titanium – with the LS9 rods featuring a unique forging designed for the pressure and power level of forced induction. Rods lengths are similar, too, at 6.098-inch for 5.3L, 5.7L, 6.0L and 6.2L (including LSA) engines. The 4.8L engine uses 6.275-inch rods and the LS7 uses 6.067-inch rods. The LS9 uses 5.990-inch rods. Since 2006, LS rods use bushed small ends. Also, LS6 rod bolts, P/N 11600158, offer a strength-enhancing upgrade to pre-2000 engines.

PISTONS

The LS9 is the only production LS engine with forged aluminum pistons; all the other use hypereutectic (cast) aluminum alloy pistons – varied mostly by diameter to accommodate various bore sizes. LS cast pistons shouldn't be used on applications greater than approximately 550 horsepower. Also, the LS7 piston's inner bracing requires the use of the matching LS7 connecting rod.



CYLINDER HEADS – INTAKE PORT DESIGN

Cylinder head interchangeability enables great parts mixing to build custom LS engine combinations, but the heads must be matched with intake manifolds that have compatible intake port configurations. The port sizes and shapes include:

Cathedral port

Introduced on the LS1 engine and used also on the LS6 and LS2, cathedral-port heads are named for the unique shape of the top of the intake port. Intake manifolds for LS1, LS2, LS6 and Vortec engines with cathedral-port heads are mostly interchangeable.

Rectangular port – LS7-style

The second LS intake runner design debuted on the Corvette Z06's LS7 engine. This rectangular design supports the straight-through airflow design of the heads. They feature 270cc intake ports and the ports and combustion chambers are CNC-ported from the factory. Use only with the LS7 intake manifold. The LSX-LS7 head features the same port design, but with six-bolt clamping vs. the production four-bolt pattern.

Rectangular port – L92/LS3 style

Similar to the LS7 design, but the ports are a little taller and a little narrower. They flow more than cathedral-port heads, but not as much as LS7 heads. In addition to the L92 6.2L engines, this port shape is also used on LS3 engines and some 6.0L truck engines, as well as the Corvette ZR1's LS9 and Cadillac CTS-V's LSA supercharged engines. Intake manifold bolt patterns are unique to this port design.

C5R heads

These heads pioneered the rectangular-port design, but because they are designed for professional finishing, their final shape and size depends on whoever is performing the porting.



A Cathedral Intake Port and Bolt Pattern



B LS3 Intake Port and Bolt Pattern

LS COMPATIBILITY—HEADS VS. INTAKES

INTAKES				HEADS						
Engine	P/N	Manifold Type	Port Type	12559855 Std LS1	12564824 Std LS6/LS2	12562319 Std L09	88958622 CNC LS6	12629064 Std L76/L92	12629063 Std LS3	88958758 CNC LS3
LS1/LS6	88894339	EFI	Cathedral	Yes	Yes	Yes	Yes	No	No	No
LS2/LQ4	88958675	4-bbl	Cathedral	Yes	Yes	Yes	Yes	No	No	No
LS3	12638197	EFI	L92	No	No	No	No	Yes	Yes	Yes
L92/LS3	25534416	4-bbl w/inj	L92	No	No	No	No	Yes	Yes	Yes
L92/LS3	25534401	4-bbl	L92	No	No	No	No	Yes	Yes	Yes
L92/LS3	19244037	LSX 4-bbl	L92	No	No	No	No	Yes	Yes	Yes
L92/LS3	19244035	LSX 4-bbl	L92	No	No	No	No	Yes	Yes	Yes
LS7	12644568	EFI	LS7	No	No	No	No	No	No	No
LS7	25534413	4-bbl w/inj	LS7	No	No	No	No	No	No	No
LS7	25534394	4-bbl	LS7	No	No	No	No	No	No	No
LSX454	19244033	LSX 4-bbl	LS7	No	No	No	No	No	No	No
—	19257854	LSX 4-bbl	LSX-CT	No	No	No	No	No	No	No
LSX454R	19257851	LSX 4-bbl	LSX-DR	No	No	No	NNo	No	No	No

No = not compatible Yes = direct compatibility



LS7 Intake Port and Bolt Pattern **C**



LSX-CT and LSX-DR Ports **D**

CYLINDER HEADS – VALVES AND RECOMMENDED APPLICATIONS

Each LS cylinder head has specific valve sizes, locations and valve angles. Here's an overview of them:

Cathedral-port heads

Designed for smaller-displacement engines, these heads have the smallest valves; 2.000-inch intake and 1.500-inch exhaust, and they're held at a 15-degree angle. They also have the closest valve spacing, which limits the maximum valve size. LS6 valves include lightweight hollow-stem intake and sodium-filled exhaust parts; all others in this family feature solid-stem construction.

L92/LS3 heads

Similar in design to the LS7 head, the L92 heads don't flow quite as much and the valves are correspondingly smaller: 2.165-inch on the intake side and 1.590-inch on the exhaust side. They are held at a 15-degree angle and also require offset rocker arms. These heads/valves require at least a 4.00-inch bore, but work best on an engine with a 4.065-inch bore. Valve-to-piston clearance must be checked when using them on an engine originally equipped with cathedral-port heads.

LS7 heads

Using LS-Series' largest production valves – 2.200-inch on the intake side and 1.610-inch on the exhaust – the LS7 heads offer tremendous airflow, but they require an engine with no less than 4.100-inch bores. The intake valves are made of titanium and the exhaust valves are sodium-filled; they are held at a 12-degree angle. That and their large size require offset rocker arms on the intake side. Valve-to-piston clearance must be checked when using these heads with pistons not designed for the LS7 engine.

C5R

Designed for engines with at least 4.125-inch bores, these heads can accommodate 2.200-inch intake and 1.650-inch exhaust valves; they are held at an 11-degree angle and their spacing is unique. When using on an engine not originally designed for C5R pistons, valve-to-piston clearance must be checked.

LSX-CT and LSX-DR

CT and DR are in-line heads, with a valve angle of 11 degrees. The CT head was designed specifically for 410 CID sprint car applications, with 2.200-inch intake and 1.610-inch exhaust valve sizes, with valve placement modified and optimized for 4.125-inch bores. DR heads were designed for 410-plus CID, high rpm drag racing applications. Valve placement was spread from the CT to allow up to 2.280-inch and 1.620-inch valves. Larger valve sizes require a 4.165-inch minimum bore.

LS COMPATIBILITY—HEADS VS. INTAKES CONTINUED

INTAKES				HEADS						
Engine	P/N	Manifold Type	Port Type	19201807 LSX-L92 Small Bore	19201805 LSX-LS3	19213963 LSX-LS9	12578450 Std CNC LS7	19201806 LSX-LS7	19166981 LSX-CT	19166979 LSX-DR
LS1/LS6	88894339	EFI	Cathedral	No	No	No	No	No	No	No
LS2/LQ4	88958675	4-bbl	Cathedral	No	No	No	No	No	No	No
LS3	12638197	EFI	L92	Yes	Yes	Yes	No	No	No	No
L92/LS3	25534416	4-bbl w/inj	L92	Yes	Yes	Yes	No	No	No	No
L92/LS3	25534401	4-bbl	L92	Yes	Yes	Yes	No	No	No	No
L92/LS3	19244037	LSX 4-bbl	L92	Yes	Yes	Yes	No	No	No	No
L92/LS3	19244035	LSX 4-bbl	L92	Yes	Yes	Yes	No	No	No	No
LS7	12644568	EFI	LS7	No	No	No	Yes	Yes	No	No
LS7	25534413	4-bbl w/inj	LS7	No	No	No	Yes	Yes	No	No
LS7	25534394	4-bbl	LS7	No	No	No	Yes	Yes	No	No
LSX454	19244033	LSX 4-bbl	LS7	No	No	No	Yes	Yes	No	No
—	19257854	LSX 4-bbl	LSX-CT	No	No	No	No	No	Yes	Yes
LSX454R	19257851	LSX 4-bbl	LSX-DR	No	No	No	No	No	Yes	Yes

No = not compatible Yes = direct compatibility



VALVETRAIN

LS-Series valvetrain systems are very universal. All production engines use investment-cast rockers with roller trunnions. They attach to a bolt-down mounting bracket (except for LS7 and LSX applications that have machined pedestals) that makes installation fast and easy. All production engines feature 1.7-ratio rockers, except the LS7, which uses 1.8-ratio rockers. Rockers are specific to their cylinder head families. Here's a look at the various applications:

Cathedral-port heads

Use interchangeable rockers on the intake and exhaust sides P/N 10214664. **(Photo A)**

L92 heads

Use specific, offset intake rockers P/N 12569167 and non-offset exhaust rockers P/N 10214664. **(Photo B)**

LS7 heads

Use specific, offset intake rockers P/N 12579615 and non-offset exhaust rockers (P/N 12579617). **(Photo C)**

LSX-DR heads

LSX-DR heads require racing-style shaft mount rocker systems. Chevrolet Performance offers a 1.90:1-ratio rocker arm kit (P/N 19201808). **(Photo D)**



A LS6 Rockers



B LS3 Rockers

LS COMPATIBILITY — HEADS VS. BLOCKS

BLOCKS			HEADS							
Engine	P/N	Bore Size	12559855 Std LS1	12564824 Std LS6/LS2	12562319 Std LQ9	88958622 CNC LS6	12629064 Std L76/L92	12598594 Std LS3	88958758 CNC LS3	
LS1/LS6	12561166	3.890"	Yes	Yes	Yes	Yes	No	No	No	
LS2/L76	12602691	4.000"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
L92/LS3	12623967	4.065"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
LSA	12623968	4.065"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
LS9	12621983	4.065"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
LS7	19213580	4.125"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
C5R	12480030	4.120" - 4.160"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
LSX Std. Deck ¹	19213964	3.890"	Yes	Yes	Yes	Yes	*	*	*	
LSX Tall Deck ¹	19244059	3.890" - 4.200"	*	*	*	*	*	*	*	
LSX376	19244055	4.085"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
LSX454	19244057	4.185"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

No = not compatible Yes = direct compatibility * = 4.00" minimum bore ** = 4.125" minimum bore

¹ LSX Semi-Finished - needs finish bore/hone and deck height machined



BUILDER'S TIP

Ensuring Windage Tray Clearance on LS Engines

When building a custom LS engine combination, care must be taken to make sure the connecting rods don't interfere with the windage tray. To do that, set the windage tray over the installed rotating assembly carefully rotate

the crankshaft. If any of the connecting rods touch the tray, you'll have to use a specially designed windage tray for longer-stroke cranks. See page 244 for listings.



LS7 Rockers **C**



LSX-DR Rocker Stand Pads **D**

HEAD-TO-BLOCK COMPATIBILITY

Because of their comparatively small bores – 3.89 inches – LS1 and LS6 engines can only use LS1, LS6 and LS2 heads. Using heads designed for larger engines will cause valve-to-block interference. The larger, 4.00-inch bore of the LS2 enables it to use LS1/LS6 heads, as well as L92-style heads (including LS3, LS9 and LSA engines). The 6.2L engines (LS3, L92, etc.) can use any head, except for the LS7 and C5R, while the 7.0L LS7 and C5R blocks can use any LS-series head. LS7 blocks should be matched with heads designed for at least 4.10-inch bores; and 4.125-inch bores are preferred.

Most LS production cylinder blocks share the same cylinder head bolt pattern and the same size head bolts – four 11mm bolts per cylinder (32 in total) and five upper, 8mm bolts. Early LS1 and LS6 engines used different-length 11mm bolts, but engines from 2004 and later use same-length bolts. LS9 engines use stronger, 12mm head bolts.

Non-production blocks, such as Chevrolet Performance's LSX block and the C5R, offer the same head-bolt pattern as production blocks. All LS heads will bolt up to them, but care must be taken to select the most compatible heads based on the appropriate bore size. Because of their large bores, heads designed for at least 4.10-inch bores should be used and 4.125-inch bores are preferred, such as the L92/LS3 or LS7 heads; otherwise valve-to-block interference is an issue, as is sufficient cylinder sealing.

Chevrolet Performance's LSX cylinder heads use 10 11mm and 13 8mm head bolts, or eight more than a regular-production LS head. That's more than 50 percent more head bolts than production heads, supplying superior clamping strength.

All cylinder heads used with the LSX tall-deck block require spacers to mount the intake manifold, because the higher deck of the block widens the dimension between the heads' manifold-mounting positions.

NOTE: LSX Tall-deck blocks require the appropriate intake manifold designed for tall-deck applications.

LS COMPATIBILITY — HEADS VS. BLOCKS CONTINUED

BLOCKS			HEADS						
Engine	P/N	Bore Size	19201807 LSX-L92	19201805 LSX-LS3	19213963 LSX-LS9	12578450 Std CNC LS7	19201806 LSX-LS7	19166981 LSX-CT	19166979 LSX-DR
LS1/LS6	12561166	3.890"	Yes	No	No	No	No	No	No
LS2/L76	12602691	4.000"	Yes	Yes	Yes	No	No	No	No
L92/LS3	12623967	4.065"	Yes	Yes	Yes	No	No	No	No
LSA	12623968	4.065"	Yes	Yes	Yes	No	No	No	No
LS9	12621983	4.065"	Yes	Yes	Yes	No	No	No	No
LS7	19213580	4.125"	Yes	Yes	Yes	Yes	Yes	Yes	Yes
C5R	12480030	4.120" – 4.160"	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LSX Std. Deck	19213964	3.890"	**	**	**	**	**	**	**
LSX Tall Deck	19244059	3.890" - 4.200"	**	**	**	**	**	**	**
LSX376	19244055	4.085"	Yes	Yes	Yes	No	No	No	No
LSX454	19244057	4.185"	Yes	Yes	Yes	Yes	Yes	Yes	Yes

No = not compatible Yes = direct compatibility * = 4.000" minimum bore ** = 4.125" minimum bore



BUILDER'S TIP

Priming the LS Engine

If you're used to building classic Small-Block and Big-Block engines, you've probably used an electric drill or similar tool in the distributor hole to drive the oil pump and prime the engine prior to start-up. LS engines don't use distributors, so engine priming must be performed in other ways. First of all, fill the oil pump pickup with oil when assembling the engine. That will ensure a quantity

of oil is in the pump when the engine is started for the first time. Also, disconnect either the fuel supply or ignition system when it's time to start the engine and allow the engine to "roll over" for approximately 30 seconds. That allows oil to circulate through the engine without the engine running. Removing spark plugs will allow the engine to prime faster with less load on the bearings. Then, reconnect the fuel or ignition and fire up your LS engine!





So, You Want to Install an LS Engine in your Vintage Car . . .



With LS engine swaps becoming more popular, you may be ready to take the plunge and install one in your project. Before you start, check out the complementing parts on the list below and a few tips to make it go smoothly. You'll get your transplanted LS up and running quicker and with less hassle.

Chevrolet Performance also recommends the LS1 Engine Installation Guide (part number 88959384), which illustrates basic procedures and offers helpful tips on installing an LS engine into older vehicles.

Engine mounts – Early-style GM three-bolt engine mounts don't match the four-bolt style of LS engines, but there are several readily available aftermarket adapters that solve the problem.

Oil pan – Many production LS oil pans aren't compatible with early vehicles' chassis. Our Muscle Car Oil Pan Kit (part number 19212593) works with most 1955-and-later GM vehicles.

Modifications and possibly a custom oil pan may be required on some vehicles. The oil pan for 1998-2002 LS1 Camaros and Firebirds also is a good fit for many older vehicles.

Exhaust headers/manifolds – There are aftermarket headers designed for LS swaps in popular cars, such as GM A-bodies (Chevelle, GTO, etc.), F-cars (Camaro, Firebird) and even some street rod chassis, but other applications will likely require the fabrication of custom headers. Many factory LS exhaust manifolds will fit with older vehicles' chassis, but a custom exhaust system will still be required to match them.

Carburetor or fuel injection – If you plan use a conventional carburetor on your LS engine, you'll need a carbureted intake manifold and, of course, the carburetor. Chevrolet Performance

offers several intakes (see page 252) that will work with almost all engine/cylinder head combinations. You'll also need the LSX Ignition Controller (part number 19171130) and an electric fuel pump suitable for the lower fuel pressure of a carbureted system.

If you plan to use a production-style fuel injection system, you'll need a high-pressure fuel pump, preferably an in-tank pump. A fuel return line to the tank may also be required. A production-style injection system will also require an engine control module. The stock controller for an otherwise stock used engine may be used, but may trigger "trouble codes" and affect performance because not all of the diagnostic features will be engaged in an older vehicle. Chevrolet Performance offers LS engine controllers (see page 258) that accommodate swaps into older vehicle with many of the production features "turned off."

Electronic throttle – When using an LS engine with a production electronic throttle, a Chevrolet Performance controller kit with a compatible throttle pedal assembly must be used (see page 258). The alternative is converting the system to a cable-operated throttle body.

Cooling fan – LS engines are designed to be used with an electric cooling fan system, which is easy to obtain in the aftermarket.

Front-end accessory drive systems – Chevrolet Performance offers several front-end accessory drive kits for a variety of LS engines (see page 246), but their use may still require cross member or other chassis modifications to accommodate the mounting position of the air conditioning compressor (if equipped).





Transplant Spotlight: Jeff Rink's LS-Powered '65 GTO

With the original drivetrain in his '65 GTO long gone, Jeff Rink turned to LS power when he commissioned Ric's Restorations to turn his "Goat" into a resto-mod modern muscle car. Keeping with the GTO theme, Rink specified the LS2 6.0L engine from a 2006 GTO, then had it topped off with a polished supercharger – and detailed with acres of chrome and other polished parts. The "blown" LS2 now makes about 540 horsepower and is connected to the same 4L65-E electronically controlled four-speed automatic offered by Chevrolet Performance (P/N 19156260). "The car runs great," says Rink. "LS engines are definitely the way to go for the future of hot rodding."



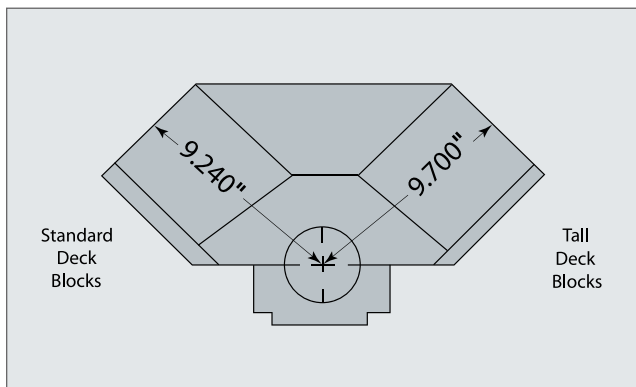
Chevy LS-Series Blocks Quick Reference Chart

LS-SERIES BLOCKS													
Origin	Part Number	Material	Deck Height	Bore	Main Bolt	Cap Material	Crankshaft Jnl Dia.	Oiling	Rear Main Seal	Max Stroke	Max Hp	Usage	Page Number
LS1/LS6	12561166	Alum	9.240	3.898"	6	Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.00"	450	Street	251
LSA	12623968	Alum	9.240	4.065"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	800	Street/Pro	252
LS9	12623969	Alum	9.240	4.065"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	900	Street/Pro	252
LS2	12602691	Alum	9.240	4.000"	6	Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.00"	450	Street	253
LS3/L92	12623967	Alum	9.240	4.065"	6	Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.00"	525	Street	253
LS7	19213580	Alum	9.240	4.125"	6	PM	Std. LS (2.56)	Wet/Dry	1 pc	4.10"	550	Street	254
CSR	12480030	Alum	9.240	4.117–4.160"	6	Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.10"	900	Pro	255
LSX	19260093*	Iron	9.260	3.880"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	257
LSX	19244059*	Iron	9.720	3.880"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	1500+	Street/Pro	257
LSX	19260095**	Iron	9.240	4.065"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	257
LSX	19260099**	Iron	9.240	4.185"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	257

*Semi-finished block

**Fully machined block

DECK HEIGHT DIAGRAM



PRODUCTION CYLINDER BLOCKS

The LS-Series cylinder block is the foundation for the serious performance achievements that are driving a new generation of street and racing enthusiasts. Features include a deep-skirt casting (the block side extends below the crankshaft centerline); 6-bolt cross-bolted main caps, strong and lightweight aluminum alloy casting (most production blocks) and provisions for the latest in engine control management. The cam-in-block configuration brings inherent torque to every LS engine, with production-based blocks capable of supporting combinations of 500 horsepower or more. The Corvette ZR1's unique 6.2L block, for example, supports the engine's 638-horsepower rating. Chevrolet Performance's high-performance iron LSX cylinder block supports more than 2000 forced-induction horses!

Whether you're building a mild street engine or an Outlaw racing engine, starting with a strong LS cylinder block brings the assurance that you'll make the power you need with a durable foundation.



A LS1/LS6 5.7L Bare Block (top)



A LS1/LS6 5.7L iron main bearing caps



LS1/LS6 5.7L Bare Block (rear) **A**



LS1/LS6 5.7L Bare Block (bottom) **A**



LS1/LS6 5.7L block – aluminum block with 6-bolt main caps **A**

A. 12561166

LS1/LS6 5.7L Bare Block

- Direct replacement for 2001-2004 LS1 and LS6 Corvette 5.7L
- Production 319-T5 aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use LS1/LS6 cylinder heads only
- 3.898" finished bore (99.0mm)
- No provision for Active Fuel Management
- Tested to over 400 horsepower!



12623968

LSA 6.2L Bare Block (not shown)

- Direct replacement for 2009-2012 Cadillac CTS-V 6.2L supercharged engine and 2012 ZL -1 Camaro
- Production cast-aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Not for use with LS7 or LSX-LS7 heads
- 4.065" finished bore (103.25mm)
- Includes oil squirters (8) for piston cooling
- No provision for active fuel management
- Rated for more than 550 horsepower



A LS9 6.2L Bare Block (rear)



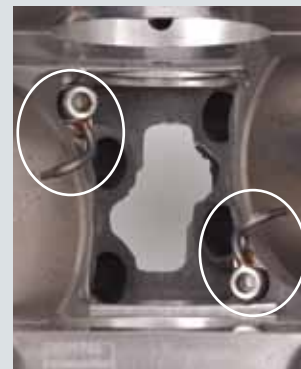
A LS9 6.2L (bottom)



A LS9 6.2L (front)



A LS9 6.2L (rear, top)



A LSA-LS9 6.2L Piston Oilers

A. 12623969

LS9 6.2L Bare Block

- Direct replacement for 2009-2012 Corvette ZR1 6.2L supercharged engine
- Production cast-aluminum block with iron sleeves
- Deck plate honed
- Production oiling system
- 6-bolt steel main bearing caps with dowel pins
- 9.240" deck height
- Not for use with LS7 or LSX-LS7 heads
- 4.065" finished bore (103.25mm)
- Includes oil squirters (8) for piston cooling
- No provision for active fuel management
- Rated for more than 635 horsepower



LS3/L92 Aluminum 6.2L Bare Block (front) **B**



LS3/L92 Aluminum 6.2L Bare Block (bottom) **B**



LS3/L92 Aluminum 6.2L Bare Block (rear) **B**



LS3/L92 Aluminum 6.2L Bare Block (top) **B**



LS3/L92 Aluminum 6.2L Bare Block (bottom) **B**

12602691

LS2 Aluminum 6.0L Bare Block (not shown)

- Direct replacement for 2005-2008 LS2 Corvette, SSR, GTO 6.0L and TrailBlazer SS
- Production 319-T5 aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use only LS1, LS6, LS2, L92/LS3-style cylinder heads
- 4.000" finished bore (101.6mm)
- Provisions for Active Fuel Management
- Great for stroker cranks for even more cubes
- Tested to over 450 horsepower!

B. 12623967

LS3/L92 Aluminum 6.2L Bare Block

- Direct replacement for:
 - '09-'12 L9H
 - '10-'12 L94
 - '08-'12 LS3
 - '10-'12 L99
 - '07-'08 L92
- Production aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use only LS1, LS6, LS2, L92/LS3-style cylinder heads
- 4.065" finished bore (103.25mm)
- Provisions for Active Fuel Management
- Great for stroker cranks for even more cubes
- Tested to over 500 horsepower!



The LS-Series Blocks Continued

A. 19213580

LS7 7.0L Corvette Bare Block

- Direct replacement for 2006-2012 7.0L LS7 engine
- Production 319-T5 aluminum block with pressed-in iron sleeves
- Production oiling system
- 6-bolt dowel located steel main bearing caps
- 9.240" deck height
- For use with any LS or LSX series head
- 4.125" finished bore (104.78mm), deck plate honed
- Siamese cylinder bores for large bore size
- No provision for Active Fuel Management
- Based on C5R block development
- Tested to over 500 horsepower!

Parts required to complete your LS7 Block

PART NUMBER	QTY	DESCRIPTION
12570471	1	Valley Cover
11588949	6	Plug
12589016	1	Camshaft Retainer
11611351	1	Plug
11610259	1	Plug, Cylinder Head
11515756	5	M8 x 1.25 Flanged Hex Head Bolt
12570326	4	Dowel, Cylinder Head Locating
12639250	1	Rear Cover Assembly
12573460	1	Oil Plug
12618422	1	Windage Tray
09427693	4	Plug
01453658	2	Dowel, Bellhousing Locating
12561663	1	Plug
12616646	1	Oil Pressure Sensor
12585546	1	Crankshaft Position Sensor
12598293	1	Cover
12585673	1	Seal - Front Cover
12633904	1	Gasket - Front Cover
11515758	8	Bolt
12591720	1	Sensor
11588712	1	Bolt

25534412

Oil Hose Adapters (shown on page 226)

- Kit adapts the production LS7 Oil Pan to aftermarket AN-style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 Oil Pan, and has AN male outlet for AN -12 fittings
- Includes 1 adapter, 2 fittings, 2 bolts, and 2 sealing gaskets



A LS7 7.0L Corvette Bare Block (bottom, rear)



A LS7 7.0L Corvette Bare Block (bottom, front)



A LS7 7.0L Corvette Bare Block (rear)



Aluminum C5R Racing Block (bottom, rear) **B**



Aluminum C5R Racing Block (bottom, front) **B**



Aluminum C5R Racing Block (front) **B**

B. 12480030

Aluminum C5R Racing Block

The ultimate GM aluminum LS block, the C5R was originally designed for Chevrolet's factory-backed Corvette racing program. It was developed to support more than 440 cubic inches and up to 900 horsepower – and it proved itself by powering the Corvette team to wins at LeMans, Daytona and nearly every track they encountered. This is a non-production, purpose-built cylinder block manufactured with proprietary materials and machined to the highest tolerances – and using premium, racing-spec hardware. If you're looking for the ultimate aluminum cylinder block to support your horsepower desires, the race-proven C5R is it!

- Premium "hipped"* and X-rayed 356-T6M aluminum-alloy block casting
- 9.240" deck height
- Production-style oiling system
- 6-bolt dowel-located steel main bearing caps
- 4340 premium map cap fasteners
- For use with any LS or LSX series head
- Unique cylinder liner material for maximum durability
- Siamesed cylinders to support larger bores
- 4.117" finished bore
- 4.160" maximum bore
- Fully blueprinted and squared
- Production camshaft location and cam bores
- Includes premium head studs
- Anodized aluminum O-ring core plugs
- No Active Fuel Management provisions
- Supports more than 900 horsepower

**HIP is the acronym for Hot Isostatic Pressure. This process puts the blocks in a sealed vessel where a vacuum is first used to remove room air and any possible contaminants. The vessel is filled with high pressure nitrogen (up to 30,000-psi) and then heated to the required temperature and sustained for a determined amount of time. The cooling process is also a controlled procedure to ensure maximum strength and proper heat treat. This extreme high pressure and heat removes almost 100% of the internal porosities that are generated during the casting process. The material integrity, strength and fatigue life increases significantly.*





LSX BOWTIE BLOCK

Delivering the seemingly impossible combination of professional racing-level strength and entry-level affordability, the LSX Bowtie Block is the next revolution in high-performance engine-building. This durable iron-block casting is based primarily on GM's production LS7 block, but designed with more material in key areas – including a thicker deck and bores – to support displacements of 454 cubic inches or more, and unique six-bolts-per-cylinder-head-clamping capability that enables forced-induction and nitrous combinations of greater than 2000 horsepower.

Because the LSX Bowtie block is based on production LS blocks, all of the LS-Series Gen IV cylinder heads, crankshafts, oil pans, camshafts, and accessories bolt right up to it. There is also a tall-deck version for building even larger engines. Chevrolet Performance delivers the LSX Bowtie Block semi-finished, allowing you to finish it to your needs. Whether you're building a "tame" 500-horse street engine for your hot rod or a 1700 horsepower turbo engine for an Outlaw drag racer, the LSX Bowtie Block is the foundation for an unbeatable combination – at an unbeatable price!

LSX Bowtie Block specs and features include:

- CNC-machined cast iron block
- True priority main oiling
- 6-head bolts per cylinder
- Standard 4.400" bore spacing
- Extra-thick siamese cylinder bores
- Semi-finished, machined thicker decks
- LS7-style, 6-bolt dowel-located billet main bearing caps
- Wet-sump and dry-sump oiling capability
- Production-style deep-skirt head bolt holes
- Production bolt hole and thread sizes
- Maintains production exterior accessory mounting provisions
- Front motor plate mounting holes added
- Additional material cast around cam bearings for greater strength
- 8mm exterior/interior fifth- and sixth-head bolt holes
- Standard 0.842" lifter bores
- Accommodates all LS oil pumps and oil pans
- External oil pump feed (rear of block)
- Main web bay-to-bay breathing holes to support greater horsepower
- Includes unique cam retainer, rear cover and lifter retainers

For the advanced LSX competition engine builder, you will fully enjoy reading the following features of the new LSX Bowtie Block:

- Front oil feed holes can be plugged/restricted for mechanical flat tappet or mechanical roller lifter applications
- Can be machined safely to 9.200" deck height
- Maximum 4.200" bore at .200" minimum wall thickness (naturally aspirated applications)
- Head bolt holes can be machined for 1/2" studs
- Cam bores can be machined to accept 60mm roller bearings
- Can be machined for larger diameter lifters and/or 1.060" bronze bushings
- Front oil feed lines can be plugged and external oil pump and/or aftermarket dry sump systems can be used via oil pump feed at rear of block – may be required with certain large stroke/aluminum rod combinations
- Belt cam drive systems can be accommodated – some machining will be required
- Front motor plate can be used for racing chassis applications (sprint car, drag racing, truck pulling, etc.).
- Threaded water plugs can be used for external heaters or coolers
- Extra stock for main bearing align-honed
- 400 mPa Tensile strength iron



A LSX Bowtie Block (bottom, front)



A LSX Bowtie Block (top, rear)



A LSX Bowtie Block (front)



LSX Bowtie Block (bottom, front) **A**



Lifter Boss Detail **A**



Bay-to-Bay Breathing Pocket Detail **A**



Deck Detail **A**

Semi-finished Blocks

A. 19260093

LSX Bowtie Block (Standard Deck)

- 3.880" finished siamese cylinder bores
- 9.260" semi-finished standard deck height (ready to be decked)
- 4.250" maximum stroke (professional engine builders only!)
- Capable of 364- to 482-cubic-inch displacements
- Orange powder-coated finish
- Accepts all LS and LSX Series heads, cranks, cams, etc.
- Approximate finished weight is 225 pounds

B. 19244059

LSX Tall Deck Block

- 3.880" finished siamese cylinder bores
- 9.720" semi-finished standard deck height (ready to be decked)
- 4.500" maximum stroke (small base circle camshafts required)
- Capable of 364- to 500-cubic-inch displacements or more!
- Orange powder-coated finish
- Accepts Gen IV LS and LSX Series heads, cranks, cams, etc.
- Approximate finished weight is 250 pounds

LSX Blocks include the following:

19244460 Cam Thrust Plate

19166179 Rear Cover

19166182 Tappet Guides

Other service parts for your LSX Block:

19166178 Cam Thrust Plate, O-Ring, Gasket

19166180 Rear Cover, O-Ring

19166181 Rear Cover, O-Ring Seal

19211434 Main Cap Dowel (10-piece kit)

Finished Blocks

19260095

LSX376 Production Block (not shown)

- 4.065" bore
- Fully CNC machined
- Deck plate honed
- Align-honed main bearings
- Deck height 9.240 (production)
- Billet-steel main caps
- Includes all hardware
- Used in LSX 376 crate engine

19260099

LSX454 Production Block (not shown)

- 4.185" bore
- Fully CNC machined
- Deck plate honed
- Align-honed main bearings
- Deck height 9.240 (production)
- Billet-steel main caps
- Includes all hardware
- Used in LSX454 crate engine



CYLINDER BLOCK COMPONENTS

A. Gen III Bare Block Completion Components

PART NUMBER	QTY	DESCRIPTION
12577927	1	Valley Cover
12561211	1	Cam Sensor
12561243	1	Front Cover (with seal)
1453658	2	Transmission Alignment Dowel
12589016	1	Cam Retainer Plate
11561455	4	Cam Retainer Bolts
12588670	1	Timing Chain Damper
12560228	1	Crankshaft Sensor
12570326	4	Head Locating Dowels
12551162	4	Lifter Guide
12639250	1	Rear Cover (with seal)
varies	-	Required Water and Oil Plugs
varies	-	Required Mounting Bolts



A Bare Block Completion Components, Gen III

B. 19299099

LSX Block Completion Kit **NEW**

- Complete your LSX or GEN IV production engine with production components

PART NUMBER	QTY	DESCRIPTION
12633906	1	Front Engine Cover
12599296	1	Valley Cover
12570326	4	Head Locator Dowels
12585546	1	Crankshaft Sensor
11515756	1	Crank Sensor Bolt
12588670	1	Timing Chain Dampener



B LSX Block Completion Kit

C. 25534412

Oil Hose Adapters

- Kit adapts the production LS7 Oil Pan to aftermarket AN-style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 Oil Pan, and has AN male outlet for AN -12 fittings
- Includes 1 adapter, 2 fittings, 2 bolts, and 2 sealing gaskets

89017877

Main Bearing (not shown)

- Positions 1,2,4,5
- Requires 4 per engine
- For LS7 and LS9 engines

89017808 (not shown)

Main Bearing

- Thrust bearing, position 3
- For LS7 and LS9 engines

89017571

Main Bearing (not shown)

- Positions 1,2,4,5
- Requires 4 per engine
- For non-LS7 engines

89017572

Main Bearing (not shown)

- Thrust bearing, position 3
- For non-LS7 engines



C Main Bearing

Front Timing Cover **D****FRONT COVERS****12561243****LS1, LS6 Front Timing Cover (not shown)**

- For LS1 and LS6 engines
- No cam sensor

D. 12633906**LS2, LS3 Front Timing Cover**

- Includes seals and bolts
- For LS2 and LS3 engines
- Gen IV cam sensor included

12594939**L92 Front Timing Cover (not shown)**

- Includes seals and bolts
- For engines with VVT such as L92
- Gen IV cam sensor included

12598293**LS7 Front Timing Cover (not shown)**

- Includes seals and bolts
- Also fits LS9 engines
- Required for 2-stage oil pump clearance
- Gen IV cam sensor included

LS Front Distributor Drive Cover **E****E. 88958679****LS Front Distributor Drive Cover**

- Assembly is manufactured for applications where a 4-bbl carburetor and distributor are required
- For all LS-Series engines except LS7 and LS9

NOTE: Distributor and mechanical fuel pump not included. Uses Small-Block Ford-style distributor and mechanical fuel pump. Special water pump, accessory drive and damper required.

12633904**Front Cover Gasket (not shown)**

- For all LS-Series engines

12585673**Front Crank Seal (not shown)**

- For all LS-Series engines

11515758**Front Cover Bolt (not shown)**

- Requires 8 per engine
- For all LS-Series engines

REAR COVERS**F. 12639250****Rear Block Cover**

- Includes seals and bolts
- For all production LS engine blocks (will not work on LSX blocks)

19166179**LSX Rear Block Cover (not shown)**

- Does not include bolts or seals
- For use on LSX blocks only

89060436**Rear Crank Seal (not shown)**

- For all LS-Series engines

Rear Block Cover **F**

LS-SERIES CYLINDER HEADS

Part Number	Description	Material	Port Size	Valve Angle	Chamber Vlv	Int Vlv	Exh Type	Int Port Type	Ex Port Type	Rocker	Notes Number	Page
12629049	Bare LS2 & LS6	Aluminum	210	15 deg	64.5	2.000	1.550	Cathedral	Std LS	Bolt-down	Bare LS2/LS6	N/S
88958622	CNC LS6	Aluminum	250	15 deg	61.9	2.000	1.550	Cathedral	Std LS	Bolt-down	11.2 compression	260
12629051	Bare L92	Aluminum	260	15 deg	70	2.165	1.590	L92	Std LS	Bolt-down	Bare L92	N/S
12629064	Stock L92	Aluminum	260	15 deg	70	2.165	1.590	L92	Std LS	Bolt-down	Solid stem valves	261
12629063	Stock LS3	Aluminum	260	15 deg	68.4	2.165	1.590	L92	Std LS	Bolt-down	Hollow/solid	261
12629051	Bare LS3	Aluminum	260	15 deg	70	2.165	1.590	L92	Std LS	Bolt-down	Bare LS3	N/S
88958758	CNC LS3	Aluminum	276	15 deg	68.5	2.165	1.590	L92	Std LS	Bolt-down	Hollow/solid	261
12578450	Bare LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Bare LS7	262
12578449	Stock LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Titanium/sodium-filled valves	262
25534393	C5R	Aluminum	210	11 deg	38	2.180	1.630	C5R	Std LS	Shaft	As-cast, no seats/guides	263
19201807	LSX-L92 Small Bore	Aluminum	260	15 deg	70	2.000	1.550	L92	Std LS	Bolt-down	Solid/solid valves	264
19201805	LSX-L92	Aluminum	260	15 deg	70	2.160	1.590	L92	Std LS	Bolt-down	Hollow/solid valves	264
19201806	LSX-L92	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Titanium/sodium-filled valves	265
19257879	Bare LSX-L92	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Fully CNC-machined	264
19257881	LSX-L92 Assembly	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Fully CNC-machined bare head	264
19166981	LSX-CT	Aluminum	302	11 deg	45	2.200	1.610	LSX-CT	LSX-CT/DR	Shaft	Fully CNC-machined bare head	265
19166979	LSX-DR	Aluminum	313	11 deg	50	2.250-2.280	1.600-1.650	LSX-DR	LSX-CT/DR	Shaft	Fully CNC-machined bare head	266

THE LS FAMILY PRODUCTION AND C5R ALUMINUM HEADS

Great cylinder-head airflow has been a key enabler of the LS-Series' exceptional performance. Chevrolet Performance delivers those power-building attributes to you with a range of production-style aluminum heads – from the LS6 heads for smaller-displacement engines to LS7 style heads for 427-inch-and-larger combinations, our aluminum heads benefit from General Motors' extensive research and development program, ensuring maximum airflow without compromises. In fact, many professional builders use our heads as straight bolt-ons, with no further machining. Many of our assembled heads use premium machining and materials, including CNC finishing and porting, along with lightweight, hollow-stem valves, sodium-filled exhaust valves and – on some heads – lightweight titanium intake valves.

Aluminum LS Family Head Technical Notes:

- Manufactured from 319-T5 aluminum alloy
- High-efficiency combustion chambers
- Symmetrical intake and exhaust ports
- Angled spark plugs (14mm; 5/8" hex; 3/4" reach; taper-seat plugs)
- 15° valve angle (except C5R and LS7)
- Bolt-down-type rocker arms (except C5R)
- Center-bolt valve cover hold-downs
- Fits Gen III and Gen IV Small-Blocks only*

A. 88958622 ⓘ

LS6 CNC-Ported Cylinder Head Assembly

- CNC-ported aluminum performance head
- 2.000" hollow stem intake, and 1.550" sodium-filled exhaust valves
- .570" max valve lift
- 250cc CNC'd cathedral-port intake ports
- 85cc CNC'd D-shaped exhaust ports
- 61.9cc CNC'd combustion chambers

Heads P/N 88958665 and P/N 88958622 are assembled with the following components:

12565311	Intake Valves	10166344	Valve Spring Retainers
12565312	Exhaust Valves	12482063	Intake Valve Stem Seals
12625033	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		

*Chevrolet Performance heads will not fit 4.8L and 5.3L engines, due to their smaller bore sizes.



A LS6 CNC-Ported Cylinder Head Assembly (exhaust)



A LS6 CNC-Ported Cylinder Head Assembly (intake)



A LS6 CNC-Ported Cylinder Head Assembly (combustion chamber)



LS3 CNC-Ported Cylinder Head Assembly (exhaust) **B**



LS3 CNC-Ported Cylinder Head Assembly (intake) **B**



LS3 CNC-Ported Cylinder Head Assembly (combustion chamber) **B**



LS3 CNC-Ported Cylinder Head Assembly (exhaust detail) **B**



LS3 CNC-Ported Cylinder Head Assembly (intake detail) **B**

12629064 ⓘ

L92 Cylinder Head Assembly (not shown)

- Aluminum performance head
- Fits any LS family engine with 4.000" bore or larger
- 2.165" solid stem intake, and 1.590" solid stem exhaust valves
- .510" max valve lift
- As-cast L92 style intake ports
- D-shaped exhaust ports
- As-cast combustion chambers

Head P/N 12629064 is assembled with the following components:

12627970	Intake Valves	10166344	Valve Spring Retainers
12582719	Exhaust Valves	12482063	Intake Valve Stem Seals
12589774	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		

L92 Head Flow Data (4.000" Bore):

Lift	0.200"	0.300"	0.400"	0.500"	0.600"
Intake	151	208	256	294	316
Exhaust	111	152	174	183	189

12629063 ⓘ

LS3 Cylinder Head Assembly (not shown)

- Aluminum performance head
- Fits any LS family engine with 4.000" bore or larger
- 2.165" hollow stem intake, and 1.590" solid stem exhaust valves
- .550" max valve lift
- As-cast L92 style intake ports
- D-shaped exhaust ports
- As-cast combustion chambers
- Uses bare head P/N **12629051**

B. 88958758 ⓘ

LS3 CNC-Ported Cylinder Head Assembly

- CNC-ported version of the LS3 cylinder head
- Flows about 10-percent more than the production head – more than 350 cfm (intake side) at .600in. lift
- 276cc intake runners and 92cc exhaust ports
- Fits all LS engines with 4.000" bore or larger
- 2.165" hollow stem intake, and 1.590" solid stem exhaust valves
- .550" max valve lift
- D-shaped exhaust ports

Heads 12629063 and 88958758 are assembled with the following components:

12569427	Intake Valves	10166344	Valve Spring Retainers
12582719	Exhaust Valves	12482063	Intake Valve Stem Seals
12625033	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		

*Chevrolet Performance heads will not fit 4.8L and 5.3L engines, due to their smaller bore sizes.



Additional components required for installation. See page 263.



A. 12578449 ⓘ

LS7 CNC-Ported Cylinder Head Assembly

- 356-T6 aluminum head
- Fully CNC'd ports and chambers
- LS7 rectangle port design
- Assembled with 2.200" titanium intake and 1.610" sodium-filled exhaust valves
- 12° valve angle
- Minimum 4.100" bore
- 270cc CNC'd intake ports, 85cc CNC'd exhaust ports
- 70cc CNC'd combustion chambers
- Capable of over 600 horsepower
- Bare head **P/N 12578450** available separately

Head P/N 12578449 is assembled with the following components:

12591644	Intake Valves	12596508	Valve Spring Retainers
12578455	Exhaust Valves	12482063	Intake Valve Stem Seals
12621428	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks	12596509	Intake Valve Lash Cap

LS7 Head Flow Data:

Lift	0.100"	0.200"	0.300"	0.400"	0.500"	0.550"	0.600"	0.700"
Intake	71	145	222	271	315	332	348	352
Exhaust	60	120	159	192	207	214	219	221

12626958 ⓘ

LSA Cylinder Head Assembly (not shown)

- CTS-V 6.2L production cylinder head assembly
- High-strength aluminum casting for supercharged application
- Premium steel intake and exhaust valves
- Completely Assembled

NOTE: Uses ten 8mm & twenty 11mm head bolts

B. 12621774 ⓘ

LS9 Cylinder Head Assembly

- ZR-1 Corvette production cylinder head assembly
- Extra-strength casting with re-enforced webbing for supercharged engines
- Thicker deck surface for minimal distortion
- Titanium intake and hollow sodium-filled exhaust valves

NOTE: Uses 10 8mm & 20 12mm head bolts – for use on LS9 blocks only



A LS7 CNC-Ported Cylinder Head Assembly (exhaust)



A LS7 CNC-Ported Cylinder Head Assembly (intake)



A LS7 CNC-Ported Cylinder Head Assembly (combustion chamber)



B LS9 Cylinder Head (exhaust)



B LS9 Cylinder Head (intake)



LS9 Cylinder Head (combustion chamber) **B**



Bare C5R Racing Cylinder Head (exhaust) **C**



Bare C5R Racing Cylinder Head (intake) **C**



Bare C5R Racing Cylinder Head (combustion chamber) **C**

C. 25534393

Bare C5R Racing Cubed Cylinder Head

- The images (C) to the left represent a machined version of the P/N 25534593 cubed (unmachined) product. Chevrolet Performance does not supply a fully machined version of the C5R head. Image is for reference only.
- 355-T7 "as-cast" Aluminum racing head
- Professional porting and machining of combustion chambers required
- No seats or guide machining
- C5R rectangle-port design – requires aftermarket rectangle-port intake manifolds
- Designed for big bore (4.100" min) LS7/C5R/LSX blocks
- 210cc "as-cast" intake ports
- 70cc "as-cast" exhaust ports, same as production LS6
- 30cc "as-cast" combustion chambers
- All fasteners are metric
- Capable of over 800 horsepower!
- Standard LS exhaust port design

LS-SERIES CYLINDER HEADS: ADDITIONAL REQUIRED COMPONENTS

Engine	Part Number	Gaskets (Quantity)	Bolts (Quantity)	Spark Plug	Engine Application
LS6	88958622	12589226 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	CNC LS6
L92	12629064	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	L9H
LS3	12629063	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	LS3
LS3	88958758	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	CNC LS3
LS7	12578449	12582179 (2) OR 19170419	11562524 (20), 12558840 (10)	12571165	MY06/07 LS7
LSA	12626958	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	LSA
LS9	12621774	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	LS9
C5R	25534393	12582179 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	C5R



Additional components required for installation.



LSX CYLINDER HEADS

Extending the performance range of the LSX platform are Chevrolet Performance's new, 6-bolt LSX cylinder heads. Many are capable of flowing more than 400 cfm and their 6-bolts-per-cylinder clamping design gives them bomb-proof strength. Your horsepower-building potential is nearly unlimited with LSX heads.

These aluminum masterpieces of performance feature port and chamber designs based on popular and performance-proven production-style heads, such as the LS3/L92 and LS7 heads. They are easily identified by the engraved LSX logo on the ends.

All LSX heads are made of 356-T6 aluminum and feature a 5/8" thick deck that allows plenty of room for builder-specified combinations. Additional features include:

- Uses 11mm (10) and 8mm (13) head bolts (not included, see drawing on page 203)
- Accommodates production valvetrain components (except for Drag Race and Circle Track heads)
- Includes premium beehive-type valve springs (except for Drag Race and Circle Track heads)
- Extra material cast in the port areas to accommodate professional porting
- Valve guides for 8mm valve stems, except DR & CT

Racing-specific LSX-DR (Drag Racing) and LSX-CT (Circle-Track) heads feature raised runner designs and other unique features designed to maximize performance at the track.

LSX Street Heads

Four LSX street head configurations are offered: The LSX-LS7 head, the LSX-LS3 head, the LSX-LS9 head and the LSX-L92 Small Bore head. The LSX-L92 head features smaller combustion chambers that are compatible with smaller-bore LS1 and LS6 engines. The street heads accommodate valve springs with up to 1.37" diameter bases, but can be machined for larger springs.

19201807

LSX-L92 Small Bore Cylinder Head (not shown)

- LS3/L92 Port Configuration
- "As cast" runners and combustion chamber
- 15° valve angle
- Assembled with 2.00" intake and 1.55" exhaust valves
- 250cc intake port and 80cc exhaust port
- 70cc combustion chamber
- Intake flow – 280 cfm@ .600" lift / Exhaust flow – 180 cfm@ .700" lift
- Beehive valve springs
- Uses LS3/L92 style rocker arms (offset)
- 3.890" minimum bore size
- Uses LS3/L92 style intake manifold

19201805

LSX-LS3 Cylinder Head (not shown)

- L92 style rectangle port design
- Assembled with 2.165" hollow stem intake and 1.590" solid stem exhaust valves
- 15° valve angle
- Minimum 4.000" bore
- 260cc "as-cast" intake ports, 80cc "as-cast" exhaust ports
- 70cc "as-cast" combustion chambers
- Uses LS3 rocker arms/LS7 bolts

19257879

LSX-LS7 CNC-Ported Bare Cylinder Head (not shown)

- Fully CNC Ported
- 6-bolt per cylinder bolt pattern
- LS7 style rectangle port design
- 12° valve angle
- Minimum 4.100" bore
- 70cc "as-cast" combustion chambers
- Uses LS7 rocker arms/LS7 bolts
- 397 cfm@0.700" intake
- 230 cfm@0.700" exhaust

19257881

LSX-LS7 CNC-Ported Cylinder Head Assembly (not shown)

- Fully CNC Ported
- 6-bolt per cylinder bolt pattern
- LS7 style rectangle port design
- Assembled with 2.200" titanium intake and 1.610" sodium-filled exhaust valves
- 12° valve angle

Continued on page 233



A LSX-LS7 Cylinder Head Assembly (exhaust)



A LSX-LS7 Cylinder Head Assembly (intake)



A LSX-LS7 Cylinder Head Assembly (combustion chamber)



LSX-CT CNC-Ported Cylinder Head (exhaust) **B**



LSX-CT CNC-Ported Cylinder Head (intake) **B**



LSX-CT CNC-Ported Cylinder Head (combustion chamber) **B**

LSX-LS7 CNC-Ported Cylinder Head Assembly Continued

- Minimum 4.100" bore
- 70cc "as-cast" combustion chambers
- Handles .650" lift with premium springs
- Uses LS7 rocker arms/LS7 bolts
- Uses P/N 19257879 bare head (shown)
- 397 cfm@0.700" intake
- 230 cfm@0.700" exhaust

A. 19201806

LSX-LS7 Cylinder Head Assembly

- 6-bolt per cylinder bolt pattern
- LS7 style rectangle port design
- Assembled with 2.200" titanium intake and 1.610-inch sodium-filled exhaust valves
- 12° valve angle
- Minimum 4.100-inch bore
- 270cc "as-cast" intake ports, 85cc "as-cast" exhaust ports
- 70cc "as-cast" combustion chambers
- Handles .650" list with premium springs
- Uses LS7 rocker arms/LS7 bolts

19166977

LSX-LS7 Bare Cylinder Head (not shown)

- Used in P/N 19201806

19213963

LSX-LS9 Cylinder Head (not shown)

- L92 style rectangle port design
- Assembled with 2.165" titanium intake and 1.590" sodium-filled exhaust valves
- 15° valve angle
- Minimum 4.000" bore
- 260cc "as-cast" intake ports, 80cc "as-cast" exhaust ports
- 70cc "as-cast" combustion chambers
- Uses LS3 rocker arms/LS7 bolts

LSX-CT and LSX-DR Heads

The LSX-CT (Circle-Track) and LSX-DR (Drag Racing) cylinder heads feature raised-runner designs for improved airflow that supports sustained high-rpm performance. Intake port configuration is similar to the competition-derived C5R head, but the ports are raised an amazing 10mm and the intake manifold bolt pattern is spread to accommodate additional port configurations. Additional features include:

- 11° valve angle (same as C5R head)
- Accommodates up to 1.660" diameter valve springs
- Raised rocker rails
- Requires shaft-mount rockers
- May require special valve covers to clear shaft-mount rockers
- Provisions for down-nozzle machining
- 9° intake manifold angle – requires new LSX DR or LSX CT intake manifolds
- Unique LSX-CT/DR exhaust bolt pattern

B. 19166981

LSX-CT CNC-Ported Cylinder Head

- Fully CNC-ported
- 356-T6 aluminum racing head
- 5/8" thick deck
- LSX-CT rectangle-intake port design – requires LSX-CT intake manifold
- LSX-CT/DR spread-port exhaust port pattern
- Cast-in down-nozzle bosses (not machined)
- Designed for 2.200" intake and 1.610" exhaust valves
- Machined for 1.625" valve springs
- 11° valve angle
- Minimum 4.125" bore
- 302cc CNC'd intake ports
- 109cc CNC'd exhaust ports
- 45cc CNC'd combustion chambers
- Capable of over 850 naturally aspirated horsepower!

19202985

LSX-CT Cylinder Head (not shown)

- Rough machined seats and guides
- Ready for custom porting



LSX Cylinder Heads Continued

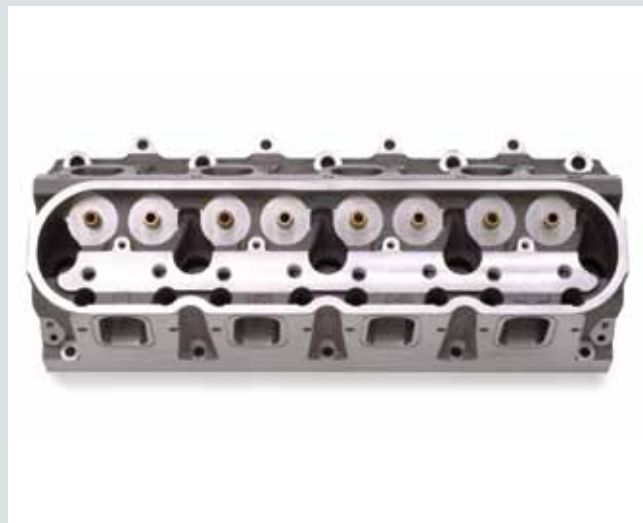
A. 19166979

LSX-DR CNC-Ported Cylinder Head

- Fully CNC ported
- 356-T6 aluminum racing head
- 5/8" thick deck
- LSX-DR rectangle intake port design – requires LSX-DR intake manifold
- LSX-CT/DR spread port exhaust port pattern
- Cast-in down-nozzle bosses (not machined)
- Designed for up to 2.280" intake and 1.620" exhaust valves (4.165" minimum bore)
- Machined for 1.660" valve springs
- 11° valve angle
- Minimum 4.125" bore
- 313cc CNC'd intake ports
- 116cc CNC'd exhaust ports
- 50cc CNC'd combustion chambers
- Requires 19201808 shaft-mount Rocker Kit
- Capable of over 900 naturally aspirated horsepower!
- Installed on LSX454R engine assembly



A LSX-DR CNC-Ported Cylinder Head (exhaust)



A LSX-DR CNC-Ported Cylinder Head (intake)



A LSX-DR CNC-Ported Cylinder Head (combustion chamber)



LSX-DR Cylinder Head (exhaust) **B**



LSX-DR Cylinder Head (intake) **B**



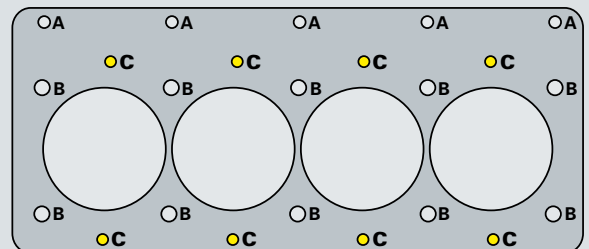
LSX-DR Cylinder Head (combustion chamber) **B**

B. 19202986

LSX-DR Cylinder Head

- Rough machined seats and guides
- For cylinder head porters to work their magic!

LS/LSX HEAD-BOLT PATTERNS



A	Standard LS	8mm	Bolt/Stud
B	Standard LS	11mm	Bolt/Stud
C	LSX	8mm	Bolt/Stud



BUILDER'S TIP

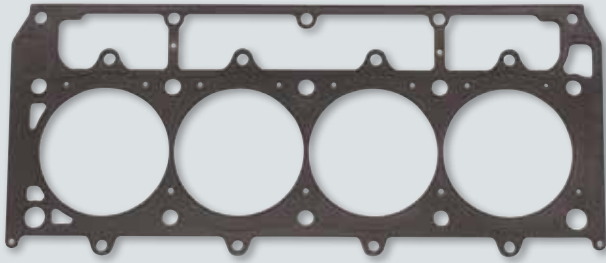
Building a Carbureted LS Engine

For some vintage cars, a carbureted induction system is more aesthetically appropriate, while some racecars depend on a carburetor, based on class rules or other reasons. Building a carbureted LS engine is just as easy as assembling a production-style fuel injected version. You'll still need all the sensors of an injected engine, but you simply replace the injection manifold with one of the Chevrolet Performance carbureted intakes –

they're available for LS1/LS2/LS6-style cathedral-port heads, L92/LS3-style heads and LS7 heads. Then, add your favorite four-barrel and plug it all into one of our pre-programmed controllers. Add a 12-volt power source and your carbureted LS engine will deliver a balanced combination of vintage looks and modern engine management dependability!



CYLINDER HEAD GASKETS AND BOLT KITS



LSX 4.100" Bore MLS Head Gasket Kit

12498543

Cylinder Head Gasket Kit (not shown)

- 2 head gaskets for 1997-2001 LS1 Camaro/Firebird and Corvette engines
- Also fits 2001 LS6 Corvette engine

12498544

Cylinder Head Gasket Kit (not shown)

- 2 head gaskets for 2002-2004 LS1 Camaro/Firebird and Corvette engines

19170418

LSX 4.100 Bore MLS Head Gasket Kit

- Multi-layer steel gaskets for naturally aspirated and forced induction applications
- .051" thick
- Includes 1 LH and 1 RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.100"

19170419

LSX 4.200 Bore MLS Head Gasket Kit (not shown)

- Multi-layer steel gaskets for naturally aspirated and forced induction applications
- .051" thick
- Includes 1 LH and 1 RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.200"

19170420

LSX 4.250 Bore MLS Head Gasket Kit (not shown)

- Multi-layer steel gaskets for naturally aspirated applications
- .051" thick
- Includes 1 LH and 1 RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.250"

12498545

Cylinder Head Bolt Kit (1997-2003, not shown)

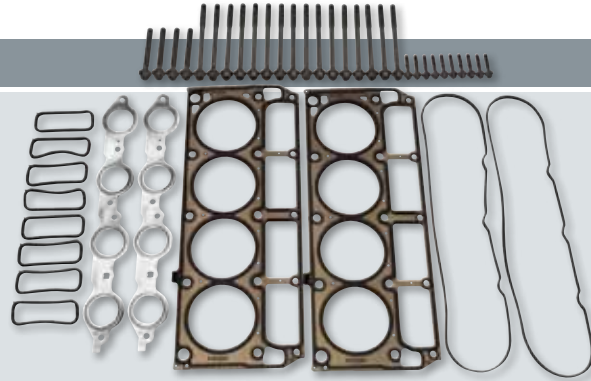
- Kit of 15 head bolts for 1998-2003 LS1 Camaro/Firebird and 1997-2003 Corvette; and 2001-2003 LS6 Corvette
- 1 kit per cylinder head; order 2 per engine
- Head bolts cannot be reused on these engines

NOTE: IMPORTANT!! LS-Series engines produced from January 2004 forward have a new "short-style" head bolt design. Earlier head bolts will not fit. Order P/N 17800568 for engines produced from January 2004 and later.

17800568

Cylinder Head Bolt Kit, Gen III and Gen IV (not shown)

- Kit of 15 bolts for LS-Series engines produced from January 2004 and later
- Bolts are 5mm shorter than previous design
- Services single engine head only



LS1 Cylinder Head Installation Kit (F-Car)

19257453

Cylinder Head Bolt Kit - Std. Deck LSX Block (not shown)

- Contains additional bolts for standard-deck LSX 6-bolt heads
- Contains bolts for 2 heads (1-engine)

NOTE: Engine set requires 2 - 17800568 bolt sets for conventional GEN III & GEN IV engines. For complete LSX set, order: 2 - 17800568 - GEN III & GEN IV bolt kits, 1 - 19257453 - LSX Standard Deck Bolt Kit.

19257452

Cylinder Head Bolt Kit - Tall Deck LSX Block (not shown)

- Contains additional bolts for tall-deck LSX 6-bolt heads
- Contains bolts for 2 heads (1-engine)

NOTE: Engine set requires 2 - 17800568 bolt sets for conventional GEN III & GEN IV engines. For complete LSX set, order: 2 - 17800568 - GEN III & GEN IV bolt kits, 1 - 19257452 - LSX Tall Deck Bolt Kit.

12499217

LS1 Cylinder Head Installation Kit (F-Car)

- Comprehensive cylinder head installation kit for 2002 Camaro and Firebird models equipped with the LS1 engine
- Kit includes 2 head gaskets, 2 valve cover gaskets, 8 intake manifold gaskets, 2 exhaust manifold gaskets, 2 intake manifold-to-block seals, 20 long-head bolts and 10 short-head bolts

12589226

LS1/LS6 Head Gasket (not shown)

- Single gasket, 2 required
- For naturally aspirated LS1 and LS6 5.7L engines
- .051" thick
- 3.920" max bore
- Standard LS bolt pattern

12589227

LS2, L76 Head Gasket (not shown)

- Single gasket, 2 required
- For naturally aspirated LS2 and L76 6.0L engines
- .051" thick
- 4.020" max bore
- Standard LS bolt pattern

12610046

LS3, L92 Head Gasket (not shown)

- Single gasket, 2 required
- For naturally aspirated LS3/L92 6.2L engines
- .051" thick
- 4.080" max bore
- Standard LS bolt pattern

12582179

LS7 Head Gasket (not shown)

- Single gasket, 2 required
- For naturally aspirated LS7 7.0L engines
- .051" thick
- 4.140" max bore
- Standard LS bolt pattern



LS-SERIES VALVES

Intake Valves

Part Number	Valve Size	Stem Size	Description
12617533	2.165"	8mm	Stock replacement valve used in L92 engines
12605223	2.165"	8mm	Stock replacement solid-stem valve used in LSA engines
12569427	2.165"	8mm	Stock replacement hollow-stem valve used in LS3 engines
12605524	2.165"	8mm	Stock replacement titanium valve used in LS9 engines
12591644	2.200"	8mm	Stock replacement titanium valve used in LS7 engines

Exhaust Valves

12565312	1.500"	8mm	Stock replacement sodium-filled stem valve used in LS6 engines
12563064	1.500"	8mm	Stock replacement solid-stem valve used in LS2 engines
12582719	1.590"	8mm	Stock replacement solid-stem valve used in L92 and LS3 engines
12605525	1.590"	8mm	Stock replacement sodium-filled stem valve used in LS9 engines
12618110	1.610"	8mm	Stock replacement sodium-filled stem valve used in LS7 engines

VALVE SPRINGS AND SPRING KITS

12499224

LS Valve Spring Kit (not shown)

- Beehive style springs
- Used on LS2/LS6 cylinder heads
- 1.800" installed height @ 90 lbs. pressure
- Max lift .550"
- 1.250" @ 295 lbs. pressure
- Includes 16 of P/N 12625033

12625033

Valve Springs (not shown)

- Beehive style springs
- Standard LS6/LS3 springs
- Use cap P/N 10166344
- 1.250" @ 295 lbs. pressure
- 1.800" installed height @ 90 lbs. pressure
- Max lift .550"

12589774

Valve Springs (not shown)

- Beehive style springs
- Standard L76/L92 springs
- 1.800" installed height @ 90 lbs. pressure
- Max lift .520"
- 1.300" @ 264 lbs. pressure

12621428

Valve Springs (not shown)

- Beehive style springs
- Used on LS7 cylinder heads
- 1.960" installed height @ 101 lbs. pressure
- 1.368" @ 310 lbs. pressure
- Max lift .600"

LS-SERIES PUSHRODS

Part Number	Material	Diameter	Length	Usage	Description
12593344	1010 steel	3/8"	7.750	LS7	Production pushrod, individually packed
10238852	1010 steel	5/16"	7.325	LS1, LS2, LS3, LS6, L92	Production pushrod, individually packed

ROCKER ARMS AND ROCKER ARM BOLTS

10214664

Rocker Arm (not shown)

- For LS1, LS2 and LS6 intake and exhaust valves
- For L92, LS9 and LS3 exhaust valves
- Straight design, no offset
- 1.7:1 ratio

12569167

Rocker Arm (not shown)

- Intake rockers for L92, LS9 and LS3 style heads only
- Offset design
- 1.7:1 ratio

12579615

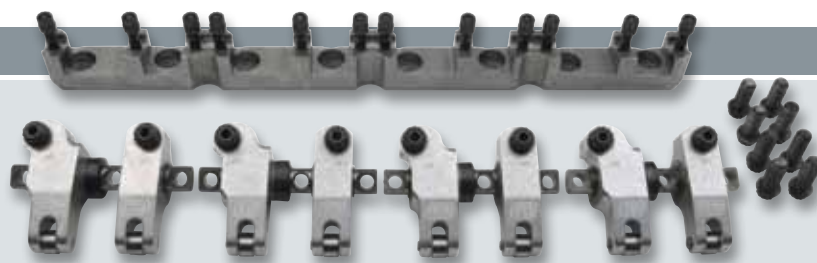
Rocker Arm (not shown)

- Intake rockers for LS7 style heads only
- Offset design
- 1.8:1 ratio

12579617

Rocker Arm (not shown)

- Exhaust rockers for LS7 style heads only
- Straight design, no offset
- 1.8:1 ratio



LSX454R Rocker Arm Kit

12560961

Rocker Arm Bolts (not shown)

- For cathedral port and L92 style heads
- 16 required per engine

11588791

Rocker Arm Bolts (not shown)

- For LS7 style heads
- 16 required per engine

12552203

Rocker Arm Stand (not shown)

- For LS1, LS2 and LS6 style heads only
- Sold individually
- Requires 1 per cylinder head

12600936

Rocker Arm Stand (not shown)

- For L92, LS9 and LS3 style heads only
- Sold individually
- Requires 1 per cylinder head

19201808

LSX454R Rocker Arm Kit

- 1.9:1 ratio
- Fits DR head only
- Full-roller bearing tips
- Full-roller bearing trunnion
- Set is for two heads
- Requires special valve cover for clearance



LS VALVE COVERS

Nothing finishes off your engine like a great-looking set of valve covers straight from GM. Our new collection of LS valve covers allows you to personalize your LS-powered project with a custom look. Choose from 8 great styles, available in natural, powder-coated, polished and chrome finishes, with callouts for your favorite nameplate, vehicle and more. These valve covers are designed and built to production specs and include a production-type O-ring gasket for a leak-free fit. No matter if you're driving a new Corvette or a Pro-Touring-style, LS3-powered '61 Chevy, we've got the perfect set of valve covers for it.

NOTE: The valve covers feature the standard bolt pattern, but **DO NOT** have provisions for production-style coil mounts. Aftermarket or custom coil relocation brackets must be used. Additional features include:

- PVC system (except 25534398 and 25534399)
- Sold in pairs (except 25534398 and 25534399)
- Integrated oil fill
- Accommodates tall-style rockers
- Includes hardware and O-ring gasket

A. 19156433

Valve Cover Kit – CHEVROLET, Chrome

- Chrome finish with Black CHEVROLET lettering

B. 19156430

Valve Cover Kit – CAMARO, Natural

- Silver finish with Black CAMARO lettering

19156428

Valve Cover Kit – CORVETTE, Polished (not shown)

- Polished finish with Black CORVETTE lettering

C. 19156429

Valve Cover Kit – CORVETTE, Polished

- Polished finish with Red CORVETTE lettering

D. 19171269

Valve Cover Kit – PONTIAC, Natural

- Silver finish with Black PONTIAC logo



A Valve Cover Kit – Chevrolet, Chrome



B Valve Cover Kit – Camaro, Natural



C Valve Cover Kit – Corvette, Polished



D Valve Cover Kit – Pontiac, Natural



Valve Cover Kit – GMPP/LSX, Polished **E**



Valve Cover Kit – LSX376, Orange/Black **F**



Valve Cover Kit – Polished **G**



LS Center-Bolt Competition Valve Cover (with breather hole) **H**



LS Center-Bolt Competition Valve Cover **I**

E. 19171500

Valve Cover Kit – GM Performance Parts/LSX, Polished

- Polished finished with Black GM Performance Parts and LSX logos

19171270

LSX376 (not shown)

- Grey/Black

F. 19299328

LSX376

- Orange/Black

19171272

LSX454 (not shown)

- Orange/Black

19171497

LSX454 (not shown)

- Black/Red

19259058

LSX454R (not shown)

- Orange/Black

G. 19171502

Valve Cover Kit – Polished

- Polished finish with no logos

H. 25534398

LS Center-Bolt Competition Valve Cover (with breather hole)

- Lightweight aluminum valve cover designed for production center-bolt LS-Series cylinder heads
- Includes bolts and seal
- Sold individually
- Natural finish

I. 25534399

LS Center-Bolt Competition Valve Cover

- Lightweight aluminum valve cover designed for production center-bolt LS-Series cylinder heads
- Includes bolts and seal
- Sold individually
- Natural finish





HARDWARE AND BREATHERS

12341993

Push-In Oil Filler Cap (not shown)

- Round oil filler cap with Bowtie logo for valve covers with 1.220" diameter hole

12573338

Oil Fill Cap (not shown)

- Production
- For LS1 engines

12573337

Oil Fill Cap (not shown)

- Production
- For L92 engines

12643759

Oil Fill Cap

- Production
- For LS2 and LS6 engines

12577215

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For L92 engines

12560961

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For LS1, LS2 and LS6 engines

11588791

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For LS7 engines

12637683

Valve Cover Gasket (not shown)

- Requires 1 per valve cover
- For LS1, LS2, LS6, LS7 and L92 engines



VALVE LIFTERS AND COMPONENTS

12499225

LS-Series Camshaft Lifter Kit (not shown)

- Set of 16 lifters for LS-Series engines
- Same lifter used in LS2 and LS7 P/N 17122490 (single lifter)

12595365

Lifter Guide (not shown)

- Works in Gen III and IV applications (except with AFM)

88958689

Racing Hydraulic Roller Lifter Kit

- As developed by GM Racing and GM Powertrain
- For use in Gen III and Gen IV engines where sustained high rpms are typical
- Special reduced-mass internal components allow for higher limiting speeds with aggressive camshaft designs
- Improved valvetrain dynamics and stability will improve horsepower, and high rpms
- Tested to 8,000 rpm in GM Racing applications
- Set of 16

VALVETRAIN KIT

19257324

LS9 Valvetrain Kit

- Use with LS9 bare cylinder head P/N 12621773
- Can be used with other LS rectangular-port heads, except LS7 and small-bore LSX, to add lighter-weight valves
- Two kits required to assemble a pair of heads
- Includes 4 intake valves, 4 exhaust valves, 8 valve springs, 8 valve spring caps, 16 valve stem keys, 4 intake valve seals, 4 exhaust valve seals and 4 rocker arm wear pads





LSX CAMSHAFT

The range of high-performance camshafts for LS engines expands to include our new LSX454 cam. It was developed by Chevrolet Performance's LSX performance engineers, who designed it to deliver great high-rpm performance with excellent street manners.

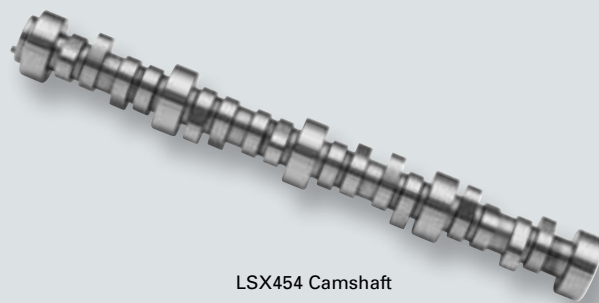
The LSX454 cam is a high-lift, hydraulic roller that was originally developed for our LSX454 crate engine. It maximizes the potential of big-displacement engines at high rpm. Maximum lift is 0.612/0.612" with 1.7-ratio rockers and 0.648/0.648" with 1.8-ratio rockers. Duration is 236 degrees on the intake side and 246 degrees on the exhaust side, with a 110-degree separation angle.

NOTE: Not compatible with production-style variable-valve timing configurations or production valve springs.

19166972

LSX454 Camshaft

- .648" lift intake/exhaust (1.8 rockers)
- 236° intake/246° exhaust
- Good mid-range and top-end
- 3-bolt design



LSX454 Camshaft

LS-SERIES CAMSHAFTS

All LS camshafts are compatible with production-style LSX and C5R blocks, as well as all of our cylinder heads – although piston-to-valve clearance must be checked on some applications. We offer a broad range of production and racing-style camshafts that are factory-engineered to deliver maximum performance when paired with our high-flow cylinder

heads. Save yourself the time and expense of going to an aftermarket camshaft supplier and build your LS engine with a genuine GM cam. We've also got the valvetrain components you need to finish the engine, including lightweight components designed for high-rpm performance.

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in) (1.7 rocker)	Lobe Separation (deg)	Technical Notes
12565308	2002-2004 LS6 Cam	I: 204 E: 218	I: .550 E: .550	117.5	Cam requires valve spring P/N 12586484
88958770	ASA Cam	I: 226 E: 236	I: .525 E: .525	110	Cam requires valve spring P/N 12586484; "ASA" cam for off-highway use
12480033	Hot Cam Kit	I: 219 E: 228	I: .525 E: .525	112	Kit includes 16 LS6 valve springs retainers
88958753	LS Hot Cam	I: 219 E: 228	I: .525 E: .525	112	Same cam as in kit P/N 12480033
19166972	LSX454 Cam	I: 236 E: 246	I: .612 E: .612	110	Max lift with 1.8 rockers .648/.648
88958766	Showroom Stock Cam	I: 239 E: 251	I: .570 E: .570	106.5	Showroom Stock racing design; requires hollow-stem intake valves P/N 12565311, hollow-stem exhaust valves P/N 12565312, valve springs P/N 12586484, and aftermarket notched pistons OR machine stock pistons
12638426	LS7	I: 211 E: 230	I: .558 E: .558	121	Stock LS7 camshaft, will not work on Gen III engines Max lift with 1.8 rockers .593/.588
12561721	LQ9: 2002-2006 LS1: 2001-2004	I: 196 E: 201	I: .467 E: .479	116	Stock cam for 2002-2006 LQ9 and 2001-2004 LS1 engines
88958772	LS Stage 2 Cam	I: 227 E: 239	I: .551 E: .551	108	Max lift with 1.8 rockers .583/.583
88958773	LS Stage 3 Cam	I: 233 E: 276	I: .595 E: .595	107	Max lift with 1.8 rockers .630/.630
12623064	LSA cam	I: 198 E: 216	I: .480 E: .480	122.5	Stock LSA cam
12638427	LS9 cam	I: 211 E: 230	I: .562 E: .562	122.5	Stock LS9 cam

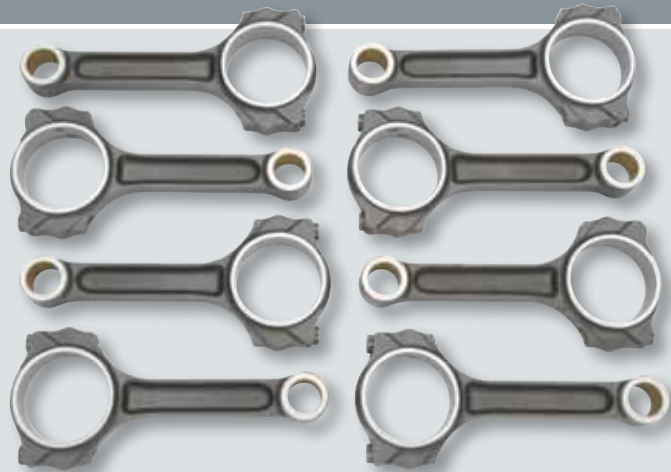


LSX CONNECTING RODS

Like our new crankshafts, the new LSX connecting rods from Chevrolet Performance are made of high-strength, 4340 forged steel to deliver worry-free performance for your high-horsepower, high-revving LS engine. Additional strength comes in the rod's I-beam design and its chamfered big end fits great with filleted cranks, like our LSX crankshafts.

- 2.100" journals (big end)
- 0.866" bushed small ends
- MUST be used with LSX forged pistons – not compatible with production pistons
- Includes 7/16" 12-point, SAE 8740 rod bolts
- Caps are dowel located
- Weight-matched, sold in sets of 8

19166964
LSX Connecting Rod Kit, 6.000"



LSX Connecting Rod Kit

LS CONNECTING RODS AND COMPONENTS

12568734
1997-2004 Connecting Rod

- Connecting rod for use on all 1997-2004 production Corvettes and 1998-2002 Camaro/Firebird with LS1/LS6
- Press fit design
- 6.098" C-C length
- Sold individually

12607475
Connecting Rod (not shown)

- Connecting rod used in 2005-2007 LS2 and 2008-2012 LS3 engines has bronze bushing
- 6.098" C-C length
- Sold individually

11610158
LS6 Rod Bolts (not shown)

- Recommended for use in performance Gen III engines
- Bolts have greater strength than pre-2000 rod bolts
- 1 bolt per package; order 2 per connecting rod



1997-2004 Connecting Rod

89017573
Rod Bearing (not shown)

- 1 required per connecting rod
- For all LS-Series engines, except LS7 and LS9

89017811
LS7 Rod Bearing (not shown)

- 1 required per connecting rod
- For LS7 and LS9 engines only

19259294
LSX454 Rotating Assembly NEW

Build your own "LSX Stroker" with this rotating assembly used in our powerful LSX454 crate engine. Order LSX fully-machined block # 19244057 to build your own engine.

Kit includes:

Part Number	Qty	Description
19244018	1	Crankshaft, 4340 Forged Steel with 8-bolt flange (4.125" stroke)
19166964	8	Connecting Rods, 4340 Forged Steel
19166958	8	Pistons, Forged Aluminum with coated skirts (4.185" bore)

NOTE: Also includes performance piston rings, rod and main bearings (not shown)





LS-SERIES PISTONS AND PISTON RINGS

Premium-quality hypereutectic aluminum alloy pistons are used on most production LS engines (the LS9 supercharged uses forged aluminum). They are lightweight, durable and promote quieter operation. Chevrolet

Performance offers production and oversized pistons for many applications. They're sold individually, unless otherwise specified. Check the accompanying chart for part numbers, specs, sizes and applications.

LS-Series Pistons

Part Number	Engine Size	Bore Size	Oversize	Rod Length	Pin Type	Comp Ratio	With Chamber	Description
88984245	5.7L	3.898"	—	Standard	Pressed	—	65	Hypereutectic LS1 and LS6 replacement
88984246	5.7L	3.898"	+ .010"	Standard	Pressed	—	65	Hypereutectic LS1 and LS6 replacement
19178305	6.0L	4.000"	—	Standard	Floated	10.9	65	Hypereutectic LS2 and LQ9 replacement
89017479	6.0L	4.000"	+ .020"	6.098"	Floated	10.9	65	Hypereutectic LS2 and LQ9 replacement
19259593	7.0L	4.125"	+ .020"	6.067"	Floated	11.0	70	Hypereutectic LS7 replacement

LS-Series Rings

Part Number	Bore Size	Oversize	Ring Thicknesses	Description
89017484	4.000"	—	1.2, 1.5, 2.5mm	Production ring pack for '05-'06 LS2, '06 L76
88894243	4.000"	—	1.5, 1.5, 3.0mm	Production ring pack for '05-'06 LQ9
89017776	4.125"	—	1.2, 1.2, 2.0mm	Production ring pack for '06 LS7
89017777	4.125"	+ .020"	1.2, 1.2, 2.0mm	Oversize LS7 ring pack

LSX PISTONS

Complete your all-LSX rotating assembly with LSX forged aluminum pistons from Chevrolet Performance. They're lightweight and tough, enabling higher revs and dependable performance, even with high-boost and nitrous-assisted applications. They're made of 4032 forged aluminum and available in 4.065" and 4.185" bores. Additional details include:

- Flat-top or dished designs with valve relief cut-outs
- High-tech skirt coating
- Forced pin oiling
- Pistons come with wrist pins and rings

19244016

LSX376 Piston, 4.065" bore

- 14cc dish that lowers compression to approx. 9:1 (with most standard LS cylinder heads)
- Optimized for supercharged and turbocharged combinations
- Use with stock-type connecting rods only

19166958

LSX454 Piston, 4.185" bore

- Forged dished piston with valve reliefs
- Must be used with LSX rods
- Lightweight, includes rings and wrist pins
- 4.185" bore, .866" wrist pin size
- 1.2mm compression ring lands and a 2.0mm oil control ring land

NOTE: Not compatible with production-style LS connecting rods. Must be used only with new LSX connecting rods with 0.866" wrist pin bores.



LSX376 Piston (dished), 4.065" bore



LSX454 Piston, 4.185" bore



CRANKSHAFTS AND COMPONENTS

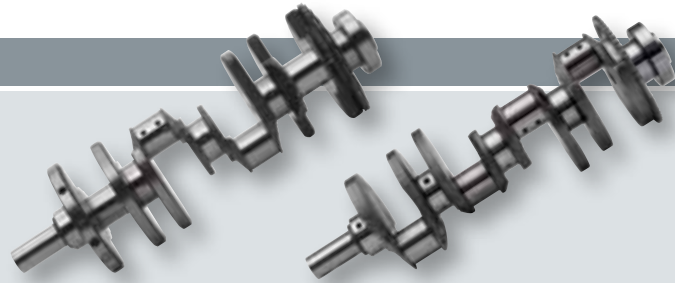
LS Crankshafts

Our LS crankshafts are strong, precision-machined components that will support your high-horsepower aspirations. Choose from our nodular cranks up to 3.622-inch-stroke and our premium, forged-steel 4.125-inch-stroke crankshafts for larger-displacement combinations – and don't forget the proper reluctor wheel!

LSX Crankshafts

Our new LSX crankshafts are all made from 4340 forged steel (most production LS cranks are cast) and have generous fillets. Chevrolet Performance's LSX forged crankshafts deliver exceptional strength and durability, whether you're building a formidable Fourth-Gen Camaro or late-model GTO for the street. Additional features include:

- 2.100" rod journals
- 8-bolt flexplate/flywheel pattern
- Comes with 58X reluctor wheel
- Reluctor wheel can be swapped for use with LS1/LS2/LS6 controller
- Designed for internal balancing (must be balanced prior to use in engine)
- Requires the use of chamfered rods (see our LSX connecting rod selection)



Crankshaft Assembly 1997 – 2004

LSX Crankshaft, 4.125" stroke



Reluctor Wheel, 24X



LSX Windage Tray Kit

LS Crankshafts and Components

89017522

Crankshaft Assembly 1997-2004

- Nodular cast 3.622" stroke crankshaft assembly has 24X reluctor wheel installed
- Used on 1998-2002 F-cars and 1997-2005 Corvettes
- Balanced for 3.898" bore engines

12588612

LS2 Crankshaft Assembly (not shown)

- Nodular cast 3.622" stroke crankshaft assembly has 58X reluctor wheel installed
- Used on 2006-2007 Corvettes
- Balanced for 4.000" bore engines

89060436

Rear Crank Seal (not shown)

- Requires 1 per engine
- For all LS-Series engines

12557583

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications
- Use when input shaft protrudes 3-6mm (.079-.112") beyond bellhousing

14061685

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications
- Use when input shaft protrudes 23-24mm (.906-.945") beyond bellhousing

12611649

LS7 Forged Steel Crankshaft (not shown)

- Forged 4" stroke crankshaft for LS7 engine
- Includes 58X reluctor wheel
- Rebalancing required if LS7 rods and pistons are not used
- Machine .886" from snout for use in wet-sump applications

12559353

Reluctor Wheel, 24X

- 24-tooth crankshaft position sensor timing wheel for 1997-2005 engines

12586768

Reluctor Wheel, 58X (not shown)

- 58-tooth crankshaft position sensor timing wheel for 2006 and newer engine

12641691

LSA Crankshaft

- Forged 3.622-inch
- 8-bolt flexplate/flywheel pattern

LSX Crankshafts and Components

19244018

LSX Crankshaft, 4.125" stroke

- 4340 premium steel
- Requires balancing
- 8-bolt flexplate/flywheel required
- 4.125" stroke
- Includes 58X reluctor wheel

19244049

LSX Windage Tray Kit (not shown)

- For 4.000" strokes
- Includes all matching hardware
- Some notching may be required

19202609

LSX Windage Tray Kit

- For 4.125" strokes
- Includes all matching hardware
- Some notching may be required depending on application



TIMING CHAINS AND SPROCKETS

12588670

LS2 Timing Chain Damper (not shown)

- Production LS2 damper
- Will not fit LS1 and LS6 blocks fitted with P/N 88958607 (P/N 88958607 is no longer serviced)
- For use with standard oil pumps

12581276

Timing Chain Damper (not shown)

- Production LS7 damper
- 1.1mm thinner than P/N 12588670
- For use with LS7 2-stage oil pump

12576407

1X Camshaft Sprocket (not shown)

- Fits all LS cams with 3-bolt design
- 1X camshaft gear
- 3-bolt design; uses 3 bolts
- P/N 12556127

12586481

Camshaft Sprocket (not shown)

- Fits all LS cams with 3-bolt design
- 4X camshaft gear
- 3-bolt design; uses 3 bolts
- P/N 12556127

12585994

VVT Camshaft Sprocket (not shown)

- Combination camshaft sprocket and VVT activator
- Production on 2007-2008 Cadillac Escalade L92 engines
- Single-bolt design; use bolt P/N 12588151
- 4X camshaft gear

12556582

Crankshaft Sprocket (not shown)

- Fits non-LS7/LS9 applications
- For standard single-stage oil pumps
- Works with both cam sprockets
- P/N 12576407 and 12586481

12581278

Crankshaft Sprocket (not shown)

- For use with 2-stage LS7 or LS9 oil pump only
- Works with cam sprockets P/N 12576407 and P/N 12586481

12586482

Timing Chain (not shown)

- Fits 1997-2009 LS based engines

12626407

Timing Chain Tensioner (not shown)

- Requires 1 per engine
- Includes retainer and bolts
- For L92 and LS3 engines

12556127

Camshaft Sprocket Bolt (not shown)

- For use with 3-bolt (non VVT) cams
- For LS1, LS2, LS6, LS9 and early LS7 engines

11561283

Camshaft Sprocket Bolt (not shown)

- For use with single-bolt cams and non-VVT timing covers
- For 2008-2009 LS3 and LS7 engines

12588151

Camshaft Sprocket Bolt (not shown)

- Combination bolt and valve for Variable Valve Timing (VVT) engines
- For L92 engines
- Use with VVT camshaft sprocket P/N 12585994

FLYWHEELS AND FLEXPATES

At the opposite end of the crankshaft from the balancer are flywheels and flexplates, which connect the engine to either manual (flywheels) or automatic (flexplates) transmissions. Chevrolet Performance offers both internally and externally balanced flywheels and flexplates. It is critical you use the correct design for your engine application.

NOTE: For Transmission Installation kits, see pages 155-157.



LS Engine Flywheels

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Clutch Diameter	Starter Ring Gear Teeth	Technical Notes
12571611	1997 - up	14" (359mm)	6-bolt LS pattern 3.110" (79mm)	11.5" Single Disc	168	Flywheel used for LS engines with 6-bolt crankshaft flange
24240678	2009 - up	14"	8-bolt	9.5" Dual Disc	168	LSA Production Dual Mass with 8-bolt crankshaft flange (also fits LSX454)
12598613	2009 - up	14"	9-bolt	10" Dual Disc	168	LS9 Production with 9-bolt crankshaft flange

LS Engine Flexplates

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Converter Bolt Pattern	Starter Ring Gear Teeth	Technical Notes
12637677	1997 - up	14"	6-bolt LS pattern 3.110" (79mm)	11.062" (281mm)	168	Flexplate used for LS engines - fits stock LS-4L60 family t/conv
19260102	1997 - up	14"	6-bolt LS pattern 3.110" (79mm)	11.5" (292.1mm)	168	Flexplate only used together with Spacer 12563532 and Bolts 19257940 (4L80 family)
12636325	2009 - up	14"	8-Bolt	11.062" (281mm)	168	LSA Production Flexplate (also fits LSX-454)
19125691	2009 - up	14"	8-Bolt	11.5" (291.1mm), 11.062" (281mm)	168	Modified LSA 12636325 Flexplate (see above) for use in flywheel kit 19125597

BOLTS, DOWELS AND BEARINGS

11569956

Flywheel Bolt (not shown)

- Requires 6 per engine
- For LS1, LS2, LS3, LS6, LS7 and L92 engines
- Use for both automatic flexplates and manual flywheels

11505820

Flywheel Dowel (not shown)

- For all LS-Series engines
- Locating dowel pin for pressure plate

12561465

Pressure Plate Bolts (not shown)

- 6 pieces
- 6 needed per flywheel
- Used on all GM LS engine manual flywheels

14061685

Pilot Bearing (not shown)

- Use with manual transmissions if the input shaft extends beyond the bell housing more than 20mm

12557583

Pilot Bearing (not shown)

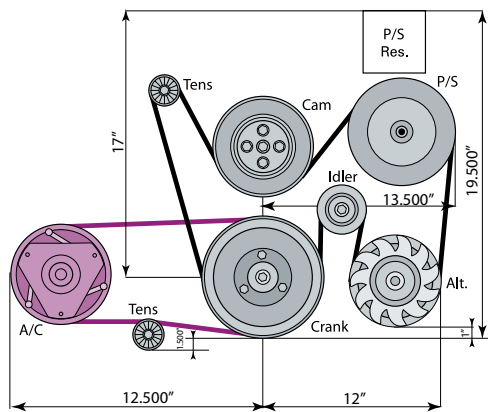
- Use with manual transmissions if the input shaft extends beyond the bell housing 5mm or less (or recessed slightly)





ACCESSORY DRIVE SYSTEMS

The easiest and most convenient way to finish your LS engine and get it ready to run in your vehicle is with one of our serpentine accessory drive systems. They include the accessories, brackets, drive belts and hardware your engine needs, saving you the time of sourcing them individually. They're all-inclusive systems that bolt right onto the engine for a factory fit and appearance.



19155066
CTS-V Accessory Drive System, with A/C - Fixed Displacement Compressor

- Does not work on LS9 and LSA supercharged engines
- Most harmonic balancers do not line up correctly with the accessory drive system; damper P/N 12620556 is strongly recommended
- Air conditioning has separate belt; to delete air conditioning, do not install the belt, compressor or tensioner
- Fits all LS type engines, except for production iron block applications
- Direct bolt-on for LS3 and LS7 engines

NOTE: Will not work with a cam-phased engine.

NOTE: Will not work on LS327 with cast iron block

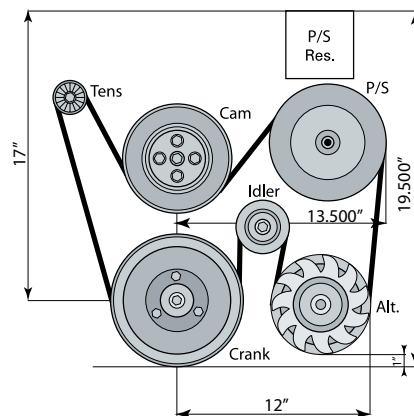
NOTE: Water pump P/N 89018052 NOT included with kit

NOTE: Includes fixed displacement compressor

NOTE: Use P/N 19299069 for A/C add-on if Variable Displacement Compressor is needed

The system includes:

Part #	QTY	Description
12578548	1	Bracket-Air Conditioning
19130461	1	Compressor-Air Conditioning
12595289	1	Tensioner-Air Conditioning Belt
12578549	1	Belt-Air Conditioning Compressor
12578551	1	Bracket-Power Steering Pump
21997867	1	Pump-Power Steering
12578552	1	Pulley-Power Steering Pump
21997866	1	Reservoir-Power Steering Fluid
21997868	1	Hose-Power Steering Fluid Reservoir With Clamps
12578550	1	Bracket-Generator
25766345	1	Generator
12568996	1	Pulley-Belt Idler
12569301	1	Tensioner-Drive Belt
12578553	1	Belt-Water Pump/Generator/ Power Steering
11515768	6	Bolt, Transaxle Br
11516360	4	Bolt - 10 x 1.50 x 90mm
11518637	3	Bolt - Hvy HX Acorn Flg Hd
11518630	2	Bolt - Hvy HX Acorn Flg Hd
11518075	3	Bolt - Hex Flg HD
11518633	3	Bolt, Gen
11515760	2	Bolt Hvy Hex Flg



19299070 (NEW)
CTS-V Accessory Drive System, without A/C

- Does not work on LS9 and LSA supercharged engines
- Most harmonic balancers do not line up correctly with the accessory drive system; damper P/N 12620556 is strongly recommended
- Fits all LS type engines, except for production iron block applications
- Direct bolt-on for LS3 and LS7 engines

NOTE: Will not work with a cam-phased engine.

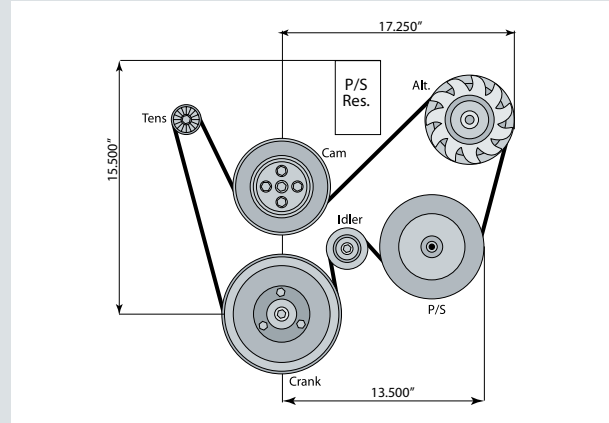
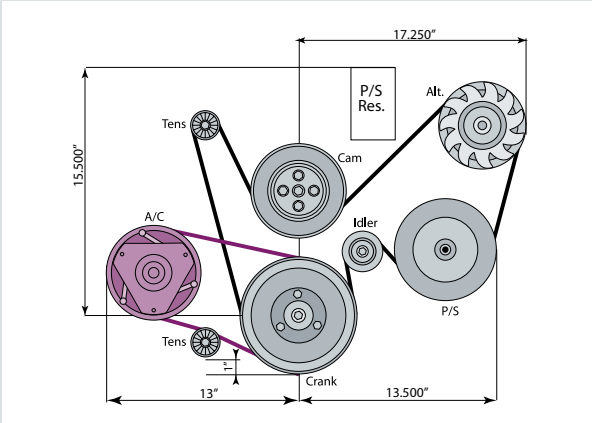
NOTE: Will not work on LS327 with cast iron block

NOTE: Water pump P/N 89018052 NOT Included with kit

The system includes:

Part #	QTY	Description
12578551	1	Bracket-Power Steering Pump
21997867	1	Pump-Power Steering
12578552	1	Pulley-Power Steering Pump
21997866	1	Reservoir-Power Steering Fluid
21997868	1	Hose-Power Steering Fluid Reservoir With Clamps
12578550	1	Bracket-Generator
25766345	1	Generator
12568996	1	Pulley-Belt Idler
12569301	1	Tensioner-Drive Belt
12578553	1	Belt-Water Pump/Generator/ Power Steering
11515768	2	Bolt, Transaxle Br
11518637	3	Bolt - Hvy HX Acorn Flg Hd
11518630	2	Bolt - Hvy HX Acorn Flg Hd
11518075	3	Bolt - Hex Flg HD
11518633	3	Bolt, Gen
11515760	2	Bolt Hvy Hex Flg





19155067
Corvette Accessory Drive System, with A/C

- Fits all Non-LSA and LS9 LS type engines
- Most harmonic balancers do not line up correctly with the accessory drive system; damper P/N 12620556 is strongly recommended
- Air conditioning has separate belt; to delete air conditioning, do not install the belt, compressor or tensioner
- Direct bolt-on for LS3 & LS7 engines

NOTE: Use on LS327 iron block engine requires harmonic balancer P/N 12601402

NOTE: Water pump P/N 89018052 NOT Included with kit

NOTE: Will not work with cam-phased engine.

The System includes:

Part #	QTY	Description
12569286	1	Bracket—Air Conditioning Compressor
89019337	1	Compressor—Air Conditioning
12595289	1	Tensioner—Air Conditioning Compressor Belt
12636225	1	Belt—Air Conditioning Compressor (1040mm-Long)
12555222	1	Bracket—Power Steering Fluid Reservoir
12578067	1	Bracket—Generator and Power Steering Pump
25888970	1	Generator
15261472	1	Pump—Power Steering
12568997	1	Pulley—Power Steering Pump
12555693	1	Brace—Power Steering Pump Front
15907878	1	Hose—Power Steering Fluid Reservoir With Clamps
26046502	1	Reservoir—Power Steering Fluid
12569301	1	Tensioner—Drive Belt
12568996	1	Pulley—Belt Idler
12579229	1	Belt—Water Pump/Generator/Power Steering Pump
11515768	2	Bolt-10x1.5x40MM- 15MM Drive
11526714	1	Bolt-10x1.5x110MM- 15MM Drive
12552922	1	Bolt-10x1.5x160MM- 15MM Drive
11516357	3	Bolt-10x1.5x75MM- 15MM Drive
11518631	1	Bolt-10x1.5x65MM- 15MM Drive
24503609	2	Bolt-10x1.5x95MM- Drive
11515758	2	Bolt-8x1.25x30MM- 12MM Drive
10317982	1	Cap—Power Steering Fluid Reservoir
11516697	2	Bolt-8x1.25x85MM- 13MM Drive

19257325 (NEW)
Corvette Accessory Drive System, without A/C

- Fits all Non-LSA and LS9 LS type engines
- Most harmonic balancers do not line up correctly with the accessory drive system; damper P/N 12620556 is strongly recommended
- Direct bolt-on for LS3 & LS7 engines

NOTE: Use on LS327 iron block engine requires harmonic balancer P/N 12601402

NOTE: Water pump P/N 89018052 NOT Included with kit

NOTE: Will not work with cam-phased engine.

The System includes:

Part #	QTY	Description
12555222	1	Bracket—Power Steering Fluid Reservoir
12578067	1	Bracket—Generator and Power Steering Pump
25888970	1	Generator
15261472	1	Pump—Power Steering
12568997	1	Pulley—Power Steering Pump
12555693	1	Brace—Power Steering Pump Front
15907878	1	Hose—Power Steering Fluid Reservoir With Clamps
26046502	1	Reservoir—Power Steering Fluid
12569301	1	Tensioner—Drive Belt
12568996	1	Pulley—Belt Idler
12579229	1	Belt—Water Pump/Generator/Power Steering Pump
11515768	2	Bolt-10x1.5x40MM- 15MM Drive
11526714	1	Bolt-10x1.5x110MM- 15MM Drive
12552922	1	Bolt-10x1.5x160MM- 15MM Drive
11516357	3	Bolt-10x1.5x75MM- 15MM Drive
11518631	1	Bolt-10x1.5x65MM- 15MM Drive
24503609	2	Bolt-10x1.5x95MM- Drive
11515758	2	Bolt-8x1.25x30MM- 12MM Drive
10317982	1	Cap—Power Steering Fluid Reservoir
11516697	2	Bolt-8x1.25x85MM- 13MM Drive

Corvette Accessory Drive System, A/C Add-on
19299069

Components needed to add AC to your LSA-equipped vehicle.

- Kit includes mounting bracket, bolts, belt, AC compressor and instruction sheet
- Intended to be used in conjunction with P/N 19243525 GMPP kit for non-AC applications. Not verified to work with any non-GM FEAD kit
- Includes variable displacement compressor

Part #	QTY	Description
12556447	1	Stud-10 x 1.5x127MM - 7MM Drive
12569286	1	Bracket—Air Conditioning Compressor
11515768	1	Bolt-10x1.5x40MM- 15MM Drive
89019337	1	Compressor—Air Conditioning
15709703	1	Nut- 10x1.5MM - 15MM Drive
11098341	1	Bolt-10x1.5x110MM- 15MM Drive
12552922	1	Bolt-10x1.5x160MM- 15MM Drive
11516360	1	Bolt-10x1.5x90MM- 15MM Drive
12595289	1	Tensioner—Air Conditioning Compressor Belt
12636225	1	Belt—Air Conditioning Compressor (1040MM - Long)



Accessory Drive Systems Continued

A. 19243525

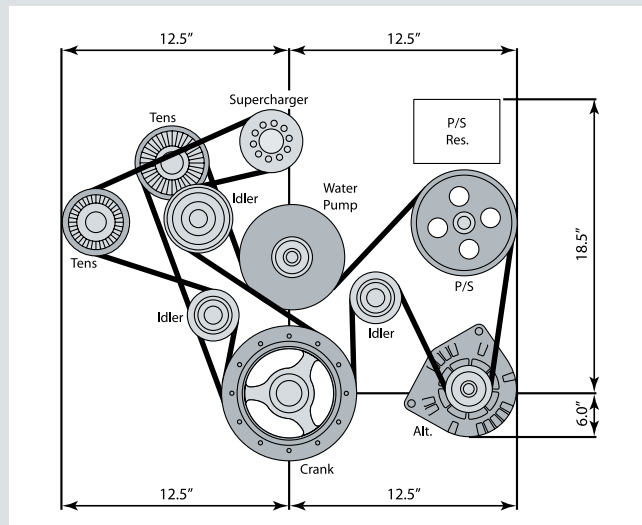
LSA Accessory Drive System w/o AC

The front engine assembly dress components used in the CTS-V, without AC for installations in other vehicles.

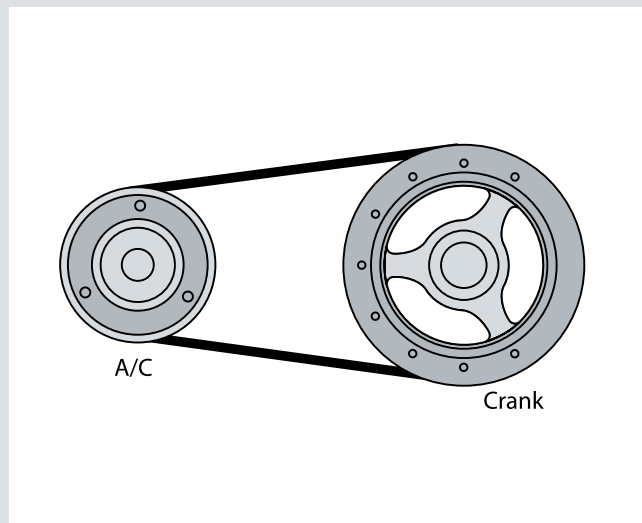
- Includes all brackets, bolts, tensioners, pulleys, belts, alternator, P/S pump and instruction sheet

The system includes:

Part #	Qty	Description
12578550	1	Bracket-Gen
25925447	1	Generator Asm
11518630	2	Bolt-Hvy Hx Acorn Flg Hd
11518637	3	Bolt-Hvy Hx Acorn Flg Hd
12611905	1	Bracket-P/S Pump
11515760	2	Bolt-Rad Upr Mt
12611906	1	Pulley-P/S Pump
20806165	1	Pump Asm-P/S
22768353	1	Reservoir Asm-P/S Fluid
15224351	1	Hose Asm-P/S Fluid Rsvr Otlt
11518633	3	Bolt-Gen
11589311	3	Bolt-Hfh, M8x1.25x29, 19 Th
12606501	1	Bracket-Belt Idler Pulley
11610074	3	Bolt-Hvy Hx Acorn Flg Hd
11589311	1	Bolt-Hfh, M8x1.25x29, 19 Th
12606500	1	Bracket-Drv Belt Tensr
11588749	1	Bolt-Hvy Hx Acorn Flg Hd
11588742	1	Bolt-Hvy Hx Acorn Flg Hd
12628025	1	Tensioner Asm-Spchg Belt
11571051	1	Bolt-Hex Washer Hd
12606031	1	Pulley Asm-Spchg Belt Idler
12606032	1	Pulley Asm-Belt Idler
11518630	2	Bolt-Hvy Hx Acorn Flg Hd
12622452	1	Tensioner Asm-Spchg Belt
11588752	1	Bolt-Hvy Hx Acorn Flg Hd
12568996	1	Pulley Asm-Belt Idler
12628027	1	Belt-w/Pmp & Gen & P/S Pump
12636227	1	Belt-Spchg
19243527	1	Instruction-FEAD Kit



A LSA Accessory Drive System without AC



B LSA AC Add-On-Kit

B. 19244106

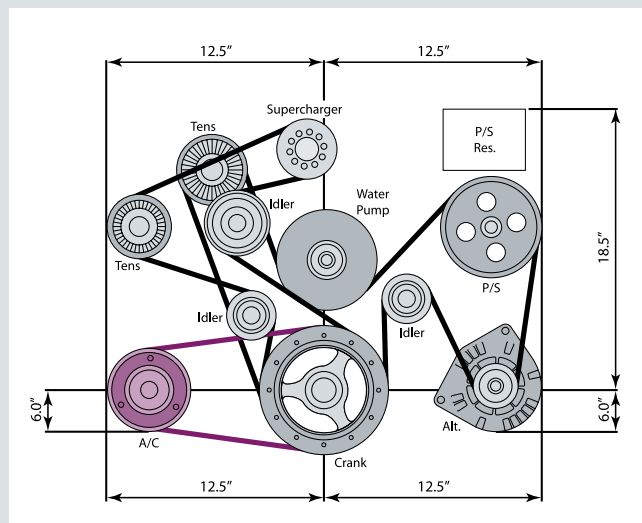
LSA Accessory Drive System AC add-on kit

Components needed to add AC to your LSA-equipped vehicle.

- Kit includes mounting bracket, bolts, belt, AC compressor and instruction sheet
- Intended to be used in conjunction with P/N 19243525 kit for non-AC applications. Not verified to work with any non-GM FEAD kit

The system includes:

Part #	Qty	Description
11516360	4	Bolt-Hex Flg Hd
12612514	1	Bracket-AC Cmpr
11571051	4	Bolt-Hex Washer Hd
19130461	1	Compressor Asm-AC
12623615	1	Tool-AC Cmpr Belt
12612516	1	Belt-AC Cmpr
19243527	1	Instruction-FEAD Kit



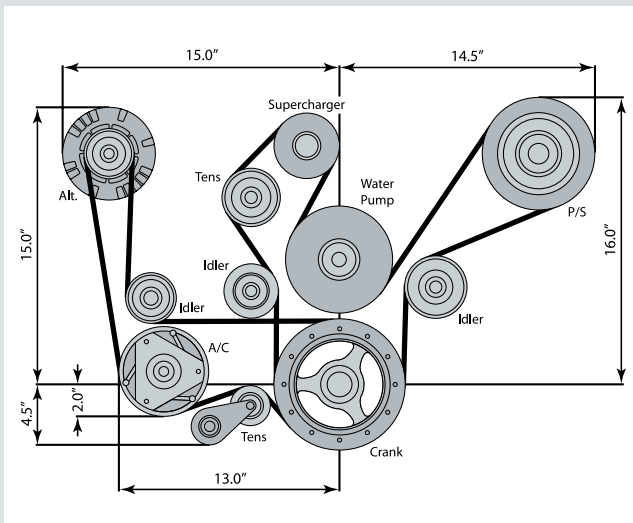
LSA Accessory Drive System with LSA AC Add-On-Kit



LS9 Accessory Drive System with AC **C**



LS9 Accessory Drive System with AC **C**



LS9 Accessory Drive System with AC **C**

C. 19243524

LS9 Accessory Drive System w/AC

The Chevrolet Performance FEAD kit for the powerful LS9 is complete, as used in the ZR-1 Corvette.

- It consists of all brackets, bolts, tensioners, pulleys, belts, alternator, P/S pump, idlers, and AC brackets, compressor and instruction sheets

The system includes:

Part #	QTY	Description
15857665	1	Pump Asm-P/S
11588733	2	Bolt-Hvy Hx Acorn Flg Hd
12625875	1	Bracket Asm-P/S Pump
11518634	4	Bolt-Hvy Hx Acorn Flg Hd
15285644	1	Reservoir Asm-P/S Fluid
12598653	1	Pulley Asm-Belt Idler
11518631	1	Bolt-Drv Belt Tensr
12598654	1	Pulley Asm-Belt Idler
11588743	1	Bolt-Hvy Hx Acorn Flg Hd
12623061	1	Tensioner Asm-Drv Belt
11515767	3	Bolt-Trans Br Brkt
12602288	1	Bracket-AC Cmpr
12556447	1	Stud-Special M10 X 1.5 X 127
11571051	1	Bolt-Hex Washer Hd
12623062	1	Tensioner Asm-AC Cmpr
12568996	1	Pulley Asm-Belt Idler
89019076	1	Compressor Asm-AC
11514597	1	Nut-Gen
12552922	1	Bolt/Screw-AC Cmpr
11518637	2	Bolt-Hvy Hx Acorn Flg Hd
11588754	1	Bolt-Hvy Hex Acorn Flg Hd
25888947	1	Generator Asm
11518630	2	Bolt-Hvy Hx Acorn Flg Hd
11571051	2	Bolt-Hex Washer Hd
12602289	1	Bracket-Gen & Drv Belt Tensr
11518634	2	Bolt-Hvy Hx Acorn Flg Hd
11515767	2	Bolt-Trans Br Brkt
12637321	1	Belt-Spchg & w/Pmp & P/S Pump
12627522	1	Belt-AC Cmpr
19243526	1	Instruction-FEAD Kit

NOTE: This kit includes the generator bracket and bolts that are already attached to a Chevrolet Performance LS9 Crate Engine. This bracket must be bolted on the cylinder head prior to installing the water pump. If you do not have a Chevrolet Performance LS9 Crate Engine, you will also need to purchase separately the LS9 water pump kit (12622036), the LS9 lifter valley cover (12605719) and LS9 coolant air bleeds (12606242 and 1260 6243) to use this FEAD kit. If you have a Chevrolet Performance LS9 Crate Engine, you do not need any of these additional parts.



A. 19258433

LC9 5.3L Accessory Drive System without A/C

The workhorse 5.3L LC9 engine assembly comes with an alternator bracket attached. To complete the installation of your engine, the parts listed below will complete the factory-installed FEAD assembly.

These components are engineered for heavy-duty work-truck use, and will provide years of reliable service in your performance vehicle.

The system includes:

Part #	QTY	Description
12626222	1	Drive Belt
12580771	1	Idler Pulley w/Bolt
20989651	1	Alternator
11516360	2	Alternator Bolts
20756714	1	P/S Pump
12554032	1	P/S Brace
11514597	2	P/S Brace Nuts
11515764	1	P/S Brace Bolt
12604004	1	P/S Pump Pulley
11515767	3	Stg Pump Mtg Bolt
19257882	1	Bolt 3/8" x 16
19440957	1	Nut 3/8" x 16
19258317	1	Washer

Power Steering Pump Pulley Install Tool (Included)

NOTE: This kit is designed to include the necessary parts to install the complete kit on a Chevrolet Performance 5.3L Crate Engine. If you do not have a Chevrolet Performance 5.3L Crate Engine, you may need some additional hardware. The following parts are included with the Chevrolet Performance 5.3L Crate Engine and are not part of this kit:

11518633	2	Bolt, Tensioner
12609719	1	Tensioner
12554030	1	Bracket, Steering/Generator
11516744	4	Bolt, Bracket
12634105	1	Balancer
12557840	1	Bolt, Balancer
12600767	1	Kit, Water Pump (includes gaskets)
12551926	6	Bolt, Water Pump

B. 19260892

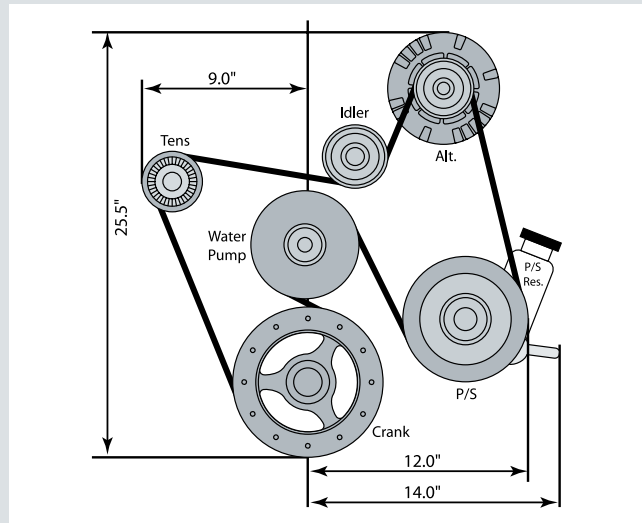
LC9 5.3L Accessory Drive System AC add-on kit

Components needed to add AC to your LC9-equipped vehicle.

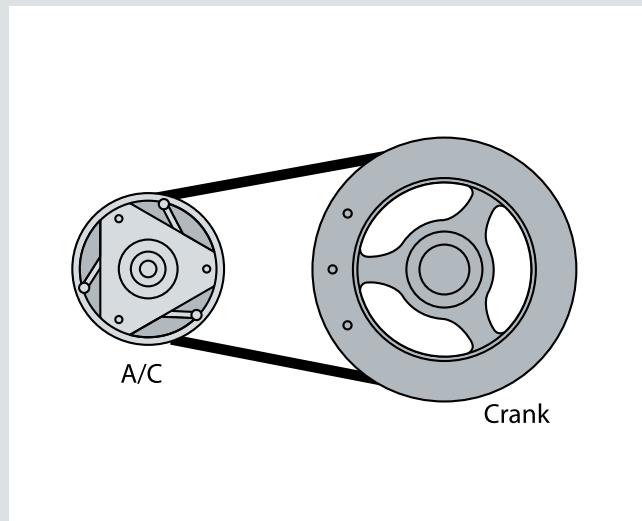
- Kit includes mounting bracket, bolts, belt, AC compressor and instruction sheet
- Intended to be used in conjunction with P/N 19258433 kit for non-AC applications. Not verified to work with any non-GM FEAD kit

The system includes:

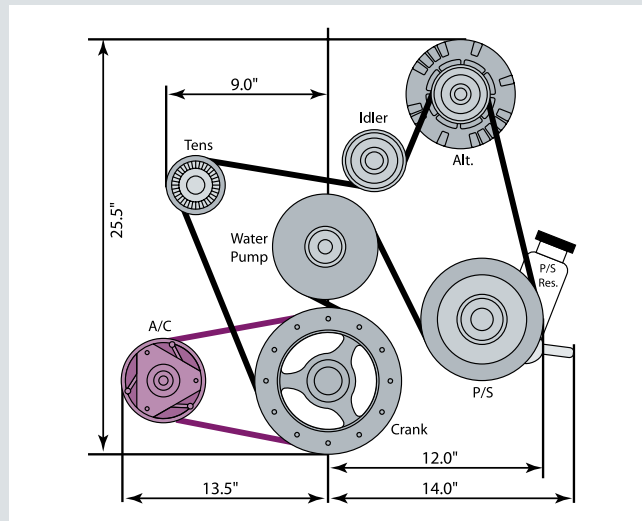
Part #	QTY	Description
25891791	1	AC Compressor
12554026	1	Mtg Bracket
11515767	3	Bracket Bolts
11516109	3	Comp Bolts-Long
11516503	1	Comp Bolt-Short
19210691	1	Belt Kit (w/Tool) AC



A LC9 5.3L Accessory Drive System



B LC9 5.3L AC Add-On-Kit



LC9 5.3L Accessory Drive System, with A/C Add-on



REAR FEAD CLEARANCE DIMENSIONS

P/N FEAD (of Application)	Belt Track (front of block to rear edge of main drive belt)		Belt track (front of lock to rear edge of supercharger belt)	
19299070 (CTS-V Non-Supercharged)	3"	6 Groove		
19155066 (CTS-V Non-Supercharged)	3"	6 Groove		
19155067 (Corvette Non-Supercharged)	3"	6 Groove		
19257325 (Corvette Non-Supercharged)	3"	6 Groove		
19243525 (CTS-V LSA Supercharged)	3"	6 Groove	4.5"	8 Groove
19243524 (Corvette LS9 Supercharged)	1.75"	6 Groove	2.75"	11 Groove
19258433 (Truck)	4.5"	6 Groove		
Gen IV Camaro/Firebird (LS1)	4"	6 Groove		
Gen V Camaro (LS3/L99)	4.75"	6 Groove		

AC COMPRESSION FOR FEADS

Part Number	Application	Style	Belt Track (front of block to rear edge of belt)	
19130461	CTS-V	Fixed Disp	1.5"	4 Groove
89019337	Corvette	Variable Disp	1.5"	4 Groove
89019339	Corvette	Variable Disp	1.75"	6 Groove
25891791	Truck	Fixed Disp	3.5"	4 Groove
	Gen V Camaro		3.25"	4 Groove

LS ENGINE FEAD KITS

Part Number	Description	
19155066	CTS-V with A/C	} Comes with A/C
19155066	Corvette with A/C	
19243524	LS9 with A/C	
19299070	CTS-V without A/C	} Common belt tracks (for/aft)
19257325	Corvette without A/C	
19243525	LSA without A/C	
19299069	Corvette style A/C add on	} Can use either kit with above non-A/C kits
19244106	LSA style A/C add on	
19258433	LC9 without A/C	} Only option use together (unique belt track for/aft)
19260892	LC9 A/C add on	



BALANCERS

A smooth-running engine depends on an effective balancer or torsional damper. Our dampers not only help LS engines run smoothly, they can extend engine life. Pick the right damper for your project from the list below.

12634105

Harmonic Balancer (not shown)

- Originally used on L92 engines
- For use in truck applications
- WILL NOT work with our Serpentine Accessory Drive Systems

A. 12553118

Harmonic Balancer

- Originally used on LS1 and LS2 engines
- For use in F-Car and GTO applications

B. 12599862

Harmonic Balancer

- Originally used on LS7 engines
- For use in Corvette applications
- Works with Chevrolet Performance Serpentine Accessory Drive System P/N 19155066 or P/N 19155067

12635649

Harmonic Balancer (not shown)

- For LS3 engines
- Works with Chevrolet Performance Serpentine Accessory Drive System P/N 19155066 or P/N 19155067

Balancer Bolts and Washers

12557840

Balancer Bolt (not shown)

- For LS1, LS2, LS3, LS6 and L92 engines

11570163

Balancer Bolt (not shown)

- For LS7 engines

12603843

Friction Washer (not shown)

- For LS2, LS3, L99, LS7 and L92 engines

WATER PUMPS AND COMPONENTS

19208815 (not shown)

Water Pump

- '07 - '10 LS2 Trucks, Vans and SUVs

C. 89018052

Water Pump

- '05 - '07 LS2
- '08 LS3
- '07 - '08 LS7

D. 19180610

Water Pump

- '09 - '10 LSA (CTS-V)
- '09 - '10 LS3 (Vette)
- '09 L76 SRX
- '09 - '10 LS7 Vette

12630223

Water Pump Gasket (not shown)

- Requires 2 per engine
- For LS1, LS2, LS3, LS6, LS7 and L92 engines

12551926

Water Pump Bolt (not shown)

- Requires quantity of 6
- For LS1, LS2, LS3, LS6, LS7 and L92



A Harmonic Balancer – LS1 and LS2



B Harmonic Balancer – LS7



C Water Pump – LS2, LS3 and LS7 Engines



D Water Pump – 2009 LSA, LS3/LS7, L76 SRX Engines



Corvette Oil Pan – 2002-2004 LS6 **E**



F-Car Oil Pan **F**



CircleTrack Oil Pan **G**



Muscle Car Oil Pan Kit **H**

OIL PANS, OIL PUMPS, GASKETS AND COMPONENTS

E. 12561828

Corvette Oil Pan (2002-2004 LS6)

- Used on 2002-2004 Corvettes with LS6

F. 12628771

F-Car Oil Pan

- Used on 1998-2002 Camaro and Firebird LS1
- Uses PF48 oil filter

G. 19243065

LS Circle Track Oil Pan

- Used on CT525 P/N 19171821
- 6-quart capacity (8-quart with remote filter and adapter)
- Requires remote oil filter and adaptor
- Uses oil pan gasket P/N 12558760 (not included)

H. 19212593

Muscle Car Oil Pan Kit

- Fits virtually all 1955-1995 GM front engine, RWD, V-8 cars
- 5-quart capacity
- Includes oil pan, dipstick and tube, gaskets, pickup tube, windage tray, and all mounting hardware
- Wet sump design
- Max stroke 3.620 w/ windage tray

24241872

Magnetic Drain Plug (not shown)

- Catches and holds small pieces of metal before they can cause damage

12612350

Oil Pan Gasket (not shown)

- Requires 1 per engine
- Fits all LS-Series engines except LS7 and LS9

12612351

Oil Pan Gasket (not shown)

- Requires 1 per engine
- For LS7 and LS9 engines

11515758

Oil Pan Bolt (not shown)

- M8 x 30mm long
- Requires 12 per engine (use 13 with LS7 and LS9 engines)
- For LS1, LS2, LS6, LS7 and L92 engines

12554990

Oil Pan Bolt (not shown)

- M6 x 136mm long
- Requires 2 per engine
- For all LS-Series engines

12612289

Oil Pump (not shown)

- For L92 engines

17801830

High Volume LS Oil Pump Kit (not shown)

- High volume pump assembly for LS-Series engines (except LS7 and LS9 applications)
- Pump pick-up seal included

12623097

Oil Pump (not shown)

- 2-stage pump for LS7 engines
- Will not work on standard LS crankshafts
- Must use crank sprocket (P/N 12581278), timing damper (P/N 12581276), LS7 pickup tube (P/N 12580855), LS7 oil pan (P/N 12596689), and LS7 timing cover (P/N 12598292)

11519133

Oil Pump Bolt (not shown)

- Requires 4 per engine
- For all LS-Series engines



LS INTAKE MANIFOLDS

A. 12610435

LS7 Production Intake Manifold Assembly

- Gen IV fuel injection nylon manifold used on the 2009 Corvette Z06 LS7 engine
- Fully assembled with injectors, fuel rail, 90mm ETC throttle body and gaskets
- For use only with LS7 and LSX/LS7-style cylinder heads

NOTE: Must use Controller Kit P/N 19243066.

B. 12638197

LS3 Intake Manifold Assembly

- Gen IV fuel-injection nylon manifold used on the 2009 Corvette LS3
- Fully assembled with injectors, fuel rail, 90mm ETC throttle body and gaskets
- For use with LS3/L92 style cylinder heads
- Compatible with Chevrolet Performance controllers only if throttle body is replaced with P/N 12570790

C. 88894339 ⓘ

LS6 Intake Manifold

- Gen III fuel-injected nylon manifold used on the 2001-2004 LS6 Corvette engine (cathedral port)
- Supplied with the intake manifold seal (P/N 12560251), gasket (P/N 12533587), throttle body seal (P/N 12552542), MAP sensor (P/N 16212460), and MAP sensor seal (P/N 16194007)

D. 19244103

LS9 Supercharger

- Original Equipment on ZR-1 Corvette
- Eaton twin-rotor 2.3L displacement
- Integrated dual-brick air to liquid intercooler
- Highly efficient 4-lobe rotor design
- Generates maximum boost pressure of 10.5 PSI
- Assembly includes:
 - Supercharger intake system with injectors
 - Cast cover and intercooler
 - Front pulley
 - Throttle body
 - Gasket Set



A LS7 Production Intake Manifold Assembly



B LS3 Intake Manifold Assembly



C LS6 Intake Manifold



D LS9 Supercharger



LSA Supercharger **E**

E. 19244095

LSA Supercharger

- Original equipment on Cadillac CTS-V Series (similar to 2012 Camaro ZL1)
- Highly efficient Eaton Twin-Vortices, high-helix rotors
- 1.9L displacement
- Integrated air-to-liquid intercooler
- Approx. 9 psi boost on 6.2L engine
- Assembly includes: supercharger intake system with injectors, cast cover and intercooler, front pulley, throttle body and gasket set

13581479

LSA/LS9 Intercooler Fluid Pump (see photo on pg. 353)

- Includes pump assembly
- Additional hoses and clamps required to connect pump inline with coolant circuit
- Original equipment on LSA, ZL-1, and ZR-1 (LS9) engines



LS2 4-bbl Intake Manifold **F**

F. 88958675 ⓘ

LS2 4-bbl Intake Manifold

- Allows you to install a 4-bbl carburetor on a LS-Series engine with cathedral ports (LS1, LS2, LS6)
- Cast aluminum open-plenum intake manifold accepts a 4150-style square-bore carburetor
- Bosses for EFI injectors for custom applications
- Bolts and instructions supplied

NOTE: LSX Ignition Controller P/N 19171130 is required for carbureted applications.

G. 25534394 ⓘ

LS7 4-bbl Intake Manifold

- Lightweight GM Racing design for use on LS7-style heads
- Reduced mass design, porting not recommended
- Includes mounting bolts and instructions
- Uses LS7 carb intake gasket set P/N 19172113
- Machined for 4150-style carburetors and has 3/8" NPT vacuum boss
- Also available with injector bosses, P/N 25534413

NOTE: LSX Ignition Controller P/N 19171130 is required for carbureted applications.



LS7 4-bbl Intake Manifold **G**

H. 25534401 ⓘ

LS3/L92 Style 4-bbl Intake Manifold

- Lightweight GM Racing design for use on LS3/L92-style cylinder heads
- Reduced mass design, porting not recommended
- Includes mounting bolts P/N 11609577 and instructions
- Uses L92 carb intake gasket set, P/N 19172114
- Machined for 4150-style carburetors and has 3/8" NPT vacuum boss
- Also available with injector bosses P/N 25534416

NOTE: LSX Ignition Controller P/N 19171130 is required for carbureted applications.



LS3/L92 Style 4-bbl Intake Manifold **H**



Additional components required for installation. See page 289.



LSX INTAKE MANIFOLDS

The best way to feed an LSX engine is with air channeled through one of our new LSX intake manifolds. They're designed to match the performance capability of our LSX heads and big-displacement rotating assemblies. LSX intake manifolds have a high-flow, spider-type design and are made of lightweight aluminum. They're cast with plenty of material for builder-specified port work; and the flanges are a minimum of 0.5"-thick to accommodate machining. Additional features include:

- Standard-deck and tall-deck versions
- Natural finish with LSX and GM logos
- Injector/nitrous bosses cast in place
- Comes with installation hardware

A. 19244037

LSX-LS3 Dual-Plane Standard Deck 4-bbl Manifold

- Dual plane for low- and mid-range torque
- L92 style ports
- Injector/nitrous bosses cast-in
- Extra thick for professional porting
- 4150-style carb. mounting provision
- Uses OEM O-ring gaskets and bolts (included)
- **Tall-deck version available as P/N 19244036**

B. 19244035

LSX-LS3 Single-Plane Standard Deck 4-bbl Manifold

- Single-plane design for mid-range and top-end power
- L92 style ports
- Injector/nitrous bosses cast-in
- Extra thick for professional porting
- 4150-style carb. mounting provision
- Uses OEM O-ring gaskets and bolts (included)
- **Tall-deck version available as P/N 19244034**

C. 19244033

LSX-LS7 Single-Plane Standard Deck 4-bbl Manifold

- Single-plane design for mid-range and top-end power
- LS7 style port
- Injector/nitrous bosses cast-in
- Extra thick for professional porting
- 4150-style carb. mounting provision
- Uses OEM O-ring gaskets and bolts (included)
- **Tall deck version available as P/N 19244032**

D. 19257854

LSX-CT Single-Plane Standard Deck 4-bbl Manifold

- No-holds-barred single plane design for large displacement or high-rpm applications
- LSX-CT/DR-style port; minor port matching required for optimal port match
- Two-sets of injector/nitrous bosses are cast-in for extreme power capability
- Extra thick for professional porting and/or boosted applications
- 1/2" raised 4150-style carb. mounting pad
- **Tall deck version available as P/N 19257853**



A LSX-LS3 Dual-Plane Standard Deck Manifold



B LSX-LS3 Single-Plane Standard Deck 4-bbl Manifold



C LSX-LS7 Standard Deck 4-bbl Manifold



D LSX-CT Standard Deck 4-bbl Manifold



LSX-DR Standard Deck 4-bbl Manifold **E**

E. 19257851

LSX-DR Single-Plane Standard Deck 4-bbl Manifold

- The ultimate drag racing single plane for large displacement or high-rpm applications
- LSX-CT/DR style port; minor port matching required for optimal port match
- Two-sets of injector/nitrous bosses are cast-in for extreme power capability
- Extra thick for professional porting and/or boosted applications
- 1" raised 4500 style carb. mounting pad
- **Tall-deck version available as P/N 19257852**



LS Front Distributor Drive Cover **F**

F. 88958679

LS Front Distributor Drive Cover

- Assembly is manufactured for applications where a four-bbl carburetor and distributor are required
- Can be combined with GM's Bowtie valve covers, P/N 25534398 and P/N 25534399, for a complete traditional-looking engine package
- For all LS-Series engines except LS7 and LS9

NOTE: Distributor and mechanical fuel pump not included. Uses Small-Block Ford-style distributor and mechanical fuel pump. Special water pump, accessory drive and damper required.

Intake manifold gaskets and components

G. 19172113

LS7 Carb Intake Gasket

- For use with intake manifold P/N 25534394 or P/N 25534413
- Includes 2 gaskets

H. 19172114

L92/LS3 Carb Intake Gasket

- For use with intake manifold P/N25534401 or P/N 25534416
- Includes 2 gaskets

19156564

LS2 Carb Intake Gasket (not shown)

- For use with intake manifold P/N 88958675
- Includes 2 gaskets



LS7 Carb Intake Gasket **G**



L92/LS3 Carb Intake Gasket **H**

EXHAUST MANIFOLD/HEADER

I. 12480130

LS Header Flange

- These 3/8" thick steel header flanges are a great way to start a fabricated set of LS-Series headers for a racecar or street rod
- For stock LS1, LS2, LS3, LS6, LS7 and L92 (may require clearancing) exhaust ports
- Sold individually



LS Header Flange **I**

INTAKE MANIFOLDS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
88894339	12533587 (1)	12552344 (10)	MY04/05 LS1 and LS6
25534394/25534413	19172113	Included with manifold	LS7 Carb Applications
25534401/25534416	19172114	Included with manifold	L76/L92 and LS3 Carb Applications
88958675	19156564	Included with manifold	LS2 Carb Applications



DRY SUMP COMPONENTS

A. 25534412

LS7 Oil Hose Adapters

- Kit adapts the production LS7 oil pan to aftermarket AN-style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 oil pan, and has AN male outlet for AN -12 fittings
- Includes 1 adapter, 2 fittings, 2 bolts, and 2 sealing gaskets

12603281

Oil Tank (not shown)

- Fits Z06 Corvette

15210122

Oil Inlet Hose (not shown)

- Fits Z06 Corvette

15210117

Oil Outlet Hose (not shown)

- Fits Z06 Corvette



A LS7 Oil Hose Adapters

IGNITION SYSTEMS

B. 19171130

LSX Ignition Controller

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program low- and high-rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible only with LS1/LS6 and LS2/LS7 ignition coils



B LSX Ignition Controller

STARTERS

C. 10465385

LS-Series Starter

- Works with all LS-Series and Gen IV V-8 engines, including the LS1, LS2, LS3, LS6, LQ9, LQ4 and LS7

89017844

Starter (reman, not shown)

- Requires 1 per engine
- For L92 engines

10465547

Starter (reman, not shown)

- Requires 1 per engine
- For F-car applications

89017664

Starter (reman, not shown)

- Requires 1 per engine
- For 2005 Corvette applications
- For LS2 engines

89017847

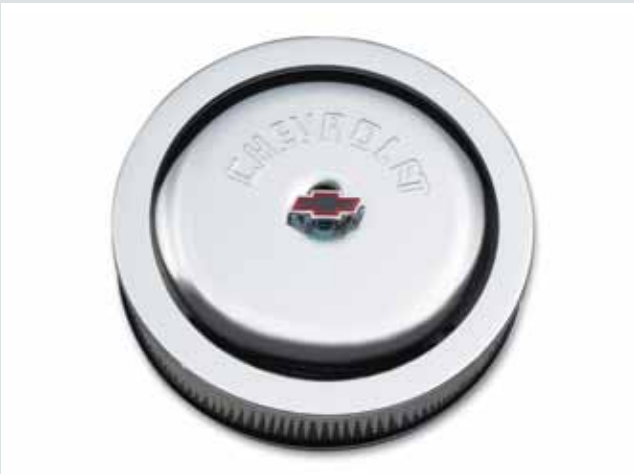
Starter (reman, not shown)

- Requires 1 per engine
- For 2006-2007 Corvette applications
- For LS2, LS3 and LS7 engines

NOTE: All LS starters require one bolt P/N 11610787, and one bolt P/N 12561848.



C LS-Series Starter



Air Cleaner, Chevrolet-Logo High-Performance Design **D**



Air Cleaner, Chevrolet-Logo Classic Design **E**

AIR CLEANERS

D 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- 14" round high-performance-style air cleaner
- Chrome lid with embossed Chevrolet name
- Fits most 4-bbl and 2-bbl carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.75" from top of carburetor gasket area to underside of hood.

E 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- 14" round classic-style air cleaner
- Chrome lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most 4-bbl and 2-bbl carburetors

SPARK PLUGS

12571165

Spark Plug (not shown)

- Requires 8 per engine
- AC 41-101
- For LS7 engines

12621258

Spark Plug (not shown)

- Requires 8 per engine
- AC 41-985
- For LS1, LS2, LS6 and L92 engines

15336959

Spark Plug Wire Shield (not shown)

- Requires 8 per engine
- For all LS-Series engines

ENGINE MOUNTS – LS ENGINES

15254700

Engine Mount (not shown)

- Requires 2 per engine
- For 2005-2008 Corvette engines
- For LS2 and LS7 engines

15254700

Engine Mount (not shown)

- Requires 2 per engine
- For 1997-2004 Corvette engines
- For LS1, LS2 and LS6 engines

22179268

Engine Mount (not shown)

- Requires 2 per engine
- For 1998-2002 F-Car engines
- For LS1 engines

15854941

Engine Mount (not shown)

- Requires 2 per engine
- For L92 engines





Chevrolet Performance Engine Control Modules and Harnesses

A precisely calibrated engine control module is essential to making your fuel-injected LS engine perform in your older vehicle – and Chevrolet Performance is your source for controllers that are designed for easy, “plug-and-play” installation and, in most applications, no need for third-party tuning adjustments.

Unlike production controllers that may or may not come with a used engine, our controllers are calibrated for installation in older vehicles. That means many of the features required for late-model production vehicles are “turned off” because they’re not required in older cars and trucks. That means features that may trigger a diagnostic trouble code and possibly affect performance – requiring additional tuning – are not enabled.

Our inclusive kits deliver all the components required to plug into the engine and get it running – from the controller itself and the accompanying wire harness to the mass airflow sensor, oxygen sensors and even a throttle pedal assembly for engines equipped with an electronic throttle body. The kits also include detailed instructions to help you do it right the first time, even if you have no experience.

MOST KITS INCLUDE:

- **Two oxygen sensors**
- **Two oxygen sensor mounting bosses (for installation in the exhaust system)**
- **A mass airflow meter**
- **A mass airflow meter mounting boss (for installation in the air intake system)**
- **A throttle pedal assembly (for use with the electronically operated throttle)**
- **A specific oil pressure sensor that is compatible with the harness (when needed)**
- **A complete wiring harness with fuse box and necessary cam sensor and MAP sensor jumpers**
- **The programmed controller**
- **An instruction sheet**

Each Chevrolet Performance controller kit is a true stand-alone system. All that’s needed to get a vehicle running with it are power and ground sources, a high-pressure fuel pump and an electric cooling fan.

QUICK INSTALLATION TIPS

Installing the ECM – The ECM is the brain of the controller. It is weather-resistant and can be mounted under the hood, but it should be placed to avoid extreme heat and away from potential splash. Chevrolet Performance does not recommend mounting it directly to the engine.

Accelerator pedal – Chevrolet Performance’s controller kits are designed for use with factory-type electronic throttles (no conventional throttle cable) that require a matched accelerator pedal. The pedal contains an electronic sensor that conveys to the controller when and how much to open the throttle. The pedal should be mounted at least 2.5 inches to the right of the brake pedal and 2 inches below it. There should be at least 0.75-inch clearance between the pedal and the transmission tunnel/center console. The pedal has a wire harness that connects to the controller, requiring it to be fed through the firewall – possibly requiring a new hole. Use a grommet on the hole to prevent chafing of the harness.

MAF – The mass airflow meter that comes with some Chevrolet Performance controller kits must be mounted in a 4-inch-diameter tube that has at least a 6-inch-long straight section. The kit includes the bracket and mounting bosses onto which the meter is secured on the tube – the tube must be cut to allow the meter to hang inside of it. The meter sensor must be mounted at the center of the straight section, making sure that is at least 10 inches from the throttle body. Orienting the MAF is essential for proper operation. The meter’s sensor should be mounted with the connector end pointed between horizontal and fully upright.

Oxygen sensors – The oxygen sensors (one for each side of the exhaust) must be inserted in the exhaust stream ahead of the catalytic converters (if used). Holes are simply drilled into the exhaust tubing and the mounting bosses welded to them. After that, the oxygen sensors simply screw onto the mounting bosses and are connected to the wire harness.



LS7 Controller and Wiring Harness Kit

19256514**5.3L Engine Controller Kit (not shown)**

- Specially programmed for retrofit applications, for quicker and easier adaptation of GM's popular 5.3L V-8 for countless hot rod projects
- Works with 2007-2009 5.3L engines with the following engine codes: LC9 (2007-2009), LH8 (2008-2009), LY5 (2007-2009), LMF (2008-2009) and LMG (2007-2009)
- Does not engage cylinder-deactivating Active Fuel Management and other features not required for retrofit installations
- For individual engine controller, use P/N 19256515 (included in kit)

19166568**LS2 Controller Kit (not shown)**

- Includes all the components required to run your LS2 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19166570 (included in kit)
- Only works with 58X reluctor wheel engines

19258270**LS3 Controller Kit (not shown)**

- Includes all the components required to run the LS3 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19258271 (included in kit)

19258267**LS376/480 Controller Kit (not shown)**

- Includes all the components required to run your LS376/480 crate engine
- Max rpm 6,600
- For individual engine controller, use P/N 19258268 (included in kit)

19259261**LS376/525 Controller Kit (not shown)**

- Includes all the components required to run LS376/525 crate engine, P/N19259261
- Max rpm 6,600
- For individual engine controller, use P/N 19259291 (included in kit)

19258553**LS7 Controller Kit, 2006-2012**

- Includes all the components required to run your 2006-2012 LS7 crate engine
- For individual engine controller, use P/N 19258554 (included in kit)
- Max rpm 7,100
- Will not run 2009 LS7s

19259293**LSA Controller Kit (not shown)**

- Includes all the components required to run LSA crate engine
- Max rpm 6,200
- For individual engine controller, use P/N 19259294 (included in kit)



LSX Ignition Controller

19299462 NEW**LS9 Controller Kit**

- Two oxygen sensors
- Two oxygen sensor mounting bosses (for installation in the exhaust system)
- A mass airflow meter
- A mass airflow meter mounting boss (for installation in the air intake system)
- A throttle pedal assembly (for use with the electronically operated throttle)
- A complete wiring harness with fuse box
- The programmed controller
- An instruction sheet.

19244481**LSX454 Controller Kit for Manual Transmission (not shown)**

- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N19244481 (included in kit)

19299840**LSX454 Controller Kit for Automatic Transmission (not shown)**

- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N19299841

NOTE: The controller will not function in a production vehicle unless all kit components are used. These controllers will not operate any of the production gauges. Aftermarket gauges are required.

19171130**LSX Ignition Controller**

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible with all LS-Series ignition coils

12480112**ECU, LS1 V-8 (not shown)**

- Calibrated for the LS1 Camaro/Firebird engine and can be used in a street rod or other early-model vehicles

NOTE: Use with Camaro/Firebird LS1 engine and wire harness P/N 12480113.

12480054**ECU, LS1/ASA Racing (not shown)**

- LS1 ECU is similar to P/N 16238212, but is calibrated for ASA racing only
- Use with wire harness P/N 12480055

12480055**Wire Harness, LS1, ASA Racing (not shown)**

- Designed for ASA racing ECU P/N 12480054 only



CHEVY BIG-BLOCK V-8



*Bowtie
Sportsman Block*

BIG-BLOCK COMPONENTS

FACTORY-ENGINEERED PERFORMANCE THAT DELIVERS BIG POWER!

Building a Big-Block engine for maximum performance and durability is easier when you're using factory-engineered, matched components that have been tested on the dyno, the street and on the drag strip. That's what you get from Chevrolet Performance.

Our Big-Block parts range starts with brand-new GM cylinder blocks that are stronger than previous production designs. The new blocks combine design elements of the Mark IV and Gen V designs, along with architecture improvements that give the block greater strength. That means it'll stand up better to the high horsepower and monster torque levels a Big-Block is capable of generating. We've even got an updated version of the legendary aluminum ZL-1 block casting for your COPO tribute project!

We've also got the best-performing rotating parts and cylinder heads, including rectangular-port and oval-port and lightweight aluminum versions of the heads. There's no reason to settle for used, reconditioned or "seasoned" parts, because Chevrolet Performance parts are competitively priced and often deliver greater strength and performance than used production components.

Chevrolet Performance has designed, built and tuned big-blocks longer than anyone, so you can trust that our parts will deliver dependable, winning performance – on the street or strip!

A Better Big-Block

The classic Chevy Big-Block production engine was introduced in 1965. In the late 1980s, a new version arrived, designed for marine and fuel-injected applications. The early-style engines are known as Mark IV Big-Blocks, while the later style is referred to as the Gen V (and Gen VI) Big-Block. You can tell them at a glance by checking for a mechanical fuel pump mounting pad. If it has one, it's a Mark IV. If there's no fuel pump pad, it's a Gen V block.

Despite the fuel pump mounting pad difference in their castings, the cylinder blocks of the Mark IV and Gen V are based on the same design architecture. There are several other differences—particularly in the water jackets near the deck surfaces—that make some Mark IV and Gen V parts incompatible, including crucial components such as the cylinder head gaskets.

Within the last few years, Chevrolet Performance revised the basic Big-Block architecture to commonize the Mark IV and Gen V, creating an all-new cylinder block casting that combines the features of both generations. It also incorporates significant updates and strength-enhancing features that make the Big-Block a stronger engine foundation with provisions to support 21st-century performance.



Although the basic Big-Block architecture is revised, Chevrolet Performance continues to offer two versions, each differentiated by performance and displacement capability. The Bowtie block continues to be the block of maximum engine performance. All of our crate engines use the revised Big-Block design.

Here's what distinguishes the latest Chevrolet Performance Big-Blocks from earlier castings:

- Water jackets are revised near the deck surfaces so that Mark IV or Gen V head gaskets can be used interchangeably
- Oil pressure feed holes are added to the oil filter boss and front bulkhead to support oil feeds for superchargers, turbochargers, etc.
- The oil hole next to the camshaft bore at the front of the block is repositioned to enable safe machining of the cam bore to accept a 50mm roller camshaft bearing
- A mechanical fuel pump mounting pad is included, similar to the Mark IV
- A boss next to the distributor hole in the valley supports hardware for digital ignition equipment
- The front bulkhead is thicker and stronger, with marked provisions for a 10-bolt timing cover (non-Bowtie blocks are delivered with drilled and tapped holes for 6-bolt covers; remaining holes must be drilled and tapped at the prescribed positions)
- Non-Bowtie blocks are machined for 4-bolt parallel main caps; Bowtie blocks are machined for 4-bolt splayed caps
- Revised rear-of-block allowed for the machining of 1- or 2-piece main seals (similar to Gen V design)
- A front clutch boss is included for older muscle car applications
- 454 blocks have a slightly beefier main web than previous blocks
- All blocks are made with the standard production roller camshaft and lifter machining
- 502 and Bowtie blocks share the same main web, which is strengthened considerably from the Mark IV and the first-generation Gen V Bowtie block
- Bowtie blocks feature a distinctive water jacket design to allow up to 4.600" bores. These blocks can be identified by a "B" suffix behind the casting number.

Two additional core plugs are featured in the rear bulkhead. They enhance the manufacturing process at the foundry and help improve overall quality. Also, a "Bowtie" logo and other identifying marks are incorporated on the Bowtie block, distinguishing it from previous generations.

Chevy Big-Block Quick Reference Chart

PRODUCTION-BASED CAST-IRON BLOCKS

Part Number	Casting Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Dia.	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
19170538	—	9.800"	Yes	Open	4.250"–4.310"	4	Straight	Cast-iron	2.750"	Wet	1 pc	4.250"	247	700	Street	298
19170540	—	9.800"	Yes	Siamese	4.470"–4.500"	4	Straight	Cast-iron	2.750"	Wet	1 pc	4.250"	269	700	Mod	298

BOWTIE CAST-IRON BIG-BLOCKS

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
19212191	24502504B	9.800"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	2 pc	4.500"	258	800	Sport	299
19212192	24502504B	9.800"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	258	800	Sport	299
19212193	24502506B	10.200"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	263	800	Sport	300
19212194	24502506B	10.200"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	2 pc	4.500"	263	800	Sport	300
19212195	24502506B	10.200"	Yes	Siamese	4.560"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	263	800	Sport	300
19212196	24502504B	9.800"	Yes	Siamese	4.240"–4.600"	4	16°	Steel	2.750"	Wet	2 pc	4.500"	281	1200	Pro	302
19212197	24502506B	10.200"	Yes	Siamese	4.240"–4.600"	4	16°	Steel	2.750"	Wet	2 pc	4.500"	296	1200	Pro	302

ALUMINUM ZL1 BLOCK

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
12370850	3946053	9.800"	Yes	Siamese	4.240"–4.300"	4	16°	Steel	2.750"	Wet	2 pc	4.375"	110	650	Pro	301
88958696*	88958695	9.800"	Yes	Siamese	4.250"–4.300"	4	16°	Steel	2.750"	Wet	1 pc	4.375"	110	650	Pro	N/A

*Used in Anniversary 427 P/N 19166392. Not available for service.

DRCE BLOCKS

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
24502572	1A626	9.525"–9.000"	No	Siamese	4.500"–4.700"	4	16°	Steel	2.750"	Dry	2 pc	4.600"	255	1400+	Pro	303
25534406	CG	9.250"–9.000"	No	Siamese	4.590"–4.700"	4	22°	Steel	2.500"	Dry	2 pc	4.600"	N/A	1400+	Pro	303
25534400	CG	9.250"–9.000"	No	Siamese	4.590"–4.700"	4	22°	Steel	2.500"	Dry	2 pc	4.600"	N/A	1400+	Pro	303



BUILDER'S TIP

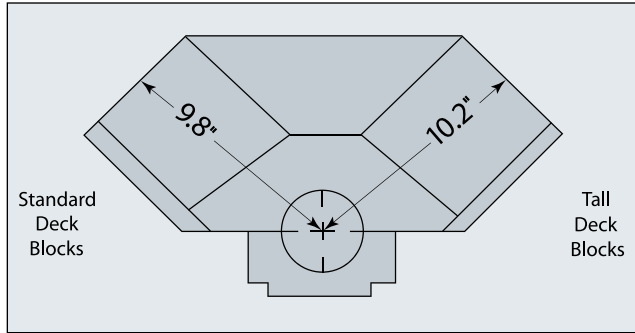
Thrust Bearing Alignment

On Small-Block and Big-Block engines, the thrust bearing alignment on the important #5 bearing is performed by installing only the #5 main cap and tightening its fasteners. With cap in place, the crankshaft is tapped forward or

backward with a rubber mallet. When this is done, crankshaft endplay can be measured. For Small-Blocks, you're looking for between 0.005- and 0.007-inch; for Big-Blocks, the spec is 0.0065-0.0075-inch.



DECK HEIGHT DIAGRAM



ENGINE BLOCKS

19170538

427/454 Bare Block (not shown)

- New casting incorporating the best designs of Mark IV and Gen VI
- Production type cast-iron 4-bolt block
- **4.250"** finished bore
- **4.310"** max bore (non-siamese bore)
- Machined fuel pump pad
- New water jackets for use with Mark IV or Gen VI heads
- Revised oiling to allow for bigger cam bearings/cam lift
- Bolt boss (not machined) added near distributor hole like 8.1L
- Can be drilled for use with 10-bolt front timing cover
- Additional clearance added for roller timing chains
- Auxiliary oil pressure line added to front of block
- Racing style oil filter cast feature with added oil pressure port
- Additional boss for manual transmission clutch pivot (machined)
- Additional material added around lifter bosses

A. 19170540

502 Mark IV/Gen VI Bare Block

- New casting incorporating the best designs of Mark IV and Gen VI
- Production-type cast-iron 4-bolt block
- Improved main bearing bulkheads—Bowtie block-style bulkhead
- Clearanced for bigger strokes
- **4.470"** finished bore
- **4.500"** max bore (siamese)
- Fuel pump pad has been added/machined
- New water jackets for use with Mark IV or Gen VI heads
- Revised oiling to allow for bigger cam bearings/cam lift
- Bolt boss (machined) added near distributor hole like 8.1L
- Can be drilled for use with 10-bolt front timing cover
- Additional clearance added for roller timing chains
- Auxiliary oil pressure line added to front of block
- Racing-style oil filter cast feature with added oil pressure port
- Two bosses added for manual transmission clutch pivot (machined)
- Additional material added around lifter bosses



A 502 Mark IV/Gen VI Bare Block (front)



A 502 Mark IV/Gen VI Bare Block (bottom)



A 502 Mark IV/Gen VI Bare Block (rear)



Bowtie Sportsman Block (front) **B**



Bowtie Sportsman Block (rear) **B**



Top—Splayed Main Cap **C**
Bottom—Machined Bottom
(close-up)



2-Piece Rear Main Seal **C**

BOWTIE SPORTSMAN BLOCKS

Big-Blocks with big power are what you get when you select a Chevrolet Performance Bowtie Sportsman Block for your drag racing or extreme street-performance application. These blocks comprise a full line of high-quality, precision-machined components based on performance-proven GM designs. The extensive lineup of blocks makes choosing the perfect block easy – and our quality and precision machining is second to none.

The blocks are CNC-machined, an automated process that guarantees precise tolerances. There are no approximations on these blocks – they're exactly right, which is critical to obtaining maximum performance. Chevrolet Performance offers more CNC-machined blocks than anyone.

The highest-quality materials are used to cast our Sportsman Bowtie Blocks. They are also available as tall decks, allowing you to make more cubic inches with larger-stroke crankshafts. These blocks can easily be bored and stroked to 500-or-more cubic inches. They can be fitted with one-piece or two-piece crankshaft seals for a smaller chance of oil leaks (one-piece seals) or more aftermarket components attachments (two-piece seals).

The Bowtie Sportsman Blocks are available with splayed main caps, which have additional material holding the crankshaft in place. The caps are splayed at 16 degrees. Chevrolet Performance uses splayed main caps throughout the entire line of performance-built Big-Blocks.

Chevrolet Performance Bowtie Sportsman Blocks are ideal for drag racers or street machines where the goal is 800 horsepower and long-lasting reliability.

Bowtie Sportsman Block Technical Notes:

- Available in short deck (9.800") or tall deck (10.200") configurations
- Blocks have clearance for 4.500" stroke crankshafts
- CNC-machined to +/- .001" tolerance
- Siamese cylinder bores
- Bore finishes are ready to hone to size
- Machined for mechanical fuel pump
- Machined for hydraulic roller and flat tappets
- Nodular iron 4-bolt main caps splayed 16° on the three center mains
- Priority main oiling system
- Blocks with a 1-piece Rear Main Seal use the 6-bolt, Gen VI-style front cover (P/N 10230954) and Gen VI-style oil pan
- Blocks with a 2-piece Rear Main Seal use the 10-bolt, Mark IV-style front cover and Mark IV-style oil pan

See chart on page 297 for complete specifications.

Standard Deck Sportsman Blocks

B. 19212192

Standard Deck Bowtie Sportsman Block

- 1-piece rear main seal
- CNC-machined cast-iron 4-bolt block
- **4.494"** finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

C. 19212191

Standard Deck Bowtie Sportsman Block

- 2-piece rear main seal
- CNC-machined cast-iron 4-bolt block
- **4.494"** finished bore
- **4.600"** max bore
- Tested to 800 horsepower!



Tall Deck Sportsman Blocks

A. 19212193

Tall Deck Bowtie Sportsman Bare Block

- 1-piece rear main seal
- CNC-machined cast-iron 4-bolt block
- **4.494"** finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

19212194

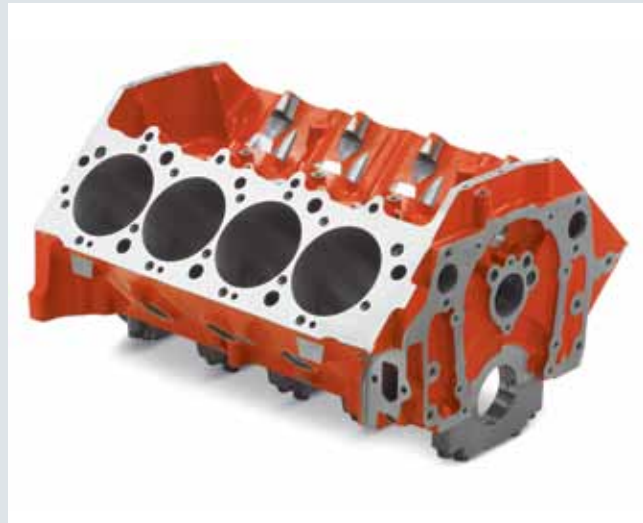
Tall Deck Bowtie Sportsman Bare Block (not shown)

- 2-piece rear main seal
- CNC-machined cast-iron 4-bolt block
- **4.494"** finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

19212195

Tall Deck 572 Bowtie Sportsman Bare Block (not shown)

- 1-piece rear main seal
- Uses Mark IV style front cover and oil pan mounting
- CNC-machined cast-iron 4-bolt block
- **4.560"** fully honed bore
- **4.600"** max bore
- Powdercoated Chevy orange
- 5 windage tray bolts installed
- Tested to 800 horsepower!
- This is the block used for our 572 engines



A Tall Deck Bowtie Sportsman Bare Block (front)



A Tall Deck Bowtie Sportsman Bare Block (rear)



A Machined Lifter Valley Detail



1-Piece Rear Main Seal



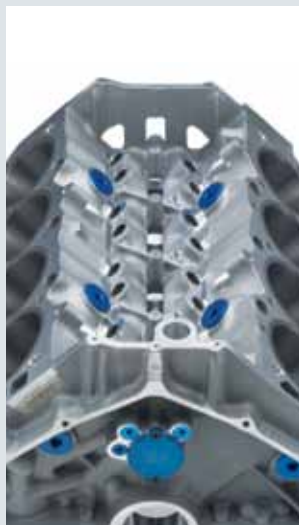
ZL1 Aluminum Big-Block (front) **B**



ZL1 Aluminum Big-Block (rear) **B**



ZL1 Aluminum Big-Block, 4-Bolt Mains **B**



ZL1 Aluminum Big-Block, Lifter Valley **B**

ZL1 ALUMINUM BIG-BLOCK

ZL1 was the legendary regular production option (RPO) code that struck fear into all competitors who came up against 1969 Camaros – and a couple of Corvettes – that were equipped with this fearsome 427-cubic-inch Big-Block from the factory. The price to own an original ZL1 has exceeded the value of many homes, but you can build your own ZL1-powered supercar thanks to Chevrolet Performance. By reintroducing this fabled aluminum Big-Block Chevrolet Performance has made it possible for mere mortals to experience the raw horsepower and tremendous torque of the ZL1. The Chevrolet Performance ZL1 aluminum block is made from premium materials and is precision machined to blueprinted specifications.

See chart on page 297 for complete specifications.

ZL1 Aluminum Block Technical Notes:

- 356-T6M Aluminum block
- Standard deck height (9.800")
- 4.300" maximum bore
- 4.240" finished bore
- 4.375" maximum stroke
- Siamesed cylinder walls
- Centrifugally spun cast-iron cylinder sleeves
- Steel 4-bolt main caps splayed 16° on the three center mains (dowel located)
- Provision for hydraulic roller camshafts
- AN O-ring oil and water plugs
- Tested to 650 horsepower

B. 12370850

ZL1 Aluminum Big-Block

- 4.240" finished bore
- 4.300" max bore
- 4.375" max stroke
- Use sleeve P/N 12480035 (see page 304)
- 2-piece rear main seal
- Uses Mark IV front timing cover



CAST-IRON BOWTIE RACE BLOCKS

If you're looking to build a drag racing engine capable of producing 1200 horses or more, a Chevrolet Performance cast-iron Bowtie Race Block is your starting point. It is designed for engine builders who want to custom-machine their blocks for specific racing applications. Toward that end, these premium castings have thick deck surfaces, improved oiling, improved coolant flow and splayed 4-bolt steel bearing caps. Everything is secured with premium fasteners. The combination of a Chevrolet Performance cast-iron Bowtie Race Block and your unique engine building skills will put you down the track ahead of the competition.

See chart on page 297 for complete specifications.

Cast-iron Bowtie Race Block Technical Notes:

- Precision CNC-machining means +/- 0.001" tolerances
- Blocks are available in short deck (9.800") or tall deck (10.200")
- A sonic bore check data sheet is provided with each block
- Siamese cylinder bores
- Improved cooling around number-1 cylinder
- Accepts Mark IV or Gen V, VI cylinder heads
- Use Gen V head gaskets with Mark IV and Gen V cylinder heads
- Use Gen VI head gaskets with Gen VI cylinder heads
- Requires Mark IV design 2-piece rear main seal oil pans
- Requires Mark IV design crankshafts
- Can use Mark IV and Gen V, VI camshafts, timing sets, lifters and timing cover (aftermarket belt drive timing covers may require clearancing)
- Blind-tapped head bolt holes; extra inner head bolt bosses provided
- 4-bolt SAE 8620 main caps splayed 16° on the three center mains
- Priority main oiling wet-sump system
- Provisions for dry-sump oil line provided
- Honed camshaft and crankshaft bores
- 0.842" lifter bores (maximum 1.06") may be relocated
- Distributor gear clearance at bottom of number-8 cylinder bore should be checked
- Machined mechanical fuel pump pad

19212196

Standard Deck Bowtie Race Block (not shown)

- CNC-machined cast-iron 4-bolt block
- **4.240"** finished bore
- **4.600"** max bore (.250" min wall thickness)
- Standard deck height (9.800")
- Lifter bosses are .300" taller than standard blocks
- Tested to 1,200 horsepower!

A. 19212197

Tall Deck Bowtie Race Block

- CNC-machined cast-iron 4-bolt block
- **4.240"** finished bore
- **4.600"** max bore (.250 min wall thickness)
- Tall deck height (**10.200"**)
- Lifter bosses are .300" taller than standard blocks
- Tested to 1,200 horsepower!



A Tall Deck Bowtie Race Bare Block (front)



A Tall Deck Bowtie Race Bare Block (rear)



A Bowtie Sportsman Bare Block, Nodular 4-Bolt Splayed Caps

DRCE 2 Bare Block (front) **B**DRCE 2 Bare Block (rear) **B**DRCE 2 Lifter Valley **B**DRCE 2 Main Caps **B**

BIG-BLOCK DRCE BLOCKS

Chevrolet Performance Big-Block DRCE (Drag Racing Competition Engine) blocks are the foundation of many of the most powerful Pro Stock drag racing engines. The DRCE family of engine blocks was specifically designed with 500-cubic-inch Pro Stock engines in mind. They are the latest evolution of Pro Stock engine design. In order to build optimum performance, the DRCE blocks have bore spacing that allows for the preferable big bore/short-stroke crankshaft combination. The camshaft has been raised and the distributor moved.

The big-bore design unshrouds the heads, which means bigger valves can be used. The result is maximized air/fuel mixtures. All DRCE blocks are sold solid, without lifter holes or head bolt holes, so any GM Big-Block cylinder heads may be used. The DRCE blocks are available in either gray iron or compacted graphite (an extremely high-strength material that helps the block combat bore distortion and crank deflection under stress).

See chart on page 297 for complete specifications.

DRCE Block Technical Notes:

- CNC-machined to +/- 0.001" tolerance
- Siamese cylinder bores with 4.900" spacing
- No lifter bosses, solid bar can be drilled as required
- No head bolt holes
- Numbers two and four main bearing bulkheads moved 0.060"
- Bellhousing bolt pattern accommodates Chevy and Pontiac/Olds transmissions
- Uses Big-Block Chevrolet crank, camshaft, balancer, flywheel and water pump
- Requires camshaft with distributor gear behind rear bearing
- Priority main oiling dry-sump system
- Dual starter mounting locations
- Front-engine mounts only
- Each block is supplied with sonic test data sheet

B. 24502572

DRCE 2 Bare Block, Gray Iron

- CNC-machined iron 4-bolt block
- 9.525" deck height, may be machined to 9.000"
- Camshaft raised to 5.750"
- Cam tunnel accommodates 55mm cam bearings
- **4.500"** semi-finished bore
- **4.700"** max bore
- 4-bolt steel main caps, 16° splayed-on center three mains
- Oil pan rails spread .400" per side for additional stroke clearance
- Tested to 1,400-plus horsepower!

25534406

DRCE 3 Bare Block, Compacted Graphite* (not shown)

- CNC-machined compacted graphite material 4-bolt block
- 9.250" deck height, can be machined to 9.000"
- Camshaft raised to 7.067"
- Cam tunnel accommodates (9) 60mm cam bearings
- Cam tunnel is closed (no oil drain to rotating assembly)
- **4.590"** semi-finished bore
- **4.700"** max bore
- 2.500" crankshaft main journal
- 4-bolt steel doweled-after-assembly main caps, 22° splayed-on center three mains
- Highest-available quality main studs
- Oil pan rails spread to 12"
- Oil and water plugs are AN O-ring-style
- Tested to 1,400-plus horsepower!

25534400

DRCE 3 Bare Block, Compacted Graphite* (not shown)

- Same as P/N 25534406
- Cam tunnel accommodates (9) 70mm cam bearings

*Compacted graphite is an extremely high strength material that helps the block combat bore distortion and crank deflection under heavy loads – like making 1,400-plus horsepower at 10,000 rpm!



CYLINDER BLOCK COMPONENTS

A. 6264902

O-Ring Seal (sold individually)

- Use under the rear main bearing cap on all 1991-and-newer Gen V and Gen VI 454 and 502 engines

3859927

Outer Main Cap Bolt, Mark IV (not shown)

- Used with Mark IV (1965-1990) cast-iron Big-Blocks with 4-bolt mains
- Sold individually; order 10 per engine

B. 10106461

Inner Main Cap Bolt, Gen V and Gen VI

- Used with Gen V and Gen VI (1991-and-newer) Big-Blocks with 4-bolt mains
- Sold individually; order 10 per engine

3909834

Inner Main Cap Bolt, Mark IV (not shown)

- Used with Mark IV (1965-1990) cast-iron Big-Blocks with 4-bolt mains
- Sold individually; order 10 per engine

C. 88962212

Main Bearings, 572 Engine

- Complete main bearing kit for 572 block with standard-size mains

Freeze Plugs and Oil Plugs

Part Number	Description	Quantity
03826963	Plug, Expansion	8
03999200	Plug, Camshaft Bearing Hole	1
00444777	Plug	8
14090911	Plug, Water Outlet	1
00444613	Plug, Automotive Hex Head Pipe	1
12558081	Pin, Cylinder Head Locationing	4
1453658	Pin, Transmission	2
14090911	Plug, Water Outlet	1

3743389

Freeze Plug, Steel (Mark IV, not shown)

- Steel freeze plug for Mark IV (1965-1990) engines

D. 88891749

Freeze Plug, Brass (Gen V and Gen VI)

- Brass freeze plug for Gen V and Gen VI (1991-and-newer) engines
- Suitable for marine applications

12480035

Cylinder Sleeve (standard, not shown)

- Steel cylinder sleeve for aluminum block P/N 12370850 and P/N 88958696
- Sleeve has 4.240" bore and finish-bores to 4.250"

3902885

Windage Tray Stud (not shown)

- Used for mounting splash shield P/N 3967854

10224104

Windage Tray Stud, Gen V 454 and 502 (not shown)

- Used with Gen V 454 and 502 engines

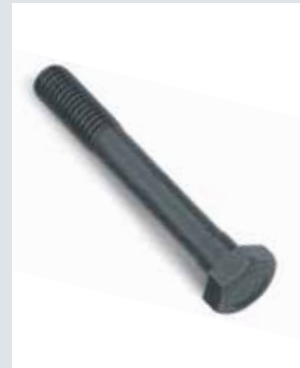
E. 88958656

Windage Tray Bolt, 572

- Used with 572 engines



A O-Ring Seal



B Inner Main Cap Bolt (Gen V and Gen VI)



C Main Bearings, 572 Engine



D Freeze Plug, Brass (Gen V and Gen VI)



E Windage Tray Bolt, 572



Timing Chain Cover **F**
Gen V and Gen VI



Big-Block Fuel Pump **G**
Block-Off Plate



Big Block Crank Trigger Ignition **H**
Conversion Kit

FRONT COVERS, PLUGS AND BLOCK-OFF PLATES

F. 10230954 ⓘ

Timing Chain Cover, Gen V and VI

- Aluminum cover with timing indicator fits all 1996-and-newer Gen V and Gen VI engines
- Used on all Chevrolet Performance Big-Block crate engines

11609914

Front Oil Galley Plug (not shown)

- Fits front oil galley (cam tunnel) holes
- .0300" oil squirter hole for cooling and lubricating the timing chain

G. 12341999

Big-Block Fuel Pump Block-Off Plate

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included

H. 19260247

Big-Block Crank Trigger Ignition Conversion Kit

- Enables the use of the latest aftermarket electronic control systems
- 58X reluctor ring for installation on the front of the crankshaft timing gear
- 4X camshaft gear
- New front cover with camshaft position and crankshaft position sensors
- Double-row timing chain for greater durability, stability and timing accuracy
- Requires aftermarket ignition controller capable of 58X signal
- Coil packs are not included

NOTE: Minor machining of the cylinder block and the damper is required.

ⓘ TIMING COVERS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Bolts (Quantity)	Seals (Quantity)	Gasket (Quantity)	Engine Application
10230954	10243771 (6)	10191640 (1)	10198910 (1)	12498793, 12498777, 12498778, 12371054, 12498827, 12498792, 12498826, 24502620, 12568779, 12568778, 12499121, 19201332, 12371054, 88890534, 24502618, 12568774, 12371204, 12568782, 12497323, 12496963, 12371171, 19166392, 19166393



BUILDER'S TIP

Valve-to-Piston Clearance Considerations

A custom engine combination should always raise the concern of valve-to-piston clearance. And while camshaft lift is commonly thought of as the primary culprit of valve/piston interference, the overlap period – when the piston nears top-dead center and the intake valve is starting to open and the exhaust valve is closing – brings the valves and piston closest together. So, don't assume the gross lift specs are all you have to worry about; duration and lobe separation are equally important, making a careful clearance inspection all the more important.



Additional components required for installation.



BIG-BLOCK CYLINDER HEADS

Part Number	Description	Casting Number	Material	Port Size (cc)	Port Type	Valve Angle	Chbr (cc)	Int Vlv (in)	Exh Vlv (in)	Exh Port	Plug Type	Heat Riser	Rocker Stud	Notes	Page Number
12562920	Gen V, VI BBC	12562934	Iron	325	Rect	BBC	118	2.180	1.880	Square	Std	yes	Screw-in	Ass'd 2925's	306
12562925	Gen V, VI BBC	12562934	Iron	325	Rect	BBC	118	2.180	1.880	Square	Std	yes	Screw-in	7/16 accy holes	306
12562926	Gen V, VI BBC	12562934	Iron	325	Rect	BBC	118	2.180	1.880	Square	Std	yes	Screw-in	3/8 accy holes	306
12562917	Gen V, VI BBC	12562932	Iron	—	Round	BBC	118	2.070	1.720	Square	Std	yes	Screw-in	HT 502 head	N/S
12363390	Oval alum	12363391	Alum	290	Oval	BBC	110	2.250	1.880	Square	Std	no	Screw-in	Semi-open, oval port	307
12363392	Oval alum	12363391	Alum	290	Oval	BBC	110	2.190	1.880	Square	Std	no	Screw-in	Semi-open, oval port	307
12363399	Oval alum	12363391	Alum	290	Oval	BBC	110	2.190	1.880	Square	Std	no	Screw-in	Bare 3392	307
12363408	NHRA L88	12363401	Alum	315	Rect	BBC	118	2.190	1.880	Square	Std	no	Screw-in	Bare, NHRA legal	308
12363400	Rect alum	12363401	Alum	300	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	Assembled	308
12363410	Rect alum	12363401	Alum	300	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	Bare 3400	308
12363425	BBC Bowtie	14044861	Alum	380	Rect	BBC	115	2.190	1.880	Square	Std	no	Screw-in	Bare, raised int/exh	309
12499255	572/620	—	Alum	310	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	ZZ572/620	309
88961160	572/720	—	Alum	310	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	ZZ572/720R	309
24502585	DRCE 2	—	Alum	—	Peanut	DRCE 2	—	—	—	DRCE	—	no	Shaft	Pro Stock—raw	310
25534404	DRCE 3	—	Alum	—	Peanut	DRCE 3	—	—	—	DRCE	—	no	Shaft	Pro Stock—raw	311

SERVICE REPLACEMENT HEADS

Chevrolet Performance service replacement cylinder heads are direct replacements on most 1990-and-later GM Big-Block 454-cubic-inch and 502-cubic-inch engines. These brand-new cylinder heads meet GM's stringent quality standards and provide excellent service and durability not found in used cylinder heads. The cylinder heads have rectangular intake ports.*

Service Replacement Head Technical Notes:

- Cast-iron
- Rectangular intake ports
- Machined for 2.180"/1.880" (3/8" stems) valves
- Non-adjustable rocker arm design
- Heads have heat risers
- Will not work on production Mark IV cylinder blocks

A. 12562925 ⓘ

Bare Cast-iron Gen V and Gen VI Cylinder Head

- Bare cast-iron head
- 118cc combustion chambers
- 7/16" accessory bolt holes

12562926 ⓘ

Bare Cast-iron Gen V and Gen VI Cylinder Head (not shown)

- Bare cast-iron head
- Machined for 2.180"/1.880" 3/8" stem valves
- 118cc combustion chambers
- 3/8" accessory bolt holes (otherwise identical to P/N 12562920)

12562920 ⓘ

Cast-iron Gen V and Gen VI Cylinder Head Assembly (not shown)

- Cast-iron head
- Completely assembled with 2.180"/1.880" valves
- 118cc combustion chambers
- Uses P/N 12562925 bare casting

This head is assembled with the following components:

14097045 Intake Valves	12360874 Valve Spring Retainer & Seal Kit
14097049 Exhaust Valves	3947880 Valve Locks
14097002 Valve Springs	3875916 Valve Spring Shims

NOTE: Will not work on L29 engines.

*Rectangular intake ports are larger in volume and designed to enhance high rpm horsepower. They are an ideal street head for those Big-Block enthusiasts who want more power from a street car that sees a lot of drag-strip action.



A Bare Cast-iron Gen V and Gen VI Cylinder Head (exhaust)



A Bare Cast-iron Gen V and Gen VI Cylinder Head (intake)



A Bare Cast-iron Gen V and Gen VI Cylinder Head (combustion chamber)



B Bowtie Oval Port Aluminum Cylinder Head (intake)



B Bowtie Oval Port Aluminum Cylinder Head (exhaust)



B Bowtie Oval Port Aluminum Cylinder Head (combustion chamber)

ALUMINUM BOWTIE STREET CYLINDER HEADS

Chevrolet Performance Bowtie high-performance street cylinder heads are an ideal combination of street drivability and drag-strip performance. They provide a broad power range with ample low-end torque, excellent throttle response, good mid-range torque and enough top-end power to beat your competitors to the finish line. Chevrolet Performance Bowtie street cylinder heads are designed for high-performance applications, with thick deck surfaces and high-velocity airflow passages. The heads are manufactured to precise machining tolerances.

Chevrolet Performance Bowtie street cylinder heads are available in either rectangular or oval intake port configurations. Rectangular intake ports are larger in volume and are designed to enhance high-rpm horsepower. These heads are best for vehicles that see frequent drag-strip action. Cylinder heads with oval intake ports are smaller in volume and are designed for greater low-rpm torque. Oval port heads are best for street applications where lots of bottom end, off-the-line power is desired.

Bowtie Street Cylinder Head Technical Notes:

- Made from 356-T6 aluminum
- Available in rectangular- or oval-port designs
- Will work on Mark IV and Gen V, VI blocks
- 9/16"-thick decks
- As-cast intake and exhaust ports
- No heat risers
- 1.55" valve spring seat diameter
- Heli-coiled 7/16" screw-in rocker stud holes
- Designed for use with 3/8" pushrods
- Use intake gasket P/N 12366985 and bolt kit P/N 12367959
- Use head gasket P/N 12363414 for bores to 4.370" and P/N 12363413 for bores 4.470" to 4.540" (Mark IV)
- Use head gasket P/N 12363412 for bores to 4.370" and P/N 12363411 for bores 4.470" to 4.540" (Gen V, VI)
- Use head bolt kit P/N 12367779

Oval Port Heads

12363399 ⓘ

Bowtie Oval Port Aluminum Cylinder Head, Bare (not shown)

- Fully machined
- Semi-finished for 2.190"/1.880" valves
- Bronze guides can be finished to 11/32" or 3/8"
- 290cc high-velocity oval intake ports
- 110cc exhaust ports
- 110cc semi-open combustion chambers

B. 12363392 ⓘ

Bowtie Oval Port Aluminum Cylinder Head Assembly

- Completely assembled with 2.190"/1.880" 11/32" stem valves
- 290cc oval intake ports
- 110cc exhaust ports
- 110cc combustion chambers

This head is assembled with the following components:

12366986	2.190" Intake Valves	12366990	Valve Spring Retainers
12366988	1.880" Exhaust Valves	12366992	Valve Locks
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		

12363390 ⓘ

Bowtie Oval Port Aluminum Cylinder Head Assembly (not shown)

- Completely assembled with 2.250"/1.880" 11/32" stem valves
- 290cc oval intake ports
- 110cc exhaust ports
- 110cc combustion chambers

This head is assembled with the following components:

12366987	2.250" Intake Valves	12366990	Valve Spring Retainers
12366988	1.880" Exhaust Valves	12366992	Valve Locks
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		



Additional components required for installation. See page 311.



Bowtie Street Heads Continued

12363408

Bowtie Rectangular Port Aluminum Bare Cylinder Head (not shown)

This NHRA-legal aluminum cylinder head is a replacement for the L88 Big-Block cylinder heads used on 1968-1971 Corvettes and 1969 Camaros.

- Aluminum performance cylinder head
- 315cc rectangular intake ports
- Replacement head for P/N 14011076
- Machined for 2.250"/1.880" 11/32" valve stems
- 110cc exhaust ports
- 118cc combustion chambers

12363410

Bowtie Rectangular Port Aluminum Bare Cylinder Head (not shown)

- Bare aluminum performance head
- Machined for 2.250"/1.880" valves
- 300cc rectangular intake port
- 110cc exhaust port
- 118cc combustion chamber

A. 12363400

Bowtie Rectangular Port Aluminum Cylinder Head Assembly

- Aluminum performance head
- Completely assembled with 2.250"/1.880" 11/32" stem valves
- 300cc rectangular intake port
- 110cc exhaust port
- 118cc combustion chamber
- Uses bare head P/N 12363410

This head is assembled with the following components:

12366987	2.250" Intake Valves	12366990	Valve Spring Retainer Lock
12366988	1.880" Exhaust Valves	12366992	Valve Spring Retainer
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		



A Bowtie Rectangular Port Aluminum Cylinder Head Assembly (intake)



A Bowtie Rectangular Port Aluminum Cylinder Head Assembly (exhaust)



A Bowtie Rectangular Port Aluminum Cylinder Head Assembly (combustion chamber)

Bowtie 572/620 Cylinder Head Assembly (intake) **B**Bowtie 572/620 Cylinder Head Assembly (exhaust) **B**Bowtie 572/620 Cylinder Head Assembly (combustion chamber) **B****B. 12499255** ⓘ**Bowtie 572/620 Cylinder Head Assembly**

- Aluminum head assembly
- Used in the 572/620 Chevrolet Performance crate engine
- Completely assembled with 2.250"/1.880" 11/32" stem valves
- Valve springs for hydraulic roller cams for up to .632" lift
- 310cc rectangular intake port
- 118cc exhaust port – raised 5/8"
- 118cc combustion chamber
- Not recommended for engines smaller than 572 cid

This head is assembled with the following components:

12366987	2.250" Intake Valves	12366990	Valve Spring Retainer Lock
88963128	1.880" Exhaust Valves	12366992	Valve Spring Retainer
88963934	Valve Springs	88963936	Valve Seals
88963937	Valve Spring Shims	3921912	Rocker Arm Studs
88963935	Valve Spring Locators	3860038	Pushrod Guideplates

88961160 ⓘ**Bowtie 572/720R Cylinder Head Assembly (not shown)**

- Aluminum racing head assembly
- Used in the 572/720R Chevrolet Performance crate engine
- Completely assembled with 2.250"/1.880" 11/32" stem valves
- Mechanical roller valve springs – not for use with hydraulic roller cams
- Good to .720" valve lift
- 310cc rectangular intake port
- 118cc exhaust port – raised 5/8"
- 118cc combustion chamber
- Not recommended for engines smaller than 572 cid

This head is assembled with the following components:

12366987	2.250" Intake Valves	12366990	Valve Spring Retainer Lock
88963128	1.880" Exhaust Valves	12366992	Valve Spring Retainer
88963933	Valve Springs	88963936	Valve Seals
88963937	Valve Spring Shims	3921912	Rocker Arm Studs
88963935	Valve Spring Locators	3860038	Pushrod Guideplates

BOWTIE RACE CYLINDER HEADS

Monster-cubic-inch stroker Big-Blocks need lots of air to maximize their performance potential and Chevrolet Performance Bowtie race cylinder heads are designed for that task. They are made of 356-T6 aluminum with huge, raised intake ports, larger valves, smaller combustion chambers and two additional head bolts for increased clamping force. The runners are purposely left smaller, so there is ample room for custom porting by the engine builder.

Bowtie Race Head Technical Notes:

- 356-T6 Aluminum
- 9/16" thick decks
- No heat risers
- Will work on Mark IV cylinder block
- Heli-coiled 7/16" screw-in rocker stud holes
- As-cast intake and exhaust ports

12363425**Bowtie Racing Cylinder Head (not shown)**

- Aluminum racing head
- Machined for 2.190"/1.880" valves (+.400" long required)
- 380cc rectangular intake ports – raised .100"
- 110cc exhaust port – raised .750", vanes in port floor ("W" port)
- 115cc "open chamber" combustion chamber
- Rocker cover rails raised .250"
- Two additional head bolt holes in valley
- Pushrod guide plates P/N 3860038 must be ground for clearance



Additional components required for installation. See page 311.



DRCE PRO STOCK CYLINDER HEADS

Chevrolet Performance DRCE (Drag Racing Competition Engine) Pro Stock cylinder heads are the choice of NHRA Pro Stock champions, so you know these are the best heads available. When races are won by thousandths of a second there's no room for second-best parts. The Chevrolet Performance DRCE aluminum cylinder heads were specifically designed for the DRCE 2 engine block P/N 24502572 and intended for NHRA Drag Racing Pro Stock competition applications.

Special features of these heads include high-capacity water jackets, symmetrical-port layout, ample wall material for custom porting, thick deck surfaces (7/8") to facilitate angle milling and reduced weight casting to minimize CNC-machining time. A typical CNC-prepped cylinder head without valves or valvetrain weighs approximately 40 pounds.

DRCE Pro Stock Race Cylinder Head Technical Notes:

- T355-T7M aluminum construction
- Complies with NHRA Pro Stock 500-cid, 4.900" bore spacing rules
- Symmetrical intake port layout
- Intake and exhaust ports are extremely small "peanut ports"
- 7/8" thick decks allow for angle milling or heavy flat milling
- Requires professional porting and machining
- High-capacity self-purging water jackets
- Custom aftermarket rocker arm assemblies required

A. 24502585

DRCE 2 Raw Aluminum Cylinder Head

- Raw aluminum casting, not machined
- Accommodates 10°–14° x 5° intake and 5°–9° x 2.5° exhaust valve angles
- Designed to work on DRCE 2 block P/N 24502572



A DRCE 2 Raw Aluminum Cylinder Head (exhaust)



A DRCE 2 Raw Aluminum Cylinder Head (intake)



A DRCE 2 Raw Aluminum Cylinder Head (combustion chamber)



DRCE 3 Aluminum Cylinder Head Casting (exhaust) **B**



DRCE 3 Aluminum Cylinder Head Casting (intake) **B**



DRCE 3 Aluminum Cylinder Head Casting (combustion chamber) **B**

B. 25534404

DRCE 3 Aluminum Cylinder Head Casting

- Raw aluminum casting, not machined
- Newest design DRCE – rocker arm mounting pads and valve spring seat pads allow greater flexibility with valve angles and locations than DRCE 2
- Designed to work on DRCE 3 block and DRCE 2 P/N 24502572

25534387

DRCE 3 Water Jacket Plug (not shown)

- For ends of DRCE 3 cylinder head casting P/N 25534404
- Aluminum AN -16 with internal hex for Allen wrench
- Includes O-ring
- Sold individually; use 2 per head

25534388

DRCE 3 Water Jacket Plug (not shown)

- For water jacket access holes of DRCE 3 cylinder head casting P/N 25534404
- Aluminum AN -08 with internal hex for Allen wrench
- Includes O-ring
- Sold individually; use 8 per head

! CYLINDER HEADS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Spark Plug	Engine Application
12562920	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	19157985	24502620, 12568778, 24502618, 12568774
12562926	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	19157985	24502620, 12568778, 24502618, 12568774
12562925	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	19157985	24502620, 12568778, 24502618, 12568774
12363390	12363411 (2)	12367779 (1 Kit)	19145286	12499121, 19201332, 12371204, 12497323, 12496963, 12371171
12363392	12555728 (2)	88960333 (16), 88960334 (8)	19145286	12498777
12363399	12555728 (2)	88960333 (16), 88960334 (8)	19145286	12498777
88961160	88961561 (2)	88960333 (16), 88960334 (8)	5613100	12498827, 12498826
12499255	88961561 (2)	88960333 (16), 88960334 (8)	5613878	12498792



CYLINDER HEAD GASKETS

Secure sealing between the cylinder heads and the block is a critical component of making reliable horsepower, so Chevrolet Performance puts the same engineering excellence and manufacturing precision into their gaskets, head bolts, and cylinder head studs as the blocks and heads they secure. Big-Block cylinder head gaskets are available in a variety of materials and thicknesses. Piston-to-head clearances should be considered when selecting gaskets. Use Gen V for 1991-1992 applications. Gasket packages contain one gasket unless otherwise specified.

A. 12363414

Composition Head Gasket (1965-1990)

- With pre-flattened copper wire ring and permatorque/blue stripe coating for engines with aluminum heads
- Bore sizes between **4.250" and 4.370"**
- Use with **Mark IV** (1965-1990) engines only
- Compressed thickness is **0.039"**

12363413

Composition Head Gasket (1965-1990)(not shown)

- With pre-flattened copper wire ring and permatorque/blue stripe coating for engines with aluminum heads and bore sizes **4.375" to 4.540"**
- Use with **Mark IV** (1965-1990) engines only
- Compressed thickness is **0.041"**

12363412

Composition Head Gasket (1991-newer)(not shown)

- For 1991-and-newer **Gen V and Gen VI** Big-Blocks with aluminum heads and **4.250" to 4.370"** bore size
- Has pre-flattened wire ring and stainless core which makes it ideal for saltwater marine use
- Compressed thickness is **0.039"**

1255728

Head Gasket, 454 Engine (not shown)

- Head gasket for 1991-2000 **Gen V** 454 Big-Blocks

B. 12366984

Head Gasket Kit, 502 Engine

- For all **Gen V and Gen VI** 502 Big-Blocks with cast-iron heads
- Has additional water hole for improved cooling of siamesed cylinder walls
- Includes 2 gaskets (right and left) per package
- Compressed thickness is **0.041"**

12363411

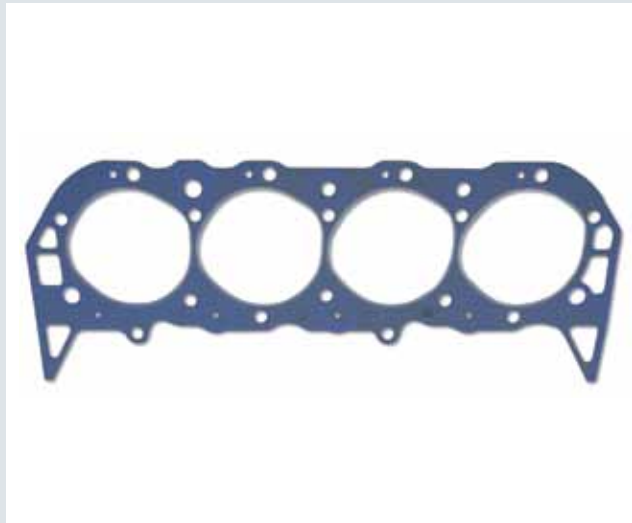
Composition Head Gasket (1991-newer)(not shown)

- For **Gen V and Gen VI** Big-Blocks with aluminum heads and **4.375" to 4.540"** bore size
- Has pre-flattened wire ring and stainless core which makes it ideal for saltwater marine use
- Compressed thickness is **0.039"**

C. 88961561

Head Gasket, 572 Engine

- With pre-flattened wire ring for all **572** Big-Blocks with either cast-iron or aluminum heads
- Compressed thickness is **0.030"**



A Composition Head Gasket (1965-1990)



B Head Gasket Kit, 502 Engine



C Head Gasket, 572 Engine



HEAD BOLTS AND STUDS

12367779

Cylinder Head Bolt Kit (not shown)

- Universal kit for cast-iron and aluminum Big-Block heads
- Includes (8) 7/16-14 x 2.08" bolts P/N 88960334, (24) 7/16-14 x 4.060" bolts P/N 88960333, (8) 7/16-14 x 5.06" bolts P/N 12367329, and (40) hardened washers P/N 14011040
- Use part numbers above for replacement parts
- Use thread sealant on all Big-Blocks except 502, due to blind bolt holes

3899696

Hardened Washer (not shown)

- 0.450" I.D. x 0.860" O.D.; sold individually

3942410

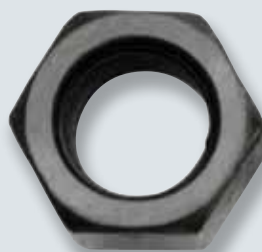
Cylinder Head Stud Nut

- Magnafluxed 1038 steel 7/16"-20 hex head nut; sold individually

14044866

Cylinder Head Stud Nut

- Magnafluxed 4037 steel 7/16"-20 12-point nut; sold individually



Cylinder Head Stud Nut, Hex Head



Cylinder Head Stud Nut, 12-Point

BIG-BLOCK VALVES



Intake Valves

Part Number	Valve Size	Stem Size	Description
12556317	2.190"	3/8"	Stock replacement valve for Gen V and Gen VI 454 and 502 HO engines
12366986	2.190"	11/32"	Stainless-steel valve with undercut chrome-plated stems, single-groove design, hardened tips, used on ZZ454, ZZ427 and the Anniversary Edition 427 crate engines
12366987	2.250"	11/32"	Stainless-steel valve with undercut chrome-plated stems, single-groove design, hardened tips, used on ZZ502 and ZZ572

Exhaust Valves

14097049	1.880"	3/8"	Stock replacement valve for Gen V and Gen VI 454 and 502 HO engines
12366988	1.880"	11/32"	Stainless-steel valve with undercut chrome-plated stems, single-groove design, hardened tips, used on ZZ454, ZZ427 and the Anniversary Edition 427 crate engines
88963128	1.880"	11/32"	Stainless-steel valve with undercut chrome-plated stems, single-groove design, hardened tips, used on ZZ502 and ZZ572

BIG-BLOCK VALVE SPRINGS



Part Number	Description	Outside Diameter	Pressure at Installed Height	Solid Height	Average Rate (lbs per in)	Retainer Part Number	Valve Seal Kit	Technical Notes
12371061	Dual Kit	1.487"	105# @ 1.880"	1.280"	267	3964264	460527	Kit of 16 P/N 3970627 springs
88963934	Dual Spring	1.540"	197# @ 1.800"	N/A	N/A	12366990	88963936	Use with 572/620 HP engines
19172596	Dual Spring	1.567"	230# @ 2.000"	N/A	N/A	12366990	88963936	Use with 572/720 HP engines



VALVE SPRINGS AND COMPONENTS

3989353

Valve Spring Retainer (not shown)

- Steel retainer for valve spring P/N 3989354

12550421

Valve Spring Retainer

- For 1991-and-newer Gen V and Gen VI engines

3947880

Valve Spring Key

- Hardened steel split locks for production and racing engines
- Color-coded purple
- Sold individually, order 32 per engine

12550422

Valve Stem Seal (not shown)

- Seal for 1991-and-newer Gen V and Gen VI engines
- Use with valve spring P/N 12550421
- The valve guide boss must be machined slightly for seal to retain clearance when using high-lift cams

88963936

Valve Spring Seal (not shown)

- Use with all 572 engines

3875916

Spring Shim (not shown)

- 55/64" I.D. x 1 31/64" O.D. x 0.015" thick

88963937

Spring Shim (not shown)

- Shim for all 572 engines



Valve Spring Retainer



Valve Spring Key

88963935

Valve Spring Locator (not shown)

- Valve spring locator for setting the valve spring in the right location on all 572 engines

3964264

Valve Spring Retainer (not shown)

- Retainer and seal for valve spring P/N 3970627

3989353

Valve Spring Retainer (not shown)

- Steel retainer for valve spring P/N 3989354

12360874

Retainer/Seal Kit (not shown)

- Kit of 16 retainers P/N 12550421 and 16 seals P/N 12550422 for 1991-and-newer Gen V and Gen VI engines
- New design improves oil economy
- The valve guide bosses require minor machining with high-lift cams

ROCKER ARMS

Steel Rocker Arms

Steel rocker arms are designed for long-term durability. Chevrolet Performance steel rocker arms are intended for 454- and 502-cubic-inch Big-Blocks. Rocker arm kits include one rocker arm and ball.

Aluminum Roller Big-Block Rocker Arm for 7/16" Studs

Chevrolet Performance aluminum roller rocker arms have bearings and fulcrums with an extra-wide design for improved load distribution. The rockers are lubricated with pressurized oil. The rockers have a 1.7:1 ratio for 7/16" studs. The roller-tip axle is made from 4130 steel and the roller tip is machined and ground from 8620 steel.

NOTE: Not for use with production-height valve covers.

12523976

Steel Rocker Arm Assembly (not shown)

- Designed for use on Gen V and Gen VI design 454- and 502-cubic-inch HO engines. The rocker arms have long slots for high-lift camshafts.

NOTE: Kit includes rocker arm and ball. One rocker assembly per package; order 16 per engine.

12368082

Steel Long Slot Rocker Arm, 1.7:1 Ratio (not shown)

- These 1.7:1 ratio hardened steel rocker arms have elongated slots to provide extra clearance for high-lift (.600" and greater) camshafts
- Use with all 396-502 Big-Block heads with adjustable rockers
- Each assembly includes rocker arm P/N 3959182 as well as the ball P/N 12338047 and nut P/N 3896648

NOTE: Can be used on any Gen V or Gen VI by using rocker stud kit P/N 12495518.



Roller Rocker Arm Set, 1.7:1 Ratio

12368085

Steel Long Slot Rocker Arm Kit (not shown)

- Set of 16 rocker arms (P/N 12368082) with the balls and nuts

NOTE: These long slot rocker arms are stamped "H."

19210726

Aluminum Roller Rocker Arm Set, 1.7:1 Ratio

- Set includes 16 roller rocker arms and nuts for 7/16" studs
- Used on 572-cubic-inch Big-Block engines
- Use P/N 12361330 for single replacement part





PUSHRODS

Chevrolet Performance offers a complete line of premium-quality, heavy-duty pushrods for most GM Big-Block engines. Pushrods are that critical link between the camshaft and the rocker arms. These seemingly innocuous parts play a very important role in the combustion process. Two materials are used: 1010 mild steel for high-performance street cars, power boats, and limited competition applications, and 4130 chrome-moly steel for maximum-performance racing engines. Chevrolet Performance pushrods are case-hardened for use with pushrod guideplates. Pushrods are available in standard and extended lengths. Check the usage chart below to verify proper applications.



Premium 7/16" Intake Pushrod



Intake Pushrod, Roller Lifter Style

Part Number	Material	Diameter	Length	Usage	Port	Description
10134307	1010 steel	3/8"	8.285"	Flat tappet	Intake	1-piece design. Recommended for high-performance street engines. ¹
10134308	1010 steel	3/8"	9.256"	Flat tappet	Exhaust	1-piece design. Recommended for high-performance street engines. ¹
10134304	1010 steel	7/16"	8.285"	Flat tappet	Intake	1-piece design. Recommended for high-performance and limited competition engines. ²
10134303	1010 steel	7/16"	9.256"	Flat tappet	Exhaust	1-piece design. Recommended for high-performance and limited competition engines. ²
10134306	4130 steel	7/16"	8.285"	Flat tappet	Intake	Premium quality 1-piece design. Recommended for racing engines. ²
10134305	4130 steel	7/16"	9.256"	Flat tappet	Exhaust	Premium quality 1-piece design. Recommended for racing engines. ²
10227762	1010 steel	3/8"	7.592"	Hyd. roller	Intake	(1) heavy-duty heat-treated .060" for use in Gen VI 454 and 502 engines with hydraulic roller lifters
10227763	1010 steel	3/8"	8.569"	Hyd. roller	Exhaust	(1) heavy-duty heat-treated .060" for use in Gen VI 454 and 502 engines with hydraulic roller lifters
12368081	1010 steel	3/8"	7.592"-8.569"	Hyd. roller	—	Kit of (8) P/N 10227762 and (8) P/N 10227763
88961559	4130 steel	3/8"	7.900"	Hyd. roller	Intake	Chrome-moly 1-piece for 572/620 (Tall Deck Block)
88961558	4130 steel	3/8"	8.900"	Hyd. roller	Exhaust	Chrome-moly 1-piece for 572/620 (Tall Deck Block)
88962284	4130 steel	3/8"	8.550"	Mech. roller	Intake	Chrome-moly 1-piece for 572/720 (Tall Deck Block)
88962283	4130 steel	3/8"	9.525"	Mech. roller	Exhaust	Chrome-moly 1-piece for 572/720 (Tall Deck Block)

¹Use with pushrod guideplate P/N 3860038.

²Use with pushrod guideplate P/N 3879620.



BUILDER'S TIP

Shimming the Way to Correct Valve Spring Height

The correct valve spring height is important to prevent coil bind and ensure uniform spring pressure among all the valves. Don't assume the installed height (with the valve closed) is correct out of the box. Each spring's height should be carefully measured and recorded. Shims – typically sold in 0.015-inch heights – can be used to

bring the springs to the manufacturer's specifications. The important thing about installing them is to be sure that they go beneath the spring seat. Don't simply slip them on over the top of the spring seat. With 16 valve springs to measure, it's a long, tedious process, but an important one for performance and engine longevity.



VALVE COVERS

Top off your high-performance Big-Block with a pair of handsome Chevrolet Performance valve covers. These stylish, precision-fit valve covers come in a variety of finishes and colors. They're made out of die-cast aluminum or heavy-gauge stamped steel. Quality construction methods provide better sealing and less chance of leakage from deflection caused by over-tightened fasteners. Competition valve covers are designed to clear taller valvetrains.

NOTE: Valve covers are sold in pairs unless otherwise specified.

A. 12342093 ⓘ

Short Chrome Bowtie Valve Cover

- Show-quality covers embossed with the famous Bowtie logo and Chevrolet name
- Standard height, for use with 1965-1994 engines
- May not clear brake booster on some Corvette models

B. 12495488 ⓘ

Custom Aluminum Valve Covers

- Die-cast aluminum valve covers are black with a brushed aluminum finish on top revealing the Chevrolet name and Bowtie logo
- Can be finished with a custom engine designation badge (see page 250) not included
- For use on 1965-1994 engines
- Includes 2 covers, 1 grommet P/N 10198941, 1 grommet P/N 10198949, oil cap P/N 15681150 and 14 retaining bolts

C. 12371244 ⓘ

Aluminum Competition Design Valve Covers

- Display the Chevrolet name and Bowtie logo in natural aluminum finish, or paint to match engine or vehicle color
- No holes for PCV or oil fill, but bosses for drilling them
- Can be used on most Big-Block Chevrolet cylinder heads
- Use P/N 12370836 for single replacement part

NOTE: Use with valve cover gasket P/N 14085759.

D. 25534323 ⓘ

Aluminum Competition Design Valve Covers, Black Powder-Coat

- Display the Chevrolet name and Bowtie logo in black powder-coated covers
- No holes for PCV or oil fill, but bosses for drilling them
- Can be used on most Big-Block Chevrolet cylinder heads

NOTE: Use with valve cover gasket P/N 14085759.

E. 25534374 ⓘ

Aluminum Competition Design Valve Covers, Orange Powder-Coat

- Display the Chevrolet name and Bowtie logo in orange powder-coated covers
- One hole each cover for PCV or oil fill
- Can be used on most Big-Block Chevrolet cylinder heads

NOTE: Use with valve cover gasket P/N 14085759.



A Short Chrome Bowtie Valve Cover



B Custom Aluminum Valve Covers



C Aluminum Competition Design Valve Covers



D Aluminum Competition Design Valve Covers, Black Powder-Coat



E Aluminum Competition Design Valve Covers, Orange Powder-Coat

Valve Covers, "572 Chevrolet" **F**Valve Covers, "427 Chevrolet", Natural Appearance **G**Valve Covers, "427 Chevrolet", Black Powder-Coat **H****F. 12499200** ⓘ
Valve Covers, "572 Chevrolet"

- Used on all 572-cubic-inch crate engines and can be used on most Big-Blocks
- Cast aluminum with "572 Chevrolet" as part of the casting
- One cover has oil fill and breather holes and the second cover has the breather hole only

NOTE: Requires push on oil cap P/N 12341993, breather P/N 25534355 and breather tube P/N 88962074 that incorporates a baffle in the tube.

G. 19202588 ⓘ
Valve Covers, "427 Chevrolet", Natural Appearance

- Natural finish
- Used on the Anniversary Edition 427 crate engine
- Can be used on any Big-Block engine

H. 19202589 ⓘ
Valve Covers, "427 Chevrolet", Black Powder-Coat

- Used on the ZZ427/480 crate engine
- Can be used on any Big-Block engine

ⓘ **VALVE COVERS: ADDITIONAL REQUIRED COMPONENTS**

Part Number	Gaskets (Qty)	Bolts (Qty)	Grommets (Qty)	Oil Fillers (Qty)	Engine Application
12342093	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12499121, 19201332, 12371204, 12497323, 12496963, 12371171, Mark IV, V, VI BB
12495488	14085759 (2) OR Mark IV, V, VI (2)	25520079	10198941 OR 3989350	15681150	12499121, 19201332, 12371204, 12497323, 12496963, 12371171, Mark IV, V, VI BB
12371244	14085759 (2)	88961871 (8)	N/A	12341993 (1)	12498793, 12498827, 12498792, 12498826
25534323	14085759 (2)	88961871 (8)	N/A	12341993 (1)	12498793, 12498827, 12498792, 12498826
25534374	14085759 (2)	88961871 (8)	N/A	12341993 (1)	12498793, 12498827, 12498792, 12498826
12499200	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826
19202588	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826
19202589	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826



Additional components required for installation.



HARDWARE AND BREATHERS

88962074

Oil Baffle Tube (not shown)

- Pushes easily into most valve covers that have an oil baffle
- Requires breather P/N 25534355, used on ZZ572 engines

A. 25534355

ZZ572 Breather

- Special breathers for the ZZ572 valve covers
- Chrome breathers are 1-3/8", hose-clamp-style with the Bowtie logo on top
- Use with oil baffle tube P/N 88962074
- Includes 2 breathers

B. 12341993

Push-In Oil Filler Cap

- For valve covers with 1.220" hole

19131218

Chrome Push-In Breather (not shown)

- 2-3/4" O.D. x 1-1/2" tall with 3/4" nipple
- Use with rubber grommet P/N 3894337

3894337

Rubber Grommet, Bowtie Valve Covers (not shown)

- Has 15/16" I.D. x 17/32" O.D.
- Can be used to plug the oil filler hole in Bowtie valve covers or to mount a push-in breather

14085759

Valve Cover Gasket (not shown)

- Steel-reinforced gasket fits all Big-Block Chevy valve covers
- Order 2 per engine

VALVE COVER BADGES

Designed to fit mounting area on valve covers P/N 12495488 (see page 248), these good-looking badges will fit some other Big-Block valve covers.

NOTE: 1 badge per package. Order 2 per engine.

C. 12363951

Valve Cover Badge, "427 Cubic Inches"

12366995

Valve Cover Badge, "454 GM Performance Parts"

12366994

Valve Cover Badge, "502 GM Performance Parts"

ROCKER ARM STUDS AND ACCESSORIES

D. 3896648

Rocker Adjusting Nut

- Positive locking 7/16"-20 nut for all Big-Block V-8s
- POSU 10112680



A ZZ572 Breather



B Push-In Oil Filler Cap



C Valve Cover Badges



D Rocker Adjusting Nut

Pushrod Guide Plate (3/8") **E**Hydraulic Lifter Kit **F**Hydraulic Roller Lifter Kit **G**Mechanical Roller Lifter, ZZ572/720 **H****BIG BLOCK GUIDE PLATES****E. 3860038****Pushrod Guide Plate (3/8")**

- Designed for all 1965-1990 iron and aluminum cylinder heads with 3/8" diameter pushrods
- Slotted style with hardened steel construction, aligns rocker arms with valve stem tips on Big-Block's splayed-valve head
- 8 required for each engine

NOTE: Use with screw-in rocker stud P/N 3921912.

3879620**Pushrod Guide Plate (7/16")(not shown)**

- Similar to guide plate described above, but for use with heavy-duty 7/16" diameter pushrods

12562369**Pushrod Guide Plate (Gen V 454/502 style)(not shown)**

- Used on all Gen V 454 and 502 engines with 3/8" diameter pushrods

VALVE LIFTERS AND COMPONENTS**F. 12371044****Hydraulic Lifter Kit (set of 16)**

- For use on all 396, 427, 454, and 502 engines that use hydraulic flat tappet lifters
- For single-service replacement use P/N 5232720

17120060**Hydraulic Roller Lifter, ZZ572/620 (not shown)**

- Roller valve lifters used on the ZZ572/620 engines
- Use with camshaft P/N 88961557, intake pushrod P/N 88961559, exhaust pushrod P/N 88961558 and rocker arm P/N 12361323

G. 12371056**Hydraulic Roller Lifter Kit**

- Hydraulic roller lifter retainer kit can be used on all Gen VI 454 and 502 engines that are machined for hydraulic roller lifters
- Includes 16 roller lifters P/N 17120061, 8 lifter guides, 1 lifter guide retainer and 4 retainer bolts
- For single service replacement lifter, use P/N 17120061

NOTE: These lifters allow more oil to the rocker arms than the late-model truck roller lifters.

H. 19210719**Mechanical Roller Lifter, ZZ572/720**

- Mechanical roller valve lifters used on the ZZ572/720 horsepower engines
- Use with camshaft P/N 88962216, intake pushrod P/N 88962284, exhaust pushrod P/N 88962283 and rocker arm P/N 12361323
- Kit of 16 lifters

12551397**Roller Tappet Guides (not shown)**

- Roller tappet guides used with all 502 engines and 454 HO engines
- Used with roller camshaft engines
- Sold individually; order 8 per engine

12551399**Roller Tappet Guide Retainer (not shown)**

- Roller tappet guide retainer used with all 502 engines and 454 HO engines
- Used with roller camshaft engines
- Order only 1 per engine



BIG-BLOCK CAMSHAFTS

The camshaft is one of the most important factors in determining an engine's overall performance profile and capability. The wide array of precision-engineered, extensively tested camshafts from Chevrolet Performance allows you to choose the best cam for your application. In order to avoid possible engine damage, a distributor with a melonized steel gear must be used with steel camshafts.



Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
12366543	Steel hydraulic roller	I: 224 E: 234	I: .527 E: .544	110	For 502/502 special engine. Must use distributor gear P/N 10456413.
24502611	Steel hydraulic roller	I: 211 E: 230	I: .510 E: .540	112	For 454 and 502 HO engines. Must use distributor gear P/N 10456413.
19210721	Steel hydraulic roller	I: 254 E: 264	I: .632 E: .632	112	For ZZ572/620 engine
19210722	Steel mechanical roller	I: 278 E: 282	I: .714 E: .714	112	For ZZ572/720 engine

CAMSHAFT COMPONENTS

A. 12499434

Camshaft Bearings, 572 Engine

- Five standard-size premium camshaft bearings for the ZZ572 engine



A Camshaft Bearings, 572 Engine

CONNECTING RODS AND COMPONENTS

B. 19170198

Forged Steel Connecting Rod

- Magnafluxed 4340 steel with heavy-duty 7/16" bolts
- Machined for pressed piston pins and color-coded white
- Used in Gen V 454 and 502 engines
- 6.135" c-c length
- Use rod bearing P/N 12329715



B Forged Steel Connecting Rod

19211226

427 Forged Connecting Rod (not shown)

- 4340 Steel with 7/16" heavy duty bolts
- Machined for pressed piston pins
- Used in 427 Anniversary and ZZ427 engines
- Big end chamfered for large crank pin radius
- 6.535" c-c length
- Use rod bearing P/N 88961556

C. 88962926

572 Connecting Rod

- Forged 4340 steel H-beam for all 572 engines
- 6.535" c-c length
- Use rod bearing P/N 88961556



C 572 Connecting Rod



572 Connecting Rod Bearing Kit **D**



12-Point Connecting Rod Nut (set of 16) **E**

D. 88961556

572 Connecting Rod Bearing Kit

- Standard-size, premium connecting rod bearings
- Includes all 8 rod bearings

E. 12366569

Connecting Rod Nut Set

- Set of 16 aircraft-quality, 6304 steel 12-point 7/16"-20 nuts for all 396, 427, 454, and 502 engines
- For single service replacement use P/N 14044866



PISTONS AND PISTON RINGS

Pistons and rings operate in a very explosive environment, so they have to be extremely tough. Chevrolet Performance pistons and rings are designed to withstand the rigors of high-performance engines. The pistons are factory-tested for quality assurance. Chevrolet Performance pistons are sold in a variety of sizes and compression ratios. There are pistons for GM Big-Block engines ranging in displacement from 427 cubic inches to 572 cubic inches. Pistons are sold individually and are fitted with wrist pins.

NOTE: Part numbers are for one piston; order eight per engine.

Big-Block Pistons

Part Number	Engine Size	Bore Size	Oversize	Rod Length	Pin Type	Compression Ratio	Chamber Size	Ring Size	Description
12533507	502	4.470"	—	6.135"	Pressed	8.75:1	118cc	5/64", 1/16", 3/16"	Forged Gen V and Gen VI 502 replacement
88962925	572	4.560"	—	6.535"	Floating	9.6:1	118cc	1/16", 1/16", 3/16"	Forged 572/620
88963227	572	4.560"	—	6.535"	Floating	12.0:1	118cc	1/16", 1/16", 3/16"	Forged 572/720R

Big-Block Piston Rings

Part Number	Bore size	Oversize	Ring Thicknesses	Description
12523921	4.250"	Standard	5/64", 5/64", 3/16"	Standard-size ring pack for Gen V 454 HO
12523923	4.250"	+0.030"	5/64", 5/64", 3/16"	Oversize ring pack for Gen V 454 HO
12524293	4.470"	Standard	5/64", 1/16", 3/16"	Standard-size low-tension ring pack for all 502 engines
12524294	4.470"	+0.030"	5/64", 1/16", 3/16"	Oversize low-tension ring pack for all 502 engines
12499212	4.560"	Standard	1/16", 1/16", 3/16"	Standard-size ring pack for 572 engines



CRANKSHAFTS

Crankshafts are a critical, central component of any engine. Strength and durability are important traits of a great crankshaft. Chevrolet Performance crankshafts are precision-engineered to be both strong and durable. Chevrolet Performance understands how catastrophic crankshaft failure can be, so that's why its crankshafts are manufactured to such exacting specifications and tested to withstand the forces of high-performance engines. These crankshafts are the same tough parts used in Chevrolet Performance crate engines.

3963524

Crankshaft, Forged Steel (454 and Mark IV 502-cubic-inches)(not shown)

- Premium quality
- Externally balanced
- Nitride-treated 5140 forged steel with 4.000" stroke, cross-drilled 2.750" diameter main journals, and 2.200" diameter rod bearing journals
- Used on 1965-1990 454 and 502 with 2-piece rear seal

NOTE: Must be used with counterweighted torsional damper and flywheel or flexplate.

14096983

Crankshaft, Forged Steel (Gen V and Gen VI 454)(not shown)

- Externally balanced
- Forged 1053 steel crankshaft with 1-piece rear main seal

10183723

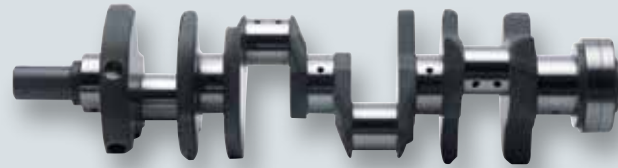
Crankshaft, Forged Steel (Gen V and Gen VI 502)

- Externally balanced
- Cross-drilled
- Nitride-treated forged 1053 steel crankshaft with 1-piece rear main seal
- Forging P/N 14097044

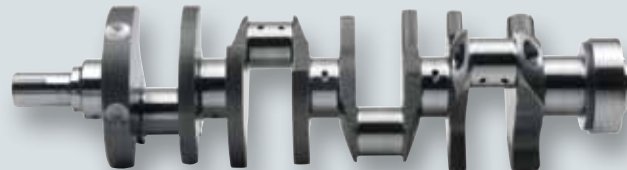
19171620

Crankshaft, Forged Steel (Gen V and Gen VI 427)(not shown)

- Steel crankshaft with 3.750" stroke for 1991-and-later 427-cubic-inch engines
- 1-piece rear main seal
- Requires chamfered connecting rods (P/N 19211226 or 88962926) and rod bearings P/N 88961556
- Used in ZZ427 and Anniversary Edition 427 engines
- Internally balanced



Crankshaft, Forged Steel (Gen V and Gen VI 502)



Crankshaft, Forged Steel 572

88961554

Crankshaft, Forged Steel (572-cubic-inches)

- Internally balanced
- Premium 4340 steel forging for 572-cubic-inch engines
- Use neutral balance damper and flexplate or flywheel
- 1-piece rear seal

NOTE: Must use main bearing P/N 88962212 and rod bearing P/N 88961556.

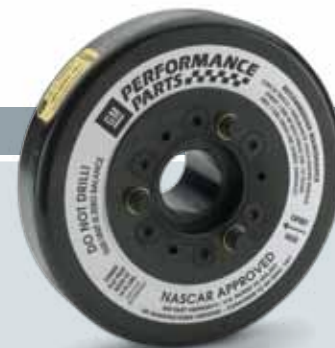
14061685

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications

BALANCERS

Balancers are relatively small parts that play a big role in helping engines run smoothly. Balancers are also known as torsional dampers or harmonic balancers, which is indicative of how they help control unwanted crankshaft vibrations. By controlling vibrations, Chevrolet Performance balancers help engines run smoothly, which also extends engine life.



88962814
572 Balancer

Part Number	Engine Application	Outside Diameter	Technical Notes
10216339	454 and 502 with 4.000"-stroke crank 1970 to present	8"	Counterweighted for externally balanced engines. Use chrome timing pointer P/N 3991436
10216339	572	8"	This internal balance damper is designed with inner and outer shells. It utilizes matched O-rings to control destructive crankshaft vibrations. Black zinc chromate finish. Laser engraved 360° timing marks



FLYWHEELS AND FLEXPATES

Chevrolet Performance offers both internally and externally balanced flywheels and flexplates. It is critical that you use the correct design for your specific engine application. Engines with one-piece crankshaft seals require externally balanced flywheels or flexplates (except for ZZ427, ZZ572/620, ZZ572/720R and the Anniversary Edition 427). Check the accompanying charts to find the correct parts for specific engine applications.



14096987 Flywheel (see chart below)



12561217 Flexplate (see chart below)

Big-Block Flywheels

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Clutch Diameter	Starter Ring Gear Teeth	Technical Notes
14085720	1965-present	12.750"	3.580"	10.4"	153	Lightweight nodular iron; weighs approximately 15 lbs; for internally balanced engines
3991469	1965-present	14"	3.580"	11"	168	Use with internally balanced engines and balancer P/N 3879623
3993827	1970-1990	14"	3.580"	11"	168	Counterweighted for externally balanced 454 Mark IV 2-piece rear seal engines; use with balancer P/N 10216339
14096987	1991-present	14"	3.580"	11"	168	Lightweight nodular iron. For external balanced engines
12582964	1965-present	14"	3.580"	11.500"	168	Used with 427 or 572 crate engine. Internally balanced.

Big-Block Flexplates

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Converter Bolt Pattern	Starter Ring Gear Teeth	Technical Notes
10185034	1991-up	14"	3.580"	10.750" and 11.500"	168	Use with forged steel crank. Has dual-converter bolt pattern. (502 & 454 1-piece rear main seal)
12561217	1991-up	14"	3.580"	11.500"	168	427 ci crate engine production internally balanced .100" thick
471598	1965-present	14"	3.580"	10.750" and 11.500"	168	For internally balanced engines. Use with 572/620 crate engine. Has dual-converter pattern. .120" thick
14001992	1970-1990	14"	3.580"	11.500"	168	For externally balanced 454 Mark IV 2-piece rear main seal engines

Bolts and Dowels

12337973

Flywheel Bolt (not shown)

- Fits all Chevy Small-Block V-8, Big-Block V-8 and 90° V-6 engines
- Sold individually; 6 required per engine

10046031

Flywheel Dowel (Big-Block, not shown)

- Highly recommended for all high-performance and competition Big-Block engines

1453658

Bellhousing Dowel, Clutch Housing/Transmission Dowel (Big-Block)(not shown)

- Use with Big-Block engine
- Sold individually; 2 required per engine

3727207

Flexplate Bolt (not shown)

- Fits all Chevy Small-Block V-8, Big-Block V-8 and 90° V-6 engines
- Sold individually; 6 required per engine

TIMING CHAINS AND SPROCKETS

Chevrolet Performance's strong, accurate timing chains and sprockets provide top performance and dependable service.

12371053

Timing Chain Kit, 502 (second design Gen VI)

- Heavy-duty timing chain kit for all second-design 502 Gen VI roller-lifter engines with aluminum front timing cover
- Kit includes chain P/N 10114177, crankshaft sprocket P/N 12550039, camshaft sprocket P/N 12551401, camshaft retainer and bolts
- Also used in 572

10114177

Timing Chain, 502 (second design Gen VI)

- Single-roller design for all second-design 502 Gen VI engines
- Use with crankshaft sprocket P/N 12550039 and camshaft sprocket P/N 12551401



Timing Chain Kit, 502 (second design Gen VI)



Timing Chain, 502 (second design Gen VI)



Camshaft Bolt

12554553

Camshaft Dowel Pin (not shown)

9424877

Camshaft Bolt

- 5/16"-18 x 0.75" bolt



WATER PUMPS AND ACCESSORY DRIVE SYSTEMS

A. 19168602

Aluminum Water Pump, Short-Style

- Lightweight standard-rotation pump has reinforced snout and large-diameter hub with dual bolt patterns for early- and late-model pulleys
- Has short mounting legs
- Use with early-design V-belt drive rotation

B. 19168606

Cast-iron Water Pump, Long-Style

- Same standard-rotation pump used on all Chevrolet Performance 454 and 502 crate engines
- Not for use with a serpentine belt system

C. 19172805

Serpentine Accessory Drive Belt System With Air Conditioning

- Deluxe kit includes all the components and hardware necessary to install on a 9.800" deck or 10.200" tall deck engine (including bolts, nuts and spacer)
- Belt included

The system includes:

10463415	Alternator Assembly (cs130, reman)
88985115	Power Steering Pump (reman)
12456326	Water Pump Kit
88964862	A/C Compressor, R134a
10187612	A/C Compressor Bracket
10187613	A/C Compressor Bracket
10108470	Water Outlet
10085753	Crankshaft Pulley
88986828	Belt (water pump, A/C, alternator)
88986813	Belt (fan, water pump, A/C)
12552359	Tensioner
12552361	Idler Pulley
10085760	Fan and Water Pump Pulley
6272959	Thermal Bypass Hose Connector
1470030	Clamp
1485552	Heater Hose
12604004	Power Steering Pump Pulley
88961892	Power Steering Bracket (tall deck)
10187611	Alternator Bracket
10187610	Alternator/Power Steering Bracket

19172806

Serpentine Accessory Drive Belt System Without Air Conditioning (not shown)

- Deluxe kit includes all the components and hardware necessary to install on a 9.800" deck or 10.200" tall deck engine
- Kit includes hardware and belt

The system includes:

10463415	Alternator Assembly (cs130, reman)
88985115	Power Steering Pump (reman)
12456326	Water Pump Kit
10108470	Water Outlet
10085753	Crankshaft Pulley
88986828	Belt (water pump, A/C, alternator)
88986813	Belt (fan, water pump, A/C)
12552359	Tensioner
12552361	Idler Pulley
10085760	Fan and Water Pump Pulley
6272959	Thermal Bypass Hose Connector
1470030	Clamp
1485552	Heater Hose
12604004	Power Steering Pump Pulley
88961892	Power Steering Bracket (tall deck)
10187611	Alternator Bracket
10187610	Alternator/Power Steering Bracket
10055890	Idler Pulley



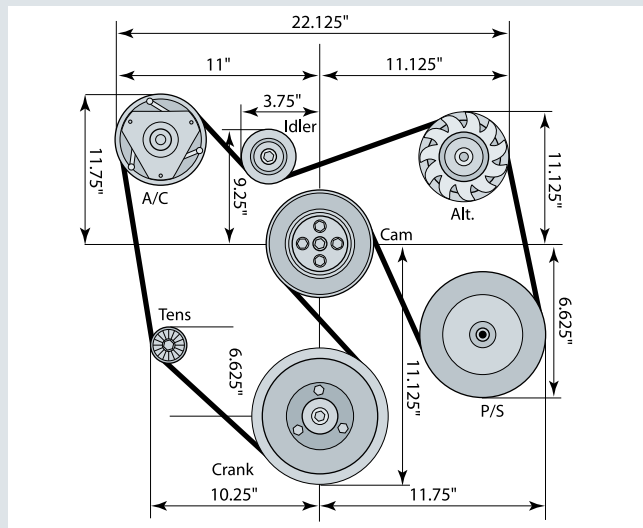
A Aluminum Water Pump, Short-Style



B Cast-iron Water Pump, Long-Style



C Serpentine Accessory Drive Belt System, with Air Conditioning



C Serpentine Accessory Drive Belt System (with Air Conditioning): Diagram



Corvette Oil Pan (1965-1974) **D**



6-Quart Oil Pan **E**



6-Quart Oil Pan, Gen V and Gen VI **F**



4-Quart Oil Pan Kit, Gen V and Gen VI **G**

OIL PANS, OIL PUMPS, GASKETS AND COMPONENTS

Oil is an engine's lifeblood and a high quality Chevrolet Performance oil pan is what keeps it where it belongs. Properly designed and manufactured oil pans fit right, and when used with matching Chevrolet Performance gaskets, prevent leaks. We have oil pans for street and competition applications. Oil pans are sold without dipsticks or other hardware unless otherwise noted.

D. 14091356

Corvette Oil Pan (1965-1974)

- 5-quart pan has a trap door baffle that controls oil slosh during cornering and heavy braking
- Windage tray is included and requires four mounting studs, P/N 3902885
- Used on LS7 engine assembly P/N 3965774

NOTE: Use the following part numbers for the oil pan rails: P/N 3860048 (x2), 3860049 (x1), and 3860050 (x1). Parts are available through Vintage Parts.

E. 14103141

6-Quart Oil Pan

- 6-quart pan fits all 1965-1990 engines

F. 10240721

6-Quart Oil Pan, Gen V and Gen VI

- Six-quart pan fits all 1991-and-newer Gen V and Gen VI, 427, 454, 502 and 572 engines

G. 12495360

4-Quart Oil Pan Kit, Gen V and Gen VI

- Fits 1991-and-newer Gen V and Gen VI 427, 454 and 502 engines
- Fits many early-model Chevelles and Camaros
- Includes a 4-quart oil pan, 4 main cap-bolts, oil pump screen, oil level tube, oil level gauge, and oil pan gasket
- Pan is not available separately

12557083

Dipstick, 6-Quart (not shown)

- For use with production 6-quart oil pan P/N 10240721 or P/N 14103141
- Use oil dipstick tube P/N 12550533 and seal P/N 274244



Oil Pans, Oil Pumps, Gaskets and Accessories Continued

A. 12550533

Dipstick Tube, 6-Quart

- For use with production 6-quart oil pan P/N 10240721 or P/N 14103141
- Use oil dipstick P/N 12557083 and seal P/N 274244

274244

Oil Dipstick Tube Seal, 6-Quart (not shown)

- For use with the production 6-quart oil pan P/N 10240721 or P/N 14103141
- Use oil dipstick tube P/N 12550533 and dipstick P/N 12557083

3989391

Dipstick, 4-Quart (not shown)

- For use with 4-quart oil pan kit P/N 12495360 for all Gen V and Gen VI engines
- Use dipstick tube P/N 329231

B. 329231

Dipstick Tube, 4-Quart

- For use with 4-quart oil pan kit P/N 12495360
- Use oil dipstick P/N 3989391

C. 14097040

Windage Tray

- Use with the Gen V and Gen VI 454 and 502 engines

D. 3967854

Windage Tray

- Separates the oil from the spinning crank assembly to reduce aeration of the oil, aids in oil control and minimizes oil slosh under hard braking
- Use with oil pan P/N 14091356
- Requires four mounting studs P/N 3902885

E. 88962187

Windage Tray, 572 Engine

- Used on all 572-cubic-inch engines
- Use with oil pan P/N 14091356
- Requires four mounting studs P/N 88958656

3969870

Oil Pump and Pick-Up (not shown)

- Heavy-duty pump
- 1.300" wide gears for increased volume; suitable for all Mark IV engines
- Distance from the pump mounting surface to the bottom of the pick-up tube screen is 4.940"
- Pick-up tube is tack-welded to the pump body
- Use with Corvette-style oil pan P/N 14091356

10051105

High-Volume Oil Pump (not shown)

- Delivers 25 percent more capacity than a production pump at standard pressure
- Use with oil pan P/N 12495360 and pick-up P/N 3955281

F. 19131250

Oil Pump and Pick-Up, 572 Engine

- For use with all 572-cubic-inch engines
- Use with oil pan P/N 10240721, oil pan gasket P/N 10106407 and windage tray P/N 88962187

G. 3865886

Oil Pump Shaft

- Heavy-duty all-metal
- Intermediate shaft fits all Big-Block engines

12555167

Oil Pump and Pick-Up, Gen V and Gen VI (not shown)

- For use with the Gen V and Gen VI 454 and 502 engines with 1-piece rear main seal
- Pump has 1,300" gears and will fit Mark IV engines
- Distance from the mounting surface to the bottom of the screen is 5.870"

NOTE: Tack-welding pick-up tube to pump is recommended.



A Dipstick Tube, 6-Quart



B Dipstick Tube, 4-Quart



C Windage Tray



D Windage Tray



E Windage Tray, 572 Engine



F Oil Pump and Pick-Up, 572 Engine



G Oil Pump Shaft

Oil Filter Adapter **H**Oil Cooler Bypass Valve **I**Distributor **J**Distributor, Billet HEI **K**Distributor, Competition Adjustable Slip Collar **L****3955281****Oil Pump Pick-Up (not shown)**

- Distance from pump mounting surface to lowest point of screen is 4.880"

NOTE: Weld or braze the pick-up tube to the pump cover for off-highway applications.

H. 3952301**Oil Filter Adapter**

- Mounts a spin-on cartridge oil filter
- Contains a filter bypass valve used on all V-8 engines

I. 25013759**Oil Cooler Bypass Valve**

- For high-performance and Bowtie Big-Blocks with 4-bolt main bearing caps
- Must be installed in the rear hole behind the oil filter adapter bolt to route oil through the cooler

24241872**Magnetic Drain Plug (not shown)**

- Catches and holds small pieces of metal before they can cause engine damage

DISTRIBUTORS AND IGNITION SYSTEMS

Chevrolet Performance distributors and ignition components are designed to provide the optimum spark at precisely the right time. The distributors in this group are interchangeable with Small-Block Chevrolet V-8 components. Chevrolet Performance distributors cannot be used with Tall-Deck Bowtie blocks, except adjustable distributor P/N 10093387.

J. 93440806**Distributor**

- Has melonized cam drive gear P/N 19052845 for steel roller camshafts
- Required on all crate engines and steel roller camshafts
- If engines are assembled not using this gear, it may affect your engine warranty
- Use connector wire P/N 8917052 to ignition

K. 88961867**Distributor, Billet HEI**

- Most powerful and durable distributor for Small- or Big-Block Chevrolet engines that Chevrolet Performance has serviced
- For strength and high rpm stability the oversized shaft is guided by a sealed ball bearing and long sintered bushing
- Treated coating on the shaft provides low friction
- Advance assembly features chrome-moly weights that slide on nylon pads for smooth timing advancement through the entire rpm range
- Vacuum advance canister and billet aluminum housing is CNC-machined for greater accuracy
- Has melonized cam drive gear P/N 10456413 for steel roller camshafts
- High-quality cap with brass terminals

19052845**Distributor Gear (not shown)**

- Melonized iron gear is required on all crate engines and steel roller camshafts
- If engines are assembled without using this gear, it may affect the warranty

NOTE: This gear is part of distributor assembly P/N 93440806.

L. 10093387**Distributor, Competition Adjustable Slip Collar**

- Designed primarily for competition use
- Billet-aluminum housing, ball-bearing guide and adjustable mechanical-advance assembly
- Magnetic pickup provides accurate trigger signals to Chevrolet Performance Heavy Duty Ignition P/N 10037378 (not included)
- Uses a standard Chevrolet V-8 cap and rotor
- Will clear most induction systems
- Slip collar that can be adjusted to make up for block or head machining, or a tall-deck Bowtie block



INTAKE MANIFOLDS, GASKETS AND COMPONENTS

The wide range of Chevrolet Performance intake manifolds are cast-iron and aluminum for carbureted and fuel injected applications. These intake manifolds were designed specifically for GM engines so you know they will deliver optimum performance. Due to the profile of some Chevrolet Performance high-rise intake manifolds, hood clearance should be carefully checked before ordering an intake manifold.

A. 14097092

Intake Manifold, Oval Port (iron) (spread bore)

- Economical iron 4-bbl intake manifold
- Fits all 396–502 engines with large oval port heads
- Use oil splash shield P/N 346243 (if required)

B. 19131359 ⓘ

High-Rise Intake Manifold, Rectangular Port (square bore)

- Aluminum, dual-plane manifold can be used with high-performance cast-iron or aluminum rectangular port heads
- Same as used on 454 HO and 502 HO engine assemblies

NOTE: Ports do not match Bowtie cylinder heads P/N 14044861 and P/N 14044862, or symmetrical port heads P/N 10051128 and P/N 10051129.

C. 12363420 ⓘ

High-Rise Intake Manifold, Oval Port

- Designed for all 396-502 engines with GM aluminum heads (1975 and earlier) and large oval port iron heads
- Has a dual-plane design with spread bore flange and a dual-bolt pattern
- Has no provisions for a hot-air choke, but will accept a divorced choke or electric choke
- Accepts air conditioning and alternator brackets
- Use intake manifold gasket P/N 12366985 and bolt kit P/N 12367959

NOTE: May not fit on many Corvette models. Manifold height is 6" at the rear and 4.5" in front. Check for hood clearance before ordering.

12363421

High-Rise CNC-Port-Matched Intake Manifold, Oval Port (spread bore) (not shown)

- Similar manifold design as P/N 12363420 (see above), but it is "CNC" port-matched to Chevrolet Performance oval port aluminum cylinder heads

D. 12363406

Intake Manifold, Oval Port (square bore) (Holley Carburetors)

- Same as manifold P/N 12363420 (see above), but designed for use with a Holley carburetor
- Dual-plane design requires bolt kit P/N 12367959, which includes 16 bolts (8740 chrome-moly 3/8-16 x 1.5" with 3/8" hex head and 16 5/8" O.D. washers), and manifold gasket kit P/N 12366985
- Accepts air conditioning and alternator brackets and a late-model water neck

NOTE: Will not fit production Corvettes, and may not fit Chevilles. Manifold carb flange height is 4.450".



A Intake Manifold, Oval Port (iron)



B High-Rise Intake Manifold, Rectangular Port



C High-Rise Intake Manifold, Oval Port



D Intake Manifold, Oval Port (Holley Carburetors)



CNC-Port-Matched Intake Manifold, Oval Port (Holley Carburetors) **E**



Intake Manifold, ZZ572/620 Engine **F**



Intake Manifold, ZZ572/720R Engine **G**

E. 12363407 ⓘ
CNC-Port-Matched Intake Manifold, Oval Port (square bore) (Holley Carburetors)

- Same as P/N 12363406 (see previous page), except it has been CNC-port-matched for GM aluminum oval port heads with large oval port heads (1975-and-older), and all aluminum heads with oval ports

F. 88961161 ⓘ
Intake Manifold, ZZ572/620 Engine (square bore)

- Aluminum single-plane intake manifold is used on the ZZ572/620 engine
- The carburetor flange is for a 4150-style carburetor
- Use intake gasket P/N 88962213
- For tall-deck blocks

G. 88962218 ⓘ
Intake Manifold, ZZ572/720R Engine

- Aluminum single plane intake manifold is used on the ZZ572/720R engine
- The carburetor flange is for a 4500 Dominator-style carburetor
- Use intake gasket P/N 88962213
- For tall-deck blocks



Additional components required for installation. See page 330.



Intake Manifolds, Gaskets and Components Continued

A. 12499249

Ram Jet Fuel Injection Kit, with MEFI-4 Electronics

- Retro-fit fuel injection kit is calibrated for a 502/502 Chevrolet Performance engine and is the same as used on the Ram Jet 502 P/N 12499121
- May be used on other Big-Block applications by replacing the ECU unit with an aftermarket unit with the proper calibration
- Includes brackets, sensors, bolts, nuts, gaskets and other small parts, including:

PART	DESCRIPTION	QTY
88962744	Instruction Manual	1
12489400	Diagnostic Trouble Code Tool	1
12555320	Intake Manifold Oil Shield	1
12366985	Gasket Package	1
12367959	Bolt/Screw Package	1
12489372	Upper Intake Manifold Gasket	1
12487372	Fuel Feed Hose	1
10216948	Tube Assembly—Fuel Press Regulator	1
88961968	Engine Harness Assembly	1
10456208	Knock Sensor	1
12489595	Bracket Assembly, Transmission Cable	1
12489596	Bracket Assembly, Transmission, Throttle Cable	1
12489597	Rod, Throttle Control	1
1104060	Distributor	2
1115491	Ignition Coil	1
12464482	Lower Intake Manifold	1
12464484	Upper Intake Manifold	1
17113524	Body Assembly Throttle	1
12490257	Air Filter Kit	1
12569240	MAP Sensor	1
25036751	Intake Air Temperature Sensor	1
17090919	Injector Assembly	8
17113222	Fuel Injector Retainer Kit	1
17120039	Rail Assembly, Multi-Port Fuel Injection	1
89060414	Fuel Pressure Regulator Assembly	1
88962718	Module Assembly Engine Cont.	1
15326386	Coolant Temperature Sensor	1
19178918	O ₂ Sensor	1
12487373	Connector, Fuel Rtn. Line	1



A Ram Jet Fuel Injection Kit, with MEFI-4 Electronics



B Lower Manifold, 502 Ram Jet



C Upper Manifold, 502 Ram Jet

B. 12464482 ⓘ

Lower Manifold, 502 Ram Jet

- Aluminum lower portion of the intake manifold is used on Ram Jet 502 crate engine P/N 12499121
- Use with upper manifold P/N 12464484 (see below), upper manifold gasket P/N 12489372 and 8 bolts P/N 12490255

C. 12464484 ⓘ

Upper Manifold, 502 Ram Jet

- Aluminum upper portion of the intake manifold is used on Ram Jet 502 crate engine P/N 12499121
- Use with lower manifold P/N 12464482 (see above), upper manifold gasket P/N 12489372 and 8 bolts P/N 12490255

ⓘ INTAKE MANIFOLDS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
12464484	12366985 (1)	12497460 (1)	12499121, 12497323
12464482	12366985 (1)	12367959 (1)	12499121, 12497323
88961161	88962213 (1)	12367959 (1)	12498793
12363420	12366985 (1)	12367959 (1)	12498777, BB Oval Port High Rise
12363407	12366985 (1)	12367959 (1)	19201332, 12371171, CNC version of 12363406
19131359	12506106 (2)	10198997 (14), 9349918 (2)	12568774, BB Dual Plane
88962218	88962213 (1)	12367959 (1)	12498827



Oil Shield **D**



Gasket, Aluminum Oval Port Heads **E**



Bolt Kit, Intake Manifold **F**



Water Neck **G**



Air Cleaner, Chevrolet-Logo High-Performance Design **H**



Air Cleaner, Chevrolet-Logo Classic Design **I**

Intake Manifold Components and Gaskets

D. 1255320

Oil Shield

- Isolates hot engine oil from the air/fuel mixture

E. 12366985

Gasket, Aluminum Oval Port Heads

- Designed for Big-Block aluminum heads P/N 12363390, P/N 12363392 and P/N 12363399
- Use with manifold P/N 12363406, P/N 12363407, P/N 12363420 or P/N 12363421

88962213

Intake Manifold Gasket (not shown)

- Use on all Big-Block engines with rectangular intake port heads 396 through 572-cubic-inch
- Includes 2 gaskets

12506106

Gasket, 454 and 502 Engines (not shown)

- Used on 454 and 502 engines; with restricted heat crossover passages
- 1 gasket per package; order 2 per engine.

F. 12367959

Bolt Kit, Intake Manifold

- For any Big-Block Chevrolet engine
- Includes 16 bolts: 3/8"-16 x 1.5" with wide, underhead flange with a 7/16" hex head
- Rated at 170,000 psi and will give consistent torque load
- Includes 16 hardened flat washers

NOTE: Four of these washers are smaller in diameter for use around the front water passages.

CHROME WATER NECKS

G. 12342024

Water Neck

- Chrome water neck with neoprene O-ring and chrome bolts
- For 1966-1975 full-size Chevrolet, Camaro, and Chevelle V-8 engines

10108470

Aluminum Water Outlet (not shown)

AIR CLEANERS

H. 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- 14" round high-performance style air cleaner has chrome lid with embossed Chevrolet name
- Fits most 4-bbl and 2-bbl carburetors
- Will not fit Dominator-style carburetors
- Bowtie nut not included

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.750" from top of carburetor gasket area to underside of hood.

I. 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- 14" round classic-style air cleaner has chrome lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most 4-bbl and 2-bbl carburetors
- Will not fit Dominator-style carburetors



Additional components required for installation.



A. 17802112

Performance Exhaust Tips

Add high-performance appearance to the Cat-Back Exhaust System on your Cobalt with one of these highly polished exhaust tips.

- Unique design
- Rolled lip
- Polished T-304 stainless steel

Part Number	Model Year	Description
17802112	2005-08	Bowtie Logo, Angle Cut
17802113	2005-08	Bowtie Logo, Straight Cut

NOTE: Not for use on production exhaust systems.

B. 19131972

Extrude Honed Exhaust Manifold

Provides improved flow over production exhaust manifold.

Part Number	Model Year	Description
19131972	2005-08	SS/Supercharged (exc CA emissions)

NOTE: Fits production or Chevrolet Performance Exhaust Systems.

C. 17800578

16" Wheel

D. 17800195

18" Wheel

Personalize your Cobalt with attractive wheels.

- Chromed
- Available with matching center cap and lugnuts
- Validated to GM specifications

Part Number	Model Year	Description
17800578	2005-08	AZ577, 16" Cast Chrome
17800195	2005-08	AP194, 18" Forged Polished

88958710

Heavy-Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Left-hand (shown on page 339)

- Designed to provide enhanced load capacity for off-road use
- Designed to use the existing interfaces to the bearing, brake caliper, strut and control arm
- Installation requires caliper mounting bolts P/N 11588889, lower ball joint bolt P/N 11589341 and nut P/N 11511799 included with the kit
- Bearing spacer plate needs modification for installation
- Specific suspension point geometry – may induce increased tire wear during street duty

88958711

Heavy-Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Right-hand (shown on page 339)

- See P/N 88958710 for description



A Performance Exhaust Tips



B Extrude Honed Exhaust Manifold



C 16" Wheel



D 18" Wheel


 Cobalt Wheel-Hop Kit **E**

**E. 19211782
Cobalt Wheel-Hop Kit**

Under hard acceleration, wheel hop will slow you down and could lead to a broken or damaged transmission, axle, or other expensive parts. This kit is specially designed to eliminate wheel hop on your 2005-2007 Cobalt SS/SC or 2004-2007 ION Redline so that you can get all of your power to the ground.

**F. 19212712
Cobalt Clutch Upgrade Kit**

This kit utilizes stronger components to create a package that will be less susceptible to clutch failure in your 2005-2007 Cobalt SS/SC and 2004-2007 Ion Redline. This kit is capable of up to 300 horsepower and will give users better performance and more load capability because of increased surface area and extra clamping force. 2004-2007 Ion Red Line.


 Cobalt Clutch Upgrade Kit **F**

SUPERCHARGER UPGRADE KITS

G. 17801947

Stage 1 Performance Upgrade Kit: Cobalt SS/ION Red Line

Increase the performance of your 2004-2007 Chevrolet Cobalt SS or 2004-2007 Saturn ION Red Line with our Stage 1 Performance Upgrade Kit. This kit includes a recalibrated computer and high-flow injectors to meet the demands of more rpm and higher horsepower. The Stage 1 Kit takes the factory-blown 2.0L Ecotec from 205 horsepower up to 230 horsepower. Keep the fun rolling with a performance upgrade kit for your daily driven supercar.

Kit Includes:

- High-flow injectors
- PCM reprogramming

NOTE: Premium (93-octane) fuel is required for Stage 1.

H. 17803229

Stage 2 Performance Upgrade Kit

Make that Cobalt SS or Saturn ION Red Line sit up and beg with our Stage 2 Performance Kit. Building on the success of our Stage 1 Kit, our Chevrolet Performance engineers wanted to push the over achieving four-banger just a little bit more. Stage 2 takes your Cobalt SS or ION Red Line from a stock rating of 205 horsepower all the way up to 241 horsepower.

The key to making that power is increasing the boost on the factory supercharger by swapping out the stock blower pulley. Increased boost means more air getting pumped into the high-revving Ecotec, and the increased airflow requires more fuel. That's why GM high-flow injectors are included in the kit. Together, this Performance Kit will keep your Cobalt/ION Red Line boosted ahead of the competition.

Kit Includes:

- High-flow injectors
- Supercharger pulley
- Correct length supercharger belt (P/N 12597993)
- PCM reprogramming

NOTE: Premium (93-octane) fuel is required for Stage 2.


 Stage 1 Performance Upgrade Kit: Cobalt SS/ION Red Line **G**

 Stage 2 Performance Upgrade Kit **H**

SUPERCHARGER UPGRADE KITS CONTINUED

Stage 3 Kit for Cobalt SS/ION Red Line

Take your Cobalt SS or ION Red Line to the next level with our Stage 3 Off-Road Kit! The Stage 3 kit consists of the following:

- Smaller, 76mm supercharger pulley
- 2-pass intercooler end plate
- Unique PCM, which includes a calibration for the smaller pulley, an adjustable rev limiter, a 100-octane mode, and a nitrous control algorithm

Our Stage 3 Kit will take your supercharged Ecotec 2.0L engine to a whole new level of performance. Stage 3 takes horsepower output to 248 horsepower on 93 octane fuel and to 260 horsepower on 100 octane fuel. In addition to the power increase, you'll also get an adjustable rev limiter and calibration for a 50-shot of nitrous (nitrous kit not included). For best power, we recommend also installing a high-flow exhaust.

This PCM is equipped with a user-adjustable rev limit from 6,750 to 8,000 rpm. The rev limit is adjusted by pressing on the throttle pedal with the ignition on and engine off. At about 50 percent throttle, the tachometer will show the current rev limit. Pressing the throttle further will adjust the rev limit in 250 rpm increments. This PCM is also equipped with a control scheme for the equivalent of a 50-horsepower shot of nitrous. The PCM will automatically provide the proper spark and fuel for nitrous up to 500 rpm below the current selected rev limit when the trigger is activated.

NOTE: The Stage 3 Kit is for off-road use only. The Stage 3 upgrades are meant for off-road use only and are not certified to be emissions-legal. The vehicle's air conditioning is disabled by the Stage 3 PCM.

NOTE: This kit is an upgrade to Stage 2. It requires the following parts from the Stage 2 Kit: high-flow fuel injectors, pulley adapter hub and serpentine belt.



Stage 3 Kit, 2006-2007 Cobalt SS Supercharged

Kits

88958718	Stage 3 Kit, 2005 Cobalt SS Supercharged
88958719	Stage 3 Kit, 2006-2007 Cobalt SS Supercharged
88958715	Stage 3 Kit, 2004 ION Red Line
88958716	Stage 3 Kit, 2005 ION Red Line
88958717	Stage 3 Kit, 2006-2007 ION Red Line

Parts List

88958721	Intercooler Endplate, 2 Pass Style
12610641	PCM, Stage 3, 2004 ION Red Line
12610642	PCM, Stage 3, 2005 ION Red Line
12610643	PCM, Stage 3, 2006-2007 ION Red Line
12610644	PCM, Stage 3, 2005 Cobalt SS Supercharged
12610645	PCM, Stage 3, 2006-2007 Cobalt SS Supercharged

19212670

Performance Turbocharger Upgrade Kit for Cobalt, Solstice, Sky and HHR

- For 2007-2009 Pontiac Solstice GXP, 2007-2009 Saturn Sky Redline, 2009-2010 HHR SS, 2008-2010 Cobalt SS
- Increases horsepower up to 290 @ 5,200 rpm and torque up to 340 lb.-ft.
- Includes new calibration (flashed by your local dealer) and two new MAP sensors
- Premium fuel required



V-6 90° ENGINE BLOCK QUICK REFERENCE CHART

Part Number	10205294	10134371	10134351
Block Material	Cast-iron	A356-T6 aluminum	A356-T6 aluminum
Cylinder Wall Type	Non-Siamesed	Siamesed	Siamesed
Cylinder Deck Height	9.025"	9.025"	9.025"
Cylinder Bore (Max)	4.000"	4.125"	4.125"
Number Bearing Cap Bolts	2	4	4
Cap Bolt Orientation	Straight	Splayed (20°)	Splayed (20°)
Bearing Cap Type	Cast-iron	Steel	Steel
Crankshaft Journal Dia.	350 size	350 size	400 size Oil Sump Type
Oil Sump	Wet	Wet	Dry
Oil Seal Type	2 pc	2 pc	2 pc
Design Max Stroke	3.750"	4.000"	4.000"
Weight (lbs; bare)	N/A	78	78
Intended Usage	Discontinued	Professional competition	Professional competition
Non-Standard Parts Required	Has fuel pump boss	No mechanical fuel pump boss	No mechanical fuel pump boss





Aluminum Racing Bare Block (front) **A**

V-6 90° ENGINE BLOCKS

A. 10134351

Aluminum Racing Bare Block (400 ci main size)

- Has the same features as block P/N 10134371 (see above), except it has 4.117" bores, a 2.65"-diameter main bearing bore and a provision for dry-sump oiling
- Maximum recommended bore is 4.125"

V-6 90° CYLINDER HEADS QUICK REFERENCE CHART

Part Number	Description	Casting Number	Material	Port Size	Port Type	Valve Angle	Chamber CC's	Int Vlv	Exh Vlv	Plug Type	Heat Riser	Rocker Stud	Notes
10134359	18° V-6	12480009	Aluminum	215	Raised	18°	43	2.150	1.620	Angled	No	Shaft	No seats/guides
12480009	18° V-6	12480009	Aluminum	215	Raised	18°	43	2.150	1.620	Angled	No	Shaft	As cast ports



18° Aluminum Cylinder Head (exhaust) **B**

V-6 90° CYLINDER HEADS

B. 10134359

18° Aluminum Cylinder Head

- Low-port 18° aluminum cylinder head for maximum-effort competition engines
- Offers significant improvements over conventional head designs with 18° valve angles (vs. older 23° angles) and 43cc combustion chambers
- Spark plug holes are centrally located and valve centerlines are relocated
- Exhaust ports are high-flow
- Head face has an extra 0.080" of material for 9.1:1 compression, and up to 2.200" intake valves can be used
- Shallow wedge-shaped combustion chambers allow builders to achieve high compression ratios with small piston domes
- Heads do not include valve seats or guides
- Aftermarket shaft-mounted rocker arm assemblies and pushrods are required
- Piston domes and valve pockets must be matched to the revised combustion chamber design



18° Aluminum Cylinder Head (top/intake) **B**

12480009

18° Aluminum Cylinder Head (not shown)

- Low-port 18° aluminum cylinder head for competition engines
- Identical to P/N 10134359 (see above), except that it has a new-design intake port for the Daytona Dash Racing Series



18° Aluminum Cylinder Head (combustion chamber) **B**

PONTIAC V-8 AND SUPER-DUTY FOUR CYLINDER

Valve Covers

A. 25534420

301-455 Valve Covers

- Stylish covers fit 301-455 cubic-inch Pontiac engines manufactured from 1965-1979
- Designed for stock valvetrains and may not clear aftermarket rocker arms, springs or stud girdles
- Each cover has one 1.220" hole on left side for oil fill cap; or grommet for PCV or fresh air inlet
- Covers have a natural aluminum finish with machined Pontiac name and logo
- Includes 2 covers and grommet kit P/N 12341988



A Pontiac 301-455 V-8 Valve Covers

CAMSHAFTS

B. 88958648

Ecotec Performance Camshaft Set (not shown)

- For increased power in naturally aspirated and turbocharged engines
- Duration @ 0.050" lift is 247° on the intake and 249° on the exhaust
- Maximum lift is 0.499" for the intake and 0.499" on the exhaust
- Lobe centerline is 116°



B Exhaust Header Flange

C. 88958611

Ecotec Intake Camshaft Blank

- Heat-treated camshaft blank for grinding custom-profile intake cam



C Ecotec Intake Camshaft Blank

D. 88958612

Ecotec Exhaust Camshaft Blank

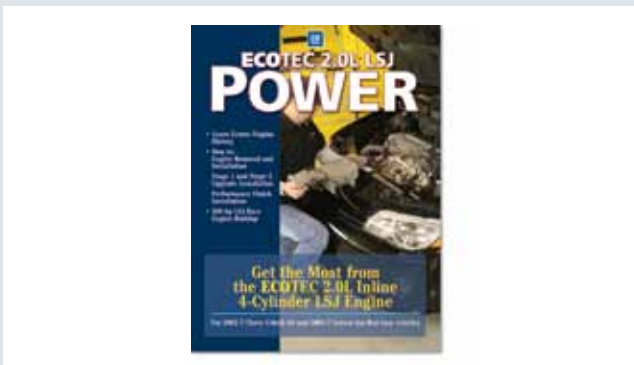
- Heat-treated camshaft blank for grinding custom-profile exhaust cam



D Ecotec Exhaust Camshaft Blank


 Ecotec Adjustable Cam Gear Set **E**

 Ecotec Neutral Balance Shaft Set **F**

 Sport Compact Build Book **G**

 Ecotec 2.0L LSJ Power Book **H**
E. 88958613
Ecotec Adjustable Cam Gear Set

- Includes intake and exhaust
- Allows valve timing to be advanced or retarded up to 16° of crankshaft rotation

F. 88958615
Ecotec Neutral Balance Shaft Set

- High-performance neutral balance shaft set (two shafts) used to replace stock balance shafts

CRANKSHAFTS
88958631
Ecotec Crankshaft Pulley (not shown)

- Billet pulley has a reduced diameter to minimize horsepower-robbing drag of the alternator and air conditioning compressor

INTAKE MANIFOLDS, GASKETS AND COMPONENTS
88958633
Ecotec Intake Manifold Flange Set (not shown)

- 0.555"-thick aluminum flanges can be used to fabricate your own custom intake manifold

G. 88958728
Sport Compact Build Book

- Describes all the parts and procedures needed to transform your stock Ecotec engine into a high-performance racing engine for drag racing or drifting competition
- Also includes race modifications for a 4T65-E automatic transmission

H. 88958686
Ecotec 2.0L LSJ Power Book

Step-by-step guide to boosting the horsepower and torque in this versatile four-cylinder powerplant.

- Detailed instructions on engine removal/reinstallation
- Special instructions on Installing Stage 1 and Stage 2 upgrade kits
- Build a 300-plus horsepower Ecotec!

WHEELS AND ACCESSORIES

Perhaps nothing gives your vehicle a more distinct look than its wheels. Chevrolet Performance wheels are factory engineered and give your vehicle an integrated, production appearance. And best of all, they look great!

ZQ8 Wheels

A. 12498299

5-Spoke Wheel Kit, 16" ZQ8-Style

- Originally designed for S-trucks with the ZQ8 suspension
- 16" x 8" aluminum wheels have a -6.4mm rim offset and look great on 1987-and-older A-body and G-body cars; 1992-and-older F-body cars; and other vehicles that have the GM-style 5" x 4.750" five-lug bolt pattern
- Includes four wheels, Bowtie logo center caps, valve stems, wheel nuts and wheel nut caps

NOTE: If GMC logo center caps desired, order cap P/N 9593761 (sold individually; order four per vehicle).



A 5-Spoke Wheel Kit, 16 ZQ8-Style

WHEEL HARDWARE AND ACCESSORIES

12363989

Valve Stem Assembly, Rubber (not shown)

- Rubber valve stem has chrome metal sleeve and metal hex head
- 4 per part number

CHASSIS, SUSPENSION AND BRAKES

Cadillac CTS-V

B. 12499241

Shock Absorber Kit

- Performance-oriented kit consisting of two 45mm monotube front shocks and two 32mm self-leveling Nivomat rear shock absorbers
- Developed at the famed Nürburgring racetrack in Germany to work with the stock 2004-07 CTS-V suspension, providing exceptional road handling
- Nivomat rear shocks have a self-compensating hydropneumatic spring that helps maintain ride control, but also maintains level vehicle height when carrying passengers or cargo

NOTE: Shock absorber kit improves handling, but may result in a harsher overall ride.



B Shock Absorber Kit

C. 88964607

Front Rotors

- Cross-drilled rotors for 2004-07 Cadillac CTS-V
- Sold as a pair



C Front Rotors

D. 88964608

Rear Rotors

- Cross-drilled rotors for 2004-07 Cadillac CTS-V
- Sold as a pair



D Rear Rotors



Heavy Duty Steering Knuckle, Left-Hand **E**



Heavy Duty Front Steering Knuckle, Right-Hand **F**



Strut Tower Braces **G**

Cobalt SS, Saturn ION Red Line

E. 88958710

Heavy-Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Left-hand

- Designed to provide enhanced load capacity for off-road use
- Designed to use the existing interfaces to the bearing, brake caliper, strut and control arm
- Installation requires caliper mounting bolts P/N 11588889, lower ball joint bolt P/N 11589341 and nut P/N 11511799 included with the kit
- Bearing spacer plate needs modification for installation
- Specific suspension point geometry – may induce increased tire wear during street duty

F. 88958711

Heavy-Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Right-hand

- See P/N 88958710 for description

W-Body: 2000-2005 Monte Carlo and Impala; 1997-2003 Grand Prix

G. 12498648

Strut Tower Braces

- Install these easy bolt-on braces on your car to reduce body flex for firmer feel when cornering
- Includes hardware and installation instructions



A. 12498642

Heavy-Duty Rear Stabilizer Bar

- For reduced body roll, install this thick, 19mm rear bar
- Includes bushings



A Heavy-Duty Rear Stabilizer Bar

B. 12498643

Heavy-Duty Front Stabilizer Bar

- Get the look and feel of performance with this sturdy 34mm front bar
- Includes bushings and end links



B Heavy-Duty Front Stabilizer Bar

C. 12498644

High-Performance Front Brake Upgrade Kit

- Attain increased braking performance with 12" vented disc rotors and high-performance brake pads
- Includes rotors, caliper mounting brackets, pads and bushings

NOTE: Monte Carlo and Impala models already have this system installed as standard production. Will not fit stock Grand Prix "crosslace" wheels and spare tire may not fit. Heat generated by performance brake pads can cause rotor warping if not allowed to cool sufficiently between severe uses.



C High-Performance Front Brake Upgrade Kit

D. 12498646

Heavy-Duty Front Brake Caliper Brackets

- Same brackets used in brake kit P/N 12498644 (see above)
- Includes brackets, bushings and pins
- Rotors equivalent to P/N 12498647 must be used



D Heavy-Duty Front Brake Caliper Brackets



FACTORY ENGINEERED RACE PARTS F & Y CAR



T1 Suspension Package for C-5 Corvette

Lightweight Racing Aluminum Driveshaft

Lose less power transferred from the transmission to the rear axle. These lightweight aluminum driveshafts are designed for F-cars equipped with the MM6 six-speed manual transmission:

12564004

Aluminum Driveshaft (not shown)

- 1998-1999 LS1 with MM6 transmission

Corvette

The Corvette engineering group and Chevy Racing collaborated to develop components that improve the durability and performance of production-based 1997-2004 Corvettes in professional Showroom Stock racing. Chevrolet Performance offers these winning parts in convenient, comprehensive kits to make your Corvette's transformation from street car to racecar simple and straightforward.

NOTE: C5 racing parts are validated for off-road use only and are not intended for street car use. Modification with these parts will void the vehicle's warranty.

C5 Corvette

12480062

T1 Suspension Package

- Developed and approved for SCCA Touring 1 racing
- Comprehensive kit dramatically improves the handling of the Corvette
- Includes front and rear springs, front and rear stabilizer bars, stabilizer bar end links and isolators, upper and lower front A-arms
- Provides maximum performance when used with the SACHS shock absorbers (see below)

This kit includes the following items:

12480063	Spring-Front	12480064	Spring-Rear
12480065	Stabilizer Bar-Front	25534433	Stabilizer Bar-Rear
12480067	Stabilizer Link-Front and Rear (4 required)	12480068	Isolator-Front Stabilizer Bar (2 required)
12480069	Isolator-Rear Stabilizer Bar (2 required)	12480072	Upper Control Arm-Front LH
12480073	Upper Control Arm-Front RH	12480077	Lower Control Arm-Front LH
12480078	Lower Control Arm-Front RH		

12480094

SACHS Shock Absorber, Front (not shown)

- Tuned for use with the T1 suspension package (see above)
- Sold individually; order 2 per vehicle

12480095

SACHS Shock Absorber, Rear (not shown)

- Tuned for use with the T1 suspension package (see above)
- Sold individually; order 2 per vehicle

12480093

Camber Spacer Kit (not shown)

- 2 kits required per wheel

Kit includes one of each of the following:

12480071	Camber Plate, Large	12480076	Camber Plate, Small
15688265	Bolt, Lower Control Arm	11516382	Nut, Lower Control Arm

12480080

C5 Transmission Oil Cooler Kit (not shown)

- Intended for cars equipped with the six-speed manual transmission and has been updated for use on Z06 and export-model Corvettes
- Includes transmission pump, cooler assembly, wiring harness, plumbing kit, filter bracket, thermal switch, brackets and fasteners

C6 Corvette

25534430

T1 Suspension Kit for C6 Corvette (not shown)

- Approved by the SCCA for racing in the T1 class
- Similar to the championship winning C5 kit, but made to fit the C6

This kit includes the following items:

25534418	Spring-Front	25534419	Spring-Rear
12480065	Stabilizer Bar Front	25534433	Stabilizer Rear (4 required)
12480067	Link-Anti-Roll Bar (4 required)	12480068	Isolator-Front Anti-Roll Bar (2 required)
12480069	Isolator-Rear Anti-Roll Bar (2 required)	25534436	Arm-Front Upper LH
25534437	Arm-Front Upper RH	25534438	Arm-Front Lower LH
25534439	Arm-Front Lower RH	25534442	Arm-Rear Lower LH
25534443	Arm-Rear Lower RH		



STARTERS AND ALTERNATORS

Flywheels with two different diameters are used on Chevrolet Small-Block, Big-Block, and 90° V-6 engines. Large flywheels are 14" in diameter and have 168 teeth on the starter ring gear. Small-diameter flywheels are 12.750" in diameter, with 153 teeth on the ring gear.

This difference in flywheel diameters requires two distinct starter housings. Starter noses used with large-diameter flywheels have two offset bolt holes, while starters for small flywheels have two bolt holes that are parallel to the back of the block. Most Chevy blocks are drilled for both types of starters.

STARTERS

A. 12361146 ⓘ

High-Torque Mini Starter

- Gear reduction starter is designed for 1958-1996 V-8 and all 90° V-6 engines
- Compact design provides increased clearance
- Weighs only 10.5 pounds and has a gear reduction of 3.75:1
- Equipped with a dual bolt pattern for 12.750" (153-tooth) and 14" (168-tooth) flywheels
- Housing can be rotated to clear exhaust systems
- Includes starter, mounting bolts, shims, gaskets and electrical connectors

NOTE: Not recommended for competition use.

B. 12363128 ⓘ

High-Torque Mini Starter, Chrome

- Same as starter P/N 12361146 (see above), but with a chrome housing

C. 10465143 ⓘ

Lightweight Starter (remanufactured)

- Lightweight high-performance starter was originally used on 1993-1997 Camaros and Firebirds with the LT1 engine
- Can be used on any Small-Block or Big-Block engine with a 12.750", 153-tooth flywheel

D. 12606096 ⓘ

Lightweight Starter, Big-Block and Small-Block

- Gear reduction starter can be used on Big-Block and Small-Block engines with a 14", 168-tooth flywheel

E. 10465385 ⓘ

LS-Series Starter

- Works with all LS-Series and Gen IV V-8 engines

ALTERNATORS

88958690

Alternator, 90-Amp (Competition Use, not shown)

- Proven in NASCAR use
- Similar to P/N 1001641
- CS121 design housing
- Serpentine belt pulley
- Hand-assembled and dyno-tested



A High-Torque Mini Starter



B High-Torque Mini Starter, Chrome



C Lightweight Starter 12.75" Flywheel (remanufactured)



D Lightweight Starter 14" Flywheel



E LS-Series Starter

**STARTERS: ADDITIONAL REQUIRED COMPONENTS**

Part Number	Bolts (Quantity)	Engine Application
12361146	14097279 (1), 14097278 (1)	Small-Block (except LT or LS Engines)
12361146	12338064 (2)	Big-Block
10465143	14097279 (1), 14097278 (1)	Small-Block (except LT or LS Engines) and 12499711, 12499710, 12499712, 19201330
10465143	12338064 (2)	Big-Block
12606096	12338064 (2)	Big-Block and 12499121, 12496962, 12497323, 12371171
12363128	14097278 (1)	Small-Block (except LT or LS Engines)
12363128	12338064 (2)	Big-Block
10465385	11588456 (1), 12561848 (1)	LS-Series

SPARK PLUG WIRES

Chevrolet Performance spark plug wire kits are designed to fit your GM engine, eliminating the guesswork in selecting the correct length.



GM Performance Parts Spark Plug Wire Set (90° Boots Shown)



Spark Plug Wire Set (135° Boot Shown)



Chevrolet Bowtie Spark Plug Wire Set (90° Boots Shown)

GM Performance Parts Logo Wires

These performance 8mm spark plug wires exhibit only 600 ohms per foot of resistance, with high noise suppression capabilities. Features include red wires with white GM Performance Parts insignia and black boots. Manufactured with double-wall silicone construction. Kits include a 10" coil wire for engines, such as the Ram Jet 350 and ZZ572 engines that have remote-coil HEI, plus four wire separators and HEI terminals and boots for the distributor cap.

Part Number	Description	Notes
12361051	Spark Plug Wire Set, Small-Block (90° Boot)	Designed for a Small-Block, with 90° spark plug boots. Route below the valve covers. Recommend wire loom kit: P/N 12496806.
12368384	Spark Plug Wire Set for GMPP Loom Kit, Big-Block	Custom-fit set designed to be used with black wire loom P/N 12495502.
12495519	Spark Plug Wire Set, LS-Series V-8	Direct-fit wire set with factory-style boots and terminals.

Chevrolet Bowtie Logo Wires

These red wires share the same high quality features as the GM Performance Parts wires, but have the Chevrolet Bowtie logo in white.

Part Number	Description	Notes
12361051	Spark Plug Wire Set, Small-Block (90° Boot)	Designed for a Small-Block, with 90° spark plug boots. Route over the valve covers. Recommend wire loom kit: P/N 12496806.
12368384	Spark Plug Wire Kit for GMPP Loom Kit, Big-Block	Custom-fit set designed to be used with black wire loom P/N 12495502 or chrome wire loom P/N 12342049.

GM Racing Wires

Part Number	Description	Notes
24502521	Spark Plug Wire Set	Superior quality racing plug wires used by NASCAR teams. Designed to route over the valve cover, with 135° spark plug boots. 50 ohm/ft premium cable covered with 8mm of silicone and a black abrasive-resistant cover. Not for SB2 cylinder heads.



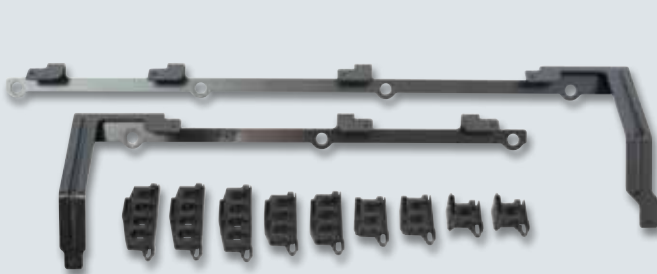
Additional components required for installation. See page 344.



! SPARK PLUG WIRES: ADDITIONAL REQUIRED COMPONENTS

Part Number	Engine Type	Loom Number	Logo	Ends	Routing	Engine Application
12361051	Small-Block	12496806 OR 88891792	GMPP	90°	Below valve covers	12499711: 350 HO Turn-Key, 12499710: FB 385 Turn-Key, 19201330: ZZ4 Turn-Key, 12499120: Ram Jet 350, 12496968: 350 HO Deluxe, 12495515: Ram Jet 350
12495519	LS-Series	N/A	None		Over valve covers	
12361051	Small-Block	12496806	Bowtie	90°	Below valve covers	Small-Block with 90° spark plug boots
12368384	Big-Block	12495502 OR 12342049	GMPP	135°	Over valve covers	12499121: Ram Jet 502, 12497323: Ram Jet 502
24502521	NASCAR	N/A	None	135°	Over valve covers	

LOOM KITS



Wire Loom Kit, Big Block



Wire Loom Kit, Small Block

Part Number	Description	Technical Notes
12496806	Wire Loom Kit, Small-Block	Stainless-steel supports with the Bowtie logo laser-cut in each of the six supports. Twelve retainers, bolts and washers are supplied to bolt to the side of the head. Use with spark plug wire set P/N 12361051 and P/N 12361057.
12495502	Wire Loom Kit, Big-Block	Used on late-model Big-Block trucks. Supplied with one left-hand support P/N 12553397, one right-hand support P/N 12553398, three four-wire retainers P/N 12132223, two three-wire retainers P/N 12047523, two two-wire retainers P/N 12132229, and two single-wire retainers P/N 12132228.

ELECTRONIC CONTROL UNITS AND COMPONENTS

19171130

LSX Ignition Controller

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible with all LS-Series ignition coils





ELECTRONIC CONTROL UNITS AND COMPONENTS



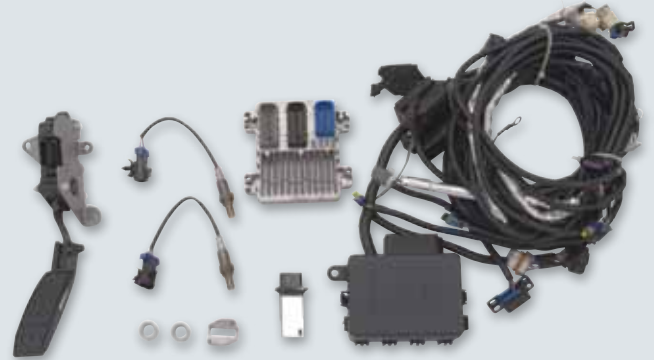
Ignition Controller



Ignition Wire Harness



Rev Limiter for CD Ignition Controller



Controller and Wiring Harness, LS7

Ignition Components

10037379

Rev Limiter for CD Ignition Controller

- Plugs directly into the GM High Performance CD Ignition Controller P/N 10037378
- The rpm limit is set with plug-in rpm modules
- Kit is supplied with 6,000, 7,000, and 8,000 rpm modules

LS Engine Controller Kits

Includes calibrated ECM, wiring harness, MAF sensor, O² sensors, ETC pedal assembly.

19256514

5.3L Engine Controller Kit (Not Shown)

- Specially programmed for retrofit applications, for quicker and easier adaptation of GM's popular 5.3L V-8 for countless hot rod projects
- Works with 2007-2009 5.3L engines with the following engine codes: LC9 (2007-2009), LH8 (2008-2009), LY5 (2007-2009), LMF (2008-2009) and LMG (2007-2009) - Requires MAP 12644228
- Does not engage cylinder-deactivating Active Fuel Management and other features not required for retrofit installations
- For individual engine controller, use P/N 19256515 (included in kit)

19166568

LS2 Controller Kit (not shown)

- Includes all the components required to run your LS2 crate engine
- Max rpm 6,500
- For individual engine controller, use P/N 19166570 (included in kit)
- Only works with 58X reluctor ring engines, 2006+

19258270

LS3 Controller Kit (not shown)

- Includes all the components required to run the LS3 crate engine
- Max rpm 6,500
- For individual engine controller, use P/N 19258271 (included in kit)

19258267

LS376/480 Controller Kit (not shown)

- Includes all the components required to run your LS376/480 crate engine
- Max rpm 6,500
- For individual engine controller, use P/N 19258268 (included in kit)

19259261

LS376/525 Controller Kit (not shown)

- Includes all the components required to run LS376/525 crate engine
- Max rpm 6,500
- For individual engine controller, use P/N 1925929 (included in kit)

19258553

LS7 Controller Kit

- Includes all the components required to run your 2006-2013 LS7 crate engine
- For individual engine controller, use P/N 19268554 (included in kit)
- Max rpm 7,100
- Will run all M/Y LS7s with MAP sensor 12615801

19259293

LSA Controller Kit (not shown)

- Includes all the components required to run LSA crate engine, P/N 19260164
- Max rpm 6,500
- For individual engine controller, use P/N 19259294 (included in kit)

19244481

LSX454 Controller Kit (not shown)

- Includes all the components required to run LSX454 crate engine P/N 192608333
- Max rpm 6,500
- For individual engine controller, use P/N 19244482 (included in kit)

The previous kits (P/N 19256514, 19259261, 19244481, 19258553, 19166568, 19258267, 19258270, 19259293) include the following items:

19166573	LS2/LS3/LS376/480/LS376/525/LS7/LSX 454 Engine Harness
19202597	LS2/LS7/LSX454 MAP Sensor Jumper
19202598	LS3/LS376/480/LS376/525 MAP Sensor Jumper
15865791	Mass Air Flow Meter
19166574	Mass Air Flow Meter Mounting Boss
10379038	Accelerator Pedal Assembly
12581966	Oxygen Sensor (2 Per Kit)
15156588	Oxygen Sensor Mounting Boss (2 Per Kit)
Varies	Instruction Sheet
Varies	Engine Specific Controller

NOTE: The controller will not function in a production vehicle unless all kit components are used. These controllers will not operate any of the production gauges. Aftermarket gauges are required.



ELECTRONIC CONTROL UNITS & COMPONENTS CONTINUED

Chevy Small-Block V-8 (LS Style)**12480112****ECU, LS1 V-8 (not shown)**

- Calibrated for the LS1 Camaro/Firebird engine and can be used in a street rod or other early-model vehicles

NOTE: Use with Camaro/Firebird LS1 engine and wire harness P/N 12480113.

12480054**ECU, LS1/ASA Racing (not shown)**

- LS1 ECU is similar to P/N 16238212, but is calibrated for ASA racing only
- Use with wire harness P/N 12480055

12480055**Wire Harness, LS1, ASA Racing (not shown)**

- Designed for ASA racing ECU P/N 12480054 only

19212657**Transmission Controller, 4L60-E, 4L65-E, 4L80-E and 4L85-E Automatic (not shown)**

- Required when using a GM electronically controlled automatic transmission (see page 125)
- Includes wiring harness, software and connector for laptop computer
- Controller allows full programming of shifting, as well as part-throttle, wide-open throttle and shift firmness control

Chevy Small-Block V-8 (Gen I)**88962717****MEFI 4 ECU, Ram Jet 350 (not shown)**

- Replacement ECU for all Ram Jet 350 crate engines, MEFI 3 P/N 12495515 or MEFI 4 P/N 12499120
- MEFI 4 Ram Jet engine is a closed-loop system that gives a much smoother idle and improved performance

NOTE: Replacing the ECU on MEFI 3 Ram Jet engine P/N 12495515 requires using new wire harness kit P/N 12499116, or use jumper wire P/N 88963118 to use MEFI 4 ECU as an open-loop system.

88961967**MEFI 4 ECU Wire Harness, Ram Jet 350 (not shown)**

- Designed to be used with the MEFI 4 Ram Jet 350 P/N 12499120 and MEFI 4 ECU P/N 88962717

12499116**MEFI 4 ECU and Wire Harness Kit, Ram Jet 350 (not shown)**

- Use to convert a Ram Jet 350 from MEFI 3 to the newer MEFI 4 design, which provides a better idle through closed-loop operation
- Includes ECU module P/N 88962717, wire harness P/N 88961967, oxygen sensor P/N 19178918, intake air temp sensor P/N 25036751, and oxygen sensor fitting P/N 15156588

NOTE: ECU is programmed with a "green mode" that controls the rpm for the break-in period. During this period, engine speed is limited to 4,000 rpm in the first hour, 4,500 rpm in the second hour and 5,500 rpm in the third hour.

15156588**Fitting, Oxygen Sensor (not shown)**

- Used on all MEFI 4 electronic controlled ignition systems
- Should be welded into the exhaust pipe so the oxygen sensor can be screwed into the exhaust system

12489492**MEFI 3 ECU Wire Harness, Ram Jet 350 (not shown)**

- Designed for use with the MEFI 3 350 Ram Jet engine P/N 12495515 using ECU P/N 12489488

Chevy Big-Block V-8**88962718****ECU, Ram Jet 502 (not shown)**

- Replacement ECU for all Ram Jet 502 engines (MEFI 3 P/N 12497323 or MEFI 4 P/N 12499121)
- MEFI 4 Ram Jet engine is a closed-loop system that gives a much smoother idle and improved performance

NOTE: Replacing the ECU on MEFI 3 Ram Jet engine P/N 12497323 requires using new wire harness kit P/N 12499117, or jumper wire P/N 88963118 to use MEFI 4 ECU as an open-loop system.

12499117**MEFI 4 ECU & Wire Harness Kit, Ram Jet 502 (not shown)**

- Module/harness kit is used to convert a Ram Jet 502 from MEFI 3 to the newer MEFI 4 design, which offers improved idle and performance through a closed-loop system
- Includes module P/N 88962718, wire harness P/N 88961968, oxygen sensor P/N 19178918, intake air temp sensor P/N 25036751 and oxygen sensor fitting P/N 15156588

NOTE: The ECU is programmed with a "green mode" that controls the rpm for the break-in period. During this period, engine speed is limited to 4,000 rpm in the first hour, 4,500 rpm in the second hour and 5,500 rpm in the third hour.

88963118**Jumper Harness, MEFI 3 to MEFI 4 (not shown)**

- Allows an MEFI 4 module to be used with an MEFI 3 wiring system (to stay as an open-loop system)
- Fits both Big-Block and Small-Block engines

88961968**MEFI 4 ECU Harness, Ram Jet 502 (not shown)**

- Used in the MEFI 4 Ram Jet 502 P/N 12499121 with the MEFI 4 closed-loop oxygen sensor-equipped system
- Use with MEFI 4 ECU P/N 88962718

CHASSIS WIRING HARNESS

If you're building a hot rod or restoring an old muscle car, Chevrolet Performance inclusive wiring harness kits make a great replacement for old, worn or damaged wires. These universal wiring kits come with the wires pre-installed on the fuse block, so wiring the vehicle is simply a matter of mounting the fuse block and routing the wires. Each wire is preprinted with the necessary application and is GM-color-coded. The kits also come with all necessary fuses, flashers, horn relay, tach leads, wire ties and grommets. High-temperature, 275°F wire is used – one size larger than factory specs. In all, it's everything you need to electrify your vintage GM car or truck!

NOTE: These universal systems will re-wire any car, truck or competition vehicle using a GM-keyed column. Kits come with extra-long wire to accommodate almost any vehicle.

12355691**12-Circuit Wiring Harness (not shown)**

- Basic system is wired for: heat/air conditioning, brake lights, coil, electric fan, emergency flashers, gauges/dash instruments, headlamps, horn, radio, turn signals, wipers, dome light and third brake light

12355693**18-Circuit Wiring Harness (not shown)**

- Includes wiring for all circuits in P/N 12355691
- Also includes: cigarette lighter, power windows, power door locks, electric fuel pump, back-up lights/cruise control and speakers

Distributor, HEI **A**Distributor, Billet HEI **B**Distributor, Ram Jet 350 & Ram Jet 502 **C**Distributor, Adjustable Slip Collar **D**

DISTRIBUTORS AND COMPONENTS

High-quality, durable and dependable Chevrolet Performance distributors optimize the performance of your GM engine. These distributors are interchangeable among standard GM Small-Block and Big-Block V-8s. For tall-deck engines, use adjustable slip collar distributor P/N 10093387.

NOTE: Melonized distributor gear P/N 10456413 is required on all Chevrolet Performance crate engines, or serious damage will occur.

A. 93440806

Distributor, HEI

- Cast aluminum distributor for all Small-Block and Big-Block V-8 engine assemblies
- High-performance mechanical advance curve
- Vacuum advance canister included
- Use connector P/N 12167658 to attach tachometer and 12-volt power supply wire to distributor
- Includes module P/N 19180771, cap P/N 19110931 and rotor P/N 19110934

B. 88961867

Distributor, Billet HEI

- CNC-machined billet aluminum housing provides great strength
- Ball-bearing guide, oversized shaft and long sintered bushing for stability
- Offers mechanical advance and vacuum advance
- Includes brass terminal cap
- Use connector P/N 12167658 to attach tachometer and 12-volt power supply wire to distributor

C. 1104060

Distributor, Ram Jet 350 and Ram Jet 502

- Used on the fuel-injected Ram Jet 350 and Ram Jet 502
- Includes ignition module P/N 10482830, cap P/N 19166099 and rotor P/N 10477219

1103952

Distributor, Late-Model EFI (not shown)

- Used on late-model V-8 engines with fuel injection and computer controls
- Kit includes ignition module, cap and rotor

D. 10093387

Distributor, Adjustable Slip Collar

- Designed for competition use
- Billet aluminum housing
- Ball-bearing guide
- Adjustable mechanical advance
- Magnetic pickup
- Uses standard cap and rotor
- Adjustable slip collar for tall-deck blocks or to compensate for cylinder head or block machining

19052845

Distributor Gear (not shown)

- Melonized gear for distributor P/N 1103952

10456413

Distributor Gear (not shown)

- Melonized iron gear is required on all Chevrolet Performance crate engines
- Failure to use this gear will affect the engine warranty

NOTE: Supplied on distributor P/N 93440806.

12167658

Connector, HEI Distributor Power and Tachometer (not shown)

- Used to attach the power and tachometer wires to the cap of the HEI distributor

12498335

Coil, HEI (not shown)

- Production HEI coil



CARBURETORS, THROTTLE BODIES AND AIR CLEANERS

Chevrolet Performance has the right carburetor or throttle body to complete your new crate engine, or give life to your rebuilt engine. Then, top off your engine with one of our great-looking air cleaners.

Carburetors

19170097

Carburetor, Holley 650-cfm (not shown)

- Holley 4150-style 650-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Mechanical secondaries
- Manual choke
- Four-corner idle adjustment
- Power valve blowout protection
- Bolts and gaskets included
- Replaces Holley 4160 600-cfm carburetor P/N 12497147

A. 19170092

Carburetor, Holley 670-cfm

- Holley 4160-style 670-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Dual-feed center-hung fuel bowls
- Vacuum secondaries
- Electric choke
- Power valve blowout protection
- Quick-change adjustable vacuum secondary
- Bolts and gaskets included

19170093

Carburetor, Holley 770-cfm (not shown)

- Holley 4160-style 770-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Dual feed, center-hung float bowls
- Vacuum secondaries
- Automatic electric choke
- Quick-change adjustable vacuum secondary
- Recommended for Small-Block and Big-Block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces Holley 4160 750-cfm carburetor P/N 12485506

B. 19170095

Carburetor, Holley 850-cfm

- Holley 4150-style 850-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Mechanical secondaries
- Electric choke
- Four-corner idle adjustment
- Power valve blowout protection
- Custom-calibrated for the ZZ572/620 crate engine
- Recommended for 502 crate engines and suitable for Big-Block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces Holley 4160 850-cfm carburetor P/N 88961560

NOTE: Carburetor can only be recalibrated for use with other large-displacement engines.

C. 19170094

Carburetor, Holley 870-cfm

- Holley 4160-style 870-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Dual feed, center-hung float bowls
- Vacuum secondaries
- Automatic electric choke
- Quick-change adjustable vacuum secondary
- Recommended for 502 crate engines and suitable for Big-Block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces 4150-style 850-cfm carburetor P/N 12366996



A Carburetor, Holley 670-cfm



B Carburetor, Holley 850-cfm



C Carburetor, Holley 870-cfm



Carburetor, Holley Dominator 1150-cfm **D**

D. 19170096

Carburetor, Holley Dominator 1150-cfm

- Dominator-style 1150-cfm 4-bbl carburetor
- Features show-car-quality polished finish
- Mechanical secondaries
- Four-corner idle adjustment
- Power valve blowout protection
- Custom-calibrated for the ZZ572/720R crate engine
- Bolts and gaskets included
- Replaces 4500-style 1090-cfm carburetor P/N 88962217

Throttle Bodies

17096144

Throttle Body, Ram Jet 350 (not shown)

- Used on the Ram Jet 350 crate engine
- Use throttle body gasket P/N 12551240 and bolt P/N 11588714 for installation
- Single 75mm blades

17113524

Throttle Body, Ram Jet 502 (not shown)

- Used on the Ram Jet 502 crate engine
- Use throttle body gasket P/N 10105379 and bolt P/N 11516344 for installation
- Dual 49.9mm blades

NOTE: Also fits L98 TPI engines.

Air Cleaners

E. 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- 14" round classic-style air cleaner
- Has chrome lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most 4-bbl and 2-bbl carburetors
- Does not fit Dominator-style carburetors

F. 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- 14" round high-performance-style air cleaner
- Has chrome lid with embossed Chevrolet name
- Fits most 4-bbl and 2-bbl carburetors
- Does not fit Dominator-style carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.750" from top of carburetor gasket area to underside of hood.

G. 12498951

Air Cleaner, Ram Jet 350

- Designed for use with throttle body on Ram Jet 350 crate engine
- Can be used on other applications

12490257

Air Cleaner, Ram Jet 502 (not shown)

- Designed for use with throttle body on Ram Jet 502 crate engine
- Can be used on other applications



Air Cleaner, Chevrolet Logo Classic Design **E**



Air Cleaner, Chevrolet Logo High-Performance Design **F**



Air Cleaner, Ram Jet 350 **G**



FUEL PUMPS AND COMPONENTS

A. 6415325

Fuel Pump, High Capacity, Small-Block

- For use on carbureted engines
- Pump has 7 psi shutoff pressure and free flowing rate of 30 gph
- Lower housing can be rotated to reposition inlet and outlet ports

B. 12355612

Fuel Pump, Street Performance, Small-Block

- For use on carbureted engines
- Pump has 7 psi shutoff pressure and a free-flow rating of 110 gph
- Lower housing can be rotated to reposition inlet and outlet ports
- 3/8" - 18 inlet

C. 12355613

Fuel Pump, Competition, Small-Block

- For use on carbureted racing engines
- Pump has 9 psi shutoff pressure and a free-flow rating of 115 gph
- Lower housing can be rotated to reposition inlet and outlet ports
- 1/2" - 14 inlet

D. 12355614

Fuel Pump, Street Performance, Big-Block

- For use on carbureted Big-Block engines built from 1965 through 1990
- Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph
- Lower housing can be rotated to reposition inlet and outlet ports
- 3/8" - 18 inlet



A Fuel Pump, High Capacity, Small-Block



B Fuel Pump, Street Performance, Small-Block



C Fuel Pump, Competition, Small-Block



D Fuel Pump, Street Performance, Big-Block



Small-Block Fuel Pump Block-Off Plate **E**



Big-Block Fuel Pump Block-Off Plate **F**



Electric Fuel Pump **G**



Camaro ZL1 Fuel Pump Module **H**



Electric Fuel Pump, High Output **I**



Fuel Filter **J**

Chrome Fuel Pump Block-Off Plates

E. 12341998

Small-Block Fuel Pump Block-Off Plate

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included

F. 12341999

Big-Block Fuel Pump Block-Off Plate

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included

Electric Fuel Pumps and Components

G. 6472657

Electric Fuel Pump

- For use on all carbureted engines
- Flows 30-40 gph at 6-9 psi

H. 19260557

Camaro ZL1 Fuel Pump Module

- Production fuel pump module for the 2012 Camaro ZL1 with supercharged LSA engine
- Supports approximately 600 horsepower
- Direct replacement for 2010+ Camaro SS fuel pump modules
- 250 liters per hour capacity at 65 psi
- Pulse-width modulated, eliminates need for conventional pressure regulator
- Kit includes fuel pump module/sender assembly tank seal and instruction sheet

I. 25115899

Electric Fuel Pump, High-Output

- Heavy-duty 12-volt electric rotary pump
- Flows 72 gph at 6-8 psi

19245530

Fuel Pressure Regulator Kit (not shown)

- Used on Ram Jet 502 crate engine
- Fits other fuel-injected engines

J. 854619

Fuel Filter

- High-capacity inline filter
- Suitable for all high-performance carbureted applications
- 5/16" inlet and outlet

19239926

LS Fuel Filter (not shown)

- 99-03 Corvette stock fuel filter
- Built-in fuel pressure regulator
- Mounts to frame
- Supplies constant 55-61 PSI of fuel to engine and returns excess to fuel tank



SUPERCHARGERS

Turn your GM car into a true sport compact with the horsepower boost of a supercharger. By squeezing pressurized air into the engine, a supercharger dramatically increases the performance of your vehicle, while maintaining excellent drivability. Chevrolet Performance Roots-type supercharger systems are factory engineered and extensively tested to meet the same rigorous standards as GM's production vehicles and components.

A. 12498660

2.4L Twin Cam Supercharger (Cavalier, Sunfire, Grand Am, Alero)

- Add up to 50 horsepower and 40 lb.-ft. of torque!
- Designed for 2000-2002 GM vehicles equipped with the 2.4L Twin Cam engine (engine code RPO LD9)
- Includes all mounting brackets, air ducts, adapters, Gen II MAP sensor and spark plugs
- Can be installed with normal hand tools
- Includes new serpentine drive belt

NOTE: Recalibration of Vehicle Control Module is included, but must be performed by an authorized GM dealership.



A 2.4L Twin Cam Supercharger

Supercharger Upgrades

B. 17801947

Stage 1 Performance Upgrade Kit, Cobalt SS/ION Red Line

- For 2005-2007 Saturn ION Red Line and Chevrolet Cobalt SS only
- Enhances engine performance to 230 hp (up from stock 205 hp)
- Includes high-flow injectors and specific performance engine calibration
- Premium fuel required



B Stage 1 Performance Upgrade Kit, Cobalt SS/ION Red Line

C. 17803229

Stage 2 Performance Upgrade Kit, Cobalt SS/ION Red Line

- For 2005-2007 Saturn ION Red Line and Chevrolet Cobalt SS only
- Enhances engine performance to 241 hp (up from stock 205 hp)
- Includes high-flow injectors, supercharger pulley, new special length supercharger belt and specific performance engine calibration
- Premium fuel required



C Stage 2 Performance Upgrade Kit, Cobalt SS/ION Red Line

D. 88958719

Stage 3 Kit for Cobalt SS/ION Red Line

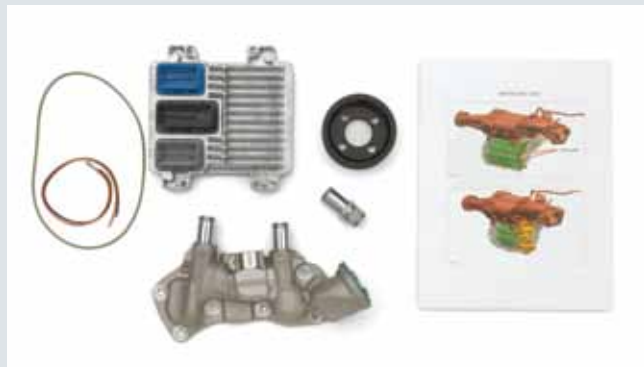
Take your Cobalt SS or ION Red Line to the next level with our Stage 3 Off-Road Kit! The Stage 3 Kit consists of the following:

- A smaller, 76mm supercharger pulley
- A 2-pass intercooler end plate
- A unique PCM, which includes a calibration for the smaller pulley, an adjustable rev limiter, a 100-octane mode, and a nitrous control algorithm
- See page 334 for more information

88958721

Two Pass Intercooler Endplate Kit (not shown)

- Upgrade from Stage 3
- Kit includes: seal P/N 12584355, seal P/N 12584333, nipple P/N 10235669 and instruction sheet
- Go to tunersource.gmblogs.com for more information



D Stage 3 Performance Upgrade Kit, Cobalt SS/ION Red Line



LSA Supercharger **E**

E. 19244095

LSA Supercharger

- Original equipment on Cadillac CTS-V Series (similar to 2012 Camaro ZL1)
- Highly efficient Eaton Twin-Vortices, high-helix rotors
- 1.9L displacement
- Integrated air-to-liquid intercooler with rear-facing lines
- Approx. 9 psi boost on 6.2L engine
- Assembly includes: supercharger intake system with injectors, cast cover and intercooler, front pulley, throttle body and gasket set



ZL1 Supercharger **F**

F. 19300534

ZL1 Supercharger

- Original equipment on LSA-powered 2012-2013 ZL1 Camaro
- Highly efficient Eaton Twin-Vortices, high-helix rotors
- 1.9L displacement
- Integrated air-to-liquid intercooler with front-facing lines
- Approximately 9lbs. psi boost on 6.2L engine
- Assembly includes: supercharger, intake system with injectors, ribbed cast cover and intercooler, front pulley, throttle body and gasket set

G. 19244103

LS9 Supercharger

- Original Equipment on ZR-1 Corvette
- Eaton twin-rotor 2.3L displacement
- Integrated dual-brick air to liquid intercooler
- Highly efficient 4-lobe rotor design
- Generates maximum boost pressure of 10.5 PSI
- Assembly includes:
 - Supercharger intake system with injectors
 - Cast cover and intercooler
 - Front pulley
 - Throttle body
 - Gasket Set

NOTE: For Turbocharger upgrades, see page 334.



LS9 Supercharger **G**

H. 22901367

LSA Intercooler Fluid Pump

- Includes pump assembly
- Additional hoses and clamps required to connect pump inline with coolant circuit



LSA Intercooler Fluid Pump **H**



BOOKS AND MANUALS

Get the most from your vehicle and its Chevrolet Performance parts. These books and manuals provide insider information and technical tips from direct sources within General Motors. They are invaluable for building an engine for the street or race track.

A. 24502488

Chevrolet Power

- Seventh edition of the time-tested guide to building competition engines for oval track racing, drag racing, road racing and marine applications
- Includes information on Small-Block, Big-Block, 90° V-6 and 60° V-6
- Contains more than 600 photos, illustrations, blueprints and charts

B. 12486611

Service Manual, Ram Jet 350 (MEFI 3)

- Covers the installation and service of the MEFI 3 Ram Jet 350 P/N 12495515

88962723

Service Manual, Ram Jet 350 (MEFI 4) (not shown)

- Covers the installation and service of the MEFI 4 Ram Jet 350 P/N 12499120

C. 12486610

Service Manual, Ram Jet 502 (MEFI 3)

- Covers the installation and service of the MEFI 3 Ram Jet 502 P/N 12497323

88962724

Service Manual, Ram Jet 502 (MEFI 4, not shown)

- Covers the installation and service of the MEFI 4 Ram Jet 502 P/N 12499121

D. 88959384

LS1 Engine Kit Installation Guide

- Detailed instructions to help you install an LS1 engine in your older vehicle
- Includes notes and technical explanations for necessary parts, along with part numbers you can order from your GM dealer to get the job done easily

E. 88958786

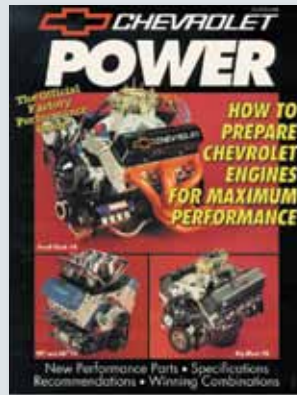
High-Performance Chevy LS1/LS6 V-8s

- 160 pages discuss the LS-Series engine architecture and design, parts interchangeability along with step-by-step engine removal sequences for many GM vehicles with LS-Series engines
- Shows how to build, modify and tune LS engines

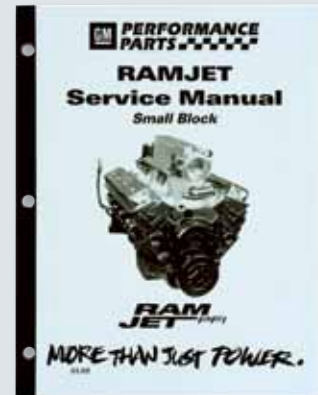
F. 88958764

LS-Series "How to Rebuild" Book

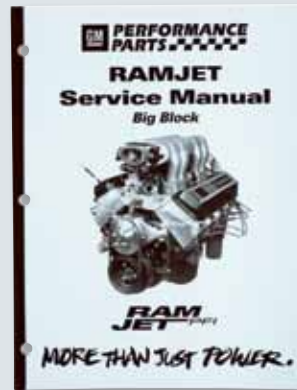
- A complete reference that shows how to rebuild an LS-Series engine
- Includes tips and modification procedures to improve power and economy
- More than 600 step-by-step color photos



A Chevrolet Power



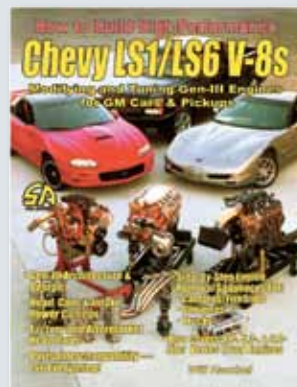
B Service Manual, Ram Jet 350 (MEFI 3)



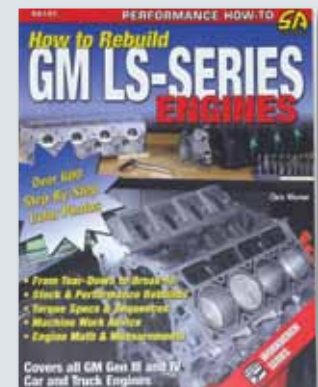
C Service Manual, Ram Jet 502 (MEFI 3)



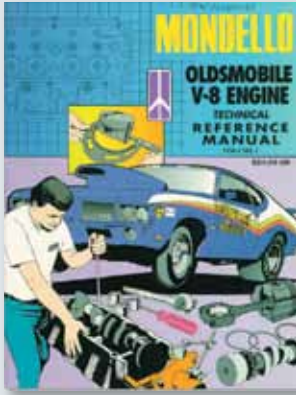
D LS1 Engine Kit Installation Guide



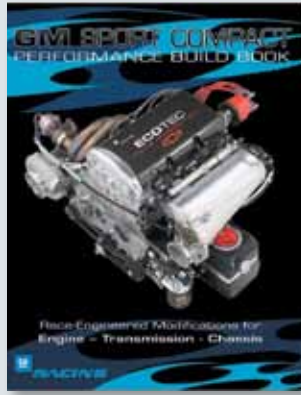
E High-Performance Chevy LS1/LS6 V-8's



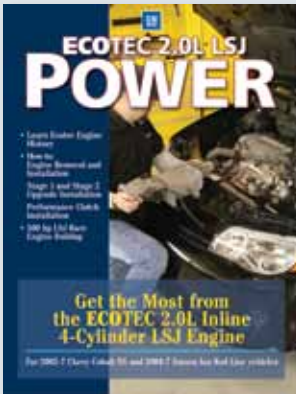
F LS-Series - How to Rebuild Book



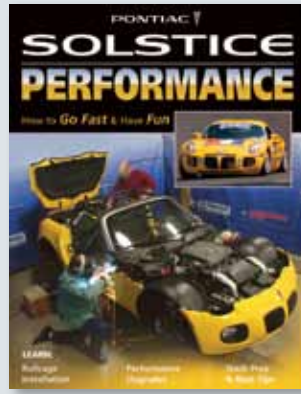
Oldsmobile High-Performance Manual **G**



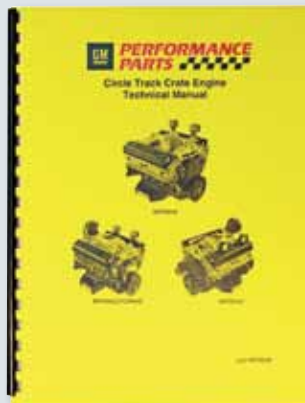
Sport Compact Build Book **H**



Ecotec 2.0L LSJ Power Book **I**



Solstice Performance **J**



Circle Track Techbook **K**



Circle Track Techbook (CT525) **L**

G. 12480027

Oldsmobile High-Performance Manual

- Contains proven methods for building power in Olds V-8 engines
- Also contains a detailed list of casting numbers for most Oldsmobile V-8 engines

H. 88958728

Sport Compact Build Book

- Describes all the parts and procedures needed to transform your stock Ecotec engine into a high-performance racing engine for drag racing or drifting competition
- Also includes race modifications for a 4T65-E automatic transmission

I. 88958686

Ecotec 2.0L LSJ Power Book

Step-by-step guide to boosting the horsepower and torque in this versatile four-cylinder powerplant.

- Detailed instructions on engine removal/reinstallation
- Special instructions on installing Stage 1 and Stage 2 upgrade kits
- Build a 300-plus-horsepower Ecotec!

24502570

Motorsports Aurora V-8 Engine Handbook (not shown)

- Covers component selection and recommendations, as well as engine building procedures, for engines used in specific racing series

J. 88958697

Solstice Performance

- 132 pages show how to take advantage of the performance capabilities of the Pontiac Solstice
- Loaded with almost 900 images and detailed technical information to help everyone from the beginner to the expert
- Shows how a Sports Car Club of America (SCCA) road racing Solstice is created, along with the buildup of a 'drifting' Solstice and a brute-performance Solstice

K. 88958668

Circle Track Techbook

- Technical manual for GM Circle Track crate engines P/N 19258602, P/N 88958602, P/N 88958603 and P/N 88958604
- Covers all details regarding rebuilding specifications, including parts lists
- 47 pages with photos and details on valve machining, valve springs, camshafts and other factory specifications

L. 88958759

Circle Track Techbook (CT525)

- Technical manual for Chevrolet Performance CT525 Circle Track engine P/N 19271821
- Covers all engine specifications, component part numbers, installation tips and rebuilding specifications



GM Licensed Parts

NEW PARTS FOR YOUR LS ENGINE!

LS Slant-Edge Valve Covers

Still trying to find your LS engine amongst a congestion of wires, tubes, and ignition coils? Not Any More! Through innovative engineering, Specialty Auto Parts U.S.A., Inc., has developed a valve cover that will take your stock LS engine, and give it a totally personalized look. These new valve covers are taller than stock valve covers, and can accommodate a wide variety of large valvetrain applications. Seven choices, with raised or recessed Chevrolet and Bowtie emblems, LSX emblem (not shown), or no emblems at all for a self-customized look. Mounting studs, and oil-restricting baffles are included. Threaded mounting holes for the Integrated Ignition Coil Bracket included. Sold in Pairs. U.S. Pat. D657,798. Your style choices include:

LSX, Chevrolet and Bowtie Emblems

Fits GM LS engines (see FactoryPerformanceParts.com for dimensional information).

- Chevy® Orange, LSX®
(see website for availability)..... **141-257**
- Chevy Orange, raised emblem..... **141-261**
- Black Crinkle, raised emblem **141-262**
- Cast Gray, raised emblem **141-263**
- Polished, recessed red/black emblem **141-264**
- Chrome, recessed red/black emblem **141-265**
- Polished, no logo **141-266**

Integrated Ignition Coil Bracket

What to do with those pesky coils in such a confined space? In addition to new LS Slant-Edge valve covers, Specialty has designed an attractive way to lift your coils off your valve cover so you can see the Chevrolet emblem. A unique rail mounting system attaches to the threaded holes on the valve cover, and the individual coils attach to the rail so they can be mounted in multiple positions. All necessary hardware included. See www.FactoryPerformanceParts.com for detailed coil information.



- Coil bracket for LS 1st Gen style coils **69520**
- Coil bracket for LS 4th & 5th Gen style coils **69521**

Spark Plug Wires

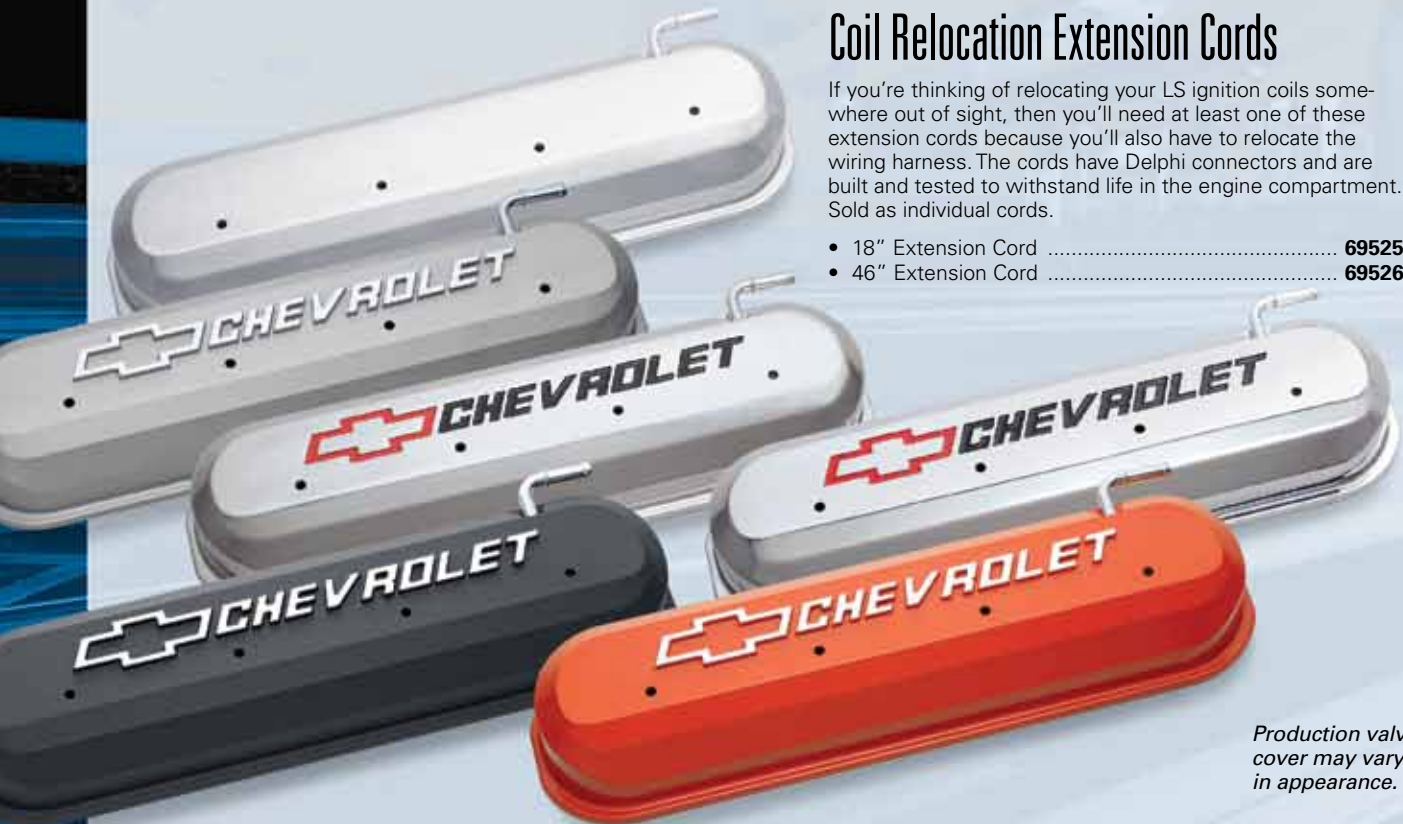
If you decide to use Specialty's Integrated Ignition Coil Bracket to mount your coils, you will need slightly longer spark plug wires. 13"-15" wires are needed. See www.FactoryPerformanceParts.com for detailed spark plug wire information.

- MSD 8.5mm Wires, P/N 39849, are recommended

Coil Relocation Extension Cords

If you're thinking of relocating your LS ignition coils somewhere out of sight, then you'll need at least one of these extension cords because you'll also have to relocate the wiring harness. The cords have Delphi connectors and are built and tested to withstand life in the engine compartment. Sold as individual cords.

- 18" Extension Cord **69525**
- 46" Extension Cord **69526**



Production valve cover may vary in appearance.



NEW Collector's Series Valve Covers! (see page 358)



NEW! Carbon-Style Dress-up Kit (see page 360)

GM LICENSED PARTS

Your engine is a source of pride. Show it off with accessories designed to complement its style and support its performance!

These parts are manufactured under license for General Motors and Chevrolet Performance. They meet strict dimensional and quality standards, ensuring you the highest-quality, best-fitting, top-performing components.

Finish your project your way with dress-up accessories and other licensed components from Chevrolet Performance.

Parts without images in this catalog may be viewed online.



Use coupon code **CHEVYPERF13** at checkout for **15% Off** on your first **FactoryPerformanceParts.com** order. One use per customer.

\$10 CASH REBATE COUPON*

To receive your \$10 cash rebate, please send (1) your name and mailing address legibly written (and optional email address in case questions arise), (2) this coupon cut from your 2013 catalog, (3) proof-of-purchase: a copy of your online order for \$50 or more, excluding shipping, shipped to the same name and address as that to which the \$10 should be sent (ordered through the www.factoryperformanceparts.com website, which is also accessible through the www.Chevroletperformance.com website) to: 2013 Chevrolet Performance Catalog Rebate, Factory Performance Parts, P.O. Box 306, Roseville, MI 48066. More information about this offer can be found under the "Chevrolet Performance Catalog" tab on the FactoryPerformanceParts.com website.

***NOTE:** Only the parts displayed on pages (356-365) are eligible for the \$10 rebate from Factory Performance Parts.

Ordering Information

The licensed engine dress-up parts displayed on the following pages (356-365) may be purchased online through chevroletperformance.com (or from factoryperformanceparts.com), as well as from Chevrolet Performance Authorized Centers and participating GM dealers. To locate products, find additional product information, or receive technical support, please visit chevroletperformance.com, click on "Featured Products" and then on "Licensed Products."

ATTENTION GM DEALERS: The following pages of General Motors licensed products (356-365) may be ordered online from the licensee by visiting www.FactoryPerformanceParts.com and clicking on the "Dealer Login" button. These procedures are also referenced in Dealer Bulletin ACC08-035. Crate Engine/Dress-Up Parts Cash Rebate information is described in Dealer Bulletin GMP09-200



SUPER-LIGHT, FABRICATED ALUMINUM VALVE COVERS

Precision-welded fabricated aluminum valve covers are available for street and racing applications (with and without, respectively, breather holes and baffles). The valve covers have recessed Chevrolet and Bowtie logos, billet mounting rails (for maximum leak resistance), and weigh approximately three pounds less than stamped steel die-cast valve covers. Sold in pairs.

A. Chevrolet Small-Block V-8, 1958-1986

- Clear anodized, tall, no baffle (shown, A) 141-800
- Clear anodized, tall, with baffle (not shown) 141-801
- Black anodized, tall, no baffle (not shown) 141-802
- Black anodized, tall, with baffle (not shown) 141-803

B. Chevrolet Big-Block, 1965-Later

- Clear anodized, tall, no baffle (not shown) 141-805
- Black anodized, tall, no baffle (not shown) 141-806
- Black anodized, tall, with baffle (shown, B) 141-807
- Clear anodized, tall, with baffle (not shown) 141-808

DIE-CAST VALVE COVERS

These premium die-cast aluminum valve covers are manufactured to GM specifications and are equipped with internal oil drippers (Small-Block only) and baffles. The valve covers are highlighted with recessed and raised Bowtie and Chevrolet logos. Available in tall only. Sold in pairs.

C. Chevrolet Big-Block, 1965-Later

- Chrome, recessed logo (shown, C) 141-140
- Black crinkle, recessed logo (not shown) 141-141
- Polished, recessed logo (not shown) 141-142

D. Chevrolet Small-Block V-8, 1958-1986

- Polished, recessed logo (shown, D) 141-108
- Black crinkle, recessed logo (not shown) 141-116
- Chrome, recessed logo (not shown) 141-117
- Chevy Orange, recessed logo (not shown) 141-118
- Black Crinkle, raised logo (not shown) 141-119
- Chevy Orange, raised logo (not shown) 141-120
- Carbon-Style, recessed logo (not shown) 141-121

LATE-MODEL DIE-CAST VALVE COVERS

Late-model valve covers are the tall, center hold-down-style and come with mounting bolts and appropriate washers. All late-model valve covers come with baffles and grommets. Sold in pairs.

E. Chevrolet Small-Block V-8, 1987-Current

- Polished, with baffle (not shown) 141-130
- Black crinkle, with baffle (not shown) 141-131
- Chrome, with baffle (shown, E) 141-132
- Replacement bolt and washer kit (not shown) 141-133
- Polished, no logo, with baffle (not shown) 141-134
- Polished, no logo, circle track w/vent tubes (not shown) 141-135

SLANT-EDGE DIE-CAST VALVE COVERS

These tall, slant-edge die-cast valve covers have a progressive design and a modern look. Offered with raised or recessed Chevrolet and Bowtie logos, plus plain. The valve covers are baffled and sold in pairs. U.S. Pat. D580,954.

F-J

Chevrolet Small-Block V-8, 1958-1986

- Polished, raised logo (not shown) 141-920
- Black crinkle, raised logo (shown, H) 141-921
- Chrome, raised logo (shown, F) 141-922
- Metallic gray, recessed logo (not shown) 141-923
- Chevy® Orange, raised logo (shown, G) 141-924
- Cast gray crinkle, raised logo (not shown) 141-925
- Polished, no logo (shown, I) 141-926
- Polished, recessed red/black logo (not shown) 141-927
- Black crinkle, recessed logo (not shown) 141-928
- Chrome, recessed red/black logo (shown, J) 141-930

New Collector's Series

- Red, raised logo (shown, page 357) 141-931
- Blue, raised logo (shown, page 357) 141-932
- Green, raised logo (shown, page 357) 141-933
- Yellow, raised logo (shown, page 357) 141-934
- White, raised logo (shown, page 357) 141-935



A 141-800



B 141-807



C 141-140



D 141-108



E 141-132



F 141-922



G 141-924



H 141-921



I 141-926



J 141-930



141-905 **K**



141-813 **L**



141-103 **M**



141-712 **N**



141-751 **O**



141-361 **P**



141-811 **Q**



141-784 **R**

STAMPED VALVE COVERS

These heavy-gauge stamped steel valve covers are designed to prevent leakage. The high-quality chromed covers feature Chevrolet and Bowtie logos. They are available in both tall and short (production height) designs. Some valve covers have oil baffles for PCV hookups. The valve covers are sold in pairs with necessary grommets, unless otherwise specified.

NOTE: Production height Chevy Small-Block valve covers and valve covers with baffles will not clear most stud girdle applications.

K, M, N, O, P, R

Chevrolet Small-Block V-8, 1958–1986

- Chrome, tall, no baffle (not shown) 141-101
- Chrome, short, with baffle (not shown) 141-102
- Chrome, tall, with baffle (shown, M) 141-103
- Metallic gray, tall, with baffle (shown, P) 141-361
- Carbon-Style, tall, with baffle (shown N) 141-712
- Black crinkle, short, with baffle (not shown) 141-750
- Black crinkle, tall, with baffle (shown, O) 141-751
- Chevy® orange, tall, with baffle (shown R) 141-784
- Chrome, short, with baffle, black/red logo (not shown) 141-899
- Chrome, tall, with baffle, black/red (shown, K) 141-905

L, Q

Chevrolet Big-Block V-8, 1965–1996

- Chrome, short, with baffle (not shown) 141-114
- Chrome, tall, with baffle (not shown) 141-115
- Black crinkle, short, with baffle (not shown) 141-810
- Black crinkle, tall, with baffle (shown, Q) 141-811
- Chrome, short, with baffle, black/red logo (not shown) 141-812
- Chrome, tall, with baffle, black/red (shown, L) 141-813
- Chevy® orange, short, with baffle (not shown) 141-789
- Chevy® orange, tall, with baffle (not shown) 141-787

TRANSMISSION OIL PAN

This stock-depth transmission oil pan has a drain plug for easier maintenance. The finned design aids cooling. There is a large GM logo stamped on the pan.

Transmission Oil Pan (not shown)

- Turbo 350 141-250

Personalize your engine with a distinctive component combo in three easy steps:

(1) Select your preferred color theme, choosing from various offerings in classic chrome, chrome with recessed painted logos, black crinkle, high-tech metallic gray, polished, clear anodized; or select the Chevy orange valve covers.

(2) Select your basic materials, choosing from stamped steel, die-cast aluminum, stamped aluminum, fabricated aluminum, composite or graphite fiber.

(3) Consider the importance of functionality, internal and external clearance, weight, mechanical strength, and surface finish characteristics.

...the result will be an appearance that is uniquely yours.



Plating more than four times thicker than some aftermarket parts.

2-PIECE DIE-CAST ALUMINUM VALVE COVERS

Valvetrain maintenance is greatly simplified with 2-piece die-cast aluminum valve covers. The top section has a diagonal cut and a retained gasket for a tight, leak-free seal. The valve covers feature oversized bolts for fast removal. These tall valve covers will clear roller rockers and stud girdles. These valve covers are available in a variety of styles/finishes with and without Bowties and/or Chevrolet logos. Small-Block valve covers fit 1958-1986 engines, and Big-Block fit 1965-1996. The valve covers are sold in pairs and include an Allen wrench and required grommets. U.S. Pat. Nos. 7,343,890, D543,998S

A-B

Chevrolet Small-Block V-8, 1958-1986

- Polished, recessed logo (shown, A)..... 141-910
- Black crinkle, recessed logo (shown, B) 141-911
- Chrome, recessed logo (not shown) 141-912
- Polished, raised logo (not shown) 141-913
- Black crinkle, raised logo (not shown) 141-914
- Polished, no logo (not shown) 141-915
- Replacement gasket kit (2) (not shown) 141-916

NOTE: Will not fit cylinder head 12340034 or similar (with three rectangular raised internal sections near the valve cover mounting surface), unless such sections are milled off.



A 141-910



B 141-911

LATE-MODEL STAMPED-STEEL VALVE COVERS

These short-style valve covers are the center hold-down design for later Small-Block engines. They have baffles and grommets, but are not supplied with mounting bolts. Sold in pairs.

C

Chevrolet Small-Block V-8, 1987-Current

- Chrome, short (not shown) 141-107
- Black crinkle, short (shown, C) 141-907
- Metallic gray, short (not shown) 141-908



C 141-907



D 141-710

NEW DRESS-UP KITS

Chevy Orange and Carbon-Style Engine Dress-up Kits are the latest looks for your small-block Chevy! These limited edition kits won't be around forever, so get one while you can. For more details about contents, please visit www.FactoryPerformanceParts.com.

NOTE: Carbon-Style parts are stamped steel with a decorative finish.

D-E

Chevrolet Small-Block V-8, 1958-1986

- Carbon-Style (shown, D)..... 141-710
- Chevy® Orange (shown, E)..... 141-780

DELUXE DRESS-UP KITS

These dress-up kits include one pair of tall valve covers, an air cleaner, timing chain cover, breather cap, 8 wing nuts and 8 hold-down clamps.

F-G

Deluxe Dress-Up Kits

- Metallic gray (not shown) 141-360
- Black crinkle (shown, G) 141-758
- Chrome, black/red logos (shown, F) 141-900



E 141-780



F 141-900

	141-360	141-758	141-900
Valve Covers	141-361	141-751	141-905
Air Cleaner	141-362	141-752	141-906
Timing Chain Cover	141-363	141-753	141-904
Air Breather Cap	141-365	141-754	141-616
8 Wing Nuts	141-364 x2	141-756 x2	141-902 x2
8 Hold-Down Clamps	141-366 x2	141-757 x2	141-903 x2

H

Chevrolet Small-Block V-8, 1958-1986

- Includes 2 short baffled Bowtie valve covers (141-102), plus Bowtie timing chain cover with GM production oil seal installed (141-215), 2 black/red Bowtie 4-wire looms (141-636), 1 Bowtie push-in air breather (141-616), oil dipstick (141-550), timing tab for 8" Balancer (141-202), and 2 grommets (air breather cap and PCV) (not shown) 141-001
- Includes two short baffled Bowtie valve covers (141-102), plus 8 Bowtie valve cover wingnuts (141-600), 4 valve cover hold-down clamps (141-610), 2 black/red Bowtie 4-wire looms (141-636), 1 Bowtie push-in air breather cap (141-616), oil dipstick (141-550), and 2 grommets (air breather cap and PCV) (shown, H)..... 141-002



G 141-758



H 141-002



141-302 **I**



141-692 **J**



141-785 **K**



141-752 **L**



141-906 **M**



141-362 **N**



141-713 **O**



141-333 **P**



141-323 **Q**



141-327 **R**

AIR CLEANERS

These steel air cleaners are available in the classic GM style and the newer, high-performance look. They feature the Chevrolet logo and come with maximum flow ACDelco air filter elements* and mounting hardware. The classic air cleaners include die-cast Bowtie center nuts (except P/N 141-906). The air filter bases are recessed for a low profile and maximum hood clearance (a minimum of 3.750- inches from the top of carburetor gasket area to hood underside).

*14" x 3" Filter (A212CVW), 10" x2-53/64" Filter (A773)

I, K, L, M, N, O

14" Steel Air Cleaners

- 14" Classic with Bowtie center nut (shown, I)..... 141-302
- 14" High-performance (not shown)..... 141-307
- 14" Metallic gray (shown, N)..... 141-362
- 14" Black crinkle (shown, L)..... 141-752
- 14" Carbon-style (shown, O)..... 141-713
- 14" Chevy® Orange (shown, K)..... 141-785
- 14" Chrome, black/red logo (shown, M)..... 141-906

10" Steel Air Cleaners

- 10" High-performance (not shown)..... 141-315

SUPER-LIGHT 14" AIR CLEANERS

Weight savings can be had by using air cleaners made of aircraft aluminum, and carbon fiber. The aluminum air cleaners are available in clear anodized or black anodized finishes. These air cleaners come with a 3" tall ACDelco filter element, all necessary mounting hardware and standard wingnuts.

J

14" Super-Light Air Cleaners

- Black anodized aluminum, no logo (not shown)..... 141-690
- Clear anodized aluminum, no logo (not shown)..... 141-691
- Black anodized aluminum, Chevrolet Bowtie logo (shown, J) 141-692
- Clear anodized aluminum, Chevrolet Bowtie logo (not shown) 141-693
- Carbon fiber, silver Bowtie logo (not shown)..... 141-790

AIR CLEANER CENTER NUTS

Add some extra flair to your custom air cleaner by topping it with a distinctive GM or Bowtie chrome plated zinc, or black crinkle die-cast center nut. The center nuts are available in small and large sizes. They fit both 1/4"-20 and 5/16"-18 studs.

P-R

Large and Small Air Cleaner Center Nuts

- Bowtie, small (not shown)..... 141-322
- Bowtie, large (shown, P)..... 141-333
- Bowtie, black crinkle, large (not shown)..... 141-369
- Hi-tech Bowtie, small (not shown)..... 141-328
- Hi-tech Bowtie, large (shown, Q)..... 141-323
- Hi-tech GM, small (not shown)..... 141-332
- Hi-tech GM, large (shown, R)..... 141-327

Chevrolet Performance Licensed Engine Builder Tools



Available only at FactoryPerformanceParts.com or GM Dealers



NEW VALVE COVER MINI NUTS & WINGNUTS

These custom valve cover mini nuts and wingnuts feature a Bowtie logo on the top of each fastener. Separate studs are included for precise gasket positioning. The wingnuts fit Chevrolet Big-Block, Small-Block, and V-6 cylinder heads. Sold 4 per package.

A-E

Valve Cover Mini Nuts

- Chevy® Orange (shown, A)..... 141-601
- Polished aluminum (shown, B)..... 141-917
- Black crinkle (shown, C)..... 141-759
- Metallic gray (shown, D)..... 141-367
- Chrome, with red Bowtie (shown, E)..... 141-909

F-I

Valve Cover Wingnuts

- Chrome (shown, F)..... 141-600
- Metallic gray (shown, G)..... 141-364
- Black crinkle (shown, H)..... 141-756
- Chrome, with red Bowtie (shown, I)..... 141-902

AIR BREATHER CAPS

Air breather caps with raised Bowtie logos are available in a variety of finishes to complement die-cast or stamped valve covers. Use on valve covers with grommets fitting 1.220" holes unless otherwise specified. The breather caps are available in traditional domed-style and push-in, 3"-diameter air-filter-element style. Air breather/PCV grommet kit available: P/N 141-615.

Push-In, Rectangular

- Chrome (not shown)..... 141-619

J-L

Push-In, 3" Diameter

- Metallic gray (not shown)..... 141-365
- Chevy® Orange (shown, J)..... 141-786
- Chrome (shown, K)..... 141-616
- Black crinkle (shown, L)..... 141-754

Push-On, 3" Diameter, For Use with Oil Filler Tube, 1.820" Opening

- Chrome (not shown)..... 141-617

Twist-On, 3" Diameter

- Chrome (not shown)..... 141-618

These popular push-in filter air breathers, with the raised Bowtie logo stamped prominently in the top, are offered in two styles: with the heat-shield hood and without. 3" diameter. Fits valve covers with 1.220" holes.

M-N

Push-In Filter Air Breathers

- Chrome, with hood (shown, M)..... 141-621
- Chrome, without hood (shown, N)..... 141-622

Clamp-On Filter Air Breather, Fits 1-3/8th

- Chrome, with hood (not shown)..... 141-625

WATER NECKS

These Chevrolet water necks utilize neoprene O-ring gaskets instead of regular gaskets – eliminating leakage. Supplied with chrome bolts.

- V-8, 1955-1965, Chevy II V-8 1965, Corvette 1956-1963 (not shown)..... 141-500
- Chevrolet, Camaro, and Chevelle V-8s, 1966-1975 (not shown)..... 141-501

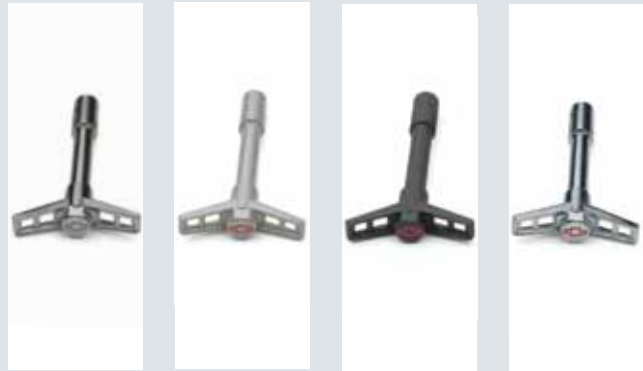
MASTER CYLINDER COVERS

These GM dual line master cylinder covers are offered for the most popular applications. Supplied with clips and a precisely positioned GM logo. PDB = Power Disc Brakes

- Single clip, 5"x 2-3/8", PDB (not shown)..... 141-225
- Single clip, 5-5/8"x 3", PDB or manual (not shown)..... 141-227



A 141-601 **B** 141-917 **C** 141-759 **D** 141-367 **E** 141-909



F 141-600 **G** 141-364 **H** 141-756 **I** 141-902



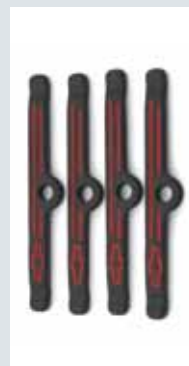
J 141-786 **K** 141-616 **L** 141-754



M 141-621 **N** 141-622



141-366 **O**



141-757 **P**



141-903 **Q**

VALVE COVER HOLD-DOWN CLAMPS

Valve cover hold-down clamps distribute the load over a wider area to minimize valve cover distortion and possible leakage. The clamps feature Bowtie logos and fit stamped valve covers for Chevrolet Small-Block V-8 and V-6/90-degree engines through 1986. (4 clamps per package.)

O-Q

Hold-Down Clamps

- Chrome, no logo (not shown)..... 141-610
- Metallic gray (shown, O) 141-366
- Black crinkle (shown, P)..... 141-757
- Chevy® Orange (not shown)..... 141-782
- Chrome, red Bowtie (shown, Q)..... 141-903



141-363 **R**



141-753 **S**



141-904 **T**

TIMING CHAIN COVERS

Add a distinctive look to the front of any Chevrolet Small-Block or Big-Block engine with a custom timing cover that's accented with Chevrolet and Bowtie logos. These stamped-steel covers are engineered to GM specifications and come with a GM production oil seal pre-installed. The covers use bolt-on timing pointers.

NOTE: Replacement oil seals: S/B GM 10111769, B/B GM 3860095.

R-U

Chevrolet Small-Block V-8 1969-1991 and V-6/90°

- Chrome (shown, U) 141-215
- Metallic gray (shown, R)..... 141-363
- Black crinkle (shown, S)..... 141-753
- Chevy® Orange (not shown)..... 141-783
- Chrome, black/red logo (shown, T) 141-904

V. Chevrolet Big-Block 1965-1990

- Chrome (shown, V)..... 141-216

Striking die-cast timing covers, supplied with separate GM production oil seal. Bowtie logo directly cast into the upper surface.

W. Die-Cast Aluminum, Chevrolet Small-Block V-8 1965-1990

- Polished (shown, W)..... 141-217
- Chrome (not shown)..... 141-218



141-215 **U**



141-216 **V**

HARMONIC BALANCER COVERS

Enhanced looks and engine timing accuracy are benefits of installing a custom aluminum harmonic balancer cover. More than just a dress-up item, the precision-degreed Small-Block and Big-Block covers are mounted directly through the center hub, which eliminates any timing inaccuracies caused by outer inertia ring slippage. The balancer covers are marked with a Bowtie logo, Top Dead Center and proper timing degrees. They are available in black and chrome finishes. U.S. Patent 5,675,078

Chevrolet Small-Block, 6-3/4"

- Black (not shown) 141-727
- Chrome (not shown)..... 141-725

Chevrolet Small-Block, 8"

- Black (not shown) 141-728
- Chrome (not shown)..... 141-726

X. Chevrolet Big-Block

- Black (shown, X) 141-730
- Chrome (not shown)..... 141-729



141-217 **W**



141-730 **X**

A Little Bling for your Ring!



Billet Aluminum Piston Rod Keychain w/Bowtie logo 141-970

CHROME ALTERNATORS

These chrome (with red Bowtie logo) alternators are totally new with no rebuilt components, so they perform as well as they look. The quality is assured with generous over-spec amperage and an individual Quality Assurance graph that documents operating performance. The alternators come with a machined pulley.

A. 100% New Chrome Alternators

- 1973-1986 internal regulator (not shown)..... 141-656
- 100 amp, 1-wire (shown, A)..... 141-657
- 60 amp, 1-wire (not shown)..... 141-658
- 80 amp, 1-wire (not shown)..... 141-659
- 120 amp, 1-wire (not shown)..... 141-660

ALTERNATOR BRACKETS

Alternator Brackets

- Top bracket bolts to manifold (not shown) 141-402
- Top bracket bolts to neck (not Corvette) (not shown) 141-403

HEI DISTRIBUTORS

These high quality, 100% new, and dependable HEI distributors set the standard in ignition, loaded with premium components like the original GM-meltonized distributor gear and sintered steel weights to optimize GM engine performance. Includes an adjustable vacuum advance for fine-tuning the rate and amount of advance that will result in increased power and eliminate harmful detonation.

B. Chevrolet Small- and Big-Block, 1955-1982

- Yellow cap, with coil (not shown) 141-681
- Black cap, with coil (not shown) 141-682
- Red cap, with coil (shown, B) 141-683

BOWTIE HIGH PERFORMANCE ELECTRIC FANS

Auxiliary electric fans can improve engine performance and increase gas mileage, as well as prevent overheating in congested traffic. The fans are available in 10", 12", 14", heavy-duty 15" with thermostat, and 16" sizes to fit most popular cars and trucks. Their ultra-thin design is great for cramped locations. The 15" fan has an adjustable 180-240° F thermostat, and pulls 2,800 cfm, bolting to the radiator supports with supplied sturdy brackets. Installation is easy with basic hand tools. The fans feature a red Bowtie logo.

C-D

Bowtie High Performance Electric Fans

- 10" fan (not shown)..... 141-641
- 12" fan (not shown)..... 141-642
- 14" fan (shown, C) 141-644
- 15" fan with adjustable thermostat (shown, D) 141-647
- 16" fan (not shown)..... 141-646

ELECTRIC WATER PUMPS

Electric water pumps help race- and high-performance street engines save weight and eliminate high-rpm impeller drag. The lightweight, but durable, die-cast aluminum pumps are epoxy-powder-coated in four colors (plus chrome and polished finishes) for corrosion resistance. The flow rate is more than 35 gallons per minute. The units are decorated with a red Bowtie logo. A stepped fitting (1" pipe to 1.750" hose) and weather-tight connector are included.

E-G

Electric Water Pumps

	Big-Block	Small-Block
Polished	141-670 (shown, E)	141-654
Chrome	141-671	141-650
Red	141-672	141-652
Blue	141-673 (shown, F)	141-653
Black	141-674	141-651 (shown, G)
Orange	141-675	141-655

HEAVY DUTY HIGH-TORQUE MINI STARTER

High-torque, gear-reduction design. 100% New, not rebuilt. Offset design results in more clearance between the oil pan and the starter, and can be rotated for additional chassis clearance. 15-to-1 compression for maximum cranking!

H. High-Torque Mini Starter

- Heavy-duty, 2.0 KW starter (shown, H) 141-684



A 141-657



B 141-683



C 141-644



D 141-647



E 141-670



F 141-673



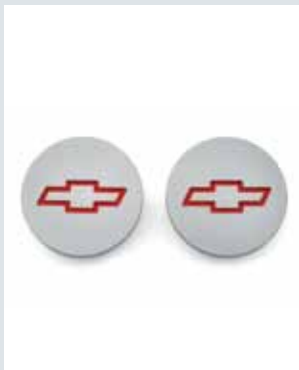
G 141-651



H 141-684



141-232 **I**



141-233 **J**



141-630 **K**



141-210 **L**



141-638 **M**



141-636 **N**



141-200 **O**



141-550 **P**

BOWTIE LOGO FREEZE PLUG INSERTS

Make your engine block Bowtie all the way with decorative machined billet aluminum Bowtie logo freeze plug inserts. These are NOT freeze plug replacements. They fit all Chevy Small-Block engines except the LS-Series. Two per package.

I-J

Freeze Plug Inserts

- Black, raised logo (shown, I)..... 141-232
- Red, recessed logo (shown, J) 141-233

PUSH-IN OIL FILLER CAP

A raised, embossed Bowtie logo adorns the top of this push-in filler cap that fits valve covers with 1.220" holes.

K. Oil Filler Cap

- Chrome (shown, K)..... 141-630

TWIST-ON OIL FILLER CAP

A large, white-on-blue epoxy-coated GM logo highlights this large, twist-on oil filler cap. It fits Chevrolet-style holes and includes a non-asbestos gasket.

Twist-On Oil Filler Cap

- Chrome with GM logo (not shown)..... 141-631

FUEL PUMP BLOCK-OFF PLATES

These Chevrolet V-8 fuel pump block-off plates feature a stamped Bowtie logo and come with a special non-asbestos gasket

L. Fuel Pump Block-Off Plates

- Small-Block, chrome (shown, L)141-210
- Big-Block, chrome (not shown).....141-211

LINEAR WIRE LOOMS

Messy spark plug wires can detract from an otherwise sharp engine, but those unruly wires can easily be tamed with Bowtie logo linear wire looms. The looms attach to the valve cover bolts and hold the wires in a neat parallel arrangement. A patented nylon wedge allows the wire holders to be opened and closed individually. One pair per package.

M. Linear Wire Looms

- Chrome, Small-Block V-8, 1959-1986 (shown, M) 141-638
- Chrome, Big-Block V-8, 1965-1991 (not shown) 141-639
- Black Crinkle, Small-Block V-8, 1959-1986 (not shown) 141-714

IGNITION WIRE LOOMS

These ignition wire looms feature black nylon separators with Bowtie and Chevrolet logos in red. They're mounted on chrome stems. They fit Small-Blocks from 1959-1986 and Big-Blocks from 1965-1991. Two per package.

N. Ignition Wire Looms

- Wire looms (shown, N)..... 141-636

TIMING CHAIN POINTERS

Chrome, bolt-on timing pointers are available for 6.750" or 7" balancers and 8" balancers on Small-Block Chevrolet engines from 1969-1990 and Big-Blocks from 1965-1991.

O. Chevrolet Small-Block V-8 or V-6/90°, 1969-1990

- 6-3/4" or 7" balancer (shown, O)..... 141-200
- 8" balancer (not shown) 141-202

Chevrolet Big-Block, 1965-1991

- 8" balancer (not shown)..... 141-201

OIL DIPSTICK KITS

Chrome dipstick kits are available for a large variety of Chevrolet Small-Block and Big-Block engines. The kits include the dipstick tube and a hooked handle dipstick that has the Bowtie logo stamped near the fill indicator mark.

P. Chevrolet Oil Dipstick Kits

- Small-Block V-8, through 1977 (shown, P)..... 141-550
- Small-Block V-8, 1978-1981 (not shown)..... 141-551
- Big-Block V-8, 1965-1991 (not shown)..... 141-553



BOWTIE LOGO GAUGES

Now that you've built your dream high-performance Chevrolet engine, let Chevrolet Performance keep tabs on all vital functions with handsome Chevrolet logo gauges. A wide variety of gauges and styles are offered by Autometer products with Chevrolet, Bowtie, and GM Performance Parts logos. These gauges are designed to withstand the rigors of racing or high-performance street use. Mounting hardware is included unless otherwise specified.

NOTE: ATTENTION GM DEALERS: The following pages are General Motors' LICENSED PRODUCTS and must be ordered from the licensee. For detailed instructions, see Bulletin number ACC08-035 or visit the chevroletperformance.com website, click on "Dealer Info," and then click on "Dealer Sites."

BOWTIE LOGO GAUGES

3600-00406 Series

- Red Bowtie logo
- White LED Through-the-dial lighting
- Black dial, white numbers



Speedometer
3688-00406

Tachometer
3699-00406



Fuel Level
3613-00406

Voltmeter
3692-00406

Water Temperature
3655-00406

Oil Pressure
3653-00406

3613-00406

2-1/16" Fuel Level, 0-90 Ohms GM, Short Sweep Electrical

3627-00406

2-1/16" Oil Pressure, 0-100 PSI, Short Sweep Electrical

3637-00406

2-1/16" Water Temperature, 100-250° F, Short Sweep Electrical

3644-00406

2-1/16" Pyrometer Kit, 0-1,600° F, Full Sweep Electrical

3645-00406

2-1/16" Pyrometer Kit, 0-2,000° F, Full Sweep Electrical

3649-00406

2-1/16" Transmission Temperature, 100-250° F, Short Sweep Electrical

3653-00406

2-1/16" Oil Pressure, 0-100 PSI, Full Sweep Electrical

3655-00406

2-1/16" Water Temperature, 100-260° F, Full Sweep Electrical

3657-00406

2-1/16" Transmission Temperature, 100-260° F, Full Sweep Electrical

3659-00406

2-1/16" Boost, Vacuum 30 In Hg/30 psi, Full Sweep Electric

3674-00406

2-1/16" Nitrous, 0-1,600 psi, Full Sweep Electrical

3675-00406

2-1/16" Air/Fuel Ratio, Full Sweep Electrical

3688-00406

3-3/8" Electrical Speedometer, 160 mph Programmable

3690-00406

3-3/8" Tachometer, 10,000 rpm with Shift Light

- 4-, 6-, and 8-cylinder compatible

3692-00406

2-1/16" Voltmeter, 8-18 Volt, Short Sweep Electrical

3697-00406

3-3/8" Tachometer, 10,000 rpm

- 4-, 6-, and 8-cylinder compatible
- In-dash mount

3699-00406

5" Tachometer, 10,000 rpm with Shift Light

- 4-, 6-, and 8-cylinder compatible
- In-dash or pedestal mount

3603-00406

2-1/16" Boost, Vacuum 30 in Hg/30 psi, Mechanical

3604-00406

2-1/16" Boost, 0-35 psi, Mechanical

3605-00406

2-1/16" Boost, 0-60 psi, Mechanical

3607-00406

2-1/16" Boost, Vacuum 30 in Hg/20 psi, Mechanical

3621-00406

2-1/16" Oil Pressure, 0-100 psi, Mechanical

3632-00406

2-1/16" Water Temperature, 120-240° F, Mechanical

3663-00406

2-1/16" Fuel Pressure, 0-100 psi, Full Sweep Electrical



Tachometer - 880445



Water Temperature - 88046



Voltmeter - 880444



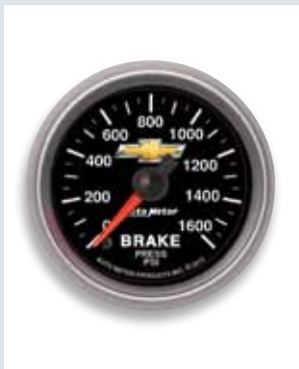
Fuel Pressure - 880449



Trans Temperature - 880448



Oil Pressure - 880447



Brake Pressure - 880450

GOLD BOWTIE LOGO GAUGES

- Gold Bowtie logo
- White LED Through-the-dial lighting
- Black dial, white numbers
- Same as COPO Chevy Camaro

880445

5" 10K RPM FSE Shift Light Tachometer

880446

2-1/16 100-260 F FSE Water Temperature

880444

2-1/16 8-18V SSE Voltmeter

880449

2-1/16 0-100 PSI FSE Fuel Pressure

880448

2-1/16 100-260 F FSE Trans Temperature

880447

2-1/16 0-100 PSI FSE Oil Pressure

880450

2-1/16 1600 PSI FSE Brake Pressure

VINTAGE BOWTIE LOGO GAUGES

A. 1300-00408

5-Piece Kit Box with Mechanical Speedometer

- Vintage logo
- White dial, black logo
- Perimeter lighting
- All 2" gauges feature chrome-embossed Bowtie bezel
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature, fuel level gauges and all required sensors, sending units and mounting hardware

B. 1302-00408

5-Piece Kit Box with Electrical Speedometer

- Vintage logo
- White dial, black logo
- Perimeter lighting
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature, fuel level gauges and all required sensors, sending units and mounting hardware

C. 1303-00408

5" Quad Gauge and Speedometer

- Vintage logo
- White dial, black logo
- Perimeter lighting
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature, fuel level gauges and all required sensors and sending units

D. 1398-00408

3-1/8" Tachometer, 7,000 rpm

- Vintage logo
- White dial, black logo
- Perimeter lighting
- Orange pointer
- 4-, 6-, and 8-cylinder compatible



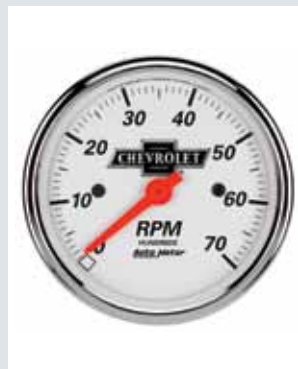
A 5-Piece Kit Box with Mechanical Speedometer



B 5-Piece Kit Box with Electrical Speedometer



C 5" Quad Gauge and Speedometer



D 3-1/8" Tachometer, 7000 rpm



Example of 2-1/16" Chrome-Embossed Bowtie Bezel



Tachometer - 5899-00407



Speedometer - 5889-00407



Water Temperature - 5837-00407



Oil Pressure - 5827-00407



Volts - 5891-00407



Nitrous - 5828-00407

GM PERFORMANCE PARTS LOGO GAUGES

5700/5800-00407 Series

- GM Performance Parts logo
- Perimeter lighting
- White dial, black numbers

5780-00407

- 3-3/4" Tachometer, 8,000 rpm (not shown)**
- 4-, 6-, and 8-cylinder compatible

5795-00407

- 5" Electrical Tachometer, 10,000 rpm with Memory, Standard Ignition (not shown)**

- 4-, 6-, and 8-cylinder compatible
- In-dash or pedestal mount

5827-00407

- 2-5/8" Oil Pressure, 0-100 psi, Short Sweep Electrical**

5837-00407

- 2-5/8" Water Temperature, 100-250° F, Short Sweep Electrical**

5891-00407

- 2-5/8" Voltmeter, 8-18 Volts**

5899-00407

- 5" Tachometer, 10,000 rpm with Shift Light**

- 6- and 8-cylinder compatible
- In-dash or pedestal mount

5898-00407

- 5" Tachometer, 10,000 rpm In-Dash (not shown)**

- 4-, 6-, and 8-cylinder compatible

5814-00407

- 2-5/8" Fuel Level (not shown)**

- 0 Ohms empty, 90 Ohms full

5889-00407

- 5" Electrical, Programmable Speedometer, 160 mph**

5812-00407

- 2-5/8" Fuel Pressure, 0-100 psi, Mechanical (not shown)**

5813-00407

- 2-5/8" Fuel Pressure, 0-15 psi with Isolator, Mechanical (not shown)**

5821-00407

- 2-5/8" Oil Pressure, 0-100 psi, Mechanical (not shown)**

5828-00407

- 2-5/8" Nitrous, 0-2,000 psi, Mechanical**

5832-00407

- 2-5/8" Water Temperature, 120-240° F, Mechanical (not shown)**

BOWTIE LOGO GAUGES

5700/5800-00406 Series

- Red Bowtie logo
- Perimeter lighting
- White dial, black numbers

5780-00406

3-3/4" Tachometer, 8,000 rpm

- 4-, 6-, and 8-cylinder compatible
- In-dash or pedestal mount

5795-00406

5" Tachometer, 10,000 rpm with Memory, Standard Ignition (not shown)

- 4-, 6-, and 8-cylinder compatible
- In-dash or pedestal mount

5814-00406

2-5/8" Fuel Level, Short Sweep Electrical

- 0 Ohms empty, 90 Ohms full

5827-00406

2-5/8" Oil Pressure, 0-100 psi, Short Sweep Electrical

5837-00406

2-5/8" Water Temperature, 100-250° F, Short Sweep Electrical

5889-00406

5" Electronic Programmable Speedometer, 160 mph

5812-00406

2-5/8" Fuel Pressure, 0-100 psi, Mechanical (not shown)

5813-00406

2-5/8" Fuel Pressure, 0-15 psi with Isolator, Mechanical (not shown)

5821-00406

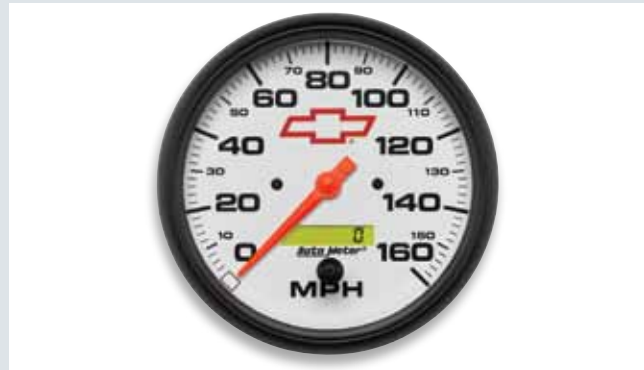
2-5/8" Oil Pressure, 0-100 psi, Mechanical (not shown)

5828-00406

2-5/8" Nitrous, 0-2000 psi, Mechanical

5832-00406

2-5/8" Water Temperature, 120-240° F, Mechanical



Speedometer - 5889-00406



Water Temperature - 5832-00406



Tachometer - 5780-00406



Fuel Level - 5814-00406



Water Temperature - 5837-00406



Oil Pressure - 5827-00406



Nitrous - 5828-00406

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EC Products Design	805-466-4703	www.corvettepacifica.com	Mike's Auto Parts & Accessories	419-589-8855	
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Ivan Leonard Chevrolet, Inc.	John Moore	1620 Montgomery Hwy	Hoover	AL	35216	205.979.3046	250.979.3048	ivanleonardchevy.com	jmoore@evanleonard.com
Landers McLarty Chevrolet	Jack Straley	4930 University Dr	Huntsville	AL	35816	256.217.4387	256.430.4271	landersmclartygm.com	jstraley@landersmclarty.corp

Arkansas

Smith Chevrolet-Cadillac Co.	Brad Scoggins	1215 Hwy 71 S	Ft. Smith	AR	72901	800.847.0084	479.646.1479	smithchevyland.com	bscoggins@smithautogroup.com
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Arizona

Chapman Chevrolet, L.L.C.	Chuck Owen	1717 E Baseline	Tempe	AZ	85283	480.838.0810	480.730.6745	chapmanchevy.com	chuckowen@chapmanchoice.com
Brown & Brown Chevrolet, Inc.	David Priest	145 E Main St	Mesa	AZ	85201	480.827.3370	480.827.2171	browncbrownchevrolet.com	priestd@autonation.com
Courtesy Chevrolet	Phil Graziano	1233 E Camelback Rd	Phoenix	AZ	85014	602.604.3003	602.604.3099	courtesychev.com	pgraziano@courtesychev.com
Thorobred Chevrolet, Inc.	Jerry Anderson	2121 N Arizona Ave	Chandler	AZ	85225	480.899.1151	480.899.3331	thorobredchevrolet.com	janderson@thorobredchevrolet.com
Midway Chevrolet Company	Casey Dahmen	2323 W Bell Rd	Phoenix	AZ	85023	602.760.3357	602.387.7526	parts4chevys.com	cdahmen@vtaig.com
Van Chevrolet	Sam Phillips	8585 E Frank Lloyd Wright Blvd	Scottsdale	AZ	85260	800.477.9233	480.905.1659	gmpartscenter.net	sphillips@vtaig.com
Watson, Inc.	Bob Valencia	625 W Auto Mall Dr	Tuscon	AZ	85705	520.292.1500	520.292.3252	watsonchevrolet.com	bobv@watsonchevrolet.com
Sands Motor Company	Robert Wellman	5418 NW Grand	Glendale	AZ	85301	623.931.9349	623.842.5205	sandschevrolet.com	wellman@sandschevrolet.com

California

Bonander-Buick-GMC	Pete McCarthy	231 S Center St	Turlock	CA	95380	209.632.8871	209.633.4749	bonanderauto.com	petem@bonander.com
City Chevrolet	Dan Perry	2111 Morena Blvd	San Diego	CA	92110	619.276.6900	619.276.2414	city-chevrolet.com	dperry@city-chevrolet.com
Connell Chevrolet	Dave Hardy	2828 Harbor Blvd	Costa Mesa	CA	92626	714.546.9400	714.979.3278	connellchevrolet.com	wearegm@aol.com
Courtesy Chevrolet Center	Jessica Miller	750 Camino Del Rio North	San Diego	CA	92108	619.297.3961	619.297.4023	courtesyandiego.com	jmiller@courtesyandiego.com
Crest Chevrolet	Willy Diaz	909 W 21st Street	San Bernardino	CA	92405	909.883.8833	909.882.4661	crestchevrolet.net	wdiaz@crestfleet.com
Diamond Hill Auto Group, Inc.	James Eshleman	4545 W Ramsey	Banning	CA	92220	951.849.7861	951.849.0970	diamondhillautogroup.com	jeshleman@diamondhillautogroup.com
Dublin Chevrolet Cadillac	Jack Sandri	4200 John Monego Court	Dublin	CA	94568	925.828.6500	925.829.2941	dublinchevrolet.com	jacks@cacargroup.com
F. H. Dailey Motor Co.	Peter Chin	800 Davis St	San Leandro	CA	94577	510.351.5800	510.614.9220	fdailey.com	fddaileymotors@gmail.com
Fremont Chevrolet	Ray Lloyd	5850 Cushing Pkwy	Fremont	CA	94538	510.445.8700	510.445.8700	chevroletoffremont.com	rayl@cacargroup.com
Guaranty Chevrolet Motors, Inc	Carl Lutes	711 E 17th Street	Santa Ana	CA	92701	714.993.1711	714.543.3387	occhevy.com	clutes@guarantychevrolet.com
Mark Christopher Auto Center	Doug Reeves	2131 Convention Center Way	Ontario	CA	91764	909.390.2900	909.390.4677	markchristopher.com	dreeves@markchristopher.com
Martin Automotive Group	Gary Carter	12101 W Olympic Blvd	Los Angeles	CA	90064	310.820.3611	310.207.8429	martinautogroup.com	garyc@martincad.com
Motor City Auto Center	Todd Sumrall	3101 Pacheco Rd	Bakersfield	CA	93313	855.411.3680	661-836-2342	motorcitywest.com	gmparts@motorcitywest.com
Paradise Chevrolet Cadillac	Ruben Aranda	27360 Ynez Road	Temecula	CA	92591	951.699.2699	951.676.4789	paradiseautos.com	rubenaranda@msn.com
Rally Auto Group	Brenden Herem	39012 Carriage Way	Palmdale	CA	93551	800.585.0551	661.266.1881	4rally.com	gmparts@4rally.com
Rydell Automotive Group	Dan Colwell	18600 Devonshire	Northridge	CA	91324	866.697.5167	818.832.1690	chevynorthridge.com	dcolwell@rydells.com
Taylor Motors, Inc.	Cliff Mayne	2525 Churn Creek Road	Redding	CA	96002	530.222.1200	530.722.1089	taylormotorsredding.com	cliffmayne@sbcglobal.net
Victory Chevrolet Cadillac	Adrian Smith	1360 Auto Center Dr	Petaluma	CA	94952	707.765.3068	707.762.7606	victorychevy.com	partsvictory@hotmail.com

Colorado

Al Serra Chevrolet	Kerry White	230 N. Academy	Colorado Springs	CO	80909	718.380.6000	719.314.2301	alserracolorado.com	kwhite@alserracolorado.com
John Elway Chevrolet	Ken Casey Jr.	5200 S Broadway	Englewood	CO	80113	800.345.5744	313.789.6737	elwaydealers.com	kcasey@elwaydealers.net

Delaware

Nucar Chevrolet	Bill Grasso	174 N Dupont Hwy	New Castle	DE	19720	302.322.6606	302.322.7135	nucar.com	bgrasso@nucar.com
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Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
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Florida

Autoway Parts Center	Jim Kubisiak	15005 Us Hwy 19 North	Clearwater	FL	33764	800.888.2292	727.539.0756	clearwaterchevrolet.com	kubisiakj@autonation.com
Rivard Buick-GMC, Inc.	Larry Folino	9740 Adamo Dr	Tampa	FL	33619	877.909.6565	813.620.6589	jrgmparts.com	parts@jrgmparts.com
Jon Hall Chevrolet, Inc.	Scott Bowser	551 N Nova Road	Daytona Beach	FL	32114	386.236.4509	386.236.4754	jonhallchevrolet.com	sbowser@jonhall.com
Maroone Chevrolet - Miami	Juan Herta	4181 S.W. 8 Street	Miami	FL	33134	305.446.7000	305.448.2670	maroonechevroletofmiami.com	huertaj@autonation.com
Nimnicht Chevrolet Company	Dwight Bjork	1550 Cassat Ave	Jacksonville	FL	32210	904.388.0751	904.389.7779	nimnichtchevy.com	dbjork@nimnicht.com
Phil Smith Chevrolet	Humberto Napoles	1640 North State Rd. 7	Fort Lauderdale	FL	33313	954.733.6000	954.497.5272	philsmithchevrolet.com	humberton@psmithchevrolet.com
Stingray Chevrolet	Bill Annable	2002 N. Frontage Rd	Plant City	FL	33563	813.359.5000	866.626.5123	stingraychevrolet.com	bannable@stingraychevrolet.com
Victory Layne Chevrolet	Dave Hack	3980 Fowler	Fort Myers	FL	33901	800.226.7806	239.936.9218	victorylaynechevrolet.com	davehack@victorylaynechevrolet.com

Georgia

Day's Chevrolet, Inc.	Jeff Tate	3693 North Cobb Pkwy	Acworth	GA	30101	770.975.1802	770.974.2683	dayschevrolet.com	jtate@dayschevrolet.com
Gordon Chevrolet	Randy Armstrong	2031 Gordon	Augusta	GA	30909	800.735.2481	706.481.5019	gordonaugusta.com	parts@gordonaugusta.com
John Thornton Chevrolet	Gary Ellis	1971 Thornton Rd	Lithia Springs	GA	30122	770.941.8550	770.732.6433	johnthornton.com	Gellis@johnthornton.com
Legacy Chevrolet, Cadillac, Saab	Johnny Williams	3615 N. Manchester Express Way	Columbus	GA	31909	706.405.4030	706.327.3745	legacychevy.com	jwilliams@legacychevy.com
Maypole Chevrolet, Inc.	Dave Phillips	2625 Hwy 17	Toccoa	GA	30577	706.886.7481	706.886.9419	maypolechevy.com	audioswamp@aol.com
Nash Chevrolet Company	George Pittman	630 Scenic Highway	Lawrenceville	GA	30045	770.963.9266	770.822.6671	nashchevy.com	gpittman@nashchevy.com
Nesmith Chev Bu GMC, Inc.	David Anderson, Sr.	7334 Hwy 280 West	Claxton	GA	30417	877.497.3624	912.739.7000	nesmithnow.com	david@nesmithnow.com

Idaho

Edmark Chevrolet Cadillac	Matt Brown	15700 Idaho Center Blvd	Nampa	ID	83687	877.761.8936	208.442.2713	edmarkchevrolet.com	mattbrown@edmarksuperstore.com
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Illinois

Jim Mccomb Chevrolet, Inc.	Bill Brouch	3622 N University	Peoria	IL	61604	309.686.2500	309.686.0121	uftringauto.com	billbrouch@jimmccomb.com
Rockenbach Chevrolet Sales, Inc.	Tom Rominski	1000 E Belvidere Rd	Grayslake	IL	60030	800.441.5150	847.223.7085	rockenbachchevy.com	tom@crateenginedepot.com
The Chevy Exchange	Lee Kaufman	1 Sherwood Terrace	Lake Bluff	IL	60044	847.615.1111	847.810.1991	chevyexchange.com	lkaufman@chevy.com
Weir Chev-Buick-GMC	Bryan Washausen	1107 S Main	Red Bud	IL	62278	618.282.3111	618.282.3993	weirparts.com	bryan.washausen@weirparts.com
Uftring Weston Chev Cadillac	Bill Brouch	3622 N University	Peoria	IL	61604	309.686.2500	309.686.0121	uftringweston.com	billbrouch@uftringweston.com

Indiana

Hubler Chevrolet, Inc.	Rick Bell	8220 S US 31	Indianapolis	IN	46227	317.882.4018	317.882.4719	indianapolischevy.com	rbell@drivehubler.com
Schepel Auto Group	Ron Carlson	3209 West Lincoln Hwy	Merrillville	IN	46410	219.769.7757	219.755.0339	schepel.com	parts@schepel.com
Shepherd's Chevrolet-Buick	Wes Nellans	1520 East 9th Street	Rochester	IN	46975	574.224.7278	574.223.2718	shepherdsrochester.com	shepherdsgmcenter@gmail.com

Iowa

Bob Brown Chevrolet, Inc.	Ron Dorrian	3600 111th St.	Urbandale	IA	50322	515.278.7888	515.278.7895	bobbrownauto.com	ron.dorrian@bobbrownauto.com
Karl Chevrolet, Inc.	Adam Moore	1101 SE Oralabor Rd	Ankeny	IA	50021	866.551.9188	515.299.4380	karlchevrolet.com	adam@karlchevrolet.com
Shottenkirk, Inc.	Brad Richardson	5031 Ave O	Ft. Madison	IA	52627	877.223.9757	319.372.4223	shottenkirkfortmadison.com	gmparts@shottenkirk.com

Kansas

Hendrick Chevrolet	Jeff Kopp	8300 Shawnee Mission Pkwy	Merriam	KS	66202	913.384.3115	913.789.1005	superchevyperformance.com	jeff.kopp@hendrickauto.com
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Kentucky

Bachman Auto Group, Inc.	Tom Finley	9650 Bluegrass Pkwy	Louisville	KY	40299	502.499.6161	502.719.3849	bachmanchevrolet.com	tfinley@bachmanautogroup.com
Bob Hook Chevrolet, Inc.	Jack Tillman	4144 Bardstown Rd	Louisville	KY	40218	502.499.8060	502.499.0917	bobhook.com	jtillman@bobhook.net



AUTHORIZED CENTERS

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Louisiana									
All Star Chevrolet, Inc.	Pat Jackson Sr.	11377 Airline Hwy	Baton Rouge	LA	70816	225.341.3073	225.298.8041	allstarchevroletbr.com	pjackson@allstarautomotive.com
Banner Chevrolet	Gerry Braud	5950 Chef Menteur Hwy	New Orleans	LA	70126	504.242.4624	504.253.8596	bannerchevy.com	gbraud@bannerauto.com
Chevyland	Jeral Lawler	7500 Youree Dr	Shreveport	LA	71105	318.425.3471	318.222.4990	chevyland.com	jlawler@chevyland.com
Maine									
Quirk Chevrolet Cadillac	Dave Provencher	293 Hogan Rd	Bangor	ME	04401	800.664.6008	207.945.0164	quirkchevyofbangor.com	dprovencher@quirkauto.com
Maryland									
Courtesy of Salisbury	Bill Cropper	2531 N Salisbury Blvd	Salisbury	MD	21801	410.749.7100	410.749.4257	salisburychevycadillac.com	parts@courtesychevrolet.biz
Criswell Chevrolet, Inc.	Alex Verna	503 Quince Orchard Rd	Gaithersburg	MD	20878	301.948.0880	301.921.9806	criswellchevrolet.com	averna@criswellauto.com
Jerry's Chevrolet, Inc.	Vince Poling	1940 E Joppa Rd	Baltimore	MD	21234	410.661.9100	410.513.0196	jerryschevrolet.com	vpoling@jerryschevrolet.com
Ourisman's Rockmont Chevrolet	Dave Katz	#20 Southlawn Court	Rockville	MD	20850	301.424.5900	601.424.0027	ourismanrockmont.com	dave.katz@ourismanschevrolet.com
Massachusetts									
Best Chevrolet	Larry Higgins	128 Derby St.	Hingham	MA	02043	800.649.6781	781.749.7804	bestchevyusa.com	higg7702@comcast.net
Clay Chevrolet-Hyundai	Chris Marchetti	391 Providence Hwy	Norwood	MA	02062	781.762.8300	781.255.8912	claychevrolet.com	cmarchetti@claycars.com
Michigan									
Berger Chevrolet, Inc.	Gerry Rozeboom	2525 28th St SE	Grand Rapids	MI	49512	616.575.9473	616.949.2870	bergerchevy.com	grozeboom@bergerchevy.com
Ed Rinke Chevrolet Co.	Jim Hensley	26125 Van Dyke	Centerline	MI	48015	586.754.7000	586.754.5030	edrinkechevrolet.com	jhensley@edrinke.com
Lafontaine Automotive Group	Kelley Longwish	4000 W. Highland Rd	Highland	MI	48357	800.883.4627	248.714.1196	lafontaineperformancecenter.com	klongwish@lafontainemotors.com
Shaheen Chevrolet, Inc.	Eirk Lindell	3901 S Milk Blvd	Lansing	MI	48910	517.394.0330	517.394.6305	shaheenlansing.com	elindell@shaheenchevrolet.com
Young Chevrolet, Cadillac, Inc.	Mike Szura	1500 E Main Street	Owosso	MI	48867	989.725.2184	989.729.3016	youngautosales.com	mikeszura@youngautosales.com
Mississippi									
Turan-Foley Motors, Inc.	Joe May	11123 Hwy 49 N	Gulfport	MS	39503	228.539.7500	228.539.5689	turanfoley.com	joemay@turanfoley.com
Minnesota									
Suburban Chevrolet	Tom Kuether	12475 Plaza Drive	Eden Prairie	MN	55344	952.947.5432	952.947.5439	suburbanchev.com	tkuether@suburbanchev.com
Missouri									
Bob McCosh Chev-Buick-GMC Cad	Rick Neuner	1 Business Loop 70	Columbia	MO	65203	573.443.1821	573.441.5632	bobmccosh.com	rneuner@perrychevrolet.com
Lou Fusz Buick-GMC	Butch Geringer	10950 Page Avenue	St. Louis	MO	63132	800.325.1492	314.595.2790	gmc.fusz.com	pontiacparts@fusz.com
Reliable Chevrolet, Inc.	Dean Jones	3655 S Campbell	Springfield	MO	65807	417.887.5800	417.887.4012	reliablechevy.com	djones@vtaig.com
Van Chevrolet Cadillac	Dave Hosley	100 N.W. Vivion Rd.	Kansas City	MO	64118	816.454.1442	816.454.6248	vanchevroletkc.com	dhosley@vtaig.com
Nebraska									
Friesen Chevrolet, Inc.	Jon Pederson	806 Commercial Ave.	Sutton	NE	68979	402.773.5538	402.773.5639	friesengmparts.com	parts@friesenchevy.com
H & H Chevrolet Company	Don Korner	4645 South 84th St	Omaha	NE	68127	402.596.2710	402.596.2719	hhchevy.com	dkorner@hhchevy.com
Nevada									
Champion Chevrolet Geo	Dean Younie	800 Kietzke Lane	Reno	NV	89502	775.786.3111	775.786.1513	championchev.com	info@championchevroletreno.com
Fairway Chevrolet	Brad Oaks	3100 E Sahara Ave	Las Vegas	NV	89104	702.641.1446	702.641.5866	fairwaychevy.com	bradoaks@fairwaychevy.com
Henderson Chevrolet Co.	Pete Zachrison	240 N Gibson Rd	Henderson	NV	89015	702.558.2430	702.558.2444	hendersonchevy.com	petez@hendersonchevy.com
Reno Buick GMC Cadillac	Donna Woody	900 Kietzke Ln	Reno	NV	89502	775.329.0831	775.786.1513	renobuickgmccadillac.com	donnawoody@renogm.com
New Hampshire									
Banks Chevrolet-Cadillac, Inc.	Dave Corcoran	137 Manchester St	Concord	NH	3301	603.224.4055	603.225.6489	banksautos.com	dcorcoran@banksautos.com
Miller Chevrolet Cadillac	Kevin French	13 Labombard Rd	Lebanon	NH	3766	877.777.0001	877.448.0637	millerautogroup.com	kfrench@millerautogroup.com
Quirk Chevrolet Buick	Gary Philbin	1250 S Willow St	Manchester	NH	3103	800.842.9600	800.641.5554	quirkchevynh.com	gphilbin@quirkcars.com



Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
New Jersey									
Bob Maguire Chevrolet, Inc.	Ray Fackenthall	237 Route 130	Bordentown	NJ	8505	609.298.3600	609.298.3033	bobmaguirechevrolet.com	ray.fackenthall@mcquireauto.com
New Mexico									
Permian Chevrolet, GMC, Cadillac	Robin Ashcroft	800 N Turner Street	Hobbs	NM	88240	575.393.1711	505.397.0838	permiangmccadillac.com	robin@permiangmc.com
New York									
Burdick Chevrolet	Al Koster	604 Old Liverpool Rd	Liverpool	NY	13088	315.233.0333	315.233.0347	breseechevrolet.com	alk@burdickcars.com
Hoselton Chevrolet, Inc.	Mike Frazer	909 Fairport Rd	East Rochester	NY	14445	585.419.4352	585.586.0273	hoseltonchevrolet.com	mikef@hoselton.com
Nesenger 112 Chevrolet	Thomas Doner	2096 Rte 112 Medford Ave	Medford	NY	11763	877.453.7918	866.726.1313	chevrolet112.com	tdparts63@yahoo.com
Nye Automotive Group	Jon Curro	1479 Genesee Street	Oneida	NY	13421	315.363.0600	315.363.2873	nyeauto.com	jcuro@nyeauto.com
Ruge's GM	Dave Zits	7916 Old Route 22	Copake Falls	NY	12517	845.876.1090	845.758.1766	rugescgm.com	david@rugesparts.com
North Carolina									
Bobby Murray Chevrolet, Inc.	Scott Tilley	1820 Capital Blvd	Raleigh	NC	27604	800.662.7502	919.832.1603	morethanjustpower.com	scott@bobbymurray.com
Burnsville Chev-Buick, Inc.	Andy Warren	627 W Main St	Burnsville	NC	28714	828.682.6141	828.678.3481	burnsvillechevy.com	m.warren@mail.com
City Chevrolet	Chris Knight	5101 East Independence Blvd	Charlotte	NC	28212	800.763.2489	704.586.7422	citychevrolet.com	cknight@hendauto.com
Everett Chevrolet, Inc.	Kim Dowell	161 Hwy 70 SE	Hickory	NC	28602	828.327.9171	828.328.3282	everettchevy.com	kdowell@everettchevy.com
Flow Chevrolet	Chris Porter	1400 S Stratford Road	Winston-Salem	NC	27103	336.760.7046	336.760.5126	gmpartsdirect.com	cporter@flowauto.com
Modern Chevrolet Company	Chris Hege	5415 Kelley-Moore Dr	Winston-Salem	NC	27105	800.334.0165	336.727.4809	modernchevy.com	chege@modernautomotive.com
North Dakota									
Rydell Chevrolet Cadillac	Dan Stinar	2700 S Washington	Grand Forks	ND	58201	800.354.7278	701.772.3377	rydellchev.com	parts@rydellchev.com
Ohio									
Coughlin Chevrolet Buick	Greg Jackson	15801 US Route 36	Marysville	OH	43040	800.311.6348	937.644.3000	coughlinmarysvillegm.com	gregjackson@coughlincars.com
McDaniel Chevrolet, Inc	Rich Wallace	1065 Mt Vernon Ave	Marion	OH	43302	800.333.2415	740.389.3915	mcDanielauto.com	richwallace@mcDanielauto.com
Reichard Buick GMC	Jeff Ringer	161 Salem Avenue	Dayton	OH	45406	937.224.8541	937.220.6746	reichardbuick.com	parts@reichardbuick.com
PACE Performance	Chuck Fitch	50 Karago Ave.	Boardman	OH	44512	800.748.3791	330.758.6973	paceperformance.com	parts@paceperformance.com
Sweeney Chevrolet Buick GMC	Matt Fullerton	7997 Market Street	Youngstown	OH	44512	877.360.5209	330.726.0709	sweeneycars.com	mattf@sweeneycars.com
Oklahoma									
Danny Beck Chevrolet, Inc.	Tim Kieffer	8300 New Sapulpa Rd	Tulsa	OK	74131	918.227.1070	918.227.7746	dannybeckchevy.com	timk@dannybeckchevy.com
Hudiburg Chevrolet Inc	John Cline	6000 Tinker Diagonal	Midwest City	OK	73110	877.640.8051	405.739.0636	hudiburg.com	jccline@hudiburg.com
Smicklas Chevrolet	Daryl Chowning	8900 Northwest Expressway	Oklahoma City	OK	73162	405.470.8860	405.525.4484	smicklaschevrolet.com	dchowning@group1auto.com
Oregon									
Airport Chevrolet	Larry Lavada	3001 Biddle Road	Medford	OR	97504	541.770.1300	541.772.8079	airportchevy.com	parts@airportchevy.com
Capitol Chevrolet Cadillac, Inc	Tom Dalton	2711 Misson St SE	Salem	OR	97309	503.585.4141	503.316.4223	capitolchevrolet.com	tdalton@capitolauto.com
Gilbert Auto Group	Cody Campbell	2250 SE Court Street	Pendleton	OR	97801	541.612.4699	541.278.0794	gilbertautooforegon.com	ccampbell@gilbertauto.com
Kendall Chevrolet	Art Wigton	Pendleton	Eugene	OR	97401	541.342.1121	541.335.6895	kendallchevroletofeugene.com	artwigton@kendallauto.com
Ron Tonkin Chevrolet Co.	Allen English	122 NE 122nd Ave	Portland	OR	97230	503.255.2355	503.257.2285	tonkinchevrolet.com	aenglish@tonkin.com
Wentworth Chevrolet Co.	Darrin Rea	107 SE Grand Ave	Portland	OR	97214	503.232.2000	503.234.3374	wentworthchevrolet.com	darrinrea@wentworthchevrolet.com

AUTHORIZED CENTERS

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Pennsylvania									
Apple Chevrolet Cadillac	Jason Alwood	1200 Loucks Rd, Po Box 7767	York	PA	17404	888.263.7903	717.843.5730	applechevroletcadillac.com	applechevyparts@appleauto1.com
Bowser Automotive, Inc.	Dan Salaj	Rte 51 & Lewis Run Rd	Pleasant Hills	PA	15236	412.469.2100	412.469.3596	powerofbowser.com	parts@powerofbowser.com
Fred Beans Cad Buick GMC	Dave Wittlinger	841 N Easton Rd	Doylestown	PA	18902	267.327.4178	336.940.3768	fredbeanschevrolet.com	wedopartsright@fredbeans.com
Bill Macintyre Chevrolet Buick	Boyd Musser	10 East Walnut Street	Lock Haven	PA	68127	866.608.5724	570.748.8159	billmacintyre.com	macintyreparts1@yahoo.com
Rohrich Cadillac, Inc.	Paul Lijja	2116 West Liberty Ave	Pittsburgh	PA	15226	412.390.2940	412.390.2950	rohrichcadillac.com	plijja@rohrich.com
Sutliff Chevrolet Co	Steve Simmers	1251 Paxton Street	Harrisburg	PA	17104	800.932.0284	717.234.8825	sutliffchevrolet.com	ssimmers@sutliffs.net
South Carolina									
Raceway Chevrolet Buick	Fred Bowker	1510 S 5th Street	Hartsville	SC	29550	843.339.2719	843.339.2716	racewaygm.com	fbowker@newsomeparts.com
Love Chevrolet Company	Andy Trantum	1255 Knox Abbott Drive	Cayce	SC	29033	803.407.4800	803.926.1658	love-chevy.com	atranum@lovechevy.com
South Dakota									
Billion Motors, Inc.	Dale Zimmer	600 West 41st St	Sioux Falls	SD	57105	877.858.5749	605.333.3459	billionauto.com	dale.zimmer@billionauto.com
Tennessee									
Chuck Hutton Chevrolet	Gene Langdon	2471 Mt Moriah Rd	Memphis	TN	38115	866.651.9699	901.369.0661	chuckhuttonchevrolet.net	glangdon@chuckhutton.com
Dobbs GMC	Jeff Sappington	2621 Mendenhall Rd S	Memphis	TN	38115	901.795.4500	901.367.3146	dobbsgmcdealer.com	sappingtonjeff@autonation.com
James Corlew Chevrolet	James West	722 College St	Clarksville	TN	37040	931.647.6571	931.648.1127	jamescorlewaautomotive.com	jameswest@jamescorlew.com
West Chevrolet, Inc.	John Parker	3450 Airport Hwy	Alcoa	TN	37701	865.970.9378	865.970.4559	westchevrolet.com	johnparker@westchevrolet.com
Texas									
Bruce Lowrie Chevrolet, Inc.	Kris King	711 SW Loop 820	Ft. Worth	TX	76134	817.568.4819	817.551.0570	brucelowriechevrolet.com	kingz28502@msn.com
Champion Chevrolet	Dee Alfred	13800 Gulf Freeway	Houston	TX	77034	281.929.3220	281.929.3238	champion-chevrolet.com	alfredL@autonation.com
Classic Chevrolet	Ken Williams	13115 SW Freeway	Sugar Land	TX	77478	800.800.PART	281.269.1743	classicchevysugarland.com	kwilliams@classicchevysugarland.com
Classic Chevrolet, Ltd.	Rick Johnston	2501 William D. Tate	Grapevine	TX	76051	866.673.1597	817.410.6146	classicchevrolet.com	rjohnston@classicchevrolet.com
Covert Buick Inc.	KC Kalman	11750 Research Suite D	Austin	TX	78759	512.371.6075	512.583.3498	covertbuickgmc.com	kckalman@covertauto.com
Don Hewlett Chevrolet-Buick	Jeff Gilbert	7601 S. Interstate 35	Georgetown	TX	78626	512.681.3000	512.681.3113	donhewlett.com	jeffg@donhewlett.com
Friendly Chevrolet Co.	Robert Fayette	2754 N Stemmons Freeway	Dallas	TX	75207	214.920.4100	214.920.4138	friendlychevy.com	rfayette@friendlychevy.com
Henna Chevrolet, L.P.	Hal Matthews	8805 North IH-35	Austin	TX	78753	512.719.6273	512.832.2355	henna.com	halmatt@henna.com
Scoggin-Dickey Chevrolet-Buick	Nicky Fowler	5901 Spur 327	Lubbock	TX	79424	800.456.0211	806.798.4086	sdparts.com	naf@sdparts.com
Utah									
Larry H. Miller Chevrolet	Grant Martin	5500 S State Street	Murray	UT	84107	801.264.3330	801.264.3336	larrymillerchevrolet.com	gmartin@lhm.com
Virginia									
Berglund Performance Parts	Danny Price	1824 Williamson Rd	Roanoke	VA	24012	540.344.1461	540.345.7431	berglundperformance.com	dprice@berglundcars.com
Chandler Chevrolet	J.W. Brightwell	1841 Richmond Hwy	Tappahannock	VA	22560	804.443.5100	804.443.1354	chandlerchevrolet.com	jw@chandlerchevrolet.com
Dominion Chev-Buick-GMC	John Faison	12050 West Broad Street	Richmond	VA	23233	804.364.4500	804.364.4598	dominionautogroup.com	jfaison@dominionautogroup.com
Heritage Chevrolet, Inc.	Andy Pratt	12420 Jefferson Davis Hwy	Chester	VA	23831	804.748.6466	804.748.9770	heritagechevrolet.com	apratt@heritagechevrolet.com
Radley Chevrolet	Chris Rogers	3670 Jefferson Davis Hwy	Fredericksburg	VA	22408	540.898.4000	540.891.2074	radleyauto.com	chrisrogers@radleyautogroup.com
Strosnider Chevrolet, Inc.	Mark Hughes	5200 Oaklawn Blvd	Hopewell	VA	23860	804.415.4485	804.458.9839	strosniderchevrolet.com	mhughes.strosnider@yahoo.com
Vermont									
Springfield GMC	Linley Messer	431 River St North Springfield	N Springfield	VT	05150	802.886.2281	802.886.2213	springfieldautomart.com	parts@vermontel.net



Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Washington									
Appleway Parts Center	Mike Kellogg	S. 311 Dishman Mica Rd.	Spokane	WA	99206	509.927.1277	509.927.1089		kelloggm@autonation.com
Camp Automotive, Inc.	Brian O'Shaughnessey	101 Montgomery	Spokane	WA	99207	509.456.7890	509.456.7895	campchevrolet.com	BOShaughnessey@lithia.com
Hall Chevrolet-Buick	Lynn Channel	314 Sixth St	Prosser	WA	98350	800.676.4255	509.786.0239	hallchevbuick.com	parts@hallchevbuick.com
Jet Chevrolet, Inc.	Steve Haase	35700 Enchanted Pkwy S	Federal Way	WA	98003	253.952.7417	253.952.7419	jetchevrolet.com	steveh@jetchevrolet.com
Mccurley Chevrolet-Cadillac	Dean Goody	1325 Auto Plex Way	Pasco	WA	99301	509.547.5555	509.547.8228	billmccurley.com	dean.goody@mccurley.net
Speedway Chevrolet, LLC	Greg White	16957 W Main St	Monroe	WA	98272	360.794.1155	360.863.9356	speedwaychevrolet.com	gwhite@speedwaychevrolet.com

Wisconsin

Broadway Automotive, Inc.	Rick Larscheid	2700 S Ashland Ave	Green Bay	WI	54304	800.236.2819	920.498.6620	broadwayautomotive.com	rlarscheid@broadwayautomotive.com
Bud Weiser Motors, Inc.	Brad Schrock	2676 Milwaukee Rd	Beloit	WI	53511	608.364.6340	608.364.6355	budweisermotors.com	parts@budweisermotors.com
Holz Motors, Inc.	Dale Keup	5961 S 108 Place	Hales Corners	WI	53130	800.236.2407	414.425.1402	holzmotors.com	dkeup@holzmotors.com
Gandrud Chevrolet, Inc.	Chris Slack	919 Auto Plaza Dr	Green Bay	WI	54302	920.468.3658	920.468.3673	gmperformancemotor.com	parts@gandrud.com

Company Name	Address	City	State	PC	Phone	Fax
Australia						
Eagle Auto Parts	92 Gippsland Hwy.	Dandenong	Victoria	3175	.03.87103000	.03.97933082
Eagle Auto Parts	8 Marigold Place	Padstow	New South Wales	2212	.02.97715566	.02.97715599
Eagle Auto Parts	Unit 1, 100 Park Road	Slacks Creek	Queensland	4127	.07.34428000	.07.34428099

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Chevrolet Performance Parts are available at all participating Canadian GM dealers.

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GM SERVICE REPLACEMENT POWERTRAIN & CHEVROLET PERFORMANCE LIMITED WARRANTY

Engines, Engine Components, Transmissions, Transmission Components & Transfer Cases

To retain the safety and dependability built into this product, it is essential that your product receives the scheduled maintenance at the recommended intervals contained in your vehicle Owner's Manual/Maintenance Schedule* or Chevrolet Performance Engine Instruction Sheet. Since emissions-related components vary by model and engine application, you should follow the emissions maintenance recommendations also contained in your vehicle's manuals.

Maintenance services should be performed by an authorized GM dealer or other qualified independent service center.

General Motors Company warrants to the purchaser for the time and/or mileage indicated that it will repair or replace, at its option, using new, remanufactured, or refurbished parts, GM Parts Service Replacement Engine, Engine Component, Transmission/Transaxle, Transmission Component, Transfer Case or Short Block Assembly that fails due to a defect in material or workmanship.

Remanufactured Product - This product meets General Motors' requirements for service parts and was remanufactured for General Motors from previously used components.

Refurbished Product - This product meets General Motors' requirements for service parts and was refurbished for General Motors from a previously used part that is inspected, cleaned, tested, and repackaged.

*If owner's manual/maintenance schedule is lost, visit www.ownerscenter@mygmlink.com



Effective with purchases on or after 4/15/05	Passenger Car & Light-Duty Truck ¹	Medium-Duty Truck, Class A Motor Home, Taxi & Police ⁴	Other ⁵
Engines & Automatic Transmissions ^{6,10}	36 months or 100,000 miles ^{1,2,7,8}	18 months or 100,000 miles ^{1,2}	12 months or 12,000 miles ¹
Transfer Cases	36 months or 100,000 miles ^{1,2}	36 months or 100,000 miles ^{1,2}	36 months or 100,000 miles ¹
Short Block Assemblies ⁹	24 months or 24,000 miles ¹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹
Manual Transmissions	12 months or 12,000 miles ^{1,2}	12 months or 12,000 miles ^{1,2}	12 months or 12,000 miles ¹
Engine & Transmission Components ⁹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹



Effective with purchases on or after 3/1/07	Passenger Car & Light-Duty Truck ^{1,12}
Performance Parts Transmissions, Components & Short Block Assemblies ⁹	12 months or 12,000 miles ^{1,12}
Performance Parts Engines	24 months or 50,000 miles ^{1,2,8,11,12}

¹Whichever occurs first, months or mileage; ²Parts and labor warranty; ³Light-Duty series 10-30; ⁴Medium-Duty series 40-80, unlimited miles; ⁵Parts only warranty for non-cataloged applications; ⁶Includes Allison assemblies sold through GM Dealers; ⁷3 year, 50,000 mile warranty applies to purchases prior to 4/15/05; ⁸Engine upgrades require appropriate associated parts to ensure proper engine and transmission cooling and torque capacity, fuel/air delivery and emission controls (upgrade example: 305 engine replaced with 350 engine); ⁹Parts only warranty when sold over the counter or to a qualified independent repair facility; ¹⁰Excludes ACDelco and Chevrolet Performance; ¹¹12 month, 12,000 mile warranty applies to purchases prior to 3/1/07; ¹²Must be installed in a street legal automotive application.

Warranty begins on the date of installation by an authorized GM dealer or by a qualified independent service center. For over-the-counter sales, warranty begins on date of retail sale.

This Warranty Does Not Cover:

- Damage due to improper installation, negligence, alteration, accident, improper use, or any use related to racing, track or competition. Proper vehicle use is discussed in the vehicle Owner's Manual. In addition, coverage does not apply if the odometer has been disconnected or the mileage reading has been altered.
- Damage caused by lack of proper maintenance as described in the vehicle's original Maintenance Schedule/Owner's Manual, failure to follow Maintenance Schedule intervals, or failure to use or maintain proper type and levels of fluid, fuel, oil and lubricants recommended in the Maintenance Schedule/Owner's Manual. Proof of proper maintenance is the owner's responsibility. Keep all receipts and be prepared to make them available if questions arise about maintenance.

- Damage as a result of overheating, contamination or lack of lubrication.
- Damage caused by a turbocharger, supercharger, nitrous oxide, or similar product, which is not an approved Chevrolet Performance Part or Accessory.
- Racing engines and/or their components.
- Use of components in excess of maximum torque specification.
- Damage as a result of modification/replacement of torque converter that is part of transmission assembly.
- Loss of time, inconvenience, loss of use, or other economic loss.
- Vehicles registered and normally operated outside of the United States.
- This warranty does not apply to any unit installed under the General Motors New Vehicle Limited Warranty.

Documentation Requirements:

The GM dealer or independent service center must be furnished with the purchaser's original repair order or sales slip (or dealer's photo copy), and this warranty certificate properly completed. This warranty is transferable to subsequent owners by providing the above required documents to any purchaser of the vehicle in which the assembly/component was originally installed.

Obtaining Repairs:

GM Dealer Installation—The GM dealer who initially installed the assembly/component or any GM dealer may perform the repairs. You must allow a reasonable period of time for repairs following delivery of the vehicle to the GM dealer's place of business.

Independent Service Center Installation—The independent service center that installed the assembly/component or any GM dealer may perform repairs. Before any repairs can be performed under warranty by an independent repair center, the selling GM dealer (or any GM dealer) must first authorize needed repairs as a sublet service.

Emergency Repairs (GM Dealers Only)—Reimbursement to an owner for repairs performed by other than a GM dealer will be considered when GM dealer service was not available (e.g., weekends, evenings, etc.) or when repairs were made in a foreign country where warranty repairs by a GM dealer were difficult to obtain.

Other Terms:

GM sells other engines and transmissions in various states of completion. This warranty covers only those engines and transmissions that are marketed by GM as Goodwrench, GM Parts or Chevrolet Performance.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

General Motors does not authorize any person to create for it any other obligations or liability in connection with these assemblies.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO ASSEMBLIES OR PARTS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. THE PERFORMANCE OF REPAIRS OR REPLACEMENT IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. GM SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, therefore, the above limitation or exclusions may not apply to you.

Service Checks:

Transmissions: It is important for you or a service technician to check the transmission/transaxle fluid level at regular intervals.

Engines: It is important for you or a service technician to perform these underhood checks at each fuel fill:

- Check engine oil level and add if necessary.
- Check engine coolant level in coolant reservoir and add if necessary.
- Check belts and hoses for visible wear and replace if necessary.

The parts listed in this catalog are intended primarily for use in race or "off-highway" vehicles only. Federal law restricts the removal, modification or knowingly making inoperative of any part or element of design installed in compliance with an applicable Federal Motor Vehicle Safety Standard or any part of federally required emission control systems on a motor vehicle used on public roads. Further, many states have enacted laws with various penalties for tampering with, or otherwise modifying any required emission or noise control system. Parts which have been granted an exemption by the California Air Resources Board (CARB) are noted as such.

Unless specifically noted to the contrary herein, vehicles equipped with Chevrolet Performance Parts may not meet Federal Motor Vehicle Safety Standards and emissions regulations and should not be operated on public roads. Chevrolet Performance customers are responsible for ensuring their use of Chevrolet Performance Parts complies with applicable federal, state and local laws, regulations and ordinances.

Many parts intended for racing or other "off-highway" use are not designed or tested for crashworthiness or to meet the safety needs of the motoring public, and may adversely affect the original intended performance or handling characteristics of the vehicle. These parts are designed and intended to be used with experts supervising their installation and use, to help assure the proper and safe operation of the vehicle.

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Direct any inquiries to: General Motors Co., Consumer Relations Dept., P.O. Box 33136, Detroit, MI 48233-5136

GM SERVICE REPLACEMENT POWERTRAIN & CHEVROLET PERFORMANCE LIMITED WARRANTY & OTHER INFORMATION Engines, Engine Components, Transmissions, Transmission Components & Transfer Cases

To retain the safety and dependability built into this product, it is essential that your product receives the scheduled maintenance at the recommended intervals contained in your vehicle Owner's Manual/Maintenance Schedule.* Since emissions-related components vary by model and engine application, you should follow the emissions maintenance recommendations also contained in your vehicle's manuals.

Maintenance services should be performed by an authorized GM dealer or other qualified independent service centre.

General Motors of Canada Limited ("GM Canada") warrants to the purchaser for the time and/or mileage indicated that it will repair or replace, at its option, using new, remanufactured, or refurbished parts, GM Parts Service Replacement Engine, Engine Component, Transmission/Transaxle, Transmission Component, Transfer Case or Short Block Assembly that fails due to a defect in material or workmanship.

Remanufactured Product - This product meets General Motors' requirements for service parts and was remanufactured for General Motors from previously used components.

Refurbished Product - This product meets General Motors' requirements for service parts and was refurbished for General Motors from a previously used part that is inspected, cleaned, tested, and repackaged.



Effective with purchases on or after 4/15/05	Passenger Car & Light-Duty Truck ³	Medium-Duty Truck, Class A Motor Home, Taxi, Police ⁴ & Tow Truck ⁴	Other ⁵
Engines & Automatic Transmissions ^{6,10}	36 months or 160,000 kilometers ^{1,2,7,8}	18 months or 160,000 kilometers ^{1,2}	12 months or 20,000 kilometers ¹
Transfer Cases	36 months or 160,000 kilometers ^{1,2}	36 months or 160,000 kilometers ^{1,2}	36 months or 160,000 kilometers ¹
Short Block Assemblies ⁹	24 months or 40,000 kilometers ^{1,2}	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ¹
Manual Transmissions	12 months or 20,000 kilometers ^{1,2}	12 months or 20,000 kilometers ^{1,2}	12 months or 20,000 kilometers ¹
Engine & Transmission Components ⁹	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ¹



Effective with purchases on or after 3/1/07	Passenger Car & Light-Duty Truck ^{3,13}
Performance Parts Transmissions, Components & Short Block Assemblies ⁹	12 months or 20,000 kilometers ^{1,11}
Performance Parts Engines	24 months or 80,000 kilometers ^{1,2,8,11,12}

¹ Whichever occurs first, months or mileage; ² Parts and labor warranty; ³ Light-Duty series 10-30; ⁴ Medium-Duty series 40-70; ⁵ Parts only warranty for non-cataloged applications; ⁶ Includes Allison assemblies sold through GM Dealers; ⁷ 3 year / 80,000 kilometer warranty applies to purchases prior to 4-15-05; ⁸ Engine upgrades require appropriate associated parts to ensure proper engine and transmission cooling and torque capacity, fuel/air delivery and emission controls (upgrade example: 305 engine replaced with 350 engine); ⁹ Parts only warranty when sold over the counter or to a qualified independent repair facility; ¹⁰ Excludes ACDelco and Chevrolet Performance; ¹¹ 12 month / 20,000 kilometers warranty applies to purchases prior to 3-1-07; ¹² Must be installed in a street legal automotive application.

WARRANTY BEGINS ON THE DATE OF INSTALLATION BY AN AUTHORIZED GM DEALER OR BY A QUALIFIED INDEPENDENT SERVICE CENTER. PARTS ONLY WARRANTY (NO LABOUR) APPLIES FOR WARRANTY REPAIRS NOT PERFORMED BY AN AUTHORIZED GM DEALER OR QUALIFIED INDEPENDENT SERVICE CENTER.

GM sells other engines and transmissions in various states of completion. This warranty covers only those engines and transmissions that are marketed by GM as Goodwrench or GM Parts.

THIS WARRANTY DOES NOT COVER:

- Damage due to improper installation, negligence, alteration, accident, improper use, or any use related to racing or competition. Proper vehicle use is discussed in the vehicle Owner's Manual. In addition, coverage does not apply if the odometer has been disconnected or the mileage reading has been altered.

- Damage caused by lack of proper maintenance as described in the vehicle's original Maintenance Schedule/Owner's Manual, failure to follow Maintenance Schedule intervals, or failure to use or maintain proper type and levels of fluid, fuel, oil and lubricants recommended in the Maintenance Schedule/Owner's Manual. Proof of proper maintenance is the owner's responsibility. Keep all receipts and be prepared to make them available if questions arise about maintenance.
- Damage as a result of overheating, contamination or lack of lubrication.
- Damage caused by a turbocharger, supercharger, nitrous oxide, or similar product, which is not an approved GM Performance Part or Accessory.
- Racing engines and/or their components.
- Use of components in excess of maximum torque specification.
- Damage as a result of modification/replacement of torque converter that is part of transmission assembly.
- Loss of time, inconvenience, loss of use, or other economic loss.
- Vehicles registered and normally operated outside of Canada.
- This warranty does not apply to any unit installed under the General Motors New Vehicle Warranty.

DOCUMENTATION REQUIREMENTS

The GM dealer or independent service center must be furnished with this warranty statement, purchase receipt, installation date invoice and proof of proper maintenance. This warranty is transferable to subsequent owners by providing the above required documents to any purchaser of the vehicle in which the assembly/component was originally installed.

OBTAINING REPAIRS

GM Dealer Installation—The GM dealer who initially installed the assembly/component or any GM dealer may perform the repairs. You must allow a reasonable period of time for repairs following delivery of the vehicle to the GM dealer's place of business.

Independent Service Center Installation—The independent service center that installed the assembly/component or any GM dealer may perform repairs. Before any repairs can be performed under warranty by an independent repair center, the selling GM dealer (or any GM dealer) must first authorize needed repairs as a sublet service.

OTHER TERMS

TO THE FULL EXTENT PERMITTED BY APPLICABLE CANADIAN LAW: The foregoing warranty is the only and the entire warranty provided by GM Canada and is in lieu of and excludes all other representations, warranties or conditions, express or implied (including any implied warranty of merchantability or fitness for a particular purpose).

The performance of repairs, the provision of replacement parts, or reimbursement thereof, as described above, is the exclusive remedy under this written warranty or under any otherwise applicable implied warranty or condition.

GM CANADA DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATIONS or liability in connection with the products and no person is permitted to extend or enlarge this warranty on behalf of GM Canada by written, verbal or other representation and if made, such representation or warranty will not be enforceable against GM Canada.

DISCLAIMER OF LIABILITY: Except as provided in this limited warranty, GM Canada will not be liable in contract, tort or otherwise for any direct, indirect, economic, commercial, incidental, or consequential or special loss or damage or expense or claim howsoever caused, arising in connection with the sale, use, loss of use, performance or non-performance of the product.

NOTICE REGARDING LIMITATIONS: The terms contained in this limited warranty are not intended to limit or otherwise modify or exclude any warranty that by law cannot be limited, disclaimed or excluded. When and to the extent that any applicable Canadian law prohibits in a particular situation, any term contained in this warranty, such term will be considered severable and deemed deleted from this warranty in that situation.

Some states/provinces do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, therefore, the above limitation or exclusions may not apply to you.

SERVICE CHECKS:

Transmissions: It is important for you or a service technician to check the transmission/transaxle fluid level at regular intervals.

Engines: It is important for you or a service technician to perform these underhood checks at each fuel fill:

- Check engine oil level and add if necessary.
- Check engine coolant level in coolant reservoir and add if necessary.
- Check belts and hoses for visible wear and replace if necessary.

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Build Your Own COPO, LS7 or LS9 CRATE ENGINE!

Expanded program exclusively from Chevrolet Performance allows you to build your own high-performance engine!

Chevrolet Performance is offering customers the opportunity to build their own COPO racing engine; or, if you prefer to have production car performance, you can have the same experience with the 505hp LS7 ZO6 Corvette or the 638hp LS9 Supercharged engine standard in the ZR1! Simply order the Build Experience when you purchase one of the featured engines, and get ready for a unique, once-in-a-lifetime, hands-on experience.

This unique program provides customers the experience of visiting GM's Performance Build Center in Wixom, Mich., where they will join a specially trained engine builder in the start-to-finish assembly of the engine they purchased. Upon completion, a personalized nameplate is added to the engine, making it truly one-of-a-kind.

The program is similar to the Corvette Engine Build Experience that allows new Corvette ZO6 and ZR1 customers to participate in the assembly of the engine destined for their car. This is the same production line that builds the Chevrolet Performance crate engine versions of the LS7 and LS9 engines. In 2012, the Build Center production line added the 3 COPO racing engines to their prestigious product list, and now we can extend the opportunity of the COPO Build Experience to anyone that purchases a COPO race engine from Chevrolet Performance.

When a customer orders the Build Experience, the Chevrolet Performance dealer submits the order to Central Office. A special concierge then contacts the customer to verify participation and help coordinate arrangements. While travel arrangements to and from Metro-Detroit are the customer's responsibility, the concierge helps schedule the engine build, coordinate the customer's activities at the Performance Build Center, arrange local lodging and meals, and arrange ground transportation in the area.

All three of the COPO racing engines detailed on page 50 are included in this special program. Part numbers and pricing for the 2013 COPO engine build packages, as well as the 2013 LS7 and LS9 build package have not been finalized at press time. Check with your Chevrolet Performance Dealer, or go to chevroletperformance.com for pricing and availability.

NOTE: LS7 and LS9 Chevrolet Performance crate engines come with a 24-month/50,000 mile warranty. COPO Racing Engines are not designed for highway operation, and carry no warranty.

This program is subject to change without notice.



CONNECT & CRUISE
Crate Powertrain System
ASK FOR PART NO. CPSLSA4L85E

How to **GET**
DOWN
the road *like*
DALE JR.

DALE JR. ALWAYS DREAMED OF A '70 CHEVELLE. SLICK, BLACK, AND FAST. AND HE ALWAYS KNEW HE'D HELP PUT IT TOGETHER. HE JUST DIDN'T KNOW WHEN. CHEVROLET PERFORMANCE HAD THE TIME-SAVING SOLUTION: **THE CONNECT & CRUISE CRATE POWERTRAIN SYSTEM.** THIS PLUG-AND-PLAY SYSTEM COMBINES A POWERFUL LS ENGINE, ELECTRONIC TRANSMISSION, AND ALL NECESSARY ELECTRONICS INTO ONE COMPLETE PACKAGE FOR A FAST AND SIMPLE INSTALL. AND IT'S ALL ENGINEERED AND VALIDATED BY THE EXPERTS AT CHEVROLET PERFORMANCE. WE HELPED JUNIOR BUILD HIS CHEVELLE, AND WE CAN HELP YOU FINISH YOUR DREAM PROJECT, GET IT DOWN THE ROAD, AND UNFOLD YOUR STORY. BECAUSE **WE ALL HAVE STORIES WORTH TELLING.**



READ THE FULL
STORY AND TELL
YOUR OWN ON
THE BLOCK



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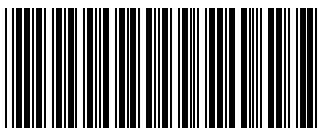
Our "Connect & Cruise"
Crate Powertrain
Systems provide an
all-in-one solution!
See page 114 for details



CARB-Certified E-ROD
Systems offer both
performance and
compliance!
See page 110 for details



YOUR AUTHORIZED CHEVROLET PERFORMANCE CENTER



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