PERFORMANCE

VEHICLES • PARTS • RACING

Retail Price $5.00
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Supersedes All Previous Catalogs

2014 CATALOG

NEW ZZ5 & ZZ383

Small-Block Favorites
Produce Big Power!

SMALL-BLOCK.
BIG-BLOCK.
OR LS POWER!

All from Chevrolet
Performance



COPO
IS BACK FOR 2014!

BOOST YOUR SONIC FUN-FACTOR!

With Performance Parts and Accessories from Chevrolet

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Chevrolet Performance is About Performance Cars, Engines, Parts and Racing

Driven by more than 100 years of motorsports heritage, Chevrolet Performance fuels the passions of automotive enthusiasts through high-performance vehicles, parts and racing. Championship technology is at the core of Chevrolet's performance cars like the new Camaro Z/28, ZL1, SS 1LE and the track-ready COPO Camaro drag race car. This technology helps racers win in series such as NASCAR, NHRA, ALMS, GRAND-AM, IndyCar and many grassroots circle track series.

A passion for performance also drives the development of racing parts and street-level components, including engine parts, transmissions, controllers and, of course, crate engines. Our engineers, who develop Chevrolet's high-performance production cars, leverage their experience from GM's state-of-the-art proving grounds and race tracks around the globe to develop factory-engineered specialty parts for the street and track that perform like no others in the aftermarket.

Check out our new range of production-based Gen V Camaro parts, including ZL1 and SS brake kits, ZL1 drivetrain kits, 1LE suspension systems and more. When you're taking your Camaro to the next level of performance, rely on components that were designed for your car by the factory. In most cases, their installation won't void the vehicle's warranty – that's a claim other aftermarket companies can't make. And, if you're into small car performance, check our new line of performance parts for Sonic including a stage kit, suspension kits, brake upgrades, and more.

When it comes to engine technology and crate engine choices, nobody beats Chevrolet Performance. More than four decades ago we pioneered the concept of the high-performance crate engine and 25 years ago we introduced the landmark ZZ4 350 – the most successful, longest-running crate engine in the industry.

Chevrolet Performance is also the industry's only source for brand-new Gen I/Gen II Small-Block and Big-Block crate engines – and with our LS range, we're the only manufacturer to offer three engine families. Our lineup is the industry's largest and most diverse, with dozens of engines designed to fit every budget and performance goal – including E-ROD emissions-compliant engine packages and the all-new Connect & Cruise crate powertrain systems, which deliver a high-performance crate engine, transmission, their respective controllers and the installation hardware. Connect & Cruise represents one-stop shopping that brings a factory-engineered powertrain package to your garage to power your project vehicle, and Chevrolet Performance is the only manufacturer with it.

Whether you're upgrading your new Chevy performance car, building a resto-mod classic for the street or preparing a Bowtie-powered race car for another season on the track, Chevrolet Performance is your source for factory-engineered components – all backed by more than a century of experience and passion. It's what we do.

See you on the street, strip and track!

The Chevrolet Performance Team

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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PERFORMANCE CENTER

New For 2014



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23120542 - SS Brake Kit

NEW FACTORY-ENGINEERED CAMARO BRAKE KITS DELIVER

Chevrolet Performance has a factory-engineered solution for Gen V Camaro drivers who want to add greater braking performance to their V-6 or SS models – bolt-on brake kits from the supercharged Camaro ZL1 and, for V-6 owners, the more economical brakes from the SS. The ZL1 brakes bolt onto the SS and V-6, and both systems feature premium Brembo components. It's a mix of the best in aftermarket high-performance components with the assurance of factory engineering and validation. Importantly, when these kits are properly installed – by a Chevrolet dealer – the vehicle's factory warranty is preserved. That's an assurance you can't get from aftermarket kits.





22989384 - ZL1 Front and Rear Brake Kits

TRACK-READY PERFORMANCE

The New 2014 CAMARO SS



HERE'S A RUNDOWN OF THE AVAILABLE KITS:

P/N 23120542 - SS brake kit for Camaro V-6
– This kit upgrades the front and rear brakes for 2010-and-later Camaro V-6 models with the Brembo front and rear brake components from the SS. It's a more economical option for customers who want greater brake performance on the street and track, but don't need the performance of the ZL1 brakes. The kit includes two front rotors and calipers, two rear rotors and calipers, brake pads, master cylinder and installation hardware. Twenty-inch wheels are required for caliper clearance. See page 19 for details.

P/N 22959672 - ZL1 front brake kit for Camaro SS
– It includes racing-style front two-piece, 14.6-inch front rotors and six-piston Brembo calipers with aluminum housings cast with the ZL1 logo. The two-piece rotor design offers greater resistance to warping and potentially extends rotor life. The kit includes two rotors, two calipers, brake pads and mounting hardware. It is a direct replacement for Camaro SS. Twenty-inch wheels are required for caliper clearance. See page 20 for details.

P/N 23104466 - ZL1 rear brake kit for Camaro SS
– It complements the ZL1 front brake kit with ZL1-logo calipers. The kit includes two calipers, brake pads and installation hardware. Twenty-inch wheels are required for caliper clearance. See page 20 for details.

P/N 22989384 - ZL1 front/rear brake kit for Camaro V-6
– Upgrades the front and rear brakes for 2010-and-later Camaro V-6 models with the 14.6-inch front and 14.4-inch rear brake components from the ZL1. The kit includes two front, two-piece rotors and six-piston calipers, two rear single-piece rotors and four-piston calipers, brake pads, master cylinder and installation hardware. Twenty-inch wheels are required for caliper clearance. See page 21 for details.



All-New ZZ5 and Updated ZZ383 Crate Engines Pull Harder with New Fast Burn Heads and Beehive Valvetrain



By the way: You can spot the new crate engines at a glance, thanks to new Bowtie insignias on the ends of the heads – and all-new valve covers.

19301293 - ZZ5 Base (carb and ignition not included)

When it comes to Small-Block power, Chevrolet Performance's engineers keep finding new ways to add muscle to the iconic American V-8. For 2014, they've developed new Fast Burn cylinder head castings that incorporate beehive-style valve springs and complementing valvetrain components. The result is greater high-rpm range and durability – and power. The heads are the stars of an all-new ZZ5 350 crate engine and an updated version of the big-torque ZZ383 stroker engine.

The ZZ5 is rated at an impressive 400 horsepower, which is more than any small block 350 offered in a production car. The ZZ383 is rated at 450 horsepower. Both engines complement those high-rpm horses with low-rpm torque – at least 300 lb.-ft. by only 1,500 rpm – for that unmistakable feeling of immediate power that comes only from the Small-Block.

Chevrolet Performance offers the engines in Base, Deluxe and Turn-Key systems, allowing you to select the crate engine package that fits your budget and project plans. See page 96 for more details on the ZZ5 and page 106 for everything you need to know about the new, more powerful ZZ383. We also have a more in-depth look at the benefits of the beehive valve spring design on the next page.

ZZ383 UPDATED!



19301295 - ZZ383 Deluxe



New Fast Burn Heads (P/N 19300955) Use Beehive Springs For Greater High-RPM Performance

Chevrolet Performance's Fast Burn 23-degree cylinder heads took Small-Block performance to new heights and the engineers have done it again with all-new castings that incorporate LS-style beehive valve springs to enhance high-rpm performance. The heads are easily identified by new Bowtie insignias on the ends.

Compared to a conventional valve spring, the beehive design delivers greater high-rpm capability and valvetrain stability. The shape, which is smaller in diameter at the top and expands in an egg-shaped barrel at the middle, reduces the overall spring weight and allows for a smaller, lighter retainer. That translates into less reciprocating mass in motion, enabling quicker revving.

The unique shape places the maximum area of the spring's coil at the position of greatest stress under load, enabling it to handle valvetrain stress more efficiently, for greater stability at high engine speeds. It also requires less spring pressure, for better valve control, and offers greater heat dissipation characteristics – all of which fosters longer valvetrain life, higher-rpm capability and utilizes the free-flowing single-plane intake manifold. Our ZZ383 crate engine, for example, gained 25 horsepower with the new Fast Burn head casting and a beehive spring-based valvetrain.

Chevrolet Performance offers new assembled heads and bare heads, along with a beehive spring conversion kit for retrofitting earlier Fast Burn heads. See page 133 for more information. These heads are also used on the new ZZ5, ZZ383 and CT400 crate engines.

CT400 Circle Track Crate Engine Gains High-RPM Performance, Durability

Circle track racing is all about sustained high-rpm performance and Chevrolet Performance has revamped the popular CT400 350 small block with the same new Fast Burn cylinder head castings used on the all-new ZZ5 350 and ZZ383 crate engines. In addition to improvements in the head casting itself, it was designed to support LS-style beehive valve springs, for the exceptional high-rpm valvetrain performance that delivers power and greater durability through enhanced stability.

The core of the factory-sealed CT400 crate engine remains the same, tough Small-Block that has powered countless racers to victory, including a forged steel crankshaft and hypereutectic pistons installed in a brand-new block with four-bolt mains. The assembly also includes an open-plenum high-rise intake manifold and 1.5:1-ratio aluminum roller rockers, a competition 8-quart circle track oil pan, with dual kick-out design, along with a valve cover breather kit.

See page 114 for complete details on this updated racing engine that runs harder and more durably than ever!



19318604 - CT400

New LS376/480, LS376/525 and LS7 Kits Added to Connect & Cruise Lineup!



Chevrolet Performance has added three new high-performance Connect & Cruise crate powertrain systems for 2014 – the 480-hp LS376/480, the 525-hp LS376/525 and the legendary 7.0L LS7. Each is paired with a high-strength SuperMatic™ four-speed automatic overdrive transmission.



The new systems join the 5.3L, LS3 and supercharged LSA systems, giving you more choices to power your project vehicle. Each of these industry-exclusive packages matches factory-engineered engine-and-transmission combinations that include all the electronic control modules, wiring harnesses and other key components.

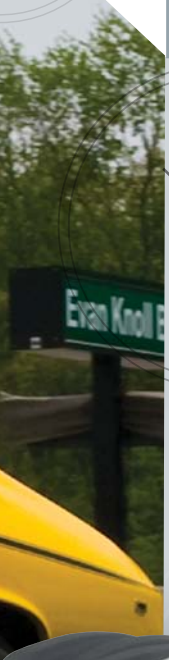
Also new for 2014 is a manual transmission option for the Connect and Cruise packages for those who prefer to shift for themselves.

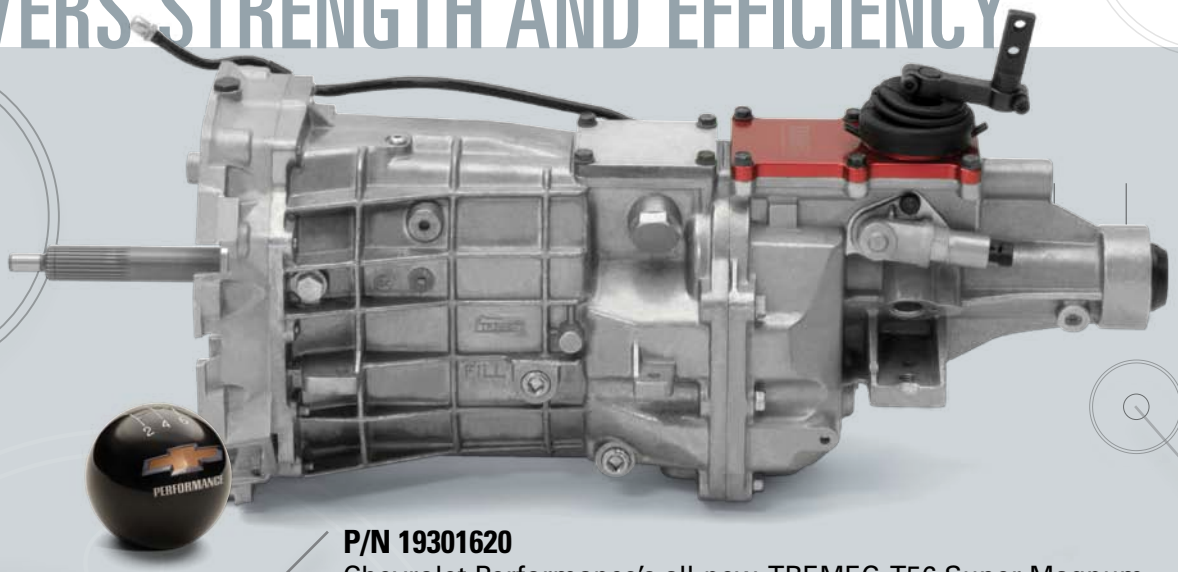
The Connect & Cruise lineup even includes emissions-compliant E-ROD LC9, LS3 and LSA systems! The specially calibrated controllers for all kits are designed for retrofit installations in older vehicles, for easier and quicker installation and operation without the need for third-party tuning.

Along with dependable performance, Connect & Cruise systems offer convenience and value. One part number brings everything to you for less than the cost of buying the components separately. Truly plug-and-play performance!

See page 198 for a complete look at the growing Connect & Cruise crate powertrain lineup!

NEW SIX-SPEED MANUAL TRANSMISSION DELIVERS STRENGTH AND EFFICIENCY







P/N 19301620

Chevrolet Performance's all-new TREMEC T56 Super Magnum transmission kit is the solution for builders looking for the strength of a heavy-duty transmission, the satisfying control of a manual transmission and the drivability and efficiency benefits of an overdrive transmission!

Designed for LS-engine retro-fit installations, the T56 Super Magnum packages the stronger components of the high-performance TR6060 transmission used in the Camaro ZL1 in an enhanced aluminum T56 transmission case. The result is a compact, adaptable and strong manual transmission with a 700 lb.-ft. torque capacity.

The T56 Super Magnum's greater strength comes from larger and stronger components, when compared with the original T56. First gear, for example, measures 4.9 inches in diameter and is 0.98 inches thick, but in the TR6060, first gear is still 4.9 inches in diameter, but is 1.19 inches thick – a significant 22-percent increase over the T56 that delivers exponentially greater strength. It's a similar comparison for all the gears and when it comes to the output shaft, the TR6060's 31-spline output shaft measures 1.36 inches in diameter. It also has a beefy, 26-spline input shaft.

Importantly, this new transmission features a more conventional slip-yoke design and includes the all-important 40-tooth reluctor ring to satisfy the electronic vehicle speed sensor used with Chevrolet Performance controllers. It also comes with a shifter handle and ball-style shift knob with the Chevrolet Performance logo on it. The transmission has provisions for three shifter positions and the included shifter accommodates two of them.

A separate, complementing transmission installation kit includes the bell housing, clutch release bearing, an LS7 flywheel with a 6-bolt flange – which is compatible with all LS engines except the LSA, LSX454 and LSX454R – an LS7 clutch and pressure plate, and more. See page 338 for complete details.

COPO NEWS



COPO CAMARO PROGRAM REVS UP FOR ANOTHER YEAR!

The Chevrolet Performance COPO Camaro program returns for 2014 with another limited run of factory-produced race cars and a pair of new racing-engine choices. It's the third year for COPO Camaro program and like the previous two, only 69 race cars will be built – but they'll carry the distinctive, updated styling of the 2014 Camaro lineup, including new front and rear fascias.



The new, LS-based racing engines include a revised version of the naturally aspirated 427 engine and a supercharged version of the 350 engine introduced in 2013. It will feature a 2.9L Whipple screw-type compressor.

Each COPO Camaro race car is built by hand, starting with hardware from the Oshawa assembly plant that manufactures regular-production Camaros. They include the same body-in-white body shells (part number 19243374) racers can purchase from Chevrolet Performance, along with other COPO-specific parts, to build a dedicated race car. Each production car is fitted with an NHRA-approved roll cage and other safety equipment, along with racing chassis and suspension components – including a unique solid rear axle system in place of the regular-production Camaro's independent rear axle.



Chevrolet Performance engineers designed and tested the engines with the same methods used to develop production engines, ensuring their performance and durability. Each is assembled by hand at the Chevrolet Performance racing development shop.



Racing enthusiasts who are interested in more information on the COPO program – including registering their interest in one of the 2014 COPO Camaros – can go to www.chevrolet.com/performance to sign up for the COPO Camaro Mailing List. They can also follow the latest COPO information at **theblock.com** – the online automotive community powered by Chevrolet Performance.

Copo Crate Engine Range Expands!

The same engines used in Chevrolet Performance's factory-engineered COPO Camaro race cars are available to all racers. And, for 2013 COPO's we've added a pair of high-winding, naturally aspirated crate engines to the lineup – 350-cubic-inch and 396-cubic-inch engines that join the naturally aspirated 427 and a pair of supercharged 327 engines.

Each COPO racing engine is engineered for NHRA's Stock Eliminator and Super Stock classes, offering sportsman racers a range of factory-developed-and-assembled racing engines. The 427, 396 and 350 engines are designed to cover NHRA's Stock Eliminator classes from E all the way up to AA, with curb weight adjustments the primary requirement for class qualification.

The supercharged 327 engines – one using a Whipple twin-screw 2.9L supercharger and the other using a 4.0L Whipple supercharger – deliver the power to send a COPO Camaro down the quarter-mile in less than 10 seconds.

A Holley engine management system is included with each engine. See page 48 for more information.



Chevrolet Performance Helps Boost Your Sonic Fun-Factor!

For 2014, Chevrolet Performance is bringing our SEMA Sonic concept vehicle parts right to the counter ... your Chevrolet dealer parts counter that is! We're increasing your Sonic fun by a factor of five – with five new packages designed to improve the handling and performance of your Sonic, and look good doing it!

Inhale ...

Give your 1.4L Turbo a breath of clean, cool air with this performance air intake kit. Designed for factory fit, with Performance looks. Calibration included for dealer installation.



Exhale ...

The Sonic Performance High Flow Exhaust system sounds and looks great, with a chrome stainless steel tip proudly showing the Chevy Bowtie to your friends! This low-restriction system and included dealer-installed calibration will provide 10 more HP (up to 148 HP) and 10% increase in torque (+15 ft.-lbs.)



Handle ...

Chevrolet Performance engineers have developed an 18-inch wheeland tire package for your Sonic that looks good, while gripping the road. You'll love the firm, responsive feel that this package provides, while avoiding the extra-harsh ride caused by mis-matched combinations. Your Chevrolet dealer can order you RPO SE4 to get this attractive package.

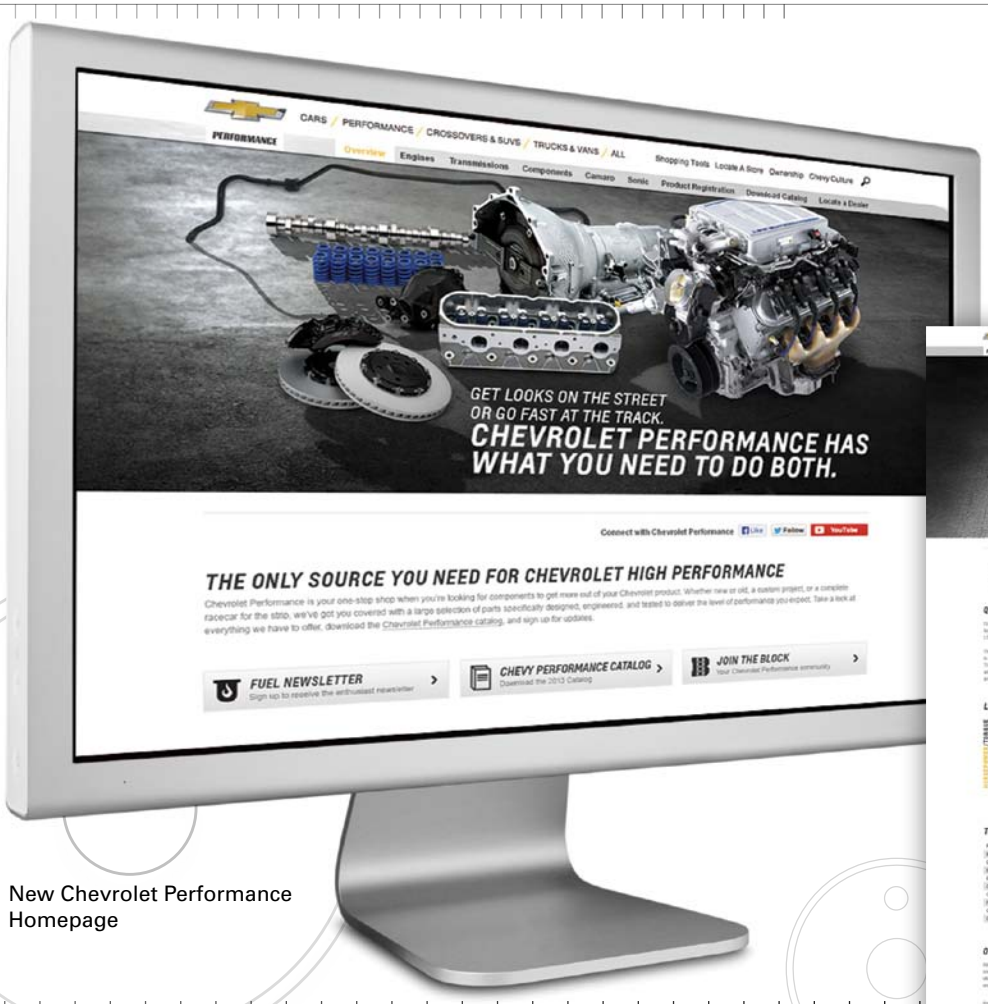
It takes a tuned suspension to complement your Sonic's performance-oriented wheels and tires. The engineers at Chevrolet Performance have designed the Sonic suspension components to optimize vehicle handling performance, and improve the stance at the same time. This kit uses the "RS" fast-reacting shock valving, but lowers the "RS" by 10mm, and the base model by 20mm. It utilizes the "RS" front struts assembled with a different spring and jounce bumper. The rear springs and shocks are redesigned to accommodate the new suspension travel. This package lowers the center of gravity of your vehicle, which results in improved handling.



Stop ...

Chevrolet Performance has designed products to make your Sonic both "go" and "whoa"! To improve the braking performance characteristics of your Sonic, install this performance brake package with oversized (300mm) rotors, and red fixed bridge front calipers with the Bowtie Performance logo for everyone to see through the spokes in your performance wheels! Available in Q3 2014.





New Chevrolet Performance Homepage

PERFORMANCE



Engine product detail page

Chevrolet Performance Has a New Home!

ChevroletPerformance.com has moved to Chevrolet.com, and we think you're going to like what you see. We've designed and built this website like we do our cars, with the performance enthusiast in mind. We've added more relevant content, contingency details for racers and product information to help you find the right parts to complete your project – all built where you would expect to find us, within Chevrolet.com.

Take a tour of our new space and check out:

- All new Engine &Transmission Showcases highlighting the largest lineup of GM OE-engineered crate engines and transmissions in history.
- Dedicated COPO Camaro section delivering the latest information of the COPO program, including details on all the parts available from Chevrolet Performance to help you build your own race car.
- New Camaro-Specific Performance Parts to help transform your Camaro into the performance machine you want it to be.

And don't worry, if you have ChevroletPerformance.com bookmarked as a favorite, you will automatically redirect to the new location.

The BLOCK is your go-to online community for exclusive behind-the-scenes news, content and culture from around the Chevrolet universe.

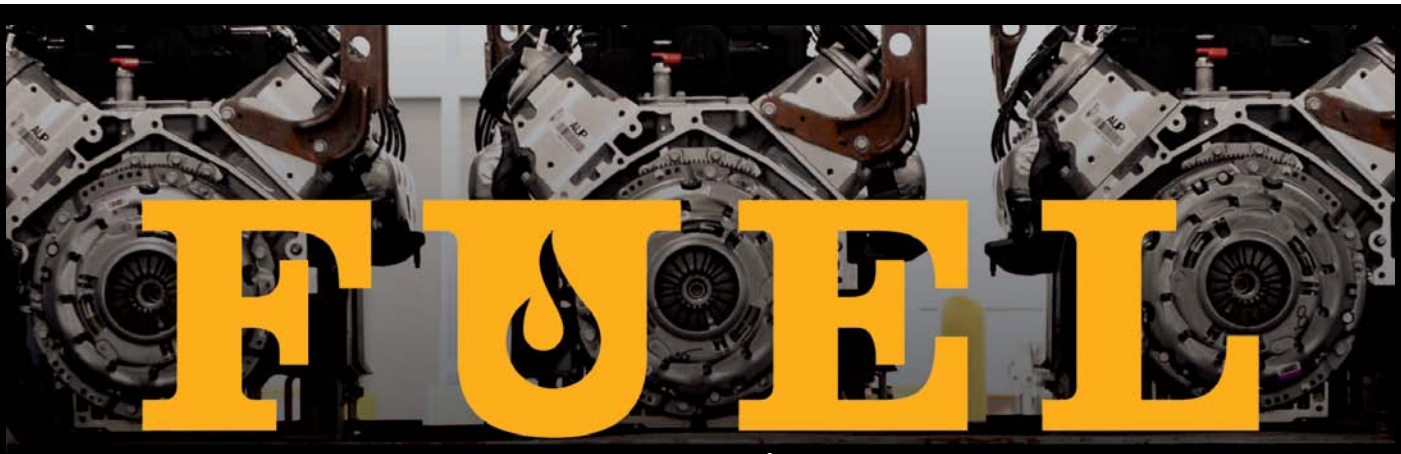
THE BLOCK | PERFORMANCE



INSIDER NEWS | CAR FEATURES | FORUMS | TECH TALK

The BLOCK features in-depth vehicle builds, an interactive forum, part spotlights, interviews with Chevrolet Performance powertrain engineers, and on-site coverage from some of the world's biggest automotive events, races and shows – there is simply no high-performance stone left unturned.

Take it for a Spin at: **TheBLOCK.com**



FUEL

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CHEVROLET PERFORMANCE



Make the Most of Your New Chevy with Factory-Engineered Parts and Accessories from Chevrolet Performance!

Chevrolet is America's best-selling performance car brand and Chevrolet Performance is your source for factory-engineered performance parts and appearance accessories to make your driving experience more fun and personal.

Available through your Chevy dealer and other authorized retailers, Chevrolet Performance offers components for nearly every new Chevy car and truck – including a huge collection of production-based and COPO racing parts for Gen V Camaro models.

From the brakes and rear axle system of the Camaro ZL1 to the track-ready suspension of the 1LE Performance Package, we have the parts to take your Camaro's capability to the next level. And if you're building a Camaro for the drag strip, our lineup of COPO racing parts – including racing crate engines – will help you get down the quarter-mile quicker!

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. In fact, most of our production-based parts won't affect your new Chevrolet's new-vehicle warranty when they're installed by your dealer. That's a claim other aftermarket manufacturers can't make.

When it comes to personalizing your new Chevrolet, insist on factory-engineered parts for the best performance, fit and assurance. Insist on Chevrolet Performance!




SONIC
SILVERADO
CAMARO

Camaro Performance Upgrades



Help Your GEN V Camaro Handle and Stop Even Better!

Chevrolet Performance continues to expand handling and brake upgrade packages for the Gen V Camaro in 2014. Realizing that not everyone requires the ZL1's stopping power, we are introducing a brake upgrade kit to convert standard V-6 Camaro brakes to the V-8 SS level. This factory designed, engineered and validated kit is the perfect complement to the new street-performance level 1LE Track Pack suspension kit for both the V-6 and V-8 equipped cars. This great kit includes everything to plant four tires squarely on the ground. These and other great performance products designed by Chevrolet Performance engineers for late-model Camaros allow you to maximize your driving "fun-factor", yet retain the car's street manners for the performance enthusiast.



NEW



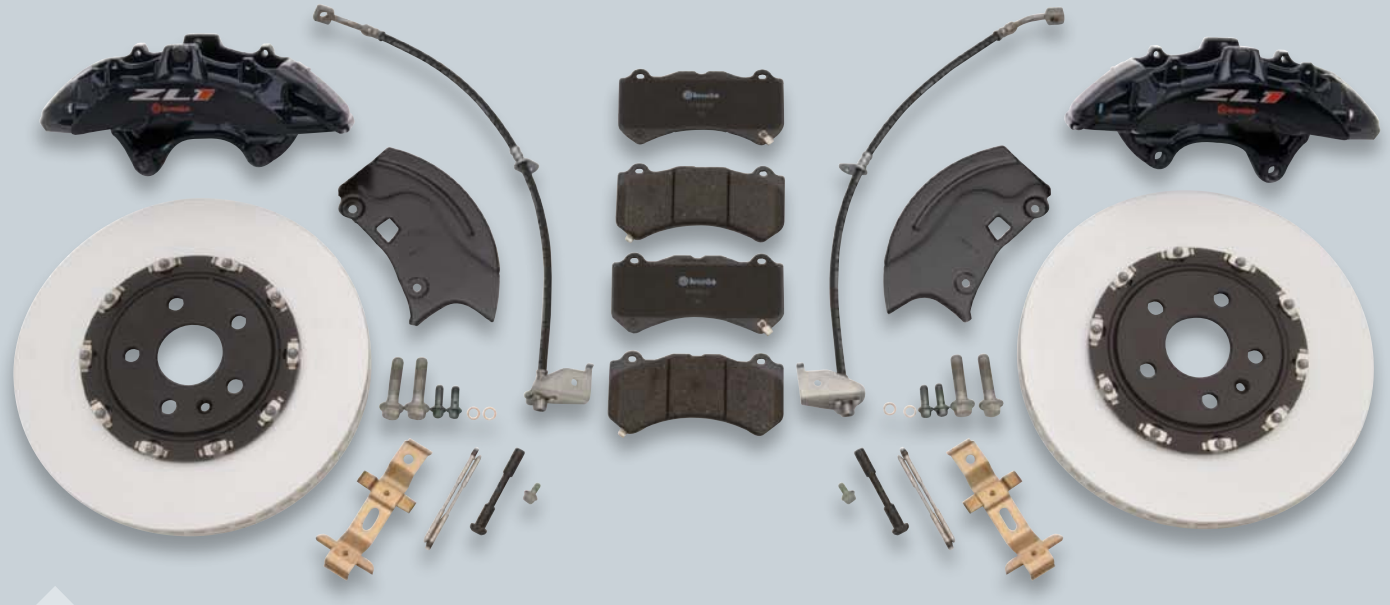
Camaro SS Brake Upgrade Kit for Camaro V-6 23120542 NEW

Upgrades the front and rear brakes for 2010-and-later Camaro V-6 models with the Brembo front and rear brake components from the SS. The front rotors are 14 inches wide, compared to the 12.6-inch diameter of the V-6 brakes, while the rear rotors are 14.4 inches wide, compared to the stock 12.4-inch rotors. The SS calipers are aluminum Brembo four-piston units for each corner. It's a more economical option for customers who want greater brake performance on the street and track, but don't need the performance of the ZL1 brakes. The kit includes two front rotors and calipers, two rear rotors and calipers, brake pads, master cylinder and installation hardware.

NOTE: *Requires 20" wheels for caliper clearance.*

The system includes:

PART NUMBER	DETAIL	QTY
23120544	Installation Sheet	1
22956541	Master Brake Cylinder	1
23131778	RR Brake Shield	1
23131777	LR Brake Shield	1
92229712	Front Hose	1
92229713	Front Hose	1
92229716	Rear Hose	2
21012386	Front and Rear Hose Washers	8
11569590	Front and Rear Hose Bolts	4
11611687	Rear Drive Shaft Nut	2
22907156	SPO Front Service Pad Kit	1
89047711	SPO Front Caliper Pin Kit	2
92233176	RR SS Caliper	1
92233177	LR SS Caliper	1
92244287	LF SS Caliper	1
92244288	RF SS Caliper	1
92245928	Front Rotor	2
92245929	Rear Rotor	2
89047228	Rear Caliper Pin Kit	2
89047744	Rear Pad Kit	1
22942442	Chevrolet Performance Badge	1
11515781	Rear Caliper to Knuckle Bolt	4
11570788	Front Caliper to Knuckle Bolt	4



SS V-8 Camaro to ZL1 Brembo Front Brake Conversion Kit* 22959672

Upgrade the front brakes on your 2010-and-later Camaro SS 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 black with the ZL1 logo. That compares with the 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, pads and mounting hardware.

Add the optional ZL1 rear caliper kit, P/N 23104466, to complement the style of the ZL1 front caliper.

NOTE: *Requires 20" wheels for caliper clearance.*

**For V-6 Conversion use Complete Kit P/N 22989384 (front and rear)*

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	2
25940447	SPO Front Service Pad Kit	1
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

SS V-8 Camaro to ZL1 Rear Conversion Kit 23104466

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



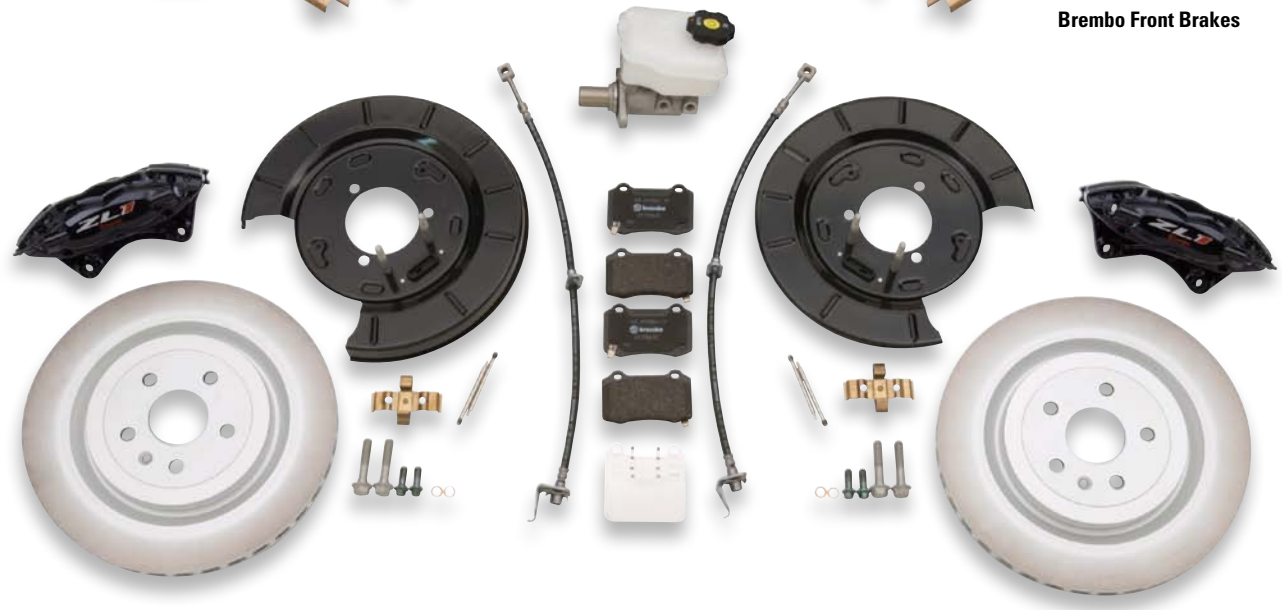
The system includes:

PART NUMBER	DETAIL	QTY
23117967	SSV8 Rear Installation Sheet	1
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 (not shown)	4

NOTE: *Requires 20" wheels for caliper clearance.*



Brembo Front Brakes



Brembo Rear Brakes

Camaro V-6 to ZL1 Brake Conversion Kit (Complete Front & Rear Kit) 22989384

Upgrade the brakes on your 2010-and-later Camaro V-6 to the system used on the supercharged Camaro ZL1 – including racing-style two-piece, 14.6 front rotors with six-piston Brembo front calipers, 14.4 inch rear rotors with 4-piston Brembo rear calipers and a V-8-specific master cylinder. That compares to the 12.6-inch front and 12.4-inch rear rotors and single-piston sliding calipers on V-6 models.

NOTE: *Requires 20" wheels for caliper clearance.*

The front 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	2
25940447	SPO Front Service Pad Kit	1
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 Hose Bolts	2
21012386	Front Hose Washers	4
22942442	Chevrolet Perf. Badge	1

The rear system includes:

PART NUMBER	DETAIL	QTY
22989385	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
23131777	ZL1 Rear LH Shield	1
92229716	ZL1 Rear RH & LH Hose	2
23131778	ZL1 Rear RH Shield	1
21012386	Front & Rear Hose Washers	4
22956541	V8 Master Cylinder	1
11569590	Front & Rear Hose Bolts	2



Camaro 1LE Track Pack - Street
23123398 - V6 Camaro NEW
23123397 - V8 Camaro NEW

Upgrade your V6 or SS Camaro's suspension with the same parts used in the 1LE Trak-Pak. This kit features a stiffer 27mm solid front stabilizer bar and a 28mm solid rear stabilizer bar for improved body control in cornering. The front struts were redesigned with improved damping curves for more body control and quicker response times. It also includes new faster reacting rear monotube shocks to replace the V6 and SS twin-tube design and combines them with a stiffer rear upper shock mount to increase vehicle agility, both are shared with the ZL1. The bushings in the rear toe link are replaced with spherical bushings to eliminate compliance in cornering, which is also common with the ZL1. The V6 kit also includes the stiffer front springs used on the 1LE and SS variants.

***NOTE**: The V6 1LE suspension kit requires use of SS Brake kit #'s 23120542 and 23120543 for proper rear stabilizer bar clearance (not included).*

23123397 - V-8 system includes:

PART NUMBER	DETAIL	QTY
11516078	Nut-FRT STAB HYD SHF Link	2
22942442	Emblem-F/End UPR Tie Bar	1
23123399	Installation-ACSRY	1
11569638	Nut-FRT SUSP Strut MT	2
11516078	Nut-RR S/ABS (UPR)	2
22845487	Link ASM-RR SUSP ADJ	2
23115372	Absorber ASM-RR SHK	2
22922445	Mount ASM-RR S/ABS UPR	1
22922446	Mount ASM-RR S/ABS UPR	1
22761221	Link ASM-RR S/ABS UPR	2
22786260	Shaft ASM-RR STAB	1
22812942	Shaft ASM-FRT STAB	1
22812984	Strut ASM-FRT SUSP	1
22812985	Strut ASM-FRT SUSP	1

23123398 - V-6 system includes:

PART NUMBER	DETAIL	QTY
92245257	Spring-FRT	2
23123400	Installation-ACSRY	1
11516078	Nut-FRT STAB HYD SHF Link	2
22942442	Emblem-F/End Upper Tie Bar	1
23123399	Installation ACSRY	1
11569638	Nut-FRT SUSP Strut MT	2
11516078	Nut-RR S/ABS (UPR)	2
22845487	Link ASM-RR SUSP ADJ	2
23115372	Absorber ASM-RR SHK	2
22922445	Mount ASM-RR S/ABS UPR	1
22922446	Mount ASM-RR S/ABS UPR	1
22761221	Link ASM-RR STAB SHF	2
22786260	Shaft ASM-RR STAB	1
22812942	Shaft ASM-FRT STAB	1
22812984	Strut ASM-FRT SUSP	1
22812985	Strut ASM-FRT SUSP	1



Camaro ZL1 HD Driveline Kit*– Manual Transmission 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 half-shafts – 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.

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

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

*(See Warranty Statement on page 25)

Manual system includes:

PART NUMBER	DETAIL	QTY
20931145	Propshaft	1
20931133	RDM	1
22960153	RDM Plug/cap	2
22953760	LH Halfshaft	1
22953759	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
11611365	Prop to Trans Nut	3
11515758	Prop to Frame Bolt	2
11516878	RDM to Crade Bolt	3
11516078	RDM to Crade Nut	3
22942442	Chevrolet Perf. Badge	1

Automatic system includes:

PART NUMBER	DETAIL	QTY
22960156	Propshaft	1
20931134	RDM	1
22960153	RDM Plug/cap	2
22953760	LH Halfshaft	1
22953759	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 Crade Bolt	3
11516078	RDM to Crade Nut	3
22942442	Chevrolet Perf. Badge	1

Camaro 1LE 3.91 Gear Kit 19301504 NEW

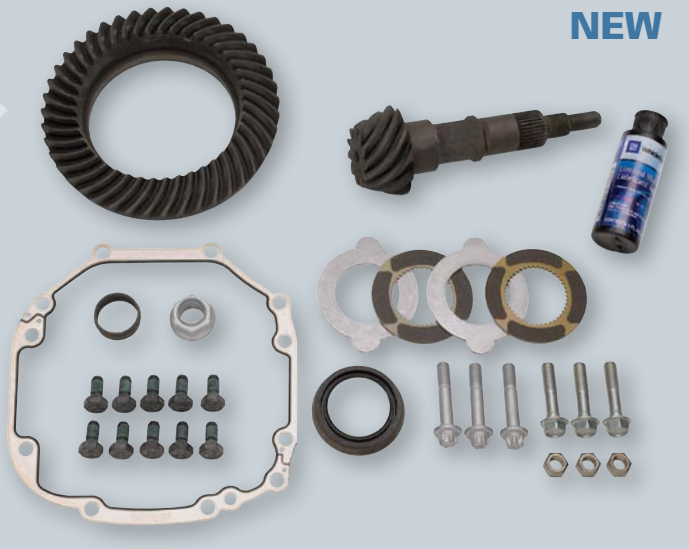
This lower (higher numerically) ratio rear drive gear will increase effective rear wheel torque multiplication in 2010 - 2013 SS Camaros by 13% (over standard 3.45 ratio) in a manual transmission-equipped car, and 20% (over standard 3.27) in an automatic-equipped car. This gearset is the original equipment 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
22813040	Gear Kit (shown)	1
92230403	Gasket	1
92230584	Oil Seal	1
90538867	Nut	3
92138569	Bolt	3
92139104	Bolt	3
92230606	Shim Kit	1
88900330	Limited Slip differential Oil Additive	1
19301909	Label Altered Vehicle Cert.	1
19301503	Instruction Sheet	1

NEW



Camaro Short-Throw Suede-Wrapped Shifter Kit
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.

Camaro1LE Short-Throw Leather-Wrapped Shifter (not shown)
23157703 NEW

The production Camaro 1LE Performance Package shifter delviers shorter, more precise shifts for a greater feeling of control and more immediate performance. It is a direct replacement for the standard manual shifter on 2010+ Camaro SS models and is similar to the Camaro ZL1 shifter, but with a leather-wrapped shift knob. The kit includes the shifter, shift knob and installation hardware.



Camaro 1LE PCV System
12653073

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.

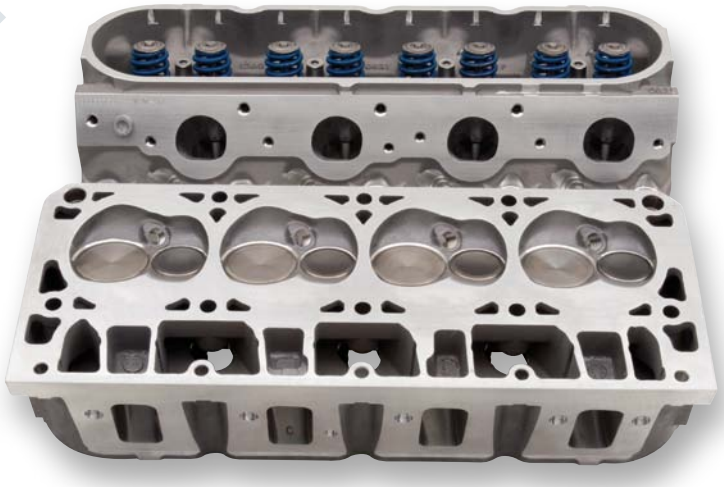


LS3 Power Upgrade Kit – Basic (Head and Cam only)*
19300535

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 Power Upgrade Kit – Deluxe (Heads, Cam and Components)* (not shown)
19301990 NEW

Same as #19300535 (above), but includes cylinder heads, camshaft and components needed to complete the job.





PART NUMBER	DETAIL	QTY
88958758	CNC LS7 Cyl Head	2
12638426	LS7 Camshaft	1
12623754	Camshaft Sprocket	1
11588723	Cam Bolts	3
12610046	Head Gasket	2
19258707	Head Bolts	20
12602540	Cover	2
12617944	Exhaust Manifold Gasket	2
12557840	Crankshaft Bolt	1



LS3 CNC-Ported Cylinder Head*
88958758

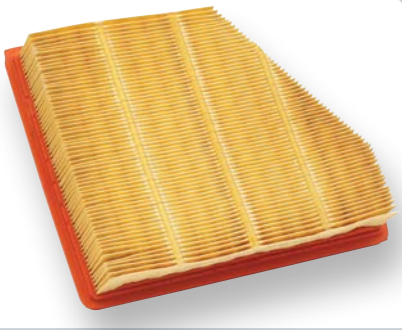
It flows nearly 10-percent more than the stock cylinder head to promote greater power across the rpm band.

ZL1 Fuel Pump
19260557

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

NOTE: *When combined with service part 22756513 and 22756514 fuel pickups, you can expand the amount of fuel available during road course usage on your Camaro.*





ZL1 Low-Restriction Air Filter
92229651

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.

Air Inlet Kit for LS-Based Crate Engine Installation

19301246 NEW

Designed for universal LS and LSX EFI crate engine installations, this kit contains intake tubes with provisions for the mass airflow meter and vacuum line, along with a reusable, high-performance air filter and mounting hardware. When joined, the kit's straight and elbow tubes provide the optimal distance between the throttle opening and mass airflow meter, including the minimum length of straight tubing required for accurate mass airflow meter operation – saving the time and guesswork involved with fabricating a similar system. The intake tubes are polished and the kit also includes couplers, worm-style clamps and a vacuum hose. The mass airflow meter provision accepts all GM production meters, which must be purchased separately.

NOTE: *This is a universal kit and may not fit every application. Additional fabrication may be required, but the length of the straight tube must be maintained for accurate mass airflow meter operation.*





Camaro 1LE Strut Tower Brace
23120485

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 (not shown).

**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 Chevrolet 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 ELECTRONICS

A. Ambient Lighting

This Ambient Lighting package provides a soft glow in 7 colors (blue, red, white, orange, purple, green, yellow) illuminating the console cupholder and footwell area of your Camaro. The color can be controlled via a button in your center console.

PART NUMBER	YEAR	DETAIL
23173329	2014-2014	Footwell and Cup Holder
20971892	2014-2014	Cup Holder Lamp Package

Battery Protection (not shown)

Keep your vehicle's battery in peak condition with this 110-volt Battery Charger.

PART NUMBER	YEAR	DETAIL
20981933	2011-2014	110-Volt Battery Charger

CAMARO EXTERIOR

B. Convertible Top Products

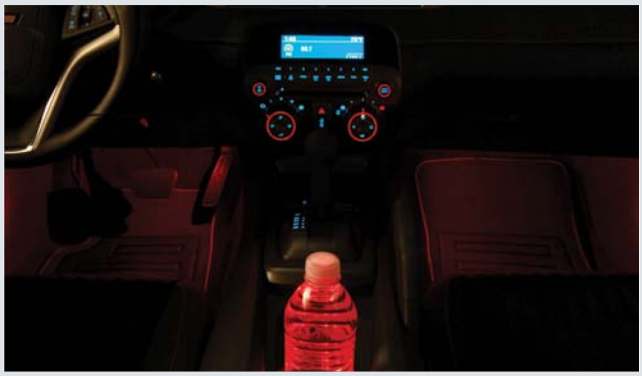
When the convertible top is down, this Tonneau Cover provides a finished look to Camaro's sculpted rear shoulders.

PART NUMBER	YEAR	DETAIL
22855148	2011-2014	Tonneau Cover Bag, With Camaro Logo
22872149	2011-2014	Tonneau Cover

C. Custom Graphics

Camaro vehicle graphics by 3M Original Wraps are a great way to add a personal touch to your vehicle. They are specifically designed and crafted for your Camaro. Non-GM Warranty. Warranty by Original Wraps; for information, please contact 1-866-944-9727.

PART NUMBER	YEAR	DETAIL
19299164	2011-2014	Lower Thick Stripe Vinyl Wrap by Original Wraps, Gloss White
19299165	2011-2014	Lower Thick Stripe Vinyl Wrap by Original Wraps, Matte Black
19299166	2011-2014	Pointed Angle Stripe Vinyl Wrap by Original Wraps, Matte Black
19299167	2011-2014	Pointed Angle Stripe Vinyl Wrap by Original Wraps, Gloss White
19299168	2011-2014	Center Pin Stripe Vinyl Wrap by Original Wraps, Matte Black
19299169	2011-2014	Center Pin Stripe Vinyl Wrap by Original Wraps, Gloss White
19299170	2011-2014	Dual Stripe Vinyl Wrap by Original Wraps, Matte Black
19299171	2011-2014	Dual Stripe Vinyl Wrap by Original Wraps, Gloss White
19299172	2011-2014	Cowl Vinyl Wrap by Original Wraps, Matte Black
19299173	2011-2014	Cowl Vinyl Wrap by Original Wraps, Matte Silver
19299174	2011-2014	Hood Vinyl Wrap by Original Wraps, Matte Black
19299175	2011-2014	Roof Vinyl Wrap by Original Wraps, Matte Black
19299176	2011-2014	Decklid Vinyl Wrap by Original Wraps, Matte Black
19299177	2011-2014	Hood Vinyl Wrap by Original Wraps, Matte White
19299178	2011-2014	Roof Vinyl Wrap by Original Wraps, Matte White
19299179	2011-2014	Decklid Vinyl Wrap by Original Wraps, Matte White
19299180	2011-2014	Cowl Vinyl Wrap by Original Wraps, White
19299181	2011-2014	Center Pin Stripe Vinyl Wrap by Original Wraps, Matte Black
19299182	2011-2014	Center Pin Stripe Vinyl Wrap by Original Wraps, Gloss White
19299183	2011-2014	Dual Stripe Vinyl Wrap by Original Wraps, Matte Black
19299184	2011-2014	Dual Stripe Vinyl Wrap by Original Wraps, Gloss White



A Footwell and Cup Holder



B Tonneau Cover



C Custom Graphics - Dual Stripe, Matte Black



C Custom Graphics - Center Pin Stripe, Gloss White



C Custom Graphics - Lower Thick Stripe, Gloss White

D. 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
22798335	2012-2014	Stripe Package - Satin Black
22798337	2012-2014	Stripe Package - Orange
22798338	2012-2014	Stripe Package - White Pearl
22798339	2012-2014	Stripe Package - Cyber Gray
22798340	2012-2014	Stripe Package - Light Silver

E. 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	**2011-2014**	Stripe Package - Black

F. 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	2011-2014	Stripe Package - White
20968500	2011-2014	Stripe Package - Black
20990192	2010-2014	Stripe Package - Silver
20990193	2014-2014	Stripe Package - Gray
20990195	2011-2014	Stripe Package - Orange
22995858	2014-2014	Stripe Package - Blue
22995859	2014-2014	Stripe Package - Red Hot

Decal/Stripe Package - Hockey Stick Stripes (not shown)

The Hockey Stick Stripe Kit gives you Camaro a classic look with contemporary styling. Contact your Chevrolet dealership for more information.

PART NUMBER	YEAR	DETAIL
22995864	2014-2014	Stripe Package - Silver
22995865	2014-2014	Stripe Package - Blue
22995866	2014-2014	Stripe Package - Red
22995872	2014-2014	Stripe Package - Orange
23106918	2014-2014	Stripe Package - White
22768988	2012-2013	Stripe Package - White
23106919	2014-2014	Stripe Package - Cyber Gray
22768986	2012-2013	Stripe Package - Cyber Gray
23106920	2014-2014	Stripe Package - Black
22768987	2012-2013	Stripe Package - Black

G. Fuel Door

Personalize the exterior of your Camaro with a unique Fuel Door. Available in Chrome or Satin Nickel featuring the Camaro logo.

PART NUMBER	YEAR	DETAIL
22959850	2012-2014	Chrome
92212671	2010-2014	Satin Nickel



D Fender Hash Marks - Satin Black



E Gill Stripes



F Heritage Stripe - White



G Fuel Door - Satin Nickel

A. 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 select body colors. Not compatible with Quarter Flares/Splash Guards, Performance Exhaust (NPP), and ZL1 Models,

PART NUMBER	YEAR	DETAIL
22986797	2014-2014	Paint to Match - price does not include charge for painting. For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986798	2014-2014	Red Rock Metallic (G7P) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986799	2014-2014	Red (G7C) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986800	2014-2014	Silver Ice (GAN) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986801	2014-2014	Summit White (GAZ) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986802	2014-2014	Black (GBA) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986803	2014-2014	Crystal Red (GBE) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986804	2014-2014	Ashen Gray (GLJ) - For Use on SS Model Vehicles With Performance Exhaust (NPP)
22986805	2014-2014	Blue Ray (GXH) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986806	2014-2014	Lemon (G7D) - For Use on SS Model Vehicles with Performance Exhaust (NPP)
22986809	2014-2014	Paint to Match - price does not include charge for painting. For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986810	2014-2014	Silver Ice (GAN) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986823	2014-2014	Summit White (GAZ) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986824	2014-2014	Black (GBA) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986825	2014-2014	Crystal Red (GBE) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986826	2014-2014	Ashen Gray (GLJ) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986827	2014-2014	Blue Ray (GXH) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986828	2014-2014	Lemon (G7D) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986830	2014-2014	Red Rock Metallic (G7P) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986831	2014-2014	Red (G7C) - For Use on LT Model Vehicles with Performance Exhaust (NPP)
22986832	2014-2014	Paint to Match - price does not include charge for painting. For Use on LT Model Vehicles with Dual Exhaust (N10)
22986833	2014-2014	Silver Ice (GAN) - For Use on LT Model Vehicles with Dual Exhaust (N10)
22986834	2014-2014	Summit White (GAZ) - For Use on LT Model Vehicles with Dual Exhaust (N10)
22986835	2014-2014	Black (GBA) - For Use on LT Model Vehicles With Dual Exhaust (N10)
22986836	2014-2014	Crystal Red (GBE) - For Use on LT Model Vehicles With Dual Exhaust (N10)
22986837	2014-2014	Ashen Gray (GLJ) - For Use on LT Model Vehicles with Dual Exhaust (N10)
22986838	2014-2014	Blue Ray (GXH) - For Use on LT Model Vehicles with Dual Exhaust (N10)
22986839	2014-2014	Lemon (G7D) - For Use on LT Model Vehicles with Dual Exhaust (N10)



A Ground Effects



A Ground Effects



A Ground Effects

B. Spoiler Kit

Personalize the look of your Camaro with a custom race-inspired Spoiler. Available as Blade style in select body colors. A replacement emblem is not included in kit and must be purchased separately.

PART NUMBER	YEAR	DETAIL
22875592	2014-2014	Blade, Not For Use on Convertible Models, Summit White (GAZ)
22875593	2014-2014	Blade, Not For Use on Convertible Models, Silver Ice (GAN)
22875595	2014-2014	Blade, Not For Use on Convertible Models, Black (GBA)
22875596	2014-2014	Blade, Not For use on Convertible Models, Crystal Red (GBE)
22875599	2014-2014	Blade, Not For Use on Convertible Models, Ashen Gray (GLJ)
22875600	2014-2014	Blade, Not For Use on Convertible Models, Blue Ray (GXH)

C. 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	2010-2014	Indoor - Black with Camaro Logo
20960815	2011-2014	Indoor - Silver with Camaro Logo
20960816	2011-2014	Indoor - Red with Camaro Logo
22863449	2012-2014	Indoor - Black with ZL1 Logo
22863451	2012-2014	Outdoor - Red with ZL1 Logo - For Use on Coupe Models
22863452	2012-2014	Outdoor - Gray with ZL1 Logo - For Use on Coupe Models
22863454	2013-2014	Outdoor - Red with ZL1 Logo - For Use on Convertible Models
22863455	2013-2014	Outdoor - Gray with ZL1 Logo - For Use on Convertible Models
92215993	2010-2014	Outdoor - Red with Black Stripes, Camaro Logo - Coupe
92215994	2010-2014	Outdoor - Gray with Black Stripes, Camaro Logo - Coupe
92223303	2011-2014	Outdoor - Red with Black Stripes, Camaro Logo - Convertible
92223304	2011-2014	Outdoor - Gray with Black Stripes, Camaro Logo - Convertible

D. Windscreen

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

PART NUMBER	YEAR	DETAIL
92219688	2011-2014	Windscreen



B Spoiler Kit



C Vehicle Cover - Gray with Black Stripes, Camaro Logo



D Windscreen

CAMARO INTERIOR

A. Door Sill Plates

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

PART NUMBER	YEAR	DETAIL
92223800	2010-2014	Door Sill Plates - Front Set, Chevrolet Script Logo - Bright and Black

B. Floor Console Lid

Upgrade your existing Floor Console Lid from vinyl to a soft, thick leather cover. This leather cover is easy to install and is available with various Camaro logos such as RS, SS and ZL1.

PART NUMBER	YEAR	DETAIL
22859165	2012-2014	RS Logo
22859167	2012-2014	SS Logo
22992180	2012-2014	ZL1 Logo (Seam Stitch Red)

C. Floor Mats - Front and Rear Premium All Weather

These Front and Rear Premium All Weather Floor Mats conform to the interior of your Camaro. Their custom designed, deep-patterned grid collects rain, mud, snow and debris; and nibs on the back help keep them in place.

PART NUMBER	YEAR	DETAIL
22787711	2011-2014	Premium Carpet - Black Carpet, White Camaro Logo, Red Edging
22808224	2012-2014	Premium - Black Carpet, Mojave Camaro Logo, Mojave Edging
92219641	2010-2014	Premium Carpet - Titanium Carpet, Black Camaro Logo, Black Edging
92221511	2010-2014	Premium Carpet - Black Carpet, Inferno Orange Camaro Logo, Red Edging
92221512	2010-2014	Premium Carpet - Black Carpet, Silver Camaro Logo, Silver Edging

D. Interior Trim Kit

This four piece Interior Trim Kit complements or contrasts your Camaro's exterior color for a completely custom appearance. Available in four matching body colors: White, Yellow, Silver, and Orange.

PART NUMBER	YEAR	DETAIL
22918237	2010-2014	Yellow (GCO)
22918238	2010-2014	Orange (GCR)
22918239	2010-2014	Silver (GAN)
22918240	2010-2014	White (GCN, GAZ)
92241144	2010-2014	Orange (GCR)
92241180	2010-2014	White (GCN, GAZ)
92248679	2010-2014	Orange (GCR)
92248688	2010-2014	Silver (GBA, GAN)
92248689	2010-2014	White (GCN, GAZ)

E. Pedal Cover

Designed specifically for your Camaro, these high-quality stainless steel Pedal Covers replace existing pedals to provide a sporty performance look and feel to your interior. The covers also feature raised rubber traction surfaces.

PART NUMBER	YEAR	DETAIL
22826305	2012-2014	Manual Transmission (MV5 & M10)
22826306	2012-2014	Automatic Transmission (MYB & MYC)



A Door Sill Plates



B Floor Console Lid, RS Logo



C Floor Mats - Black Carpet, Inferno Orange, Camaro Logo, Red Edging



D Interior Trim Kit - Orange (GCR)



E Pedal Cover - Manual

CAMARO PERFORMANCE

F. 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.

PART NUMBER	YEAR	DETAIL
12643075	2012-2014	V-6 (LFX) - Crystal Red (GBE)
12643077	2012-2014	V-8 (LS3 and L99) - Crystal Red (GBE)
12654765	2013-2014	V-6 (LFX) - Blue Ray (GXH)
12654766	2013-2014	V-8 (LS3 and L99) - Blue Ray (GXH)
12658126	2014-2014	V-6 (LFX) - Red Rock (G7P)
12658127	2014-2014	V-6 (LFX) - Bright Yellow (G7D)
12658128	2014-2014	V-8 (LS3 and L99) - Bright Yellow (G7D)
12658129	2014-2014	V-8 (LS3 and L99) - Red Rock (G7P)
12658130	2014-2014	V-8 (LS3 and L99) - Red Hot (G7C)
12658131	2014-2014	V-6 (LFX) - Red Hot (G7C)
92219186	2013-2014	V-6 (LFX) - Black (GBA)
92247656	2010-2014	V-8 (LS3 and L99) - Black (GBA)

G. Performance Exhaust Upgrade

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
23206771	2014-2014	V-8 (LS3) Exhaust Upgrade Kit. with tips
23206772	2014-2014	V-8 (LS3) Exhaust Upgrade Kit with Tips
23206773	2014-2014	V-8 (LS3) Exhaust Upgrade Kit, No Tips
23206774	2014-2014	V-6 (LFX) - Exhaust Upgrade Kit, with Tips
23206775	2014-2014	V-6 (LFX) Exhaust Upgrade Kit, without tips



F Engine Cover - V-8 LS3 and L99 Crystal Red (GBE)



F Engine Cover - V-6 (LFX) - Blue Ray (GXH)



G Performance Exhaust Upgrade Package - V-8 (LS3) with Tips

CAMARO WHEELS

A. 20-inch Wheels

Personalize your Camaro with these stylish 20-inch 5-Spoke Accessory Wheels. Validated to GM specifications. Use only GM-approved tire and wheel combinations. See www.gmaccessorieszone.com for important wheel and tire information.

PART NUMBER	YEAR	DETAIL
19301175	2013-2014	20-Inch Wheels - EA892 - 20-Inch x 8-Inch Front Wheel- 5-Spoke Polished- SEK
19301174	2013-2014	20-Inch Wheels - EA896 - 20-Inch x 9-Inch Rear Wheel- 5-Spoke Polished- SEK
19301172	2013-2014	20-Inch Wheels - EA407 - 20-Inch x 8-Inch Front Wheel- 45th Anniversary Alt. Finish - Painted Black - SEO
19301173	2013-2014	20-Inch Wheels - EA407 - 20-Inch x 9-Inch Rear Wheel- 45th Anniversary Alt. Finish - Painted Black - SEO
19301177	2013-2014	20-Inch Wheels - EA407 - 20-Inch x 8-Inch Front Wheel- 45th Anniversary Manoogian Silver Painted - SEM
19301176	2013-2014	20-Inch Wheels - EA407 - 20-Inch x 9-Inch Rear Wheel- 45th Anniversary Manoogian Silver Painted - SEM
19301170	2013-2014	20-Inch Wheels - EA892 - 20-Inch x 8-Inch Front Wheel- 5-Spoke Black Painted - SEL
19301171	2013-2014	20-Inch Wheels - EA896 - 20-Inch x 9-Inch Rear Wheel- 5-Spoke Black Painted - SEL
19301168	2013-2014	0-Inch Wheels - EA892 - 20-Inch x 10-Inch Front Wheel- ZL1/1LE 5-Spoke Black w/ Polished Fangs (not shown) 20-Inch Wheels - EA892 - 20-Inch x 11-Inch Rear Wheel- ZL1/1LE 5-Spoke Black w/ Polished Fangs - RZT- RZT (not shown)



A 20-Inch Wheel - EA892 Five Spoke Polished



A 20-Inch Wheel, EA407, 45th Anniversary Black



A 20-Inch Wheel - EA407, 45th Anniversary Manoogian Silver



A 20-Inch Wheel - EA892, 5-spoke Black

B. 21-inch Wheels

Personalize your Camaro with these stylish 21-inch Accessory Wheels. Validated to GM specifications. Use only GM-approved tire and wheel combinations. See www.gmaccessorieszone.com for important wheel and tire information. Not for use on ZL1 or 1LE.

PART NUMBER	YEAR	DETAIL
19257813	2013-2014	21-Inch Wheels - EA573 - 21-Inch x 8.5-Inch Front Wheel - Cast Aluminum, Polished
19257815	2013-2014	21-Inch Wheels - EA573 - 21-Inch x 9.5-Inch Rear Wheel - Cast Aluminum, Polished
20984709	2013-2014	21-Inch Wheels - EA708 - 21-Inch x 8.5-Inch Front Wheel - Multi-Spoke Chrome
20984712	2013-2014	21-Inch Wheels - EA573 - 21-Inch x 9.5-Inch Rear Wheel - Multi-Spoke Chrome
19302759	2013-2014	21-Inch Wheels - EA712 - 21-Inch x 8.5-Inch Front Wheel - Multi-Spoke Chrome
19302758	2013-2014	21-Inch Wheels - EA712 - 21-Inch x 9.5-Inch Rear Wheel - Multi-Spoke Chrome
19302857	2013-2014	21-Inch Wheels - EA708 - 21-Inch x 8.5-Inch Front Wheel - Multi-Spoke Painted Silver
20984708	2013-2014	21-Inch Wheels - EA708 - 21-Inch x 8.5-Inch Front Wheel - Multi-Spoke Painted Silver
20984711	2013-2014	21-Inch Wheels - EA711 - 21-Inch x 9.5-Inch Rear Wheel - Multi-Spoke Painted Silver



B 21-Inch Wheel, EA 708 Painted Silver



B 21-Inch Wheel - EA708 Multi-Spoke Painted Silver



B 21-Inch Wheel - EA712 Multi-Spoke Chrome



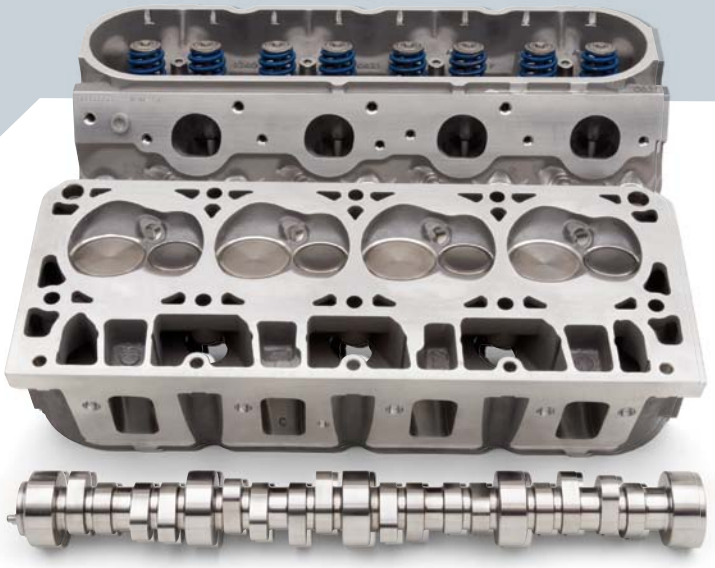
Corvette Performance Upgrades

Accessories for Your C7 Stingray!

(and some upgrades for your LS3 C6 as well!)

If you have a C6 Corvette with the powerful 6.2L LS3, we've got a power-boosting package for you! If you're interested in more personalization, we've also got the perfect accessories for your baby!

Be the first on your block to get genuine Corvette Accessories for your C7 Stingray! See the great all-new selection available on pages 36–39.



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

Increase the power of the LS3 engine in your C6 LS3 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 276cc 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.

LS Polished Aluminum Valve Covers - Black*
19156428

LS Polished Aluminum Valve Covers - Red*
19156429

Show off your Corvette's engine with these distinctive, polished aluminum, engraved valve covers that are available with either black or red Corvette Logo.







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 Chevrolet 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.

Genuine Corvette Accessories For Your C7 Stingray:

CORVETTE CARGO MANAGEMENT

A. Luggage

Arrive in style with luggage specially designed for the Corvette brand. A five-piece luggage set, including a suitcase with roller wheels, a backpack and messenger bag are all available featuring the Cross-Flags logo.

PART NUMBER	YEAR	DETAIL
22970473	2014-2014	Luggage, Roller
22970474	2014-2014	Luggage, Backpack
22970475	2014-2014	Luggage, Duffel, 40L
22970476	2014-2014	Luggage, Messenger
23152910	2014-2014	Luggage, Duffel, 70L
23152911	2014-2014	Luggage, Duffel, 70L

Storage Bags (not shown)

Handy Storage Bags for your Corvette. The Removable Roof Panel Storage Bag stows your roof panel and helps prevent scratches when it's not in use.

PART NUMBER	YEAR	DETAIL
22944817	2014-2014	Removable Roof Panel Storage Bag - Crossed-Flag Logo, Black
23148691	2014-2014	Removable Roof Panel Storage Bag - Crossed-Flag Logo, Black

CORVETTE EXTERIOR

B. Grille

Add a distinct look to the front of your Corvette with a Cyber Gray Grille insert that dresses up the front of your Corvette while providing protection from road debris. Add the Front Bumper Molding for states that require a front license plate.

PART NUMBER	YEAR	DETAIL
22926971	2014-2014	Grille, Alt Finish
22987426	2014-2014	Grille, Cyber Gray

C. Front Bumper Molding

For states that require a front license plate, this Front License Plate Frame Kit fastens to the front fascia without necessitating any hole drilling in the bodywork. Available in select exterior body colors. Available in fourth quarter.

PART NUMBER	YEAR	DETAIL
22979545	2014-2014	Cyber Gray

License Plate Holder - Rear (not shown)

This body-color Rear License Plate Holder matches the exact color of your Corvette to provide a clean, elegant look.

PART NUMBER	YEAR	DETAIL
22910406	2014-2014	Carbon Flash

D. Spoiler Kit

Add style to your Corvette with a body-color Rear Spoiler that replaces the standard black spoiler.

PART NUMBER	YEAR	DETAIL
22881387	2014-2014	Spoiler Kit, Paint to Match - price does not include charge for painting.
22908980	2014-2014	Spoiler Kit, Laguna Blue (G7H)
22908981	2014-2014	Spoiler Kit, Lime Rock (G7J)
22908982	2014-2014	Spoiler Kit, Velocity Yellow (G8A)
22908983	2014-2014	Spoiler Kit, Blade Silver (GAN)
22908984	2014-2014	Spoiler Kit, Black (GBA)
22908985	2014-2014	Spoiler Kit, Crystal Red (GBE)
22908986	2014-2014	Spoiler Kit, Cyber Gray (GBV)
22908987	2014-2014	Spoiler Kit, Torch Red (GKZ)
22908989	2014-2014	Spoiler Kit, Night Race Blue Metallic (GXH)
22938855	2014-2014	Spoiler Kit, Arctic White (G8G)



A Luggage, Roller



A Luggage, Duffel



B Grille - Cyber Gray



C Front Bumper Molding



D Spoiler Kit - Cyber Gray

E. Underhood Liner

Go ahead and pop the hood to show off your engine compartment. This Underhood Liner attaches to your Corvette's hood to provide a detailed appearance and is available with different logos; Crossed-Flag and Stingray in Black. Underhood lamp sold separately.

PART NUMBER	YEAR	DETAIL
22807697	2014-2014	Crossed-Flag Logo
22980028	2014-2014	Stingray Logo

F. 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
23142881	2014-2014	Indoor Dust Cover, Crossed-Flag Logo, Gray
23142882	2014-2014	Indoor Dust Cover, Crossed-Flag Logo, Kalahari
23142888	2014-2014	Indoor Dust Cover, Crossed-Flag Logo, Red
23142883	2014-2014	Indoor Dust Cover, Stingray Logo Logo, Black
23142884	2014-2014	All Weather Outdoor Cover, Stingray Logo, Black
23142885	2014-2014	All Weather Outdoor Cover, Stingray Logo, Gray

G. Splash Guards

Designed to accent the exterior of your Corvette, these Molded Splash Guards fit directly behind the front and rear wheels to help protect against tire splash and mud.

PART NUMBER	YEAR	DETAIL
22935635	2014-2014	Splash Guards, Front Molded
22935639	2014-2014	Splash Guards, Rear Molded



E Underhood Liner Crossed-Flag Logo



E Underhood Liner Stringray Logo



F Outdoor Stingray Vehicle Cover, Crossed-Flag Logo, Black



G Splash Guards, Front Molded



G Splash Guards, Rear Molded

CORVETTE INTERIOR

A. Deck Lid Liner

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

PART NUMBER	YEAR	DETAIL
22807701	2014-2014	Black

B. Floor Mats - Cargo Premium Carpet

This Premium Carpet Cargo Mat provides a perfect fit in the rear cargo area of your Corvette to help keep carpet clean.

PART NUMBER	YEAR	DETAIL
22801642	2014-2014	Black

C. Floor Mats - Front Carpet Replacements

These Front Carpet Replacement Floor Mats provide an exact fit to the floor of your Corvette to help protect the interior from dirt, mud, snow and debris.

PART NUMBER	YEAR	DETAIL
19301566	2014-2014	Black
19301568	2014-2014	Brownstone
19302804	2014-2014	Designed to provide the perfect fit, these Front Carpet Replacement Floor Mats help protect the floor of your Corvette from dirt, mud, snow and other debris, and are available in Brownstone.
19302805	2014-2014	Designed to provide the perfect fit, these Front Carpet Replacement Floor Mats help protect the floor of your Corvette from dirt, mud, snow and other debris, and are available in Gray.
19302806	2014-2014	Designed to provide the perfect fit, these Front Carpet Replacement Floor Mats help protect the floor of your Corvette from dirt, mud, snow and other debris. They're available in Black.

D. 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
23146465	2014-2014	Door Sill Plates



A Deck Lid Liner



B Floor Mats - Cargo Premium Carpet, Black



C Floor Mats - Gray



C Floor Mats - Brownstone



D Door Sill Plates

CORVETTE WHEELS

E. Chrome Wheels

Make a dramatic modification to the appearance of your Corvette with these 5-spoke Accessory Wheels. Validated to GM specifications. Use only GM-approved tire and wheel combinations.
See www.gmaccessorieszone.com for important wheel and tire information.

PART NUMBER	YEAR	DETAIL
19302113	2014-2014	19-Inch Wheel - YA113F Front Wheel - Chrome 5-Spoke - 5YU
19302115	2014-2014	20-Inch Wheel - YA115R Rear Wheel - Chrome 5-Spoke - 5YU

F. Silver Painted Wheels

Make a dramatic modification to the appearance of your Corvette with these 5-spoke Accessory Wheels. Validated to GM specifications. Use only GM-approved tire and wheel combinations.
See www.gmaccessorieszone.com for important wheel and tire information.

PART NUMBER	YEAR	DETAIL
19302114	2014-2014	19-Inch Wheel - YA115R Front Wheel - Silver 5-Spoke - 5YU
19302116	2014-2014	20-Inch Wheel - YA116R Rear Wheel - Silver Painted 5-Spoke - 5YV

G. Center Caps

Custom Center Caps specifically designed for your Corvette wheels. Made of durable material to resist corrosion for long life.

PART NUMBER	YEAR	DETAIL
20995597	2014-2014	Center Cap - Crossed-Flag Logo, Argent, Service Component
22782982	2014-2014	Center Cap - Crossed-Flag Logo, Black, Service Component
22926205	2014-2014	Center Cap - Z51 Logo, Metallic Gray, Service Component
22782986	2014-2014	Center Cap - Jake Logo
19301420	2014-2014	Center Cap - Z51 Logo
19301418	2014-2014	Center Cap - Stingray Logo



E Front Wheel Chrome 5-Spoke



F Rear Wheel Silver Painted 5-Spoke



G Center Cap, Z51



G Center Cap, Crossed Flag, Argent



G Center Cap, Stingray



G Center Cap, Jake Logo

Sonic Performance Upgrades



SONIC PERFORMANCE PARTS

A. 18-Inch Wheels and Tires

Chevrolet Performance engineers have developed a wheel and tire package for your Sonic that looks good, while gripping the road. You'll love the firm, responsive feel that this package provides, while avoiding the extra-harsh ride caused by mis-matched combinations. Your Chevrolet dealer can order you RPO SE4 to get this attractive package.

PART NUMBER	YEAR	DETAIL
13254959	2012-2014	18" Five-Spoke aluminum Wheel
23142296	2012-2014	18" Tire
19156306	2012-2014	Tire Instructions
23430211	2012-2014	Tire Label
23142299	2012-2014	Dealer Instruction
22863942	2012-2014	Hub Caps (Gold Bowtie)
22854866	2012-2014	Tire Pressure Monitor Valves
23430210	2012-2014	Lug Nut pack
22942442	2012-2014	Chevrolet Performance Badge



A 18-Inch Wheels and Tires

B. 1.4L Turbo Stage Kit w/High Flow Exhaust System

The Sonic Performance High Flow Exhaust system sounds and looks great, with a chrome stainless steel tip proudly showing the Chevy Bowtie to your friends! This low-restriction system and included dealer-installed calibration will provide 10 more HP (up to 148 HP) and 10% increase in torque (+15 ft.-lbs.). Kit includes exhaust system, calibration, premium fuel label and new 50 state legal emission certification label.

***NOTE**: 2012-2013 vehicles require a new high capacity 2014 manual clutch. See your dealer for Service Part Number information.*

PART NUMBER	YEAR	DETAIL
23444736	2012-2014	Exhaust Kit (1.4L turbo - Base Hatchback)
23444737	2012-2014	Exhaust Kit (1.4L turbo - RS Hatchback)
23451716	2012-2014	Exhaust Kit (1.4L - Sedan)

C. Chevrolet Performance Induction Kit

Give your 1.4L Turbo a breath of clean, cool air with this performance air intake kit. Designed for factory fit, with Performance looks. Dealer installed calibration ensures your vehicle will maintain functionality of its engine diagnostics. Kit includes air cleaner assembly, calibration authorization code, and 50 state legal emission certification label.

PART NUMBER	YEAR	DETAIL
23169952	2012-2014	Air Cleaner Kit

D. Chevrolet Performance Brake Package w/ Front Calipers

Chevrolet Performance has designed products to make your Sonic both "go" and "whoa"! To improve the braking performance characteristics of your Sonic, install this performance brake package with oversized (300mm) rotors, and red fixed bridge front calipers with the Bowtie Performance logo for everyone to see through the gaps in your performance wheels! System is validated to work with production chassis controls, traction control and antilock brakes.

***NOTE:** Available in Q3 2014*

Sonic Caliper Kit P/N 23124391 includes:

PART NUMBER	YEAR	DETAIL
23124392	2012-2014	LH Fixed Bridge Caliper
23124393	2012-2014	RH Fixed Bridge Caliper
13502064	2012-2014	Brake Rotor 300mm (2)
11516330	2012-2014	Caliper Bolts (4)
89021297	2012-2014	Knuckle Bolt Thread Locker
21012386	2012-2014	Brake Hose Washers (4)
22942442	2012-2014	Chevrolet Performance Badge
23124397	2012-2014	Installation Sheet

Chevrolet Performance Suspension Kits (not shown)

It takes a tuned suspension to complement your Sonic's performance oriented wheels and tires. The engineers at Chevrolet Performance have designed the Sonic suspension components to optimize vehicle handling performance, and improve the stance at the same time. This kit uses the "RS" fast-reacting shock valving but lowers the "RS" by 10mm, and the base model by 20mm. It utilizes the "RS" front struts assembled with a different spring and jounce bumper. The rear springs and shocks are redesigned to accommodate the new suspension travel. This package lowers the center of gravity of your vehicle, which results in improved handling.

Sonic Performance Suspension Kit P/N 23158161 includes:

PART NUMBER	YEAR	DETAIL
23158167	2012-2014	Installation Instructions
96859128	2012-2014	Front Suspension Jounce Bumper
95481254	2012-2014	Front Strut
95483008	2012-2014	Front Strut
23158165	2012-2014	Rear Shock Absorber
23158164	2012-2014	Rear Spring
23158163	2012-2014	Front Spring
22942442	2012-2014	Chevrolet Performance Badge

Sonic RS Performance Suspension Kit P/N 23158162 includes:

PART NUMBER	YEAR	DETAIL
23158167	2012-2014	Installation Instructions
23158165	2012-2014	Rear Shock Absorber
23158164	2012-2014	Rear Spring
23158163	2012-2014	Front Spring
22942442	2012-2014	Chevrolet Performance Badge



B 1.4L Stage Kit w/High Flow Exhaust



C Chevrolet Performance Induction



D Chevrolet Performance Brake Package w/Front Calipers

SONIC EXTERIOR

A. 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 only
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 Hatch back 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



A Spoiler Kit - Black



A Spoiler Kit - Inferno Orange Metallic



A Spoiler Kit - Silver Ice



A Spoiler Kit - Summit White

B. 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)

SONIC WHEELS

C. 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

D. 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



B Grille - Inferno Orange Metallic



B Grille - Summit White



C 16-Inch Wheels



C 16-Inch Wheels



D 17-Inch Wheels



D 17-Inch Wheels

Silverado Performance Upgrades



SILVERADO BED PRODUCTS

Tie Down Rings - Bed Mounted (not shown)

Enhance the cargo capability of your vehicle with these Bed Tie-Down Rings flush-mounted into the stake pockets. They recede out of sight when not in use.

PART NUMBER	YEAR	DETAIL
23146899	2014-2014	Set of 4, Removable

A. Tonneau Cover - Soft Folding

This Soft Folding 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.

PART NUMBER	YEAR	DETAIL
22895471	2014-2014	5' 8" Short Box, Hi Gloss Vinyl, Black
22895472	2014-2014	6'6" Standard Box, High Gloss Vinyl, Black
22895473	2014-2014	Black Tri-Fold, 8' Long Box

B. Tonneau Cover - Hard Folding

These Hard Folding Tonneau covers are engineered to provide quick and easy access to your truck's cargo area, while offering the ultimate protection for your cargo. The flat and smooth tri-fold desing allows easy opening and closing.

PART NUMBER	YEAR	DETAIL
19301291	2014-2014	5'8" Short Box, High Gloss Vinyl, Black
19302797	2014-2014	6'6" Standard Box, High Gloss Vinyl, Black
19302798	2014-2014	5'8" Short Box, High Gloss Vinyl, Black, with Personal Caddy
19302799	2014-2014	6'6" Standard Box, High Gloss Vinyl, Black, with Personal Caddy
22834742	2014-2014	5'8" Short Box, High Gloss Vinyl, Black
22834743	2014-2014	6'6" Standard Box, High Gloss Vinyl, Black
22834744	2014-2014	8' Long Box, High Gloss Vinyl, Black



A Tonneau Cover - Soft Folding



B Tonneau Cover - Hard Folding

C. Tonneau Cover - Soft Roll-Up

This Soft Roll-Up Tonneau Cover is constructed of durable, lightweight black grained vinyl to help protect truck bed cargo from the elements.

PART NUMBER	YEAR	DETAIL
22772361	2014-2014	Black with Embossed Bowtie Logo, Crew Cab, 5'8" Short Box
22772362	2014-2014	Black with Embossed Bowtie Logo, 6'6" Standard Box
22772363	2014-2014	Black with Embossed Bowtie Logo, 8' Long Box

D. Tool Box

This hardworking Tool Box can handle up to 250 lbs. of storage and has many great features; it mounts securely to the bed of your vehicle without drilling; integrated handle makes it easy to remove and carry, and it has a removable sliding tray with rubber mat.

PART NUMBER	YEAR	DETAIL
19170990	2014-2014	Stationary, GMC or Bowtie Logo, Diamond Patterned
19260344	2014-2014	Gull Wing Tool Box by UWS - a division of Thule®
19299117	2014-2014	Cross Over Deep Well Aluminum Toolbox by UWS A Division of Thule®
19299118	2014-2014	Cross Over Deep Well Toolbox (For Use with Aluminum Full Ladder Rack) by UWS A Division of Thule®
19302652	2014-2014	Low Profile Tool Box by UWS - a division of Thule®

SILVERADO EXTERIOR

Fuel Door (not shown)

Add personality to the exterior of your vehicle with this stylish Chrome Fuel Door.

PART NUMBER	YEAR	DETAIL
22832419	2014-2014	Chrome, 6'6" Standard Box and 8' Long Box
22832420	2014-2014	Chrome, 5'8" Short Box, Crew Cab

E. Splash Guards - Rear Flat

Help protect your Silverado from tire splash and mud with these Splash Guards that fit directly behind your rear wheels.

PART NUMBER	YEAR	DETAIL
19213393	2014-2014	Flat with Contour, Rear Set, White Bowtie Logo, Black
22894865	2014-2014	Flat with Contour, Rear Set, Black

Splash Guards - Front Flat (not shown)

Help protect your vehicle from tire splash and mud with these Front Flat Splash Guards that fit directly behind your front wheels.

PART NUMBER	YEAR	DETAIL
22894859	2014-2014	Flat with Contour, Front Set, Black

F. Splash Guards - Front Molded

Designed to accent the exterior of your vehicle, these Front Molded Splash Guards fit directly behind your front wheels to help protect your truck from tire splash and mud.

PART NUMBER	YEAR	DETAIL
22894857	2014-2014	Molded Front Set, Black Grained
22902391	2014-2014	Molded Front Set, Black (GBA)
22902392	2014-2014	Molded Front Set, Summit White (GAZ)
22902393	2014-2014	Molded Front Set, Red (GCN)
22902394	2014-2014	Molded Front Set, Silver (GAN)
22902395	2014-2014	Molded Front Set, White Diamond (GBN)

Splash Guards - Rear Molded (not shown)

Designed to accent the exterior of your vehicle, these Rear Molded Splash Guards fit directly behind your rear wheels to help protect your truck from tire splash and mud.

PART NUMBER	YEAR	DETAIL
22894863	2014-2014	Molded Rear Set, Black Grained
22902401	2014-2014	Molded Rear Set, Black (GBA)
22902402	2014-2014	Molded Rear Set, Summit White (GAZ)
22902403	2014-2014	Molded Rear Set, Red (GCN)
22902404	2014-2014	Molded Rear Set, Silver (GAN)
22902405	2014-2014	Molded Rear Set, White Diamond (GBN)



C Tonneau Cover - Soft Roll-Up



D Tool Box - Cross Over Deep Well (for Aluminum Full Ladder Rack)



E Splash Guards - Flat



F Splash Guards - Molded

A. Assist Steps

Stylish Assist Steps with textured step pads make it easier to get in and out of your Silverado. Available in 4-inch round or 6-inch rectangular, with either chrome or black powder coat finish. Both finishes add great style and excellent corrosion protection.

PART NUMBER	YEAR	DETAIL
22805432	2014-2014	4-Inch Round, Chrome, For Use on Regular Cab Models with Gas Engine (LV3)
22805434	2014-2014	4-Inch Round, Chrome, For Use on Extended Cab Models with Gas Engine (LV3, L83, L86, LC8, and L96)
22805435	2014-2014	4-Inch Round, Black, For Use on Extended Cab Models with Gas Engine (LV3, L83, L86, LC8, and L96)
22805436	2014-2014	4-Inch Round, Chrome, For Use on Crew Cab Models with Gas Engine (LV3, L83, and L86)
22805437	2014-2014	4-Inch Round, Black, For Use on Crew Cab Models with Gas Engine (LV3, L83, L86 and L96)
22805438	2014-2014	6-Inch Oval, Chrome, For Use on Regular Cab Models with Gas Engine (LV1, LV3, L83, LC8, and L96)
22805439	2014-2014	6-Inch Oval, Black, For Use on Regular Cab Models with Gas Engine (LV1, LV3, L83, LC8, and L96)
22805440	2014-2014	6-Inch Rectangular, Chrome, For Use on Extended Cab Models with Gas Engine (LV3, L83, L86, LC8, and L96)
22805441	2014-2014	6-Inch Rectangular, Black, For Use on Extended Cab Models with Gas Engine (LV3, L83, L86, LC8, and L96)
22805442	2014-2014	6-Inch Rectangular, Chrome, For Use on Crew Cab Models with Gas Engine (LV3, L83, L86, and L96)
22805443	2014-2014	6-Inch Rectangular, Black, For Use on Crew Cab Models with Gas Engine (LV3, L83, L86, and L96)

B. 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 the contour of your hood.

PART NUMBER	YEAR	DETAIL
19302679	2014-2014	Molded Hood Protector - Smoke Black

Bodyside Molding Package (not shown)

Add accent styling and protection to your vehicle with this Bodyside Molding Package in Chrome.

PART NUMBER	YEAR	DETAIL
22775457	2014-2014	Chrome, For Use on Regular Cab Models
22775458	2014-2014	Chrome
22775459	2014-2014	For Use on Extended Cabs, Chrome

SILVERADO PERFORMANCE

C. Exhaust Tip

Add a sporty appearance to your Silverado with Dual-walled Exhaust Tips made from highly polished, stainless steel.

PART NUMBER	YEAR	DETAIL
22799814	2014-2014	Bowtie Logo, Dual Wall, Angle Cut, Highly Polished
22911703	2014-2014	No Logo, Dual Wall, Angle Cut, Highly Polished for 6.0L (LC8, L96) or 6.2L (L86) Engines



A Assist Steps - 4-Inch Round, Chrome



B Molded Hood Protector



C Exhaust Tip - Bowtie Logo

SILVERADO WHEELS

D. 22-Inch Wheels

Personalize your vehicle with these attractive Accessory Wheels, validated to GM specifications. Available with center cap and lug nuts. Use only GM-approved tire and wheel combinations. See www.gmaccessorieszone.com for important tire and wheel information.

PART NUMBER	YEAR	DETAIL
19301156	2014-2014	22-Inch Wheel - CK156 Chrome - SEY
19301157	2014-2014	22-Inch Wheel - CK157 Chrome - SEZ
19301158	2014-2014	22-Inch Wheel - CK158 Chrome - SEU
19301159	2014-2014	22-Inch Wheel - CK159 Chrome - SES
19301160	2014-2014	22-Inch Wheel - CK160 Ultra-Bright Machined - High Gloss Black - SEW
19301161	2014-2014	22-Inch Wheel - CK161 Ultra-Bright Machined - Manoogian Silver - SF0
19301162	2014-2014	22-Inch Wheel - CK162 High-Gloss Black - SEV
19301163	2014-2014	22-Inch Wheel - CK163 Silver - SF1
19301164	2014-2014	22-Inch Wheel - CK164 Silver with Black Inserts - RX1
19301190	2014-2014	22-Inch Wheel - CK190 Silver with Chrome Inserts - RXN
20951981	2014-2014	22-Inch Wheels - CK981, Service Component
20984066	2014-2014	22-Inch Wheels - CK066, Service Component



D 22-Inch Wheel - SEU, Chrome



D 22-Inch Wheel - SF1, Silver



D 22-Inch Wheel - RXN, Silver with Chrome Inserts

COPO PROGRAM



COPO Camaro Program – Official Racing Engines and Vehicle Components

Chevrolet Performance's COPO Camaro program returns for 2014, led by a new production run of 69 factory-engineered, hand-assembled race cars. They advance the racing legacy established nearly 45 years ago by performance-minded dealers who used the COPO special-order system to produce high-horsepower, factory-engineered Camaros that weren't officially offered by Chevrolet.

The latest COPO Camaros are designed for the highly competitive classes in NHRA's Super Stock and Stock Eliminator ranks – just like the originals in 1969.

In addition to the development and production of the factory race cars, Chevrolet Performance offers service parts, including the specialized racing engines, used on the 2012-2013 cars. We've also added two new engines to the lineup in this catalog, the COPO 396 and COPO 350. Both are naturally aspirated, LS-based racing engines, joining the COPO 427 and a pair of supercharged 327 engines, to bring the COPO crate engine family to five. Each engine kit includes a specialized engine management system, for easier installation and set-up. Additionally, Chevrolet Performance's "COPO Camaro Build Book" (part number 88958767) provides an insider's look at the assembly of the production race cars through hundreds of color photos, which can assist racers when it comes to building their own race car.

See you on the drag strip!



17802825
COPO 427 CID

***NOTE**: Headers not included with crate engine*

COPO CRATE ENGINES

More Choices for Taking Down the Competition!

Chevrolet Performance has thrown open the R & D doors at COPO headquarters to offer the same high-performance engines used in the COPO Camaro production race cars. Each is engineered for NHRA's Stock Eliminator and Super Stock classes, offering sportsman racers a range of factory-developed-and-assembled racing engines.

The COPO crate engine family grows to five for 2014 and includes a naturally aspirated 427 engine (7.0L), two supercharged 327 (5.3L) engines – one using a Whipple twin-screw 2.9L supercharger and the other using a 4.0L Whipple supercharger – and all-new 396-cubic-inch and 350-cubic-inch naturally aspirated engines. Each is assembled by hand at the same specialty build facility responsible for all of the Chevrolet Performance racing engines.

The 350, 396 and 427 COPO engines make the car eligible for NHRA Stock Eliminator classes from AAA/S to D/S, based primarily on curb weight and horsepower ratings. The 327/4.0L S/C engine puts the car in SS/AA and SS/A.

Chevrolet Performance engineers designed and tested the engines with the same methods used to develop production engines, ensuring their performance and durability.

COPO 427

17802825 (2012-2013)

425 HP

The COPO 427 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 4.000
Crankshaft:	Forged steel
Connecting Rods:	Forged steel
Pistons:	Forged dome
Cylinder Heads:	LS7 aluminum
Induction:	natural
Intake Manifold:	Holley Hi-Ram
Camshaft Type:	Hydraulic roller
Camshaft Lift (int./exh.):	.630/.630-inch
Camshaft Duration (int./exh.):	233/276 deg. @ .050-inch





COPO 350 NEW

19301609 (2013)

325 HP

The entry-level COPO racing engine is a bit of a sleeper, that has capabilities far beyond what the modest specs might indicate. It's high-flow LS3 cylinder heads help deliver high rpm power, that will move the car through the top-end lights quickly.

SPECS

Displacement:	350 cu in (5.7L)
Compression Ratio:	10.7:1
Cylinder Block:	LS7 cast aluminum
Bore x Stroke (in):	4.125 x 3.270
Crankshaft:	Forged steel
Connecting Rods:	Forged steel
Pistons:	Forged dome
Cylinder Heads:	LS3 aluminum
Induction:	natural
Intake Manifold:	Holley Hi-Ram
Camshaft Type:	Hydraulic roller
Camshaft Lift (int./exh.):	.525/.525-inch
Camshaft Duration (int./exh.):	226/236 deg. @ .050-inch



COPO 396 NEW

19301608 (2013)

375 HP

With the displacement of a classic Chevrolet Big-Block, the lightweight, all-aluminum COPO 396 racing engine delivers power reminiscent of vintage muscle cars, but with the high-rpm capability and vehicle balance dynamics that only an LS engine can deliver. An all-forged rotating assembly makes it a durable performer, too!

SPECS

Displacement:	396 cu in (6.5L)
Compression Ratio:	10.5:1
Cylinder Block:	LS3 cast aluminum
Bore x Stroke (in):	4.065 x 3.825
Crankshaft:	Forged steel
Connecting Rods:	Forged steel
Pistons:	Forged flat top
Cylinder Heads:	LS3 aluminum
Induction:	natural
Intake Manifold:	Holley Hi-Ram
Camshaft Type:	Hydraulic roller
Camshaft Lift (int./exh.):	.595/.595-inch
Camshaft Duration (int./exh.):	233/276 deg. @ .050-inch



COPO 327– 2.9L S/C

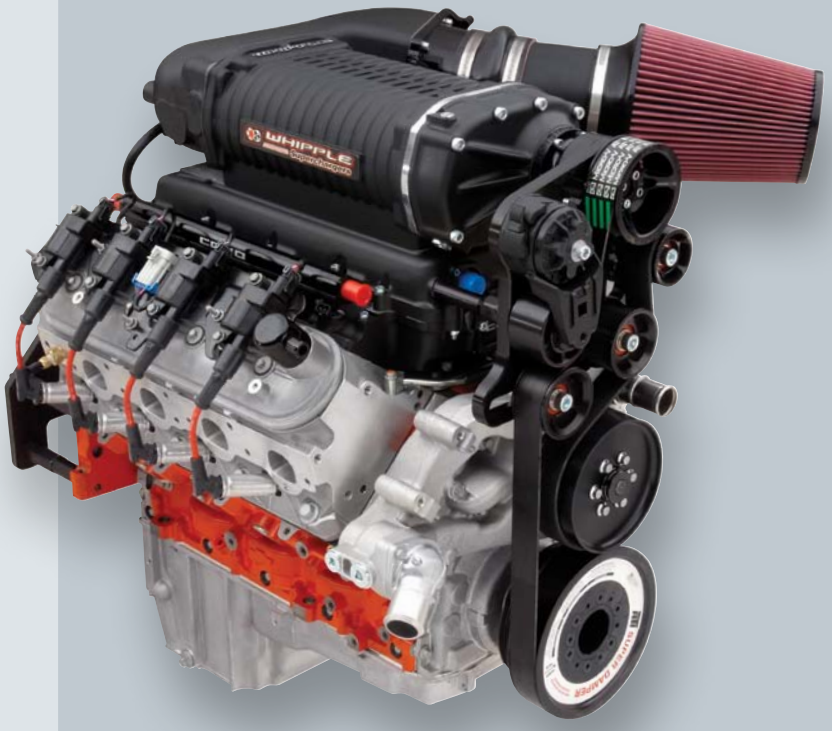
17802826 (2012)

500 HP

Don't let the smaller displacement fool you. This COPO racing engine packs a supercharged punch, thanks to a 2.9L Whipple twin-screw supercharger. It forces air into a pair of LSX-LS7 6-bolt heads mounted on a strong LSX Bowtie block, for a potent combination of exceptional power and strength.

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:	LSX-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 (2012)

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 LSX-LS7 6-bolt 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:	LSX-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



19301614
Long-Block Engine – COPO 396/375

- Replacement long-block engine
- For factory COPO 396/375
- COPO 427/425 P/N19299607
- COPO 350/327 P/N19301615



17802828
Throttle Body – COPO 427/425

- Mechanical throttle body used on COPO racing engines, COPO engraved on top of housing
- COPO 396/375 and 350/325 P/N19301616
- COPO 327/2.9L S/C P/N19300083
- COPO 327/4.0L S/C P/N19300085



17802810
COPO 427/425 Intake

- The COPO race-only intake manifold is a Holley Hi-Ram with a throttle body and fuel rails
- COPO logo engraved on throttle body (see inset)
- COPO 350/325 and 396/375 P/N19301195



19301559
COPO 350/325 Steel Replacement Crank Shaft

- Crankshaft for COPO engines
- COPO 396/375 P/N19301270
- COPO 427/425 P/N19299608

19301556
COPO 396/375 Piston (flat top)

- Forged aluminum piston with rings



19301558
COPO 350/325 Piston (dome top)

- Forged aluminum high-dome piston with rings



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 427 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.

NOTE: *All COPO 350 and 396 racing cylinder heads are built with the same "Max-life" valve springs and hardened spring seats as the 327S/C and the 427 N/A, plus, they include light-weight hollow-stem LS3 intake valves and light-weight LS9 hollow-stem exhaust valves.*



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**



COPO LS7-Style Intake Valve **D**



COPO LS7-Style Exhaust Valve **E**



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



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



COPO Alternator Kit **H**



COPO Injector Harness **I**

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.

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.

G. 12579617
COPO LS7-Style Exhaust 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.

H. 19299546
COPO Alternator Kit
High-output alternator mounting kit designed for proper clearance in the factory-built COPO Camaro drag race vehicles.

I. 19299611
COPO Injector Harness
Designed to fit all normally aspirated COPO engines with Hi-Ram intake manifold.

19299612 (not shown)
COPO Injector Harness
Designed to fit all supercharged COPO engines.

COPO ENGINE COMPONENTS

A. 19301143
Fuel Rail Fittings
Set of four fuel rail fittings for all normally aspirated COPO engines.

B. 19301144
Oil Pump
LS production-style geroter-type oil pump modified to maintain oil pressure at high rpm's for engines using a conventional wet-sump lubrication system.

C. 19299313
Damper/Hub Pulley Kit
Special Chevrolet Performance/ATI SFI-approved harmonic damper with front hub adapter, pulley and engine damper.

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.



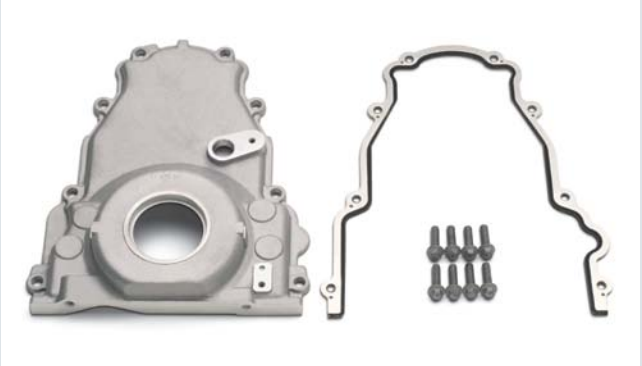
A Fuel Rail Fittings



B Oil Pump



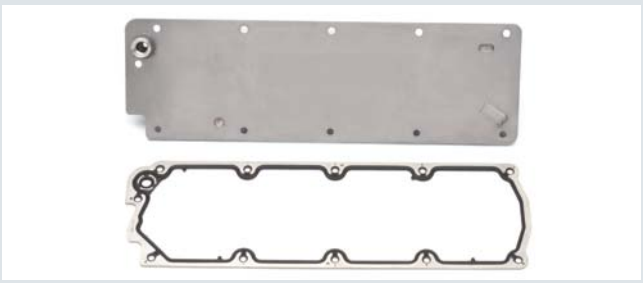
C Damper/Hub Pulley Kit



D Front Engine Block Cover Kit



Rear Engine Block Cover Kit **E**



Valley Cover Kit **F**



Air Induction Tube **G**



Air Induction Tube **H**



Air Induction Tube **I**

E. 12633904
Rear Engine Block Cover Kit
Rear engine cover for Gen IV Small-Block. Kit includes cover, cover gasket and rear crankshaft seal.

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*
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.

H. 19300087
Air Induction Tube*
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.

I. 19299621
Air Induction Tube*
Air Intake – 7.0L (427) Engine
Air intake system for use with 7.0L 427 COPO crate engine 17802825, with 4.0L supercharger.

**Chevrolet Performance does not service the COPO air filter elements. Replacement air filter elements are readily available in the retail automotive aftermarket*

COPO ENGINE CONTROL MODULES AND HARNESSES

PART NUMBER	DETAIL
19299289	Engine Control Harness
19299610	Engine Control Jumper (427)
19299611	Injector Harness (427)
19299612	Injector Harness (327)
19299290	Engine Control Harness Jumper (327) Both
19299291	Engine Control Harness Jumper (327)/4.0L
19299292	Engine Control MEFI 5-427
19299293	Engine Control MEFI 5-327/2.9

PART NUMBER	DETAIL
19299294	Engine Control MEFI 5-327/4.0
TK40015*	Crank Case Breather Cam
19299546	Alternator Mount Kit
10480003	Alternator
12223861	Map Sensor
12569240	Map Sensor (427)
10480003	COPO LS Starter Assembly

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 our Chevrolet Performance Camaro bodies-in-white and build your COPO your way!

A. 19243374
Camaro Body-in-White
Chevrolet Performance's Gen V 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.

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 and the COPO logo embossed on the underside. Designed for hinged/strut opening or adaptable to racing hood pins. Delivered ready to paint.



A Body-in-White



B COPO Camaro Cowl-Induction Hood (Top)



B COPO Camaro Cowl-Induction Hood (Underside)



Rear Suspension Installation Kit **C**



Powertrain Mounting Kit **D**



NEW COPO Switch Kit **E**



COPO Gauge Housing Panel **F**

C. TK10004
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. TK20001
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.

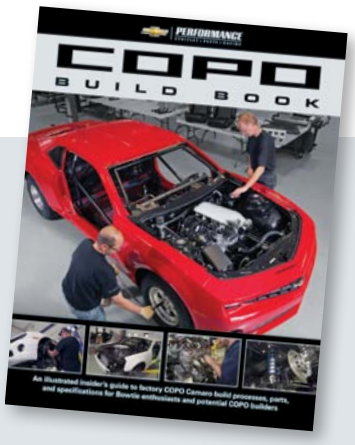
E. TK30001 NEW
COPO Switch Panel Assembly*
Powertrain switch kit includes switches and jumper connector to plug into COPO wiring harness (not included). Switches include engine start/stop, ignition, fuel pump and auxiliary fan.

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

F. TK70002
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). Mounts on the instrument panel.

**Not serviced by Chevrolet Performance. To order, contact COPO Parts Direct at: 855.267.6685 or www.COPOpartsdirect.com*

The COPO Build Book is Here!



88958767
COPO Build Book
The COPO Build Book provides all the information you need to build your own COPO Camaro including specs, part numbers and more.

For the latest information, head to chevrolet.com/performance.

COPO VEHICLE COMPONENTS

Gauges

A. 3699-00406
Tachometer
5" Tach, 10,000 RPM with shift indicator light.

B. 3653-00406
Oil Pressure
2-5/8" Oil pressure - 0-100PSI

C. 3699-00406
Water Temperature
2-5/8" Water Temperature - 120°- 240°

D. 3699-00406
Voltmeter
2-5/8" Voltmeter - 8-18 volts

E. 3699-00406
Transmission Temperature
2-5/8" Trans Temperature - 100°- 260°

F. 3699-00406
Fuel Pressure

NOTE: *GM License Parts. See page 362 for more information.*



A Tachometer



B Oil Pressure



C Water Temperature



D Voltmeter



E Transmission Temperature



F Fuel Pressure

COPO GRAPHICS

G. COPO Camaro 2012 Graphics Package
Add a touch of color to your Camaro race car. Original equipment option on 2012 COPO Camaro.

PART NUMBER	DETAIL
23162259	Chevy Racing Blue (not shown)
23162260	Metallic White (not shown)
23162261	Flat Black (not shown)
23162262	Inferno Orange

H. COPO Camaro 2013 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.

PART NUMBER	DETAIL
22951639	Inferno Orange (not shown)
22951636	Chevy Racing Blue
22951637	Metallic White (not shown)
22951638	Flat Black (not shown)



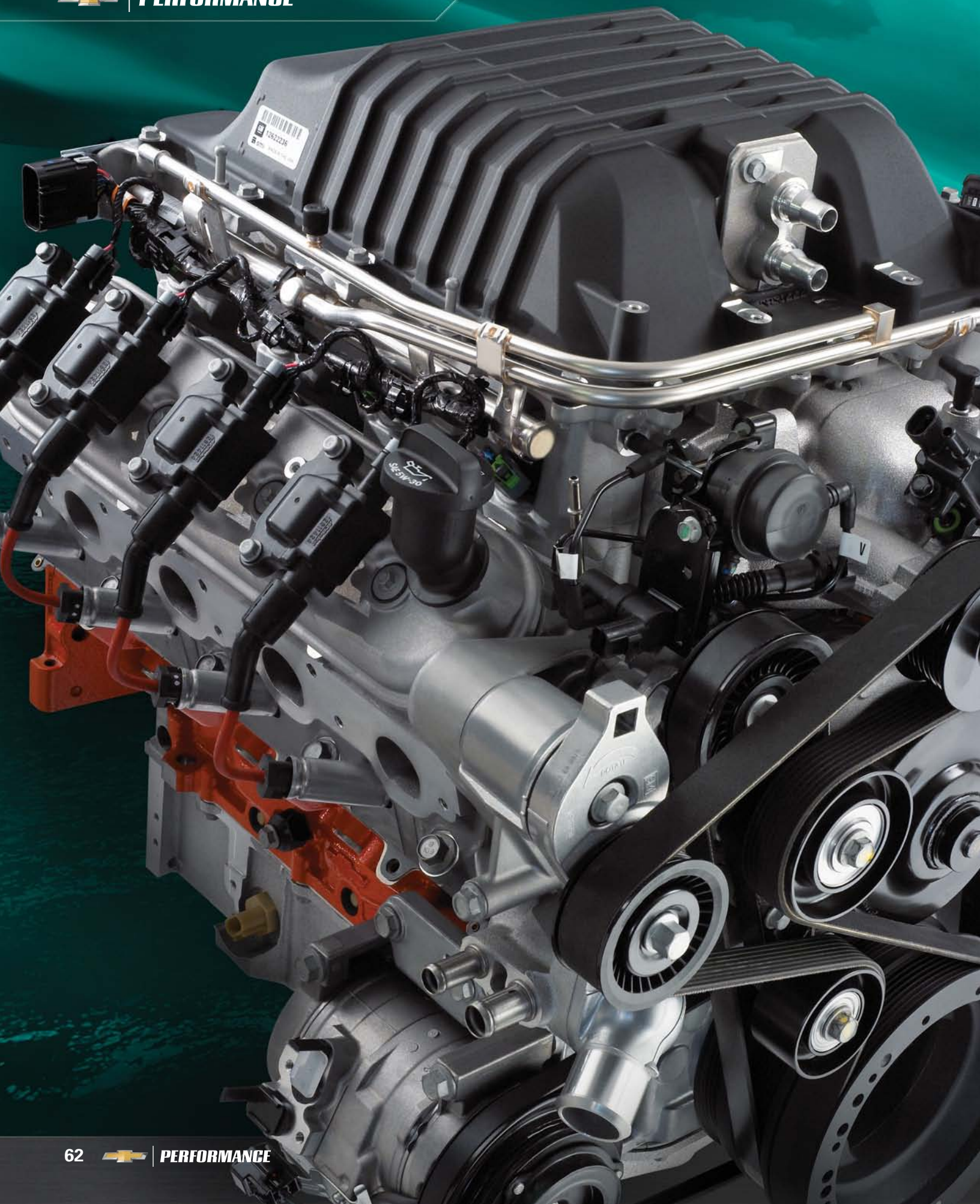
G COPO Camaro 2012 Graphics Package



H COPO Camaro 2013 Graphics Package

2013/2012 COPO Camaro Service Parts

		2013			2012		
ITEM	QTY	427	396	350	427	327 w/2.9 SC	327 w/ 4.0L
Engine assembly	1	17802825	19301608	19301609	17802825	17802826	17802827
Harness, engine control	1	19301111	19301111	19301111	19299289	19299289	19299289
Harness, engine control jumper	1	19301112	19301112	19301112	19299610	19299290	19299291
Harness, injector	1	19299611	19299611	19299611	19299611	19299612	19299612
Module, engine control	1	19302703	19302704	19302705	19299292	19299293	19299294
Air induction tube	1	19299621	19299621	19299621	19299621	19299624	19300087
Air Filter	1	19299622	19299622	19299622	19299622		
Mount kit, Alternator	1	19299546	19299546	19299546	1929546	19299546	19299546
Engine assembly	1	17802825	19301608	19301609	17802825	17802826	17802827
Collector edition and Crate Engine	1	17802825	19301608	19301609	17802825	17802826	17802827
Long Block assembly	1	19299607	19301614	19301615	1929607	17802803	17802803
Intake Kit	1	17802810	19301195	19301195	17802810	Whipple	Whipple
Fuel Rail Fittings	4	19301143	19301143	19301143	19301143	Whipple	Whipple
Throttle Body	1	17802828	19301616	19301616	17802828	19300083	19300085
Throttle cable bracket	1	19299618	19299618	19299618	19299618	19299623	19299623
Valve Cover breather cap	2	19299619	19299619	19299619	19299619	19299619	19299619
Crankshaft	1	19299608	19301270	19301559	19299608	17802815	178028515
Rods	8	17802817	19301271	17802816	17802817	17802816	17802816
Piston w/ Rings	8	17802821	19301556	19301558	17802821	17802823	17802823
Rings	8	17802822	19301557	17802822	17802822	Mahle	Mahle
Oil Pump	1	19301144	19301144	19301144	19301144	19301144	19301144
Damper assembly	1	19299313	19299313	19299313	19299313	17802805	17802805
Pick Up Tube	1	19301149	19301149	19301149	19301149	19301149	19301149
Head Gasket, LH	1	19301211	12622033	12582179	19301211	FP MLS1162-L053	FP MLS1162-L053
Head Gasket, RH	1	19301212	12622033	12582179	19301212	FP MLS1161-R053	FP MLS1161-R053
Head w/ Valves	2	17802818	12629063	12629063	17802818	17802818	17802818
Head assembly	1	17802804	19302061	19302061	17802804	17802804	17802804
Retainer, intake	4	17802819	17802819	17802819	17802819	17802819	17802819
Retainer, exhaust	4	17802819	12596508	12596508	17802819	17802819	17802819
Push Rods	16	12593344	19301617	19301617	12593344	12593344	12593344
Valve Cover	2	19301147	19301147	19301147	19301147	19301147	19301147
Oil Dipstick tube	1	12570788	12570788	12570788	12570788	12570788	12570788



CRATE ENGINES

Get the Power and Dependability Your Project Deserves from the Company that Pioneered Performance Crate Engines – Chevrolet Performance!

Selecting a crate engine is one of the biggest choices and most important investments you'll make for your project vehicle – and nobody offers a greater range of choices than Chevrolet Performance.

We're the only manufacturer offering three engine families to choose from, with each and every crate engine designed, validated and built with the same quality and performance standards that go into GM production engines. And 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, giving you greater assurance that the engine you invest in will deliver on its promise of performance and durability.

For the ultimate in crate-engine convenience, Chevrolet Performance's Connect & Cruise powertrain systems match a high-performance LS crate engine with complementing transmission – including all the necessary controllers and installation hardware. See page 198 for more details.

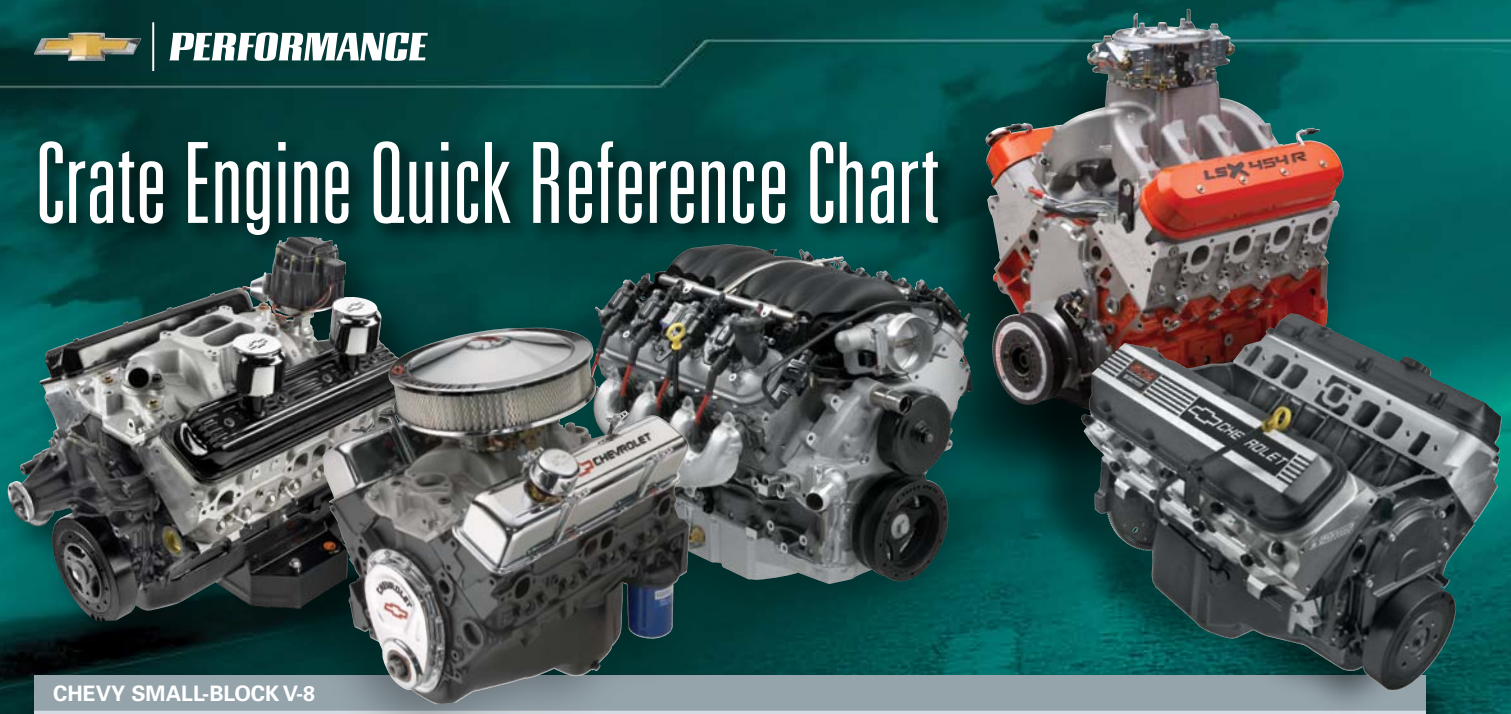
We also offer the emissions-compliant line of E-ROD crate engine packages, which include features such as catalytic converters and an evaporative emission canister. Each of our E-ROD engine packages carry a California Air Resources Board Executive Order number, making them legal for installation in more than 20 million pre-1996 vehicles in California. See page 194 for more information.

Chevrolet Performance pioneered the concept of high-performance crate engines more than 40 years ago, so you can take the guesswork out of powering your project vehicle – and spend more time enjoying it on the road!

Featured here is the LSX376-B8 P/N 19260831 (oil pan, supercharger and front-end accessory drive not included with engine)

For more information, see page 208

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	88	
12499529	350/290 HP—Economy Performance Engine	350 cu in	352	290	332	A	89	
19210009	350 HO Turn-Key—with Iron Vortec Heads	350 cu in	575	330	380	A	90	
19210008	350 HO Deluxe—with Iron Vortec Heads	350 cu in	481	330	380	A	91	
19210007	350 HO Base—with Iron Vortec Heads	350 cu in	298	330	380	A	91	
19201330	ZZ4 350 Turn-Key—with Aluminum Heads	350 cu in	511	355	405	A	92	
24502609	ZZ4 350 Base—with Aluminum Heads	350 cu in	379	355	405	A	93	
12561723	ZZ4 350 Partial Engine	350 cu in	223	N/A	N/A	A	93	
12499120	Ram Jet 350—PFI with Iron Vortec Heads	350 cu in	517	350	400	A	94	
19301293	ZZ5 350 Base	350 cu in	510	400	400	A	96	
19301294	ZZ5 350 Turn-Key	350 cu in	410	400	400	A	98	
12499101	HT383 Base—Performance Engine	383 cu in	405	340	435	A	100	
12499106	383 Partial Engine	383 cu in	335	N/A	N/A	A	101	
17800393	HT383E	383 cu in	450	340	435	A	102	
19154775	ZZ383 Base	383 cu in	410	450	450	A	104	
19301295	ZZ383 Deluxe	383 cu in	410	450	449	A	106	

CIRCLE TRACK RACING ENGINES

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19258602	CT350	350 cu in	451	350	390	N/A	110	
88958603	CT355	350 cu in	402	355	405	N/A	112	
19318604	CT400	350 cu in	466	400	400	N/A	114	
19271821	CT525	376 cu in	415	525	471	N/A	116	

*RECOMMENDED TRANSMISSIONS

A
19260380
Hydra-Matic 4L65-E
Four-Speed Automatic
See page 336 for details

B
19299055
SuperMatic™ 4L70-E
Four-Speed Automatic
See page 336 for details

C
19300175
SuperMatic™ 4L85-E
Four-Speed Automatic
See page 336 for details

LS FAMILY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19259918	LC9 5.3L	5.3L	–	320	335	A	176	
19244096	LS327/327 Deluxe Kit	5.3L	–	327	347	A	178	
19165628	LS327/327—Base Assembly	5.3L	433	327	347	A	179	
19301326	LS3 6.2L—Corvette Gen IV V-8	6.2L	415	430	424	A	180	
19301358	LS376/480—EFI LS3 Gen IV V-8	6.2L	415	480	475	B	182	
19301359	LS376/515—Carbureted LS3 Gen IV V-8	6.2L	415	515	469	B	184	
19301360	LS376/525—EFI LS3 Gen IV V-8	6.2L	415	525	489	B	186	
19260164	LSA 6.2L SC	6.2L	–	556	551	C	188	
19244099	LS9 6.2L SC	6.2L	–	638	604	N/A	190	
19244098	LS7 7.0L—Corvette Z06	7.0L	440	505	470	B	192	

LSX FAMILY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	hp	Torque	Trans*	Page	Warranty
19260831	LSX376-B8	6.2L	–	450	444	B	208	
19299306	LSX376-B15	6.2L	–	450	444	B	210	
19260833	LSX454—Base Assembly	7.4L	–	620	590	N/A	212	
19260835	LSX454R	7.4L	–	770	612	N/A	214	

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	C	266	
19166393	ZZ427/480	427 cu in	520	480	490	C	268	
12568774	454 HO—with Iron Heads and Roller Cam	454 cu in	590	425	500	C	270	
12498778	454 Partial Engine	454 cu in	361	N/A	N/A	C	271	
12498777	ZZ454/440—440 Horsepower with Aluminum Heads	454 cu in	522	440	500	C	272	
88890534	HT502—Truck Replacement Engine	502 cu in	557	377	512	C	274	
12568782	502 Partial Engine	502 cu in	402	N/A	N/A	C	275	
12568778	502 HO—with Iron Heads and Roller Cam	502 cu in	602	450	550	C	276	
19201332	ZZ502 Deluxe—Assembled Kit, with Aluminum Heads	502 cu in	611	502	567	C	278	
12371171	ZZ502 Deluxe—Unassembled Kit, with Aluminum Heads	502 cu in	602	502	567	C	279	
12496963	ZZ502 Base Engine, with Aluminum Heads	502 cu in	504	502	567	C	280	
12371204	ZZ502 Base —Unassembled Kit, with Aluminum Heads	502 cu in	532	502	567	C	281	
12499121	Ram Jet 502—PFI with Aluminum Heads	502 cu in	608	502	565	C	282	
19201333	ZZ572/620 Deluxe	572 cu in	580	620	650	C	284	
12498792	ZZ572/620 Base	572 cu in	514	620	650	C	285	
19201334	ZZ572/720R Deluxe	572 cu in	–	720	685	C	286	
19256938	Vortec 8.0L	484 cu in	602	315/375*	390/475*	–	288	

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

**Rating with CNG/Rating with Gasoline*

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.

Torque Converter Quick Reference Chart

AUTOMATIC TRANSMISSION TORQUE CONVERTER MATCH LISTING

Engine P/N	Description	Displac.	hp	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
19301294	ZZ5 Turn-Key—with Aluminum Vortec Heads	350	400	400	19299801	3000-3400	19299805	3000-3400
12499101	HT383 Base—Performance Engine	383	340	435	19299800	2400-2800	19299804	2400-2800
19301295	ZZ383—High Performance Engine	383	450	450	19299801	3000-3400	19299805	3000-3400
CHEVY LS/LSX V-8								
19259918	LC9—5.3L	6.2	326	350	19299802	2400-2800	19299806	2400-2800
19258004	LC9—E-Rod Kit Automatic	5.3	326	350	19299802	2400-2800	19299806	2400-2800
19301326	LS3—Corvette Gen IV V-8	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19257230	LS3—E-Rod Kit Automatic	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19301358	LS376/480—LS3 Gen IV V-8	6.2	480	475	19299803	3000-3400	19299807	3000-3400
19301359	LS376/515—Carburated LS3 Gen IV V-8	6.2	515	469	19299803	3000-3400	19299807	3000-3400
19301360	LS376/525 LS3 Gen IV ASA Camshaft	6.2	525	489	19299803	3000-3400	19299807	3000-3400
19260164	LSA—Supercharged Gen IV V-8	6.2	556	551	N/R		19299806	2400-2800
19260165	LS9—Supercharged Gen IV V-8	6.2	638	604	N/R		19299806	2400-2800
19244098	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
19260831	LSX376—B8	6.2	450	444	19299802	2400-2800	19299806	2400-2800
19299306	LSX376—B15	6.2	450	444	N/R		N/R	
19260833	LSX454	7.4	620	590	N/R		19299807	3000-3400
19260835	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
19201333	ZZ572/620 Deluxe	572	620	650	N/R		19299805	3000-3400
19201334	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.



RAM JET 350

Vintage Style and Modern Performance!

Classic styling meets modern performance in the Ram Jet 350! We have preserved the legendary Rochester mechanical injection look, but given it the fuel management advances of electronic port injection. A cast-iron block and crank are matched with a hydraulic roller cam and Vortec heads to produce 350 horses and 400 lb.-ft. of torque. And, with the high-rise styling, this is an ideal powerplant for a '50s or '60s era resto-mod project.

Image shown includes the Ram Jet 350 Engine P/N 12499120 along with the following additional Chevrolet Performance parts:

Deluxe Accessory Drive Kit 12497698
Valve Cover Adapters 24502540
Chrome Short Valve Covers 12341670
Push-In Oil Filler Cap 12341993
Chrome Water Neck 12342024
Spark Plug Wire Loom Kit 141-638*
Chrome Breather Cap 141-616*

To learn more about this engine, please turn to page 94.

** For more information on these and other Licensed Parts, turn to page 352.*

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




RAM JET PFI
PERFORMANCE PARTS
CHEVROLET


CHEVROLET
CHEVROLET

NEW

ZZ5 350



The Next Chapter in the Iconic 'ZZ' Engine Legacy!

Chevrolet Performance engineers keep innovating! They've added new cylinder heads that use LS-style beehive valve springs for stronger and more durable high-rpm performance. The result is 400 horsepower – making the new ZZ5 the most powerful 350 crate engine we've ever offered! We offer it in Base, and Turn Key packages. Pick the one that's right for you and enjoy the revs!

Image shown includes the ZZ5 350 Base Engine P/N 19301293 along with the following additional Chevrolet Performance parts:

Chrome Air Cleaner and Bowtie Nut 12342080
Chrome Valve Covers 12341670
Lightweight Starter (remanufactured) 10465143
Street Performance Fuel Pump 12355612
Distributor 93440806
Holley 670-cfm Carburetor 19170092
Chrome Breather Cap 12341989
Chrome Water Neck 12342024
Push-in Oil Filler Cap 12341993
Spark Plug Wire Set 12361051
Chrome Valve Cover Wingnuts 141-600*

To learn more about this engine, please turn to page 96.

** For more information on these and other Licensed Parts, turn to page 352.*

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

ZZ383

NEW

New Heads Make this Stroker Even Stronger!

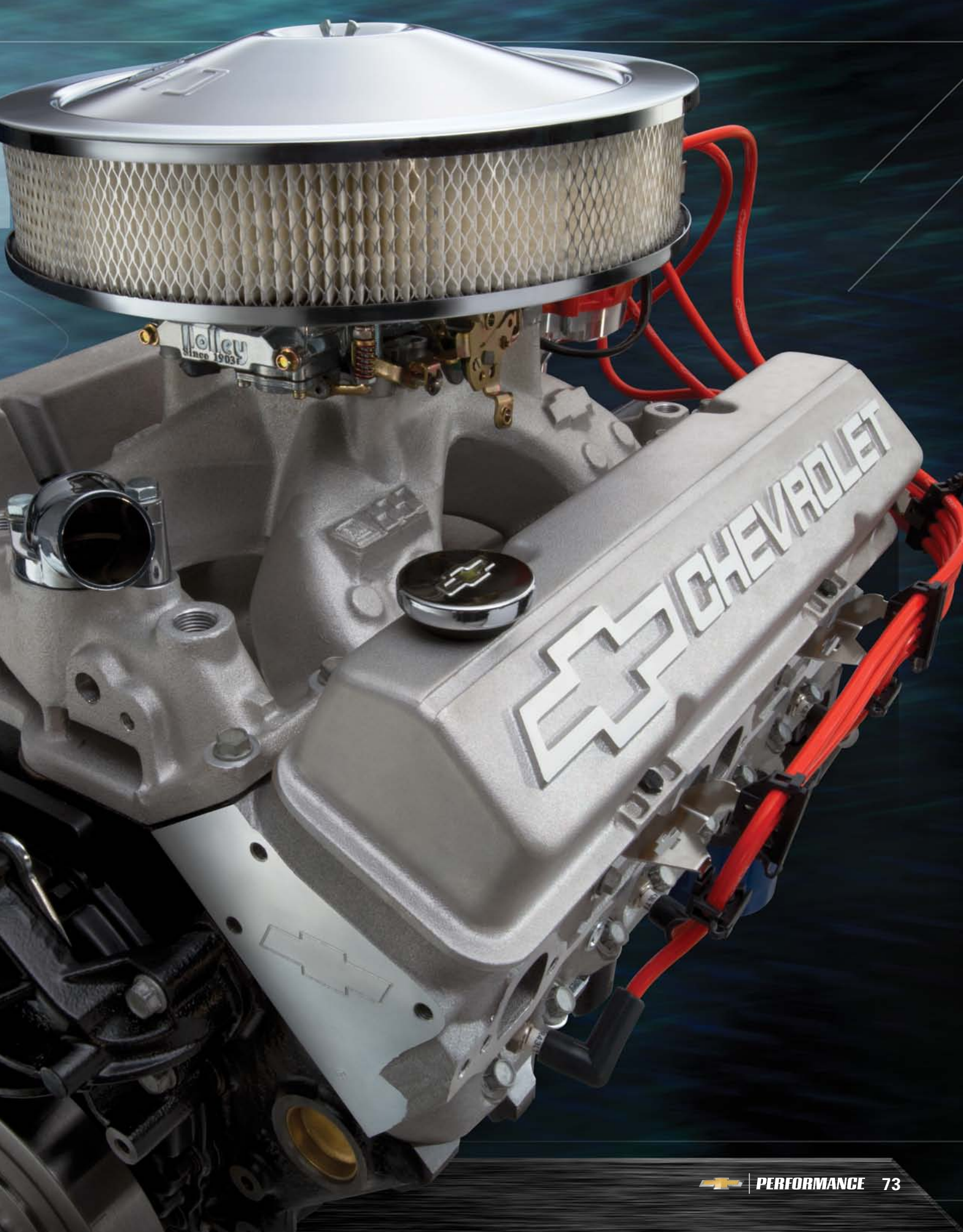
Thanks to new versions of the Fast Burn cylinder head design, Chevrolet Performance's big-torque ZZ383 is more powerful than ever. The new heads use LS-style beehive valve springs to enable greater high-rpm performance and durability. That means you get the great, low-rpm torque the ZZ383 is known for, with more power – 450 horses that transform your muscle car, street rod or classic truck into a grin-inducing tire-shredder!

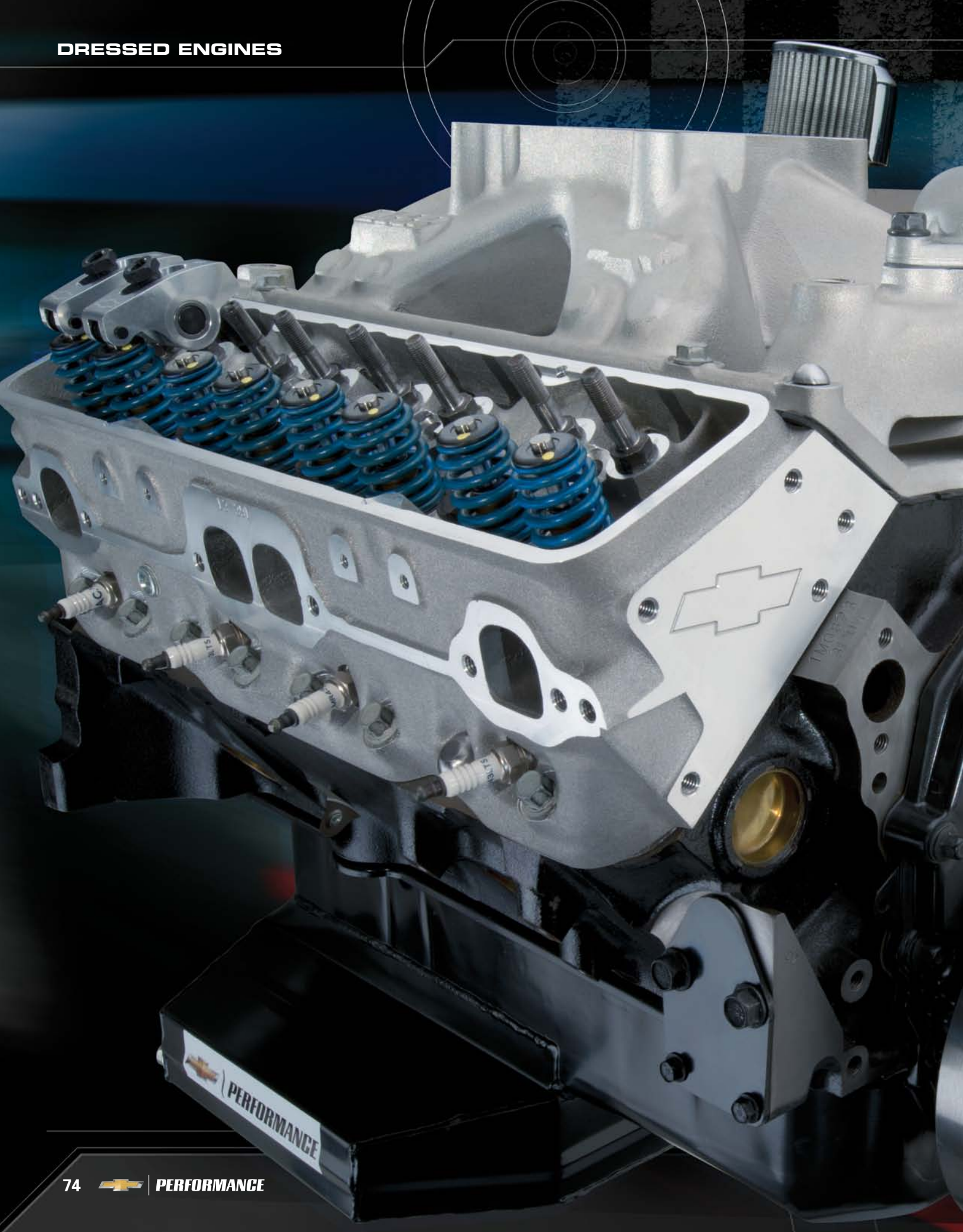
Image shown includes the ZZ383 Deluxe Engine P/N 19301295 along with the following additional Chevrolet Performance parts:

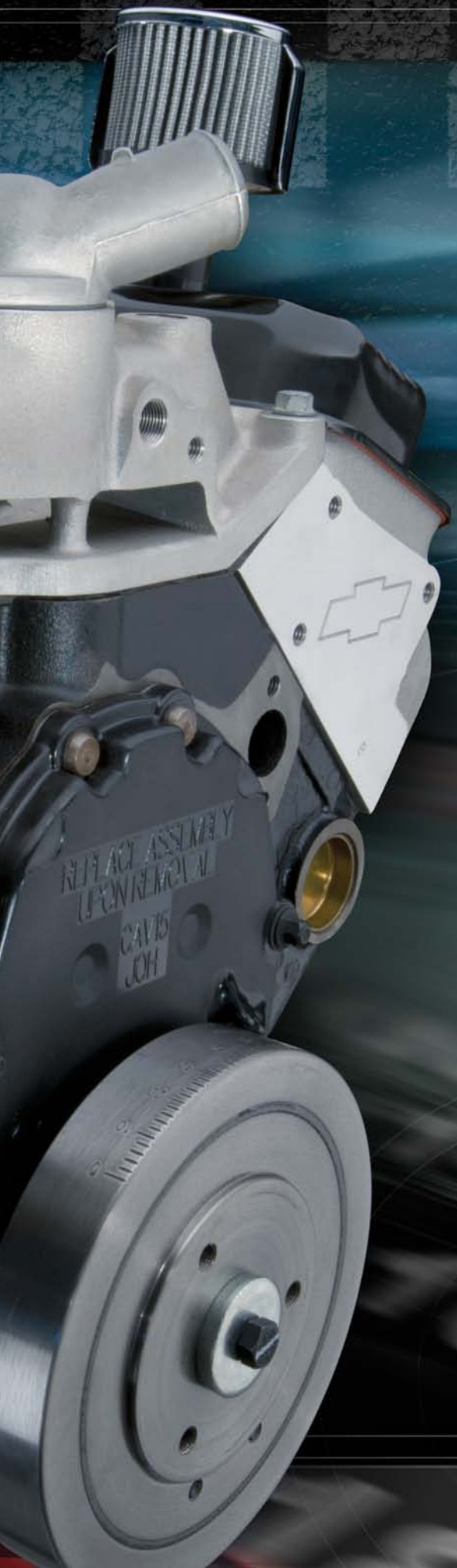
Distributor	**93440806**
Chevrolet Logo Chrome Air Cleaner	**12342071**
Holley 670-cfm Carburetor	**19170092**
Raised-Letter Bowtie Valve Covers	**12480127**
Chrome Breather Cap	**12341989**
Push-In Oil Filler Cap	**12341993**
Chrome Water Neck	**12342024**
Spark Plug Wire Set	**12361051**
Wire Loom Kit	**12496806**
High Capacity Fuel Pump	**6415325**
Chrome High-Torque Mini Starter	**12363128**

To learn more about this engine, please turn to page 106.

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


Holley
Since 1903
CHEVROLET


PERFORMANCE



CT400

New High-RPM Valvetrain for Winning Performance!

When it comes to winning, engine durability is as crucial as horsepower, and Chevrolet Performance has made a big leap in high-rpm durability with the new CT400. We've matched the proven bottom end with new versions of the Fast Burn cylinder head that use LS-style beehive valve springs, for greater high-rpm performance and durability. It's the combination you need to keep you at the front of the pack – race after race!

- **Incorporates new beehive style valvespring for increased durability**
- **New nodular-iron balancer with engraved timing marks**

To learn more about this engine, please turn to page 114.

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

LS7 7.0L

A High-Performance Legend in Its Own Time!

In the hall of fame of high-performance engines, the LS7 ranks with history's best, such as the L88 427 and LS6 454. This assembly of modern muscle made its mark in the Corvette Z06 and is now the exclusive engine in the all-new, track-capable Camaro Z/28. And whether you use it for your pro-touring first-Gen Camaro or a resto-mod Chevelle, you'll be driving with a living legend under the hood – all 505 horsepower's worth of it!

Image shown includes the LS 7 7.0L Engine P/N 19244098 along with the following additional Chevrolet Performance parts:

Holley 870-cfm Carburetor 19170094

LS7 4-Bbl Intake Manifold 25534394

Center Bolt Competition Valve Covers

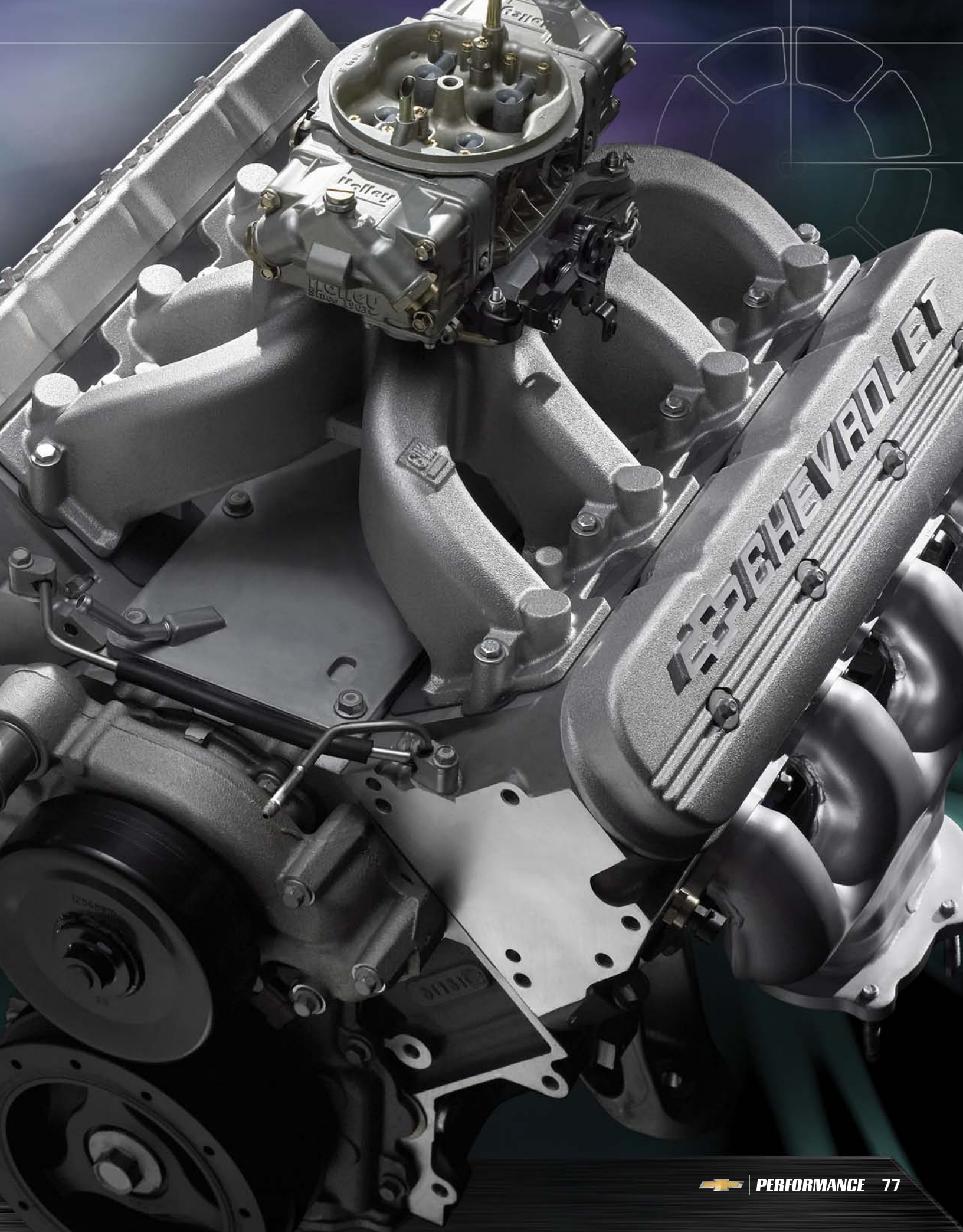
- Valve Cover with breather hole 25534398
- Valve Cover without breather hole 25534399

Push-In Oil Filler Cap 12341993

To learn more about this engine, please turn to page 192.

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




CHEVROLET


LS9 SUPERCHARGED
CORVETTE

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.

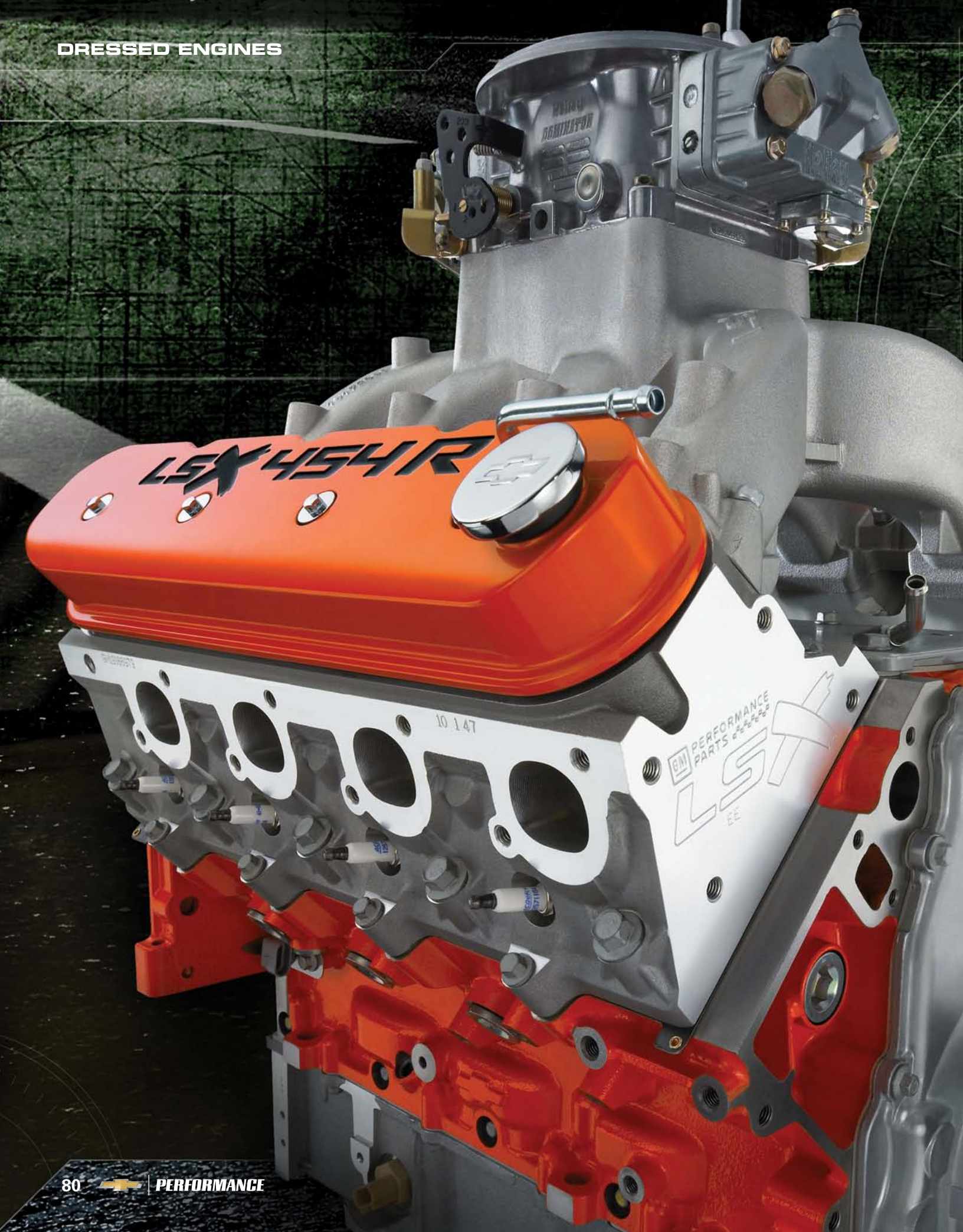
Image shown includes the LS9 6.2L Engine P/N 19244099 along with the following additional Chevrolet Performance parts:

Corvette Engine Cover 12631086

Deluxe Accessory Drive Kit 19243524

To learn more about this engine, please turn to page 190.

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


LSX454R
PERFORMANCE PARTS
LS7

LSX454R

A Strategic Weapon for Winning on the Drag Strip!

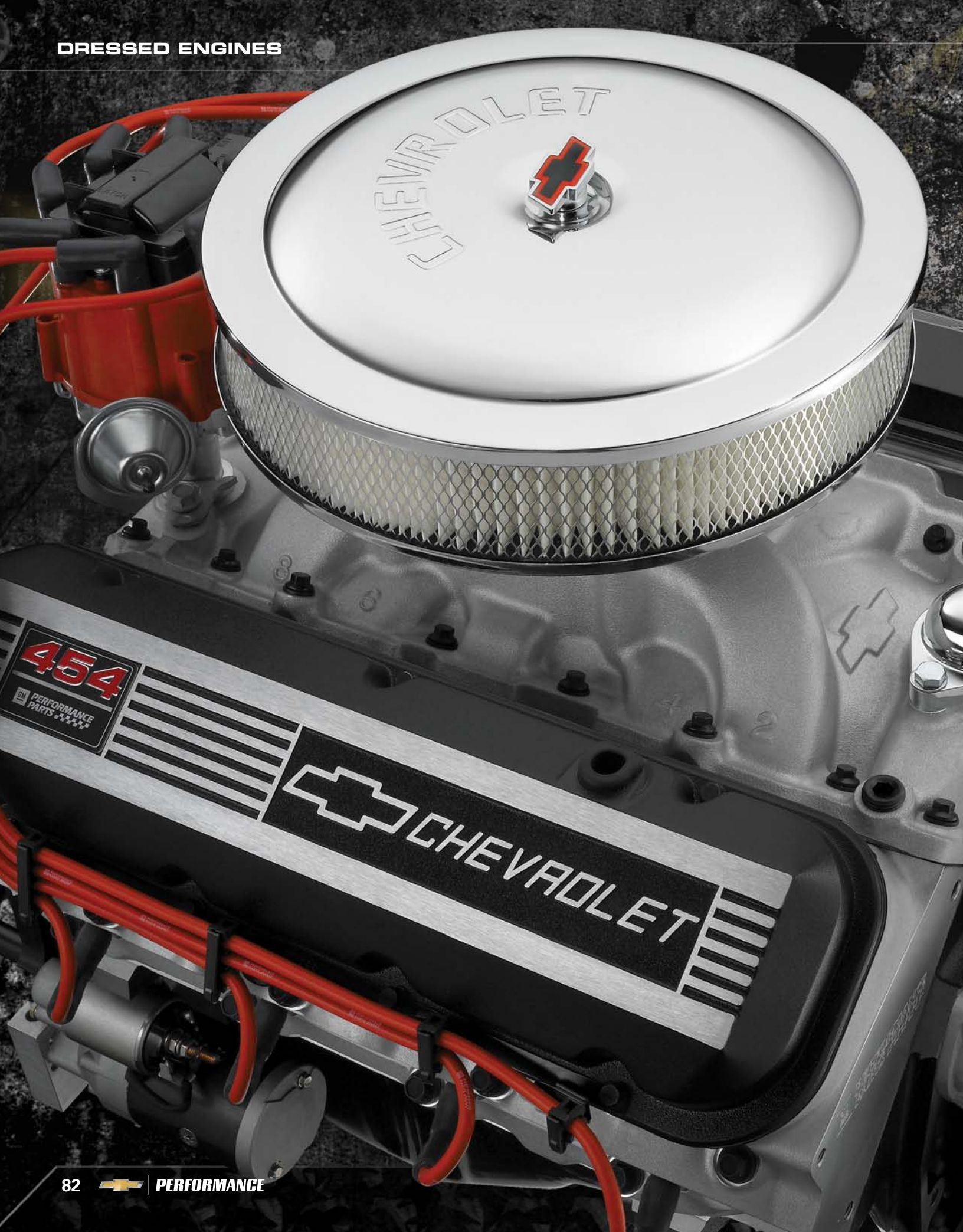
Chevrolet Performance designed the LSX454R for the heads-up, high-rpm demands of drag racing, delivering at least 750 horsepower that will help you win races. It is a high-compression, solid-roller combination that uses our six-bolt, 11-degree LSX DR cylinder heads. They feature raised ports that provide 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 214.

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




CHEVROLET
454
GM PERFORMANCE PARTS
CHEVROLET

ZZ454/440

We've Got Your Torque Right Here!

If you like the uncompromising power of a Chevrolet Performance Big-Block, you're going to love the ZZ454/440 and all its aluminum-head, oval-port glory! When equipped with our recommended carburetor, it delivers 440 horsepower and 500 axle-straining pound-feet of torque. It's built with the latest version of the Big-Block cylinder block casting, which is stronger than ever. Once you go Big-Block, you'll never go back!

Image shown includes the ZZ454/440 Engine P/N 12498777 along with the following additional Chevrolet Performance parts:

- **Chrome Air Cleaner and Bowtie Nut 12342080**
- **Holley 770-cfm Carburetor. 19170093**
- **Custom Aluminum Valve Covers 12495488**
- **Valve Cover Badge, 454 GM Performance Parts 12366995**
- **Chrome Water Neck 12342024**
- **Billet HEI Distributor 88961867**
- **Spark Plug Wire Set 12368389**
- **Wire Loom Kit. 12495502**
- **Fuel Pump Block-Off Plate 12341999**
- **Aluminum Water Pump 19168602**
- **High-Torque Mini Starter 12361146**
- **Big-Block Racing Balancer. 88962814**

To learn more about this engine, please turn to page 272.

NOTE: *Engine may not come with all the parts shown in 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. It features 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 Neck 12342024

To learn more about this engine, please turn to page 286.

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




572 CHEVROLET
PERFORMANCE PARTS

SMALL-BLOCK Crate Engines

Nobody Knows Small-Blocks Like Chevrolet Performance

Led by legendary engineer Zora Arkus-Duntov in the 1950s, Chevrolet Performance engineers wrote the book on Small-Block performance and have been continually refining it for nearly 60 years.

New cylinder heads and valvetrain components help make some of our Small-Block crate engines better performers and stronger values for builders looking for a ready-to-install engine. Chevrolet Performance's lineup is also unmatched in the industry, with a range of crate engines for every project, from our 350/290 Deluxe budget performer to our classic ZZ4, all new ZZ5 and an enhanced ZZ383 stroker engine!

And if you're a circle track racer, our sealed crate engines deliver the power you need to win, with the dependability you can count on.

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. Best of all, the non-racing engines are backed by a 24-month/50,000-mile warranty for worry-free performance.

Nobody knows Small-Block power like Chevrolet Performance. After all, we wrote the book on it.









350/290 HP
Page 88



350 HO
Page 90



ZZ4 350
Page 92



Ram Jet 350
Page 94



ZZ5 350 Base
Page 96



ZZ5 350 Turn-Key
Page 98



HT 383
Page 100



HT 383E
Page 102



ZZ383 Base
Page 104



ZZ383 Deluxe
Page 106

Engines Shown From Left:

ZZ4 350

350 HO

ZZ5 350



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!

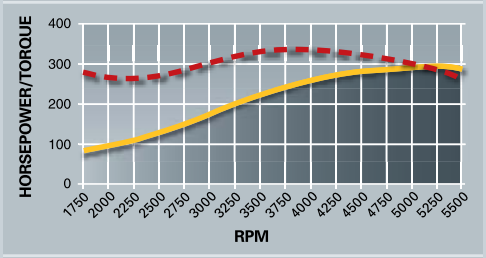
The 350/290 HP Deluxe combines Chevrolet Performance's most popular crate engine with an aluminum intake manifold* and chrome dress-up kit to create one of the most stylish and value-driven engines on the market. The chrome dress-up parts include the valve covers (with push-in breathers and "T-bar"-style 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.

19260380



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

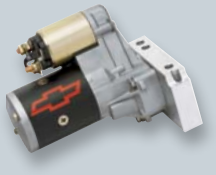
Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



93440806
HEI Distributor
See page 156 for details



12361146
High-Torque Mini-Starter
See page 164 for details



19299800
Torque Converter
See page 334 for details



12497698
Serpentine Accessory Drive System
See page 154 for details



12355612
Fuel Pump, Street Performance
See page 167 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 118 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

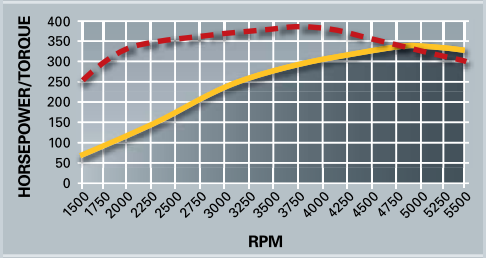
From air cleaner to oil pan, this affordable and powerful 350 comes with it all

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



INSTALLATION NOTES

- Comes with externally balanced flexplate for automatic transmission; requires externally balanced flywheel for manual transmission. See chart on page 151
- 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.

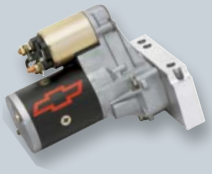
SELECT THE PARTS BELOW TO FINISH YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19260380
Hydra-Matic 4L65-E Four-Speed Automatic Transmission
See page 335 for torque converter application



19212657
Transmission Controller
See page 337 for details



12361146
High-Torque Mini-Starter
See page 164 for details



19299800
Torque Converter
See page 334 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details

SEE PAGE 118 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!

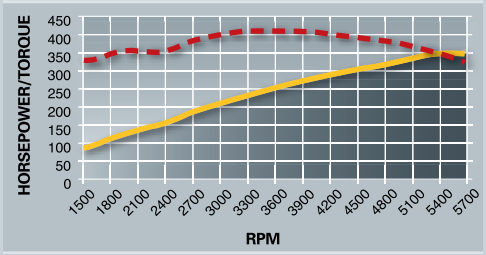
The ZZ4 350 crate engine is Chevrolet Performance's original affordable crate engine. In Turn-Key form, it comes with everything you need to get it running in your project vehicle.

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 151
- 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
		Maximum Recommended rpm:	5,800
Camshaft Type (P/N 10185071):	Steel hydraulic roller	**Balanced:**	External
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 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!



19260380
Hydra-Matic 4L65-E Four-Speed Automatic Transmission
See page 335 for torque converter application



19212657
Transmission Controller
See page 337 for details



12370838
Roller Rocker Arm Set, 1.5:1 Ratio
See page 141 for details



19299800
Torque Converter
See page 334 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details

SEE PAGE 118 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.

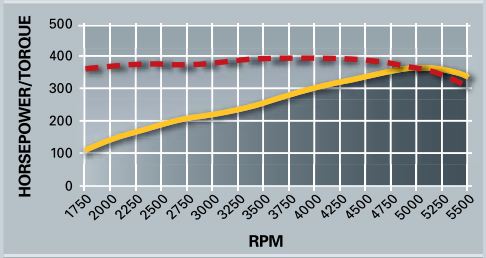
We've taken our proven 350 Small-Block and topped it with an exclusive port fuel injection system that emulates the look of Chevy's factory fuel injection systems from the 1950s and '60s. It's the perfect choice for a resto-mod hot rod from the original Rochester era.

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 151
- Installer to supply 12-volt power source and fuel pump
- 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 350 TECH 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.

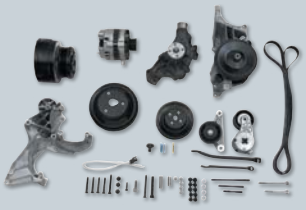
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



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



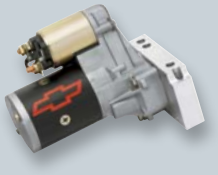
19260380
Hydra-Matic 4L65-E Four-Speed Automatic Transmission
Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.
See page 335 for torque converter application



12497698
Serpentine Accessory Drive System
The complete kit you need to finish off the crate engine in your vehicle.
See page 154 for details



19299800
Torque Converter
See page 334 for details



12361146
High-Torque Mini-Starter
See page 164 for details



12341670
Chrome Short Valve Covers
See page 142 for details



19212657
Transmission Controller
See page 337 for details



10465143
Lightweight Starter (remanufactured)
See page 164 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



ZZ5 350 Base

19301293 **NEW**

- 400 hp @ 5,600 rpm
- 400 lb.-ft. @ 3,500 rpm

The next chapter in the 'ZZ' crate engine legacy

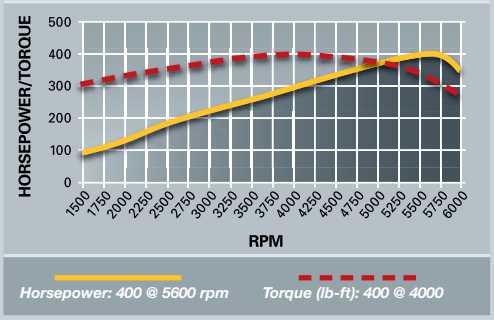
Building on the strength and power of the legendary ZZ4 Small-Block, Chevrolet Performance engineers have upped the ante with a revised cylinder head design, new valvetrain components and more to create the all-new ZZ5 – a 400-horsepower 350 with loads of low-end torque. In fact, the new ZZ5 produces at least 300 lb.-ft. of torque by only 1,500 rpm, for a thrilling feeling of immediate performance.

The new, lightweight aluminum cylinder head casting is based on the proven Fast Burn design, with large intake runners and 2.00/1.55-inch valves. New beehive-style valve springs enable greater high-rpm performance and durability, as the egg-shaped springs have less reciprocating mass in motion, require less spring pressure for greater valve control and handle valvetrain stresses more efficiently.

As with all of Chevrolet Performance's Small-Block crate engines, the ZZ5 is built with a brand-new block with four-bolt mains. It also features a forged steel crankshaft, an aggressive hydraulic roller camshaft and durable, high-silicon pistons. Unique valve covers distinguish this new crate engine at a glance, too.

The Base crate engine package includes an aluminum intake manifold, distributor, water pump, damper, flexplate and more.

ZZ5 350 DYNO CHART



INSTALLATION NOTES

- Comes with 12.750 externally balanced 153-tooth automatic transmission flexplate. Change to externally balanced flywheel for normal transmission applications. See chart on page 151
- Requires fuel line from fuel pump to carburetor
- Fuel pump pressure is pre-set; fuel pressure regulato not required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Some assembly and minor engine tuning required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine application

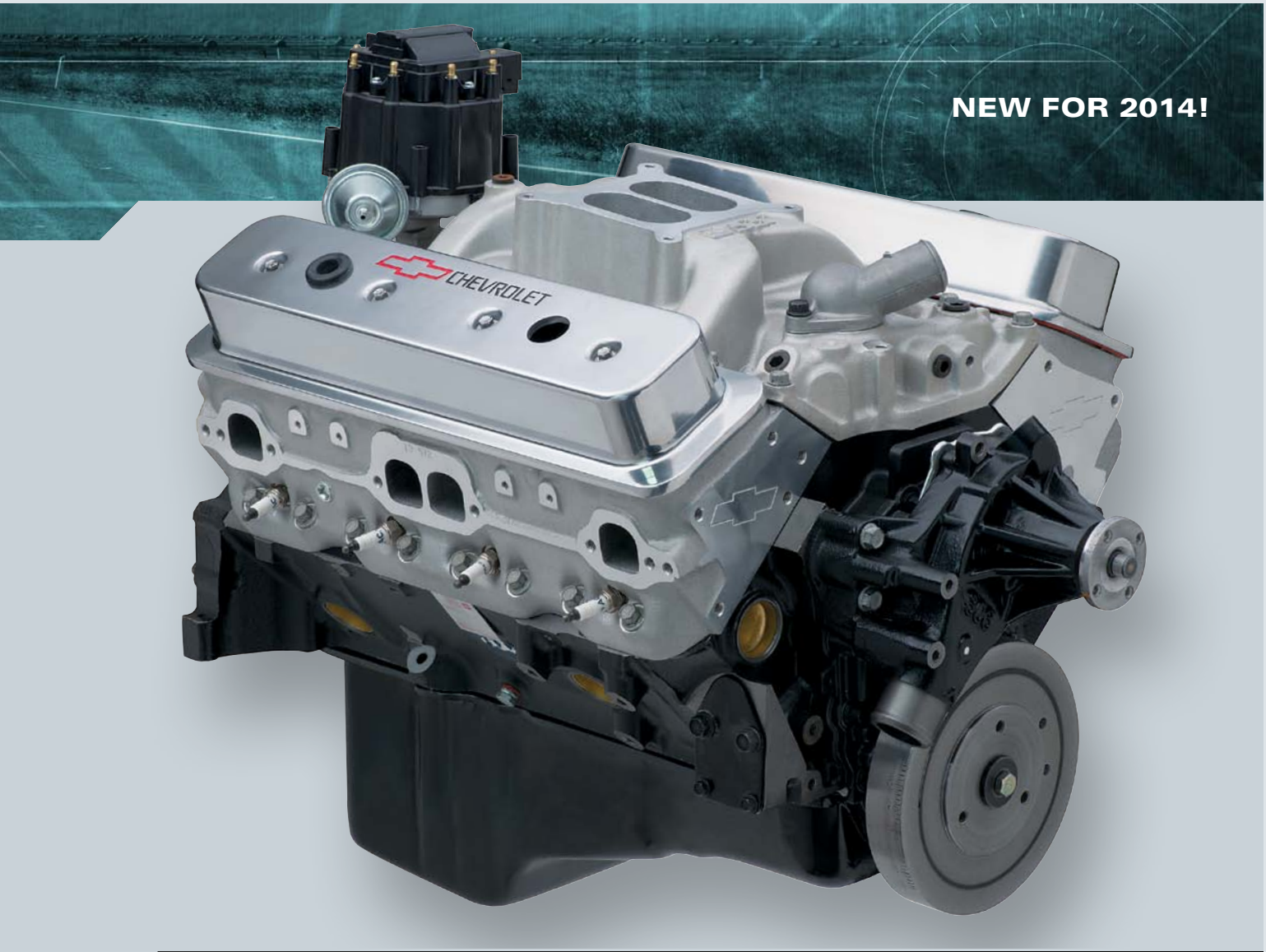
ZZ5 350 BASE TECH SPECS

Part Number:	19301293	**Cylinder Heads (P/N 19300955):**	Fast Burn aluminum;
Engine Type:	Chevy Small-Block V-8		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:**	9.72:1 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	**Recommended Fuel:**	92 octane
Pistons (P/N 10159436):	Hypereutectic aluminum	**Ignition Timing:**	Base 10° BTDC, 32° Total
Camshaft Type (P/N 10185071):	Hydraulic roller	**Maximum Recommended rpm:**	5800
Camshaft Lift (in):	.474 intake / .510 exhaust	**Balanced:**	External
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.



12561723



ZZ4 Partial Engine

The ZZ5 is based on the popular ZZ4 engine partial engine assembly and includes the forged steel crankshaft, LT1-style high-silicon pistons and connecting rods.

19260380



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

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



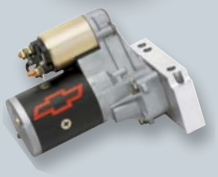
19299801
Torque Converter
See page 334 for details



19212657
Transmission Controller
See page 337 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



12361146
High-Torque Mini-Starter
See page 164 for details



12370838
Roller Rocker Arm Set, 1.5:1 Ratio
See page 141 for details



12480127
Short Aluminum Valve Covers
See page 142 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

ZZ5 350 Turn-Key



19301294 **NEW**

- 400 hp @ 5,600 rpm
- 400 lb.-ft. @ 4,000 rpm

The ultimate 'ZZ' crate engine package

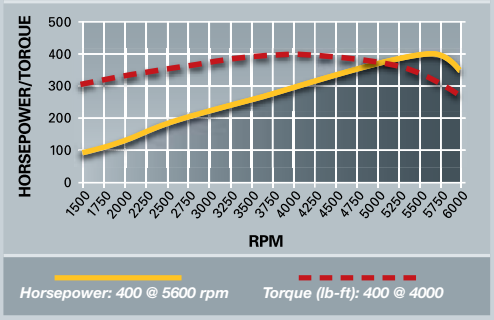
Chevrolet Performance's all-new ZZ5 350 uses new-casting Fast Burn cylinder heads equipped with LS-style beehive valve springs for greater high-rpm performance. It's rated at 400 horsepower – more than any Small-Block engine ever offered in a production Chevrolet muscle car or Corvette!

The new, lightweight aluminum cylinder head casting is based onthe proven Fast Burn design, with large intake runners and 2.00/1.55-inch valves. New beehive-style valve springs enable greater high-rpm performance and durability. They allow the ZZ5 to rev higher to make the most of every cubic inch of air drawn through it.

The ZZ5 is built with a brand-new block with four-bolt mains, along with a forged steel crankshaft, an aggressive hydraulic roller camshaft and durable, high-silicon pistons. Unique valve covers distinguish this new crate engine at a glance, too – along with Chevy "bow tie" insignias in the ends of the cylinder heads that let everyone know you've got the latest Chevrolet Performance hardware under the hood.

The Turn Key engine package includes the distributor, carburetor and balancer installed. The starter, fuel pump air conditioning pump, alternator, front-end accessory drive kit and more are also included.

ZZ5 350 DYNO CHART



INSTALLATION NOTES

- Comes with 12.750 externally balanced 153-tooth automatic transmission flexplate. Change to externally balanced flywheel for manual transmission applications. See chart on page 151
- Requires fuel line from fuel pump to carburetor
- Fuel pump pressure is pre-set; fuel pressure regulator not required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Some assembly and minor engine tuning required
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine application

ZZ5 350 TURN-KEY TECH SPECS

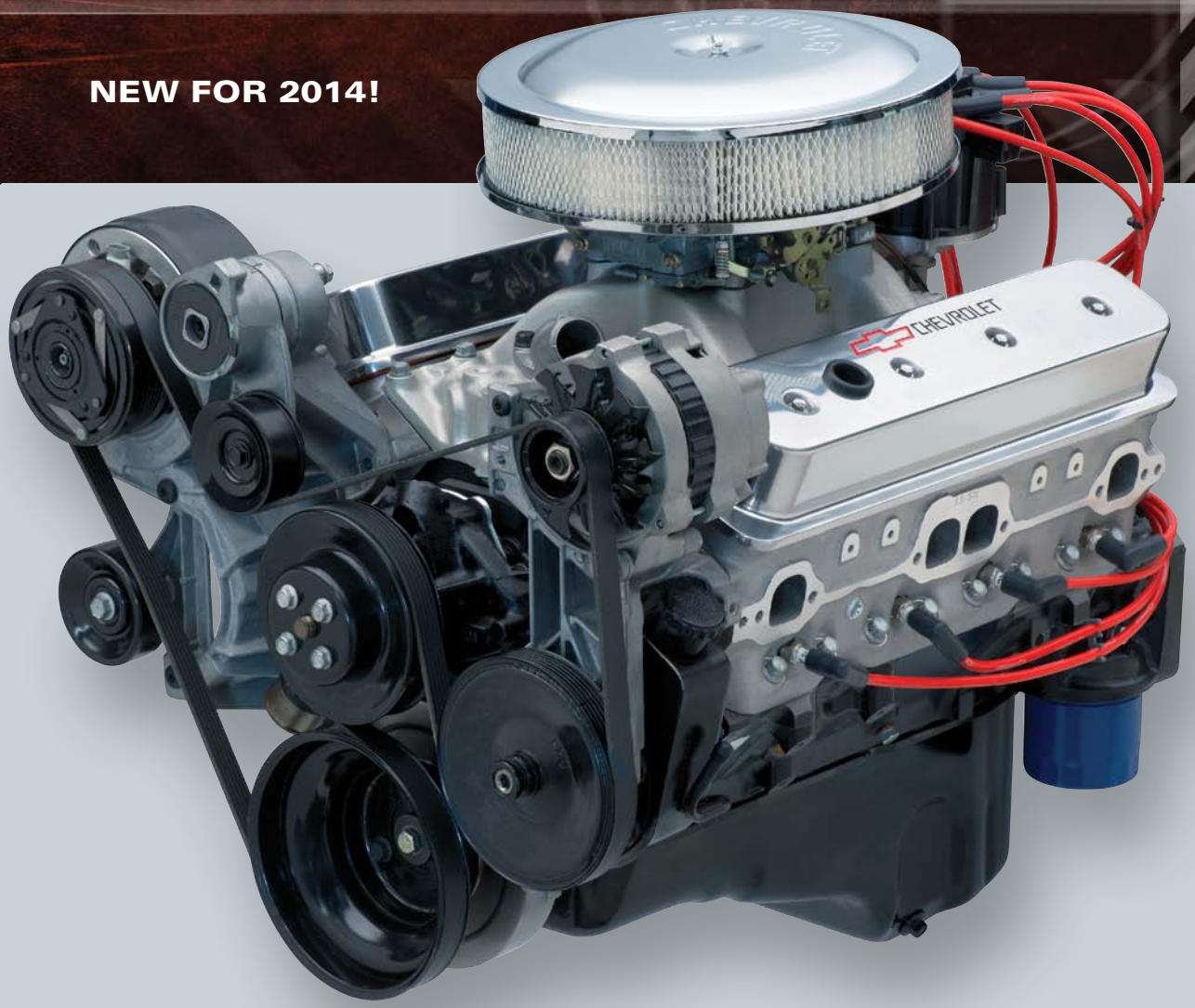
Part Number:	19301294	**Cylinder Heads (P/N 19300955):**	Fast Burn aluminum;
Engine Type:	Chevy Small-Block V-8		62cc chambers
Displacement (cu in):	350	**Valve Size (in):**	2.000 intake / 1.550 exhaust
Bore x Stroke (in):	4.000 x 3.480	**Compression Ratio:**	9.72:1 nominal
Block (P/N 10105123):	Cast-iron 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	**Recommended Fuel:**	92 octane
Pistons (P/N 10159436):	Hypereutectic aluminum	**Ignition Timing:**	Base 10° BTDC, 32° Total
Camshaft Type (P/N 10185071):	Hydraulic roller	**Maximum Recommended rpm:**	5800
Camshaft Lift (in):	.474 intake / .510 exhaust	**Balanced:**	External
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.

NEW FOR 2014!



12561723



ZZ4 Partial Engine

The ZZ5 is based on the popular ZZ4 engine partial engine assembly and includes the forged steel crankshaft, LT1-style high-silicon pistons and connecting rods.

19260380



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

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



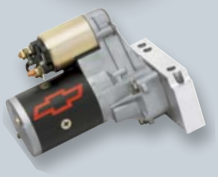
19299801
Torque Converter
See page 334 for details



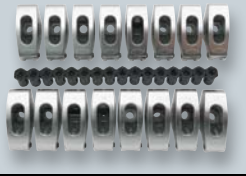
19212657
Transmission Controller
See page 337 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



12361146
High-Torque Mini-Starter
See page 164 for details



12370838
Roller Rocker Arm Set, 1.5:1 Ratio
See page 141 for details



12480127
Short Aluminum Valve Covers
See page 142 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



HT383

12499101

- 340 hp @ 4,500 rpm
- 435 lb.-ft. @ 4,000 rpm

Extra cubic inches deliver greater torque for your truck!

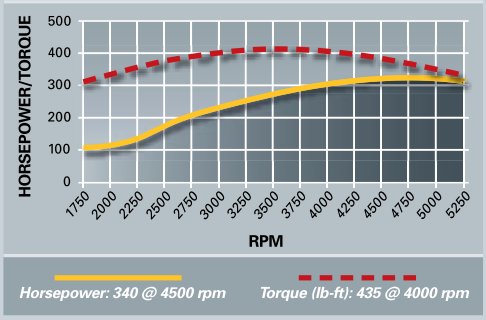
Got a pre-1980 GM truck with a tired Small-Block? Forget the rebuild or reconditioned used engine and take your trusty truck's capability to the next level with our big-torque HT383 stroker crate engine.

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



INSTALLATION NOTES

- Requires addition of carburetor, ignition and starter (not included)
- Rochester Quadrajet 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 151
- Has right-side oil dipstick
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

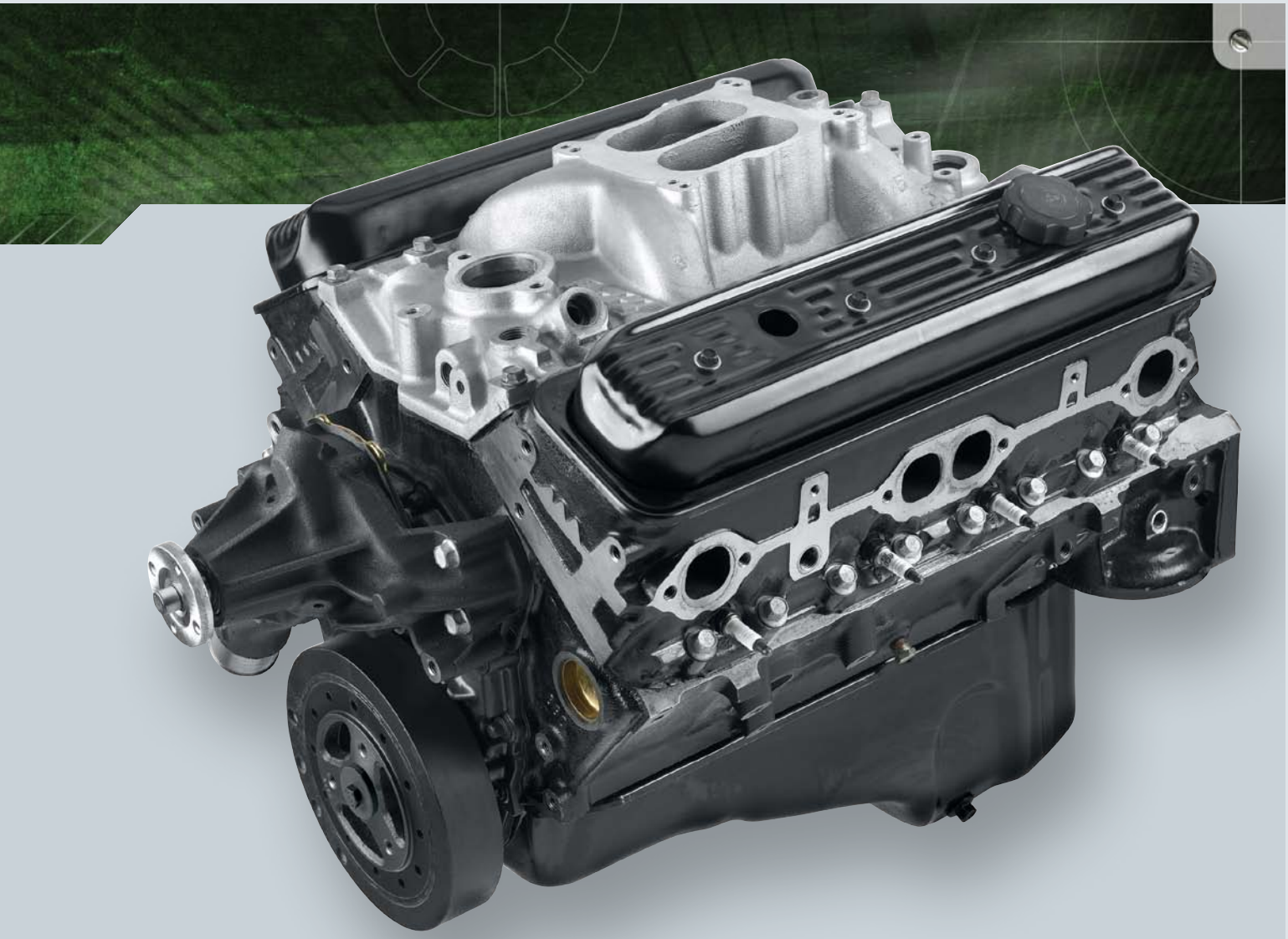
HT383 TECH SPECS

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.

19260380



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

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



93440806
HEI Distributor
See page 156 for details



19170093
Carburetor, Holley 770-cfm
See page 166 for details



19299800
Torque Converter
See page 334 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

HT383E



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 151
- Has right-side dipstick
- Not available as a Partial
- Performance recalibration of ECU will significantly increase torque and horsepower

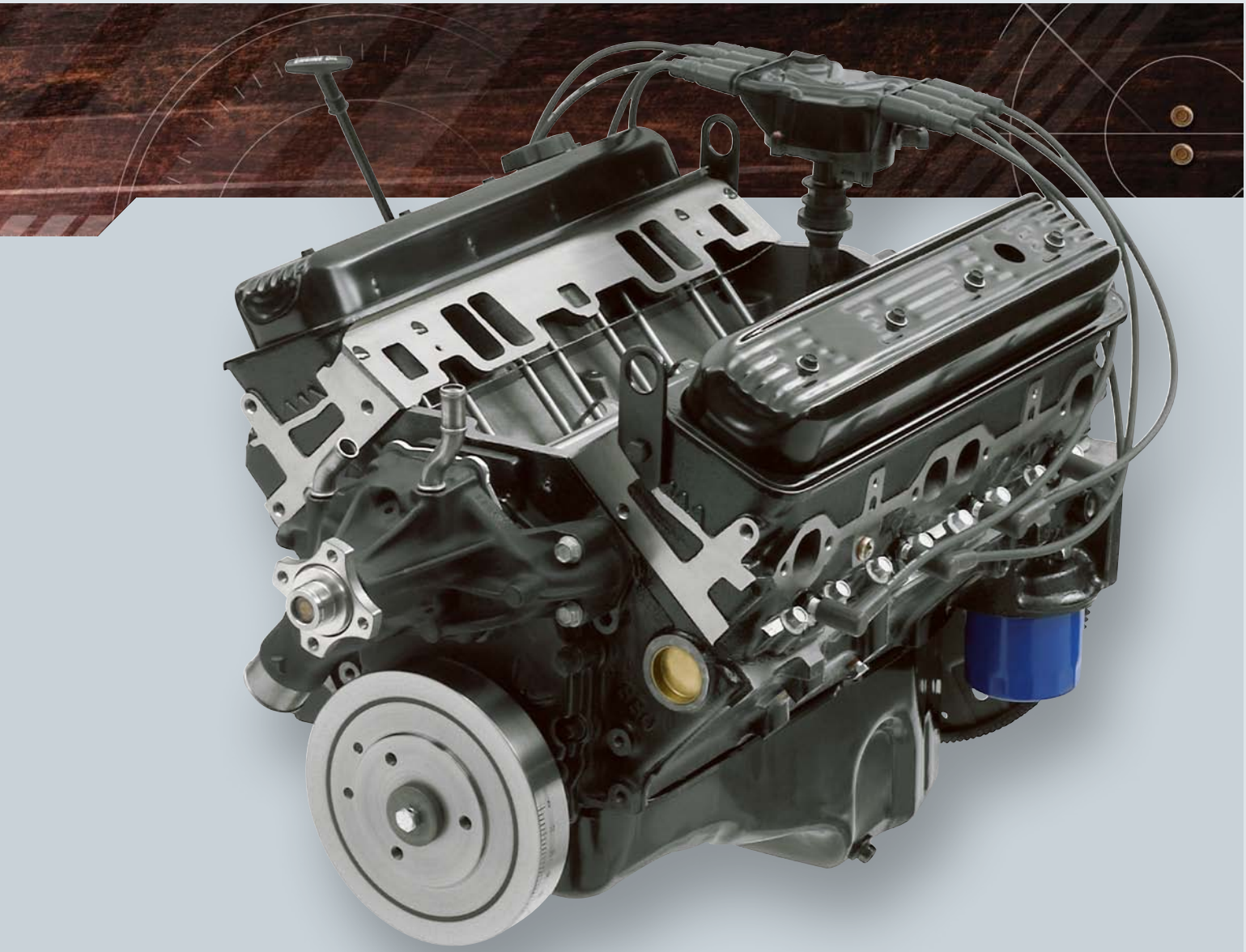
HT383E TECH SPECS

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.

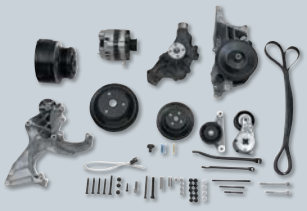
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



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



19260380
Hydra-Matic 4L65-E Four-Speed Automatic Transmission
Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.
See page 335 for torque converter application



12497698
Serpentine Accessory Drive System
The complete kit you need to finish off the crate engine in your vehicle.
See page 154 for details



19299800
Torque Converter
See page 334 for details



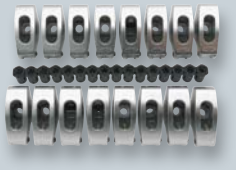
12361056
Spark Plug Wires, 135° Boot
See page 165 for details



12497979
Aluminum Black Crinkle Valve Covers, Center Bolt Design
See page 143 for details



19212657
Transmission Controller
See page 337 for details



12370838
Roller Rocker Arm Set, 1.5:1 Ratio
See page 141 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



ZZ383 Base

19154775

- 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 that 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!

***NOTE:** This ZZ383 Base engine is equipped with pre-2013 spec FastBurn cylinder heads and valve springs. Heads can be updated to 2013 Beehive specs with P/N 19300952 spring conversion kit.*

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 1986-1999 350-style externally balanced flywheel for manual transmission. See chart on page 151
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

TECH SPECS

Part Number:	19154775	**Cylinder Heads (P/N 12464298):**	Fast Burn aluminum;
Engine Type:	Chevy Small-Block V-8		62cc chambers
Displacement (cu in):	383	**Valve Size (in):**	2.000 intake / 1.550 exhaust
Bore x Stroke (in):	4.000 x 3.800	**Compression Ratio:**	9.6:1
Block (P/N 88962516):	Cast-iron with 4-bolt main caps	**Rocker Arms (P/N 12367345):**	Aluminum roller style
Crankshaft (P/N 12489436):	4340 forged steel	**Rocker Arm Ratio:**	1.5:1
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	**Recommended Fuel:**	92 octane
Pistons (P/N 12499103):	Hypereutectic aluminum	**Ignition Timing:**	Base 10° BTDC, 32° Total
Camshaft Type (P/N 19210723):	Hydraulic roller	**Maximum Recommended rpm:**	6,000
Camshaft Lift (in):	.509 intake / .528 exhaust	**Balanced:**	External
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.

19260380

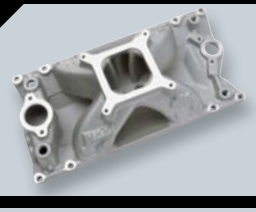


Hydra-Matic 4L65-E Four-Speed Automatic Transmission

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



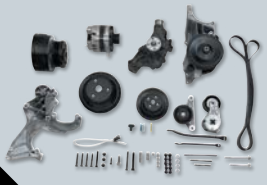
12496822
Intake Manifold, Vortec Design
See page 158 for details



12480127
Short Aluminum Valve Covers
See page 142 for details



19299801
Torque Converter
See page 334 for details



12497698
Serpentine Accessory Drive System
See page 154 for details



93440806
HEI Distributor
See page 156 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS



ZZ383 Deluxe

19301295 NEW

- 450 hp @ 5,400 rpm
- 450 lb.-ft. @ 4,500 rpm

More power from Chevrolet Performance's classic Small-Block stroker!

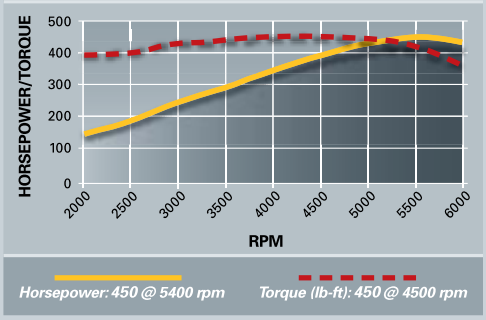
Chevrolet Performance's big-torque ZZ383 is more powerful than ever. We've added revised cylinder heads that incorporate a new, high-rpm valvetrain to help the ZZ383 produce 450 horsepower and 450 lb.-ft. of torque – 25 hp and 25 lb.-ft. more than the previous version!

The new, lightweight aluminum cylinder head casting is based on the proven Fast Burn design, with large intake runners and 2.00/1.55-inch valves. New beehive-style valve springs enable greater high-rpm performance and durability. They allow the ZZ383 to rev higher, building more power to complement its low-rpm torque.

The ZZ383 built with a brand-new block with four-bolt mains. It also features a forged steel crankshaft, an aggressive hydraulic roller camshaft and durable, high-silicon pistons. Unique valve covers distinguish the engine from previous versions and it now includes a high-flow, aluminum intake manifold! Use the Holley 770-cfm four-barrel carburetor P/N 19170093 to make the most of the engine's capability and achieve the listed horsepower and torque ratings.

Your Chevrolet Performance dealer has everything you need to finish off the engine and get this stroker small-block running in your vehicle faster!

ZZ383 DYNO CHART



INSTALLATION NOTES

- Horseppower was developed with a 770 cfm Holley carburetor, P/N 19170093 (not included)
- Requires addition of carburetor, ignition, fuel pump and starter (not included)
- Comes with 12.750 automatic transmission flexplate. Requires 1986-1999 350-style externally balanced flywheel for manual transmissions, See chart on page 151
- Designed for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications

ZZ383 DELUXE TECH SPECS

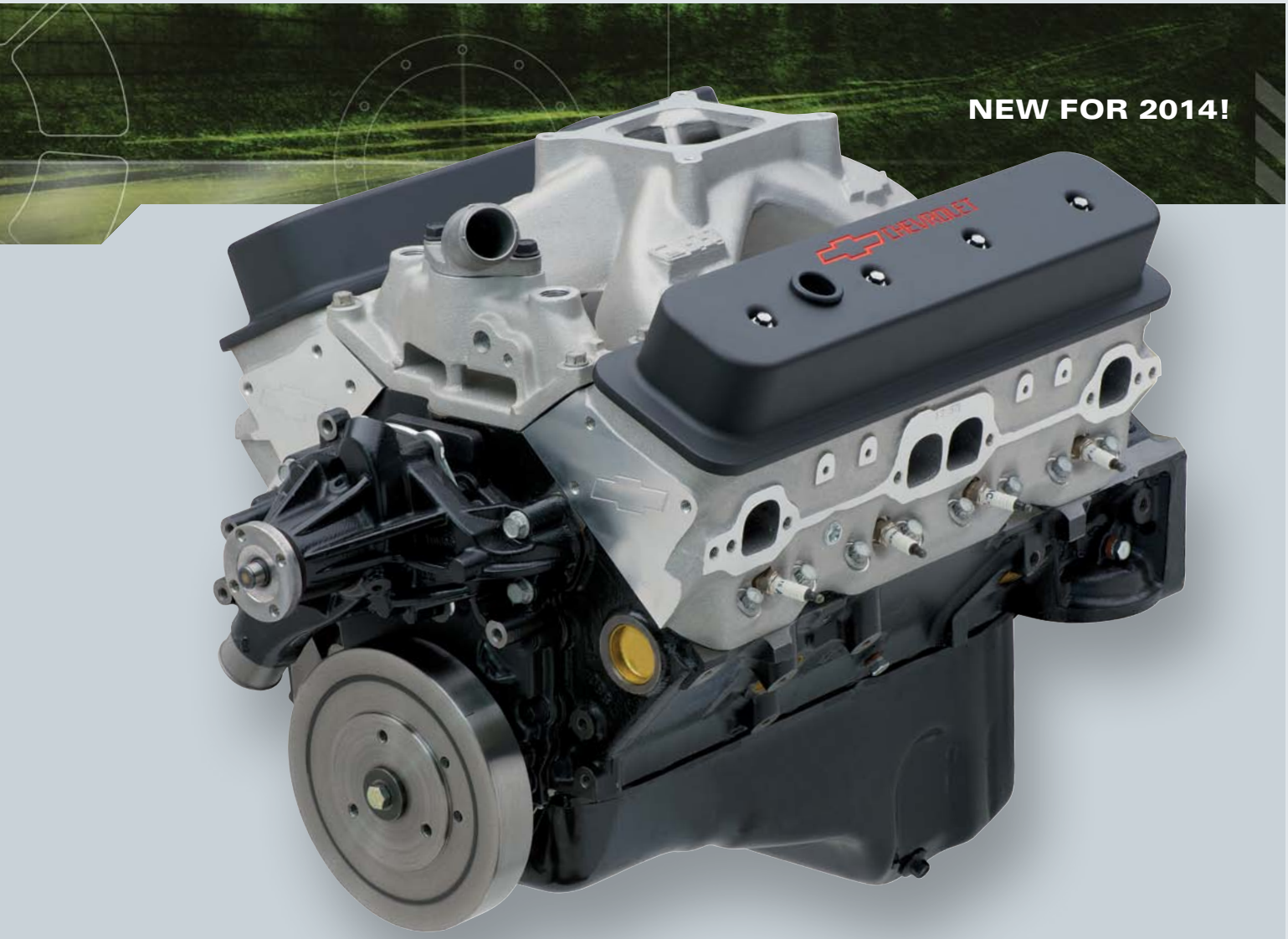
Part Number:	19301295
Engine Type:	Chevy Small-Block V-8
Displacement (cu in):	383
Bore x Stroke (in):	4.000 x 3.800
Block (P/N 88962513):	Cast-iron with 4-bolt main caps
Crankshaft (P/N 12489436):	forged steel
Connecting Rods (P/N 12497624):	Heavy-duty PM steel
Pistons (P/N 12499103):	Hypereutectic aluminum
Camshaft Type (P/N 19210723):	Hydraulic roller
Valve Lift (in):	.509 intake / .528 exhaust
Camshaft Duration (@.050 in):	222° intake / 230° exhaust

Cylinder Heads (P/N 19300955):	Fast Burn aluminum; 62cc chambers
Valve Size (in):	2.000 intake / 1.550 exhaust
Compression Ratio:	9.6:1
Rocker Arms (P/N 10089648):	Aluminum roller style
Rocker Arm Ratio:	1.5:1
Recommended Fuel:	92 octane
Ignition Timing:	Base 10° BTDC, 32° Total
Maximum Recommended rpm:	6,000
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.



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.

19260380



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

Electronically controlled four-speed overdrive transmission. Suitable for engines producing up to 430 lb.-ft. of torque.

See page 335 for torque converter application

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



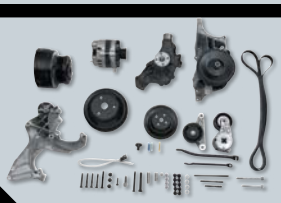
93440806
HEI Distributor
See page 156 for details



12480127
Short Aluminum Valve Covers
See page 142 for details



19299801
Torque Converter
See page 334 for details



12497698
Serpentine Accessory Drive System
See page 154 for details



12497985
Chrome-Finish Aluminum Valve Covers, Center Bolt Design
See page 143 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 118 FOR OUR COMPLETE LINE OF SMALL-BLOCK ENGINE COMPONENTS

CIRCLE TRACK Crate Engines

Factory-Engineered Performance to Help You Win!

Chevrolet Performance pioneered the racing crate engine concept more than 40 years ago, so when it comes to winning power and dependability, trust us to get you to the checkered flag!

Our 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.

From our entry-level, 350-horsepower CT350 engine and enhanced CT400 Small Block – with new cylinder heads and high-rpm, beehive-style valve springs – to the 525-horsepower CT525 LS-Series engine, Chevrolet Performance CircleTrack crate engines are designed to match your performance needs with series requirements.

Along with horsepower, Chevrolet Performance crate engines are engineered to last, saving you money that's better spent on the rest of your racing program.



Engines Shown Clockwise From Left:

- *CT350*
- *CT355*
- *CT400*
- *CT525*

Chevrolet Performance CircleTrack engines do not come with fuel pumps, carburetors or air cleaners.



CT350
Page 110



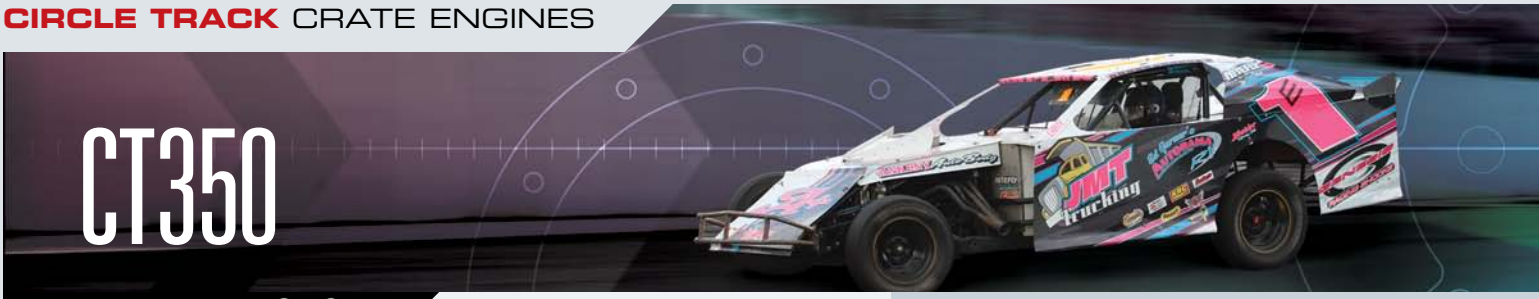
CT355
Page 112



CT400
Page 114



CT525
Page 116



CT350

19258602

- 350 hp @ 5,000 rpm
- 390 lb.-ft. @ 3,800 rpm

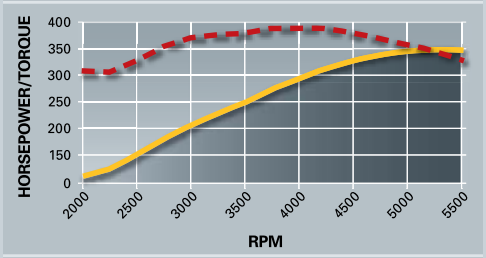
Chevrolet Performance's most economical Circle Track crate engine!

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.Chevrolet.com/Performance – 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 151 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
- For Circle Track Racing only – Not intended for street use.

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.

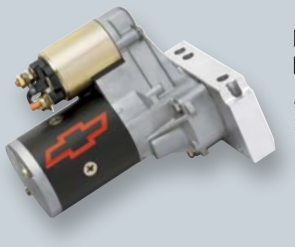
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



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



88894341
Water Pump, Long-Style
See page 153 for details



12361146
High-Torque Mini-Starter
See page 164 for details



12342071
Air Cleaner, Classic Design
See page 166 for details



12355612
Fuel Pump, Street Performance
See page 167 for details



19170092
Carburetor, Holley 670-cfm
See page 166 for details



12361051
Spark Plug Wire Set
See page 165 for details



CT355

88958603

- 355 hp @ 5,250 rpm
- 405 lb.-ft. @ 3,500 rpm

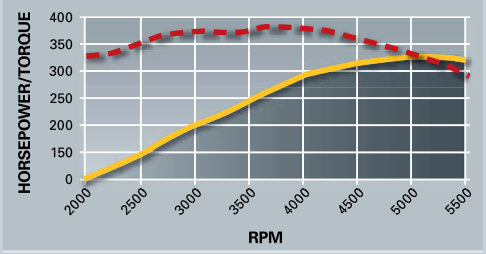
The versatile ZZ4 350 adapted for Circle Track competition!

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.Chevrolet.com/Performance.

CT355 DYNO CHART



INSTALLATION NOTES

- Requires addition of carburetor, starter, plug wires and exhaust system (not included)
- Requires an externally balanced flywheel (not included). See page 151 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.
- For Circle Track Racing only – Not intended for street use.

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.

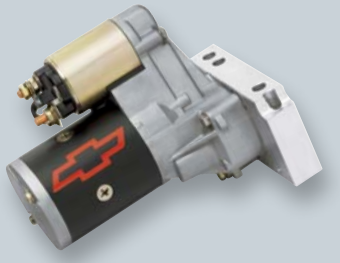
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



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



19170092
Carburetor, Holley 670-cfm
See page 166 for details



12361146
High-Torque Mini-Starter
See page 164 details



12355612
Fuel Pump, Street Performance
See page 167 for details



12361051
Spark Plug Wire Set
See page 165 for details



12342080
Air Cleaner, High-Performance Design
See page 166 for details



CT400

19318604

- 400 hp @ 5,500 rpm
- 400 lb.-ft. @ 4,500 rpm

New Fast Burn heads with beehive springs add high-rpm performance and durability

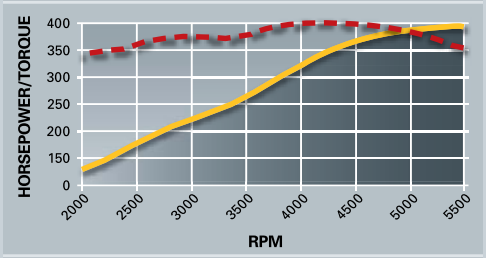
We've added greater high-rpm durability to the CT400 racing engine with new Fast Burn heads that feature beehive-type valve springs and complementing valvetrain components. The beehive springs enable greater high-rpm performance and durability. They allow the engine to rev higher to make the most of every cubic inch of air drawn through it.

This brand-new, factory-sealed racing engine is based on the new ZZ5 street crate engine, but includes a racing-only 8-quart circle track oil pan, with dual kick-out design, along with a valve cover breather kit. The new, lightweight aluminum cylinder head casting – distinguished by new Bowtie logos cast into the ends – is based on the proven Fast Burn design, with large intake runners and 2.00/1.55-inch valves.

The CT400 racing engine has a tough bottom end, anchored by a forged steel crankshaft and hypereutectic pistons installed in a brand-new block with four-bolt mains. The assembly also includes an open-plenum high-rise intake manifold and 1.5:1-ratio aluminum roller rockers.

Put a "fast burn" on the competition – with greater high-rpm performance than ever before!

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 151 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
- For Circle Track Racing only – Not intended for street use.

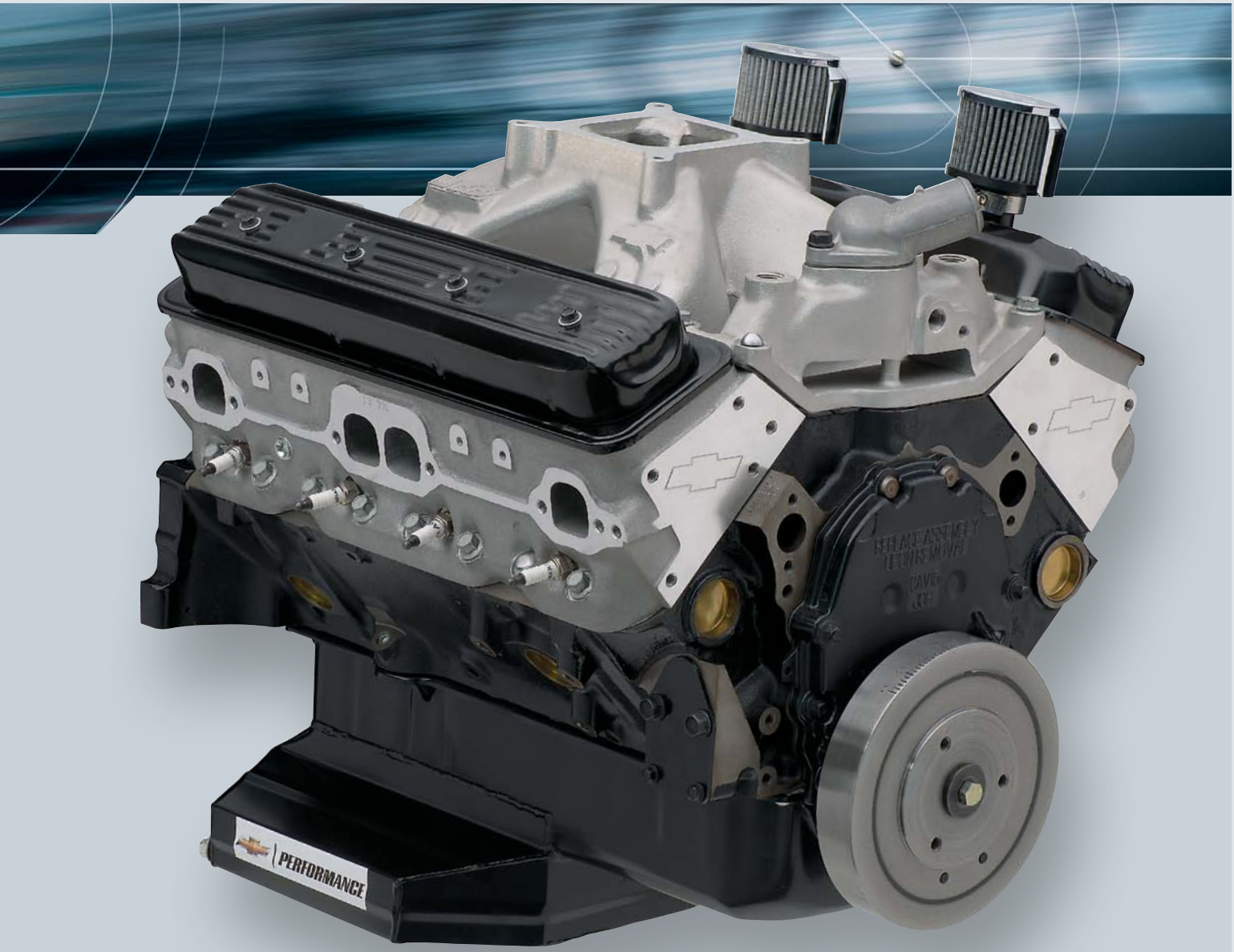
CT400 TECH SPECS

Part Number:	19318604	**Camshaft Duration (@.050 in):**	208° intake / 221° exhaust
Engine Type:	Chevy Small-Block V-8	**Cylinder Heads (P/N 19300955):**	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:**	9.72:1 Nominal
Block (P/N 10105123):	Cast-iron with 4-bolt main caps	**Rocker Arms (P/N 10089648):**	Aluminum; roller style
Crankshaft (P/N 12556307):	Forged steel	**Rocker Arm Ratio:**	1.5:1
Connecting Rods (P/N 10108688):	Powdered metal	**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
Valve 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 Racing Crate Engines are excluded from limited warranty.

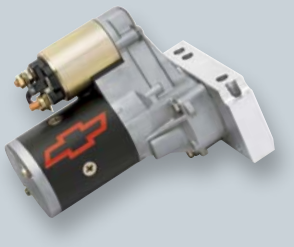
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



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



88961867
Distributor, Aluminum Billet HEI
See page 156 for details



12361146
High-Torque Mini-Starter
See page 164 for details



12342071
Air Cleaner, Classic Design
See page 166 for details



12355612
Fuel Pump, Street Performance
See page 167 for details



19170092
Carburetor, Holley 670-cfm
See page 166 for details



12361051
Spark Plug Wire Set
See page 165 for details



CT525

19271821

- 525 hp @ 6,700 rpm
- 471 lb.-ft. @ 5,000 rpm

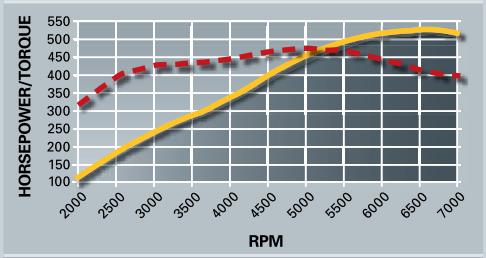
Exclusive LS3-based Chevrolet Performance racing engine is a lightweight powerhouse!

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 modifieds. 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 Camaro SS, 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-near-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.Chevrolet.com/Performance.

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 258, 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)
- For Circle Track Racing only – Not intended for street use.

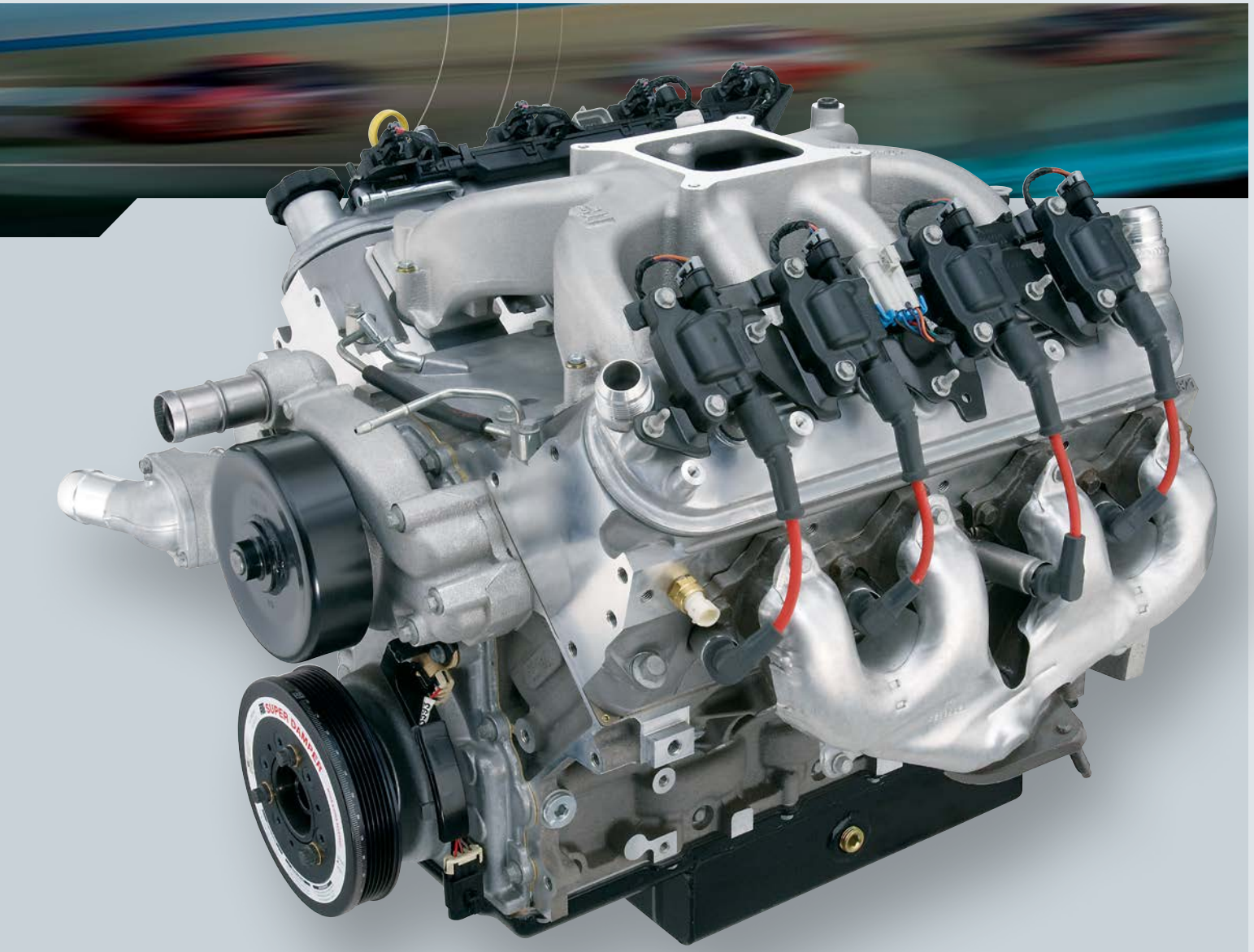
CT525 TECH SPECS

Part Number:	19271821
Engine Type:	LS-Series Gen IV Small-Block V-8
Displacement (cu in):	376 cu in (6.2L)
Bore x Stroke (in):	4.065 x 3.62 (103.25 x 92mm)
Block (P/N 12623967):	Cast-aluminum with 6-bolt, cross-bolted main caps
Crankshaft (P/N 12597569):	Nodular iron
Connecting Rods (P/N 12607475):	Powdered metal
Pistons (P/N 19207287):	Hypereutectic aluminum
Camshaft Type (P/N 88958770):	Hydraulic roller
Valve Lift (in):	.525" intake / .525" exhaust
Camshaft Duration (@.050 in):	226° intake / 236° exhaust

Cylinder Heads (P/N 12629063):	LS3 rectangle port; aluminum as-cast with 68cc chambers
Valve Size (in):	2.165 intake / 1.590 exhaust
Compression Ratio:	10.7:1
Rocker Arms (P/N 12569167 int):	Investment-cast, roller trunnion
Rocker Arms (P/N 10214664 exh):	Investment-cast, roller trunnion
Rocker Arm Ratio:	1.7:1
Recommended Fuel:	92 octane
Maximum Recommended rpm:	6,700
Reluctor Wheel:	58X
Balanced:	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.

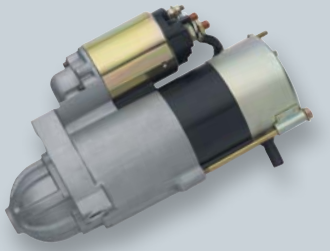


NOTE: *Final production version may differ slightly in content from photo shown.*

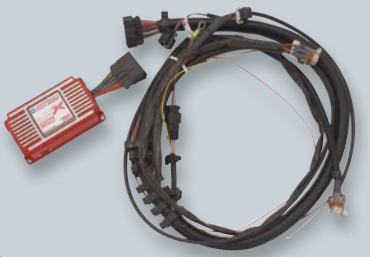
SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19170094
Carburetor, Holley 870-cfm
See page 166 for details



10465385
LS-Series Starter
See page 258 for details



19171130
LSX Ignition Controller
See page 258 for details



12342071
Air Cleaner, Classic Design
See page 166 for details

SMALL-BLOCK Engine Components

Factory-Engineered Parts for an American Classic!

Born in 1955, the Chevy Small-Block is an engine like no other in automotive history – and nobody knows how to build them like Chevrolet Performance.

Dating back to the days when the legendary Zora Arkus-Duntov tuned the original 265-cubic-inch V-8 into a true powerhouse, we bring nearly six decades of engineering experience to the table with a range of proven parts unmatched in the aftermarket. Chevrolet Performance's 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.

Chevrolet Performance's range of Small-Block parts starts with brand-new 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 – including blocks with four-bolt main caps. We offer only brand-new blocks with four-bolt mains – a feature almost all used cores don't have.

Browse our comprehensive lineup of blocks, heads, rotating parts and more and you'll find exactly what you need. When it comes to Small-Block power, we've been building it longer than anyone!

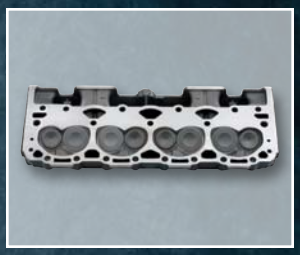




Bowtie Sportsman Block



Blocks and Components
Page 120



Heads
Page 128



Valve Components
Page 139



Valve Covers
Page 142



Camshafts
Page 147



Pistons and Pistons Rings
Page 149



Crankshafts
Page 150



Oil Pans, Oil Pumps, Gaskets and Components
Page 154



Intake Manifolds, Gaskets and Components
Page 157



Fuel and Electrical Components
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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	121
19171109	—	9.025"	Std	Open	4.004"– 4.030"	4	Straight	Gray iron	350	Wet	1 pc	3.800"	181	450	Street	121
10066034	—	9.025"	Std	Open	4.000"– 4.030"	4	Straight	Gray iron	350	Wet	2 pc	3.750"	181	350	Street	121
12480174	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	350	Wet	1 pc	3.750"	196	500	Amateur	122
12480047	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	350	Wet	2 pc	3.750"	208	500	Amateur	123
12480175	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	350	Wet	1 pc	3.750"	196	500	Amateur	123
12480157	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	350	Wet	2 pc	3.750"	196	500	Amateur	123
12480049	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Nodular	400	Wet	2 pc	3.750"	208	500	Amateur	123
12480159	10051184	9.025"	Std	Siamese	4.117"– 4.155"	4	20°	Nodular	400	Wet	2 pc	3.750"	196	500	Amateur	123
24502503	10051184	9.025"	Std	Siamese	3.980"– 4.155"	4	20°	Steel	350	Wet	2 pc	3.750"	208	700	Pro	124

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	125

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	126
10134400	10134398	9.025"	Std	Siamese	4.117"– 4.135"	4	20°	Steel	400	Dry	2 pc	3.750"	89	800	Pro	126
24502495	24502495	9.525"	Std	Siamese	4.117"– 4.135"	4	20°	Steel	400	Dry	2 pc	4.125"	101	850	Pro	126

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

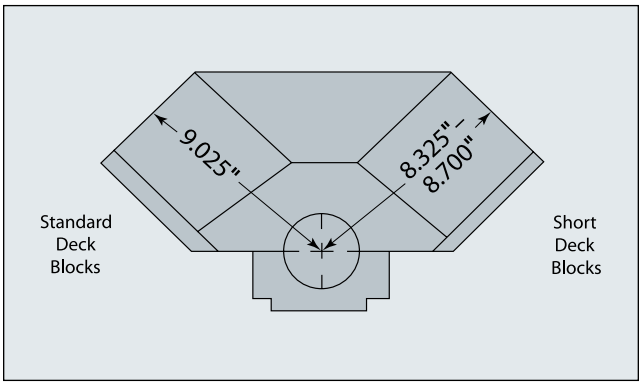


Straight 4-Bolt Mains A



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 120 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 walls[1] and 4-bolt main caps[2] 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 120 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

[1]Siamesed 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!

[2]4-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-machined[1] with closer tolerances than Bowtie blocks. Race blocks feature full race-prep machining and 4-bolt splayed[2] 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 120 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



2-piece Rear Main Seal 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

[1]CNC (computer numerical controlled) machining guarantees exact tolerances. Chevrolet Performance Parts offers more CNC-machined blocks than anyone.

[2] Splayed 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 120 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

A. 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 (not shown)

- 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!

**Proposed applications have not been specifically tested or validated by Chevrolet Performance.*



A 350 Aluminum Race Block (front)



A 350 Aluminum Race Block (rear)



A 350 Aluminum Race Block (bottom)



Universal Engine Lift Brackets **B**



Freeze Plug, 1-5/8" brass **C**



Cylinder Sleeve (standard) **D**



Main Bearing Kit 383 Engine (standard) **E**



Main Bearing Bolt Kit, Sportsman Blocks **F**

CYLINDER BLOCK COMPONENTS

B. 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

C. 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

D. 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

E. 12499102
Main Bearing Kit, 383 Engine (standard)
- Complete main bearing kit for 383-cubic-inch Small-Block V-8 with standard-size mains

F. 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: QUICK REFERENCE CHART

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	132
19300956	Fast Burn ZZ5	**12367712**	Alum	210	Vortec	23	62	2.000	1.550	LT4	Angled	No	Screw-in	Bare 19300955	N/S
19300955	Fast Burn ZZ5	**12367712**	Alum	210	Vortec	23	62	2.000	1.550	LT4	Angled	No	Screw-in	Assembly	133
12556463	ZZ4	**10088113**	Alum	163	—	23	58	1.940	1.500	LT4	Angled	No	Screw-in	ZZ4 Assembly	131
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	129
25534351	Small-Port Vortec Bowtie	**25534351**	Iron	185	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Bare 25534421	130
25534445	Large-Port Vortec Bowtie	**25534371**	Iron	225	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Bare 25534446	130
25534421	Small-Port Vortec Bowtie	**25534351**	Iron	185	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Assembly	130
25534446	Large-Port Vortec Bowtie	**25534371**	Iron	225	Vortec	23	66	2.000	1.550	LT4	Straight	No	Screw-in	Assembly	130
24502580	18° Semi	**10134363**	Alum	215	18°	18	60	—	—	18°	Angled	No	Shaft	No seats/guides	134
24502615	15°	**10134363**	Alum	210	18°	15	35-37	—	—	18°	Angled	No	Shaft	No seats/guides	134
12480129	SB2.2	**12480011**	Alum	—	SB2.2	SB2.2	48	2.150	1.625	SB2.2	Angled	No	Shaft	No seats/guides	137
12480011	SB2.2 Bare	**12480011**	Alum	—	SB2.2	SB2.2	48	2.150	1.625	SB2.2	Angled	No	Shaft	No seats/guides	136
88958667	ROX SB2.2	**88958667**	Alum	—	SB2.2	SB2.2	28	2.150	1.625	SB2.2	—	—	Shaft	No seats/guides	137
12480146	Rough Bare Splay	**10185040**	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	Rough mach 24502517	135
12480147	Semi-Machined Splay	**10185040**	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	Semi-mach 12480146	135
24502517	Splayed valve	**10185040**	Alum	—	Splayed	Splay	45	2.200	1.650	Splayed	Angled	No	Shaft	No seats/guides	135
12480153	ROX splayed	**12480153**	Alum	—	Splayed	Splay	—	—	—	Splayed	—	—	Shaft	No seats/guides	136



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 137.*

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.

A. 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		

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.

**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.*



A Small- and Large-Port Vortec Bowtie Heads (intake). Bare head shown.



A Small-Port Vortec Bowtie Head (exhaust). Bare head shown.



A Small-Port Vortec Bowtie Head (chamber).



ZZ4 Aluminum Cylinder Head Assembly (intake) B



ZZ4 Aluminum Cylinder Head Assembly (exhaust) B



ZZ4 Aluminum Cylinder Head Assembly (combustion chamber) B

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 ports[1] (they increase post-combustion scavenging for increased power), high-velocity exhaust runners and centrally located spark plugs[2] 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.

B. 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		

[1]D-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!

[2]Centrally-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.

Additional components required for installation. *See page 137.*

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.

A. 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



A LT4 Aluminum Cylinder Head Assembly (intake)

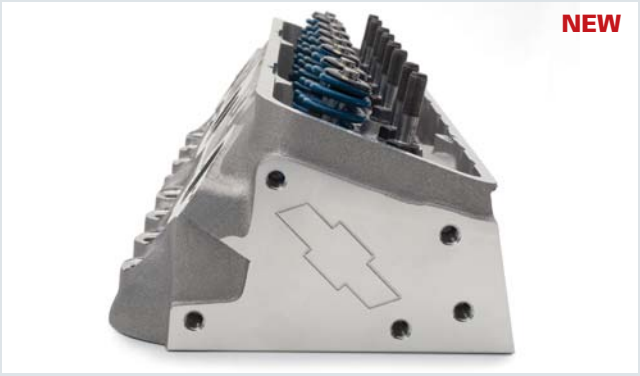


A LT4 Aluminum Cylinder Head Assembly (exhaust)



A LT4 Aluminum Cylinder Head Assembly (combustion chamber)

NEW



Fast Burn Cylinder Head **B**

NEW



Fast Burn Cylinder Head (intake) **B**

NEW



Fast Burn Cylinder Head (exhaust) **B**

NEW



Fast Burn Cylinder Head (combustion chamber) **B**

ALUMINUM FAST BURN HEADS

Chevrolet Performance's Fast Burn 23-degree cylinder heads deliver maximum performance for small-block engines. A new head casting – distinguished by new Chevy bowtie logos at each end – and new valvetrain with high-rpm, LS-style beehive-type valve springs stretches the performance range of the heads to enable greater power – including a 25-hp increase in our ZZ383 crate engine! Fast Burn technology delivers more horsepower by increasing cylinder pressures, which maximizes the air/fuel mixture's combustion. The 62cc combustion chamber is designed for used with flat-top pistons. The CNC-machined Fast Burn heads require no additional porting for optimal performance, so all you need to do is bolt them onto your small block and go! They can be used on any small-block engine with at least 4.000-inch bores and the standard-flow coolant system. Not for use on Gen II 1992-96 LT1/LT4 engines with reverse-flow cooling system.

B. 19300955 NEW

Fast Burn Aluminum Cylinder Head Assembly

- CNC-machined aluminum performance cylinder 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® exhaust gasket P/N 1470 (may require minor trimming)
- 62cc combustion chamber, .400" deck (can be milled 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
- .530" maximum valve lift (without modifications)
- Screw-in studs (3/8" top, 7/16" bottom)
- New "time-serts" prevents oil migration through rocker studs
- Dual bolt patterns for perimeter-bolt and center-bolt valve covers
- Dual bolt patterns for Vortec and early-model intake manifolds
- Use bare head **P/N 19300956**
- Use production intake gasket **P/N 19301685**

This head is assembled with the following components:

12555331	Intake valves (4)	**19301708**	Valve spring retainers (8)
12551313	Exhaust valves (4)	**19307709**	Valve stem key (16)
12625033	Valve springs (8)	**12552126**	Valve rocker arm studs (8)
19301707	Valve spring seats (8)	**10168519**	Valve guides (8)
10212810	Valve stem seals (8)	**12346004**	Valve rocker arm stud sealer

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

A. 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



A 15°/18° Cylinder Head (exhaust)



A 15°/18° Cylinder Head (intake)



A 15°/18° Cylinder Head (combustion chamber)



Splayed-Valve Head (exhaust) B



Splayed-Valve Head (intake) B



Splayed-Valve Head (combustion chamber) B

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

B. 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

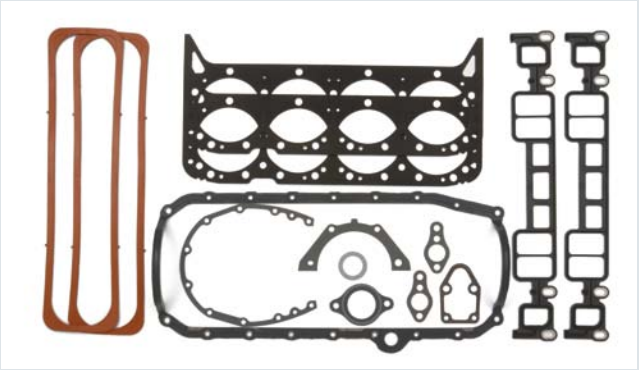
Part Number	Head Gaskets (Quantity)	Bolts (Quantity)	Spark Plug	Engine Application
93438649	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529, 19157995
93438648	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529
12558060	10105117 (2) **OR** 12557236 (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
19300955	10105117 (2) **OR** 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	5614210	19318604, 19301295, 19301293, 19301294
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, HT383 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

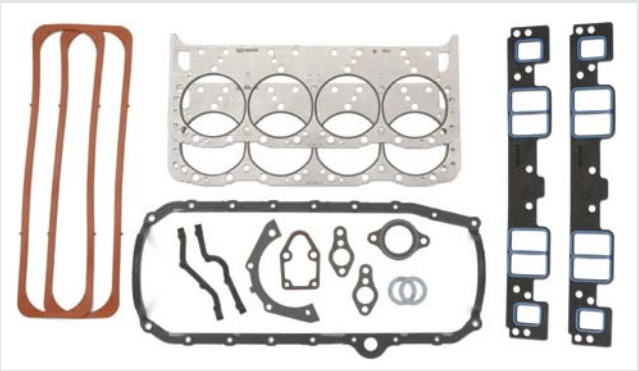


A Rebuild Gasket Kit

B. 19201172
Rebuild Gasket Kit
- Fits Fast Burn 385, ZZ5, ZZ383 and Circle Track engines P/N 88958604 and P/N 19318604

This kit includes the following items:

12557236	2	Head Gaskets
10108676	1	Oil Pan Gasket Set
12555771	1	Rear Main Seal Housing Gasket
19301685	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



B Rebuild Gasket Kit

CYLINDER HEAD GASKETS AND HEAD BOLTS

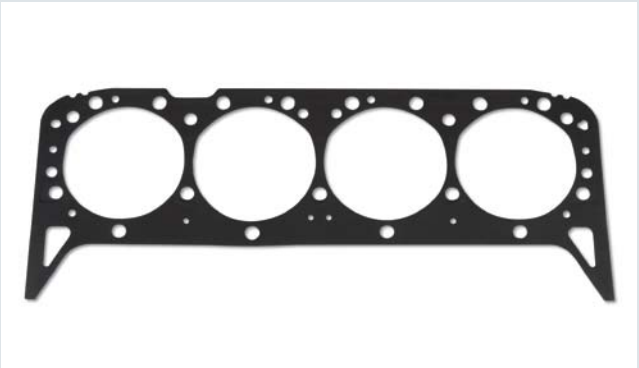
Chevrolet Performance cylinder head gaskets, cylinder head bolts and cylinder head studs are the finest-quality parts available. Their superior construction ensures optimum sealing between cylinder heads and the engine block.

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

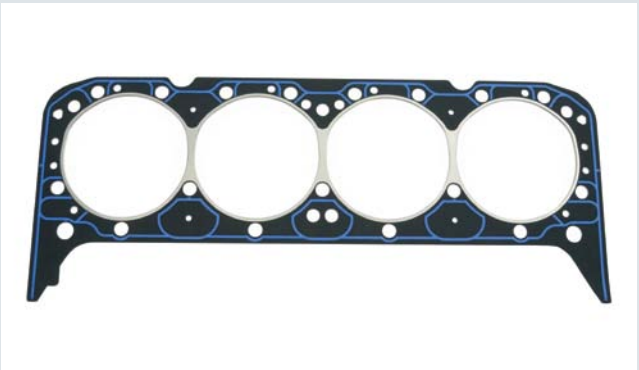
12557236
Composition Head Gasket (not shown)
- Stainless steel fire rings
- Fits aluminum or cast-iron heads
- Used on ZZ4 and 350 HO engines
- **0.051"** compressed thickness



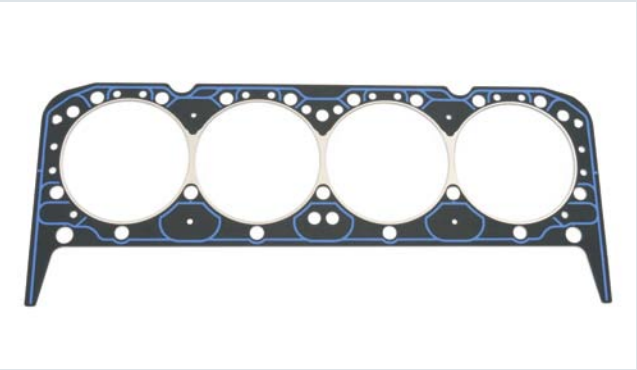
C Composition Head Gasket

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

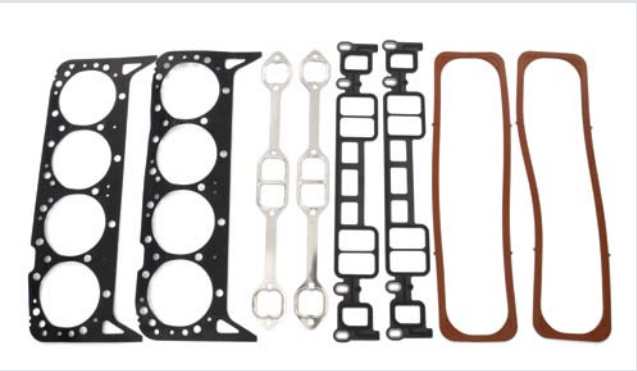
NOTE: *Drill steam holes when used on 400-ci Small-Blocks. Gasket does not require re-torquing.*



D Heavy-Duty Composition Head Gasket



Special Competition Head Gasket **E**



Cylinder Head Installation Kit **F**

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

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



Cylinder Head Stud Nut, 12 Point



Cylinder Head Dowel Pin



Cylinder Head Bolt Kit

14011040 (not shown)
Hardened Washer
- 0.450" I.D. x 0.778" O.D.
- Sold individually

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

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

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
12625033	Single spring	1.320"	101# @ 1.780"	1.220"	332	19301708	N/A	CT400, ZZ5 and ZZ383 engines (Beehive Spring)
12499224	Spring kit	1.320"	101# @ 1.780"	1.220"	332	19301708	N/A	Kit of 16 springs P/N 12625033 (Beehive Spring)
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)

BEEHIVE SPRING CONVERSION KIT — NEW

19300952 NEW

Beehive Valve Spring Conversion Kit

Convert the valvetrain on your aluminum Fast Burn heads to the beehive-type system used on Chevrolet Performance's latest Fast Burn heads (P/N 19300955) – and used on the ZZ5 and ZZ383 crate engines, and CT400 – to gain greater high-rpm capability and valvetrain stability. The springs, retainers and other hardware are direct replacements for the conventional springs and hardware, with no machining of the valve spring seat required. The engine's existing intake and exhaust valves are retained, allowing installation without cylinder head removal if compressed air or another method is used to hold the valves closed. The engine's existing rocker arms are also retained. The kit comes with components to convert a pair of cylinder heads, including:

Part Number	Quantity	Description
12623033	16	Spring
19301708	16	Cap
19301707	16	Seat
19301709	32	Keeper

NOTE: *The conversion kit is intended only for Fast Burn heads and is not compatible with Vortec heads because of insufficient room for the spring seats.*



Service Kit Includes:

Part Number	Quantity	Description
12499224	16	Spring
19303149	8	Cap
19303150	8	Seat
19302868	16	Keeper

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 ZZZ, 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. 19210731
"Kool Nut" (Single)
- 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" (Kit of 16) (not shown)

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
- Installed on ZZ5 crate engines

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
- Factory installed on new ZZ383 crate engines

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 144.

Valve Covers Continued

A. 25534420
Pontiac 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

ADAPTERS, HARDWARE AND BREATHERS

B. 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.*

C. 88962074
Oil Baffle Tube
- Pushes easily into most valve covers that have an oil baffle
- Requires breather P/N 25534355; used on ZZ572 engines

D. 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 Pontiac 301-455 V-8 Valve Covers



B Chrome Bolt Kit, Center Bolt Design



C Oil Baffle Tube



D Circle Track 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 **E**



Hold-Down Clamps **F**



Spring Bar Retainer **G**



Spring Bar Retainer, Chrome-Plated **H**

E. 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

F. 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

G. 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.*

H. 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.

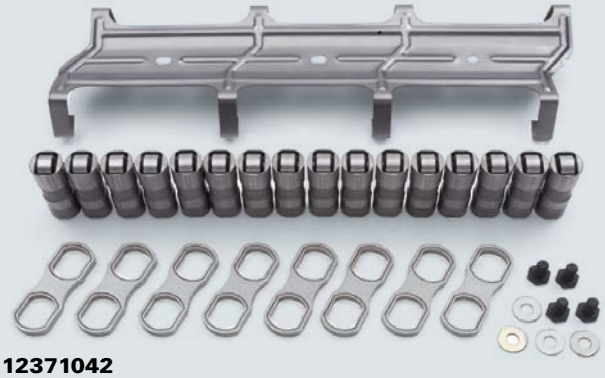
ROCKER ARM STUDS

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



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



Valve Lifter Guide, "Quick Cam"



Hydraulic Roller Lifter



Flat Tappet Lifter

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.*

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"	+.030"	—	Premium quality rings for 383 engines
12499107	4.000"	+.005"	—	Set of 8 ring packs
12499231	4.000"	Standard	—	Set of 8 ring packs of P/N 12528817

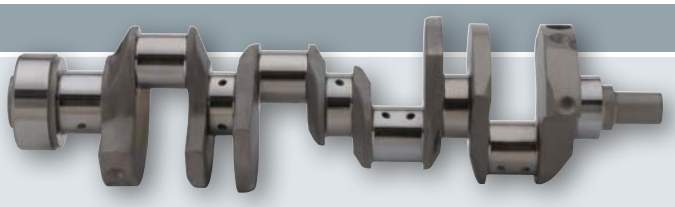
BUILDER'S TIP

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.



NEW
ZZ5 and CT 400 Engine Balancer (P/N 19301706)



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
19301706 NEW	1970-74 350; ZZ5 and CT 400 crate engine	8"	Nodular 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 FLEXPLATES

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.

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	1955–1985	14"	3.580"	10.750"; 11.500"	168	For internally balanced engine with 2-piece crank seal
471529	1955–1985	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

**Note: will not work with new Supermatic torque converters*

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

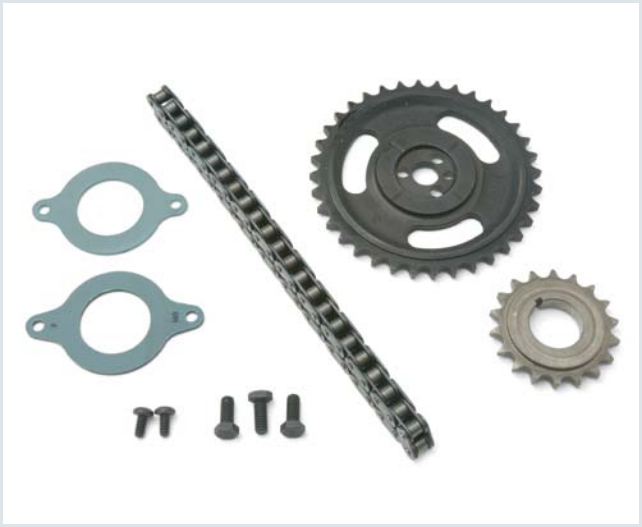
12552129
Camshaft Sprocket (not shown)
- Single-roller-type for ZZ-design 350 HO engine

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 Pump, Long-Style **E**



Aluminum Water Pump, Short-Style **F**



Water Pump Pulley **G**



Water Pump Pulley Reinforcement **H**

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

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.*

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.*

H. 3720616
Water Pump Pulley Reinforcement
- Increases stiffness of water pump pulley
- Use with pulley P/N 3942992

ACCESSORY DRIVE SYSTEMS

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
- Deluxe kit includes all the components and hardware necessary to install on an engine without air conditioning, including water pump, alternator, power steering pump and idler bracket; belt included
- Includes all components from above kit, minus air compressor assembly

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 real 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

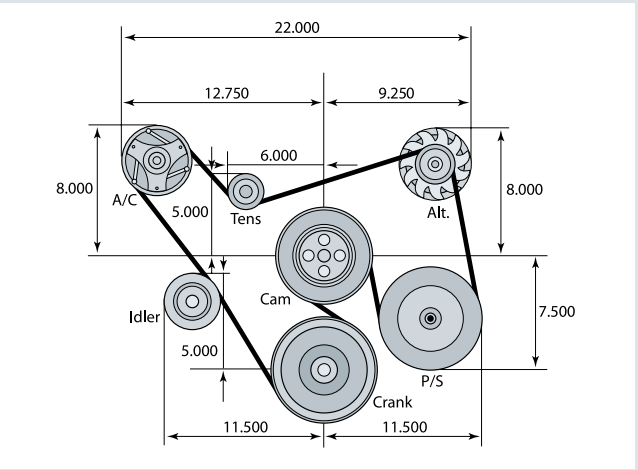
NOTE: *Use with oil pan rail reinforcement P/N 12553058 (LH) and 12553059 (RH).*

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



A Serpentine Accessory Drive System (with air conditioning)



A Serpentine Accessory Drive System (with air conditioning)



B Oil Pan, 1986–1992 F-car and ZZ4



C Oil Pan, Z28-Style



Circle Track "Late Model" Oil Pan **D**



Windage Tray **E**



Windage Tray **F**

25534353
Circle Track "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
Circle Track "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 PUMPS & FILTERS

12555884
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

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



Oil Filter Adapter



Oil Pump, High Volume

3848911
Oil Pump Spring (not shown)
- Regulates oil pressure at approximately 70 psi
- Use with high-volume pump, P/N 12555884

NOTE: *Minimum recommended oil pressure for off-highway use is 65 psi at engine operating speed.*

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 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

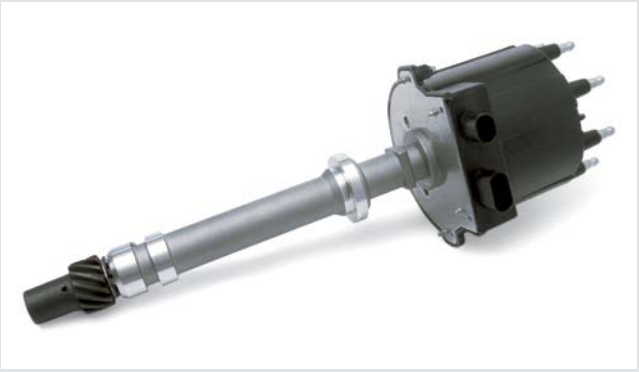
12498335
Coil, HEI (not shown)
- Production HEI coil



A Distributor, HEI



B Distributor, Billet HEI



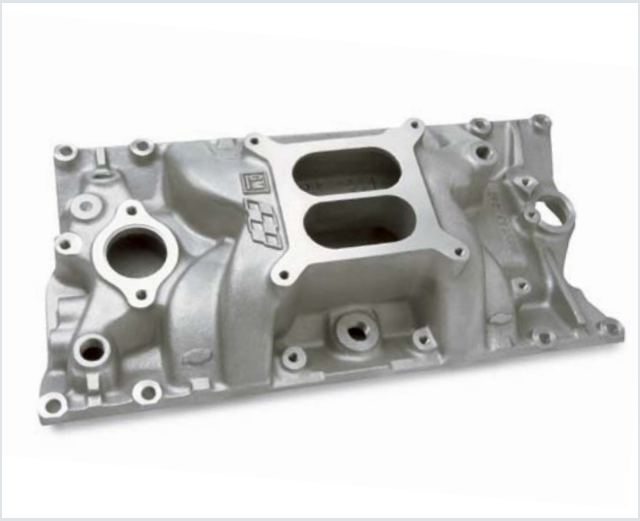
C Distributor, Ram Jet 350 & Ram Jet 502



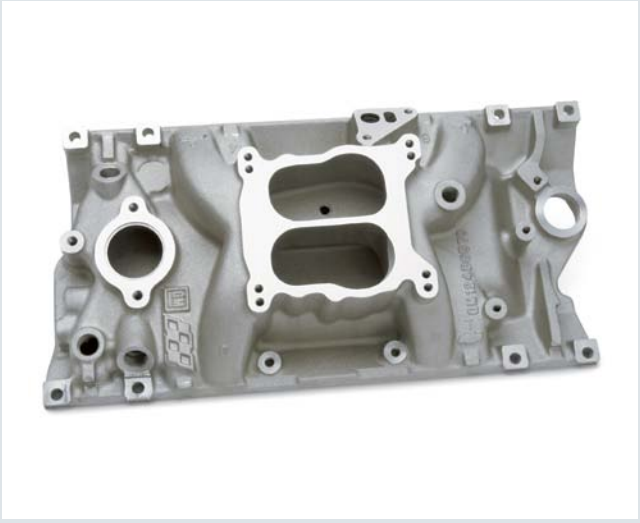
D Distributor, Adjustable Slip Collar



Intake Manifold, ZZ Series **E**



Intake Manifold, Vortec Head Design **F**



Intake Manifold, Vortec Head Design **G**
(Dual Pattern Carb Mount)

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 Quadrajet-style carburetors
- Will accept an EGR valve, P/N 17052693
- To block EGR port, use P/N 12556596
- Requires intake manifold gasket kit P/N 19301685 and 8 special manifold bolts, P/N 12550027

(!) *Additional components required for installation.* *See page 161.*

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 kit P/N 19301685 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**



Bowtie Intake Manifold, Standard Runner **E**



Ram Jet Fuel Injection Manifold Kit (less electronics) **F**

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

RAMJET ELECTRONICS

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.*

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.*

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

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

Additional components required for installation. *See page 161.*

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, R0X (not shown)

- Fits R0X manifold and R0X 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)



A Choke Hole Cover



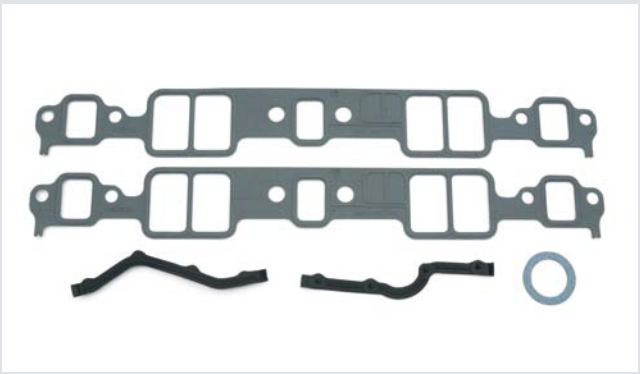
B Cover, EGR Valve



C Plug, EGR Pipe Hole

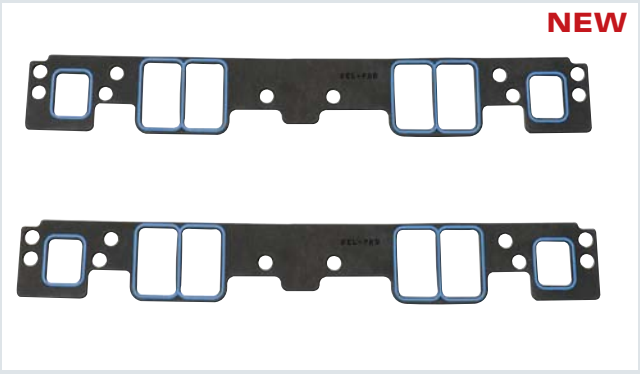


D Water Neck

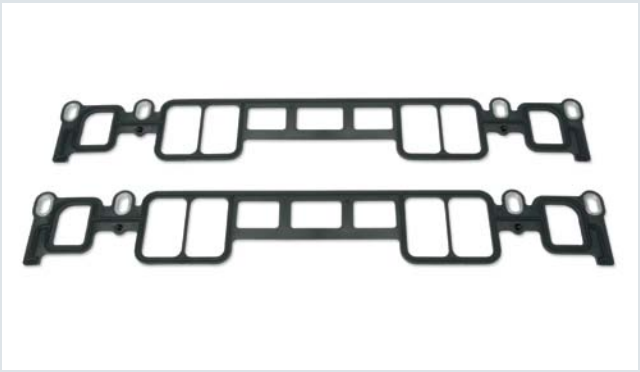


Gasket Kit, 1971-1986 and ZZ350 **E**

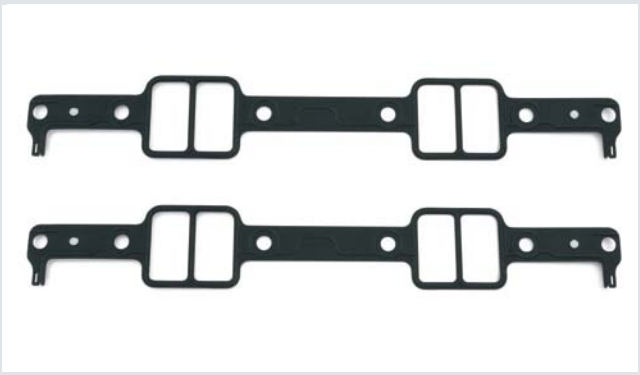
NEW



Gasket Kit, Vortec Design **F**



Gasket Kit, Production Vortec Design **G**



Gasket Kit, LT4 **H**

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. 19301685 NEW
Gasket Kit, Fast-Burn Alluminum Vortec Design
- Designed for Vortec heads P/N 12529093, P/N 12558060, P/N 12464298, P/N 19300955 and P/N 12497186 only
- Gasket thickness is 0.120" (1/8"), post size is 1.080" x 2.160" with tapered wall, Print-O-Seal design
- Has both early style 6-bolt pattern and Vortec 4-bolt pattern
- Includes 2 gaskets

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

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

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

❗ STARTERS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Bolts (Quantity)	Engine Application
12361146	14097279 (1), 14097278 (1)	Small-Block (except LT or LS Engines)
10465143	14097279 (1), 14097278 (1)	Small-Block (except LT or LS Engines) and 12499711, 12499710, 12499712, 19201330
12363128	14097278 (1)	Small-Block (except LT or LS Engines)
12606096	12338064 (2)	Big Block and 12499121, 12496962, 12497323, 12371171

❗ *Additional components required for installation.*

ELECTRONIC CONTROL REV LIMITER

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



Rev Limiter for CD Ignition Controller

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!

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.

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.*

SPARK PLUG WIRES

12361051
Chevrolet Bowtie Logo Wires
Chevrolet Performance spark plug wire kits are designed to fit your GM engine, eliminating the guesswork in selecting the correct length. 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 Chevrolet insignia and black boots. Manufactured with double-wall silicone construction.

- Kits include a 10" coil wire for engines, such as Ram Jet 350 and ZZ572 engines that have remote-coil HEI, plus four wire separators and HEI terminals and boots for the distributor cap.
- Custom-fit set designed to be used with black wire loom P/N 12495502 or chrome wire loom P/N 12342049.


Chevrolet Bowtie Spark Plug Wire Set (90° Boots Shown)

24502521
GM Racing Wires
Superior quality racing plug wires used by NASCAR teams. Designed to route over the valve cover, with 135° spark plug boots.


Spark Plug Wire Set (135° Boot Shown)

LOOM KIT

12496806
Wire Loom Kit
- 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.



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
12361051	Small-Block	12496806	Bowtie	90°	Below valve covers	Small-Block with 90° spark plug boots
24502521	NASCAR	N/A	None	135°	Over valve covers	

Additional components required for installation.

CARBURETORS AND THROTTLE BODIES

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

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

AIR CLEANERS

B. 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

C. 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.*

D. 12498951
Air Cleaner, Ram Jet 350
- Designed for use with throttle body on Ram Jet 350 crate engine
- Can be used on other applications



A Carburetor, Holley 670-cfm



B Air Cleaner, Chevrolet Logo Classic Design



C Air Cleaner, Chevrolet Logo High-Performance Design



D Air Cleaner, Ram Jet 350



Fuel Pump, High Capacity **E**



Fuel Pump, Street Performance **F**



Fuel Pump, Competition **G**



Fuel Filter **H**



Small-Block Fuel Pump Block-Off Plate **I**



Electric Fuel Pump **J**



Electric Fuel Pump, High Output **K**

FUEL PUMPS AND COMPONENTS

E. 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

F. 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

G. 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

H. 854619
Fuel Filter
- High-capacity inline filter
- Suitable for all high-performance carbureted applications
- 5/16" inlet and outlet

I. 12341998
Small-Block Fuel Pump Block-Off Plate
- Plate has stamped Bowtie logo
- Special non-asbestos gasket included

ELECTRIC FUEL PUMPS

J. 6472657
Electric Fuel Pump
- For use on all carbureted engines
- Flows 30-40 gph at 6-9 psi

K. 25115899
Electric Fuel Pump, High-Output
- Heavy-duty 12-volt electric rotary pump
- Flows 72 gph at 6-8 psi

Small-Block

LS SERIES Crate Engines

Modern Performance for Vehicles of All Ages

Installing a high-revving, high-performance LS engine is the hottest trend in hot rodding, and nobody offers more LS crate engines than Chevrolet Performance!

From production-based engines like the 7.0L LS, found in the all-new Camaro Z/28, to custom engines, like the LS376/525, which blend economical production foundations with track-tested high-performance parts, we've got the LS engine to transform your street rod, muscle car, vintage truck or even that torque-challenged import.

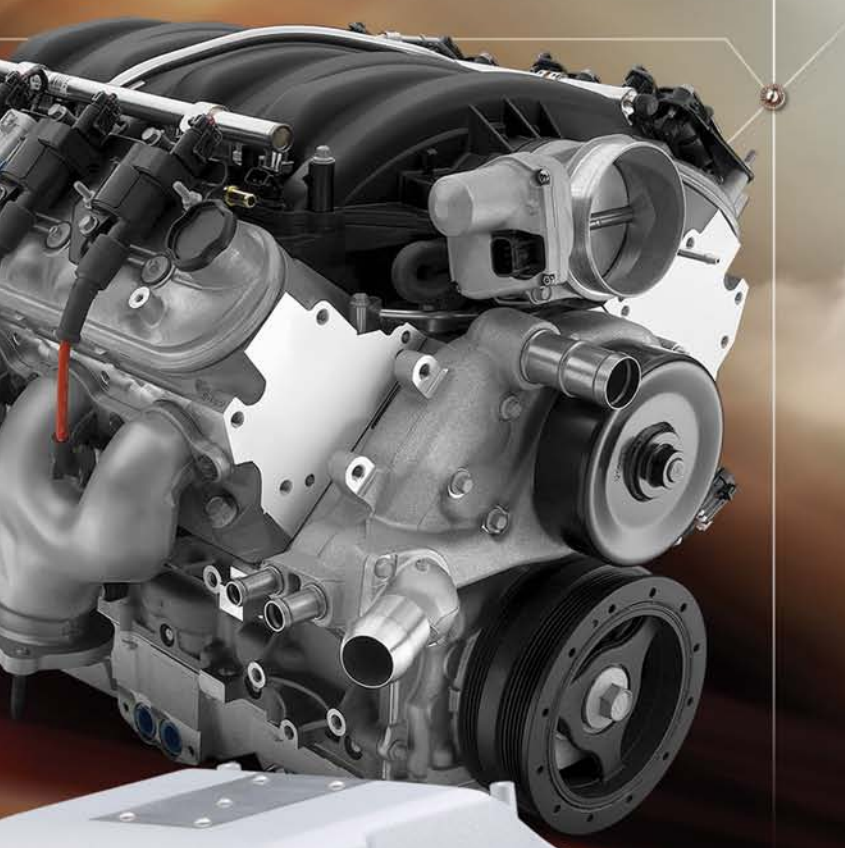
Chevrolet Performance's E-ROD lineup of LS crate engines is designed to be compliant with California emissions requirements and each carries a CARB EO number that makes it legal for pre-1996 vehicles. E-ROD systems include emissions equipment and supporting components – and represent the future of hot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

We've also got the parts you need – including controllers and accessory drive systems – to help finish the installation and get your crate engine running in your project vehicle quicker and with less hassle. That makes Chevrolet Performance the only source you need for LS power!



Engines Shown Clockwise From Left:

- *LS376/515*
- *LS376/525*
- *LSA 6.2L SC*







LC9 5.3L
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LS327/327
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LS3 6.2L
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LS376/480
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LS376/515
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LS376/525
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LSA 6.2L SC
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LS9 6.2L SC
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LS7 7.0L
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E-Rod Crate Engine Systems
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Connect & Cruise Systems
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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 was 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 was the standard engine in the C6 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.

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.

LSA

This supercharged 6.2L engine is standard in the Cadillac CTS-V series and the 2012-2014 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 B-8	6.2	376	CI	450	444	4.060	3.620
19299303	LSX376 B-15	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 Chevrolet Performance'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)
- LY5 (2007-2009)
- LMG (2007-2009)
- LH8 (2008-2009)
- LMF (2008-2009)

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.
- Two versions are offered for added power for those using really serious power adders.
- 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.

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 others 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. **(Photo A)**

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. **(Photo C)**

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. **(Photo B)**

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. **(not shown)**



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 LQ9	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. **(Photo A)**

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. **(Photo B)**

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. **(Photo C)**

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. **(not shown)**

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. **(Photo D)**

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 and 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.



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 came cylinder head bolt pattern and the same size head bolts – four 11mm bolts per cylinder (20 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 mainfold 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!



LC9 5.3L

19259918

- 320 hp @ 5,400 rpm
- 335 lb.-ft. @ 4,000 rpm

An affordable LS crate engine with power and durability!

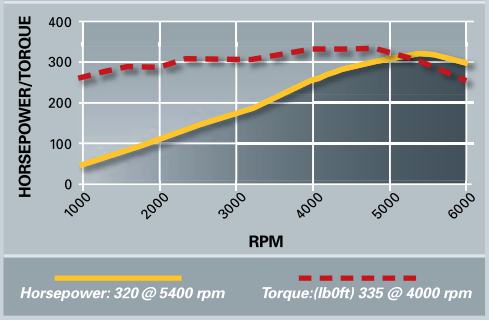
If you're looking for an affordable alternative to a used LS engine for your swap project, check out Chevrolet Performance's LC9 5.3L engine. It is based on the workhorse powerplant used in hundreds of thousands of GM trucks, including the Chevrolet Silverado and Suburban. It's rated at 320 horsepower 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 engine package includes an aluminum engine block, intake manifold, thottle body, and fuel rail. It's a great choice for hot rod cruisers and off-roader projects, where torque and dependability are equal in priority to 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



INSTALLATION NOTES

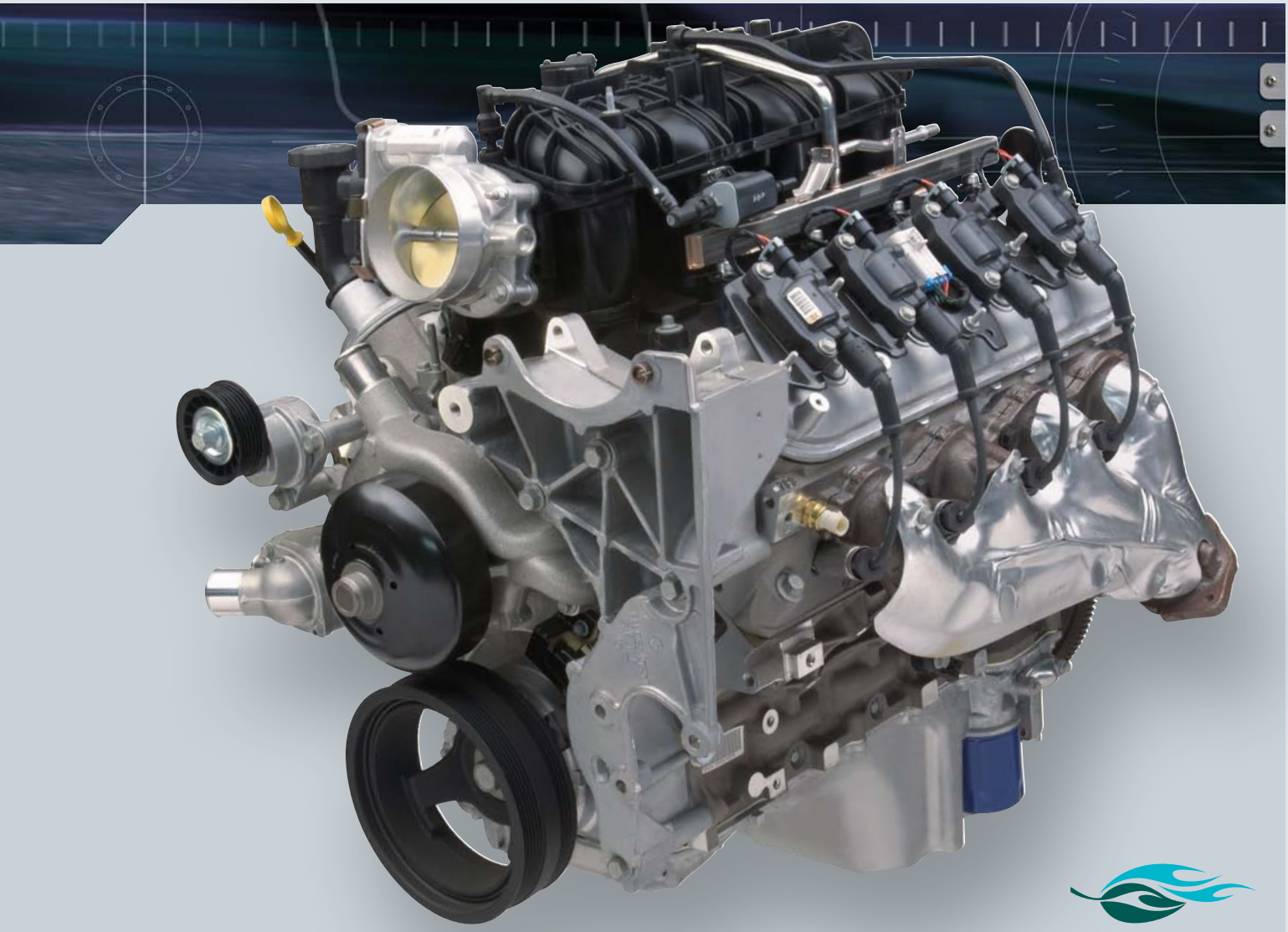
- 14-inch automatic transmission flexplate included
- Components to complete FEAD are listed on page 250
- Check hood clearance for interference
- Chevrolet Performance muscle car oil pan kit P/N 19212593 may be required for installation on older vehicles
- Intended for pre-1976 street vehicles or off-road vehicles
- Not intended for marine applications
- Requires LC9 5.3L controller kit P/N 19259914 for engine operation (not included)

LC9 5.3L TECH SPECS

Part Number:	19259918	**Camshaft Duration (@.050 in):**	196° intake / 201° exhaust
Engine Type:	LS-Series Gen IV Small-Block V-8	**Cylinder Heads (P/N 12598594):**	Aluminum; cathedral port
Displacement (cu in):	327 (5.3L)	**Valve Size (in):**	1.890 intake / 1.550 exhaust
Bore x Stroke (in):	3.620 (96 x 92 mm)	**Compression Ratio:**	9.5:1
Block (P/N 12623964):	Cast-aluminum with 6-bolt, cross-bolted main caps	**Rocker Arms (P/N 10214664):**	Investment cast, roller trunnion
		Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 12553480):	Nodular iron	**Recommended Fuel:**	87 octane
Connecting Rods (P/N 12568734):	Powdered metal steel	**Maximum Recommended rpm:**	6,000
Pistons (P/N 12571545):	Hypereutectic aluminum	**Reluctor Wheel:**	58X
Camshaft Type (P/N 12561721):	Hydraulic roller	**Balanced:**	Internal
Camshaft Lift (in):	.467 intake / .479 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.



Also available as an E-ROD system

E-ROD SYSTEM – LC9 5.3L



Emissions compliant – CARB - 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 196 for E-ROD 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 335 for torque converter applications



19302405
Transmission Controller
See page 337 for details



19259914
5.3L Engine Controller Kit
See page 261 for details



19299802
SuperMatic™ Torque Converter
See page 334 for details



19258433
LC9 5.3L Accessory Drive System
See page 250 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

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.

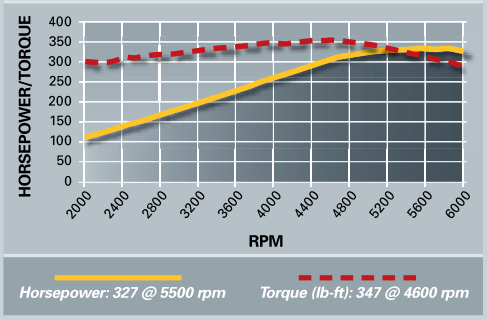
It's based on production 5.3L engines found in GM trucks and SUVs, but Chevrolet Performance engineers gave it a hotter cam, Grafel-coated high-silicon pistons and more. An iron engine block reinforces the engine's strength and keeps down the cost.

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



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
		Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 12553480):	Nodular iron	**Recommended Fuel:**	87 octane
Connecting Rods (P/N 12568734):	Powdered metal steel	**Maximum Recommended rpm:**	6,000
Pistons (P/N 12571545):	Hypereutectic aluminum	**Reluctor Wheel:**	24X
Camshaft Type (P/N 12561721):	Hydraulic roller	**Balanced:**	Internal
Camshaft Lift (in):	.467 intake / .479 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.



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. LS finishing kit P/N 19244041 is installed on this engine to make a LS 327/327 Deluxe.

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 335 for torque converter applications



19212657
Transmission Controller
See page 337 for details



19155067
Corvette Accessory Drive Kit
See page 247 for details



19299802
SuperMatic™ Torque Converter
See page 334 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details



19170093
Carburetor, Holley 770-cfm
See page 259 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LS3 6.2L

19301326

- 430 hp @ 5,900 rpm
- 424 lb.-ft. @ 4,600 rpm

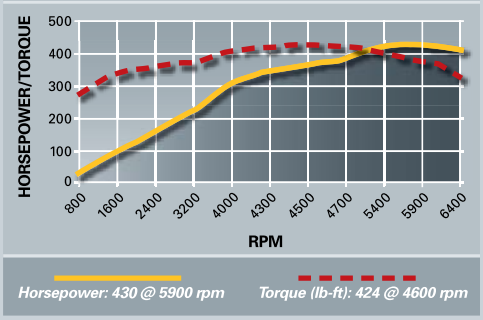
Direct from the Corvette, Camaro, and Chevy SS to your project vehicle!

The LS3 6.2L is the 430-hp standard engine in the Chevrolet Camaro SS and the all new RWD Chevy SS. It is a fantastic combination of high-technology and uncompromising performance. Our LS3 crate engine comes complete, from the Chevy SS-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 Chevy SS 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



INSTALLATION NOTES

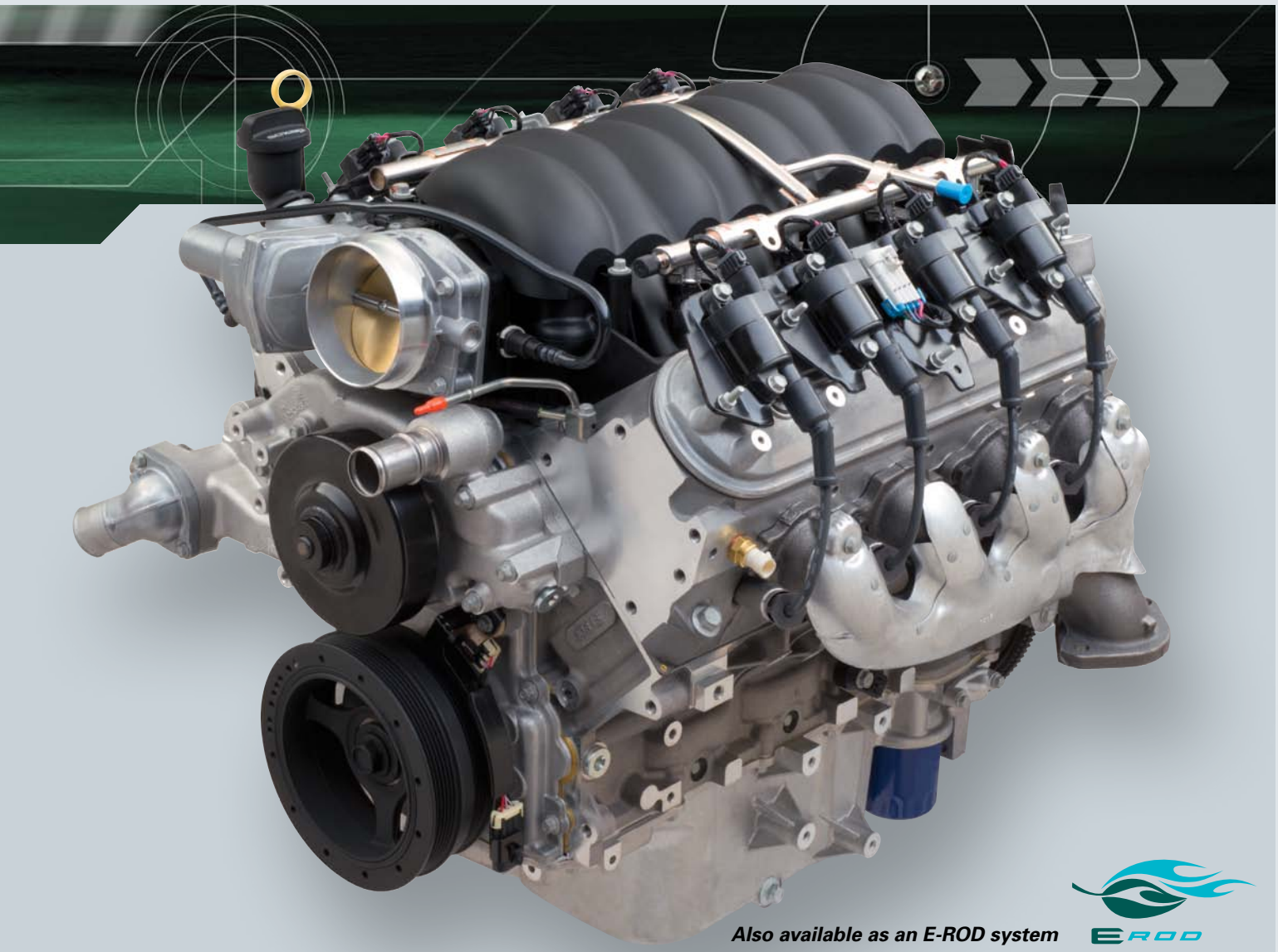
- Assembly does not include any electronics
- Use LS3 Controller Kit, P/N 19258270 for engine operation. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 205)
- Includes Chevy SS wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Front-end accessory drive kits are available in several configurations (see page 247 for application).

LS3 6.2L TECH SPECS

Part Number:	19301326	**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		

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

E-ROD SYSTEM — LS3 6.2L



Emissions compliant – CARB – E.O. number 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 196 for E-ROD 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 335 for torque converter applications



19302405
Transmission Controller
See page 337 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



19299802
SuperMatic™ Torque Converter
See page 334 for details



19155067
Corvette Accessory Drive Kit
See page 247 for details



19258270
LS3 Controller Kit
See page 205 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LS376/480

19301358

- 480 hp @ 5,750 rpm
- 475 lb.-ft. @ 4,500 rpm

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

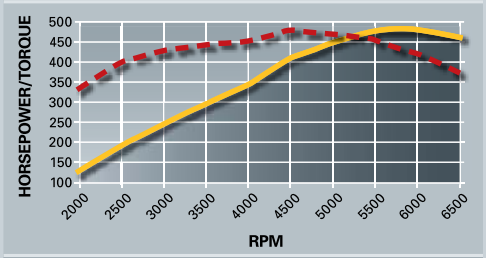
Our engineers never stop tinkering. When they took a production LS3 6.2L (376 cubic inches) engine and swapped the stock camshaft for the racing-inspired LS Hot Cam (P/N 88958753), the result was a stunning 480 horsepower and 475 lb.-ft. of torque. That's nearly 12 percent more power and torque from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



INSTALLATION NOTES

- Assembly does not include any electronics
- Use LS376/480 Controller Kit, P/N 19258267 for engine operation. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 205)
- Includes Chevy SS wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Front-end accessory drive kits are available in two configurations (see page 247 for application).

LS376/480 TECH SPECS

Part Number:	19301358	**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; electronically controlled for more precise, fuel-saving performance.
See page 335 for torque converter applications



19302405
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299803
SuperMatic™ Torque Converter
See page 334 for details



19301620
T56 Super Magnum Six-Speed Manual Transmission
See page 338 for details



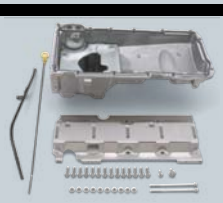
19258267
LS376/480 Controller Kit
See page 205 for details



19155067
Corvette Accessory Drive Kit
See page 247 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

LS376/515



19301359

- 515 hp @ 6,500 rpm
- 469 lb.-ft. @ 5,000 rpm

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

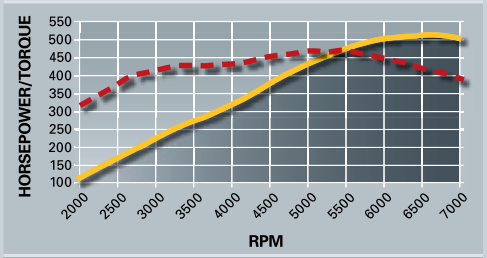
Using the LS3 engine as its foundation, the LS376/515 crate engine adds Chevrolet Performance's racing-derived ASA Cam and a carbureted intake system to produce 515 horsepower at a stellar 6,500 rpm and 469 lb.-ft. of torque at 5,000 rpm. It's the perfect high-performance option for a classic project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

The assembly includes a Chevy SS 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 205)
- Includes Chevy SS 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
- Front-end accessory drive kits are available in two configurations (see page 247 for application).

LS376/515 TECH SPECS

Part Number:	19301359	**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; electronically controlled for more precise, fuel-saving performance.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299803
SuperMatic™ Torque Converter
See page 334 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



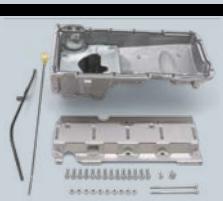
19155067
Corvette Accessory Drive Kit
See page 247 for details



19170093
Carburetor, Holley 770-cfm
See page 259 for details



19171130
LSX Controller
See page 205 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LS376/525

19301360

- 525 hp @ 6,300 rpm
- 489 lb.-ft. @ 4,400 rpm

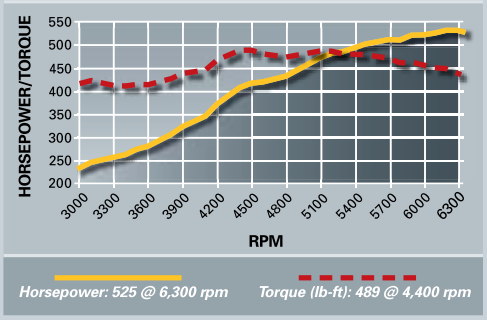
Fuel-injected ferocity for performance cars of all ages

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



INSTALLATION NOTES

- Assembly does not include any electronics
- Use LS376/525 Enginer Controller Kit for engine operation P/N 19259261 (page 205)
- Includes Chevy SS wet sump oil pan
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Front-end accessory drive kits are available in several configurations (see page 247 for application).

LSX376/525 TECH SPECS

Part Number:	19301360
Engine Type:	LS-Series Gen IV Small-Block V-8
Displacement (cu in):	376 cu in (6.2L)
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92mm)
Block (P/N12623967):	Cast aluminum with 6-bolt, cross-bolted main caps
Crankshaft (P/N 12597569):	Nodular iron
Connecting Rods (P/N 12607475):	Powdered metal
Pistons (P/N 19207287):	Hypereutectic aluminum
Camshaft Type (P/N 88958770):	Hydraulic roller
Valve Lift (in):	0.525" intake / 0.525" exhaust
Camshaft Duration (@0.050 in):	226° intake / 236° exhaust
Cylinder Heads (P/N 12629063):	Aluminum L92-style port; as cast with 68cc chambers
Valve Size (in):	2.165 intake / 1.590 exhaust
Compression ratio:	10.7:1
Rocker Arms (P/N 12569167 int):	Investment cast, roll trunnion
Rocker Arms (P/N 10214664 exh):	Investment cast, roll trunnion
Rocker Arm Ratio:	1.7:1
Recommended Fuel:	92 octane
Maximum Recommended RPM:	6,600
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 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; electronically controlled for more precise, fuel-saving performance.
See page 335 for torque converter applications



19302405
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299803
SuperMatic™ Torque Converter
See page 334 for details



19301620
T56 Super Magnum Six-Speed Manual Transmission
See page 338 for details



19259261
LS376/525 Controller Kit
See page 205 for details



19155067
Corvette Accessory Drive Kit
See page 247 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details

SEE PAGE 216 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!

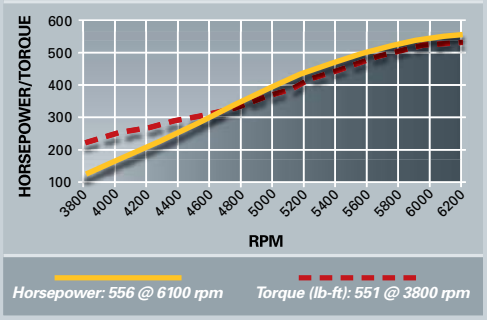
The Cadillac CTS-V's 6.2L supercharged LSA engine delivers 556 horsepower with refinement that is rare in the world of high performance. It is smooth, quiet and well-balanced – all while delivering breathtaking power.

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



INSTALLATION NOTES

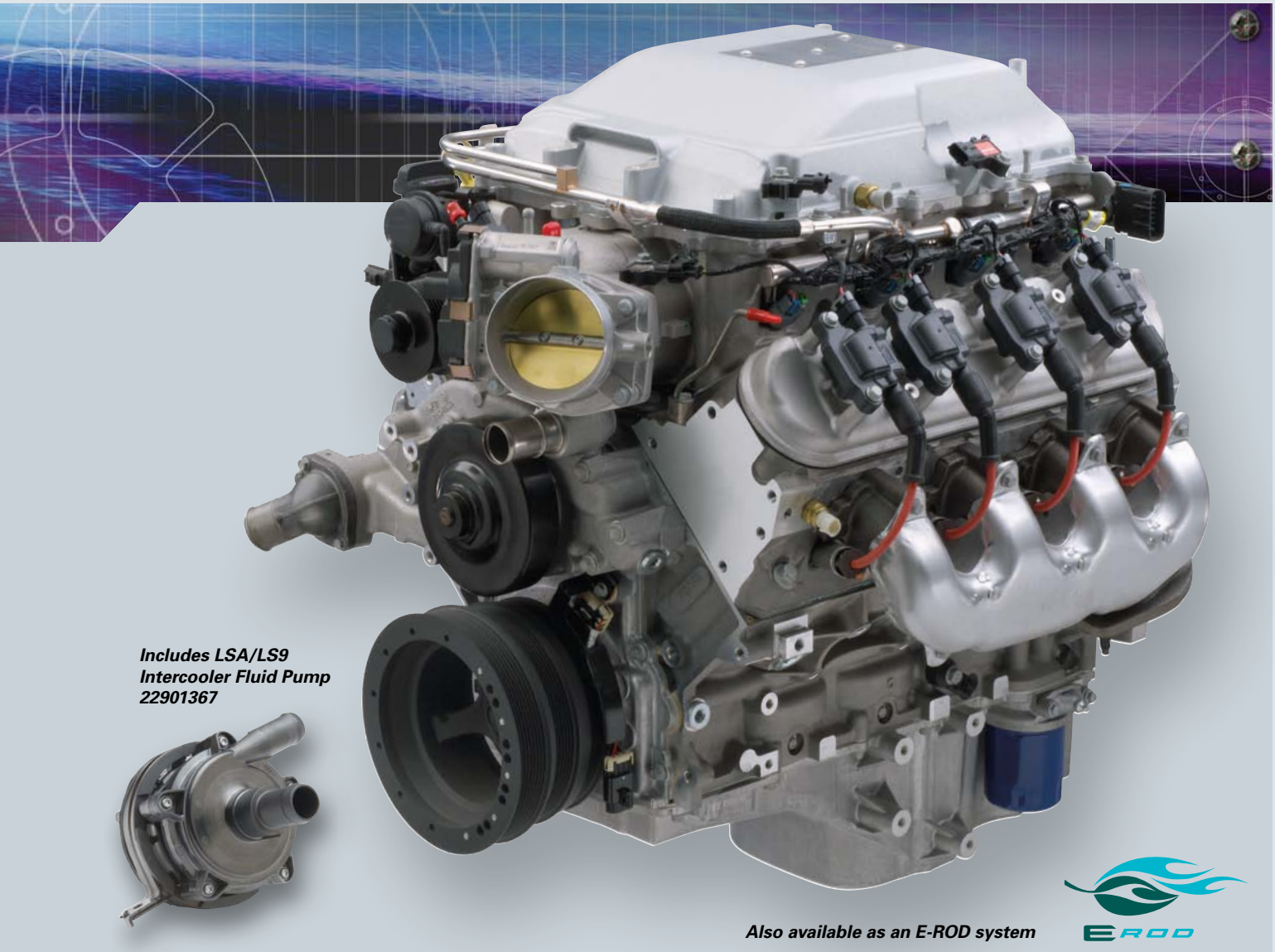
- Assembly does not include any electronics or accessory drive components
- LSA Controller Kit P/N 19259293, available for non-original applications. Kit includes ECM, wiring harness, O^2 sensors and throttle pedal for ETC operation.
- Coolant pump included P/N 22901367
- Intended for pre-1976 street vehicles or any off-road vehicle
- 8-bolt crank flange
- Not intended for marine applications
- Includes flexplate
- See page 248 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 22901367

Also available as an E-ROD system

E-ROD SYSTEM LSA 6.2L



Emissions compliant – CARB – 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 196 for E-ROD 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!



19300175
SuperMatic™ 4L85-E 4-Speed Transmission
See page 335 for torque converter applications



19299806
SuperMatic™ Torque Converter
See page 334 for details



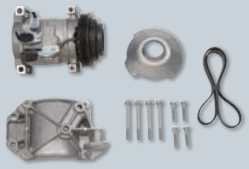
19302410
Transmission Controller
See page 337 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



19243525
LSA Accessory Drive System w/o AC
See page 248 for details



19244106
LSA Accessory Drive System AC add-on kit
See page 248 for details

SEE PAGE 216 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!

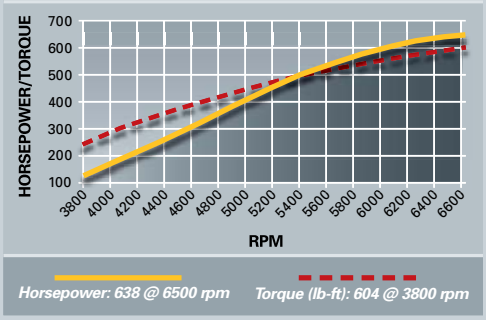
Chevrolet Performance is thrilled to offer the LS9 6.2L supercharged in a fully dressed crate engine package that includes every one of the Corvette ZR1's 638 horsepower!

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



INSTALLATION NOTES

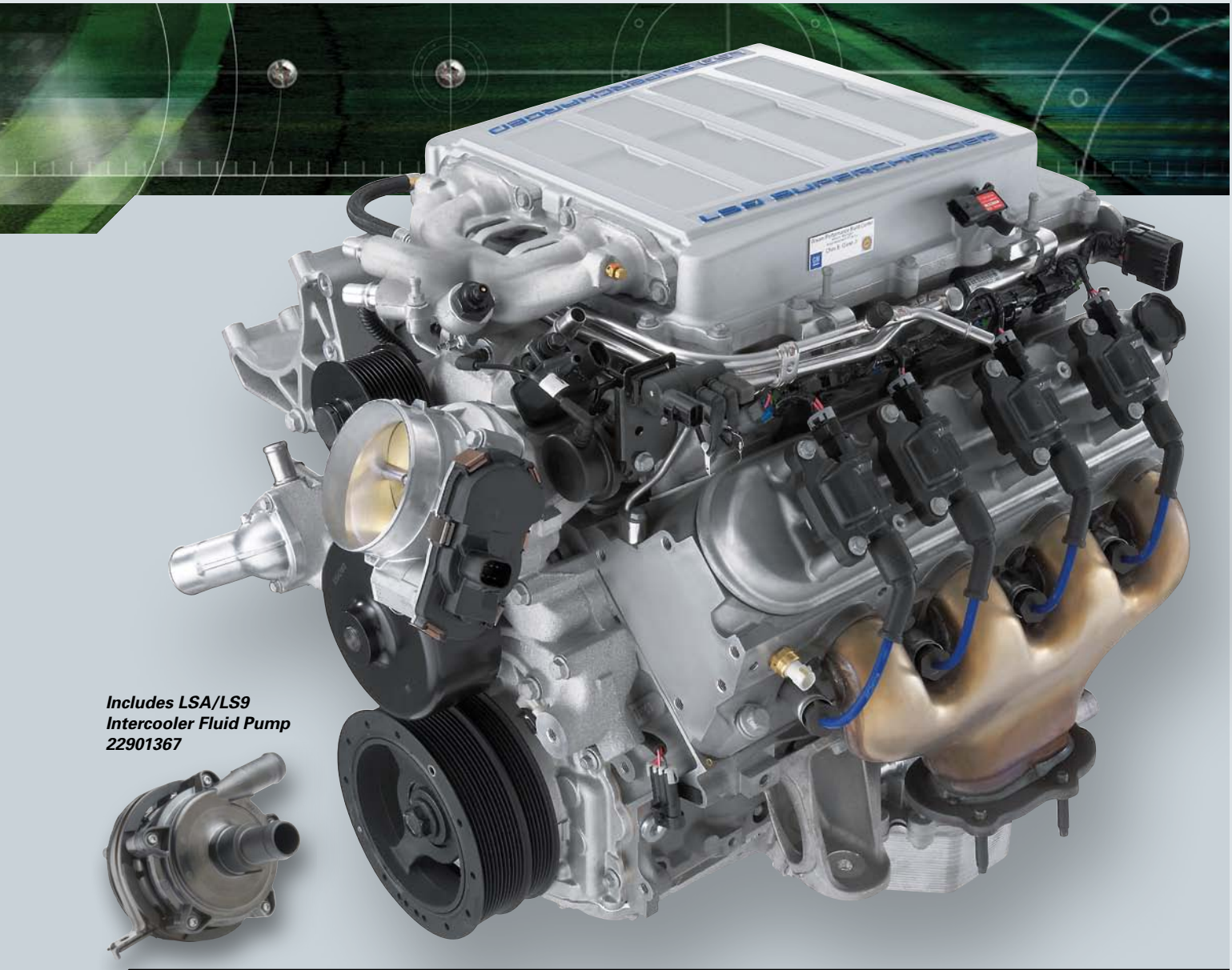
- 14" manual transmission flywheel included
- Assembly does not include any electronics - use LS9 Controller Kit P/N 19299462 to operate engine
- Forged pistons with oil-spray cooling
- Includes Corvette dry sump oil pan - requires production or aftermarket oil lines and oil tank (not included)
- Intended 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.

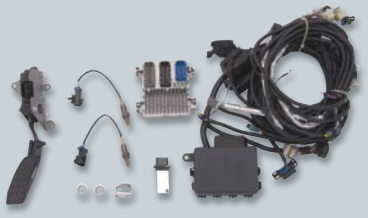


Includes LSA/LS9 Intercooler Fluid Pump 22901367

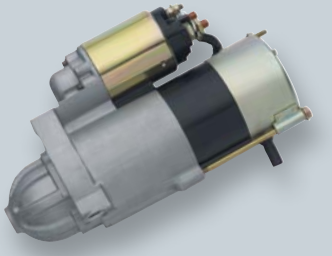
SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19301620
T56 Super Magnum Six-Speed Manual Transmission
See page 338 for details



19299462
LS9 Controller Kit
See page 205 for details



10465385
LS-Series Starter
See page 258 for details



19243524
LS9 Accessory Drive System w/AC
See page 249 for details



19301246
Air Inlet Kit for LS-BasedCrate Engine Installation
See page 255 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LS7 7.0L

19244098

- 505 hp @ 6,300 rpm
- 470 lb.-ft. @ 4,800 rpm

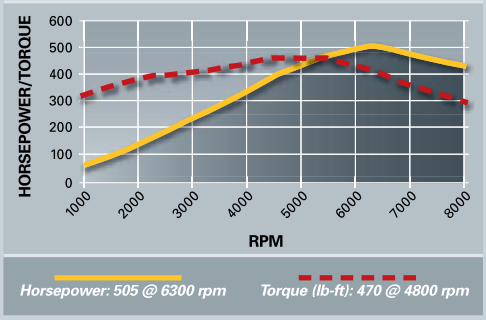
A living legend with 427 classic cubic inches!

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



INSTALLATION NOTES

- Assembly does not include any electronics
- Use LS7 Controller Kit P/N 19258553 for engine operation. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 205)
- Comes assembled with 14-inch Corvette Z06 168-tooth manual transmission 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 247 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"
Bore x Stroke (in):	4.125 x 4.000 (104.8 x 101.6mm)		sodium-filled exhaust
Block (P/N 12602689):	Cast-aluminum with 6-bolt steel	**Compression Ratio:**	11.0:1
	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; electronically controlled for more precise, fuel-saving performance.
See page 335 for torque converter applications



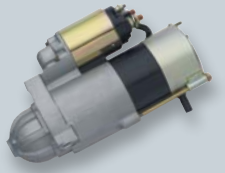
19302405
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299802
SuperMatic™ Torque Converter
See page 334 for details



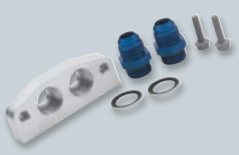
19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



10465385
LS-Series Starter
See page 258 for details



19155067
Corvette Accessory Drive Kit
See page 247 for details



25534412
Oil Hose Adapters
See page 258 for details



19258553
LS7 Controller Kit
See page 205 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS

E-ROD Crate Engine Systems

Emissions compliant with a CARB Executive Order 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, E-ROD LS3 and E-ROD LC9 5.3 L kits all received California Air Resources Board (CARB) Executive Order numbers.

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!

***NOTE**: E-ROD Engine Systems can be delivered as a complete "Connect & Cruise" engine and transmission system! See page 198 for more information.*



E-ROD 5.3L System





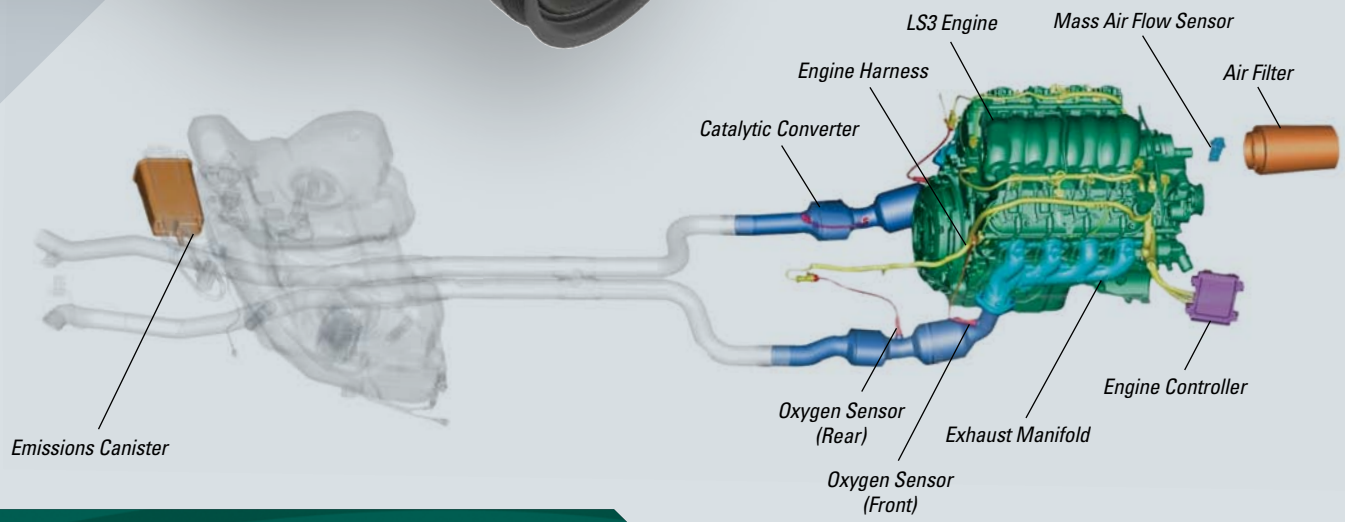


Chevrolet Performance's E-ROD '55 Chevy Delivers Big Power and Efficiency

Welcome to hot rodding in the 21st century! Chevrolet Performance's groundbreaking 1955 Chevy project vehicle introduced the E-ROD family of emissions-compliant crate engines and continues to shine as a real-world example of how classic cars can deliver modern drivability – including excellent efficiency.

We've driven the E-ROD '55 everywhere over the past few years – to countless events and even on the HOT ROD PowerTour – and its 430-horsepower LS3 engine has delivered an average of 23 miles per gallon on the highway. That's comparable to many new performance cars with six-speed transmissions and this vintage Chevy is backed by a proven four-speed automatic.

With E-ROD, you can build the hot rod of your dreams without compromise. Look for our '55 Chevy at major automotive events and see for yourself how horsepower and efficiency go together like SS stripes on a Chevelle!



E-ROD Powers a New Generation of Hot Rods!



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.

Three systems are offered: The E-ROD 5.3L – our most economical system – the E-ROD LS3, with 430 hp, and the supercharged E-ROD LSA, delivering 556 hp and 551 lb.-ft. of torque. Each engine is available in an inclusive Connect & Cruise crate powertrain kit, which matches the engine with a factory-engineered transmission and all necessary controllers.

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 2014 E-ROD Engine Systems can be delivered as a complete "Connect & Cruise" engine and transmission system!* *See page 198 for more information.*



E-ROD LC9 5.3L SYSTEM

CARB EO # D-126-31

19258004	40-Tooth Reluctor Wheel Transmission*
19258008	17-Tooth Reluctor Wheel Transmission*

With same displacement as the classic 327 engines from the 1960s, the E-ROD LC9 5.3L is a great choice for building an emissions-compliant resto-mod Corvette or early Chevy II – and as our most affordable E-ROD package, it's a great value for any street rod, classic truck or muscle car. The LC9 5.3L was originally developed as a truck engine, so it delivers strong torque over a broad rpm range, giving you a great feeling of immediate power on demand. Match it with a 4L65-E transmission for the ultimate combination – which you can do with our Connect & Cruise E-ROD crate powertrain system.

SPECS
LC9 5.3L (327 cu in)
32 hp @ 5400 rpm
335 lb.-ft. @ 4000 rpm
9.5:1 compression ratio
Cathedral-port cylinder heads
Hydraulic roller camshaft with .467"/.479" lift

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 LC9 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 off "trouble codes" being set. It also includes a SES (service engine soon) LED indicator embedded in the fuse box.



E-ROD LS3 SYSTEM

CARB EO # D-126-30

19244805 40-Tooth Reluctor Wheel Transmission*

19256487 17-Tooth Reluctor Wheel Transmission*

Rated at a strong 430 hp, the original E-ROD crate engine delivers big power with California emissions compliance for countless pre-1995 cars, trucks and SUVs. Along with great power, its aluminum block and heads, and composite intake manifold, make it a lightweight performer, too, meaning your project vehicle will likely enjoy weight balance – with less weight over the front axle. We recommend the 4L65-E transmission to match with the E-ROD LS3, which Chevrolet Performance also offers as an inclusive Connect & Cruise E-ROD crate powertrain system.

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



E-ROD LSA SYSTEM

CARB EO # D-126-33

19257456 40-Tooth Reluctor Wheel Transmission*

19257460 17-Tooth Reluctor Wheel Transmission*

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
LSA 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

** GM automatic transmissions are typically equipped with 40-tooth reluctor wheels for vehicle speed sensor output. GM late model manual transmissions are typically equipped with 17-tooth reluctor wheels. The Chevrolet Performance T56 Super Magnum 6-speed manual is equipped with a 40-tooth reluctor.*

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*
- *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*

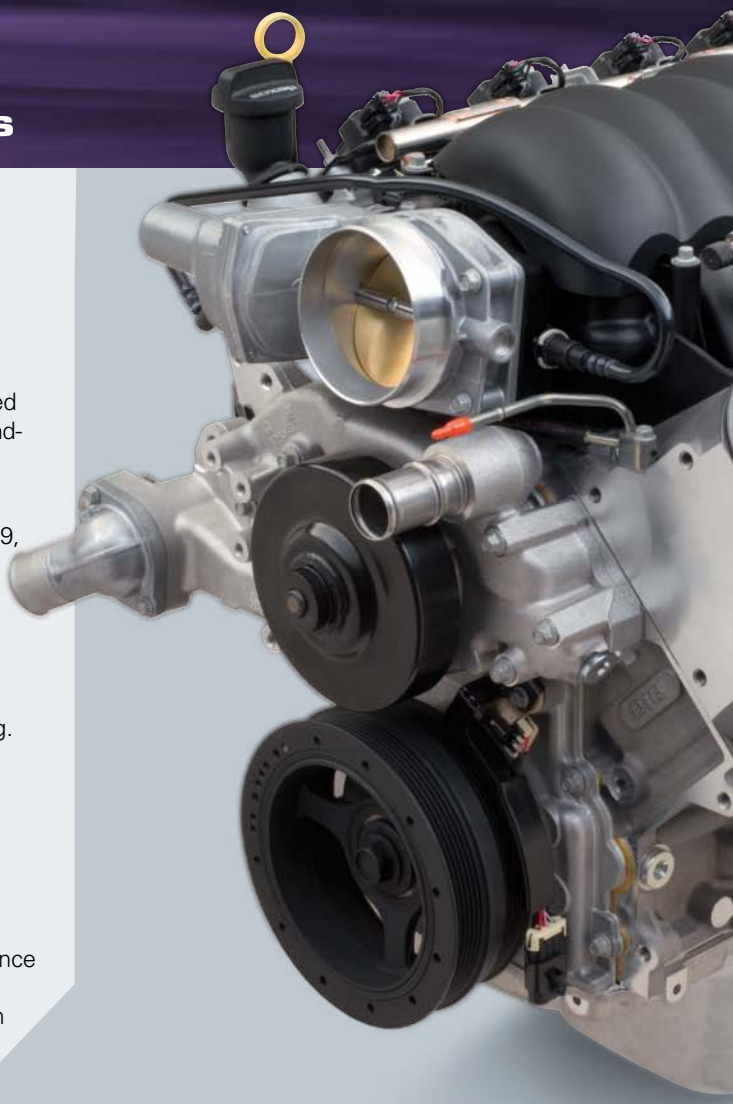
Each E-ROD engine requires a front-end accessory drive system suitable for the vehicle. The instruction manual includes recommendations for the accessory drive kit, as well as the transmission, gear ratios and more. Chevrolet Performance offers several configurations of the accessory drive systems to suit different applications; and each allows the installer to easily delete air conditioning. Check pages 246-251 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.*

"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.

The Connect & Cruise lineup even includes emissions-compliant E-ROD LC9, LS3 and LSA systems!

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.

Along with dependable performance, Connect & Cruise systems offer convenience and value. One part number brings everything to you for less than the cost of buying the components separately.

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

New for 2014, Chevrolet Performance has added three new high-performance Connect & Cruise systems for 2014 – the 480-hp LS376/480, the 525-hp LS376/525 and the legendary 7.0L LS7. Each is paired with the high-strength 4L70E four-speed automatic overdrive transmission.



GET THE COMPLETE PACKAGE!

Each Connect & Cruise System Includes

- Brand-new, fully assembled crate engine
- Brand-new or remanufactured transmission
- 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



LS3 6.2L Engine and 4L65E Automatic Transmission shown







CPSLSA4L85E Connect & Cruise Kit shown

LSA 6.2L Engine and 4L85E Automatic Transmission shown

Connect & Cruise Crate Powertrain Systems are Engineered for Total Performance!

The convenience of a crate engine, the assurance of factory–validated 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 a 5.3L/4L65-E, LS3/4L65-E, LS376/480/4L70-E, LS376/525/4L70E, supercharged LSA/4L85-E and LS7/4L70-E combinations.

Each kit delivers a brand-new, fully assembled crate engine, a 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 transmission, ensuring it was 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 controller is designed to work with the engine controller 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 cheverolet.com/performance or your Chevrolet Performance retailer for complete details).

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

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 older vehicles.

LC9 5.3L CONNECT & CRUISE CRATE POWERTAIN SYSTEM

The LC9 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 is paired with the 4L65-E four-speed transmission, for a great balance of performance and highway-cruising efficiency – and it's also available as an E-ROD system, for all the builders in California!

Engine Specs:
– LC9 5.3L (327 cu in)
– 326 hp @ 5400 rpm
– 335 lb.-ft. @ 4400 rpm
– 9.5:1 compression ratio

Trans Specs 2WD:
– 4L65-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio
– 30-3/4 inches long (approx.)

Trans Specs 4WD:
– 4L70-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio

System Components:

Part Number	CPSLC94L65E 2WD	CPSLC94L70E 4WD	CPSLC9EROD4L65E 2WD E-ROD*	CPSLC9EROD4L70E 4WD E-ROD*
Engine	19259918	19259918	19258004	19258004
Engine Control System	19259914	19259914	(included)	(included)
Transmission	19260380	19260961	19260380	19260961
Torque Converter	17803807 or 19299802	17803807 or 19299802	17803807 or 19299802	17803807 or 19299802
Transmission Control System	19302405	19302405	19302405	19302405
**Flywheel Kit	N/A	N/A	N/A	N/A
Transmission Installation Kit	19259117	19259117	19259117	19259117

LS3 CONNECT & CRUISE CRATE POWERTAIN SYSTEM

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. E-Rod package also available.

Engine Specs:
– LS3 6.2L (376 cu in)
– 430 hp @ 5900 rpm
– 424 lb.-ft. @ 4600 rpm
– 10.7:1 compression ratio

Trans Specs 2WD:
– 4L65-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio
– 30-3/4 inches long (approx.)

System Components:

Part Number	CPSLS34L65E	CPSLS3EROD4L65E E-ROD*
Engine	19301326	19257230
Engine Control System	19258270	(included)
Transmission	19260380	19260380
Torque Converter	17803808 or 19299802	17803808 or19299802
Transmission Control System	19302405	19302405
**Flywheel Kit	N/A	N/A
Transmission Installation Kit	19259117	19259117

LSA CONNECT & CRUISE CRATE POWERTAIN SYSTEM

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! E-Rod package also available.

Engine Specs:
– LSA 6.2L (376 cu in) supercharged
– 556 hp @ 6100 rpm
– 551 lb.-ft. @ 3800 rpm
– 9.1:1 compression ratio

Trans Specs 2WD:
– 4L85-E four-speed automatic
– High-performance valve body and clutches
– 2.48 first gear ratio,0.75 overdrive ratio
– 32-11/16 inches long (approx.)

System Components:

Part Number	CPSLSA4L85E	CPSLSAEROD4L85E E-ROD*
Engine	19260164	19257456
Engine Control System	19259293	(included)
Transmission	19300175	19300175
Torque Converter	**24217235 or 19299806	**24217235 or19299806
Transmission Control System	19302410	19302410
**Flywheel Kit	**19125597	**19125597
Transmission Installation Kit	19259119	19259119

* All E-ROD systems include complete emissions equipment, including catalytic converters and a fuel tank evaporative emissions canister, along with an engine control module calibrated for a balance of performance and efficiency.
** Torque Converter 24217235 requires the purchase of a flywheel kit.

LS376/480 CONNECT & CRUISE CRATE POWERTRAIN SYSTEM NEW

Mixing the capable LS "Hot Cam" with the powerful 6.2L LS3 takes affordable performance to a great, new level – 480 horsepower and 475 lb.-ft. that will wake up your vintage Camaro, Chevelle or "shoebox" Chevy. The 4L70-E four-speed overdrive transmission backs the LS376 / 480 with strength and durability. Put this combo to work in your classic cruiser and enjoy a great balance of performance and efficiency!

Engine Specs:
– LS376 / 480 (376 cu in)
– 480 hp @ 5750 rpm
– 475 lb.-ft. @ 4500 rpm
– 10.7:1 compression ratio

Trans Specs 2WD:
– 4L70-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio
– 30-3/4 inches long (approx.)

System Components:

Part Number	CPSLS3764804L70E
Engine	19301358
Engine Control System	19258267
Transmission	19299055
Torque Converter	19299803
Transmission Control System	19302405
**Flywheel Kit	N/A
Transmission Installation Kit	19259117

LS376/525 CONNECT & CRUISE CRATE POWERTRAIN SYSTEM NEW

We've matched the aggressive ASA camshaft – developed for the high-rpm world of circle-track racing – with the great-breathing 6.2L LS3 to create the LS376 / 525. This high-revving powerhouse is one of our most powerful production-based crate engines and it's backed by the tough, smooth-shifting 4L70-E automotive overdrive transmission for great balance of power on demand and highway efficiency.

Engine Specs:
– LS376 / 525 (376 cu in)
– 480 hp @ 6300 rpm
– 489 lb.-ft. @ 4400 rpm
– 10.7:1 compression ratio

Trans Specs 2WD:
– 4L70-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio
– 30-3/4 inches long (approx.)

System Components:

Part Number	CPSLS74L70E
Engine	19301360
Engine Control System	19259261
Transmission	19299055
Torque Converter	19299803
Transmission Control System	19302405
**Flywheel Kit	N/A
Transmission Installation Kit	19259117

LS7 CONNECT & CRUISE CRATE POWERTRAIN SYSTEM NEW

Destined for the hall of fame of production engines, the legendary 7.0L LS7 that made the Corvette Z06 an icon delivers 427 cubic inches of high-rpm horsepower and makes the ultimate resto-mod statement a classic Corvette, Chevelle or Camaro. We match it with the strong 4L85-E four-speed automatic to ensure all 470 lb.-ft. are transmitted to the Tarmac with dependability. Put the power of a living legend in your project car with the LS7 Connect & Cruise Crate Powertrain System!

Engine Specs:
– LS7 (427 cu in)
– 505 hp @ 6300 rpm | 470 lb.-ft. @ 4800 rpm
– 11.0:1 compression ratio

Trans Specs 2WD:
– 4L70-E four-speed automatic
– Five-pinion gearsets
– 3.06 first gear ratio, 0.70 overdrive ratio
– 30-3/4 inches long (approx.)

System Components:

Part Number	CPSLS74L70E
Engine	19244098
Engine Control System	19258553
Transmission	19299055
Torque Converter	19299802 or 19299803
Transmission Control System	19302405
**Flywheel Kit	N/A
Transmission Installation Kit	19259117

* All E-ROD systems include complete emissions equipment, including catalytic converters and a fuel tank evaporative emissions canister, along with an engine control module calibrated for a balance of performance and efficiency.
** Torque Converter 24217235 requires the purchase of a flywheel kit.



Engine Controller Module and Harness



SuperMatic Transmission Controller

About Chevrolet Performance Engine Controllers and SuperMatic Transmission Controllers

The engine and SuperMatic transmission controllers in the Connect & Cruise kits are 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. For the 5.3L and LS3, Chevrolet Performance recommends a 58-psi (400 kPa) fuel pump and for the LSA, a 65-psi (450 kPa) pump.

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

The SuperMatic transmission controller is the most fully integrated and user-friendly transmission control system on the market.

Only a few connections are required to get the transmission ready for operation in your vehicle – and it is designed for tuning-free compatibility for the Connect & Cruise systems' engine control module.

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.

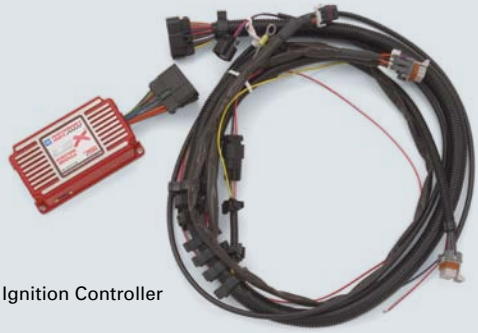
Accelerator pedal – Chevrolet Performance's controller kits are designed for use with factory-type electronic throttles (no conventional throttle cable) that require a matched accelerator pedal. The pedal contains an electronic sensor that conveys to the controller when and how much to open the throttle. 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. Cheverolet Performance has a universal air induction kit, P/N 19301846, that will work for many installations.

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.



Typical Engine Controller Kit



LSX Ignition Controller

19256514
LC9 5.3L Engine Controller Kit
- 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) – non cam phased engines
- 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)

19259914
LC9 5.3L Engine Controller Kit
- Specially programmed for late model 5.3L LC9 Cam Phased engines (2010 and newer)
- Does not engage cylinder-deactivating Active Fuel Management and other features not required for retrofit installations
- For individual engine controller, use P/N19259916 (included in kit)
- This is the optimum off road kit for the LC9 5.3L engine, P/N 19259918

19166568
LS2 Engine Controller Kit
- 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 Engine Controller Kit
- 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 Engine Controller Kit
- Includes all the components required to run your LS376/480 crate engine, P/N 19301358
- Max rpm 6,600
- For individual engine controller, use P/N 19258268 (included in kit)

19259261
LS376/525 Engine Controller Kit
- Includes all the components required to run LS376/525 crate engine, P/N 19301360
- Max rpm 6,600
- For individual engine controller, use P/N 19259291 (included in kit)

19258553
LS7 Engine Controller Kit
- Includes all the components required to run your 2006-2013 LS7 crate engine, P/N 19244098
- For individual engine controller, use P/N 19258554 (included in kit)
- Will run all M/Y LS7s with MAP sensor 12615801
- Max rpm 7,100

19259293
LSA Engine Controller Kit
- Includes all the components required to run LSA crate engine, P/N 19260164
- Max rpm 6,200
- For individual engine controller, use P/N 19259294 (included in kit)

19299462
LS9 Engine Controller Kit
- Includes all components required to run LS9 crate engine, P/N 19244099
- Max rpm 6,600
- For individual engine controller, us P/N 19299463 (included in kit)

19244481
LSX454 Engine Controller Kit for Manual Transmission
- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N 19244482 (included in kit)

19299840
LSX454 Engine Controller Kit for Automatic Transmission
- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N 19299841

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

Small-Block

LSX SERIES Crate Engines

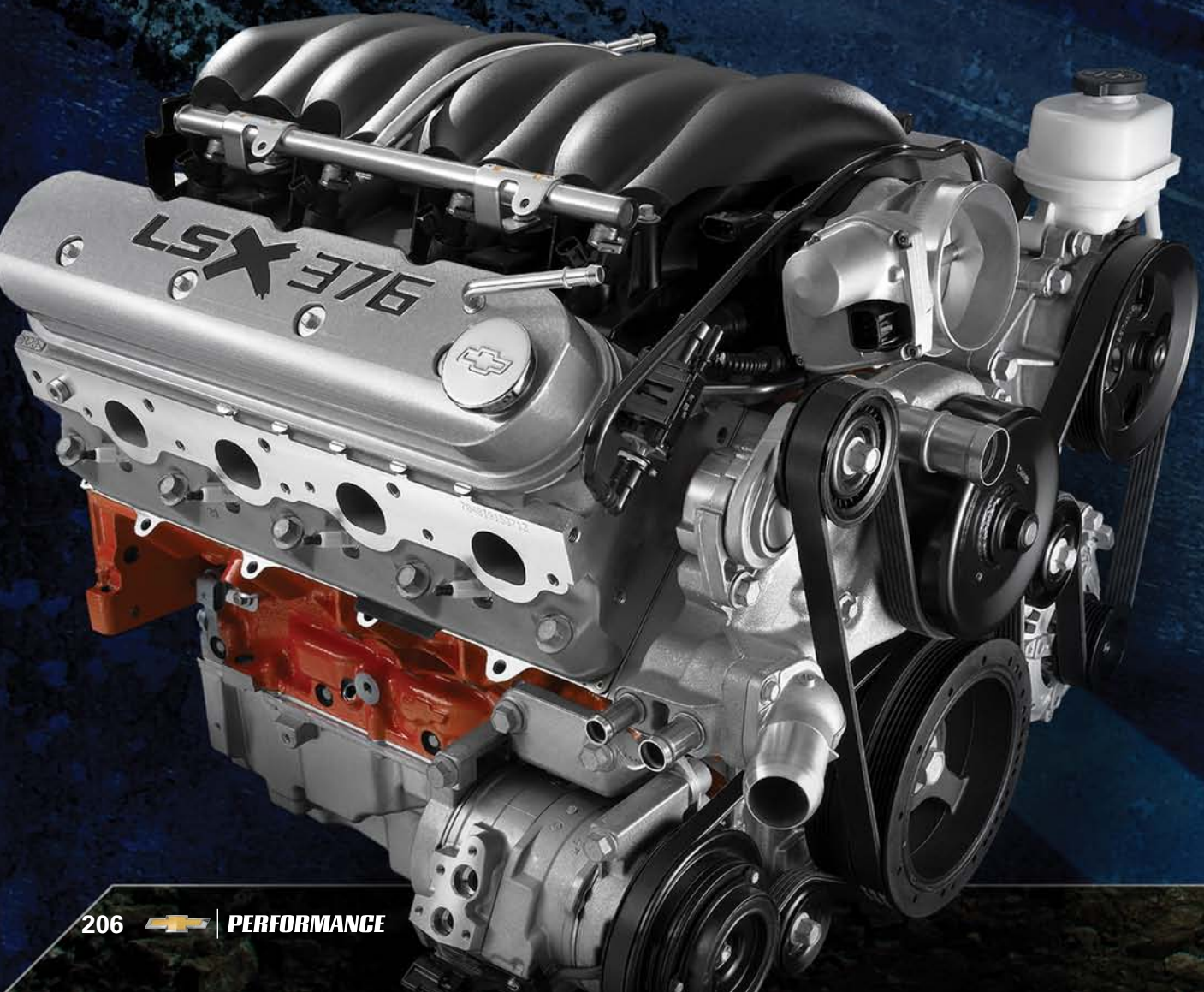
Race-Engineered Performance for the Street or Strip

Chevrolet Performance's LSX crate engines take LS power to the next level, with racing-engineered combinations that deliver power with strength. Each is based on the high-performance LSX Bowtie block, which is designed to support extreme performance combinations, including supercharging, turbocharging and nitrous.

Chevrolet Performance's LSX376 B-8 and LSX376 B-15 engines are specially designed for the high-pressure demands of forced induction, with forged crankshafts and pistons. Our cylinder heads complement that tough block with tremendous airflow and six-bolts-per-cylinder clamping strength that supports power adders of all types.

The LSX454R is the biggest, baddest LS engine in Chevrolet Performance's arsenal. It's a 750-horsepower, naturally aspirated drag strip assault weapon that's capable of propelling your race car down the track in 9 seconds or less. If your car can handle the power, the LSX454R will help you win!

When big LS power is what you need, turn to Chevrolet Performance. Nobody does ultimate-performance LSX crate engines like us.





LSX376-B8
Page 208



LSX376-B15
Page 210



LSX454
Page 212



LSX454R
Page 214

Engines Shown From Left:

LSX376

LSX454

LSX454R



LSX376-B8

19260831

- 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.

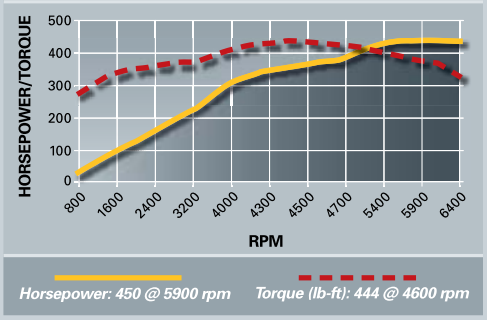
The LSX376-B8 is designed for mild-boost applications, up to about 8 pounds. That's suitable for most supercharger and turbo kits that are designed to be used with production-based applications.

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.

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

**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.*

LSX376-B8 DYNO CHART



INSTALLATION NOTES

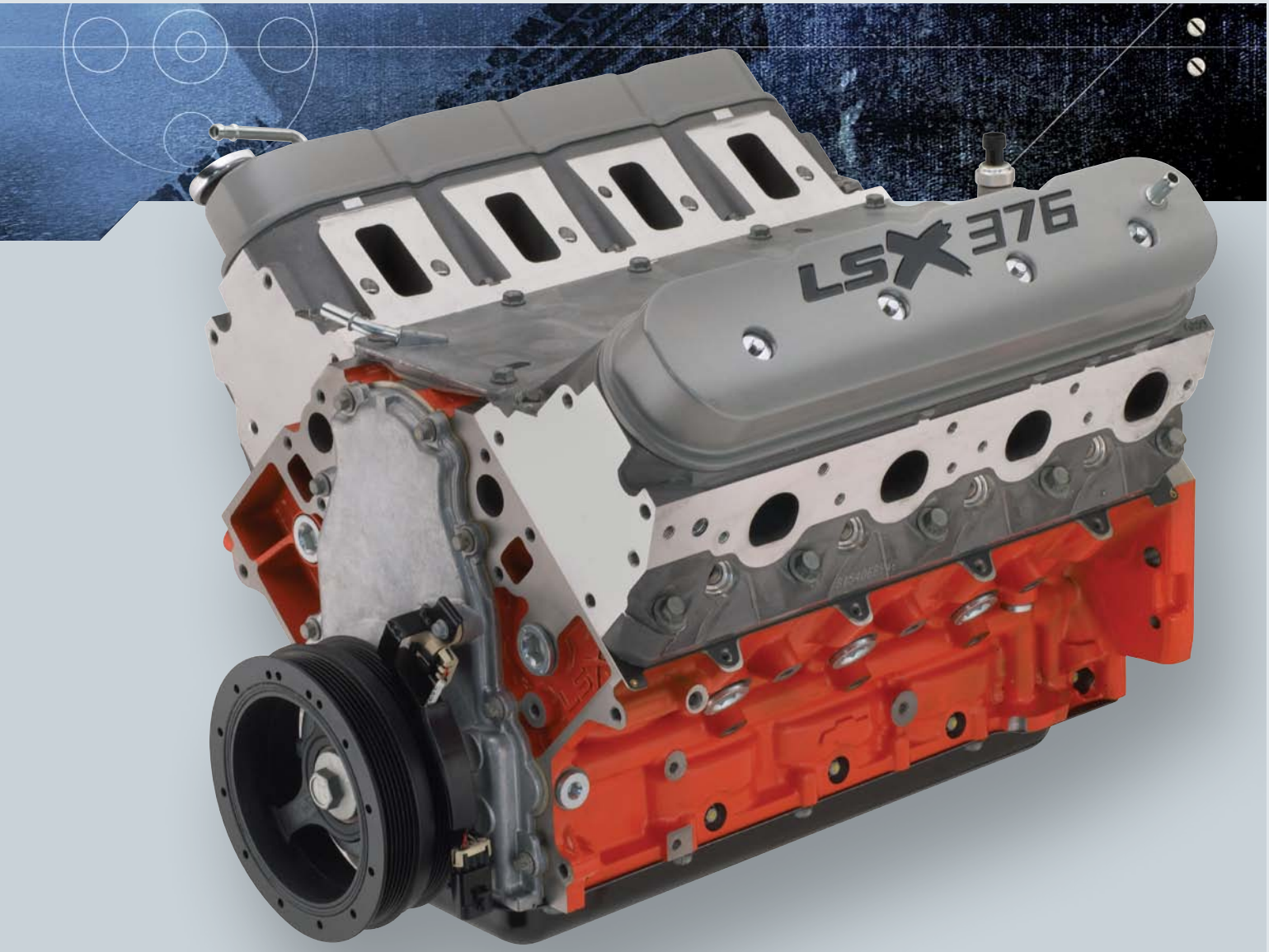
- Assembly does not include any electronics
- Intended for pre-1976 street vehicles or any off-road vehicle
- Not intended for marine applications
- Requires LSX Ignition Controller P/N 19171130 for carbureted applications
- Standard LS 6-bolt crank flange
- Assembly shipped without intake manifold or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

LSX376-B8 TECH SPECS

Part Number:	19260831	**Cylinder Heads (P/N 12615879):**	LS3 rectangular port; with "as cast" 68cc chambers
Engine Type:	LSX-Series Gen IV Small-Block V-8		
Displacement (cu in):	376 cu in (6.2L)	**Valve Size (in):**	2.160 intake / 1.590 exhaust
Bore x Stroke (in):	4.065 x 3.622 (103.25 x 92 mm)	**Compression ratio:**	9:1
Block (P/N 19260832):	LSX cast-iron with 6-bolt, cross-bolted main caps	**Rocker Arms (P/N 12569167 int):**	Investment-cast, roll trunnion
		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!



19300175
SuperMatic™ 4L85-E 4-Speed Transmission
Features five-pinion gearsets, heat-treated state shaft splines, induction-hardened turbine shaft, seven-plate clutch and specific valve-body calibration.
See page 335 for torque converter applications



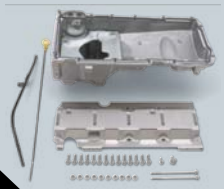
19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19244035
LSX-LS3 Single-Plane Standard Deck 4-bbl Manifold
See page 256 for details



12638197
LS3 Intake Manifold Assembly
See page 254 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 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**

SEE PAGE 216 FOR OUR COMPLETE LINE OF LSX-SERIES ENGINE COMPONENTS



LSX376-B15

19299306

- 450 HP @ 5900 rpm*
- 444 LB-FT @ 4600 rpm*

Forged internals and 6-bolt LSX heads 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 LSX376-B15, featuring a durable, all-forged rotating assembly to handle up to 15 pounds of boost.

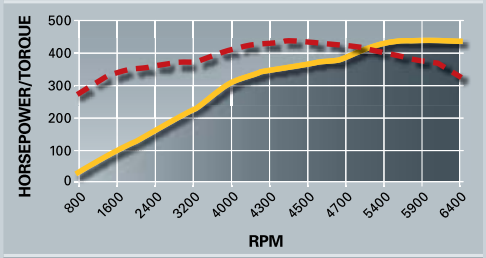
Chevrolet Performance's engineers started with the tough LSX iron Bowtie standard-deck block, added a forged steel crankshaft, forged rods and forged pistons, then topped off the short-block assembly with high-flow, rectangular-port LSX- LS3 6-bolt aluminum heads for supercharged and turbocharged combinations.

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.

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

**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.*

LSX376-B15 DYNO CHART



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,	**Compression ratio:**	9:1
	cross-bolted main caps	**Rocker Arms (P/N 12569167 int):**	Investment-cast, roll trunnion
Crankshaft (P/N 12603616):	Forged steel	**Rocker Arms (P/N 10214664 exh):**	Investment-cast, roll trunnion
Connecting Rods (P/N 12604857):	Forged powdered metal	**Rocker Arm Ratio:**	1.7:1
Pistons (P/N 19259381):	Forged aluminum	**Recommended Fuel:**	87 octane
Camshaft Type (P/N 12638426):	Hydraulic roller	**Maximum Recommended RPM:**	6,600
Valve Lift (in):	0.560" intake / 0.555" exhaust	**Reluctor Wheel:**	58X
Camshaft Duration (@0.050 in):	210° intake / 230° 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.



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



19300175
SuperMatic™ 4L85-E 4-Speed Transmission
Features five-pinion gearsets, heat-treated state shaft splines, induction-hardened turbine shaft, seven-plate clutch and specific valve-body calibration.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



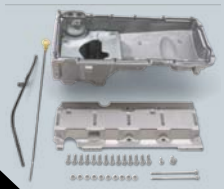
19244035
LSX-LS3 Single-Plane Standard Deck 4-bbl Manifold
See page 256 for details



19300534
ZL1 Supercharger
See page 255 for details



22901367
LSA Intercooler Fluid Pump
See page 255 for details



19212593
Muscle Car Oil Pan Kit
See page 253 for details



12638197
LS3 Intake Manifold Assembly
See page 254 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LS-SERIES ENGINE COMPONENTS



LSX454

19260833

- 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.

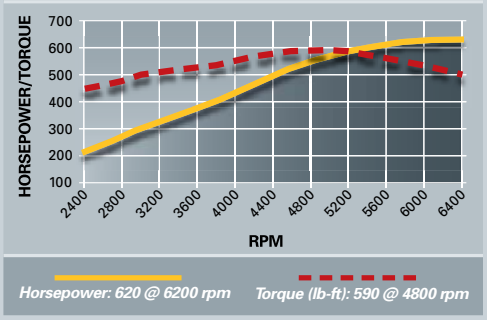
The LSX454 is filled with an all-forged, super-tough rotating assembly and features a pair of our new, deep-breathing LSX six-bolt cylinder heads. It also comes dressed with great-looking, orange powder-coated valve covers with engraved "LSX454" logos.

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 with a carburetor, 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



INSTALLATION NOTES

- Assembly does not include any electronics
- Requires LS-7 pattern intake manifold
- 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:	19260833
Engine Type:	LSX-Series Gen IV Small-Block V-8
Displacement (cu in):	454 cu in (7.4L)
Bore x Stroke (in):	4.185 x 4.125 (106.3 x 104.8 mm)
Block (P/N 19260099):	LSX cast-iron with 6-bolt, cross-bolted main caps
Crankshaft (P/N 19244018):	4340 forged steel with 8-bolt flange
Connecting Rods (P/N 19166964):	4340 forged steel
Pistons (P/N 19166958):	Forged aluminum
Camshaft Type (P/N 19166972):	Hydraulic roller
Valve Lift (in):	0.648" intake / 0.648" exhaust
Camshaft Duration (@0.050 in):	236° intake / 246° exhaust

Cylinder Heads (P/N 19201806):	Aluminum LSX-LS7 port; with "as cast" 70cc chambers
Valve Size (in):	2.200 titanium intake/1.610 hollow, sodium-filled exhaust
Compression ratio:	11.0:1
Rocker Arms (P/N 12579615 int):	Investment-cast, roll trunnion
Rocker Arms (P/N 12579617 exh):	Investment-cast, roll trunnion
Rocker Arm Ratio:	1.8:1
Recommended Fuel:	92 octane
Maximum Recommended RPM:	6,500
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!



19244481 Manual
19299840 Automatic
LSX454 Engine Controller Kit
See page 261 for details



12644568
LS7 Production Intake Manifold Assembly
See page 254 for details



19300175
SuperMatic™ 4L85-E 4-Speed Transmission
See page 335 for torque converter applications



19244033
LSX-LS7 Standard Deck 4-bbl Manifold
See page 256 for details



19301246
Air Inlet Kit for LS-Based Crate Engine Installation
See page 255 for details



19171130
LSX Ignition Controller
See page 258 for details

LSX454 COMPLETION COMPONENTS

Electronic Fuel Injection

LS7 intake manifold:	**12644568**
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 216 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 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!

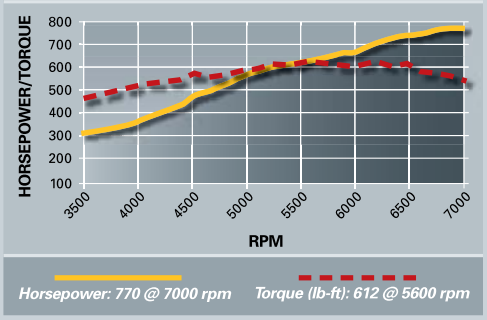
Our engineers designed the LSX454R for the unique, high-rpm demands of drag racing. It is a high-compression, solid-roller combination that uses our new LSX DR cylinder heads. These 11-degree, six-bolt aluminum heads feature raised ports that provide tremendous airflow. We complement them with an exclusive, 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



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 253) (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		6-bolt LSX aluminum
Displacement (cu in):	454 cu in (7.4L)	**Valve size (in):**	2.250" x 6.370" intake
Bore x Stroke (in):	4.185 x 4.125 (106.3 x 104.8 mm)		1.625" x 6.400" exhaust
Block (P/N 19260099):	LSX cast iron with 6-bolt cylinder	**Compression Ratio:**	13.1:1
	head attachment	**Rocker Arms (P/N 19201808):**	Shaft mounted with needle
Crankshaft (P/N 19244018):	4340 forged steel		bearing fulcrum and tip
Connecting Rods (P/N 19166964):	4340 forged steel	**Rocker Arm Ratio:**	1.9:1
Pistons: (P/N 19166958):	4032 forged aluminum	**Recommended Fuel:**	Race fuel (110 octane minimum)
Camshaft Type (P/N 19166975):	Mechanical roller	**Maximum rpm:**	7,100
Camshaft Lift (in):	.738 intake / .738 exhaust	**Reluctor Wheel:**	58X
Camshaft Duration (@.050 in):	250° intake / 270° exhaust	**Balanced:**	Internal

Chevrolet Performance Racing Crate Engines are excluded from limited warranty.

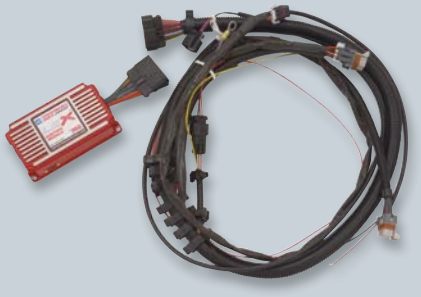
Chevrolet Performance does not utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.



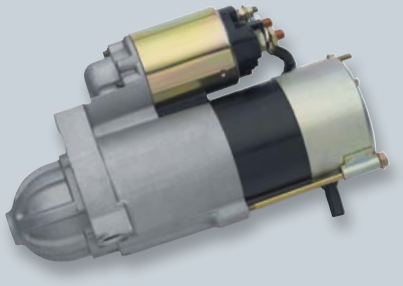
SELECT THE PARTS BELOW TO FINISH OFF YOUR CRATE ENGINE AND GET RUNNING IN LESS TIME!



19212593
Muscle Car Oil Pan Kit
See page 253 for details



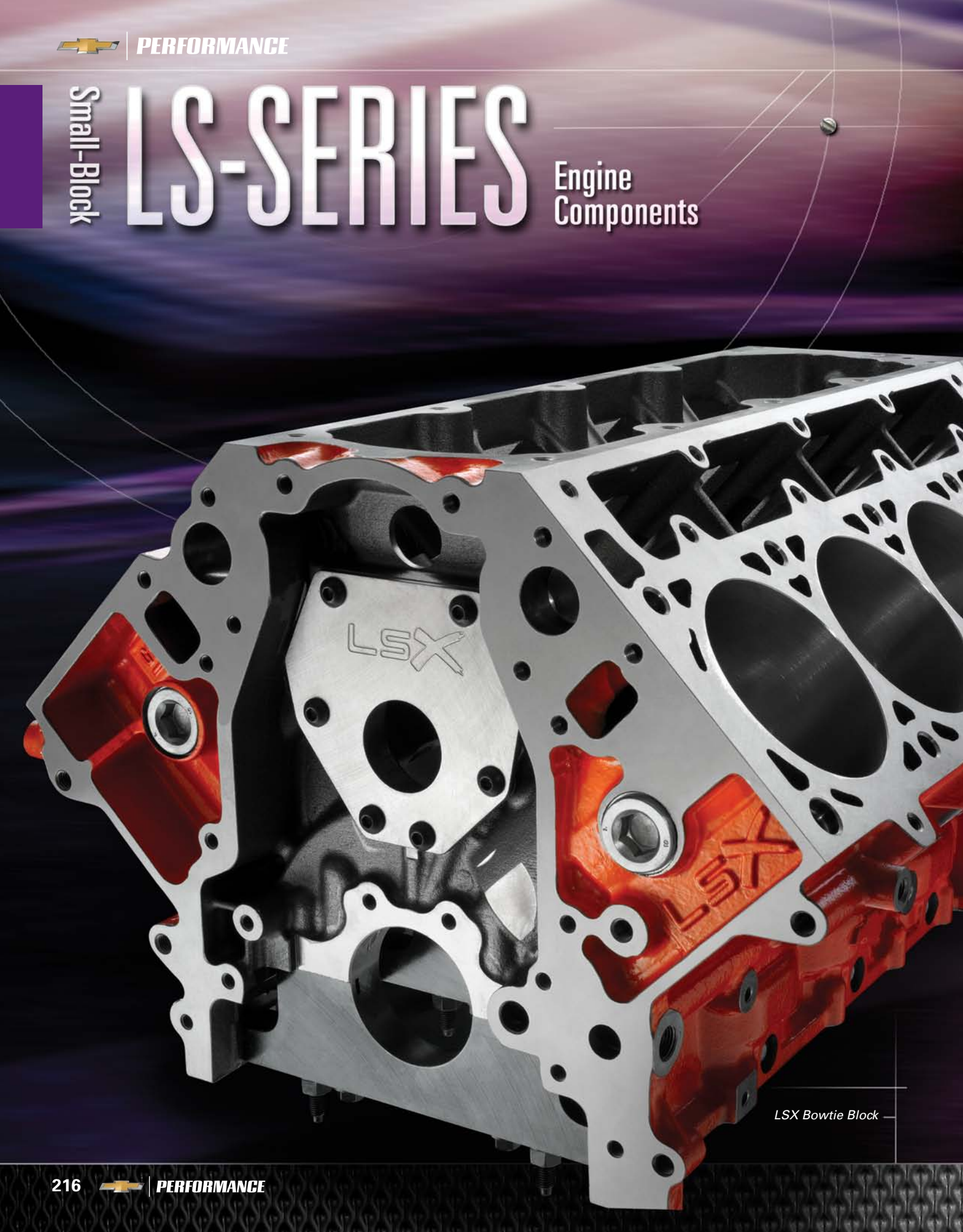
19171130
LSX Ignition Controller
See page 258 for details



10465385
LS-Series Starter
See page 258 for details

SEE PAGE 216 FOR OUR COMPLETE LINE OF LSX-SERIES ENGINE COMPONENTS

Small-Block LS-SERIES Engine Components



LSX Bowtie Block

Factory-Engineered LS Performance Parts

It's simple: No one knows more about LS performance than Chevrolet Performance and no one comes close to matching our range of performance parts – all engineered at the factory for the best performance and production-quality fit.

From the throttle body to the oil pan, including production-based blocks, heads, cams and more – as well as the growing portfolio of LSX maximum-performance parts, we've got you covered.

Chevrolet Performance even offers 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.

Whether you're building a quick, late-model performer for the strip or road course, or dropping an LS engine into your vintage muscle car or classic truck, Chevrolet Performance is your source for factory-engineered parts that perform like no others.





Blocks and Components
Page 218



Cylinder Heads
Page 228



Valve Components
Page 237



Valve Covers
Page 238



Camshafts
Page 241



Piston and Pistons Rings
Page 243



Accessory Drive Systems
Page 246



Oil Pans and Components
Page 253



Intake Manifolds
Page 254



Ignition and Starter Systems
Page 258



Fuel and Electrical Components
Page 259

Chevy LS-Series Blocks Quick Reference Chart

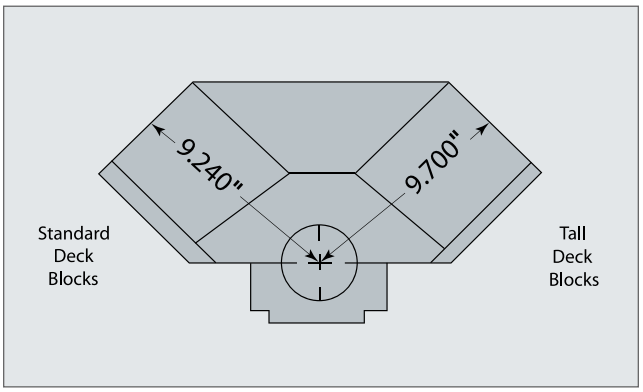
LS-SERIES BLOCKS

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	219
LSA	**12623968**	Alum	9.240	4.065"	6	Nodular Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	800	Street/Pro	220
LS9	**12623969**	Alum	9.240	4.065"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	900	Street/Pro	220
LS2	**12602691**	Alum	9.240	4.000"	6	Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.00"	450	Street	221
LS3/L92	**12623967**	Alum	9.240	4.065"	6	Iron	Std. LS (2.56)	Wet/Dry	1 pc	4.00"	525	Street	221
LS7	**19213580**	Alum	9.240	4.125"	6	Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.10"	550	Street	222
C5R	**12480030**	Alum	9.240	4.117–4.160"	6	Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.10"	900	Pro	223
LSX	**19260093***	Iron	9.260	3.880"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	225
LSX	**19244059***	Iron	9.720	3.880"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.50"	1500+	Street/Pro	225
LSX	**19260095****	Iron	9.240	4.065"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	225
LSX	**19260099****	Iron	9.240	4.185"	6	1045 Steel	Std. LS (2.56)	Wet/Dry	1 pc	4.25"	1500+	Street/Pro	225

**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 2,000 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!

LS-Series Blocks Continued

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

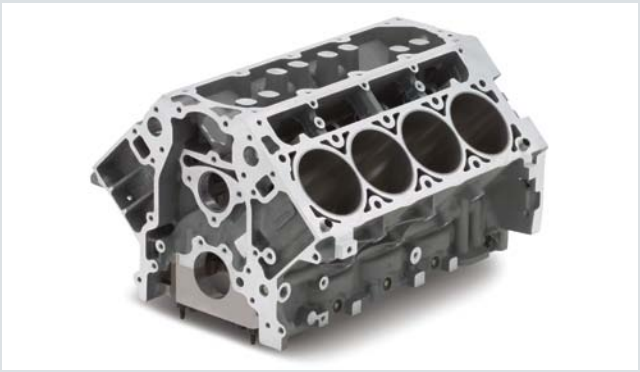
A. 12623969
LS9 6.2L Bare Block
- Direct replacement for 2009-2012 Corvette ZR1 6.2L supercharged engine
- Production cast-aluminum block with iron sleeves
- Deck plate honed
- Production oiling system
- 6-bolt steel main bearing caps with dowel pins
- 9.240" deck height
- Not for use with LS7 or LSX-LS7 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



A LS9 6.2L Bare Block (rear)



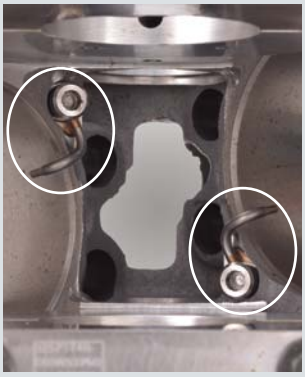
A LS9 6.2L (bottom)



A LS9 6.2L (front)



A LS9 6.2L (rear, top)



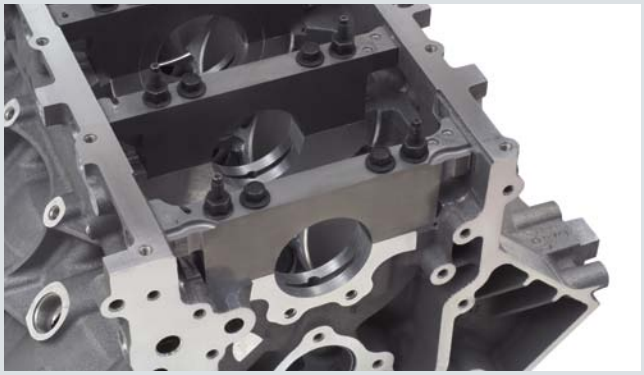
A LSA-LS9 6.2L Piston Oilers



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 **B**
Bare Block (top)



LS3/L92 Aluminum 6.2L **B**
Bare Block (bottom)

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
- Forged powered metal 6-bolt 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:
  2009-2012 L9H
  2010-2012 L94
  2008-2013 LS3
  2010-2013 L99
  2007-2008 L92
- Production aluminum block with iron sleeves
- Production oiling system
- Forged powered metal 6-bolt 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!

LS-Series Blocks Continued

A. 19213580

LS7 7.0L Corvette Bare Block

- Direct replacement for 2006-2014 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 2,000 horsepower.

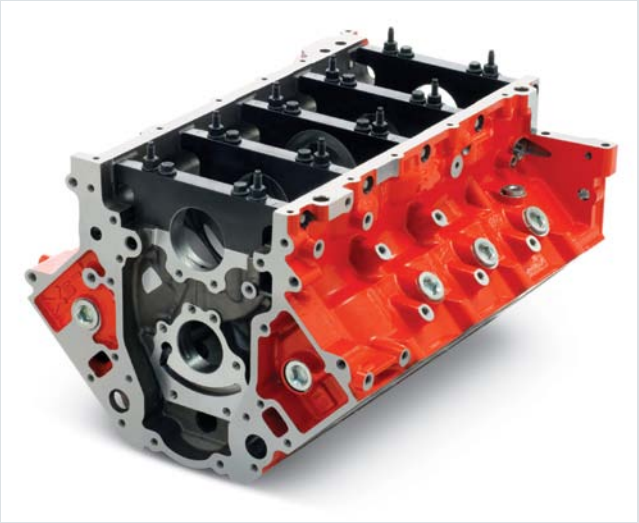
Because the LSX Bowtie block is based on production LS blocks, all of the LS-Series Gen IV cylinder heads, crankshafts, oil pans, camshafts, and accessories bolt right up to it. There is also a tall-deck version for building even larger engines. Chevrolet Performance delivers the LSX Bowtie Block semi-finished, allowing you to finish it to your needs. Whether you're building a "tame" 500-horse street engine for your hot rod or a 1,700 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 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

19244059
LSX Tall Deck Block (not shown)

- 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

LSX finished blocks are completely machined and are ready for assembly. Save time and money.

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

- 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 Oil Hose Adapter



Front Timing Cover **D**



LS Front Distributor Drive Cover **E**



Rear Block Cover **F**

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

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

LS-SERIES CYLINDER HEADS

Part Number	Description	Material Size	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	228
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	229
12629063	Stock LS3	Aluminum	260	15 deg	68.4	2.165	1.590	L92	Std LS	Bolt-down	Hollow/solid	229
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	229
12578450	Bare LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Bare LS7	N/S
12578449	Stock LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Titanium/sodium-filled valves	230
12626958	LSA Cylinder Head	Aluminum	260	15 deg	68.4	2.185	1.590	L92	Std LS	Bolt-down	CTS-V and Z-28 Assembly	230
25534393	C5R	Aluminum	210	11 deg	38	2.180	1.630	C5R	Std LS	Shaft	As-cast, no seats/guides	231
19201807	LSX-L92 Small Bore	Aluminum	260	15 deg	70	2.000	1.550	L92	Std LS	Bolt-down	Solid/solid valves	232
19201805	LSX-LS3	Aluminum	260	15 deg	70	2.160	1.590	L92	Std LS	Bolt-down	Hollow/solid valves	232
19201806	LSX-LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Titanium/sodium-filled valves	233
19257879	Bare LSX-LS7	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Fully CNC-machined	232
19257881	LSX-LS7 Assembly	Aluminum	270	12 deg	70	2.200	1.610	LS7	Std LS	Bolt-down	Fully CNC-machined bare head	232
19166981	LSX-CT	Aluminum	302	11 deg	45	2.200	1.610	LSX-CT	LSX-CT/DR	Shaft	Fully CNC-machined bare head	233
19202985	LSX-CT Cylinder Head	Aluminum	N/A	11 deg	–	–	–	–	–	Shaft	As-cast, not machined	233
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	234
19202986	LSX-DR Cylinder Head	Aluminum	N/A	11 deg	–	–	–	–	–	Shaft	As-cast, not machined	235

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 231.*

LS-Series Cylinder Heads Continued

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
	60	120	159	192	207	214	219	221

12626958

LSA Cylinder Head Assembly (not shown)

- CTS-V and ZL-1 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*



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)



Bare C5R Racing Cylinder Head (exhaust) **B**



Bare C5R Racing Cylinder Head (intake) **B**



Bare C5R Racing Cylinder Head (combustion chamber) **B**

B. 25534393 ❗

Bare C5R Racing Cubed Cylinder Head

- The images (C) to the left represent a machined version of the P/N 25534393 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

**This part has been discontinued; available while supplies last.*

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 235)
- 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 (as cast)
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 (as cast)
LSX-LS7 Bare Cylinder Head (not shown)

- Used in P/N 19201806

19213963 (assembly)
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)



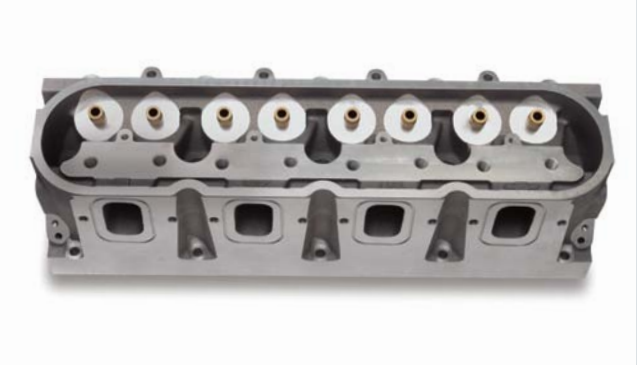
A LSX-DR CNC-Ported Cylinder Head (intake)



A LSX-DR CNC-Ported Cylinder Head (combustion chamber)



LSX-DR Cylinder Head (exhaust) B



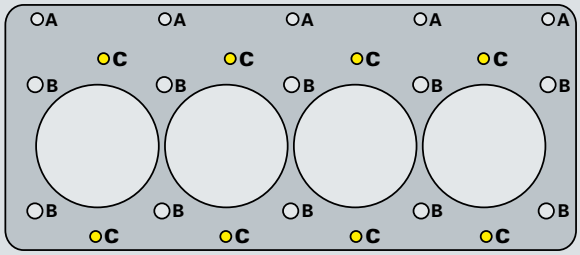
LSX-DR Cylinder Head (intake) B



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



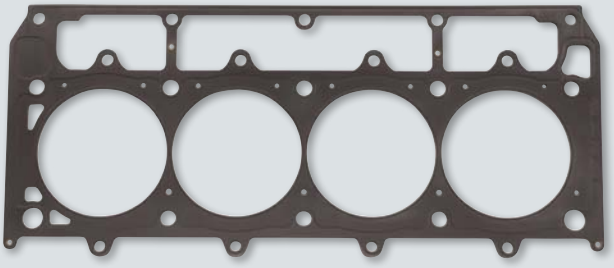
A	Standard LS	8mm	Bolt/Stud
B	Standard LS	11mm	Bolt/Stud
C	LSX	8mm	Bolt/Stud

BUILDER'S TIP

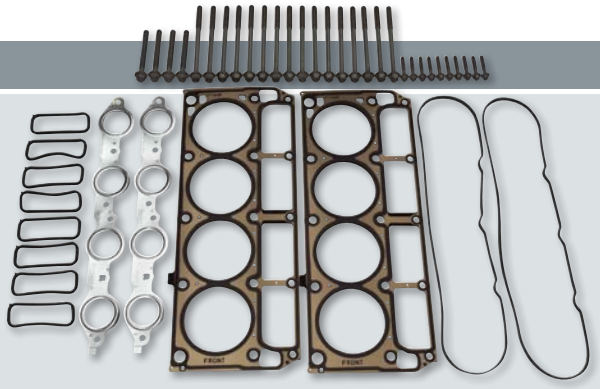
Building a Carbureted LS Engine

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



LS1 Cylinder Head Installation Kit (F-Car)

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 LS1Camaro/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

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

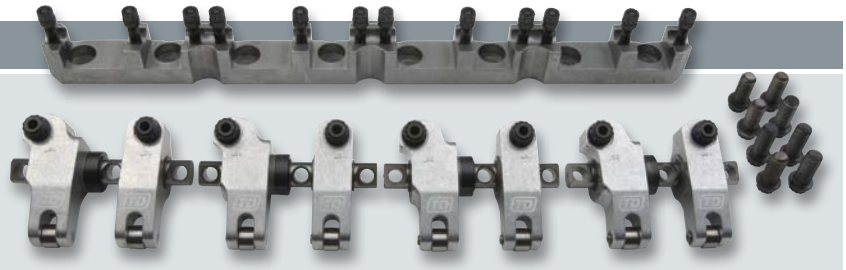
ROCKER ARMS AND ROCKER ARM BOLTS

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

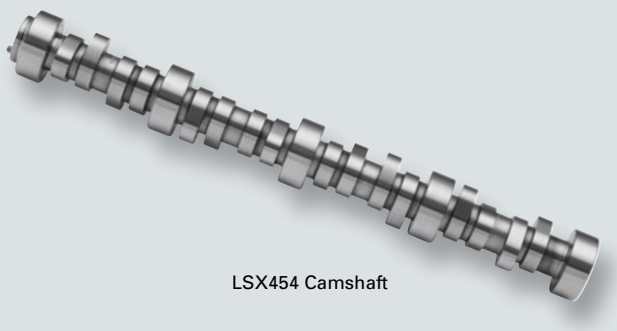


LSX CAMSHAFT

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.*



LSX454 Camshaft

19166972
LSX454 Camshaft

- .648" lift intake/exhaust (1.8 rockers)
- 236° intake/246° exhaust
- Good mid-range and top-end
- 3-bolt design

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.

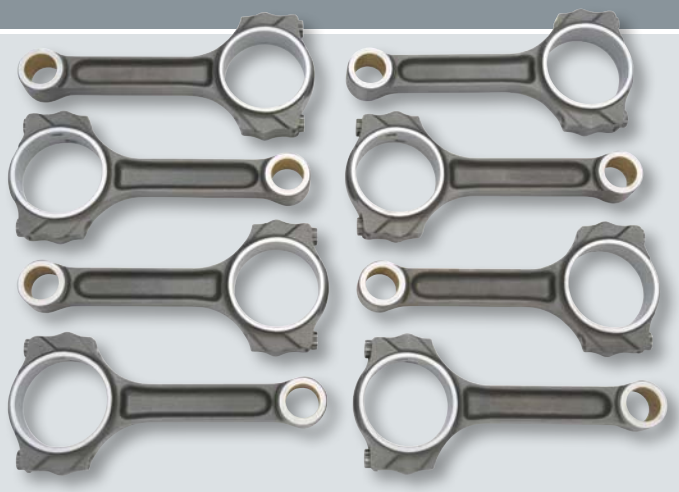
Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in) (1.7 rocker)	Lobe Separation (deg)	Technical Notes
12565308	2002-2004 LS6 Cam	I: 204 E: 218	I: .550 E: .550	117.5	Cam requires valve spring P/N 12586484
88958770	ASA Cam	I: 226 E: 236	I: .525 E: .525	110	Cam requires valve spring P/N 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



1997-2004 Connecting Rod

12649190
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

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

19259254
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
12631872	7.0L	4.125"	Standard	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



LSX376 Piston (dished), 4.065" bore

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.*



LSX454 Piston, 4.185" bore

CRANKSHAFTS AND COMPONENTS

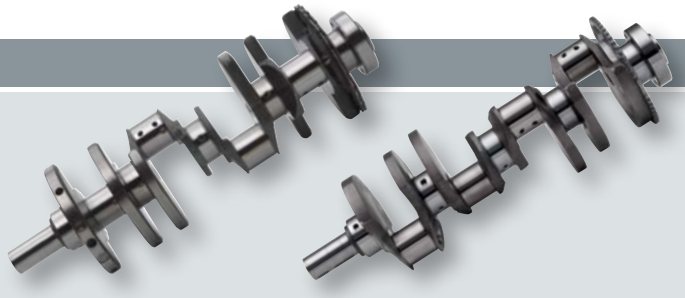
LS Crankshafts

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)

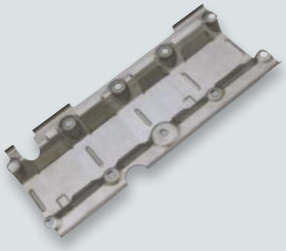


Crankshaft Assembly 1997 – 2004

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 (not shown)
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

12646386
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 FLEXPLATES





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 336-338 .*

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
12654640	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 andL92 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

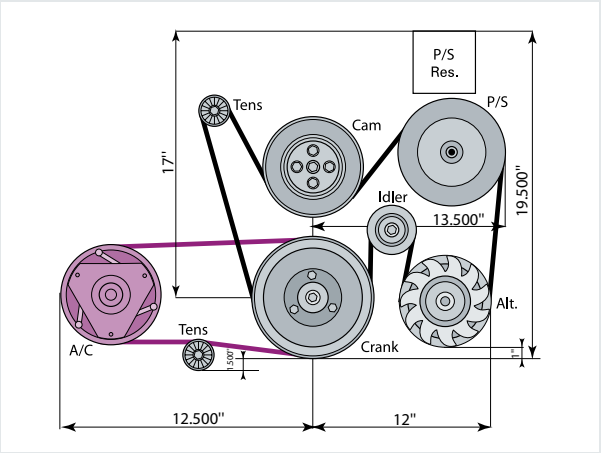
14061685
Pilot Bearing (not shown)
- Use with manual transmissions if the input shaft extends beyond the bell housing more than 20mm

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 black*

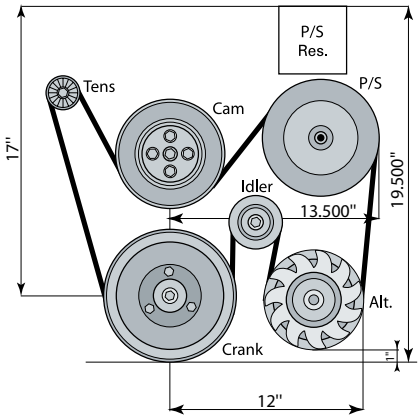
NOTE: *Water pump P/N 89018052 NOT included with kit*

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
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

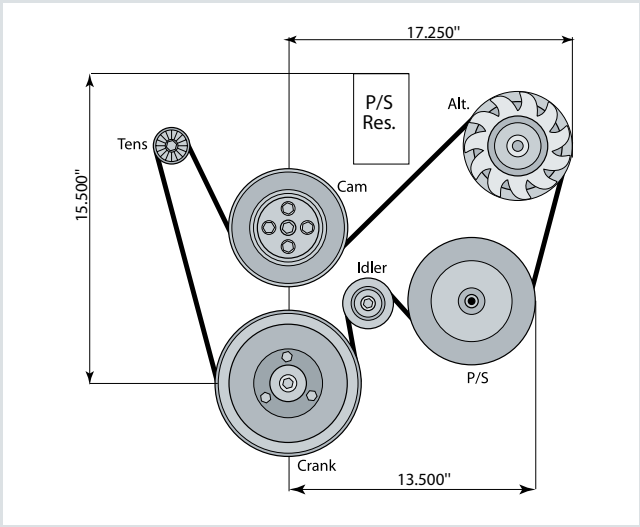
NOTE: *Will not work with a cam-phased engine.*

NOTE: *Will not work on LS327 with cast iron black*

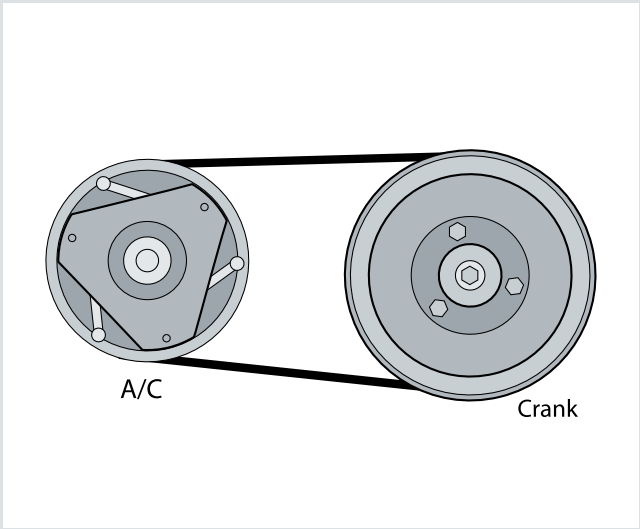
NOTE: *Water pump P/N 89018052 NOT Included with kit*

The system includes:

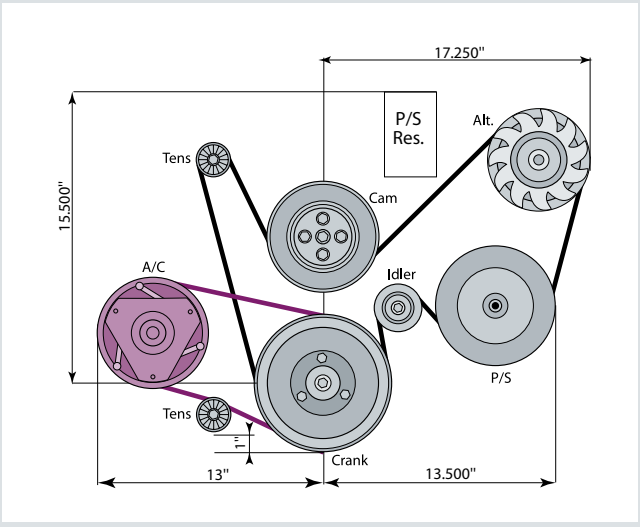
Part #	QTY	Description
12578551	1	Bracket–Power Steering Pump
21997867	1	Pump–Power Steering
12578552	1	Pulley–Power Steering Pump
21997866	1	Reservoir–Power Steering Fluid
21997868	1	Hose–Power Steering Fluid Reservoir With Clamps
12578550	1	Bracket–Generator
25766345	1	Generator
12568996	1	Pulley–Belt 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



Corvette Accessory Drive System without A/C **A**



Corvette Accessory Drive System A/C Add-on **B**



Corvette Accessory Drive System, with A/C **C**

A. 19257325

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
25960709	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
12636226	1	Belt–Water Pump/Generator/Power Steering Pump
11515768	2	Bolt-10x1.5x40MM- 15MM Drive
11516714	1	Bolt-10x1.5x110MM- 15MM Drive
12552922	1	Bolt-10x1.5x160MM- 15MM Drive
11516357	3	Bolt-10x1.5x75MM- 15MM Drive
11588745	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

B. 19299069

Corvette Accessory Drive System, A/C Add-on

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)

C. 19155067

Corvette Accessory Drive System, with A/C

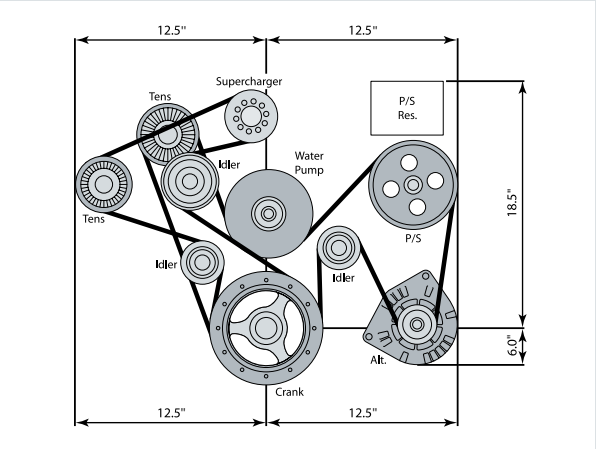
Includes all components in Kits #19257325 and #19299069 above.

- 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.*



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	4	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
11588747	3	Bolt–Gen
11589311	4	Bolt–Hfh, M8x1.25x29, 19 Th
12606501	1	Bracket–Belt Idler Pulley
11610074	3	Bolt–Hvy Hx Acorn Flg Hd
12606500	1	Bracket–Drv Belt Tensr
11588749	2	Bolt–Hvy Hx Acorn Flg Hd
11588742	1	Bolt–Hvy Hx Acorn Flg Hd
12628025	1	Tensioner Asm–Drv Belt
11571051	2	Bolt–Hex Washer Hd
12606031	1	Pulley Asm–Spchg Belt Idler
12606032	1	Pulley Asm–Belt Idler
12622452	1	Tensioner Asm–Spchg Belt
11588753	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

19244106

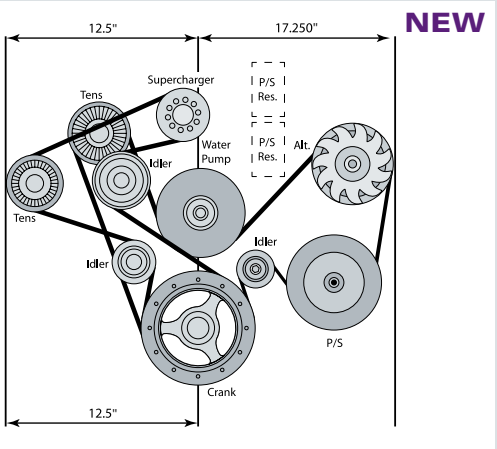
LSA Accessory Drive System AC add-on kit (not shown)

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



19303242 NEW

Modified LSA Accessory Drive System, w/o AC

Similar to LSA Accessory Drive Kit P/N 19243525, but designed for retro-fit applications with a relocated alternator and power steering pump to provide chassis clearance in older vehicles

- Includes power steering pump and two remote-mount reservoirs; builder to use the reservoir that provides the best fit for the application
- Requires fabrication of reservoir mounting bracket
- Requires reservoir-to-pump hose
- Can be used with either LSA AC add-on or Corvette AC add-on kit

The system includes:

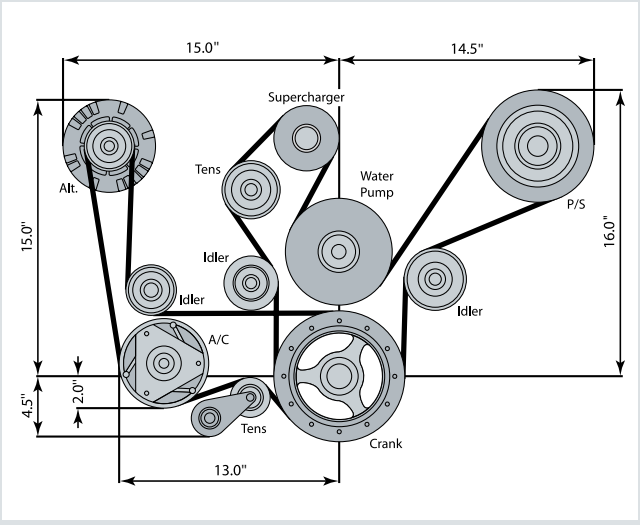
Part #	Qty	Description
12616673	1	Belt-w/pmp & Gen & P/S Pump
12628025	1	Tensioner ASM-DRV Belt
11571051	2	Bolt/Screw-DRV Belt Tensr
12568996	1	Pulley ASM-Belt Idler
12636227	1	Belt-SPCHG
12622452	1	Tensioner ASM-SPCHG Belt
11588753	1	Bolt/Screw-SPCHG Belt Tensr
12606500	1	Bracket-SPCHG Belt Tensr
11588742	1	Bolt/Screw-SPCHG Belt Tensr Brkt
11588749	2	Bolt/Screw-SPCHG Belt Tensr Brkt
12606031	1	Pulley ASM-SPCHG Belt Idler
12606032	1	Pulley ASM-SPCHG Belt Idler
11518630	2	Bolt/Screw Belt Idler Pul
12606501	1	Bracket-SPCHG Belt Idler Pul
11589311	1	Bolt/Screw-SPCHG Belt Idler Pul Brkt
11610074	3	Bolt/Screw-SPCHG Belt Idler Pul Brkt
12578067	1	Bracket-Gen/P/STG/ Pump
11516357	3	Bolt/Screw-Gen Brkt
12555693	1	Brace-P/S Pump
11588745	1	Bolt/Screw
24503609	2	Bolt/Screw
11515758	2	Bolt/Screw
11516697	2	Bolt/Screw
12568997	1	Pulley-P/S Pump
25960709	1	P/S Pump
25888970	1	Generator
22768353	1	P/S Pump Reservoir
26046502	1	P/S Pump Reservoir
10317982	1	Cap - P/S Reservoir
12555222	1	P/S Pump Reservoir Bracket
15306009	1	Connector
19303244	1	Instruction Sheet



LS9 Accessory Drive System with AC **A**



LS9 Accessory Drive System with AC **A**



LS9 Accessory Drive System with AC **A**

A. 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	6	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	5	Bolt–Trans Br Brkt
12602288	1	Bracket–AC Cmpr
12556447	1	Stud–Special M10 X 1.5 X 127
11571051	3	Bolt–Hex Washer Hd
12623062	1	Tensioner Asm–AC Cmpr Belt
12568996	1	Pulley Asm–Belt Idler
89019339	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
12602289	1	Bracket–Gen & Drv Belt Tensr
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.*

Accessory Drive Systems Continued

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
12605677	1	P/S Pump Pulley
11515767	3	Stg Pump Mtg Bolt
19257882	1	Bolt 3/8" x 16
09440957	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

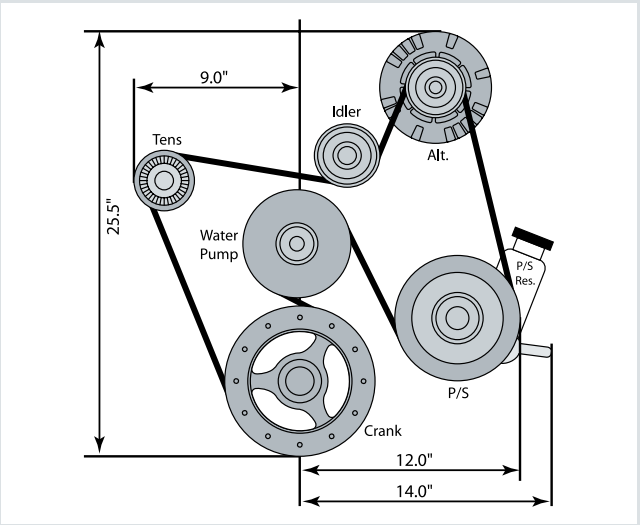
LC9 5.3L Accessory Drive System AC add-on kit

Components needed to add AC to your LC9-equipped vehicle.

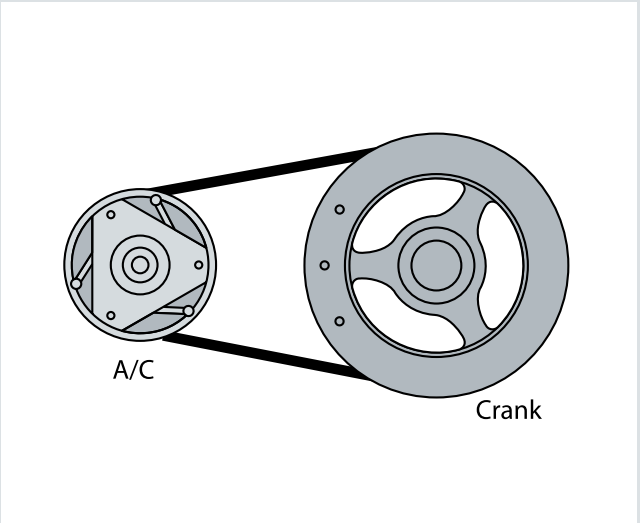
- Kit includes mounting bracket, bolts, belt, AC compressor and instruction sheet
- Intended to be used in conjunction with P/N 19258433 kit for non-AC applications. Not verified to work with any non-GM FEAD kit

The system includes:

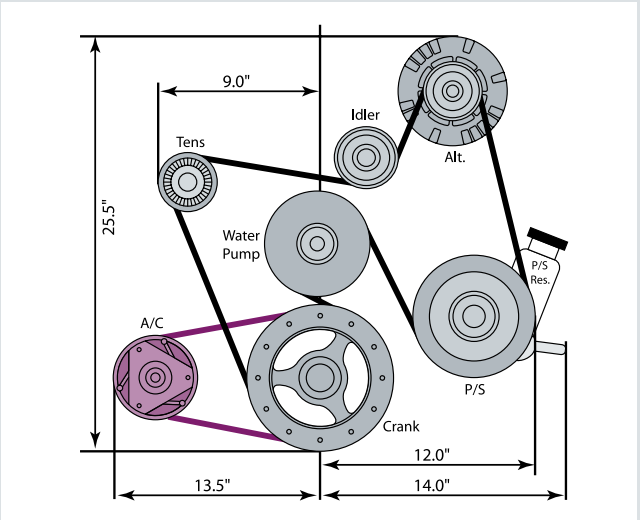
Part #	QTY	Description
25891791	1	AC Compressor
12554026	1	Mtg Bracket
11515767	3	Bracket Bolts
11516109	3	Comp Bolts–Long
11516503	1	Comp Bolt–Short
19210691	1	Belt Kit (w/Tool) AC



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

LS ENGINE FEAD KITS

Part Number	Description	
19155066	CTS-V with A/C	**Comes with A/C**
19155067	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 (Corvette)
- '09 L76 SRX
- '09 - 10 LS7 (Corvette)

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**



LS Circle Track 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. 12644568

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



ZL1 Supercharger **E**



LSA Intercooler Fluid Pump **F**



Air Inlet Kit **G**



LS2 4-bbl Intake Manifold **H**



LS7 4-bbl Intake Manifold **I**



LS3/L92 Style 4-bbl Intake Manifold **J**

E. 19300534
ZL1 Supercharger
- Original equipment on LSA-powered 2012-2014 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

F. 22901367
LSA Intercooler Fluid Pump
- Includes pump assembly
- Additional hoses and clamps required to connect pump inline with coolant circuit

G. 19301246 NEW
Air Inlet Kit for LS-Based Crate Engine Installation
- Designed for universal LS and LSX EFI crate engine installations
- Kit contains intake tubes with provisions for mass airflow meter and vacuum line, along with a reusable, high-performance air filter and mounting hardware
- Straight and elbow tubes provide the optimal distance between throttle opening and mass airflow meter, including the minimum length of straight tubing required for accurate mass airflow meter operation
- Includes polished intake tubes, couplers, worm-style clamps and a vacuum hose.
- Mass airflow meter provision accepts all GM production meters,(must be purchased separately).

NOTE: *This is a universal kit and may not fit every application. Additional fabrication may be required, but the length of the straight tube must be maintained for accurate mass airflow meter operation.*

H. 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.*

I. 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.*

J. 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.*

Additional components required for installation. *See page 257.*

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



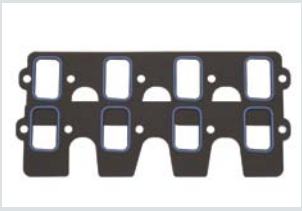
D LSX-CT Standard Deck 4-bbl Manifold



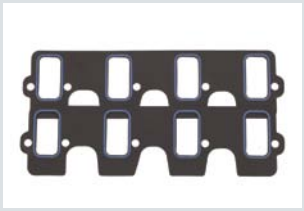
LSX-DR Standard Deck 4-bbl Manifold **E**



LS Front Distributor Drive Cover **F**



LS7 Carb Intake Gasket **G**



L92/LS3 Carb Intake Gasket **H**



LS Header Flange **I**

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**

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

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

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

❗ STARTERS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Bolts (Quantity)	Engine Application
10465385	11588456 (1), 12561848 (1)	LS-Series



Carburetor, Holley 670-cfm **D**



Carburetor, Holley 850-cfm **E**



Carburetor, Holley 870-cfm **F**



Air Cleaner, Chevrolet-Logo High-Performance Design **G**



Air Cleaner, Chevrolet-Logo Classic Design **H**

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

D. 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

E. 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.*

F. 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

AIR CLEANERS

G. 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.*

H. 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

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.

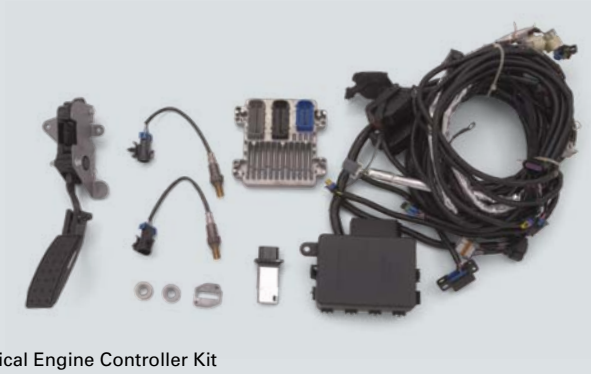
QUICK INSTALLATION TIPS

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. Cheverolet Performance has a universal air induction kit, P/N 19301846, that will work for many installations.

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.



Typical Engine Controller Kit

19256514
LC9 5.3L Engine Controller Kit
- 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) – non cam phased engines
- 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)

19259914
LC9 5.3L Engine Controller Kit
- Specially programmed for late model 5.3L LC9 Cam Phased engines (2010 and newer)
- Does not engage cylinder-deactivating Active Fuel Management and other features not required for retrofit installations
- For individual engine controller, use P/N19259916 (included in kit)
- This is the optimum off road kit for the LC9 5.3L engine, P/N 19259918

19166568
LS2 Engine Controller Kit
- 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 Engine Controller Kit
- 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 Engine Controller Kit
- Includes all the components required to run your LS376/480 crate engine, P/N 19301358
- Max rpm 6,600
- For individual engine controller, use P/N 19258268 (included in kit)

19259261
LS376/525 Engine Controller Kit
- Includes all the components required to run LS376/525 crate engine, P/N 19301360
- Max rpm 6,600
- For individual engine controller, use P/N 19259291 (included in kit)

19258553
LS7 Engine Controller Kit
- Includes all the components required to run your 2006-2013 LS7 crate engine, P/N 19244098
- For individual engine controller, use P/N 19258554 (included in kit)
- Will run all M/Y LS7s with MAP sensor 12615801
- Max rpm 7,100

19259293
LSA Engine Controller Kit
- Includes all the components required to run LSA crate engine, P/N 19260164
- Max rpm 6,200
- For individual engine controller, use P/N 19259294 (included in kit)



LSX Ignition Controller

19299462
LS9 Engine Controller Kit
- Includes all components required to run LS9 crate engine, P/N 19244099
- Max rpm 6,600
- For individual engine controller, us P/N 19299463 (included in kit)

19244481
LSX454 Engine Controller Kit for Manual Transmission
- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N 19244482 (included in kit)

19299840
LSX454 Engine Controller Kit for Automatic Transmission
- Includes all the components required to run LSX454 crate engine, P/N 19244611
- Max rpm 7,100
- For individual engine controller, use P/N 19299841

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

A. 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

B. 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



A Transmission Controller



B Rev Limiter for CD Ignition Controller

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!

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

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.*

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

SPARK PLUG WIRES

SPARK PLUG WIRES

Chevrolet Performance spark plug wire kits are designed to fit your GM engine, eliminating the guesswork in selecting the correct length.

12495519

Spark Plug Wire Set, LS-Series V-8

- Direct-fit wire set with factory-style boots and terminals
- Designed for over valve cover installation



Cheverolet Performance Parts Spark Plug Wire Set (90° Boot Shown)



Electric Fuel Pump **C**



Camaro ZL1 Fuel Pump Module **D**



Electric Fuel Pump, High Output **E**



Fuel Filter **F**

FUEL PUMPS AND COMPONENTS

C. 6472657
Electric Fuel Pump
- For use on all carbureted engines
- Flows 30-40 gph at 6-9 psi

D. 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

NOTE: *When combined with service part 22756513 and 22756514 fuel pickups, you can expand the amount of fuel available during road course usage on your Camaro.*

E. 25115899
Electric Fuel Pump, High-Output
- Heavy-duty 12-volt electric rotary pump
- Flows 72 gph at 6-8 psi

F. 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

BIG-BLOCK Crate Engines

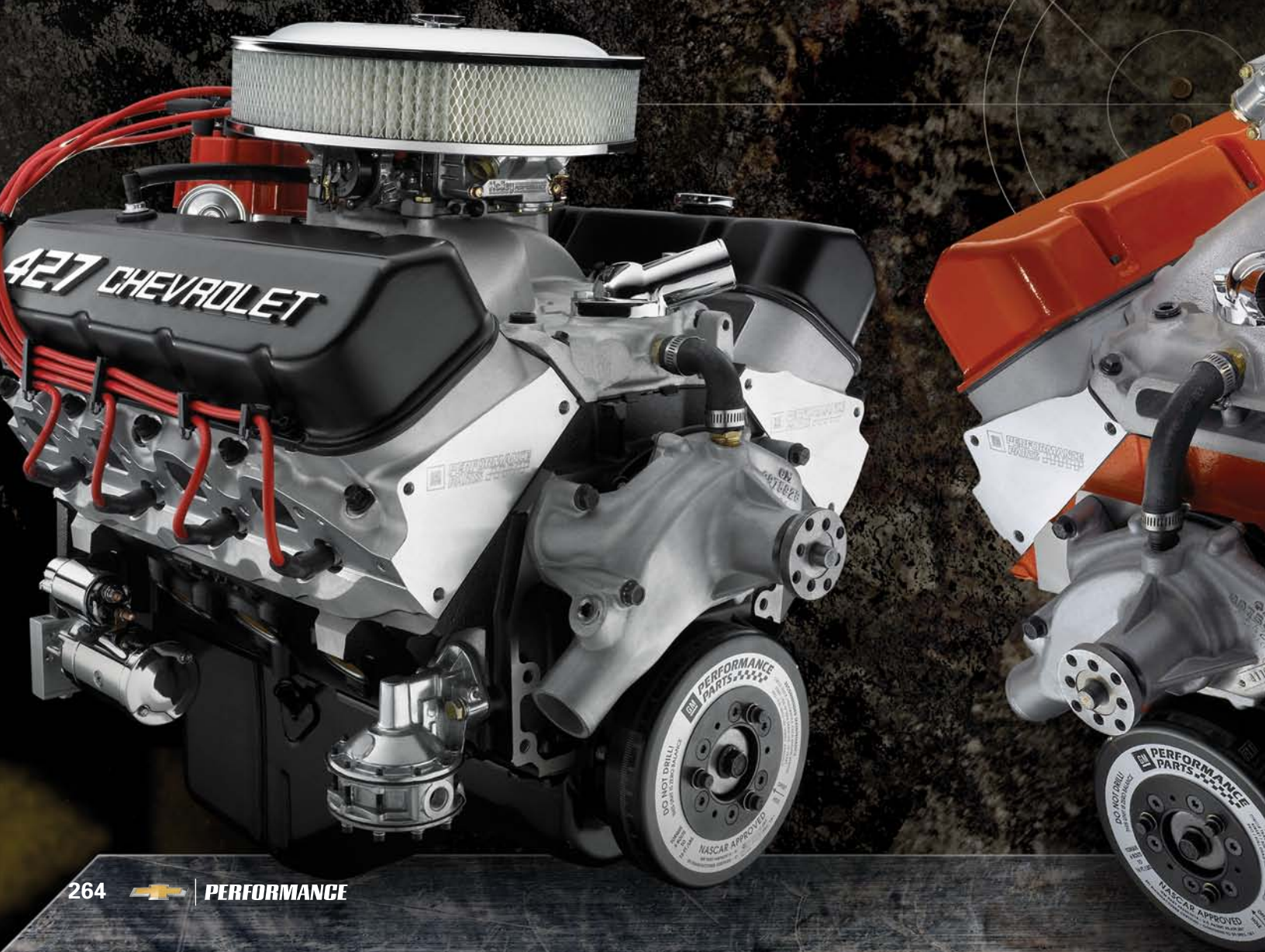
Legendary Torque for the Street, Strip or Towing

For half a century, Chevrolet's big-block engines have set the bar for big torque and the power that comes with it – whether you're hauling down the drag strip in a 9-second Camaro or hauling that Camaro to the drag strip in your truck.

Chevrolet Performance is the only source for brand-new big-block crate engines built with brand-new parts – and each is built with the latest cylinder block casting, which is stronger in many key ways to previous production engines. Save yourself the trouble of rebuilding or even finding a good, rebuildable core.

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. Our 427 crate engines make great additions to classic Corvettes and COPO Camaro tributes, while racing engines like the ZZ572/720R arm your drag racer with formidable firepower!

When you need big torque, look no further. Nobody knows big-blocks like Chevrolet Performance!





Engines Shown From Left:

- *ZZ427/480*
- *Ram Jet 502*
- *ZZ572/720R*



Anniversary Edition 427
Page 266



ZZ427/480
Page 268



454 HO
Page 270



ZZ454/440
Page 272



HT502
Page 274



502 HO
Page 276



ZZ502-502
Page 278



ZZ502-502
Page 280



Ram Jet 502
Page 282



ZZ572/620
Page 284



ZZ572/720R
Page 286



Vortec 8.0L
Page 288



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!

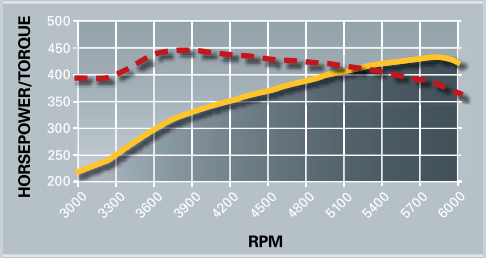
At the height of the muscle car wars, a few enterprising, dealer-backed racers worked the loopholes of Chevrolet's COPO ordering system to create a handful of factory-built, supercars that weren't found in any brochure or order guide. They were equipped with an all-aluminum 427 engine dubbed the ZL1. 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.*

**Not shipped with engine. Contact selling dealer for details.*

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

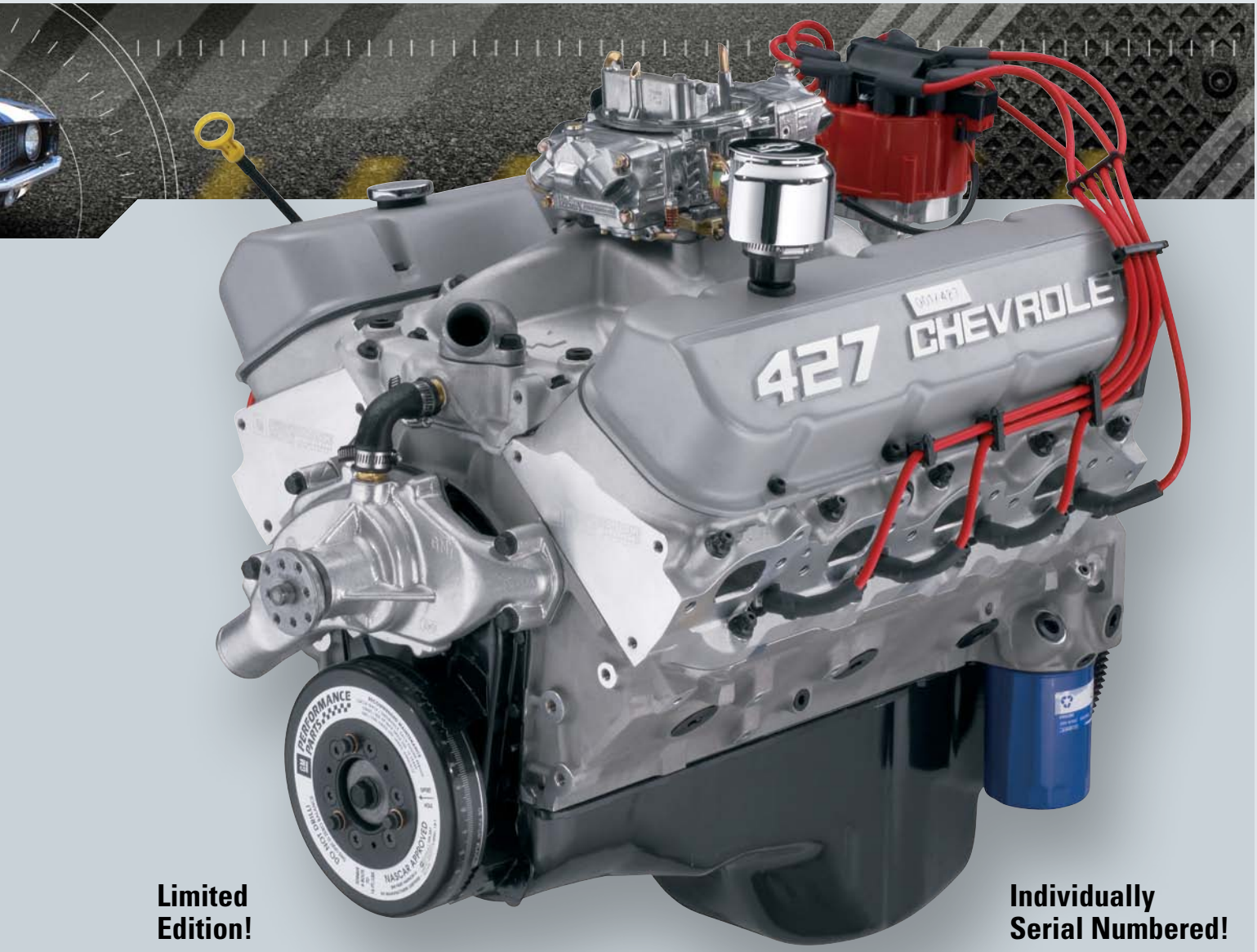
ANNIVERSARY EDITION 427 TECH SPECS

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!



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
Direct bolt-on for Gen I Small-Block and all Big-Blocks.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299805
Torque Converter
See page 334 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



12342071
Air Cleaner
See page 331 for details



12342024
Chrome Water Neck
See page 327 for details



12363128
Chrome High Torque Mini Starter
See page 328 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



ZZ427/480

19166393

- 480 hp @ 5,800 rpm
- 490 lb.-ft. @ 3,800 rpm

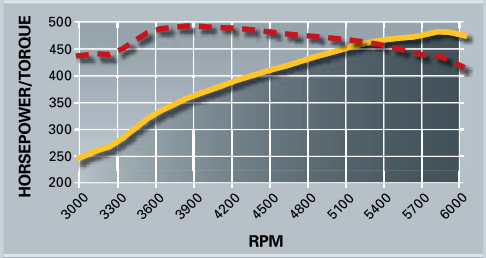
The Classic L88 427 updated for the 21st century!

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 balances 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!



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
Direct bolt-on for Gen I Small-Block and all Big-Blocks.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299805
Torque Converter
See page 334 for details



12361146
High Torque Mini Starter
See page 328 for details



12341999
Fuel Pump Block-Off Plate
See page 301 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



12342024
Chrome Water Neck
See page 327 for details



12342071
Air Cleaner
See page 331 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



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.!

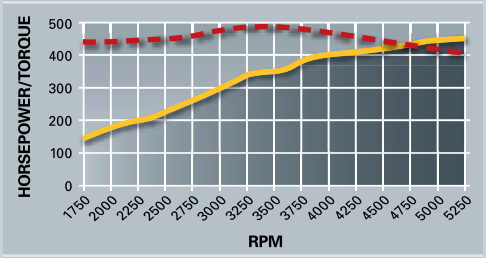
Chevrolet Performance's 454 HO crate engine is classic in its own time, offering enthusiasts an affordable Big-Block combination with performance specs that will make you think it's 1970 all over again – with 425 horsepower and 500 asphalt-wrinkling lb.-ft. of torque.

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.

19300175



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks.

See page 335 for torque converter applications

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



12342093
Short Chrome Bowtie Valve Cover
See page 312 for details



12606096
Lightweight Starter
See page 328 for details



19299804
Torque Converter
See page 334 for details



93440806
HEI Distributor
See page 323 for details



19170093
Carburetor, Holley 770-cfm
See page 330 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



ZZ454/440

12498777

- 440 hp @ 5,250 rpm
- 500 lb.-ft. @ 3,250 rpm

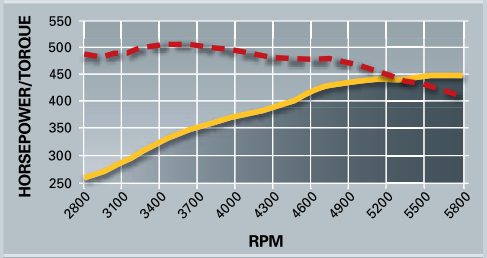
Oval-port aluminum heads deliver big power in an affordable package!

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

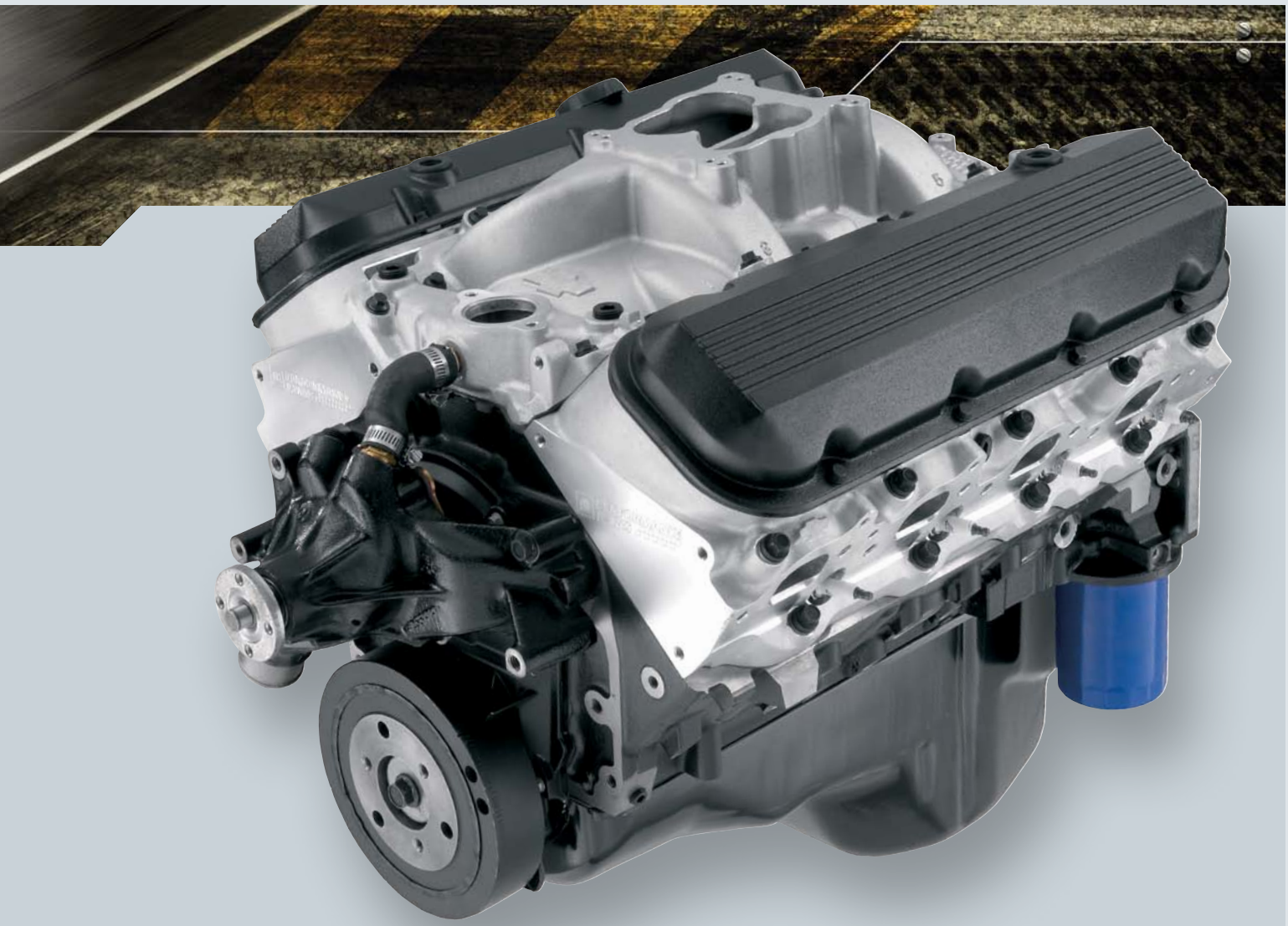
ZZ454 TECH SPECS

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

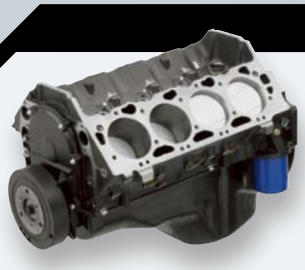
NOTE: *Distributor with melonized steel gear MUST be used with long-blocks and Partial engines with steel camshafts, or engine damage will occur.*

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.

19300175



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks.

See page 335 for torque converter applications

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



19170093
Carburetor, Holley 770-cfm
See page 330 for details



12606096
Lightweight Starter
See page 328 for details



19299804
Torque Converter
See page 334 for details



12342071
Air Cleaner
See page 331 for details



88961867
Distributor, Aluminum Billet HEI
See page 323 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

HT502



88890534

- 377 hp @ 4,500 rpm
- 512 lb.-ft. @ 3,300 rpm

An affordable, high-performance alternative to rebuilding!

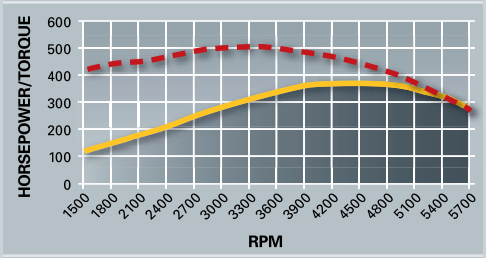
If you're thinking about repowering your trusty Big-Block-powered truck, don't bother with a rebuild or reconditioned used engine. Chevrolet Performance's HT502 crate engine is an affordable alternative with more power and greater durability.

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.

19300175



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks.

See page 335 for torque converter applications

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



19170093
Carburetor, Holley 770-cfm
See page 330 for details



12606096
Lightweight Starter
See page 328 for details



19299804
Torque Converter
See page 334 for details



19168602
Aluminum Water Pump, Short-Style
See page 320 for details



93440806
HEI Distributor
See page 323 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS



502 HO

12568778

- **450 hp @ 5,250 rpm**
- **550 lb.-ft. @ 3,500 rpm**

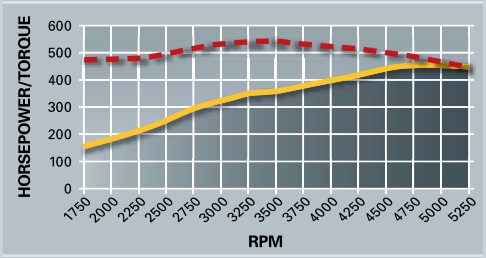
Affordable Big-Block performance with huge torque and 450 hp!

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 www.Chevrolet.com/Performance.

502 HO DYNO CHART



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

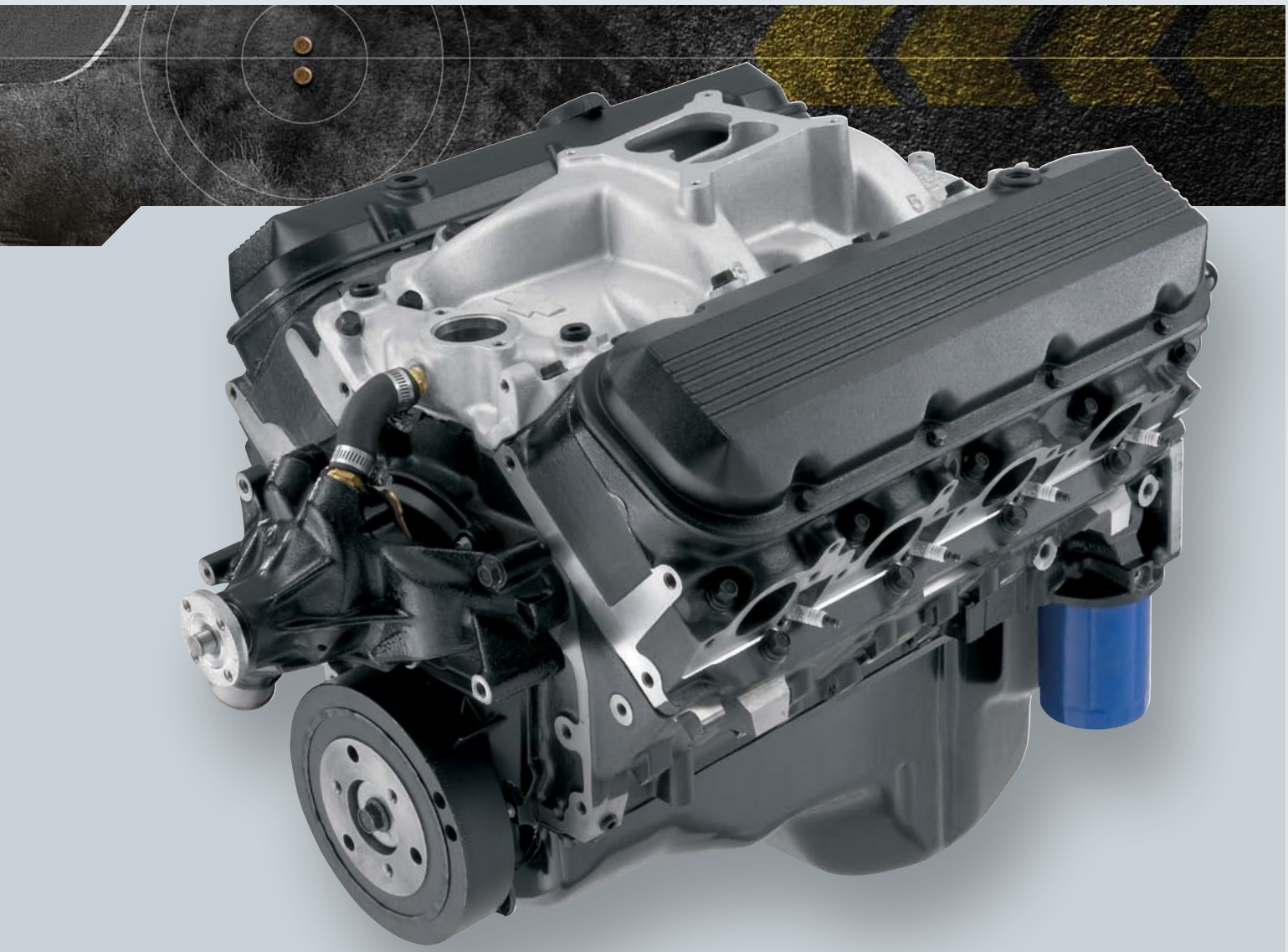
502 HO TECH SPECS

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.

19300175



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks.

See page 335 for torque converter applications

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



19170093
Carburetor, Holley 770-cfm
See page 330 for details



12368384
Spark Plug Wire Set
See page 329 for details



19299804
Torque Converter
See page 334 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



93440806
HEI Distributor
See page 323 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 290 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!

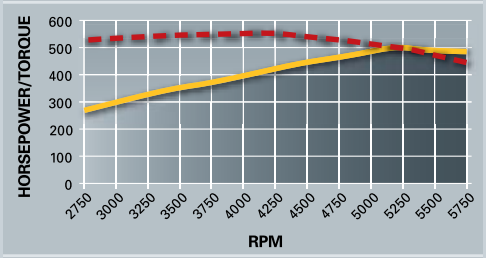
Chevrolet Performance's ZZ502/502 is one of the industry's benchmark crate engines, offering excellent value with a proven combination of performance that is suitable for the street or strip. With more than 500 horsepower and 567 lb.-ft. of torque, it demands your full attention and a chassis that is 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

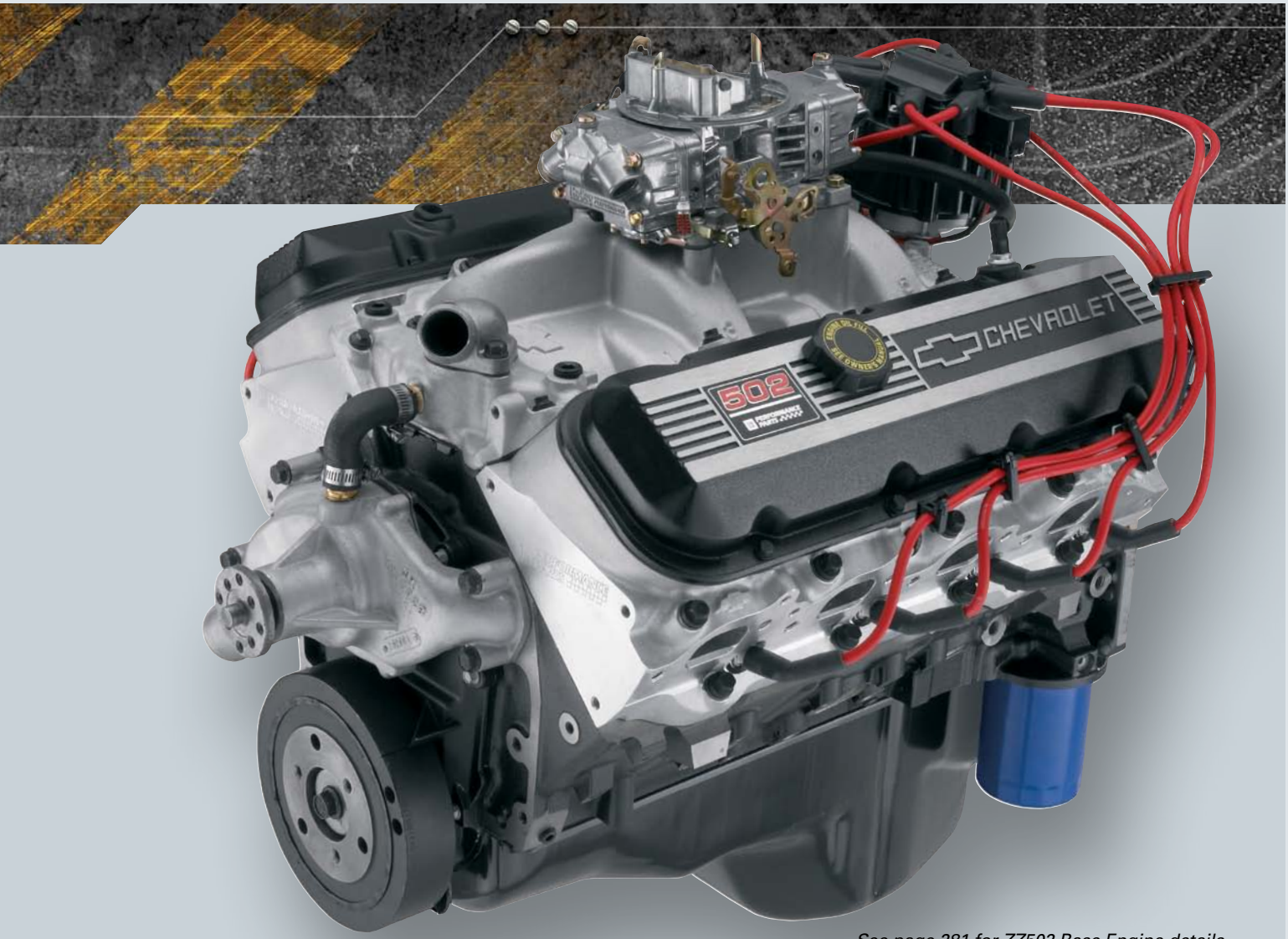
ZZ502/502 DELUXE TECH SPECS

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; stainless steel	**Maximum Recommended rpm:**	5,800
		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 281 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!



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
See page 335 for torque converter applications



19299805
Torque Converter
See page 334 for details



19212657
Transmission Controller
See page 337 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



12363128
Chrome High Torque Mini Starter
See page 328 for details



12342024
Chrome Water Neck
See page 327 for details

SEE PAGE 290 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!

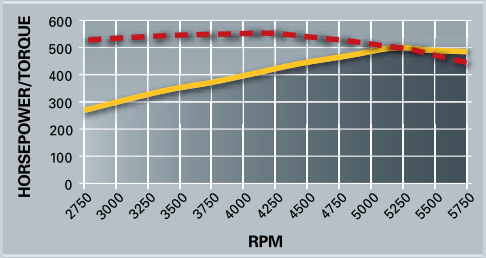
It's simple: We offer the ZZ502/502 Base crate engine for builders who want the super-strong bottom end and high-flow aluminum oval-port cylinder heads, but also want to finish the engine their way.

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 www.Chevrolet.com/Performance.

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

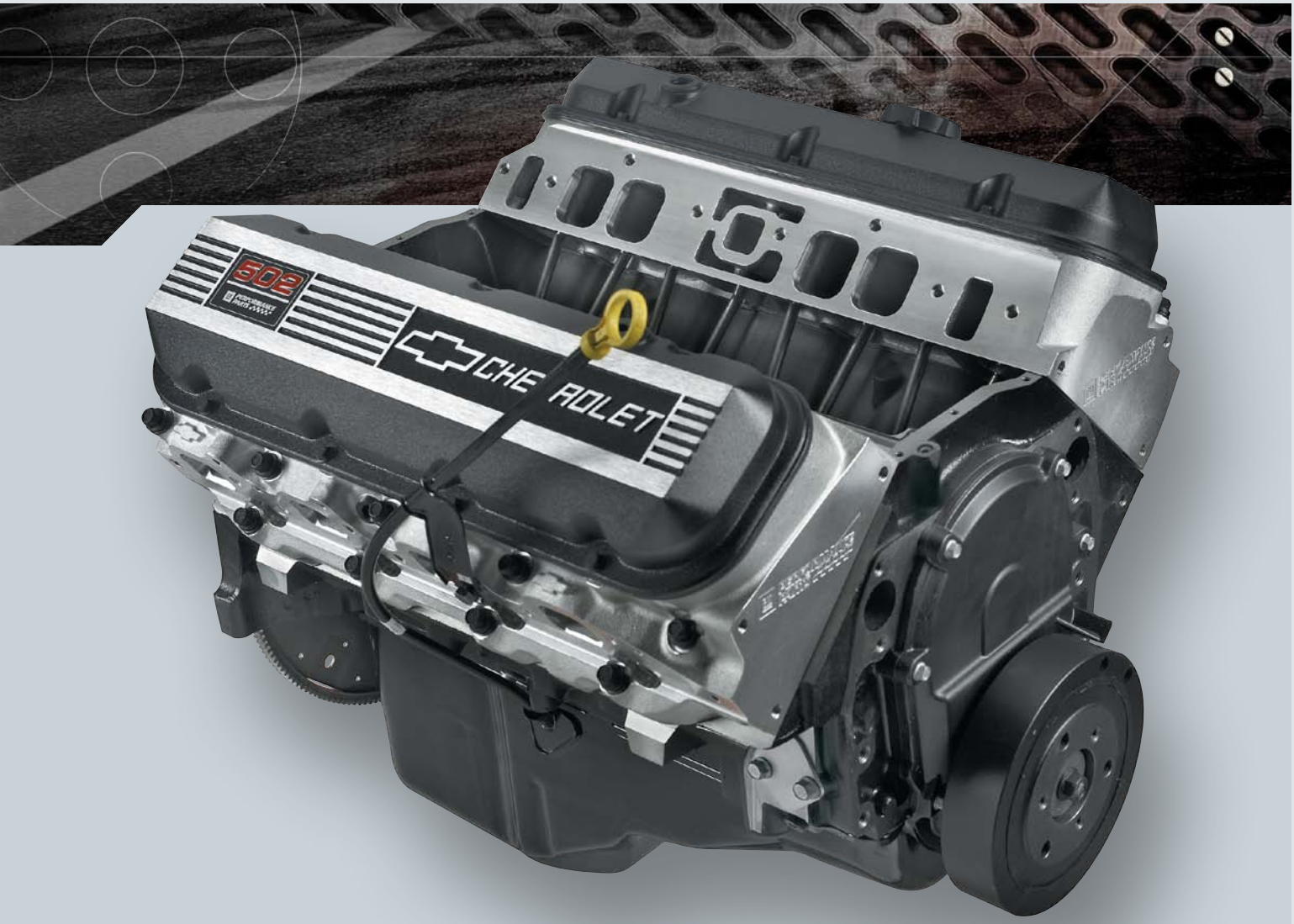
ZZ502/502 BASE TECH SPECS

Part Number:	12496963	**Cylinder Heads (P/N 12363390):**	Aluminum oval port;
Engine Type:	Chevy Big-Block V-8		110cc chambers
Displacement (cu in):	502	**Valve Size (in):**	2.250 intake / 1.880 exhaust;
Bore x Stroke (in):	4.470 x 4.000		stainless steel
Block (P/N 19170540):	Cast-iron with 4-bolt main caps	**Compression Ratio:**	9.6:1
Crankshaft (P/N 10183723):	Forged steel	**Rocker Arms (P/N 12368082):**	Stamped steel
Connecting Rods (P/N 19170198):	Forged steel, shot peened	**Rocker Arm Ratio:**	1.7:1
Pistons (P/N 12533507):	Forged aluminum	**Recommended Fuel:**	92 octane
Camshaft Type (P/N 12366543):	Hydraulic roller	**Ignition Timing:**	Base 8° BTDC, 30° total
Camshaft Lift (in):	.527 intake / .544 exhaust	**Maximum Recommended rpm:**	5,800
Camshaft Duration (@.050 in):	224° intake / 234° 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.



See page 279 for ZZ502 Deluxe Engine details.

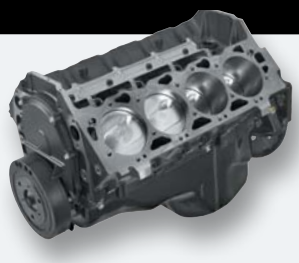
12371204



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!



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
See page 335 for torque converter applications



19299805
Torque Converter
See page 334 for details



19212657
Transmission Controller
See page 337 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



19168602
Aluminum Water Pump, Short-Style
See page 320 for details



19170095
Carburetor, Holley 850-cfm
See page 330 for details

SEE PAGE 290 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!

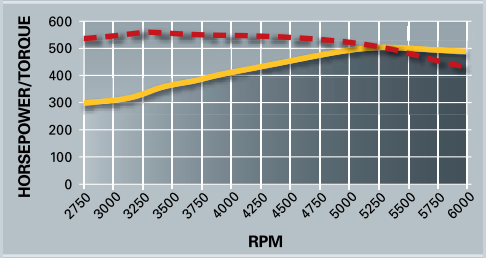
The Ram Jet 502 blends the legendary torque and performance of the Big-Block with a modern port fuel injection system and tunnel ram-style high-rise intake manifold. It's a combination that offers uncompromising performance in a visually stunning presentation.

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

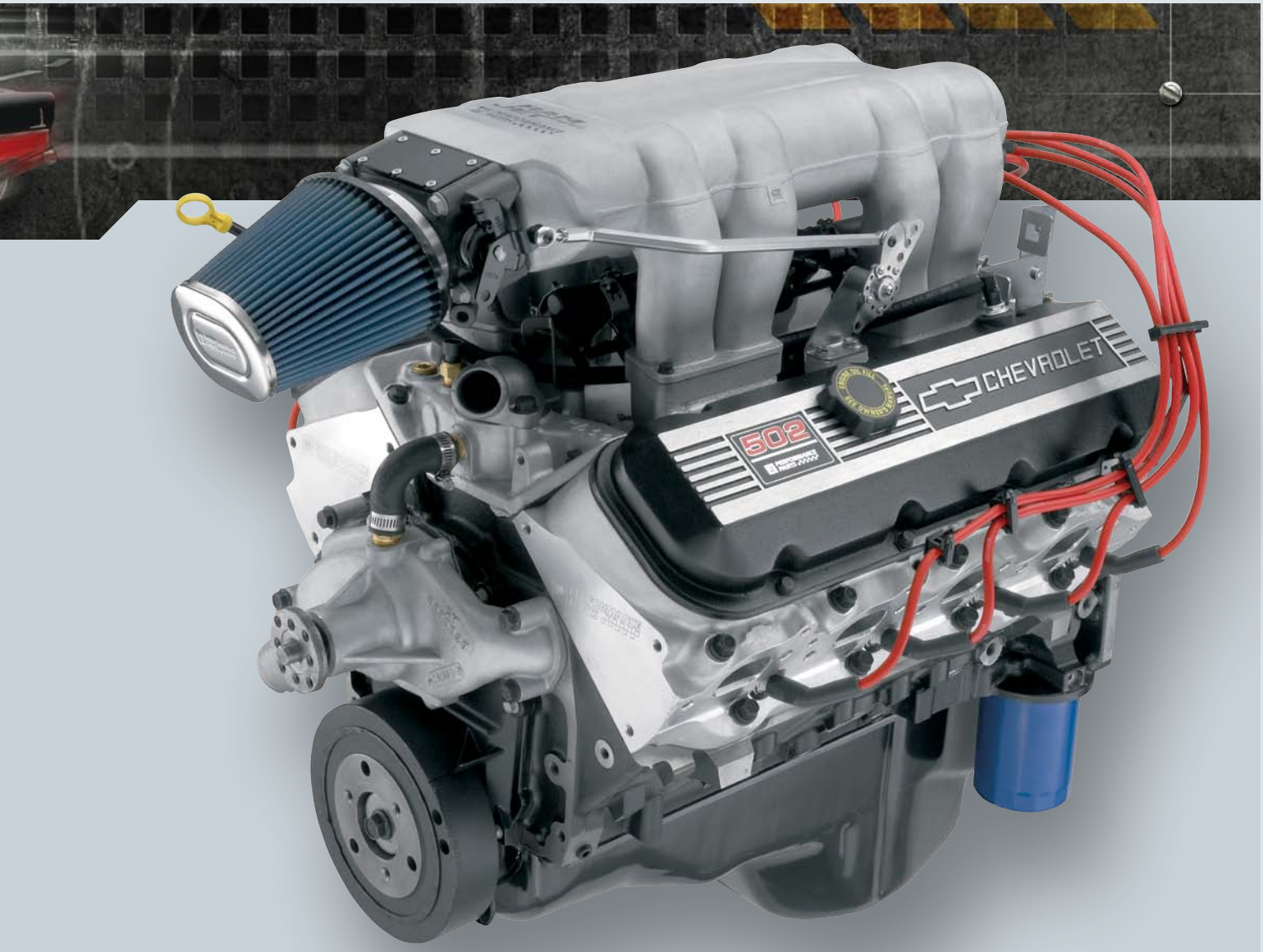
RAMJET 502 TECH SPECS

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!



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
Direct bolt-on for Gen I Small-Block and all Big-Blocks.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299805
Torque Converter
See page 334 for details



12606096
Lightweight Starter
See page 328 for details



25534374
Orange Powder-Coated Valve Covers
See page 312 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



25534323
Black Powder-Coated Valve Covers
See page 312 for details



12342093
Short Chrome Bowtie Valve Cover
See page 312 for details

SEE PAGE 290 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.

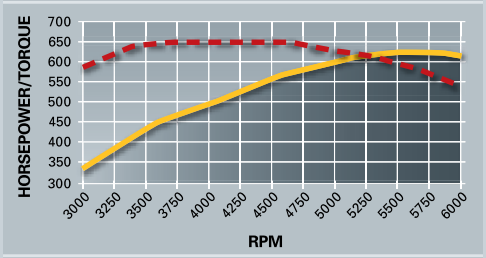
We build the ZZ572 with huge 4.560-inch bores and add a forged 4.375-inch-stroke crankshaft. To make sure those cylinders are packed with every cubic centimeter's worth of atmosphere, we use a camshaft with incredible 0.632/0.632-inch lift and 254°/264° duration specifications.

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?

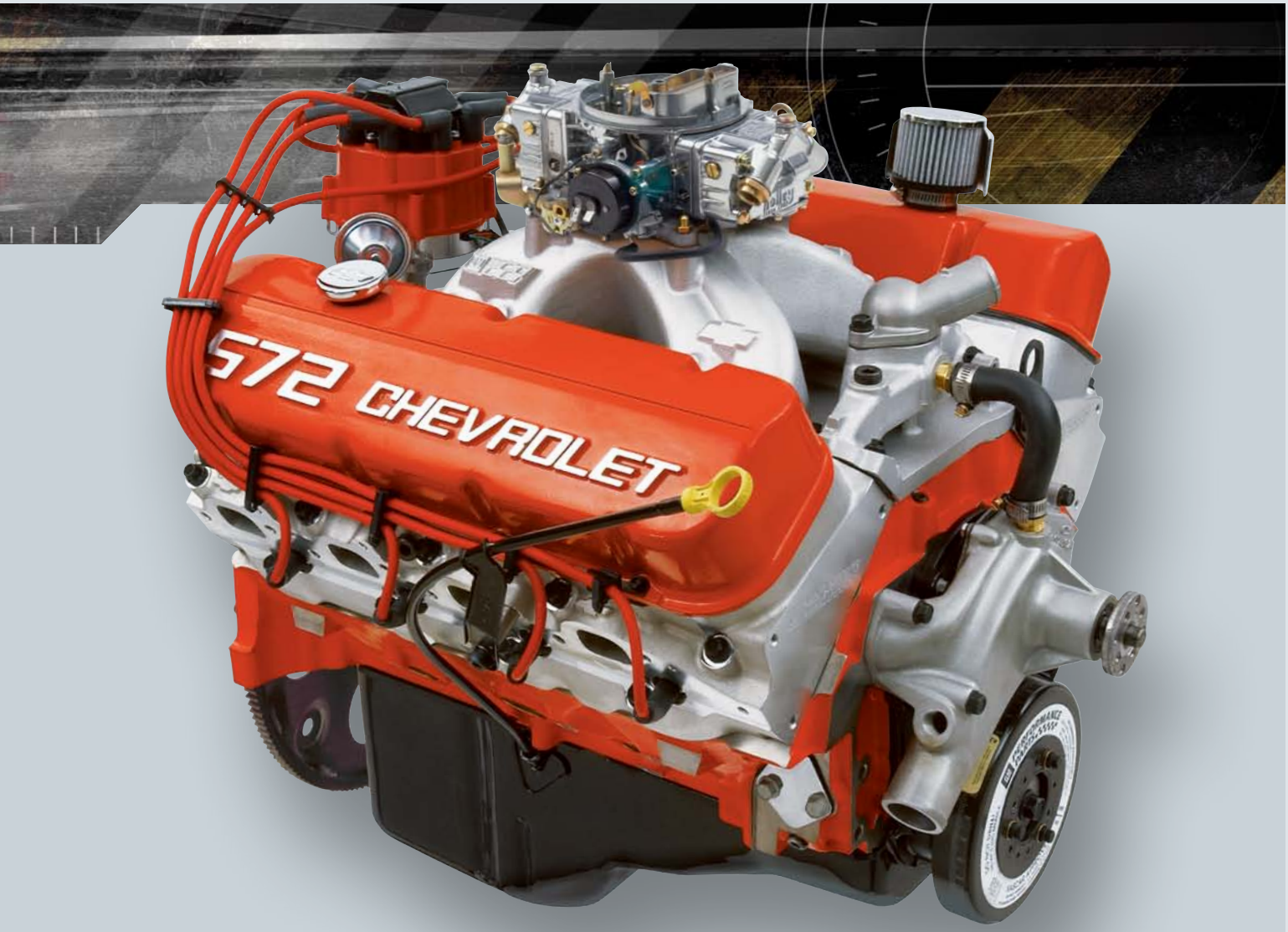
ZZ572/620 DELUXE TECH SPECS

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.

19300175



SuperMatic™ 4L85-E Four-Speed Transmission

Direct bolt-on for Gen I Small-Block and all Big-Blocks.

See page 335 for torque converter applications

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



12361146
High Torque Mini Starter
See page 328 for details



12341999
Fuel Pump Block-Off Plate
See page 301 for details



19299805
Torque Converter
See page 334 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



12342024
Chrome Water Neck
See page 327 for details



19212657
Transmission Controller
See page 337 for details

SEE PAGE 290 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!

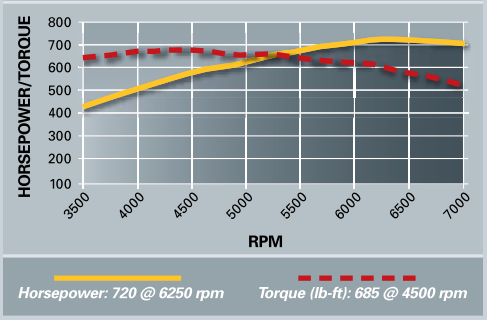
A 10-second car is quick, but the ZZ572/720R could achieve that with a couple of its spark plugs left in the pits. It is the king of all Rat engines and is capable of pulling your bracket racer or heads-up challenger down the 1320 in the 9-second range.

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



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,	**Maximum Recommended rpm:**	6,750
	118cc chambers	**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.



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



19300175
SuperMatic™ 4L85-E Four-Speed Transmission
Direct bolt-on for Gen I Small-Block and all Big-Blocks.
See page 335 for torque converter applications



19212657
Transmission Controller
Required when using a GM electronically controlled automatic transmission. Includes wiring harness, software and connector for laptop computer.
See page 337 for details



19299805
Torque Converter
See page 334 for details



12561217
14" Flexplate
See page 319 for details



12341999
Fuel Pump Block-Off Plate
See page 301 for details



19172805
Serpentine Accessory Drive Belt System With Air Conditioning
See page 320 for details



12606096
Lightweight Starter
See page 328 for details



12342024
Chrome Water Neck
See page 327 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

Vortec 8.0L



19256938

- 315 HP @ 4500 rpm (CNG)
- 375 HP @ 4200 rpm (gasoline)
- 390 LB-FT @ 3500 rpm (CNG)
- 475 LB-FT @ 3200 rpm (gasoline)

A Big-Block for your truck – and it's compatible with gasoline, CNG, or LPG!

When it comes to grunt work – like pulling your car hauler or offshore racing boat – Chevrolet Performance's new, heavy-duty 8.0L Big-Block does the job like no other engine.

This latest edition of the classic Big-Block is all about torque and makes up to 475 lb.-ft. (on gasoline) by only 3,200 rpm – and maintains a smooth, flat and useful torque band across the entire rpm range. That gives your truck the power to pull just about anything and flatten the steepest grades.

The 8.0L is built with a tall-deck (10.2-inch deck height) version of our latest Big-Block casting, which features full-length water jackets, thicker main bearing webs and four-bolt main caps. It also uses a forged steel crankshaft and forged connecting rods for optimum strength. A long, 4.250-inch stroke helps maximize the torque.

This modern Big-Block is equipped for a crank-triggered ignition system and features a 4X camshaft and 58X crankshaft reluctor wheels to support it. The engine can support fuel injection and also has a provision for a mechanical fuel pump.* 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.

***NOTE:** This engine requires an intake manifold designed for a tall-deck block. Chevrolet Performance intake manifold P/N 88961161 was used in development. Conventional big-block intake manifolds can be used with spacers (not included).*

**Production 8.0L camshaft does not have a fuel pump lobe.*

INSTALLATION NOTES

- Designed for gasoline or CNG /LPG on-highway applications
- Tall deck block design (10.2" deck height)
- Full length water jackets (non-siamesed cylinders)
- Thicker main bearing webs with four bolt main caps
- Forged steel crankshaft and connecting rods
- Double row roller timing chain
- Anodized pistons with full floating wrist pins offer CNG/LPG capability
- Hardened valve seats (intake and exhaust) for CNG/LPG durability
- Stainless steel intake and exhaust valves for CNG/LPG durability
- Adjustable valve train.
- "Fast Burn" cylinder heads for fuel efficiency and power
- 58x Crankshaft positioning sensor capability
- 4x Camshaft positioning sensor capability
- Flat-response knock sensor capability
- Coil-near-plug configuration

VORTEC 8.0L TECH SPECS

Part Number:	19256938	**Connecting Rod Ratio:**	1.58:1
Engine Type:	Chevy Big-Block V-8	**Pistons (19256829):**	Hypereutictic w/anodized top ring land
Displacement (Litre):	8.0L	**Camshaft Type (P/N 12556291):**	Hydraulic Roller
Displacement (cu in):	488	**Cylinder Heads (P/N 19256827):**	Fast Burn Iron
Bore x Stroke (in):	4.270x4.250	**Damper (P/N 19256830)**	Cast Iron
Block (P/N 19256820):	Tall Deck (10.2")	**Valve Train:**	Fully Adjustable
Fuel Requirements:	LPG/CNG	**Compression Ratio:**	9.9:1 nominal
Crankshaft (P/N 19300876):	Forged steel	**Crankcase capacity:**	8 Qts
Connecting Rods (P/N 19256831):	Forged steel	**Maximum Recommended rpm:**	4,500
Firing Order:	1-8-7-2-6-5-4-3	**Balanced:**	Internal

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

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



Spark plugs not included

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



88961161
Intake Manifold-Tall Deck
See page 325 for details



12368384
Spark Plug Wire Kit
See page 329 for details



19172805
Serpentine Accessory Drive Belt System w/AC
See page 320 for details



93440806
HEI Distributor
See page 323 for details



12495502
Wire Loom Kit, Big Block
See page 329 for details

SEE PAGE 290 FOR OUR COMPLETE LINE OF BIG-BLOCK ENGINE COMPONENTS

BIG-BLOCK Engine Components



Bowtie Sportsman Block

Build Maximum Power with Factory-Engineered Parts

Chevrolet Performance has engineered and built Big-Blocks longer than anyone, so you can trust our parts to deliver the power and durability you demand – whether you're on the street, strip or trailering your vintage Chevy over the Rocky Mountains!

Our lineup of Big-Block parts starts with brand-new GM cylinder blocks that are stronger than previous production designs, combining design elements of the Mark IV and Gen V blocks. That means they'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 that's perfect for resto-mod projects and COPO tribute cars.

When it comes to the best-performing rotating parts and cylinder heads, including rectangular-port and oval-port and lightweight aluminum versions of the heads, nobody has the Big-Block covered like Chevrolet Performance. Don't settle for used, reconditioned or "seasoned" parts. Our parts are competitively priced and often deliver greater strength and performance than used production components.

When it comes to Big-Block power and durability, trust the factory. Trust Chevrolet Performance.



Blocks and Components
Page 293



Heads
Page 302



Valve Components
Page 309



Valve Covers
Page 312



Camshafts
Page 316



Piston and Pistons Rings
Page 317



Crankshafts
Page 318



Oil Pans, Oil Pumps, Gaskets and Components
Page 321



Intake Manifolds, Gaskets and Components
Page 324



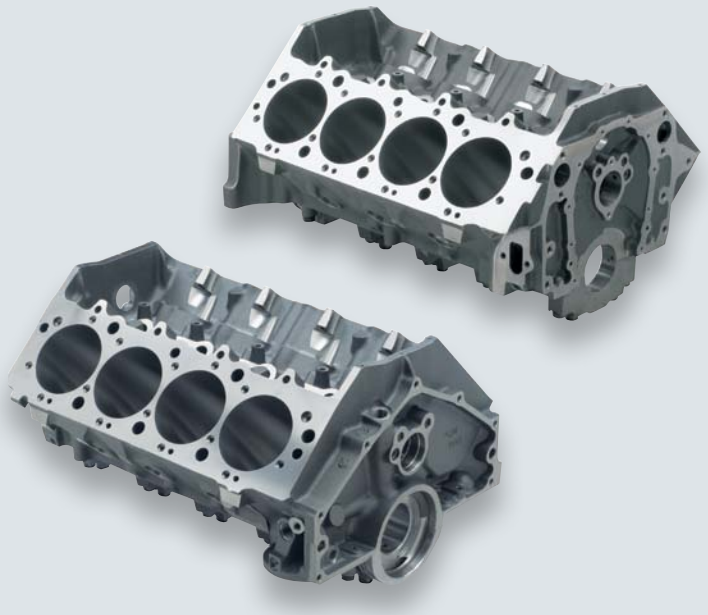
Fuel and Electrical Components
Page 330

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 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 Blt 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	294
19170540	—	9.800"	Yes	Siamese	4.470"–4.500"	4	Straight	Cast-iron	2.750"	Wet	1 pc	4.250"	269	700	Mod	294

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	295
19212192	24502504B	9.800"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	258	800	Sport	295
19212193	24502506B	10.200"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	263	800	Sport	296
19212194	24502506B	10.200"	Yes	Siamese	4.494"–4.600"	4	16°	Nodular	2.750"	Wet	2 pc	4.500"	263	800	Sport	296
19212195	24502506B	10.200"	Yes	Siamese	4.560"–4.600"	4	16°	Nodular	2.750"	Wet	1 pc	4.500"	263	800	Sport	296
19212196	24502504B	9.800"	Yes	Siamese	4.240"–4.600"	4	16°	Steel	2.750"	Wet	2 pc	4.500"	281	1200	Pro	298
19212197	24502506B	10.200"	Yes	Siamese	4.240"–4.600"	4	16°	Steel	2.750"	Wet	2 pc	4.500"	296	1200	Pro	298

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	297
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

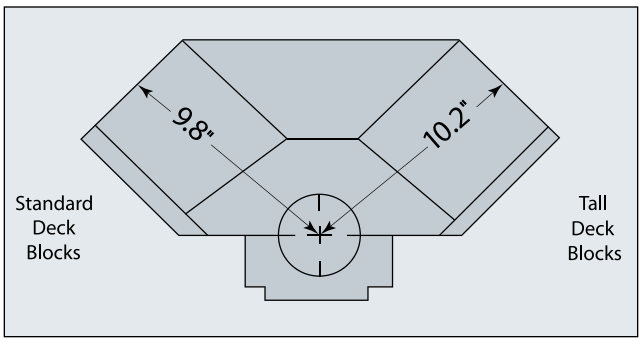
Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
24502572	1A626	9.525"-9.000"	No	Siamese	4.500"–4.700"	4	16°	Steel	2.750"	Dry	2 pc	4.600"	255	1400+	Pro	299
25534406	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	299
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	299

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
- **4.600"** 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 293 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

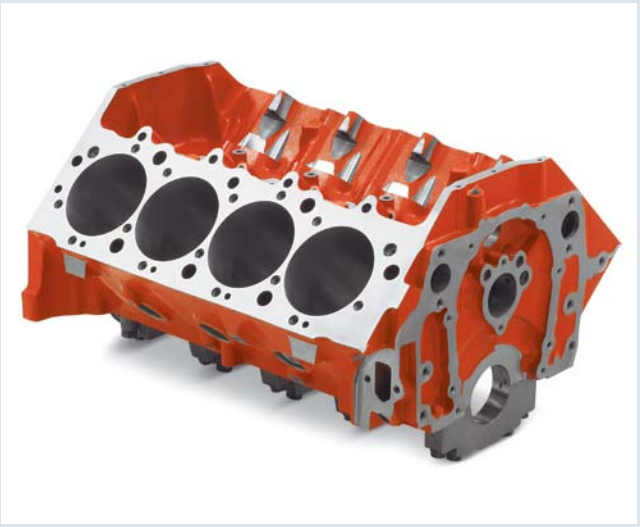
Tall Deck Bowtie Sportsman Bare Block (not shown)

- 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)

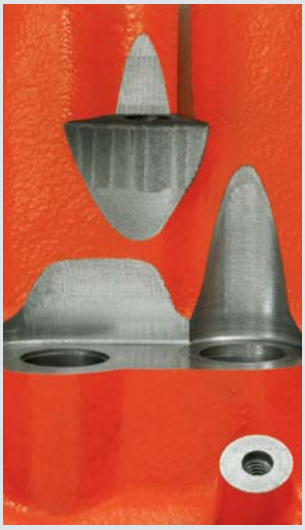
- 1-piece rear main seal
- Uses Mark IV style front cover and oil pan mounting
- CNC-machined cast-iron 4-bolt block
- **4.560"** fully honed bore
- **4.600"** max bore
- Powdercoated Chevy orange
- 5 windage tray bolts installed
- Tested to 800 horsepower!
- This is the block used for our 572 engines



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 293 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 300)
- 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 293 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

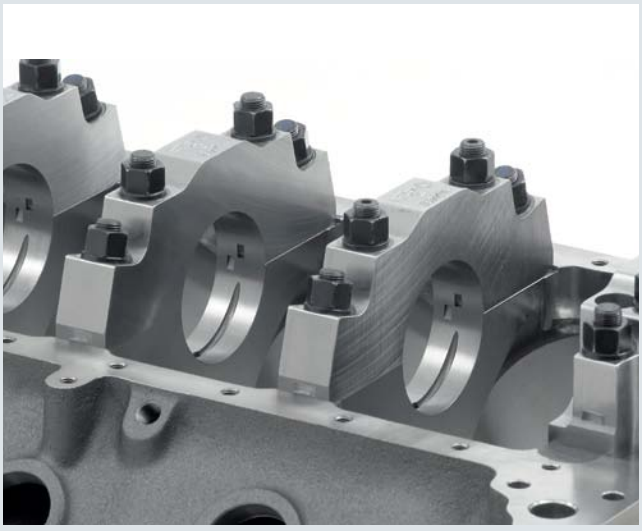
- CNC-machined cast-iron 4-bolt block
- **4.240"** finished bore
- **4.600"** max bore (.250 min wall thickness)
- Tall deck height (**10.200"**)
- Lifter bosses are .300" taller than standard blocks
- Tested to 1,200 horsepower!



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 293 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 - Discontinued

DRCE 3 Bare Block, Compacted Graphite* (not shown)

- Same as P/N 25534406
- Cam tunnel accommodates (9) 70mm cam bearings
- Available until current inventory is depleted

**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

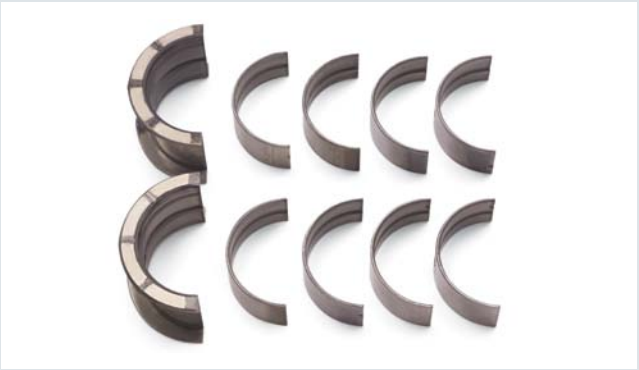
E. 88958656
Windage Tray Bolt, 572
- Used with 572 engines



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 Gen V and Gen VI **F**



Big-Block Fuel Pump Block-Off Plate **G**



Big Block Crank Trigger Ignition Conversion Kit **H**

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 (not included)
- 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	302
12562925	Gen V, VI BBC	12562934	Iron	325	Rect	BBC	118	2.180	1.880	Square	Std	yes	Screw-in	7/16 accy holes	302
12562926	Gen V, VI BBC	12562934	Iron	325	Rect	BBC	118	2.180	1.880	Square	Std	yes	Screw-in	3/8 accy holes	302
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	303
12363392	Oval alum	12363391	Alum	290	Oval	BBC	110	2.190	1.880	Square	Std	no	Screw-in	Semi-open, oval port	303
12363399	Oval alum	12363391	Alum	290	Oval	BBC	110	2.190	1.880	Square	Std	no	Screw-in	Bare 3392	303
12363408	NHRA L88	12363401	Alum	315	Rect	BBC	118	2.190	1.880	Square	Std	no	Screw-in	Bare, NHRA legal	304
12363400	Rect alum	12363401	Alum	300	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	Assembled	304
12363410	Rect alum	12363401	Alum	300	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	Bare 3400	304
12363425	BBC Bowtie	14044861	Alum	380	Rect	BBC	115	2.190	1.880	Square	Std	no	Screw-in	Bare, raised int/exh	305
12499255	572/620	—	Alum	310	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	ZZ572/620	305
88961160	572/720	—	Alum	310	Rect	BBC	118	2.250	1.880	Square	Std	no	Screw-in	ZZ572/720R	305
24502585	DRCE 2	—	Alum	—	Peanut	DRCE 2	—	—	—	DRCE	—	no	Shaft	Pro Stock–raw	306
25534404	DRCE 3	—	Alum	—	Peanut	DRCE 3	—	—	—	DRCE	—	no	Shaft	Pro Stock–raw	307

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)



Bare Cast-iron Gen V and Gen VI Cylinder Head (combustion chamber) **A**



Bowtie Oval Port Aluminum Cylinder Head (intake) **B**



Bowtie Oval Port Aluminum Cylinder Head (exhaust) **B**



Bowtie Oval Port Aluminum Cylinder Head (combustion chamber) **B**

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 307.*

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 307.*

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"**

12555728
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



Valve Spring Retainer



Valve Spring Key

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

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)

[1]Use with pushrod guideplate P/N 3860038. [2]Use 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 312), 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



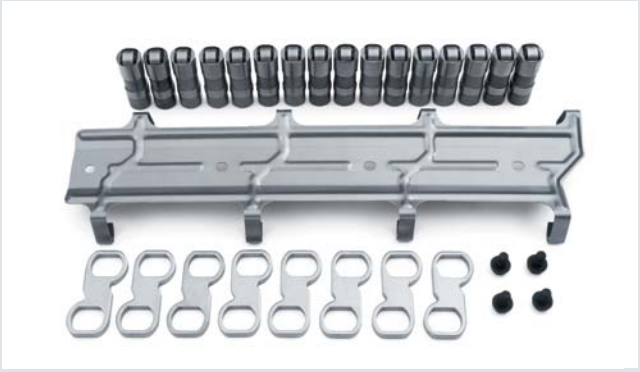
D Rocker Adjusting Nut



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 Installation 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

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

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
- 6.135" 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



A Camshaft Bearings, 572 Engine



B Forged Steel Connecting Rod



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

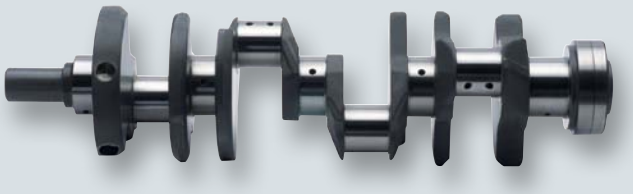
Part Number	Engine Size	Bore Size	Oversize	Rod Length	Pin Type	Compression Ratio	Chamber Size	Ring Size	Description
12533507	502	4.470"	—	6.135"	Pressed	8.75:1	118cc	5/64", 1/16", 3/16"	Forged Gen V and Gen VI 502 replacement
88962925	572	4.560"	—	6.535"	Floating	9.6:1	118cc	1/16", 1/16", 3/16"	Forged 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

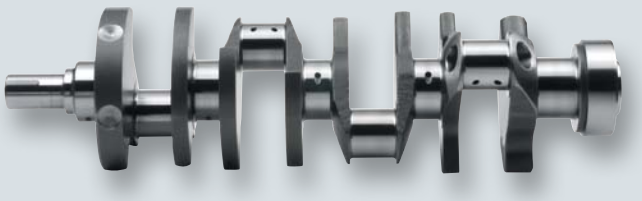
Part Number	Bore size	Oversize	Ring Thicknesses	Description
12523921	4.250"	Standard	5/64", 5/64", 3/16"	Standard-size ring pack for Gen V 454 HO
12523923	4.250"	+.030"	5/64", 5/64", 3/16"	Oversize ring pack for Gen V 454 HO
12524293	4.470"	Standard	5/64", 1/16", 3/16"	Standard-size low-tension ring pack for all 502 engines
12524294	4.470"	+.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.



Crankshaft, Forged Steel (Gen V and Gen VI 502)



Crankshaft, Forged Steel 572

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

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
88962814	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 FLEXPLATES

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	Convertor 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



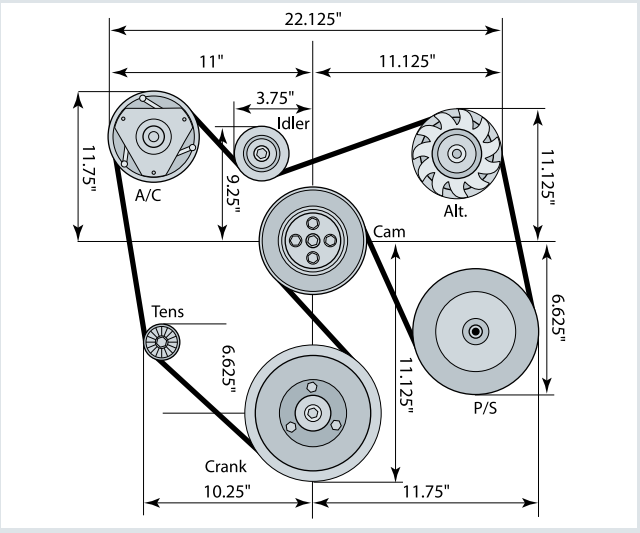
A Aluminum Water Pump, Short-Style



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



Dipstick Tube, 6-Quart H



Dipstick Tube, 4-Quart I

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

H. 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

I. 329231
Dipstick Tube, 4-Quart
- For use with 4-quart oil pan kit P/N 12495360
- Use oil dipstick P/N 3989391

Oil Pans, Oil Pumps, Gaskets and Accessories Continued

A. 14097040
Windage Tray
- Use with the Gen V and Gen VI 454 and 502 engines

B. 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

C. 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

D. 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

E. 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.*

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.*

F. 3952301
Oil Filter Adapter
- Mounts a spin-on cartridge oil filter
- Contains a filter bypass valve used on all V-8 engines

G. 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



A Windage Tray



B Windage Tray



C Windage Tray, 572 Engine



D Oil Pump and Pick-Up, 572 Engine



E Oil Pump Shaft



F Oil Filter Adapter



G Oil Cooler Bypass Valve



Distributor, HEI **H**



Distributor, Billet HEI **I**



Distributor, Ram Jet 350 & Ram Jet 502 **J**



Distributor, Adjustable Slip Collar **K**

DISTRIBUTORS AND COMPONENTS

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.

H. 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

I. 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

J. 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

K. 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

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.*

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

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) (Holley Carburetors)

- 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 Chevelles. 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) (Holley Carburetors)
- 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

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

Additional components required for installation.



Ram Jet Fuel Injection Kit



Lower Manifold, 502 Ram Jet



Upper Manifold, 502 Ram Jet

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

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

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

Electronic Control Units And Components

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

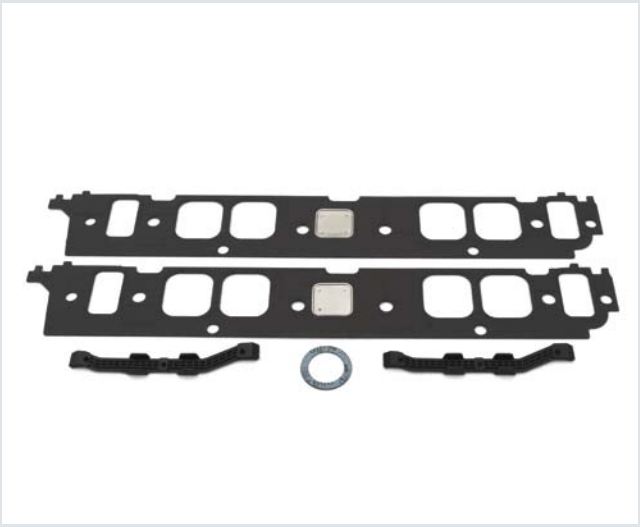
MEFI 4 ECU Harness, Ram Jet 502 (not shown)

- 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

(!) *Additional components required for installation.* *See page 325.*



Oil Shield **A**



Gasket, Aluminum Oval Port Heads **B**



Bolt Kit, Intake Manifold **C**



Water Neck **D**

A. 12555320
Oil Shield
- Isolates hot engine oil from the air/fuel mixture

B. 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.

C. 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

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)

STARTERS

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.

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



A High-Torque Mini Starter



B High-Torque Mini Starter, Chrome



C Lightweight Starter 12.75" Flywheel (remanufactured)



D Lightweight Starter 14" Flywheel

❗ STARTERS: ADDITIONAL REQUIRED COMPONENTS

Part Number	Bolts (Quantity)	Engine Application
12361146	12338064 (2)	Big-Block
10465143	12338064 (2)	Big-Block
12606096	12338064 (2)	Big-Block and 12499121, 12496962, 12497323, 12371171
12363128	12338064 (2)	Big-Block

❗ *Additional components required for installation.*

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!

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

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.*

SPARK PLUG WIRES

12368384
Chevrolet Bowtie Logo Wires
Chevrolet Performance spark plug wire kits are designed to fit your GM engine, eliminating the guesswork in selecting the correct length. 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 Chevrolet insignia and black boots. Manufactured with double-wall silicone construction.

- Kits include a 10" coil wire for engines, such as Ram Jet 350 and ZZ572 engines that have remote-coil HEI, plus four wire separators and HEI terminals and boots for the distributor cap.
- Custom-fit set designed to be used with black wire loom P/N 12495502 or chrome wire loom P/N 12342049.



WIRE LOOM KITS

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



CARBURETORS AND THROTTLE BODIES

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

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

A. 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.*

B. 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

C. 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

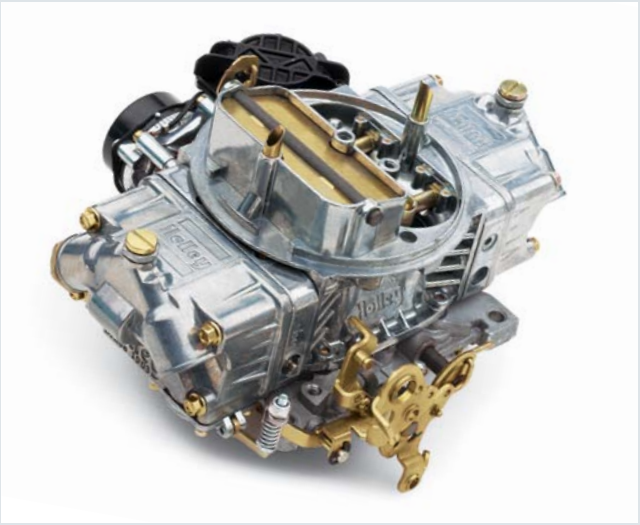
17113524

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



A Carburetor, Holley 850-cfm



B Carburetor, Holley 870-cfm



C Carburetor, Holley Dominator 1150-cfm



Air Cleaner, Chevrolet-Logo High-Performance Design **D**



Air Cleaner, Chevrolet-Logo Classic Design **E**



Electric Fuel Pump **F**



Camaro ZL1 Fuel Pump Module **G**



Electric Fuel Pump, High Output **H**



Fuel Filter **I**

AIR CLEANERS

D. 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.*

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
- Will not fit Dominator-style carburetors

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

ELECTRIC FUEL PUMPS AND COMPONENTS

F. 6472657

Electric Fuel Pump

- For use on all carbureted engines
- Flows 30-40 gph at 6-9 psi

G. 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

H. 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

I. 854619

Fuel Filter

- High-capacity inline filter
- Suitable for all high-performance carbureted applications
- 5/16" inlet and outlet

TRANSMISSIONS

Put Your Project in Overdrive with Factory-Engineered Performance Transmissions and Installation Kits!

Horsepower is important, but so is drivability and Chevrolet Performance's wide range of automatic and manual performance transmissions helps make the most of your vehicle's performance capability – on the street, strip or freeway.

Our electronically controlled automatic transmissions are engineered to match your high-performance engine with smooth, crisp shifts and the durability you expect. SuperMatic™ transmissions offer the ultimate in automatic transmission strength and torque capability – and every Chevrolet Performance automatic 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!

We've also expanded our lineup of manual transmissions for 2014, with the new TREMEC T56 Super Magnum six-speed. It delivers the strength of the heavy-duty TR6060 transmission in a universal package designed to assist LS-engine installations in older vehicles.

Chevrolet Performance transmissions are brand-new or remanufactured to GM standards. There are no requirements for core returns. Complement them with one of our transmission controller kits for plug-and-play operation – and we've improved our controllers this year, making it easier to use electronically controlled transmissions in older vehicles.

IMPORTANT! *Chevrolet Performance does not include a torque converter with automatic transmissions. A variety of torque converters for 4L60- and 4L80-series transmissions tailored for the wide variety of our crate engines' performance specifications are available. Select the transmission that's just right for your project vehicle and select the torque converter to match its performance.*

NOTE: *An aftermarket signal converter is required when installing an electronically controlled automatic transmission in an older vehicle with a mechanical speedometer.*

Hydra-Matic Transmission Family Trees

4L60-E Series
The Hydra-Matic 4L60/4L65/4L70 family of transmissions is differentiated primarily by gearset design. Each planetary gearset in the 4L60 has four pinion gears. There are five pinion gears in the 4L65 and 4L70, but the 4L70 has a higher torque rating. The external dimensions and mounting provisions are identical for each transmission in the 4L60 family. The maximum torque capacity for each includes:

4L60-E – 380 lb.-ft.
4L65-E – 430 lb.-ft.
4L70-E – 495 lb.-ft.

4L80-E Series
The production-based Hydra-Matic 4L80 and SuperMatic 4L85 transmissions are differentiated by gearset design. Each planetary gearset in the 4L80 has four pinion gears, while the 4L85 has five pinion gears. The external dimensions and mounting provisions are identical for each. The maximum torque capacity for each includes:

4L80-E – 440 lb.-ft.
4L85-E – 685 lb.-ft.





Clockwise from top:

T56 Super Magnum Six-Speed Manual Transmission

SuperMatic™ 4L85-E Transmission

SuperMatic™ Torque Converter

SuperMatic™ Transmission Control System

Performance SuperMatic™ Torque Converters

The SuperMatic Torque convertors 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**
- **No external adapters needed to fit Chevrolet Performance Crate Engines.**



NEW

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.

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					**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
19301294	ZZ5 Turn-Key – with Aluminum Vortec Heads	350	400	400	19299801	3000-3400	19299805	3000-3400
12499101	HT383 Base – Performance Engine	383	340	435	19299800	2400-2800	19299804	2400-2800
17800393	HT383E – Performance Engine	383	340	435	19299800	2400-2800	19299804	2400-2800
19301295	ZZ383 – High Performance Engine	383	450	450	19299801	3000-3400	19299805	3000-3400
CHEVY LS/LSX V-8								
19259918	LC9 – 5.3L	6.2	326	350	19299802	2400-2800	19299806	2400-2800
19258004	LC9 – E-Rod Kit Automatic	5.3	326	350	19299802	2400-2800	19299806	2400-2800
19301326	LS3 – Corvette Gen IV V-8	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19257230	LS3 – E-Rod Kit Automatic	6.2	430	424	19299802	2400-2800	19299806	2400-2800
19301358	LS376/480 – LS3 Gen IV V-8	6.2	480	475	19299803	3000-3400	19299807	3000-3400
19301359	LS376/515 – Carbureted LS3 Gen IV V-8	6.2	515	469	19299803	3000-3400	19299807	3000-3400
19301360	LS376/525 LS3 Gen IV ASA Camshaft	6.2	525	489	19299803	3000-3400	19299807	3000-3400
19260164	LSA – Supercharged Gen IV V-8	6.2	556	551	N/R		19299806	2400-2800
19257456	LSA – E-Rod Kit Automatic	6.2	556	551	N/R		19299806	2400-2800
19260165	LS9 – Supercharged Gen IV V-8	6.2	638	604	N/R		19299806	2400-2800
19244098	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
19260831	LSX376 -B8	6.2	450	444	19299802	2400-2800	19299806	2400-2800
19299306	LSX376 -B15	6.2	450	444	N/R		N/R	
19260833	LSX454	7.4	620	590	N/R		19299807	3000-3400
19260835	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
19201333	ZZ572/620 Deluxe	572	620	650	N/R		19299805	3000-3400
19201334	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 3.4 clutch
- Gear ratios: 1st: 3.06, 2nd: 1.62, 3rd: 1.00, 4th: 0.70
- Use SuperMatic™ converter for direct bolt up to Gen I and Gen II engines
- Add up to 430 lbs/ft. torque
- Does not include torque converter. See pages 334-335 for options.

NOTE: *Use with electronic controller P/N 19212657 for carbureted and Ram Jet applications. Use with electronic controller P/N 19302405 with Chevrolet Performance LS fuel injected applications.*

B. SuperMatic™ 4L70-E Four-Speed Automatic Transmission
19299055 Two-Wheel Drive (not shown)
19260961 Four-Wheel Drive

- 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 19302405 with Chevrolet Performance LS fuel injected applications.*

C. 19300175
SuperMatic™ 4L85-E Four-Speed Transmission

- Improved valve body for firmer shifts
- Direct bolt-on for Gen I Small-Block and all Big-Blocks
- Does not include torque converter. See pages 184-185 for options.
- Includes additional clutch plates
- 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 19302410 with Chevrolet Performance LS fuel injected applications. Torque converter not included. See automatic transmission torque converter match listing chart on previous page.*

TRANSMISSION INSTALLATION KITS – LS ENGINES

Whether you select one of Chevrolet Performance's electronically controlled automatic transmissions or the high-capacity T-56 Super Magnum 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
- Use flexplate 12654640 for 6-bolt crankshaft engines and SuperMatic™ converters
- Use flexplate 12636325 for 8-bolt crankshaft engines and SuperMatic™ converters
- All production converters must use crankshaft adapters (see kits on next page)



A Hydra-Matic 4L65-E Four-Speed Automatic Transmission (LS-Series V-8) *Does not include torque converter*



B SuperMatic™ 4L70-E Four-Speed Automatic Transmission (4WD) *Does not include torque converter*



C SuperMatic™ 4L85-E Four-Speed Transmission *Does not include torque converter*



D Transmission Installation Kit – 4L60 Series



E Transmission Installation Kit – 4L80 Series



8-Bolt Crankshaft Adapter Kit **F**



6-Bolt Crankshaft Adapter **G**

NEW



NEW SuperMatic™ Transmission Control System **H**



Transmission Controller, 4L60-E, 4L65-E, 4L70-E, 4L80-E and 4L85-E Automatic **I**



Transmission Adapter Kit **J**

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

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 151, 245 and 319.*

TRANSMISSION CONTROL SYSTEMS

H. 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!

19302405 NEW

- 1996-2008 4L60-E family transmissions
- Compatible with P/N 19260380, 19299055 and 19260961 Chevrolet Performance SuperMatic™
- Revised, more compact design for easier installation in smaller areas
- Enhanced shift pressure performance for improved shift control
- Compatible with OBD-II code readers

19302410 NEW

- 1993-Up 4L80-E family transmissions
- Compatible with P/N 19300175 Chevrolet Performance SuperMatic™
- Revised, more compact design for easier installation in smaller areas
- Enhanced shift pressure performance for improved shift control
- Compatible with OBD-II code readers

I. 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 336)
- 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

J. 19154766

Transmission Adapter Kit

- Allows installation of Gen III/IV style 4L60-E/4L65-E transmission onto Gen I and II engine using production style torque converter
- Includes spacer ring, shims, dowels, bolts and flexplate
- Works on one-piece rear main seal engines only (e.g., Ram Jet 350)

MANUAL TRANSMISSIONS AND COMPONENTS

A. 19301620 NEW

T56 Super Magnum Six-Speed Manual Transmission

- High-torque capacity TREMEC six-speed manual designed for custom, retro-fit installations with Chevrolet Performance LS crate engines
- 700 lb.-ft. maximum torque capacity!
- Exterior case similar to fourth-generation F-body with the stronger, high-capacity gear sets, input shaft and output shaft used in the TREMEC TR6060
- 26-spline input shaft
- 31-spline output shaft
- Gear ratios: 2.66 (1), 1.78 (2), 1.30 (3), 1.00 (4), 0.80 (5), 0.63 (6)
- Slip-yoke design
- 40-tooth reluctor ring that's necessary for use with electronic vehicle speed sensors used with Chevrolet Performance controllers
- Two-position shifter plate included, with third position built into the transmission
- Kit includes shifter handle and Chevrolet Performance-logo ball-type shift knob
- Approximately 33.6 inches long with bell housing attached (bell housing included in separate installation kit)
- Use with installation kit P/N 19301625, which is compatible with all LS engine with a 6-bolt flange.

B. 19301625 NEW

Transmission Installation Kit – Tremec T56 Super Magnum

- Use with T56 Super Magnum transmission P/N 19301620 and LS engines except LSA, LSX454 and LSX454R
- Fourth-generation F-body-type bell housing and clutch release bearing included
- LS7-style flywheel with 6-bolt flange
- LS7-style high-strength clutch and pressure plate
- Kit includes dust covers, hardware and instructions

C. 1931622 NEW

Chevrolet Performance Shifter Handle Kit

- Includes a black shifter handle and installation hardware.

D. 19301623 NEW

Chevrolet Performance-Logo Shift Ball Kit

- Give your Tremec® T56 or T56 Super Magnum six-speed-equipped project a distinctive, heritage-inspired look with a classic ball-style shift knob emblazoned with the Chevrolet Performance logo.
- Includes the Chevrolet Performance-logo ball-style shift knob and installation hardware.

E. 92246731

TR6060 Six-Speed Manual Transmission

- A direct replacement transmission 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
- Requires body mounted shifter (not included)

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
- Requires body mounted shifter (not included)

NEW



A T56 Super Magnum 6-Speed Manual Transmission

NEW



B T56 Super Magnum Installation Kit

NEW



C Chevrolet Performance Shifter Handle Kit

NEW



D Chevrolet Performance-Logo Shifter Ball Kit



E TR6060 Six-Speed Manual Transmission



Transmission Installation Kit – Tremec TR6060 (MG9) – 8-Bolt Flange **F**



Transmission Installation Kit – Tremec TR6060 (M10) – 6-Bolt Flange **G**



LSX/LS7 Clutch Kit **H**

F. 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

G. 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

H. 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
4L60/700R4 Transmission Swap Kit (not shown)
- 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 151, 245 and 319.*

COBALT APPEARANCE AND PERFORMANCE

Enhance the appearance and performance of your Cobalt with Genuine GM products from Chevrolet Performance.

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. 19301371
16" Wheel

C. 19301370
18" Wheel

Personalize your Cobalt with attractive wheels.

- Chromed
- Available with matching center cap and lugnuts
- Validated to GM specifications
- P/N is for single wheel

Part Number	Model Year	Description
17800578	2005-08	AZ577, 16" Cast Chrome
17800195	2005-08	AP194, 18" Forged Polished



A Performance Exhaust Tips



B 16" Wheel



C 18" Wheel



Cobalt Wheel-Hop Kit **D**



Cobalt Clutch Upgrade Kit **E**



2.4L Twin Cam Supercharger **F**

D. 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.

E. 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.

SUPERCHARGER UPGRADE KITS

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.

F. 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.*

SUPERCHARGER UPGRADE KITS CONTINUED



Stage 1 Performance Upgrade Kit, Cobalt SS/ION Red Line

17801947

Stage 1 Performance Upgrade Kit: Cobalt SS/ION Red Line

Increase the performance of your 2005-2007 Chevrolet Cobalt SS/SC 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.*



Stage 2 Performance Upgrade Kit, Cobalt SS/SC

17803229

Stage 2 Performance Upgrade Kit

Make that 2005-2007 Cobalt SS/SC 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 3 Kit, 2006-2007 Cobalt SS Supercharged

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.*

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



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"

Block Material	A356-T6 aluminum
Cylinder Wall Type	Siamesed
Cylinder Deck Height	9.025"
Cylinder Bore (Max)	4.125"
Number Bearing Cap Bolts	4
Cap Bolt Orientation	Splayed (20°)
Bearing Cap Type	Steel
Crankshaft Journal Dia.	400 size Oil Sump Type
Oil Sump	Dry
Oil Seal Type	2 pc
Design Max Stroke	4.000"
Weight (lbs; bare)	78
Intended Usage	Professional competition
Non-Standard Parts Required	No mechanical fuel pump boss

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**



18° Aluminum Cylinder Head (top/intake) **B**



18° Aluminum Cylinder Head (combustion chamber) **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

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

A. 88958632
Exhaust Header Flange
- Use this 375" -thick steel flange as the starting point for your custom header system

CAMSHAFTS

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. 88958611
Ecotec Intake Camshaft Blank
- Heat-treated camshaft blank for grinding custom-profile intake cam

C. 88958612
Ecotec Exhaust Camshaft Blank
- Heat-treated camshaft blank for grinding custom-profile exhaust cam



A Exhaust Header Flange



B Ecotec Intake Camshaft Blank



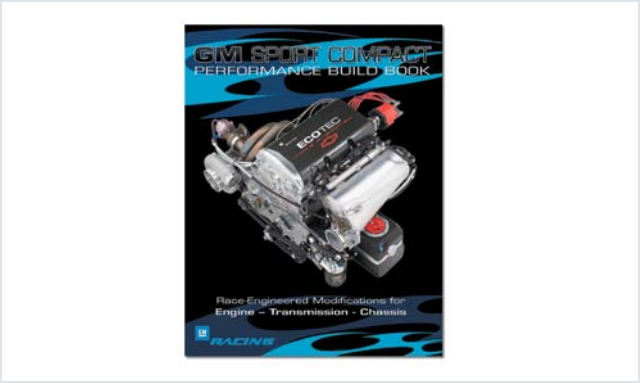
C Ecotec Exhaust Camshaft Blank



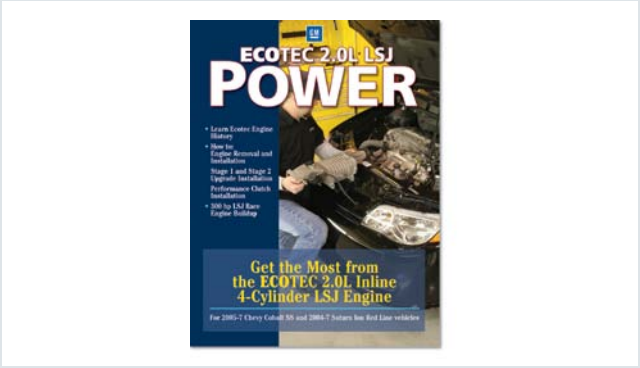
Ecotec Adjustable Cam Gear Set **D**



Ecotec Neutral Balance Shaft Set **E**



Sport Compact Build Book **F**



Ecotec 2.0L LSJ Power Book **G**

D. 88958613
Ecotec Adjustable Cam Gear Set
- Includes intake and exhaust
- Allows valve timing to be advanced or retarded up to 16° of crankshaft rotation

E. 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

F. 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

G. 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).*

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

B. 88964607

Front Rotors

- Cross-drilled rotors for 2004-07 Cadillac CTS-V
- Sold as a pair

C. 88964608

Rear Rotors

- Cross-drilled rotors for 2004-07 Cadillac CTS-V
- Sold as a pair



A 5-Spoke Wheel Kit, 16 ZQ8-Style



B Front Rotors



C Rear Rotors



Heavy Duty Steering Knuckle, Left-Hand **D**



Heavy Duty Front Steering Knuckle, Right-Hand **E**



Strut Tower Braces **F**

Cobalt SS, Saturn ION Red Line

D. 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 11570091, lower ball joint bolt P/N 11589341 and nut P/N 11517996 included with the kit
- Bearing spacer plate needs modification for installation
- Specific suspension point geometry – may induce increased tire wear during street duty

E. 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

F. 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
- Fits Pontiac Grand-Prix 1997-2003 and Chevrolet Monte Carlo 2000-2005
- For reduced body roll, install this thick, 19mm rear bar
- Includes bushings

B. 12498643
Heavy-Duty Front Stabilizer Bar
- Fits Pontiac Grand-Prix 1997-2003 and Chevrolet Monte Carlo 2000-2005
- Get the look and feel of performance with this sturdy 34mm front bar
- Includes bushings and end links

C. 12498644
High-Performance Front Brake Upgrade Kit
- Fits Pontiac Grand-Prix 1997-2003 and Chevrolet Monte Carlo 2000-2005
- 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.*

D. 12498646
Heavy-Duty Front Brake Caliper Brackets
- Fits Pontiac Grand-Prix 1997-2003 and Chevrolet Monte Carlo 2000-2005
- 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



A Heavy-Duty Rear Stabilizer Bar



B Heavy-Duty Front Stabilizer Bar



C High-Performance Front Brake Upgrade Kit



D Heavy-Duty Front Brake Caliper Brackets



TI 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
15688857	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		

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

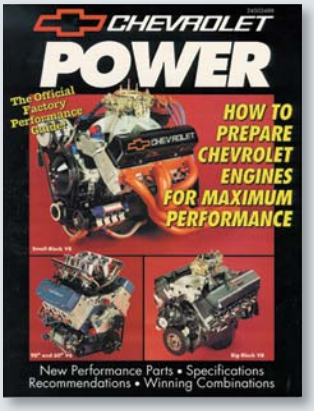
C. 12486610
Service Manual, Ram Jet 502 (MEFI 3)
- Covers the installation and service of the MEFI 3 Ram Jet 502 P/N 12497323

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

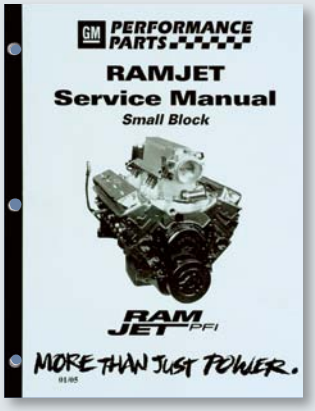
D. 88959384
LS1 Engine Kit Installation Guide
- Detailed instructions to help you install an LS1 engine in your older vehicle
- Includes notes and technical explanations for necessary parts, along with part numbers you can order from your GM dealer to get the job done easily

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

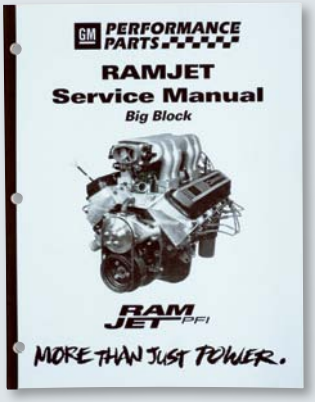
F. 88958764
LS-Series "How to Rebuild" Book
- A complete reference that shows how to rebuild an LS-Series engine
- Includes tips and modification procedures to improve power and economy
- More than 600 step-by-step color photos



A Chevrolet Power



B Service Manual, Ram Jet 350 (MEFI 3)



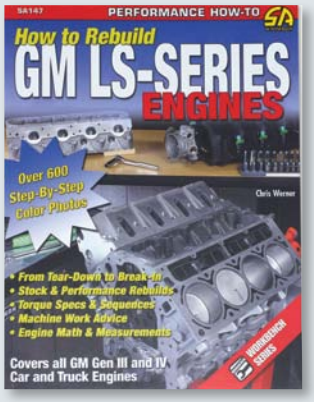
C Service Manual, Ram Jet 502 (MEFI 3)



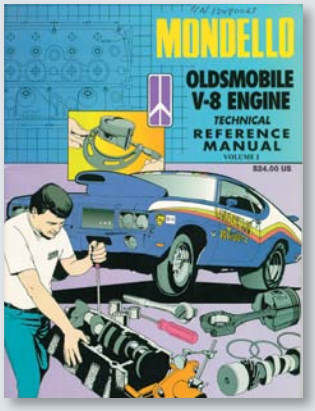
D LS1 Engine Kit Installation Guide



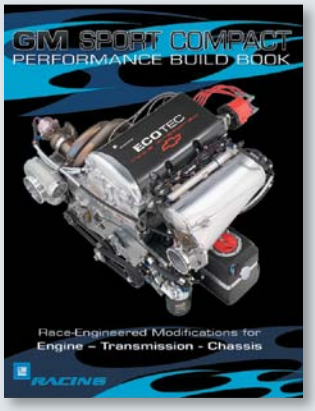
E High-Performance Chevy LS1/LS6 V-8's



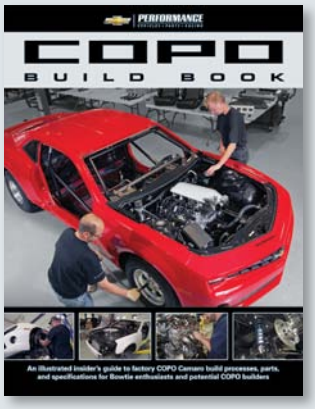
F LS-Series - How to Rebuild Book



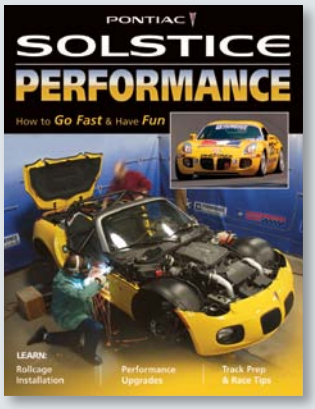
Oldsmobile High-Performance Manual **G**



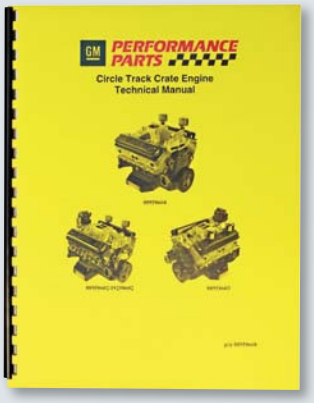
Sport Compact Build Book **H**



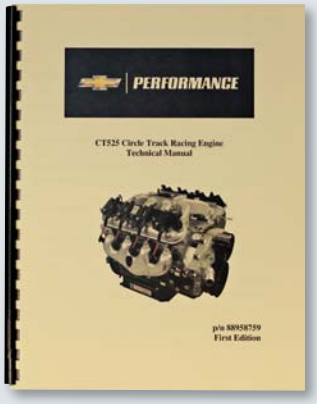
NEW! COPO Build Book **I**



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. 88958767
COPO Build Book NEW
- The COPO Build Book provides all the information you need to build your own COPO Camaro including specs, part numbers and more. For the latest information, head to chevrolet.com/performance.

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. Oil fill hole, and cap (passenger side cover), PCV (driver's side cover) 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**





NEW Collector's Series Valve Covers! (see page 354)



NEW! Chevy® Orange Electric Water Pumps (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 **CHEVYPERF14** 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 2014 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.chevrolet.com/performance website) to: 2014 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 (352-361) are eligible for the $10 rebate from Factory Performance Parts.

Ordering Information

The licensed engine dress-up parts displayed on the following pages (352-361) may be purchased online through www.chevrolet.com/performance (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 www.chevrolet.com/performance, click on "Featured Products" and then on "Licensed Products."

ATTENTION GM DEALERS: The following pages of General Motors licensed products (352-361) 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

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.

B. Chevrolet Big-Block, 1965-Later

- Chrome, recessed logo (shown, B) 141-140
- Black crinkle, recessed logo (not shown) 141-141
- Polished, recessed logo (not shown) 141-142

C-D.

Chevrolet Small-Block V-8, 1958-1986

- Polished, recessed logo (shown) 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 (shown, C) 141-119
- Chevy Orange, raised logo (shown, D) 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) 141-139

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
- Powdercoat-ready, raised logo (not shown) 141-939

New Collector's Series

- Red, raised logo (shown, page 353) 141-931
- Blue, raised logo (shown, page 353) 141-932
- Green, raised logo (shown, page 353) 141-933
- Yellow, raised logo (shown, page 353) 141-934
- White, raised logo (shown, page 353) 141-935



A 141-800



B 141-140



C 141-119



D 141-120



E 141-132



F 141-922



G 141-924



H 141-921



I 141-926



J 141-930



141-905 K



141-813 L



141-787 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, 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 (not shown) 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, M, 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 (shown, M) 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.*

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, tall (not shown) 141-105
- Chrome, short (not shown) 141-107
- Black crinkle, short (shown, C) 141-907
- Metallic gray, short (not shown) 141-908

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

	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



A 141-910



B 141-911



C 141-907



D 141-710



E 141-780



F 141-900



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



141-369 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 (A212CW), 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

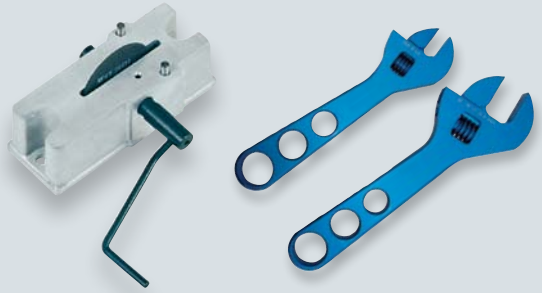
Add some extra flair to your custom air cleaner by topping it with a distinctive GM or Bowtie chrome plated zinc, or black crinkle die-cast center nut. The center nuts are available in small and large sizes. They fit both 1/4"-20 and 5/16"-18 studs.

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 (shown, R) 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



A 141-601 B 141-917 C 141-759 D 141-367 E 141-909

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

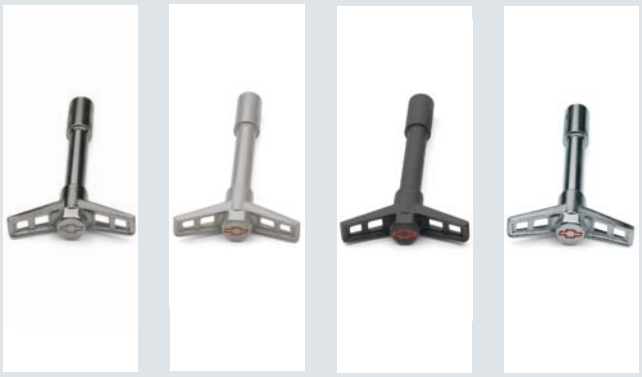
- Metallic gray (not shown) 141-365
- Chevy® Orange (shown, J) 141-786
- Chrome (shown, K) 141-616
- Black crinkle (shown, L) 141-754

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



F 141-600 G 141-364 H 141-756 I 141-902

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



J 141-786 K 141-616 L 141-754

WATER NECKS

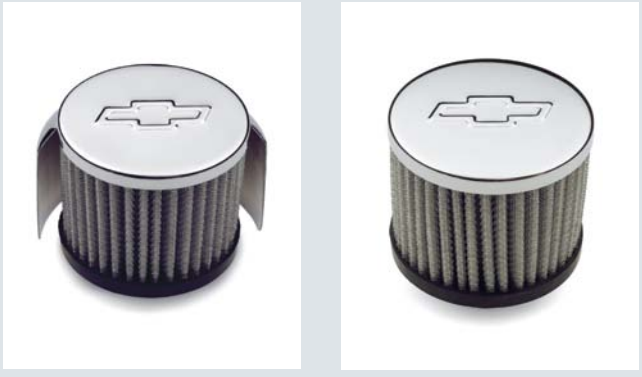
These Chevrolet water necks utilize neoprene O-ring gaskets instead of regular gaskets – eliminating leakage. Supplied with chrome bolts.

- 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



M 141-621 N 141-622



141-366 O



141-757 P



141-903 Q



141-363 R



141-753 S



141-904 T



141-215 U



141-216 V



141-217 W



141-730 X

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

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

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

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-melonized 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	141-653
Black	141-674	141-651 (shown, G)
Orange	141-675 (shown, F)	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 141-675



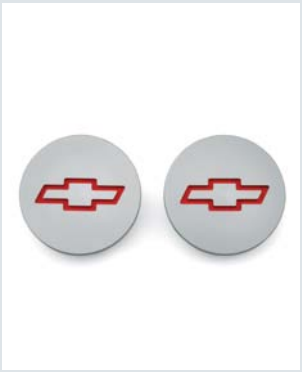
G 141-651



H 141-684



141-232 I



141-233 J



141-629 K



141-210 L



141-714 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

- Black crinkle (shown, K) 141-629
- Chrome (not shown) 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
- Small-Block, black crinkle (not shown) 141-212
- Big-Block, black crinkle (not shown) 141-213

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 (not shown) 141-638
- Chrome, Big-Block V-8, 1965-1991 (not shown) 141-639
- Black Crinkle, Small-Block V-8, 1959-1986 (shown, M) 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

Chevrolet Performance Licensed Gauges from Auto Meter

GM Performance enthusiasts rely on Auto Meter Licensed gauges to accurately deliver the information they need to win. That's because Auto Meter puts rugged, race-proven movements into every gauge. When it comes to style, nobody offers you more great looking options than Auto Meter. You can make over your entire dashboard or just add some extra gauges from Auto Meter's huge selection of speedometers, tachometers, gauges, data collection, and shift lights. Auto Meter also has the wiring kits, mounting solutions, and accessories you need for easy installation. Look inside any winning ride—you're bound to find Auto Meter.

See your GM Dealer for ordering information.



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 Auto Meter 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 www.chevrolet.com/performance website, click on "Dealer Info," and then click on "Dealer Sites."*

BOWTIE LOGO GAUGES

- 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

VINTAGE BOWTIE LOGO GAUGES

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

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

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

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



5-Piece Kit Box with Mechanical Speedometer - 1300-00408



5-Piece Kit Box with Electrical Speedometer - 1302-00408



5" Quad Gauge and Speedometer - 1303-00408



3-1/8" Tachometer, 7000 rpm - 1398-00408



Example of 2-1/16" Chrome-Embossed Bowtie Bevel



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

- 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

- 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

GOLD BOWTIE LOGO GAUGES

- Gold Bowtie logo
- White LED Through-the-dial lighting
- Black dial, white numbers
- As installed on COPO Chevy Camaro



Tachometer - 880445

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



Water Temperature - 88046



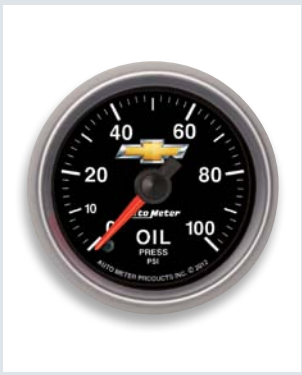
Voltmeter - 880444



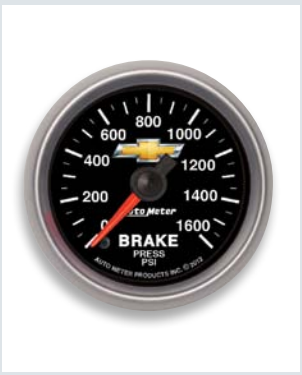
Fuel Pressure - 880449



Trans Temperature - 880448



Oil Pressure - 880447



Brake Pressure - 880450

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Ground Up Restorations, Inc.	866-358-2277	www.ss396.com
Quanta Products, LLC	410-658-5700	www.gastanks.com
Z-06 Products, LLC	800-235-8788	www.quantaproducts.com
BODY PARTS		
Auto Metal Direct	866-591-8309	www.autometaldirect.com
Dynacorn International, Inc.	805-987-8818	www.dynacorn.com
Fit-Rite Auto Body Parts Inc.	800-992-1064	www.fit-rite.com
Golden Star Corporation	972-315-3578	www.goldenstarauto.com
Mar-K Specialized Manufacturing, Inc.	405-721-7945	www.mar-k.com
Triplus Co. Ltd.	011-886-2-27557686	www.triplus.com.tw
BUICK		
Bob's Automobilia	805-434-2963	www.bobsautomobilia.com
Bright Ideas	270-535-5623	
CAR Motorsports, LLC	770-719-2068	www.carmotorsports.com
CARS, Inc.	248-853-8900	www.carsinc.com
Highway Stars, Inc.	847-599-1600	www.nos4gn.com
The Parts Place Inc.	630-365-1800	www.thepartsplaceinc.com
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Autocraft Investments, Inc., d/b/a (NPD)	800-524-8338	www.nationalparts.com
Carfre Inc.	626-282-8381	www.genesmithparts.com
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Dynacorn Classic Bodies, Inc.	805-987-8818	www.dynacornclassicbodies.com/classic2.html
El Camino Manufacturing, Inc.	360-417-9201	www.elcaminomanufacturing.com
Fesler Production LLC	480-748-2000	www.feslerbuilt.com
Heartbeat City, LLC	586-226-8811	www.heartbeatcity.com
Hubbard's Impala Parts, Inc.	336-227-1589	www.impalaparts.com
I&I Reproductions, Inc.	562-531-8117	www.iandireproduction.com
J'Leys and Co.	336-228-6701	www.jleys.com
KNS Accessories/ Grand General Accessories	310-631-2589	www.knsacc.com
Muscle Factory	714-223-0745	www.muscle-factory.com/default.asp
Original Parts Group, Inc.	800-243-8355	www.opgi.com
Premier Street Rod Parts	800-447-5000	www.premierstreetrod.com
United Pacific Industries, Inc.	866-327-5288	www.uapac.com
Vintique, Inc.	714-634-1932	
CORVETTE		
American Custom Industries (Bobbart)	800-822-8020	www.acivette.com
Auto Accessories of America	800-458-3475	www.corvetteamerica.com/default.htm
Auto Pro USA, Inc.	310-637-4500	www.autoprousa.net
CC Industries, LLC, d/b/a Corvette Central	800-345-4122	www.corvettecentral.com
Corvette Specialties Manufacturing	760-568-6452	www.grilleteeth.com
Corvette Stainless Steel Brakes aka C.S.S.B., Inc.	800-262-9595	www.cssbinc.com
EC Products Design	800-488-7671	www.corvettepacifica.com
Eckler Industries, LLC	800-284-3906	www.ecklers.com
Just Corvette	636-947-6060	www.justcorvettes.com
Keen Parts, Inc.	513-353-3449	www.keenparts.com
Lone Star Caliper Company	903-873-8400	www.lonestarcaliper.com

Company	Phone	Website
Long Island Corvette Supply, Inc.	800-466-6367	www.licorvette.com
Melrose T-Top International	815-758-2783	www.melroset-tops.com
Mid America Motorworks, f/k/a Mid America Designs, Inc.	866-350-4540	www.madvet.com
Paragon Reproductions, Inc.	800-882-4688	www.corvette-paragon.com
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Bill's Birds, Inc.	631-667-3853	www.bb-ny.com
Bob's Antique	310-515-1085	www.bobsantiques.com
Counterpart Automotive, Inc.	714-771-1732	
Drake Automotive Group, Inc.	702-853-2060	www.scottdrake.net
ECS Automotive Concpts, LLC	855-532-7846	www.ecsautomotive.com
Eurosport Daytona, Inc.	800-874-8044	www.eurosportdaytona.com
GT Performance Products	818-847-9611	www.gtperformanceproducts.com
Jim Osborn Reproductions, Inc.	770-962-7556	www.osborn-reproduction.com
Legendary Auto Interiors, Ltd.	800-363-8804	www.legendaryautointeriors.com
Mark Cornea Reproductions, d/b/a Dr. Decal	313-505-6768	www.drdecal.com
Millenium Industries, Inc.	708-895-1381	
Motor City Cinyl Graphics	888-847-3178	www.motorcityvinyl.com
Phoenix Graphix, Inc.	800-941-4550	www.phoenixgraphix.com
Sharpline Converting, Inc.	800-888-4888	www.sharpline.com
Specialty Reproductions	515-727-1310	
Stencils and Stripes Unlimited Inc.	847-692-6893	www.stencilsandstripes.com
Technostalgia Inc.	866-258-5670	www.cool-leds.com
TransAm Stripes	210-492-5555	www.transamstripes.net
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Pilkington North America, Inc.	800-848-1351	www.pilkingtonclassics.com
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Instrument Sales and Service, Inc.	800-333-7976	www.instrumentsales.com
Jim Carter's Antique Truck Parts	800-336-1913	www.oldchevytrucks.com
Ken Harrison	800-865-3876	www.kenharrisonradios.com
MB Marketing and Manufacturing	800-231-4125	www.mbmbrakeboosters.com
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OLDSMOBILE		
Fusick Automotive Products, Inc.	860-623-1583	www.fusick.com
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USA

Alabama

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Capitol Chevrolet	Scotty Dubose	711 Eastern Blvd	Montgomery	AL	36117	334.272.9595	334.270.9162	capitolchevrolet.com	scotty.dubose@capitolchevrolet.com
Ivan Leonard Chevrolet, Inc.	John Moore	1620 Montgomery Hwy	Hoover	AL	35216	205.823.5428	250.979.3028	ivanleonardchevy.com	jmoore@ivanleonard.com
Landers McLarty Chevrolet	Jack Straley	4930 University Dr	Huntsville	AL	35816	256.217.4387	256.430.4271	landersmclartygm.com	jstraley@landersmclartychevy.com

Arkansas

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Smith Chevrolet-Cadillac Co.	Karry Didway	1215 Hwy 71 S	Ft. Smith	AR	72901	800.847.0084	479.646.1479	smithchevyland.com	kadidway@gmail.com

Arizona

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
AutoNation Chevrolet-Mesa	Randy Smith	145 E Main St	Mesa	AZ	85201	480.827.3370	480.827.3371	autonationchevymesa.com	smithr3@autonation.com
Chapman Chevrolet,	Chuck Owen	1717 E Baseline	Tempe	AZ	85283	480.838.0810	480.730.6745	chapmanchevy.com	chuckowen@chapmanchoice.com
Courtesy Chevrolet	Phil Graziano	1233 E Camelback Rd	Phoenix	AZ	88602	602.604.3003	602.604.3099	courtesychev.com	pgraziano@courtesychev.com
Midway Chevrolet	Casey Dahmen	2323 W Bell Rd	Phoenix	AZ	85023	602.760.3372	602.387.7526	parts4chevys.com	cdahmen@vtaig.com
Sands Motor Company	Sam Phillips	5418 NW Grand	Glendale	AZ	85301	623.842.5212	623.842.5205	sandschevrolet.com	sphillips@sandschevrolet.com
Thorobred Chevrolet, Inc.	Jerry Anderson	2121 N Arizona Ave	Chandler	AZ	85225	480.899.1151	480.899.3331	thorobredchevrolet.com	janderson@thorobredchevrolet.com
Van Chevrolet	Dennis Brossman	8585 E Frank Lloyd Wright Blvd	Scottsdale	AZ	85260	480.991.8585	480.905.1659	gmpartscenter.net	mmylan@vtaig.com
Watson Chevrolet	Terry Cunningham	625 W Auto Mall Dr	Tuscon	AZ	85705	520.292.1500	520.292.3252	wastonchevrolet.com	terryc@watsonchevrolet.com

California

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Bonander-Buick-GMC	Pete McCarthy	231 S Center St	Turlock	CA	95380	209.632.8871	209.633.4749	bonanderauto.com	petem@bonanderauto.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	714.979.3578	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	courtesysandiego.com	jmiller@courtesysandiego.com
Crest Chevrolet	Bruce Lovejoy	909 W 21st Street	San Bernardino	CA	92405	909.883.8833	909.882.4661	crestchevrolet.net	blovejoy@crestfleet.com
Diamond Hills Auto Group, Inc.	James Eshleman	4545 W Ramsey St.	Banning	CA	92220	951.849.7861	951.849.9685	diamondhillsautogroup.com	jeshleman@diamondhillsautogroup.com
Dublin Chevrolet Cadillac,Buick,GMC	Jack Sandri	4200 John Monego Court	Dublin	CA	94568	925.479.3500	925.829.2941	dublinchevrolet.com	jacks@cacargroup.com
F. H. Dailey Chevrolet	Peter Chin	800 Davis St	San Leandro	CA	94577	510.351.5800	510.614.9220	fhdailey.com	parts@fhdailey.com
Fremont Chevrolet	Ray Lloyd	5850 Cushing Pkwy	Fremont	CA	94538	510.445.8700	510.490.9677	chevroletoffremont.com	rayl@cacargroup.com
Guaranty Chevrolet Motors, Inc	Carl Lutes	711 E 17th Street	Santa Ana	CA	92701	714.973.1711	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	310.820.2611	310.207.8429	martinautogroup.com	garyc@martincad.com
Motor City Auto Center	Todd Sumrall	3101 Pacheco Rd	Bakersfield	CA	93313	800.349.7278	661.827.9937	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	818.832.1660	818.832.1635	chevynorthridge.com	dcolwell@rydells.com
Taylor Motors, Inc.	Cliff Mayne	2525 Churn Creek Rd	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

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Al Serra Chevrolet	Kerry White	230 N Academy	Colorado Springs	CO	80909	719.596.3040	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

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Nucar Chevrolet	Bill Grasso/Ira Benson	174 N Dupont Hwy	New Castle	DE	19720	303.322.2438	302.322.6710	nucar.com	bgrasso@nucar.com/ibenson@nucar.com

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
Florida									
AutoNation Chevrolet of Coral Gables	Juan Herta	4181 SW 8 Street	Miami	FL	33134	305.446.7000	305.448.2670	autonationchevroletcoralgables.com	huertaj@autonation.com
Autoway Parts Center	Jim Kubisiak	15005 Us Hwy 19 North	Clearwater	FL	33764	800.888.2292	727.539.0756	clearwaterchevrolet.com	kubisiakj@autonation.com
Jon Hall Chevrolet, Inc.	Tom Brammer	551 N Nova Road	Daytona Beach	FL	32114	386.236.4509	386.236.4754	jonhallchevrolet.com	parts@jonhall.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	Lauderhill	FL	33313	954.733.6000	954.497.4572	philsmithchevrolet.com	humberton@psmithchevrolet.com
Rivard Buick-GMC, Inc.	Larry Folino	9740 Adamo Dr	Tampa	FL	33619	877.909.6565	818.620.6589	jrgmparts.com	parts@jrgmparts.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 Marlet	3980 Fowler	Fort Myers	FL	33901	800.226.7806	239.936.9218	victorylaynechevrolet.com	davehack@victorylaynechevrolet.com
Georgia									
Day's Chevrolet, Inc.	Scott Fettig	3693 North Cobb Pkwy	Acworth	GA	30101	770.975.1802	770.974.2683	dayschevrolet.com	sfettig@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	Bob Robinson	15700 Idaho Center Blvd	Nampa	ID	83687	877.761.8936	208.442.2713	edmarkchevrolet.com	bobrobinson@edmarksuperstore.com
Illinois									
The Chevy Exchange	Russ Fowler	1 Sherwood Terrace	Lake Bluff	IL	60044	847.615.1111	847.810.1989	chevyexchange.com	rfowler@chevyexchange.com
Jim McComb Chevrolet, Inc.	Bill Brouch	3622 N University	Peoria	IL	61604	309.686.2500	309.686.0121	uftringauto.com	billbrouch@jimmccomb.com
Rock Chevrolet	Tom Rominski	1000 E Belvidere Rd	Grayslake	IL	60030	877.441.5150	847.223.7085	crateenginedepot.com	tom@crateenginedepot.com
Weir Chev-Buick-GMC	Brian Washausen	1107 S Main	Red Bud	IL	62278	618.282.3111	618.282.3993	weirparts.com	bryan.washausen@weirparts.com
Uftring Weston Chev Cadillac	Bob Humphrey	1600 W. War Memorial Dr	Peoria	IL	61604	309.686.2500	309.686.0121	uftringweston.com	bobhumphrey@uftringweston.com
Indiana									
Hubler Chevrolet, Inc.	Rick Bell	8220 S US 31	Indianapolis	IN	46227	317.882.4018	317.882.4719	drivehubler.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	adamm@karlchevrolet.com
Shottenkirk, Inc.	Brad Richardson	5031 Ave O	Ft. Madison	IA	52627	877.223.9757	888.945.3729	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
Kentucky									
Bachman Auto Group, Inc.	Tom Finley	9650 Bluegrass Pkwy	Louisville	KY	40299	502.491.3662	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

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@allstarautomative.com
Banner Chevrolet	Gerry Braud	5950 Chef Menteur Hwy	New Orleans	LA	70126	504.242.4624	504.253.8590	bannerchevy.com	gbraud@bannerauto.com
Chevyland	Jeral Lawler	7500 Youree Dr	Shreveport	LA	71105	318.425.3471	318.425.1705	chevyland.com	jlawler@chevyland.com
Maine									
Quirk Chevrolet Cadillac	Dave Provencher	293 Hogan Rd	Bangor	ME	04401	800.664.6008	207.945.0164	quirkautopark.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	410.661.4677	jerryschevrolet.com	vpoling@jerryschevrolet.com
Ourisman's Rockmont Chevrolet	Erik Backstrom	#20 Southlawn Court	Rockville	MD	20850	301.424.5900	601.424.0027	ourismanrockmont.com	erik.backstrom@ourismanschevrolet.com
Massachusetts									
Clay Chevrolet-Hyundai	John Knapp	391 Providence Hwy	Norwood	MA	02062	781.762.8300	781.255.8912	claychevrolet.com	jknapp@claycars.com
Michigan									
Berger Chevrolet, Inc.	Kendall Tolan	2525 28th St SE	Grand Rapids	MI	49512	616.575.9473	616.949.2870	bergerchevy.com	parts@bergerchevy.com
Ed Rinke Chevrolet Co.	Jim Hensley	26125 Van Dyke	Centerline	MI	48015	586.754.7000	586.754.5030	edrinke.com	jhensley@edrinke.com
Lafontaine Automotive Group	Joe Rakov	4000 W Highland Rd	Highland	MI	48357	800.883.4627	248.714.1196	lafontaineperformancecenter.com	jrakov@lafontaineperformancecenter.com
Shaheen Chevrolet, Inc.	Eirk Lindell	3901 S Mlk 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	800.642.2654	877.947.5479	suburbanchev.com	tkuether@suburbanchev.com
Missouri									
Bob McCosh Chev-Buick-GMC Cad	Rick Neuner	1 Business Loop 70	Columbia	MO	65203	573.442.6156	573.441.5632	bobmccosh.com	rneuner@bmcmail.com
Lou Fusz Buick-GMC	Butch Geringer	10950 Page Avenue	St. Louis	MO	63132	800.325.1492	314.595.2790	gmc.fusz.com	buickgmcparts@fusz.com
Reliable Chevrolet, Inc.	Dean Jones	3655 S Campbell	Springfield	MO	65807	417.887.5910	417.887.4012	reliablechevy.com	djones@vtaig.com
Van Chevrolet	Dave Hosley	100 NW Vivion Rd.	Kansas City	MO	64118	816.454.1442	816.452.6248	vanchevroletkc.com	dhosley@vtaig.com
Nebraska									
Friesen Chevrolet, Inc.	Jon Pederson	806 Commercial Ave	Sutton	NE	68979	402.773.5538	402.773.5639	friesenchevrolet.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	parts@hhchevy.com
Nevada									
Champion Chevrolet	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	775.877.7777	775.322.1837	renobuickgmccadillac.com	donnawoody@renogm.com

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Web Site	Email Address
New Hampshire									
Banks Chevrolet-Cadillac, Inc.	Dave Corcoran	137 Manchester St	Concord	NH	03301	800.447.2107	603.225.6489	banksautos.com	dcorcoran@banksautos.com
Miller Chevrolet Cadillac	Kevin French	13 Labombard Rd	Lebanon	NH	03766	877.777.0001	603.448.0637	millerautogroup.com	chevyparts@millerautogroup.com
Quirk Chevrolet Buick	Gary Philbin	1250 S Willow St	Manchester	NH	03103	800.842.9600	800.641.5554	quirkchevynh.com	gphilbin@quirkcars.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-Buick-GMC	Karl Senn	5885 E Circle Dr	Cicero	NY	13039	315.233.0350	315.458.0488	driversvillage.com	karls@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	RJ Doolen	1479 Genesee Street	Oneida	NY	13421	800.921.3673	877.887.2526	nyeauto.com	rdoolen@nyeauto.com
Ruge's Parts Center	Dave Zitz	7293 S Broadway	Red Hook	NY	12571	845.876.1090	845.758.1766	rugesparts.com	david@rugesparts.com
North Carolina									
Bobby Murray Chevrolet, Inc.	Charles Isley	1820 Capital Blvd	Raleigh	NC	27604	800.662.7502	919.832.1603	bobbymurray.com	cisely@bobbymurray.com
Burnsville Chev-Buick, Inc.	Tom Gobel	627 W Main St	Burnsville	NC	28714	828.682.6141	828.678.3481	burnsvillechevy.com	burnchevy@gmail.com
City Chevrolet	Chris Knight	5101 East Independence Blvd	Charlotte	NC	28212	800.763.2489	704.568.7422	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	336.245.4594	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 Auto Center	Dan Stinar	2700 S Washington	Grand Forks	ND	58201	800.354.7278	701.772.3377	rydellchev.com	parts@rydellchev.com
Ohio									
Coughlin Chevrolet-Cadillac-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 Ave	Dayton	OH	45406	800.783.2842	937.220.6741	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 St	Youngstown	OH	44512	877.360.5209	330.726.0709	sweeneycars.com	mattf@sweeneycars.com
Oklahoma									
Danny Beck Chevrolet, Inc.	Rich Strain	8300 New Sapulpa Rd	Tulsa	OK	74131	918.227.7744	918.227.7745	dannybeckchevy.com	richstrain@dannybeckchevy.com
Hudiburg Chevrolet Inc	Zach Hines	6000 Tinker Diagonal	Midwest City	OK	73110	800.800.5963	405.739.0636	hudiburg.com	zach@hudiburg.com
Smicklas Chevrolet	Daryl Chowning	3501 N Santa Fe	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	2855 Maple Ave NE	Salem	OR	97301	503.316.4230	503.576.3210	capitol-chevy.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.	Rob Scott	122 NE 122nd Ave	Portland	OR	97230	503.255.4100	503.257.2285	tonkinchevrolet.com	rscott@tonkin.com
Wentworth Chevrolet Co.	Darrin Rea	107 SE Grand Ave	Portland	OR	97214	800.232.8097	503.234.3374	wentworthchevrolet.com	darrinrea@wentworthchevrolet.com

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	877.527.7539	717.843.5730	applechevroletcadillac.com	applechevyparts@appleauto1.com
Bill Macintyre Chevrolet Buick	Boyd Musser	10 East Walnut Street	Lock Haven	PA	68127	800.343.7366	570.893.8263	billmacintyre.com	macintyreparts1@yahoo.com
Bowser Automotive, Inc.	Dave McManus	Rte 51 & Lewis Run Rd	Pleasant Hills	PA	15236	412.469.2100	412.469.3596	powerofbowser.com	parts@powerofbowser.com
Fred Beans Parts	Dave Wittlinger	131 Doyle St.	Doylestown	PA	18901	267.327.4178	276.880.3232	fbparts.com	dwittlinger@fredbeans.com
Rohrich Cadillac, Inc.	Paul Lilja	2116 West Liberty Ave	Pittsburgh	PA	15226	412.390.2900	412.390.2950	rohrichcadillac.com	plilja@rohrich.com
Sutliff Chevrolet Co	Steve Simmers	1251 Paxton St	Harrisburg	PA	17104	800.932.0284	717.234.8825	sutliffchevrolet.com	ssimmers@sutliffs.net
South Carolina									
Love Chevrolet Company	Andy Tranum	1255 Knox Abbott Drive	Cayce	SC	29033	803.407.4800	803.926.1658	love-chevy.com	atranum@lovechevy.com
Raceway Chevrolet Buick	Fred Bowker	1510 S 5th Street	Hartsville	SC	29550	843.339.2719	843.339.2716	racewaygm.com	fbowker@newsomeparts.com
South Dakota									
Billion Motors, Inc.	Dale Zimmer	600 West 41st St	Sioux Falls	SD	57105	877.858.5749	605.333.3459	billionauto.com	zimmer@billionauto.com
Tennessee									
AutoNation GMC	Jeff Sappington	2621 Mendenhall Rd S	Memphis	TN	38115	901.795.4500	901.367.3146	autonationgmc.com	sappingtonj@autonation.com
Chuck Hutton Chevrolet	Gene Langdon	2471 Mt Moriah Rd	Memphis	TN	38115	866.651.9699	901.369.0661	chuckhuttonchevrolet.net	glangdon@chuckhutton.com
James Corlew Chevrolet	James West	722 College St	Clarksville	TN	37040	931.647.6571	931.648.1127	jamescorlewautomotive.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.	Brian Dixon	711 SW Loop 820	Ft. Worth	TX	76134	817.568.4819	817.551.0570	brucelowriechevrolet.com	bdixon@brucelowrie.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 GM Parts	KC Kalman	11750 Research Blvd	Austin	TX	78759	512.583.3015	512.583.3498	covertbuickgmc.com	randyhahn@covertauto.com
Don Hewlett Chevrolet-Buick	Jeff Gilbert	7601 S. Interstate 35	Georgetown	TX	78626	512.681.3055	512.681.3113	donhewlett.com	jeffg@donhewlett.com
Freedom Chev-Buick-GMC	Randy Thorn	8008 Marvin D Love Freeway	Dallas	TX	75237	972.780.3367	972.572.0854	freedomchevydallas.com	rthorn@freedomchevydallas.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.	Terry Hoesling	8805 North IH-35	Austin	TX	78753	512.832.2327	512.832.2355	henna.com	thoesling@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	Mike Taylor	3670 Jefferson Davis Hwy	Fredericksburg	VA	22408	540.898.4000	540.891.2074	radleyauto.com	miketaylor@radleyautogroup.com
Strosnider Chevrolet, Inc.	Mark Hughes	5200 Oaklawn Blvd	Hopewell	VA	23860	804.458.9864	804.458.9839	strosniderchevrolet.com	mhughes.strosnider@yahoo.com
Vermont									
Springfield GMC	Linley Messer	431 River St	North 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									
AutoNation Parts Center	Mike Kellogg	S. 311 Dishman Mica Rd	Spokane Valley	WA	99206	509.927.1277	509.927.1089		kelloggm@autonation.com
Camp Automotive, Inc.	Brian O'Shaughnessey	101 Montgomery	Spokane	WA	99207	509.456.7865	509.458.3792	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	800.257.6655	253.952.7419	jetchevrolet.com	parts@jetchevrolet.com
Mccurley Chevrolet-Cadillac	Dean Goody	1325 Auto Plex Way	Pasco	WA	99301	800.456.6257	509.545.8728	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.	Corey Miller	2700 S Ashland Ave	Green Bay	WI	54304	800.236.2819	920.498.6670	broadwayautomotive.com	corey.miller@broadwayautomotive.co
Gandrud Chevrolet, Inc.	Chris Slack	919 Auto Plaza Dr	Green Bay	WI	54302	920.468.3658	920.468.3673	gmperformancemotor.com	parts@gandrud.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

Company Name	Address	City	State	PC	Phone	Fax
Australia						
Eagle Auto Parts	92 Gippsland Hwy.	Dandenong	Victoria	03175	.03.87103000	.03.97933082
Eagle Auto Parts	Cnr Fairford & Watson Rd	Padstow	New South Wales	02212	.02.978.11000	.02.97715599
Eagle Auto Parts	Unit 1 100 Park Road	Slacks Creek	Queensland	04127	.07.34428000	.07.34428099
Canada						
Chevrolet Performance Parts are available at all participating Canadian GM dealers.						

A

ACCESSORY DRIVE KITS
- Small-Block 154
- LS-Series 246
- Big-Block 320

AIR CLEANERS
- Small-Block 166
- LS-Series 259
- Big-Block 331

ALTERNATORS
- Small-Block 164

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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.

General Motors Company ("GM") warrants to the purchaser for the time and/or mileage indicated below that it will repair or replace, at its option, any 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. GM will use new or remanufactured parts for repair or replacement.

Warranty coverage is based on months/mileage, whichever comes first, and begins on the date of installation by an authorized GM dealer or by a qualified Independent Service Center (ISC). For all other over-the-counter sales, warranty begins on date of retail sale.

Genuine GM | Parts

Product	Cataloged Passenger Car & Light-Duty Truck (Series 10-30)	Medium-Duty Truck (Series 40-80) Class A Motor Home, Taxi & Police	Non-Cataloged Passenger Car & Light-Duty Truck[2]
Engines, Automatic Transmissions & Transfer Cases[3,4]	36 months or 100,000 miles[1,2]	18 months or 100,000 miles[1,2]	12 months or 12,000 miles
Manual Transmissions & CVT	12 months or 12,000 miles[1,2]	12 months or 12,000 miles[1,2]	12 months or 12,000 miles
Engine & Transmission Components[5]	12 months/ unlimited miles	12 months/ unlimited miles	12 months/ unlimited miles

PERFORMANCE VEHICLES • PARTS • RACING

Product	Passenger Car & Light-Duty Truck (Series 10-30)[6]	Other[5] (Start-up Warranty)
Performance Parts Engines[4]	24 months or 50,000 miles[1,2]	30 Days
E-ROD & E-ROD Connect & Cruise Crate Powertrain Systems[7]	36 months or 50,000 miles[1,2]	N/A
Connect & Cruise Crate Powertrain Systems7 (non-E-ROD)	24 months or 50,000 miles[1,2]	N/A
Performance Parts, Transmissions, Short Block Assemblies & Components[5]	12 months / unlimited miles	30 Days

*[1] **Parts and labor warranty** when installed by a **GM Dealer** or qualified installing Independent Service Center (ISC). [2]**Parts and labor warranty** when sold over the counter and **REPAIRED by a GM Dealer or qualified installing Independent Service Center (ISC), on-highway applications only**. Parts only warranty when consumer repaired or when installed in non-highway application. Coverage limited to defects in material and/or workmanship of the specific part only. [3]Includes Allison 1000 Series assemblies sold through GM Dealers. [4]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). [5]**Parts-only warranty** when sold over the counter. [6]Must be installed in a "street legal" automotive application for use on public roads. [7]Warranty valid when all required components are installed on the same vehicle and purchased on one invoice.*

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 (including changes to engine controls), accident, or improper use. Proper vehicle use is discussed in the vehicle Owner's Manual.
- Any vehicle that has been used for racing (on or off track), stunt driving, performance testing, or used under other extreme operating conditions.
- Any vehicle where 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 Owner's Manual/ Maintenance Schedule, 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 Owner's Manual/Maintenance Schedule. Proof of proper maintenance is the owner's responsibility. Keep all receipts and be prepared to present them 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 photocopy). This warranty is transferable to subsequent owners, free of charge, 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 other 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.

Independent Service Center Installation – The Independent Service Center (ISC) that installed the assembly/component or any GM Dealer may perform repairs. Before any repairs can be performed under warranty by an Independent Service Center, the selling GM Dealer (or any GM Dealer) must first authorize needed repairs as a sublet service.

Towing – for GM Parts Engine, Transmission, and Transfer Case assemblies will be covered to the nearest GM Dealership or ISC who performed the installation, not to exceed $150.00, under the following conditions:
– The vehicle is inoperative.
– The failure was the result of the unit; not the installation.
*Chevrolet Performance Parts Engines and Transmissions are excluded.

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 are 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 GM Parts or Chevrolet Performance Parts.

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 48232-5136

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.

General Motors of Canada Limited ("GM Canada") warrants to the purchaser for the time and/or mileage indicated below that it will repair or replace, at its option, any 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. GM Canada will use new or remanufactured parts for repair or replacement.

Warranty coverage is based on months/mileage, whichever comes first, and begins on the date of installation by an authorized GM Canada -dealer or by a qualified Independent Service Center (ISC). For all other over-the-counter sales, warranty begins on date of retail sale.

GM Canada only warrants GM Canada supplied parts and components purchased in Canada from a GM Canada Dealer or Canadian qualified ISC.

GM Canada **Parts**

Product	Cataloged Passenger Car & Light-Duty Truck (Series 10-30)	Medium-Duty Truck (Series 40-80) Class A Motor Home, Taxi & Police	Non-Cataloged Passenger Car & Light-Duty Truck[2]
Engines, Automatic Transmissions & Transfer Cases[3,4]	36 months or 160,000 kilometers[1,2]	18 months or 160,000 kilometers[1,2]	12 months or 20,000 kilometers
Manual Transmissions & CVT	12 months or 20,000 kilometers[1,2]	12 months or 20,000 kilometers[1,2]	12 months or 20,000 kilometers
Engine & Transmission Components[5]	12 months/ unlimited kilometers	12 months/ unlimited kilometers	12 months/ unlimited kilometers

PERFORMANCE VEHICLES • PARTS • RACING

Product	Passenger Car & Light-Duty Truck (Series 10-30)[6]	Other[5] (Start-up Warranty)
Performance Parts Engines[4]	24 months or 80,000 kilometers [1,2]	30 Days
E-ROD & E-ROD Connect & Cruise Crate Powertrain Systems[7]	36 months or 80,000 kilometers[1,2]	N/A
Connect & Cruise Crate Powertrain Systems7 (non-E-ROD)	24 months or 80,000 kilometers[1,2]	N/A
Performance Parts, Transmissions, Short Block Assemblies & Components[5]	12 months / unlimited kilometers	30 Days

*[1] **Parts and labor warranty** when installed by a **GM Canada Dealer** or qualified installing Independent Service Center (ISC). [2]**Parts and labor warranty** when sold over the counter and **REPAIRED by a GM Canada Dealer or qualified installing Independent Service Center (ISC), on-highway applications only**. Canadian Parts only warranty when consumer repaired or when installed in non-highway application. Coverage limited to defects in material and/or workmanship of the specific part only. [3]Includes Allison 1000 Series assemblies sold through GM Dealers. [4]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). [5]**Parts-only warranty** when sold over the counter. [6]Must be installed in a "street legal" automotive application for use on public roads. [7]Warranty valid when all required components are installed on the same vehicle and purchased on one invoice.*

WARRANTY BEGINS ON THE DATE OF INSTALLATION BY AN AUTHORIZED GM CANADA DEALER OR BY A CANADIAN QUALIFIED INDEPENDENT SERVICE CENTER. PARTS ONLY WARRANTY (NO LABOUR) APPLIES FOR WARRANTY REPAIRS NOT PERFORMED BY AN CANADIAN AUTHORIZED GM CANADA DEALER OR QUALIFIED INDEPENDENT SERVICE CENTER.

GM Canada sells other engines and transmissions in various states of completion. This warranty covers only those engines and transmissions that are marketed by GM Canada 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 Canada 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 Canada Dealer Installation—The GM Canada dealer who initially installed the assembly/component or any GM Canada dealer may perform the repairs. You must allow a reasonable period of time for repairs following delivery of the vehicle to the GM Canada dealer's place of business.

Independent Service Center Installation—The Canadian independent service center that installed the assembly/component or any GM Canada dealer may perform repairs. Before any repairs can be performed under warranty by a Canadian independent repair center, the selling GM Canada dealer (or any GM Canada 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 or condition 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 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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