



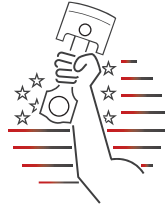
Our Vision

Speedmaster, trusted and respected for its people and its products. Globally.

Our Mission

Speedmaster creates unique & distinctive DNA items inspired by the blend of old and new technology. Its empowered work forced drives innovation not only in the products it sells but with the way it goes about doing it.





Speedmaster™
Since 1979

Speedmaster has become a leader in its field, built on a long term consistency of being a specialist in aftermarket automotive components. The team has shared all the finest moments in the numerous accolades for its people, its products, and its approach. Speedmaster is also one of the rare companies to produce its own products, where majority items are entirely developed and manufactured in its workshops. The ultimate token of precision, Speedmaster is the world's only major parts manufacturer to equip cars from Standard replacement to Top Fuel Dragsters.

In 1979, the company was founded with Pete's Performance, which was a small speed workshop. It began by building engines for customers as a hobby, and it has now grown to include selling, assembling, manufacturing and racing high performance engine parts. Over the years, the company has grown into a worldwide high performance powerhouse. Growing from a one-man bricks-and-mortar business; to now a supply chain in which entails more than 400+ people all across the world. Today, Pete's Performance has evolved into the internationally known Speedmaster: which has distribution centres and offices in Sydney, Los Angeles and Shanghai.







Speedmaster DNA is at the core of our brand and our mission.
Pushing innovation boundaries to produce visually distinctive DNA, by blending old and new technology into functionality and aesthetics.

Our commitment knows no bounds designing, developing, testing and manufacturing products in our own facilities.
Investment into state of the art technology and staff ensure we have the capability to push innovation further than we have before.



Creating Patented products has always been an internal team goal at Speedmaster.

We take pride amongst our peers by designing exclusive items for our customers.

Symbolised with our Unique finger print marking.



Speedmaster™ Track Proven

Surviving the longevity of road, race and recreation is mandatory for all "Track Proven" products, Bringing you closer to product perfection.

All Speedmaster DNA items that have endured our strict entry and exit criteria denote the "Track Proven" badge.





Speedmaster has two major distribution centres located in Los Angeles, USA and Sydney, Australia. With reseller store-fronts in over 100 countries, Speedmaster has grown into a worldwide high performance powerhouse.

Index

A adapter Plates	71
Automatic Transmission Pans.....	86
Automatic Transmission Tailhousing.....	87
Axle Assemblies	116
Axle Shafts.....	89
Engine Blocks Bare	14
B elt Drive	25
C arburetor Feed Lines.....	72
Carburetor Linkage Kits.....	72
Carburetor Spacers.....	71
Chain Drive.....	24
Connecting Rods	18
Crankshaft Sockets	104
Crankshafts.....	16
Crate Motors	114
Cylinder Heads	26
D egree Wheels	105
Differential Carriers	96
Differential Storage Case	102
Distributors.....	49
Driveshaft Safety Loops.....	87
E lectrical Water Pumps	43
Engine Dress-Up Kits	34
Engine Gasket Sets.....	38
Engine Lift Plates	105
Engine Pulley Systems	36
Engine Rotating Kits	108
Engine Stands	105
F lexplates.....	85
Fluid Coolers.....	41
Flywheels	84
Fuel Cells	74
Fuel Filters.....	79
Fuel Injection Systems	110
Fuel Pressure Regulators.....	78
Fuel Pumps.....	76
G askets & Seals	38
Gauges, Analog	79
Gear Drive.....	24
Gilmer Drive Kit	37
H armonic Balancers.....	22
Head Gaskets	39
Hose & Line & Tubing	42
Ignition Coils	54
Intake Manifold Gaskets	39
Intake Manifolds	64
L ocker	96
N itrous Oxide Bottle Bracket	102
O il Pans, Individual	33
Oil Pump Primers	104
P iston Ring Compressors	104
Piston Rings.....	21
Pistons.....	20
Pulley Kits	36
Pushrod Length Checkers	104
Pushrods, Assembled	32
R adiators	40
Rear Axle Housings.....	88
Ring and Pinion Gears.....	98
Rocker Arms	30
S park Plug Wire Sets	56
Spark Plugs.....	57
Spools.....	96
Starters	58
Supercharger Centrifugal.....	76
Superchargers Kits	112
T hird Member Case	94
Third Members.....	90
Throttle Bodies.....	70
Throttle Cable Brackets.....	72
Timing Controllers	61
Timing Covers.....	25
Timing Systems.....	24
Torque Worm LSD.....	96
U nderdrive Pulley Set.....	36
W ater Necks	41
Wiring Harnesses	60

Contents

Engine Components

Bare Engine Blocks	14
Crankshafts.....	16
Connecting Rods	18
Pistons.....	20
Piston Rings.....	21
Harmonic Balancers	22
Timing Systems.....	24
Chain Drive	24
Belt Drive	25
Timing Covers.....	25
Cylinder Heads	26
Bare	26
Assembled.....	28
Rocker Arms	30
Pushrods, Assembled	32
Oil Pans, Individual	33
Engine Dress-Up Kits	34
Pulley Kits	36
Engine Pulley Systems.....	36
Gilmer Drive Kit	37
Gaskets & Seals	38
Engine Gasket Sets.....	38
Intake Manifold Gaskets.....	39
Head Gaskets.....	39
Radiators	40
Water Necks	41
Fluid Coolers	41
Hose & Line & Tubing	42
Electrical Water Pumps	43

Ignition & Electrical

Distributors.....	49
HEI.....	50
El Rayo	52
Ignition Coils.....	54
Spark Plug Wire Sets	56
Spark Plugs.....	57
Starters	58
Wiring Harnesses	60
Timing Controllers	61

Air & Fuel Delivery

Intake Manifolds	64
Throttle Bodies.....	70
Carburetor Spacers.....	71
Adapter Plates	71
Carburetor Feed Lines.....	72
Throttle Cable Brackets.....	72
Carburetor Linkage Kits.....	72
Fuel Cells	74
Fuel Pumps.....	76
Fuel Pressure Regulators.....	78
Fuel Filters.....	79
Gauges, Analog	79
Supercharger Centrifugal.....	80

Driveline & Chassis

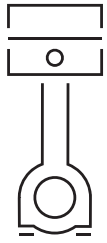
Flywheels	84
Flexplates.....	85
Automatic Transmission Pans.....	86
Driveshaft Safety Loops.....	87
Automatic Transmission Tail housings.....	87
Rear Axle Housings.....	88
Axle Shafts	89
Third Members.....	90
Third Member Case.....	94
Differential Carriers	96
Torque Worm LSD	96
Locker	96
Spools	96
Ring and Pinion Gears.....	98

Tools & Accessories

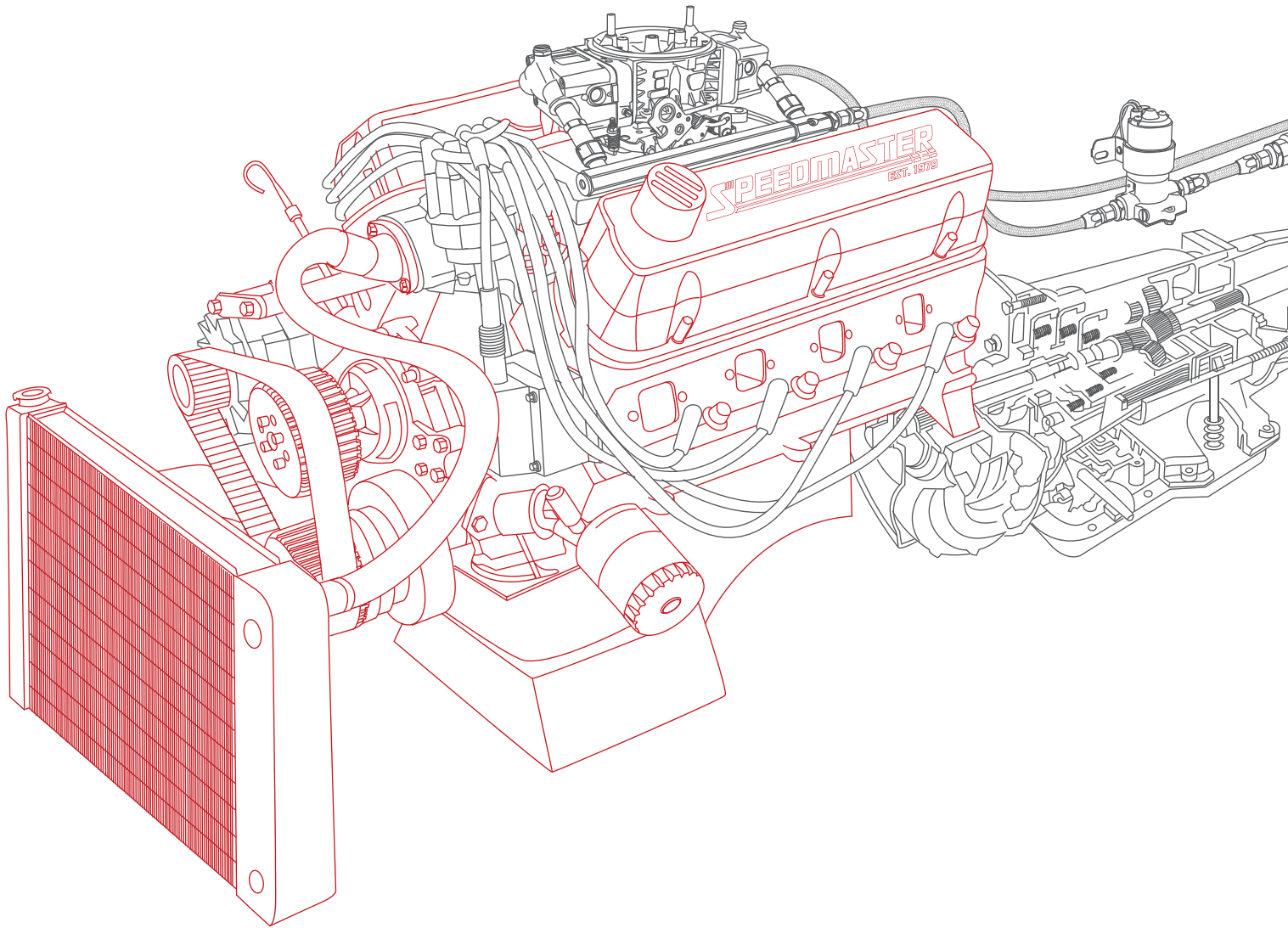
Nitrous Oxide Bottle Bracket	102
Differential Storage Case	102
Piston Ring Compressors	104
Oil Pump Primers	104
Crankshaft Sockets	104
Pushrod Length Checkers	104
Degree Wheels	105
Engine Lift Plates	105
Engine Stands	105

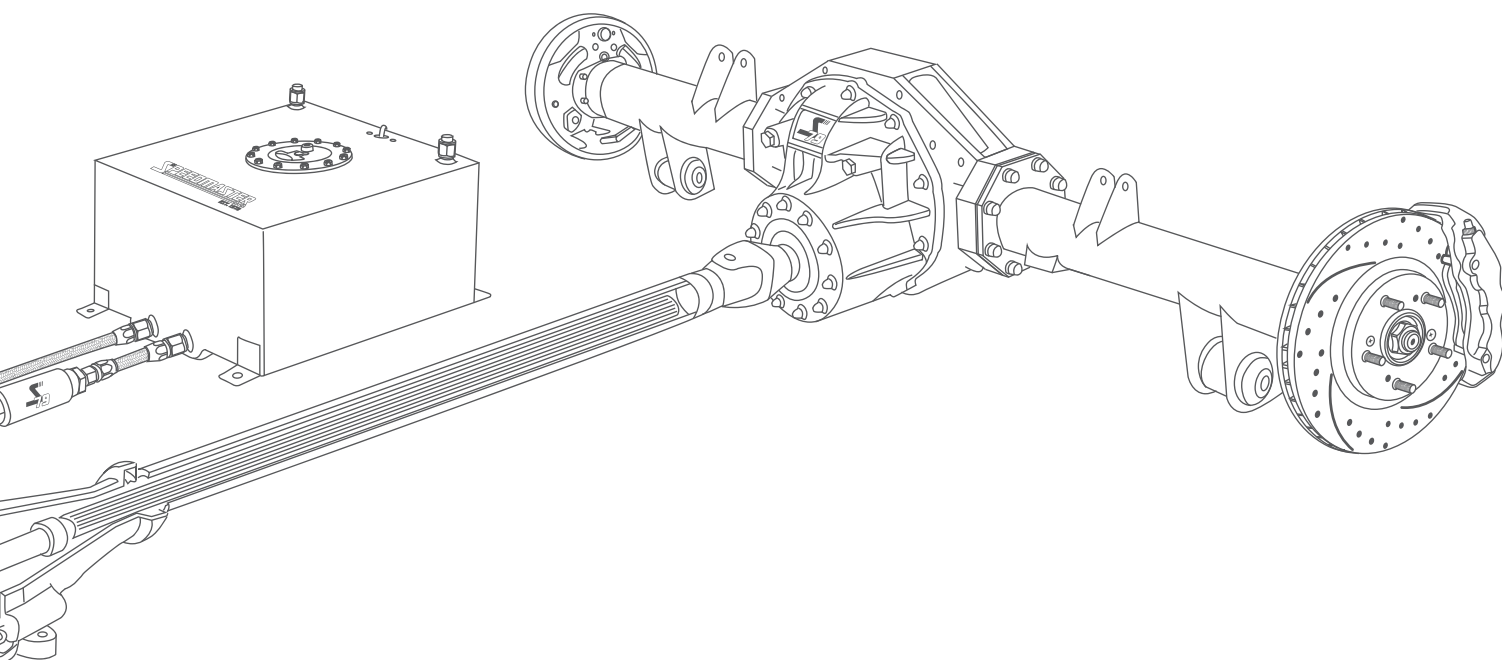
Assemblies

Engine Rotating Kits	108
Fuel Injection Systems	110
Superchargers Kits	112
Crate Motors	114
Axle Assemblies	116



Engine Components





Engine Components (EC) "Engine Component Related Parts Department"; stands by: providing ongoing proven performance components. This philosophy has been in place since the beginning. With state-of-the-art Manufacturing an extensive research and development program; Speedmaster's commitment to excellence, combined with expert Knowledge and A passion for the high Performance automotive industry has been the result of manufacturing to the highest specifications.

Bare Engine Blocks

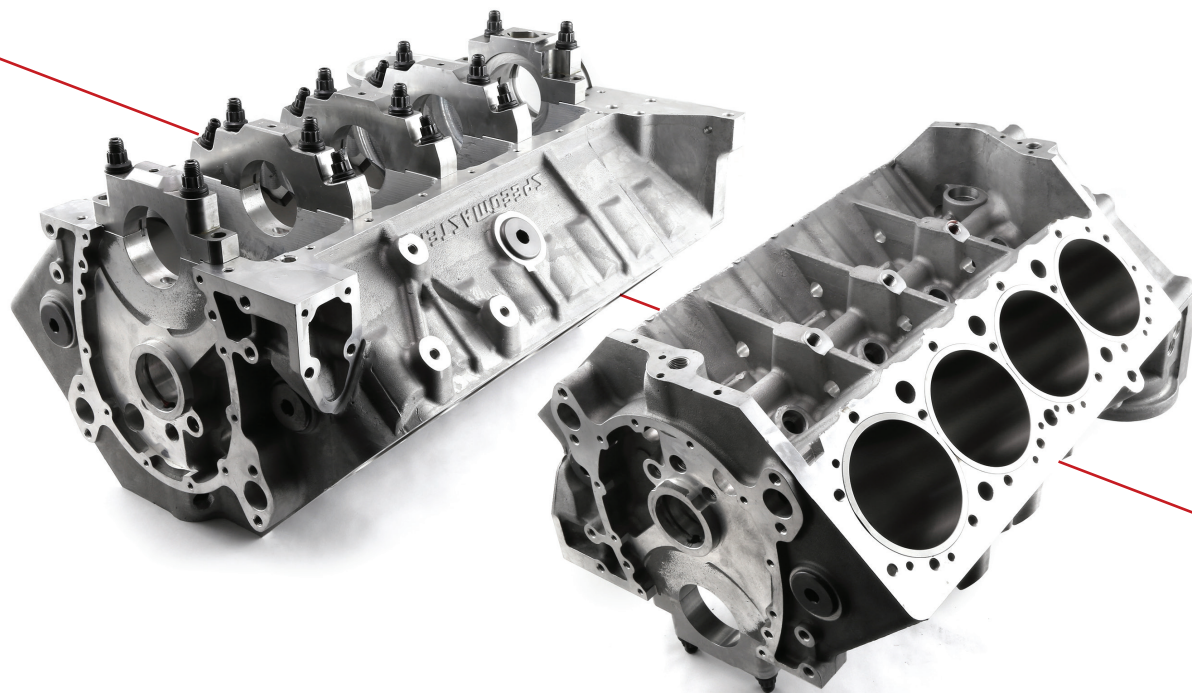
Severe Duty

Whether you're building a new engine or recovering from an under-the-hood incident you'd rather soon forget, explore our large selection of aftermarket bare engine blocks to complete your new power plant project. The engine block is the linchpin of vehicles that run on internal combustion, providing the powerhouse for the vehicle. It is called a "block" because it is usually a solid cast car part, housing the cylinders and their components inside a cooled and lubricated crankcase. This part is designed to be extremely strong and sturdy, because its failure results in failure of the car.

The next level of performance are Speedmaster™ Aluminum or cast iron blocks. Designed to look standard under your bonnet, and work with stock components. Our blocks are ready for the street racer with added strength and cubic inches. All the factory flaws redesigned to eliminate all problems, still using water jacket design. Blocks are cast from highest quality high-density iron with extra-thick cylinder walls and decks. In most of our blocks each web is stronger and fitted with billet steel 4-bolt main caps, which are ideal for supercharged, turbocharged and nitrous applications!

- Precision machined.
- Designed for compatibility with stock components.
- Priority main oil system has been adopted for high HP applications.
- Avail in a range of main tunnel sizes.
- 4 bolt billet steel main caps.*
- Oversized coolant passages for extra cooling for high hp applications.
- Casting reinforced with larger webbing in the valleys and mains to support greater hp.
- 0.250 in. bore size remaining at blocks max recommended bore size.
- High quality 8640 steel bolts supplied.

*Apply for some blocks.



Fully-Finished Ready-to-Run

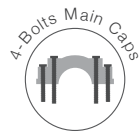
Customize an Unfinished block is a great way to get big power out of a little engine, but all of the precision machining involved can get tricky and expensive. Save yourself some time and money--grab one ready-to-run Speedmaster™ Fully-Finished engine block. We've done all of the machining and prep work for you.

This is more than great news for engine builders; it is also a beneficial step for home builders who can now order their block pre-honed.

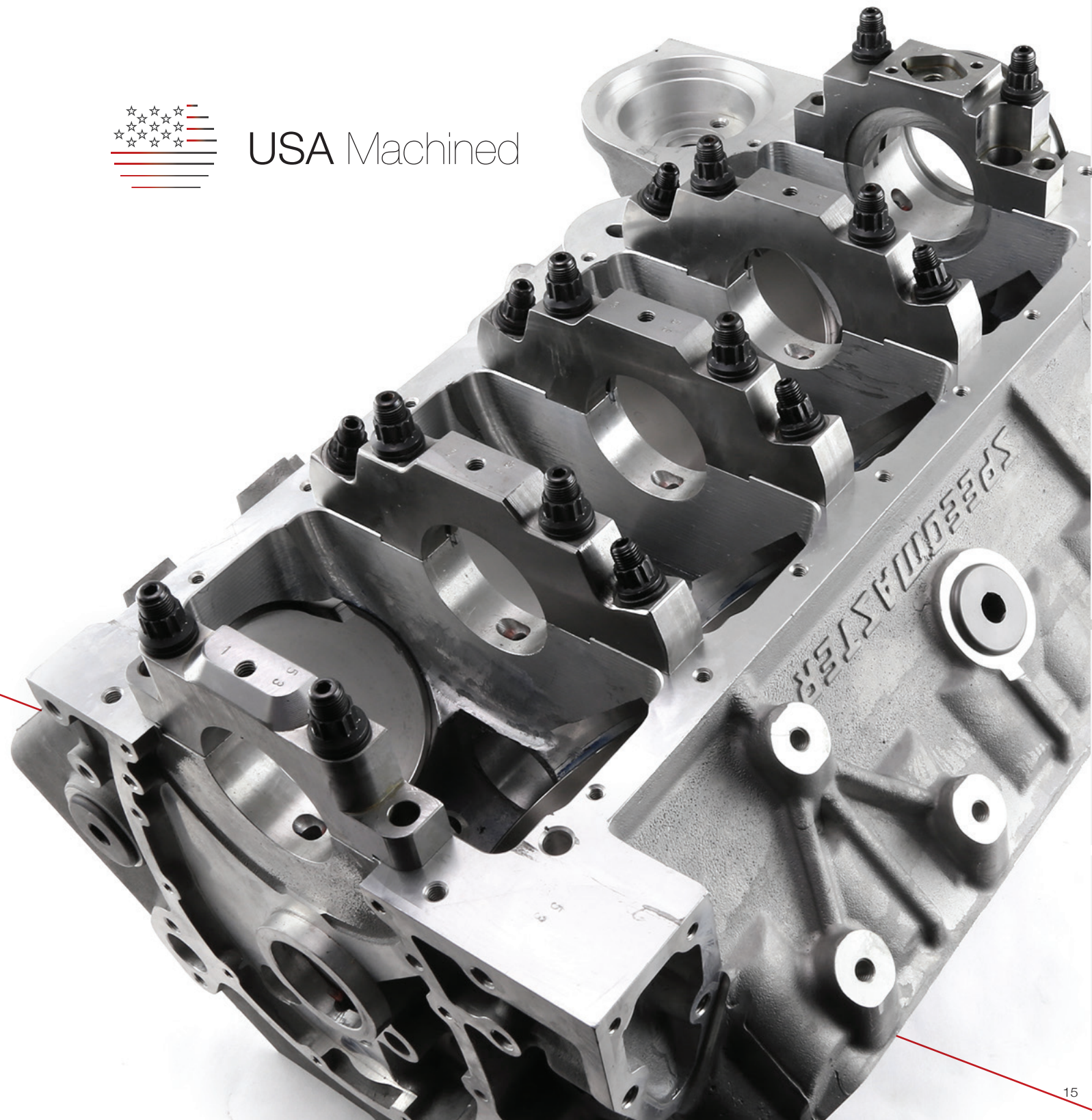
Available in:

Aluminum

Cast Iron



USA Machined



Crankshafts

Brute Force



They say that the heart of the engine is the camshaft, since it is one of the key components that dictates the engine's power level, power band, idle quality, and other characteristics. If the cam is the heart, then the crankshaft is the spine. The crankshaft also dictates power and powerband, but in a much more ambivalent way (through its stroke which, along with the bore size, dictates the engine's cubic-inch displacement). The crank is what transfers the up and down reciprocating movement of the piston and rod into the rotating motion required to drive the transmission. It carries the weight of all eight rods and pistons, and must deal with the shock loads of the combustion process. A stock crank does this fine...in a stock engine. But when power levels start to climb, that stock crank will eventually give under the tremendous loads imposed upon it.



Greater smoothness



Improves fatigue strength



Avoid long term distortions



Superior wear resistance



Spin harder & faster



Less resistance

Speedmaster™ **cast nodular iron** [Tensile strength 95,000 Psi] crankshafts are perfect for mildly built street engines or just to replace stock crankshafts that have seen better days. These Speedmaster™ crankshafts are precision-ground to exacting tolerances.

Speedmaster™ **5140 forged steel** [Tensile strength 115,000 Psi] crankshafts are perfect for high compression or blown street applications as well as most race cars. Horsepower ratings should be limited to the 700HP range for maximum efficiency. They are precision-ground, heat-treated, shot-peened and inspected for superior tolerance control. Speedmaster™ crankshafts also have straight-shot and chamfered oil holes, and feature lightening holes in all rod throws. These crankshafts also have a large radius on all journals for improved strength and wear resistance

For absolutely serious street and racing applications, a **4340 forged steel** [Tensile strength 145,000 Psi] Speedmaster™ crankshaft is the only choice. They are perfect for high horsepower, torque and RPM's and work great for all levels of power adders. Horsepower ratings are good for 1000 HP. They include all features from 5140 series plus nitride-hardened for superior wear resistance.

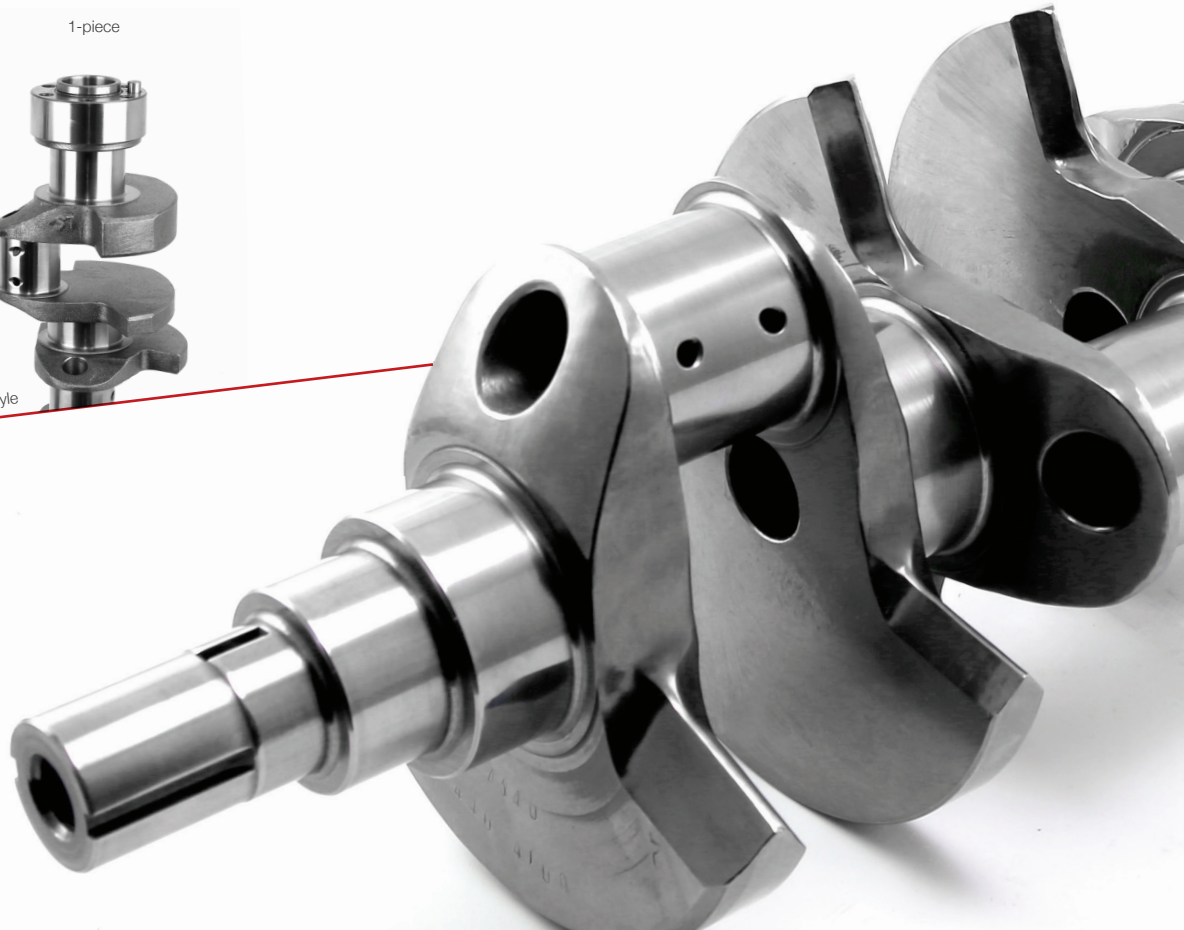
Billet steel [Tensile strength 162,000 Psi] crankshafts are at the top end of the high-performance crankshaft scale. They are precision CNC-machined from a solid chunk of forged steel on state-of-the-art equipment by master craftsmen for precise indexing and throw-to-throw consistency. The grain structure is not stretched or deformed; This makes for a stronger, stiffer, more durable finished product. Most Pro Race categories run billet cranks. Choose a better made billet crankshaft from Speedmaster™ and choose peace of mind.

2-piece

1-piece



Rear Main Seal Style





Quick Tip

Crankshaft Components

Main Journals – Machined surfaces located at the center of the crankshaft; rotation axis of the crankshaft runs through the center point of the main journals; main journals rotate in the main bearing bore created by the engine block and main caps.

Connecting Rod Journals – Surface to which the connecting rods attach. They circle around the crank's axis of rotation.

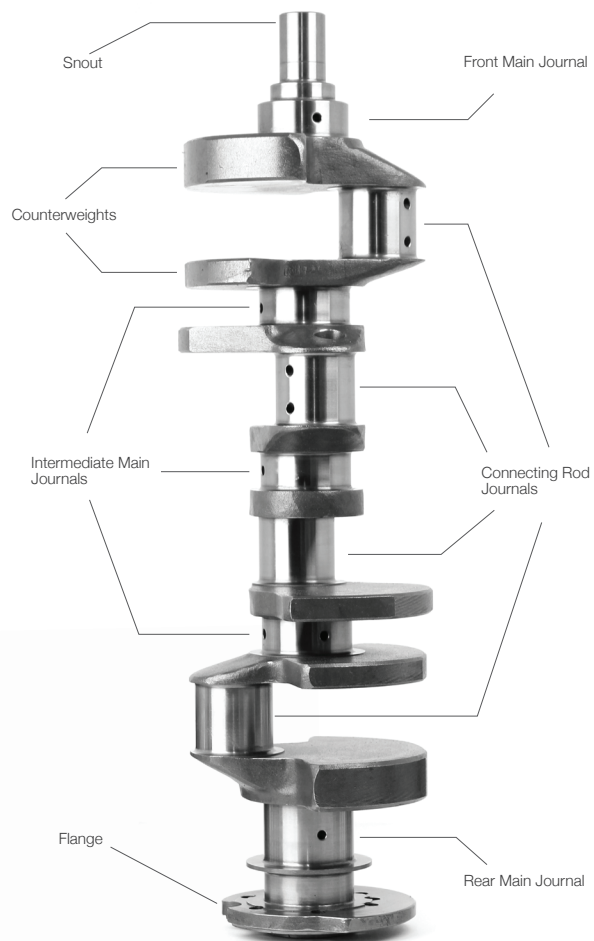
Counterweights – Balance the crankshaft to eliminate harmful vibrations. (Check the internal or external balance specifications of the particular crank)

Snout – Extends through the front end of the engine block; the camshaft timing assembly is connected to the snout, as well as the damper/balancer.

Flange – Mounting structure for the flywheel or flexplate.

Tensile strength

The tensile strength is the maximum amount of tensile stress that it can take before failure, for example braking.



Example shows a SBC 2pc RMS



Available in:

Cast Nodular Iron
Up to 500HP

5140 Forged Steel
Up to 700HP

4340 Forged Steel
Up to 1,000HP

Billet Steel
Up to +2,500HP

Connecting Rods

Time to do some Push-Ups



The connecting rod or conrod connects the piston to the crank or crankshaft. Together with the crank, they form a simple mechanism that converts reciprocating motion into rotating motion. When the cylinder fires, the piston pushes down on the connecting rod, which in turn, causes the crankshaft to rotate. All connecting rods for automotive use need to be lightweight but strong enough to withstand and transmit the thrust from the pistons to an engine's crankshaft. Speedmaster™ has a wide range of connecting rods ready to fulfill all your engine needs.



Improves fatigue strength



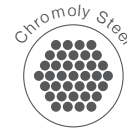
Ensures surface integrity



Ensures material quality



Avoid long term distortions



For long lasting and less fatigue

Speedmaster™ **I-Beam 5140** connecting rods are manufactured from high quality steel. Perfect for Small Block engines producing up to 500hp, and Big Block engines producing up to 600hp. Featured in press-fit or full-floating.

Manufactured from aircraft quality 4340 chromoly steel **H-Beam 4340** connecting rods are far superior to the low-carbon 5140 steel. Perfect for SB engines producing up to 700hp, and BB engines up to 850hp.

I-Beam 4340 connecting rods are manufactured from the same aircraft quality 4340 chromoly steel but designed to be the most reliable in the racing industry. For an H-Beam to catch up to the compression strength of an otherwise comparable I-Beam, the H-Beam would need to be FAR heavier than the lighter, stronger and more efficient I-Beam design. Perfect for engines producing 1000+ HP.

Speedmaster™ **I-Beam billet** forged connecting rods start with certified high-nickel 4340 aircraft-quality steel and are fully CNC-machined on the newest generation of equipment to ensure the removal of all surface imperfections. They are specially heat-treated using a multi-phase process to produce the ultimate in strength and reliability.

Available in:

I-Beam 5140
6,000 RPM

H-Beam 4340
7,500 RPM

I-Beam 4340
8,200 RPM

I-Beam Billet
10,500 RPM



Quick Tip



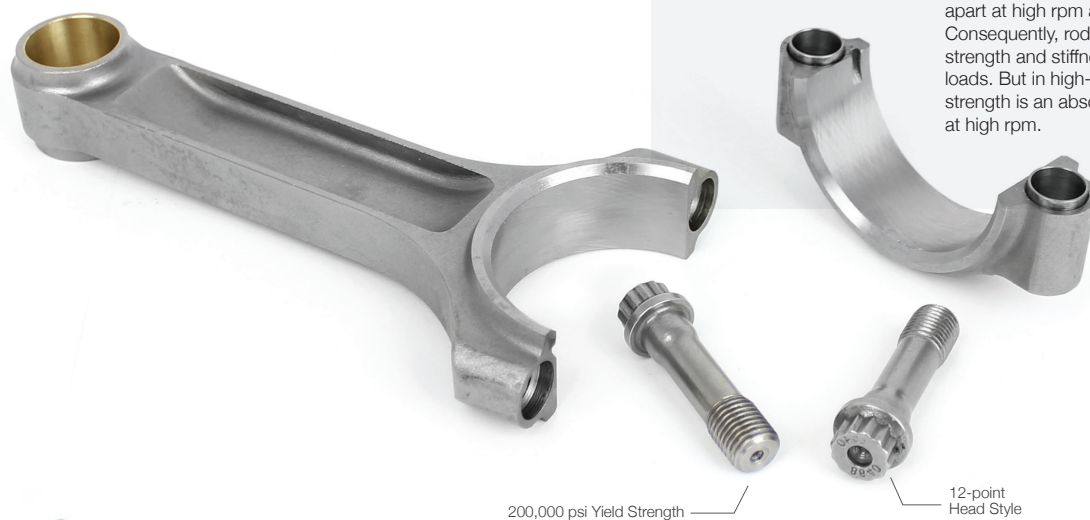
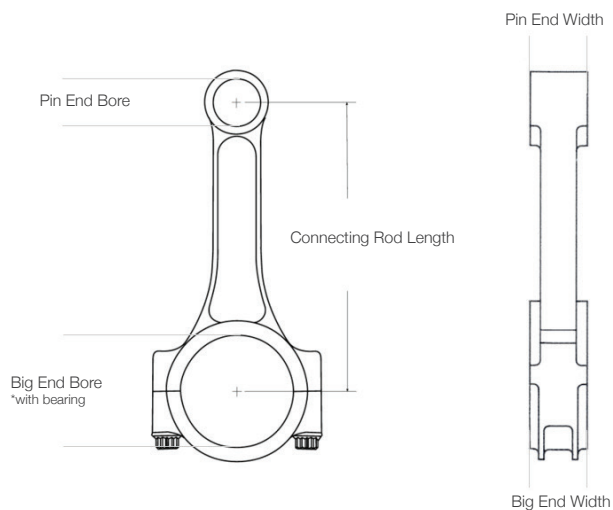
Connecting Rod Length

When measuring connecting rod length, we're really talking about center-to-center length—the distance from the center of the piston pin-end-bore to the center of the big-end bore. Here's an easy method of measuring length:

- Using a properly calibrated caliper, carefully measure from the floor of the pin-end-bore to the roof of the big-end-bore (the shortest distance from bore to bore).
- Using an inside micrometer, measure the diameter of the pin-end bore.
- Using an inside mic, measure the diameter of the big-end-bore (with cap installed and fully torqued to spec). Take this measurement from the 12 o'clock point (center of the rod saddle radius) to the 6 o'clock point (center of the cap radius).
- Add to your first measurement one-half of the pin-end-bore diameter and one-half of the big-end-bore diameter. This is the center-to-center dimension.

Horsepower vs. RPM

When it comes to rod selection, which is more important: horsepower or rpm? Higher power levels increase the compressive force on the connecting rods while higher rpms increase the tensile strain on the rods. As it turns out, most rods don't bend and fail on the compression stroke but are pulled apart at high rpm and break on the exhaust stroke. Consequently, rods need additional compression strength and stiffness to handle higher horsepower loads. But in high-revving engines, increased tensile strength is an absolute must for the rods to survive at high rpm.



Pistons

Time to Pump Out Horsepower



Gasoline and air mix together in the combustion chamber above a piston. When an electrical spark ignites that mix, it creates a tiny explosion that drives the piston up and down. That movement turns a crankshaft, which is ultimately responsible for driving a transmission and the wheels. As you might expect, pistons are subjected to more heat, pressure and movement than nearly any other engine part. They have to be built for durability. We've got the right pistons for your application. Speedmaster™ offers both Hypereutectic pistons and forged pistons for high performance engines. Each one has distinct advantages in different applications.

Speedmaster™ Forged Pistons Won a Sema Show Global Media Award.

The Speedmaster™ development team have been pushing the boundaries for years with a main objective "to improve the end user experience"; one of the many industry acknowledgments are the 5 in a row SEMA Show Global Media Awards for their research and development of their Pistons, Turnkey EFI system and Manifolds.

Hypereutectic pistons have a high silicon content alloy which contributes to excellent tensile and fatigue strength, improved thermal characteristics, greater hardness, and increased resistance to scuffing. These pistons offer a more quiet operation and cost less than forged pistons, plus they are an excellent choice for street performance, bracket racing and oval track.

They are strong, light-weight, thermally efficient, they can run tight piston-to-wall clearances (which improves ring seal and longevity), and they have exceptional wear resistance. These pistons are meant to provide performance at a reasonable price.

Forged Pistons are made from 4032 aluminum for quieter operation and reduced piston to wall clearance. Up to 20% lighter than traditional forged pistons that eliminate harmful stress concentrations for superior strength. Specifically designed for naturally aspirated or moderate nitrous applications. Forged pistons have advantages when it comes to density, strength, and durability over other piston materials. The forging process eliminates porosity in the metal, improves ductility, and will allow the piston to run cooler than a comparable cast piston.

Forged pistons are right for street performance, endurance racing, drag racing, or all out street performance applications. If you plan to run a very high compression ratio (11:1 and over), high boost supercharger, nitrous oxide, or an engine that will be operating under extreme conditions approaching detonation, you will definitely benefit from a forged piston.

Available in:

Hypereutectic
Up to 600HP

Forged
Up to 900HP

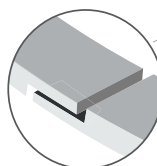


CT-Coat (Ceramic Thermal Coating) is a thin film ceramic thermal barrier that insulate the piston against damaging heat transfer, keeping more of the heat generated by combustion, pushing down on the piston for greater power. By retaining minimal heat on the surface of the piston, less heat is transferred to the incoming fuel mixture, leading to a reduction in pre-ignition which leads to detonation. CT-Coat is available in Speedmaster™ Hypereutectic pistons.



Piston Rings

Speedmaster™ piston rings are designed to stand up to the rigor of racing and high-performance street use, while providing a long lasting life. Speedmaster™ piston rings feature: Plasma-moly coated, barrel-shaped, ductile iron top rings that seal against blow-by when the piston rocks in its bore; tapered secondary rings that seal against the oil control ring's upper surface for excellent oil control; and 3-piece oil rings with stainless steel expanders that provide accurate tension without the loss of any horsepower.



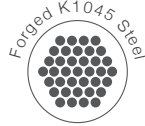
Z-Gap
Zero Gap Second Rings

Harmonic Balancers

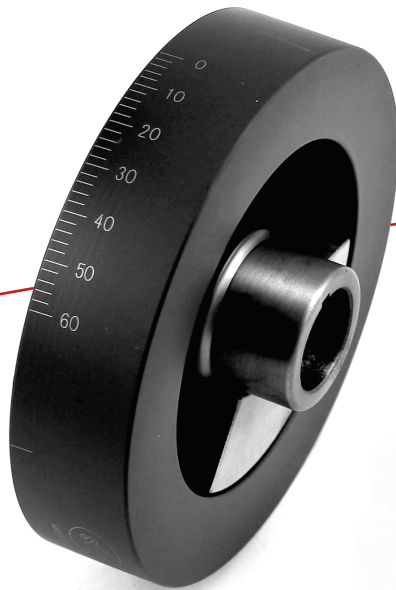
Vibration-less



Each time a cylinder fires, a force acts upon the crankshaft, causing it to twist. But this force also causes vibrations in the crankshaft, and at certain frequencies, the shaft can resonate, which makes the vibrations even worse. These vibrations from the engine can become too much for the crankshaft to bear, causing it to fail. This is where the harmonic balancer comes in. It is bolted at the front end of the crankshaft to help absorb vibrations.



Speedmaster™ Harmonic dampers are manufactured from forged K1045 low carbon steel and tuned elastomer between the two layers of steel. These dampers feature a bonding process which adheres the elastomer to the i.d. of the inertia ring and the o.d. of the hub, utilizing a strong adhesive along with an improved elastomer to create a much stronger bond. They also feature clear, white, easy-to-read timing marks against a painted black background. The steel inertia ring rotates harmonically with the engine and absorbs the torsion vibration from the rotating assembly at any frequency and RPM. All dampers are tested to withstand 15 tons press force without separation and tested to 12,500 RPM for explosion proof racing application..



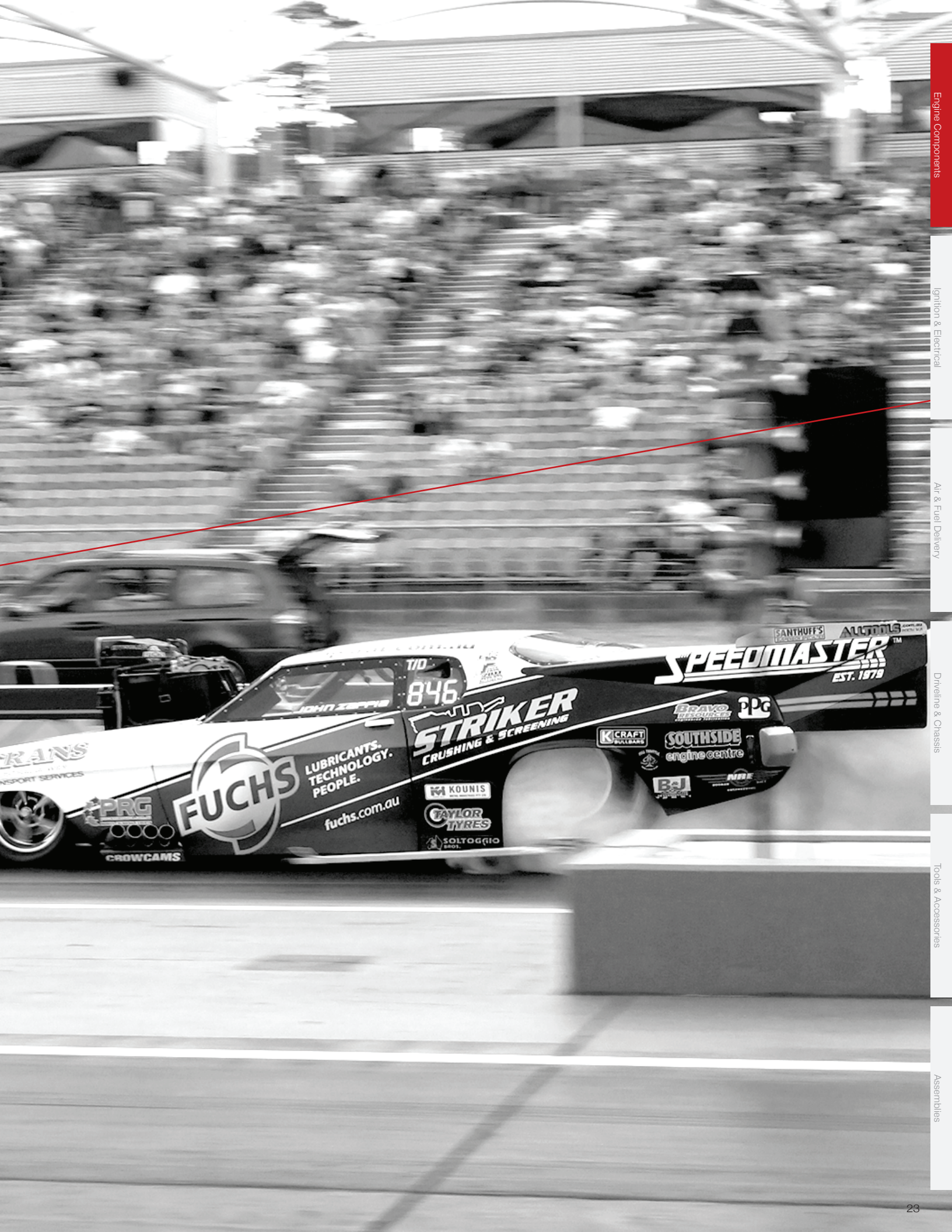
Quick Tip

Internal or External?

When identifying your existing damper, (balancer) you must look on the backside. This is not visible if the damper is mounted on the engine. If your damper has no offset in the casting or weight, then you have an internal, (neutral) style damper. If you do see the offset in the casting or a weight, you have what is classified as an external damper.

Before Installing

Inspect crankshaft snout, crankshaft keyway and key for wear or damage and repair prior to fitting your new Speedmaster™ balancer. Do Not force or hit the balancer to install it as accuracy will be lost. Make sure you are using the correct counterweight or neutral style of balancer for your application. Do not drill holes in the outer ring when balancing, use the additional holes supplied in the inner hub for mallory metal or attend to the inner hub or crankshaft or flywheel or flexplate, never the outer ring. It must remain Neutral at all Times.



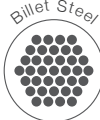
Timing Systems

The Ultimate in Cam Timing

The most important part of the engine is the timing setup that you choose as it keeps the crankshaft and camshaft in sync with each other assuring the best performance from the engine. Speedmaster™ offers a few different variations of timing setups so take the time to read up on the different products as they are one of the most important decisions you will make on an engine.

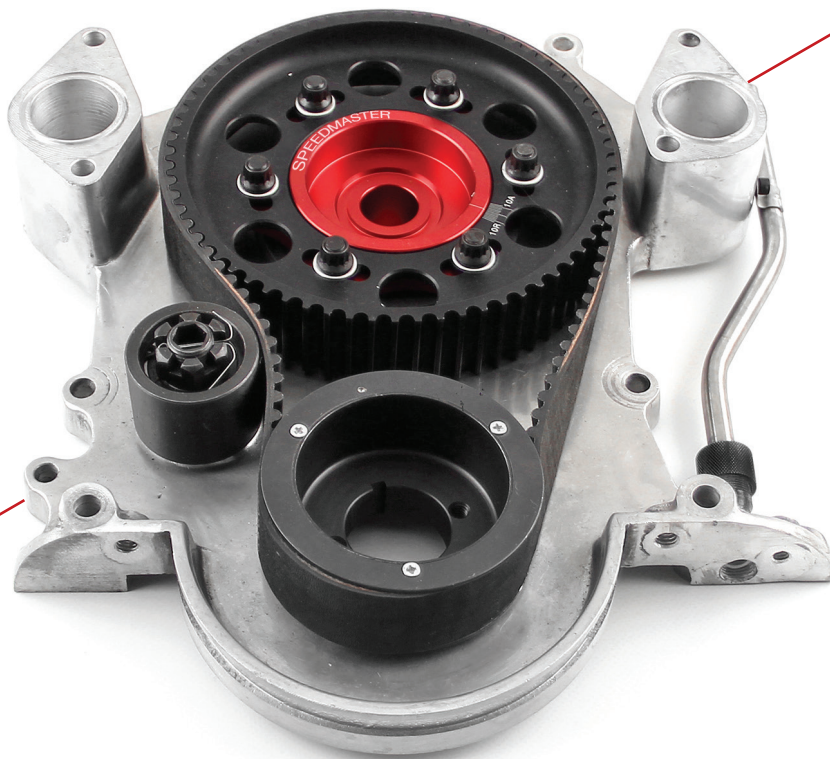
Chain Drive

Speedmaster 9 Keyway Double Row Timing Chain Kits are CNC Machined from billet, Engineered for accurate, consistent timing, faster acceleration and top-speed performance. Speedmaster Easy-just Timing Chain Set allows you advance or retard your timing 6° without having to remove your valve covers or having to back off your rocker arms. Exact Radial run out tolerance insures your timing adjustments are accurate. Features a billet cam and crank sprocket. The crank sprocket is also heat treated for additional strength. Heavy-Duty roller chain and one-piece roller thrust bearing assembly insure smooth operation.



Belt Drive

Speedmaster™ belt drives represent the ultimate in cam timing systems, providing competition engine builders with the most accurate valvetrain components available today. These drives are designed to absorb a significant amount of crankshaft harmonics, which will affect valve motion if they reach the valvetrain. These systems require less power to operate than conventional belt drives, and are proven to be more durable than either gear or chain drives.



Available in:

Chain Drive

Belt Drive

Timing Covers

Speedmaster™ timing covers are the perfect way to add strength and durability to the front of your engine, not to mention increased looks. Speedmaster™ aluminum timing covers are the perfect addition to your powerhouse.



Cylinder Heads

Serious Performance

The cylinder head works by allowing the air-fuel mixture to enter one valve and the exhaust gas to exit the other. Speedmaster™ cylinder heads offer improved power throughout the rpm range for greater throttle response and top-end horsepower.



As-Cast

Speedmaster™ cylinder heads feature as-cast ports in both alloy and cast iron and are designed for entry-level street/street performance applications operating in the idle-to-6500 rpm range. They are available for popular V8 engines. Some of the key features include:

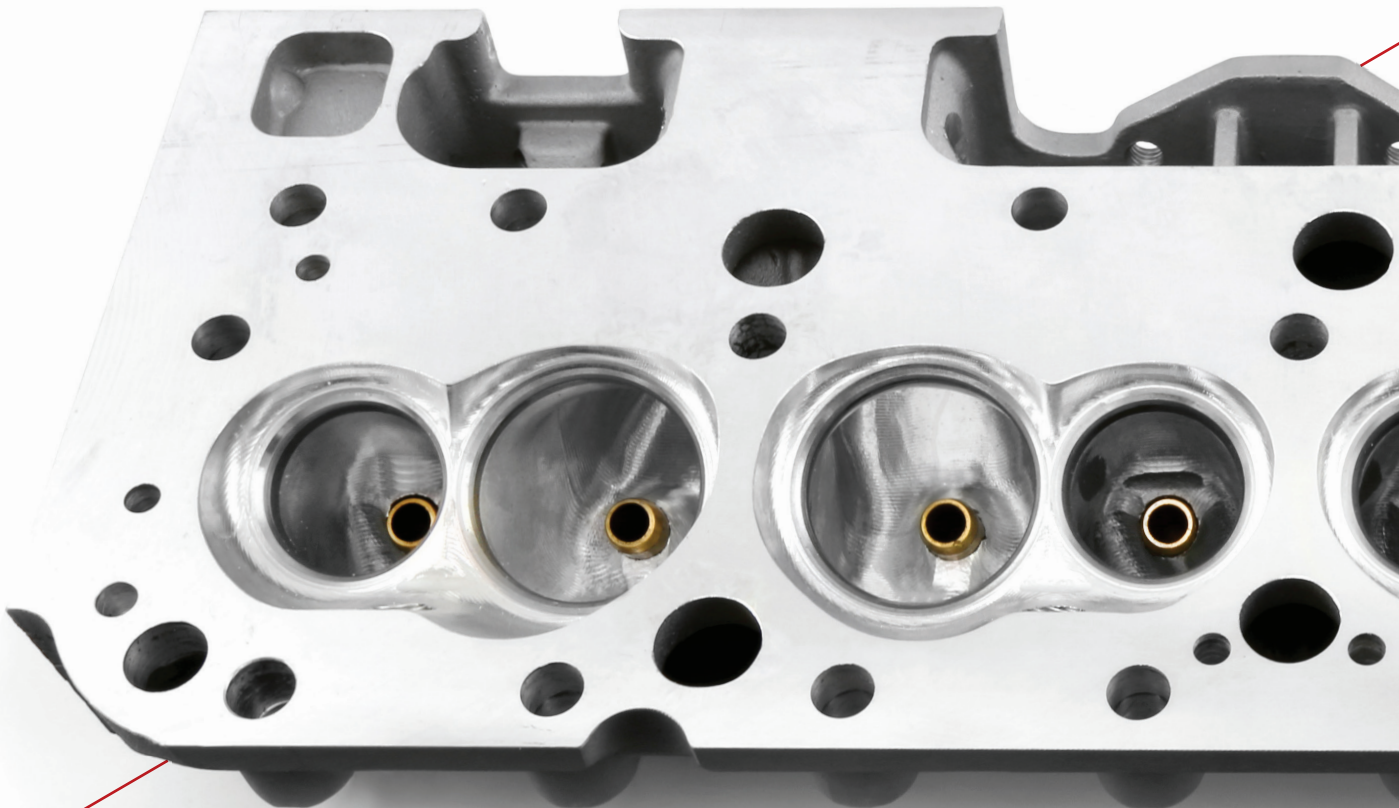
- Bronze valve guides
- CNC finish faces and bolt holes for extreme accuracy
- T6 heat treated gravity die cast construction (alloy heads only)
- OEM accessory bolt patterns for simply compatibility
- Plenty of material for upgrading to larger HP applications
- Machined for screw in studs and guide plates
- Flame hardened valve seats for use with all fuel

Full-CNC

Speedmaster™ CNC ported cylinder heads are machined on dedicated 4-axis and 5-axis CNC machining centers to ensure accuracy and cost effectiveness.

Combustion Chamber, Exhaust and Intake Ports all fully CNC machined for better flow. CNC combustion chambers offer superior control over flame travel and quench area. CNC Ported heads eliminate human error and variation from port to port. Unsurpassed repeatability from one cylinder head to another that is commonly found in "Hand porting & Polishing".

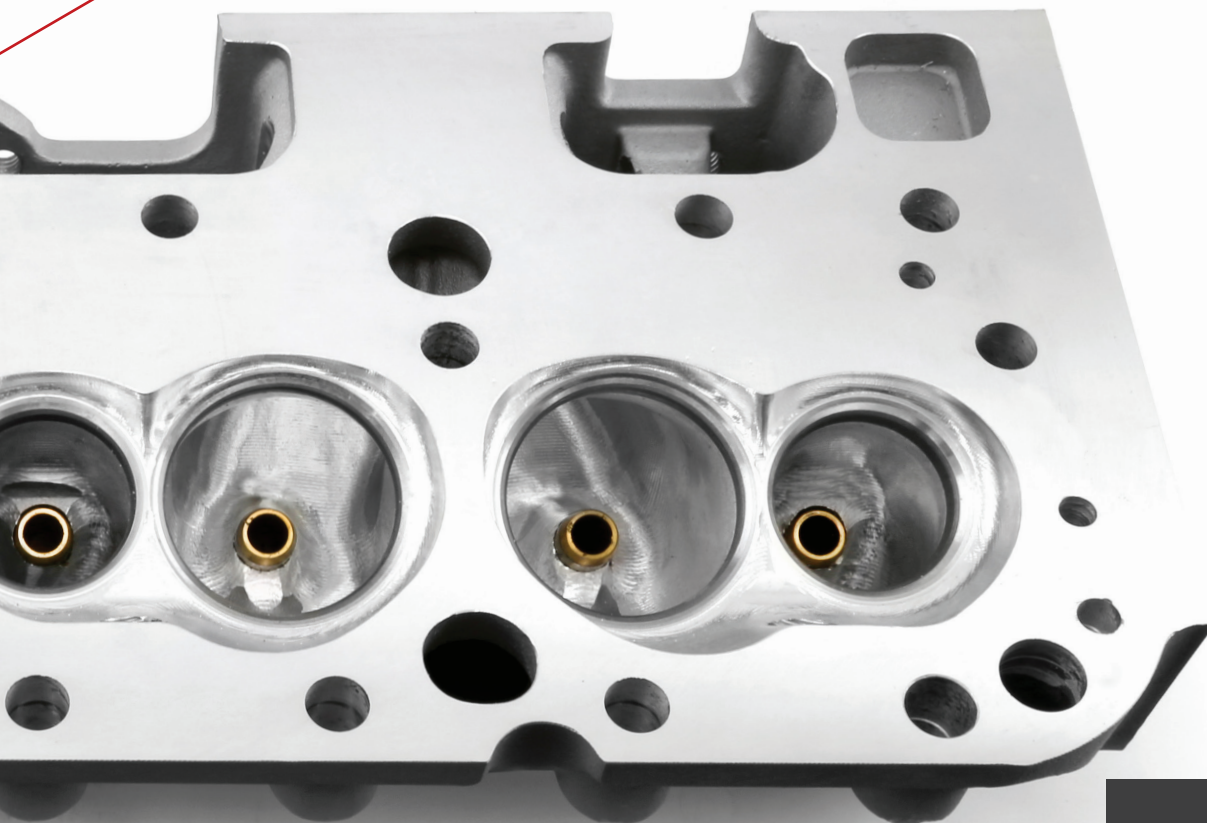
Combustion chambers are exact in volume - so every cylinder has the same compression ratio. Each port is the same cross section - so every cylinder can reach higher true RPM potential. CNC machining produces ports and chambers to within tolerances of no more than .002"; in turn every cylinder can reach the same power potential and accurate tuning.



Speedmaster™ TopFuel cylinder heads are designed to support extreme conditions up to

8,000 hp!

Speedmaster™ TopFuel 100% CNC ported billet heads, are the result of countless hours of R&D, in house and on the track. Crew Chief's and tuners are able to achieve much greater consistency, through the superior materials, technology, and man-power. Suppling the performance to set records, win races, and clinch Championships.



Available in:

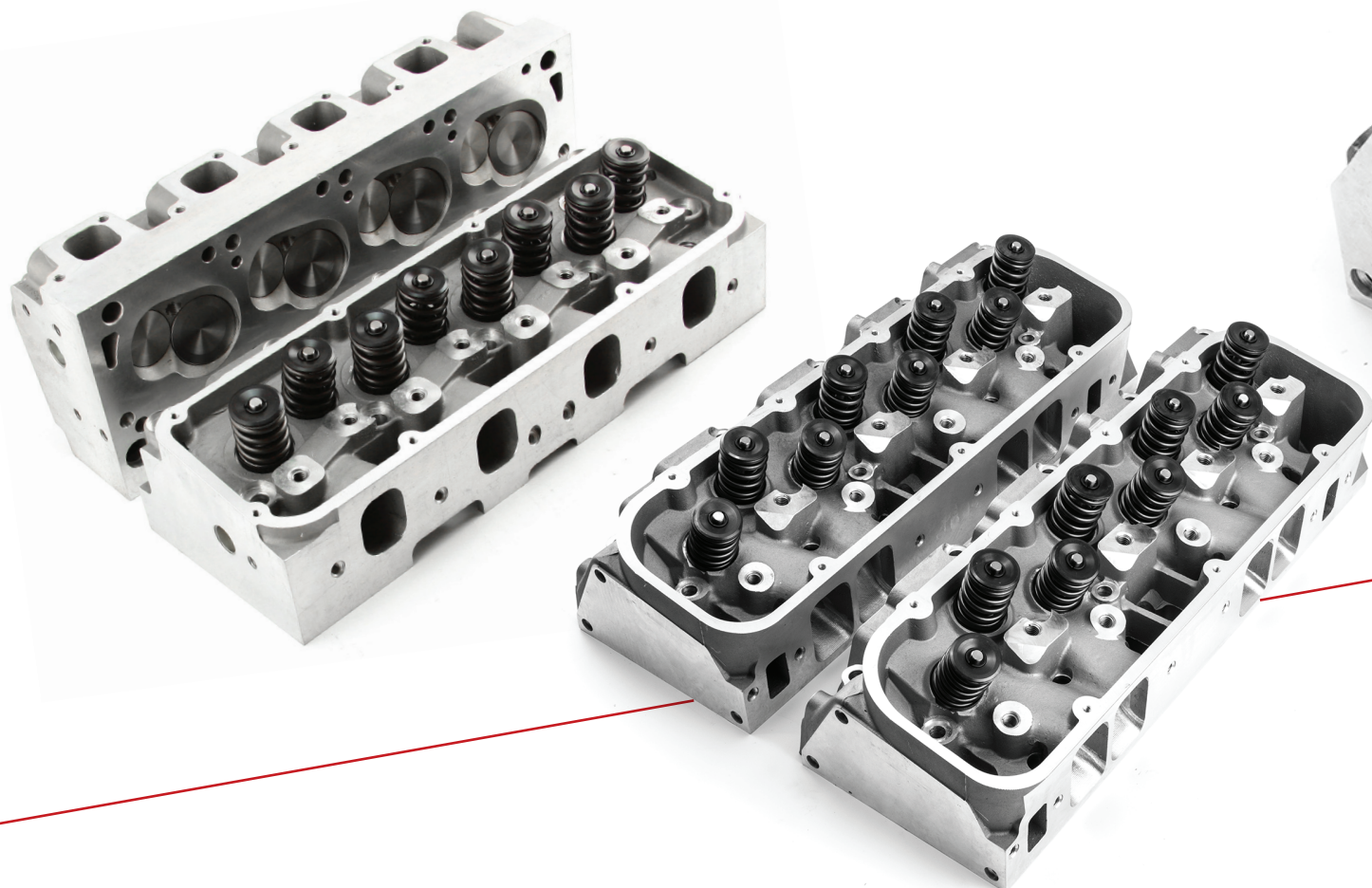
As-Cast

Full-CNC

Assembled Cylinder Heads

Ready-to-Run

Bolt on a set of fully assembled heads for instant power gains! Plus, you can turn up the horsepower even more by choosing heads with CNC-ported runners and chambers, CNC-profiled chambers and other enhancements. Speedmaster cylinder heads offer great performance for less than it would cost to rebuild an old set.



Available in:

Closed Seat Pressure

Open Seat Pressure

Max Lift

Street Series
Hydraulic Flat Tappet

110 lbs.

300 lbs.

0.550 in.

SuperStreet Series
Solid Flat Tappet

125 lbs.

320 lbs.

0.580 in.

Outlaw Series
Hydraulic Roller

145 lbs.

360 lbs.

0.580 in.

Sportsman Series
Solid Roller

210 lbs.

450 lbs.

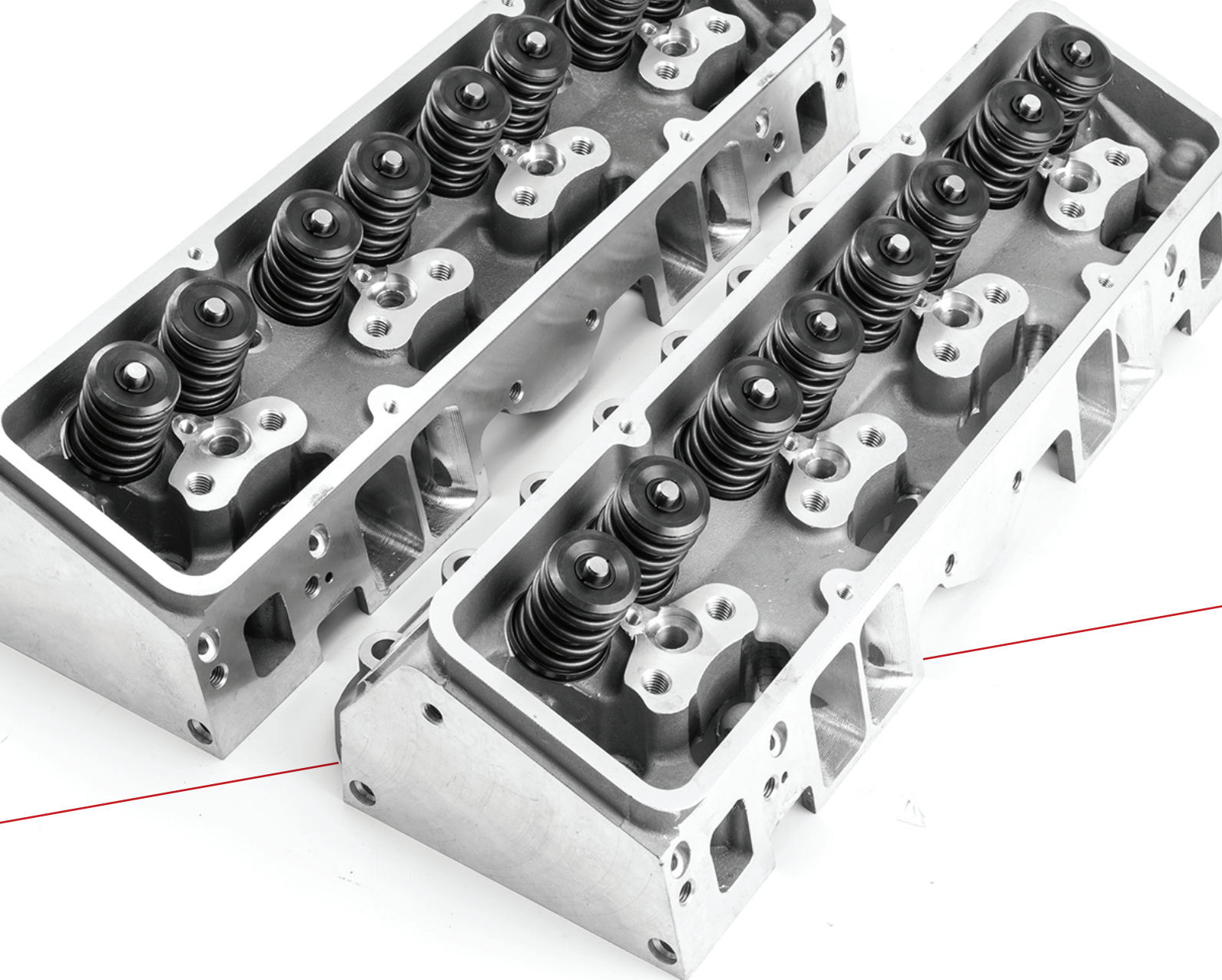
0.650 in.

Racer Series
Race Solid Roller

300 lbs.

700 lbs.

0.800 in.



Finest Premium Components



Valves



Valve Springs



Valve Spring Retainers



Valve Locks



Valve Stem Seals



Valve Spring Locators

Speedmaster™ cylinder head parts kits have been assembled with the finest premium components to provide your engine with optimal airflow for maximum engine performance. Head Build Kits include the following: Intake Valves, Exhaust Valves, Valve Spring Retainers, Valve Locks, Valve Springs, Valve Stem Seals, and Valve Spring Locators.



Rocker Arms

Smooth Valvetrain



Speedmaster™
Patent Design

Get smooth valvetrain operation, stable timing, and increased horsepower with Speedmaster™ rocker arms! Shop a huge selection of stud-, shaft-, and pedestal-mount rockers. Reduce engine weight with durable, lightweight extruded aluminum rockers. Or get superior severe-duty, high-rpm performance with forged steel rocker arms. Speedmaster™ rocker arms will ensure maximum performance from your entire valvetrain!



Stud Mount

Speedmaster stud mount aluminum roller rockers are extruded from 2024 Aluminum. The larger needle bearing fulcrum can withstand valve spring loads up to 360lbs, while the extruded body has a tensile strength over 68,000 PSI. Ideally suited for use with Solid / Mechanical flat tappet and Hydraulic Roller Cams.

360_{LBS}

Shaft Mount

Speedmaster shaft rockers have proven themselves to be the ultimate replacements for inadequate stud rocker assemblies on OEM and aftermarket cylinder heads. If you are still spending aggravating hours adjusting your stud rockers, only to have to repeat the procedure the next weekend, then speedmaster shaft rockers are the solution for you. These 2024 aluminum bodied shaft rockers are able to easily handle today's aggressive springs and cam profiles. They are designed to withstand open spring pressures of up to 700 lbs., while maintaining precise valve lash settings.

Speedmaster™ Sportsman Pro Series Aluminum shaft mount Rocker Arms are used around the world by professional racers, engine builders and hot rod enthusiasts, offering outstanding power and performance advantages for street, strip, and track applications. Each piece is precision CNC machined to ensure consistency and ratio accuracy and finished by hand to ensure that our customers receive the very best Speedmaster™ has to offer.

700_{LBS}

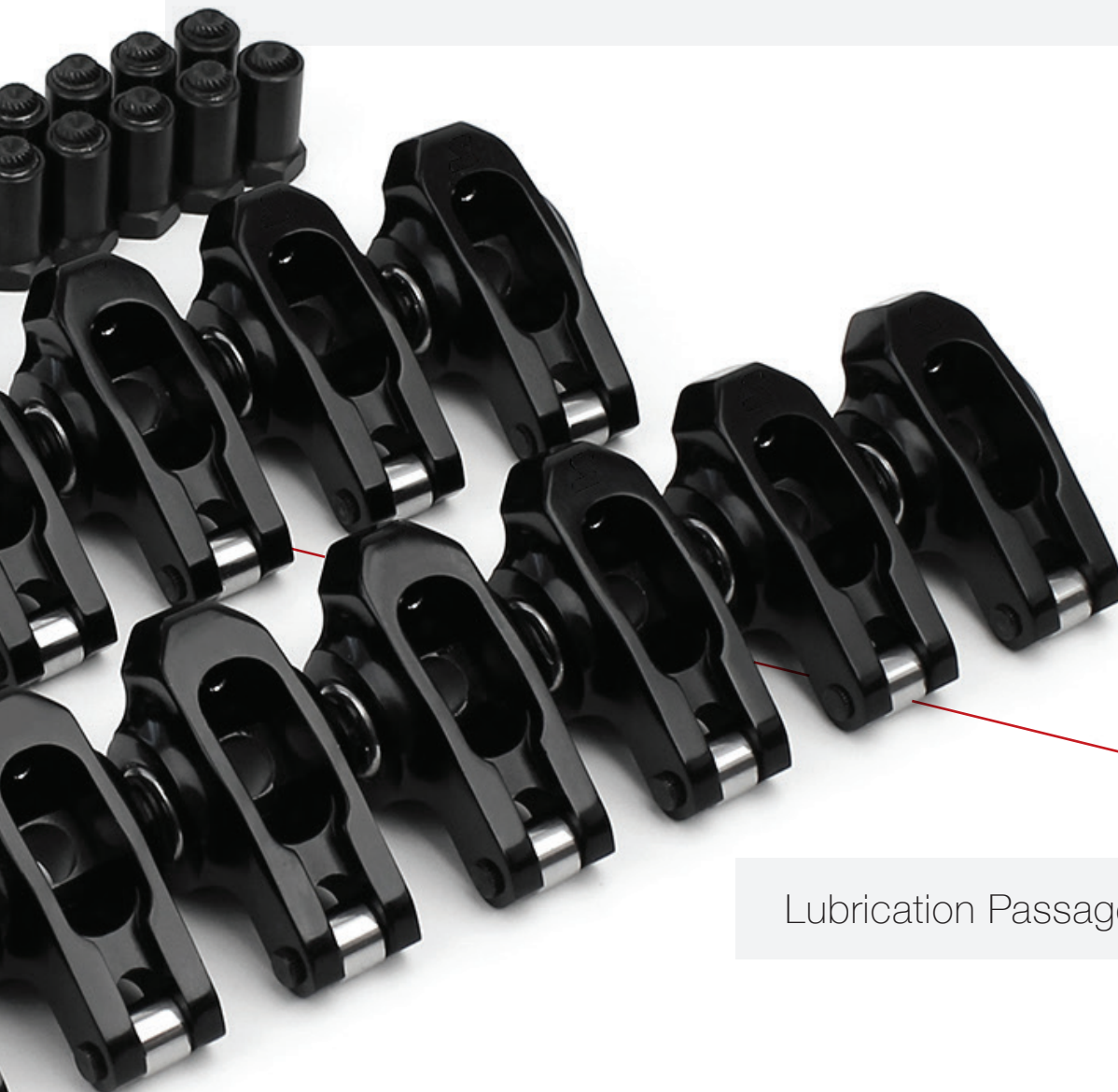
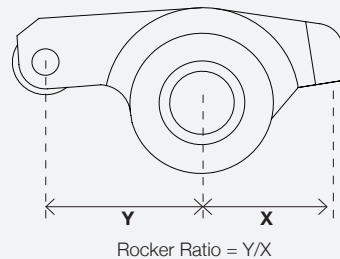


Quick Tip

**Rocker Arm Ratio - The Math**

The ratio of a rocker arm is determined by the distance between the centerline of the pivot point to the centerline of the roller tip (or area of contact with the valve stem), divided by the centerline of the pushrod to the centerline of the pivot point (X). Most aftermarket roller rockers have the ratio stamped on them. See Diagram.

To determine the change in lift when changing rocker arm ratios, divide the lift of the cam by the original rocker ratio (which gives you the lobe lift), then multiply this number by the new rocker ratio. For example, a popular small block chevy cam has .468 lift at the valve. Divide this number by the stock rocker ratio of 1.5 to get the lobe lift of .312. Multiply .312 by the new rocker ratio 1.6, to get the new lift of .499.



Lubrication Passage



Available in:

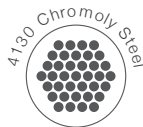
Stud Mount

Shaft Mount

Pushrods, Assembled

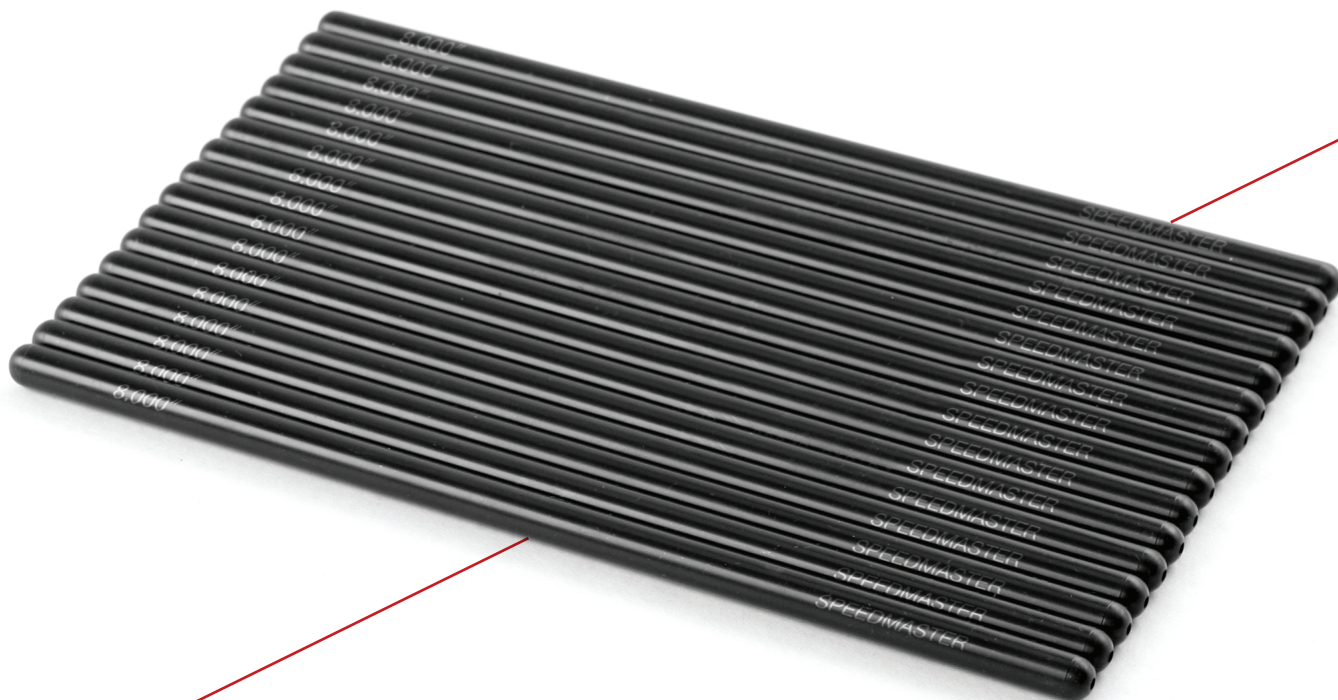
Keep your Engine Humming

Prior to extensive research, it was thought that the pushrod only had to be strong enough not to fail, bend or burn up at the ends. But engineers have learned that the frequency of the pushrod must match that of all the rest of the parts in the valve train, as well as the rpm at which the engine will be run. As cam profiles get more aggressive and valve spring pressures increase, the importance of selecting the right pushrods has never been more critical. Speedmaster™ carries a wide selection of precision pushrods to handle any application from stock replacement to hardcore race.



Get all of the performance that your engine can produce with these durable pushrods designed especially for high-lift cams. Speedmaster™ PRO pushrods are available in both 5/16 in. and 3/8 in. diameters. They feature .080 in. wall thickness and are formed from 4130 chromoly steel. These one-piece Speedmaster™ pushrods are heat-treated for use with guideplates. Plus, the oil holes are drilled and chamfered to .093 in. to prevent stress fractures and cracks.

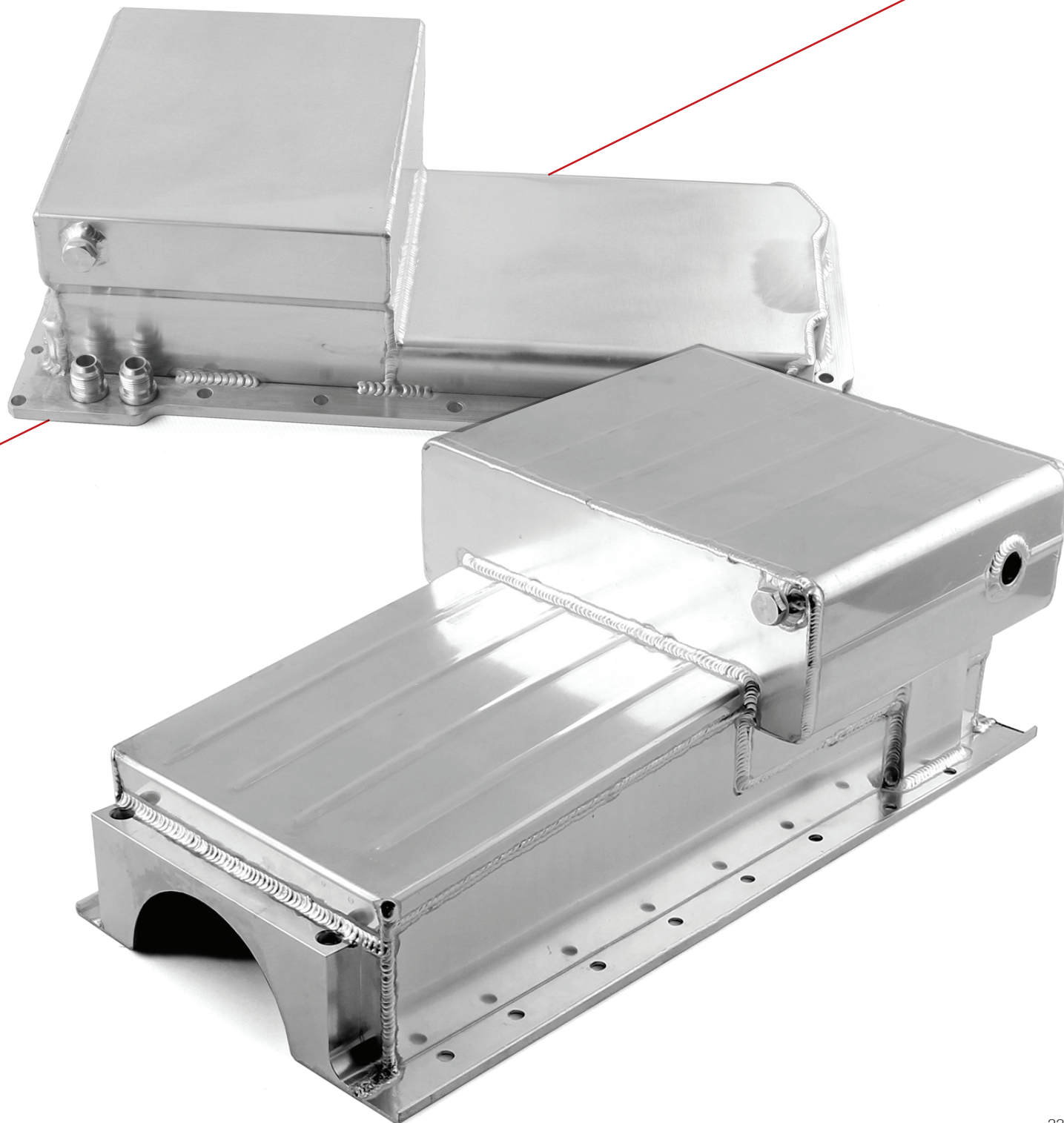
Material:	Chromoly Hardened Steel
Heat-Treated:	Yes
Tip Attachment:	Formed
One-Piece:	Yes
For Use with Guideplates:	Yes



Oil Pans

The Engine Oil Reservoir

The oil pan serves as the reservoir for the engine's oil. It is designed to hold the amount of oil that is needed to lubricate the engine when it is running, plus a reserve. The oil pan helps to cool the oil thru its contact with the outside air. Dress up your oil system with a oil pan from Speedmaster™.



Engine Dress-Up Kits

Keep the Oil in and the Dirt out

You'll be proud to pop your hood after you install one of Speedmaster engine dress up kits. Increasing the flow of air through your engine generally increases performance. Step up to a high performance air cleaner and filter from Speedmaster™. They look great and help to increase horsepower.



Available in:

Black
Anodized



Natural
Polished



Red
Anodized



Pulley Kits

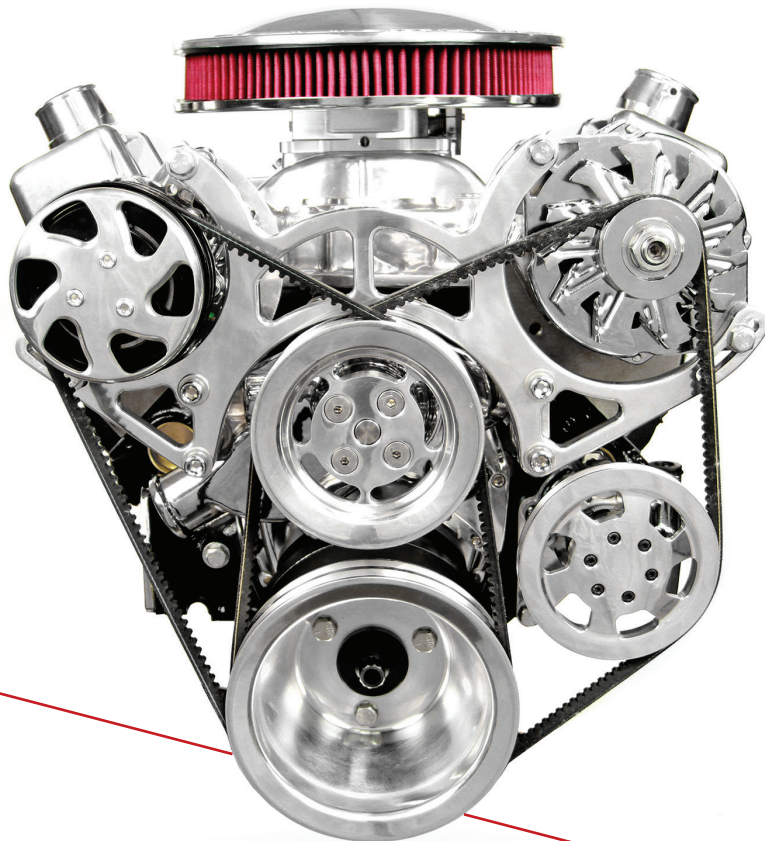
Long Lasting Durability

If you're rebuilding, upgrading, doing maintenance, seeking better performance or just trying to make the proper decision, we are the company you can turn to for guaranteed satisfaction. Our pulley systems are built in an a way to help minimize stress during installation.

When working on your engine you are presented with a number of options to make things work according to your needs and specifications. Having high performance pulley systems in place is crucial to improving power and maximizing efficiency.

Engine Pulley Systems

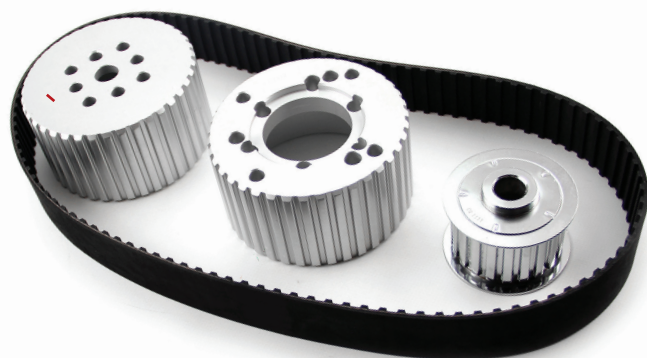
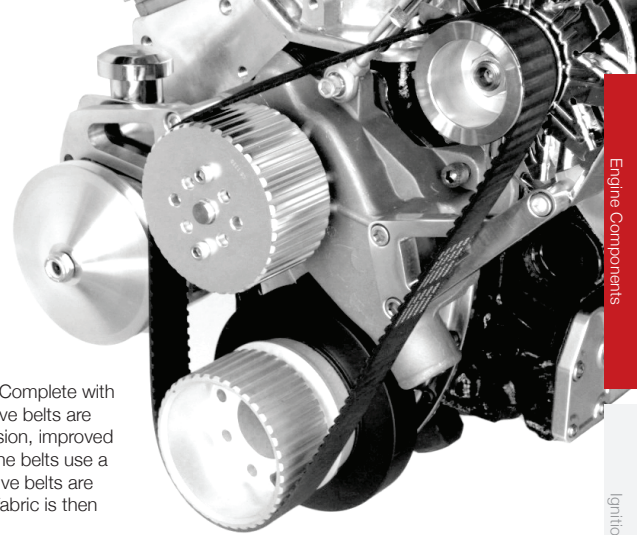
The successful formula of offering a complete engine drive accessory kit has now been applied to the Speedmaster™ pulley systems. Superior engineering, high-tech styling, and quality components are combined into a precision-machined compact package. Once again, true innovation is the key, from the patent-pending compressor manifold to the stainless hardware. Speedmaster™ pulley systems work with any type of cylinder head or manifold configuration. They are made from high quality Billet Aluminum, with a polished finish guaranteed to draw attention to your engine.



Gilmer Drive Kits

Eliminate Belt Slippage

Speedmaster™ gilmer drive kits are aluminum machined and precision made for your street/race engines; Complete with a 1.5 in. wide belt to eliminate belt slippage that is common with V-belt systems. Speedmaster™ gilmer drive belts are designed to keep your accessory drive operating properly. They provide higher power and torque transmission, improved meshing to reduce tooth jump, greater resistance to tooth shear, and reduced friction to extend their life. The belts use a fiberglass cord wound across the entire width of the belts to minimize stretching. Speedmaster™ gilmer drive belts are manufactured from a synthetic neoprene compound that resists heat, oils, ozone, and aging. Tough nylon fabric is then bonded to the tooth surface for greater wear resistance.

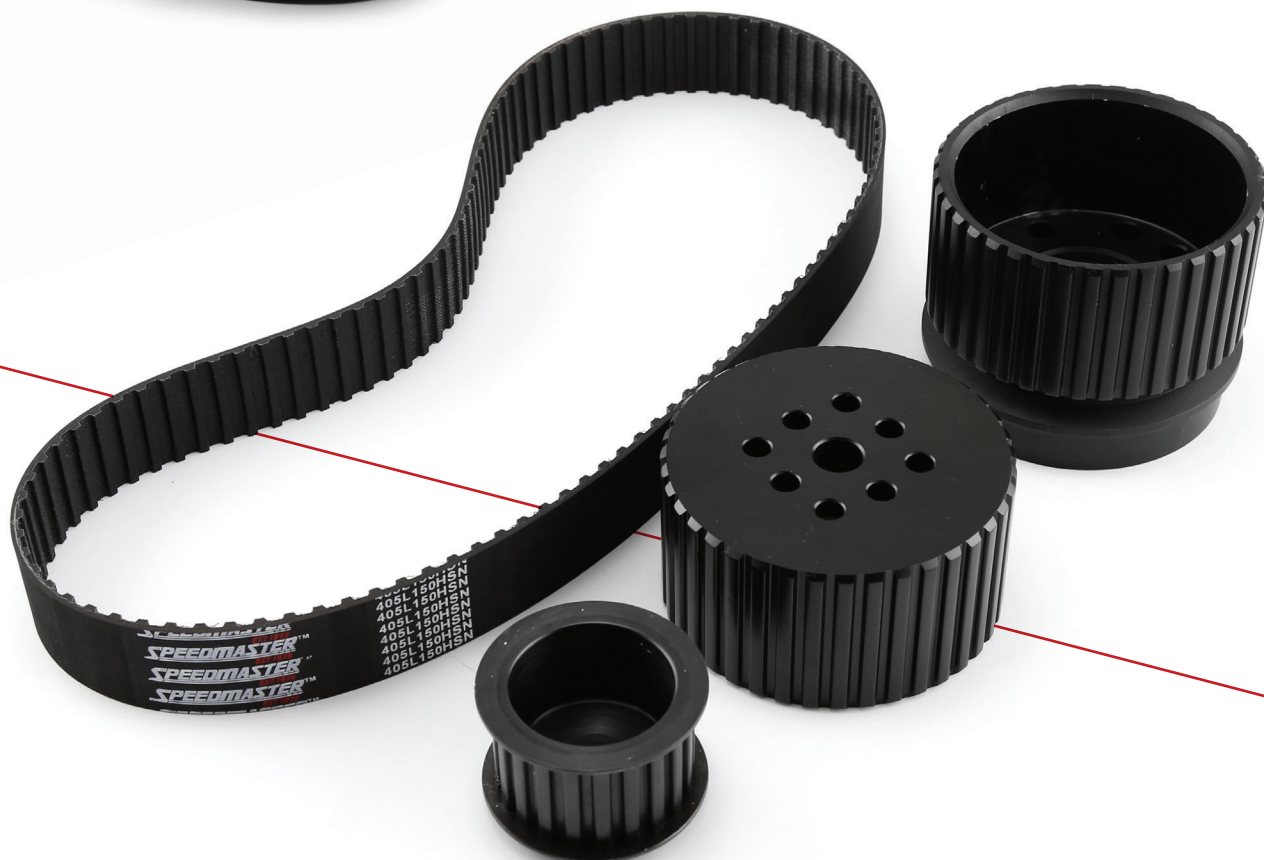


Available in:

Black
Anodized



Natural
Anodized



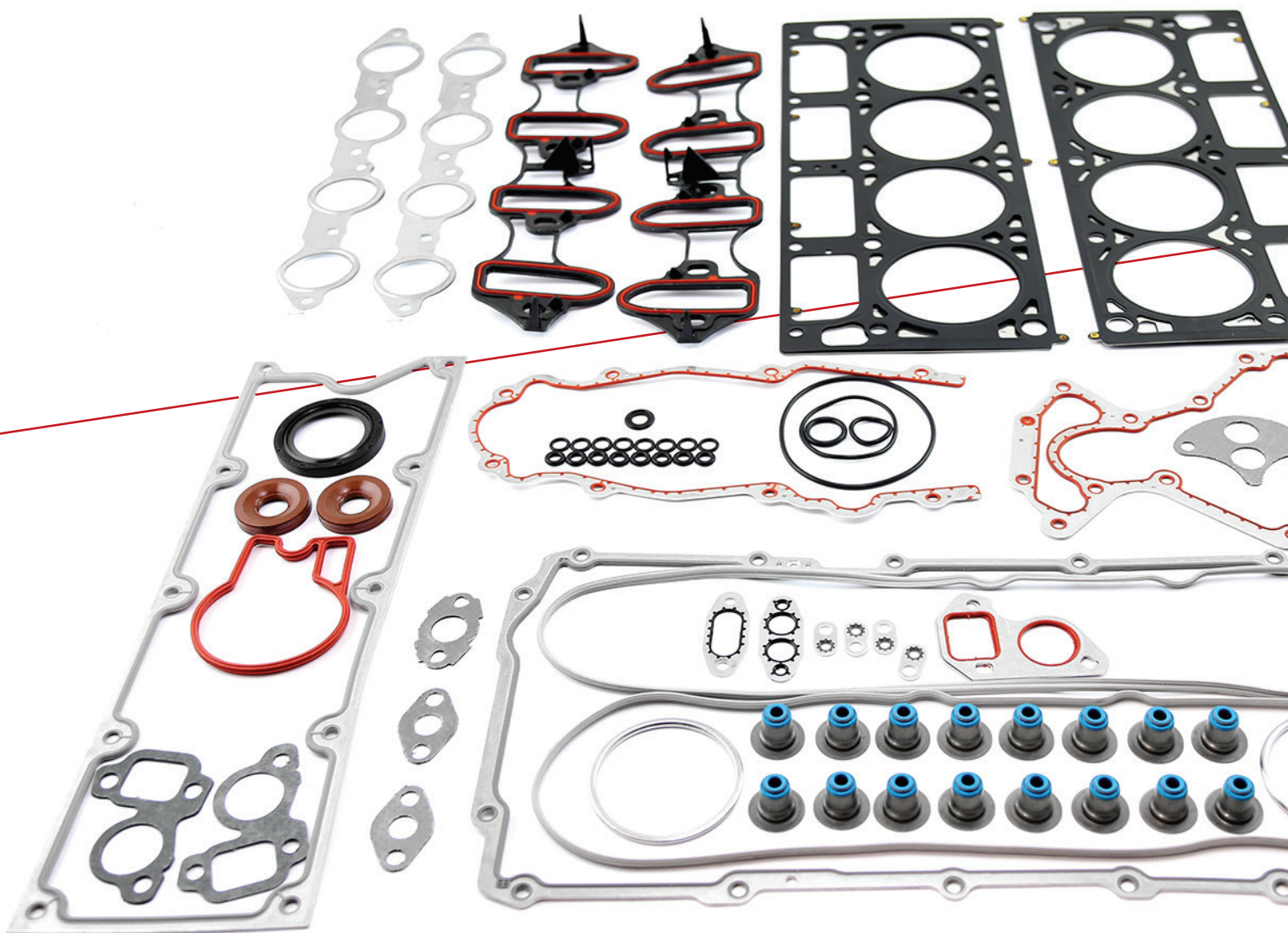
Gaskets & Seals

Long Lasting Durability

From intake to exhaust, gaskets are always at the center of the action, providing the positive, leak-free seal your vehicle's vital systems require to run at peak efficiency. We have the automotive gaskets and seals for your daily driver or dedicated race car in individual pieces that are perfect for general maintenance or full sets with every gasket and seal you need for a complete engine rebuild all designed to withstand extreme heat and pressure.

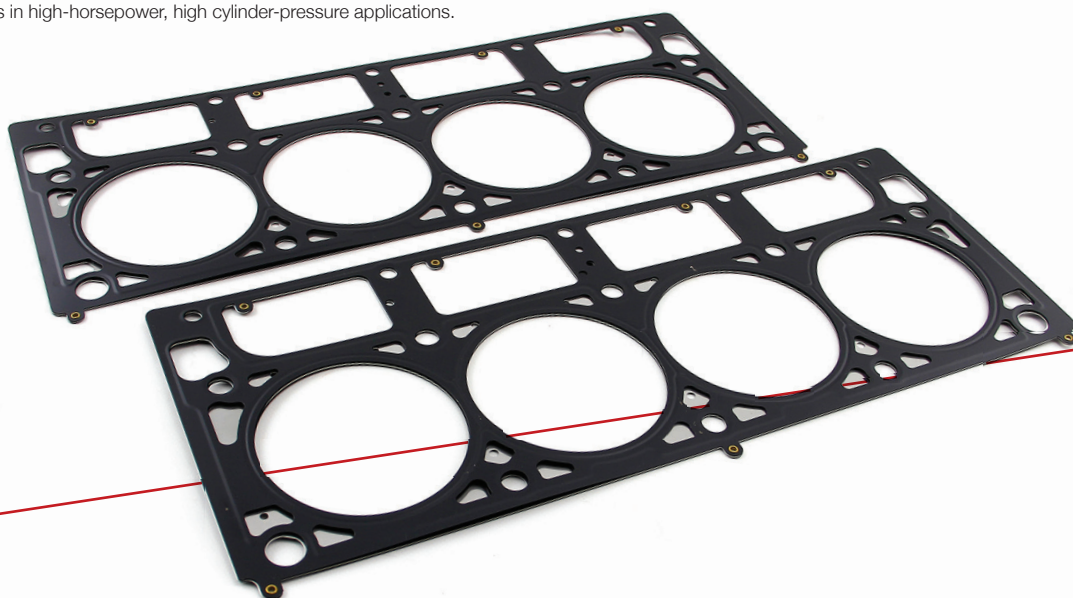
Engine Gasket Sets

Speedmaster™ offers gaskets for all of the popular applications. From valve covers and carburettor base gaskets to full engine gasket sets. These Speedmaster™ gasket kit sets include premium-quality head gaskets, intake gaskets, exhaust gaskets, valve cover gaskets, oil pan gaskets, valve stem seals, and all accessory gaskets--everything that you need for a complete engine rebuild, all in one affordable set. If it has to seal right the first time Speedmaster™ has what you need.



Head Gaskets

Speedmaster™ head gaskets are proven to handle big power any way you can make it. Speedmaster™ gaskets are designed to maintain contact pressure between the cylinder head and block during the dynamics of engine operation. Speedmaster™ MLS gaskets use a high pressure steel laminate design known for standing up against the extremely high shearing forces that occur between an aluminum head and iron block. It's internal embossments expand heat to create a better seal when the engine is seeing extremely high combustion pressures and temperatures as is the case with heavy nitrous and turbocharged applications. MLS (Multi Layer Steel) is ideal for both aluminum heads to cast iron blocks and aluminum heads to aluminum blocks. These gaskets offer better torque retention, less distortion, and better sealing than conventional or composite head gaskets in high-horsepower, high cylinder-pressure applications.



Intake Manifold Gaskets

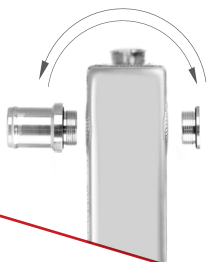
Most Speedmaster™ intake manifold gaskets have Printoseal construction, which puts beads of special elastomers around the ports for extra sealing power. They also feature a non-metallic, rubber-fiber base material that resists gasoline and alcohol, while allowing engine builders to precision-trim around the intake ports.



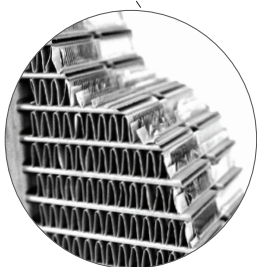
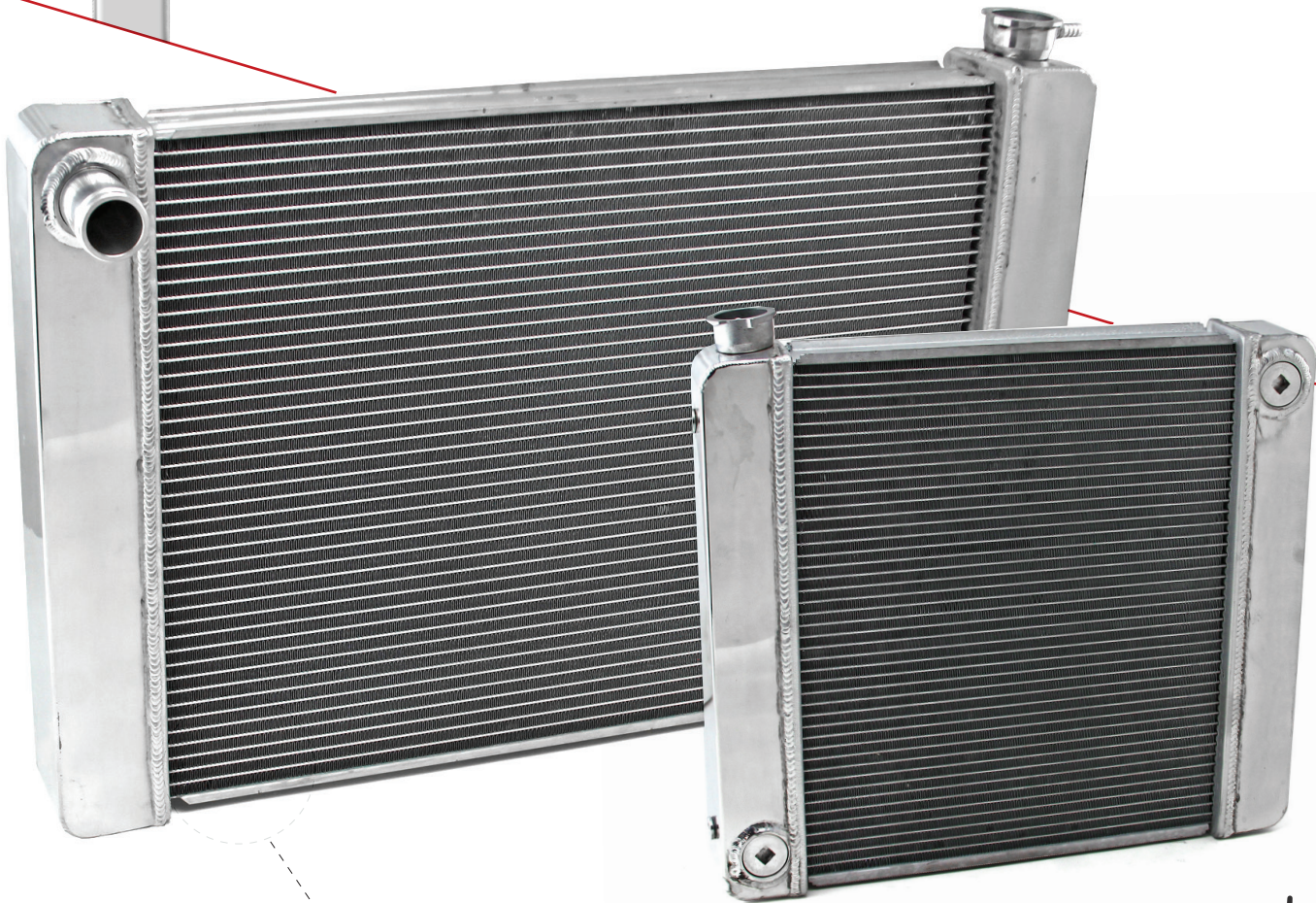
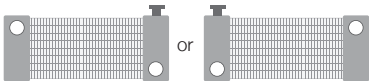
Radiators

Extreme Cooling

When time is crucial and weight means everything, let a Speedmaster™ aluminum Competition series radiator give your street, strip or high-powered show car the advantage. Manufactured with lightweight aluminum technology, these radiators are designed in a wide variety of racing sizes for your cooling needs. The Speedmaster™ design incorporates open-fin spacing that promotes airflow through the radiator to enhance the cooling and help eliminate clogging.



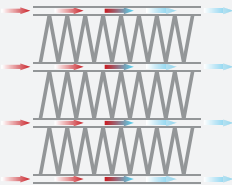
Universal
Unplug-Rotate-Plug



Quick Tip



The coolant flows from the inlet to the outlet through many tubes mounted in a parallel arrangement. The fins conduct the heat from the tubes and transfer it to the air flowing through the radiator.



Water Necks

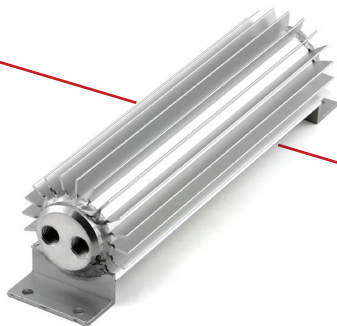
These aluminum water necks from Speedmaster™ add a touch of class to your cooling system. O-ring seal and bolts are included.



Fluid Coolers Transmission Oil

Dual Outlet Heat sink

The key to a cooler and longer-lasting transmission is simple Speedmaster™ dual transmission coolers! These dual transmission coolers provide a sleek, compact alternative to bulky transmission coolers. They feature aluminum construction and provide great cooling rate due to the double outlet design. This allows for an efficient fluid transfer, thus reducing the transmission temperatures for optimum performance. Features 1/4 in. NPT inlet and outlet Female threads. This cooler includes two 1/4 in. NPT x 3/8 in. hose barb fittings.



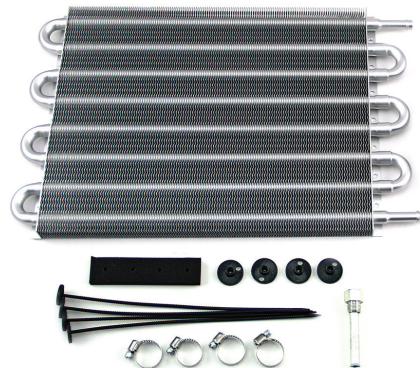
Single Outlet Heat sink

The internal and external cooling fins in these Speedmaster™ heat sink transmission coolers provide maximum cooling efficiency without relying on direct airflow. Their compact diameter means that they can be mounted in a variety of locations, such as on the frame rail next to the transmission, directly under the radiator, under the floorboards, etc. Their rugged aluminum extrusion features welded ends for long service life, in even the toughest environments. Features 3/8 in. NPT inlet and outlet Female threads. Includes 3/8 in. hose barb fittings.



Flat Tube & Fin

Speedmaster™ transmission oil coolers feature a new tubular design that improves heat transfer dramatically over other designs. It can drop your transmission fluid temperature 20 degrees, and that can double the life of your automatic transmission. You'll get longer life and more consistent shifts even while doing heavy-duty towing. All necessary fittings come included with the kit. Features 3/8 in. hose barb inlet and outlet attachment.



Fluid Coolers with Fan

Speedmaster™ remote fluid coolers combine a high-capacity oil-cooler core with a 10-inch electric fan for maximum cooling in any environment. This superior combination will give you the peace of mind knowing that your fluids will be at their prime operating temperatures. These coolers feature high flow tubes and aluminum dissipating fins with plastic edge-guard protectors, all with a durable black powdercoat finish.

Each fan is solidly mounted to the cooler core with clear-anodized billet-aluminum brackets to ensure a stable attachment. You can make these coolers even better with the fan thermostats and installation kits that are sold separately.



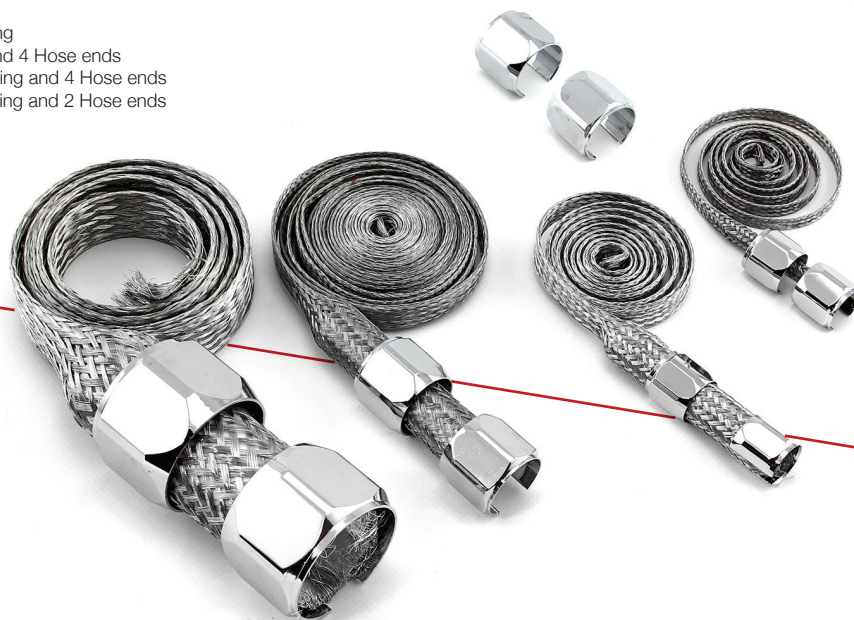
Hose & Line & Tubing

Hose Sleeving Kits

Speedmaster™ hose sleeving kits are the answer to protecting your engine hoses for added reliability. They provide an affordable alternative to stainless steel and will give your car that authentic race look. Speedmaster hose sleeving kits are designed for easy slip-on installation. They contain enough braided metal sleeving in various sizes to cover the upper radiator hose, heater hoses, and fuel and vacuum hoses. They come complete with an anodized aluminum hose clamp cover in your choice of red, blue, black or chrome for a professional, finished appearance.

The kit includes:

- 3 ft. of vacuum line sleeving
- 4 ft. of fuel line sleeving and 4 Hose ends
- 4 ft. of radiator hose sleeving and 4 Hose ends
- 12 ft. of heater hose sleeving and 2 Hose ends



Hoses, Radiator

Make cooling your car an easier task by using Speedmaster™ universal flexible radiator hose kits. These stainless steel universal flexible radiator hose kits are offered in several size options, making them perfect for custom applications. Speedmaster™ universal flexible radiator hose kits are strong, stylish replacements for weak factory rubber hoses. Speedmaster stainless steel flexible hoses bend and cut easily, are non-corrosive, and dissipate heat better than rubber hoses. Stainless steel clamps and reducer inserts are included.



Electrical Water Pumps

More Coolant Flow



Speedmaster™ electric water pumps eliminate unnecessary weight and impeller drag experienced at high RPM. These durable but light weight aluminum pumps push up to 35 gallons of water per minute of coolant circulation. Speedmaster™ electric water pumps give you the flow that you need, without costing you horsepower. CNC-machined from T-6 aluminum, these lightweight pumps have a direct-drive 12 V motor, spinning a redesigned impeller on a stainless steel shaft. Speedmaster™ pumps draw just 5.8 amps. Because they don't run off of your crank, they won't eat up race-winning horsepower. Other features include availability in several colors, superior RFI suppression, and a removable center section for cam adjustment or replacement.

Flow Rate @ 12 Volts (gpm)	35 GPM
Hose Adapter Thread Size	1 in. NPT
Inlet Hose Size	1 3/4 in.
Inlet Hose Attachment	Nipple
Overall Depth (in)	≈ 6.500 in.
Amp Draw	5.80 amps
Weight	≈ 5.500 lbs.



Available in:

Standard
Black / Chrome

Slimline
Chrome / Polished



Engine Components

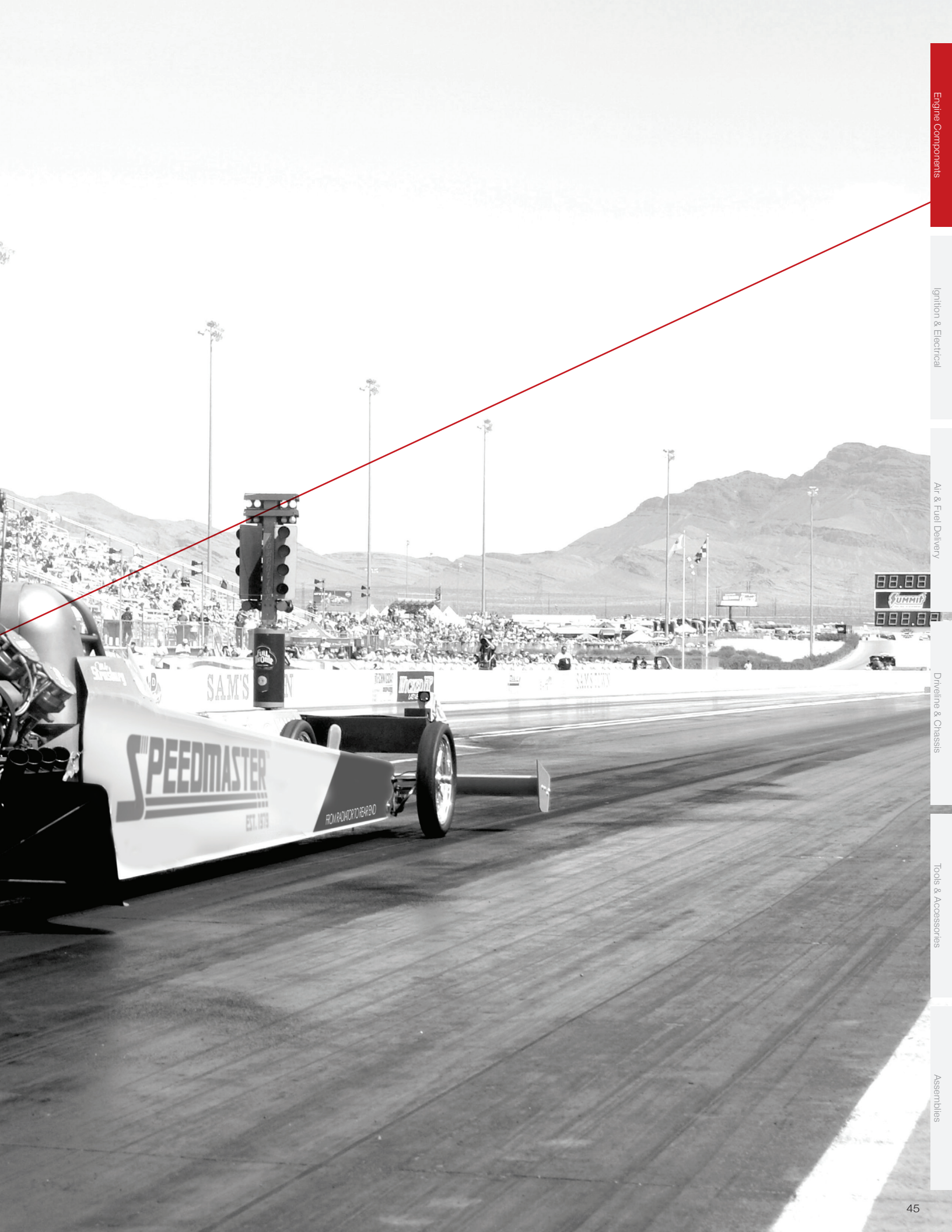
Ignition & Electrical

Air & Fuel Delivery

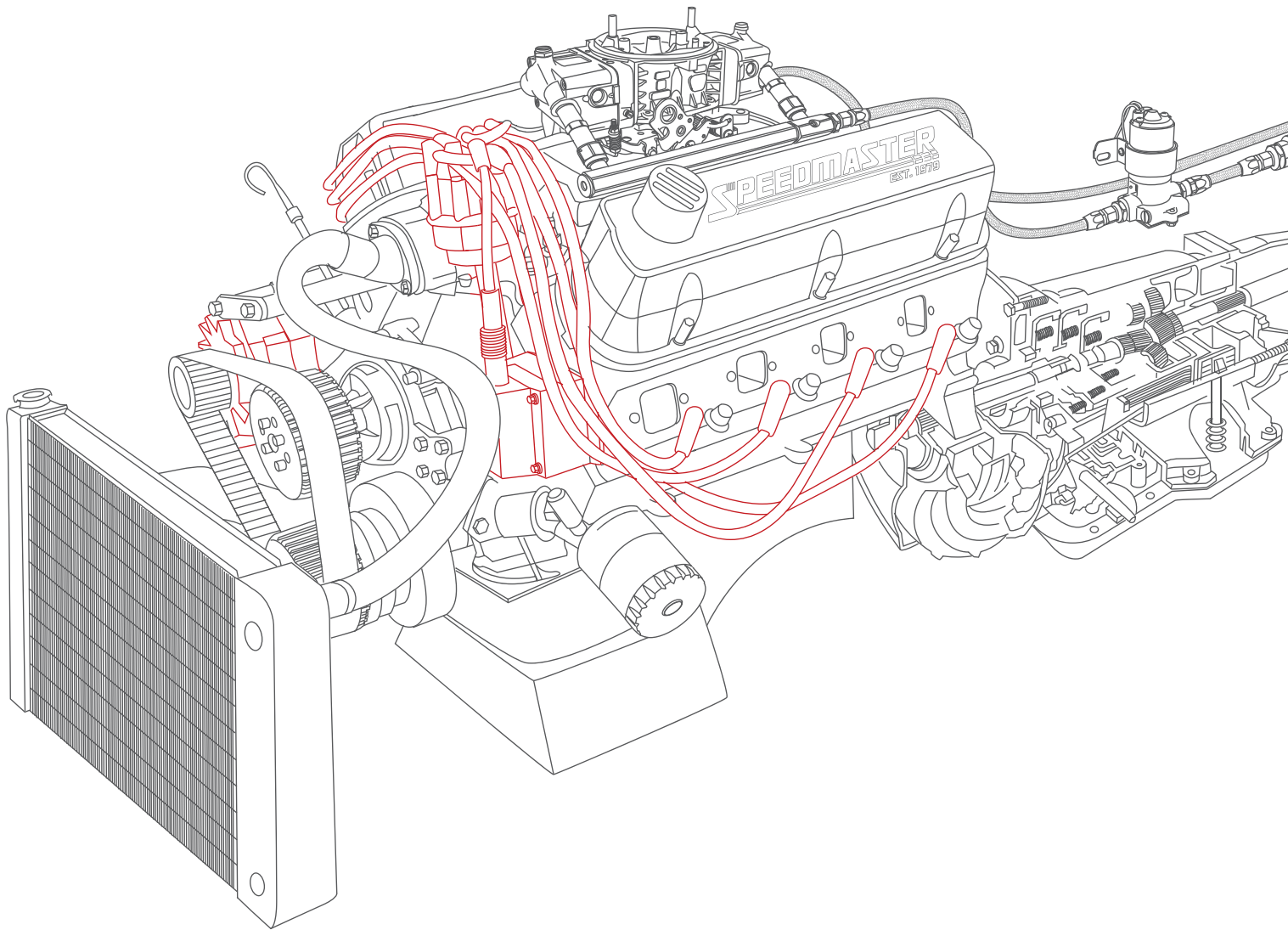
Driveline & Chassis

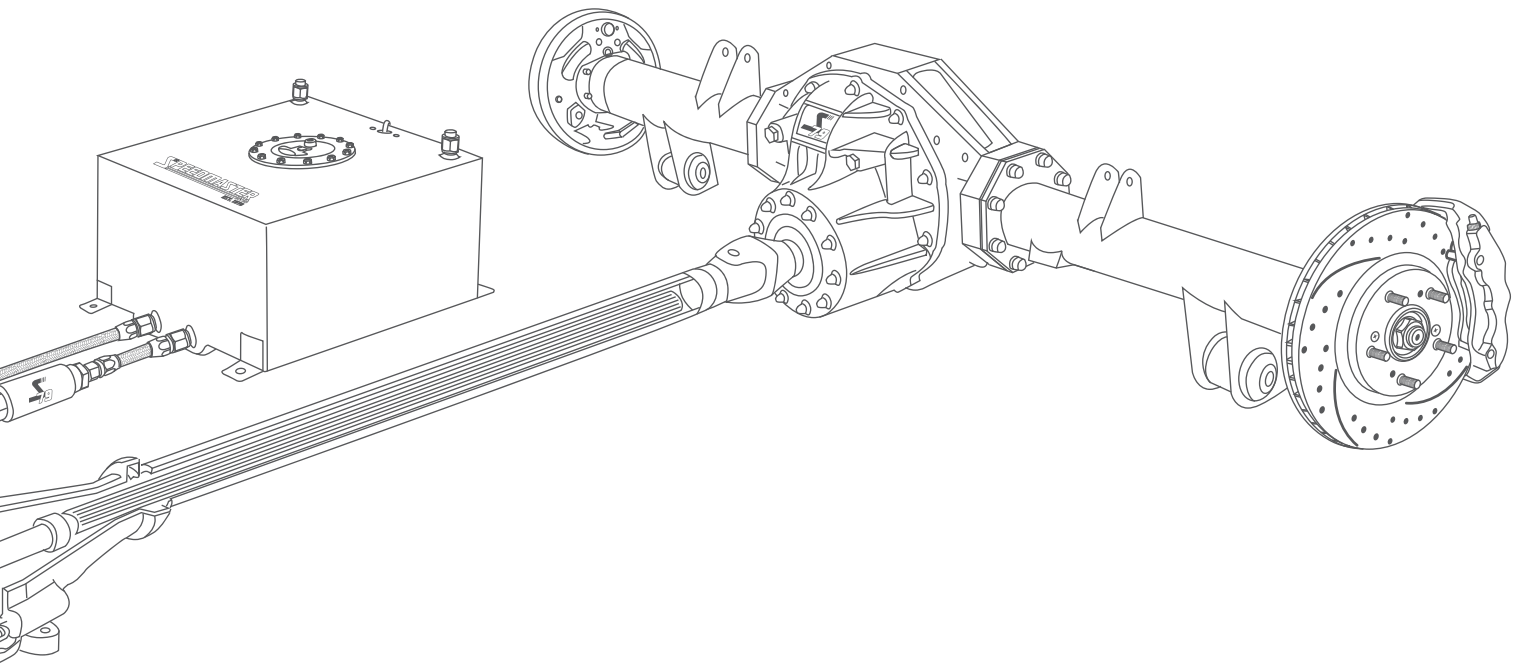
Tools & Accessories

Assemblies



Ignition & Electrical





Ignition & Electrical (IE) "Engine Related Electronic Parts Department", our electronics range of products are the finest components you can install on your car whether it's a daily driver, dirt tracker, 4-wheel drive or Big Foot. The IE team at Speedmaster™ designs, develops, tests and manufactures the entire line of Speedmaster™ Electronic products including Ignition Controls, Coils, Timing Accessories and Spark Plug Wires and Accessories.



Distributors

Fire it Up!

The distributor handles several jobs. Its first job is to distribute the high voltage from the coil to the correct cylinder. This is done by the cap and rotor. The coil is connected to the rotor, which spins inside the cap. The rotor spins past a series of contacts, one contact per cylinder. As the tip of the rotor passes each contact, a high-voltage pulse comes from the coil. The pulse arcs across the small gap between the rotor and the contact (they don't actually touch) and then continues down the spark-plug wire to the spark plug on the appropriate cylinder.



All-in-One

Speedmaster™ All-in-One HEI Distributors line is the favorite for muscle cars, street rods and even circle track racers. The integrated coil keeps underhood wiring clean, and for race cars, the idea of running one wire to the distributor keeps things simple. When it comes to performance, the Speedmaster™ All-in-One series answers the need for a strong, accurate and high performance HEI where the stock HEI falls short.

Ignition System

Speedmaster™ El Rayo distributors are a completely self contained high performance, high output ignition ideal for your hot rod! The "spark plug" type terminals offer secure wire attachment. Under the brass terminals of the cap and rotor is an extremely accurate magnetic pickup that never requires adjustment along with an easy to adjust mechanical advance mechanism.



All-in-One HEI

Speedmaster™ HEI Distributors are a favorite for muscle cars, street rods and even circle track racers. The integrated coil keeps underhood wiring clean, and for race cars, the idea of running one wire to the distributor keeps things simple. When it comes to performance, this HEI answers the need for a strong, accurate and high performance HEI where the stock HEI falls short. Tig welded on top of the distributor shaft is an adjustable centrifugal advance assembly. The Vacuum advance canister, improves economy while cruising, for those concerned. All of this is assembled around a precision and great looking CNC-machined housing. The distributor features a 65,000 V coil and is supplied with thunder cap, rotor, coil cover and heavy duty gear so it is ready to install in your engine! Inside the distributors, the ignition module and coil work together to produce a stout spark to light the fuel mixture for great performance. The high voltage is transferred through a specially designed rotor to the brass terminals of the distributor cap and out to the plugs.

The Speedmaster™ HEI distributors prove that quality does not have to be expensive! Thunder module and coil is designed to produce increased energy through to 9,000 rpm!



Aluminum body



Trigger style



Advance springs



Advance canister



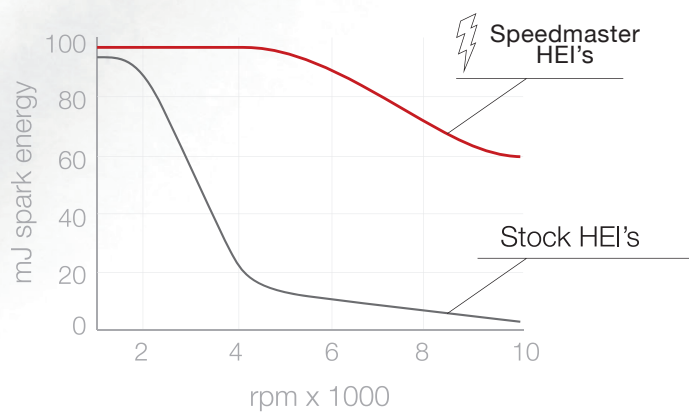
Module & Coil

Features:

- Assembled entirely from 100% NEW components (unlike some of our competitors!)
- CNC machined aluminum body
- Adjustable vacuum advance
- Premium cap with brass terminals
- Low saturation ignition module
- High output coil
- Reliable operation through 9000 RPM
- Billet 4340 steel gear for use on cast cams*
- Large diameter cap (for better spark alignment)



HEI module and coil are designed to produce increased energy through to **9,000 rpm!**



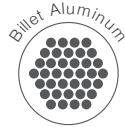
Ignition System

El Rayo



Speedmaster™
Patent Design

Speedmaster El Rayo ignition system are designed for the enthusiast that is serious about performance but needs the small cap size due to space considerations when installed. They are precision CNC machined from billet 6061-T6 aluminum to exacting tolerances. The "spark plug" type terminals offer secure wire attachment. Under the brass terminals of the cap and rotor is an extremely accurate magnetic pickup that never requires adjustment along with an easy to adjust mechanical advance mechanism. The heavy duty 1/2" steel shaft is guided in a long sintered bushing as well as a sealed ball bearing at the top to precisely locate the reluctor. This combination yields stable timing and spark delivery at any RPM.



Speedmaster El Rayo high output coil features a very efficient design where less loss occurs during the transfer of electricity due to the closed core of the coil. Another benefit is that the coils run extremely cool, even at high racing rpm, thanks to the efficient design and huge laminations.

Features:

- Efficient E-core winding design produces more voltage and current
- 85:1 turns ratio and lower primary resistance produce high voltage output
- Windings are encased in red epoxy and secured with extruded brackets
- Spark plug style terminal and threaded brass primary studs
- Supplied with rubber shock mounts



One allen key that does it all!



Coil Rubber Shock Mounts

Terminals & Extension

Universal Allen Key

Color Coded

Heat Dissipation

Wire Retainer with Guide

Ignition Coils

Caution: High Voltage!

Caution: high voltage! Our line of direct-fit and universal ignition coils delivers the voltage you need for increased performance on the street, track, or trail. Choose from canister, coil pack, E-core, magneto, and in-cap designs built to give your ignition system an added punch! Don't let weak spark derail your vehicle's performance—crank up the juice with a powerful ignition coil from Speedmaster.



High Output Epoxy

The Speedmaster™ high output technology coil produces up to 70% more spark energy than stock coils with outstanding reliability. This unit is recommended for street, strip, circle track and drag racing. Internally the coil also has large gauge wire windings for maximum spark current and voltage with better heat dissipation at high rpm. High voltage arcing is minimized through screw on connectors and a high tension tower. Ideal for use with capacitive discharge (CD) ignition systems and all of Speedmaster™ range of High Output Ignitions.





Spark Plug Wire Sets

10.5mm | Spiral Wound Core

Get more spark from your plugs with a set of Speedmaster™ ignition wires. These 10.5mm wires feature high-temperature 100% pure silicone insulator outer layer! Their spiral-wound copper conductor has extremely low resistance combined with extremely high EMI suppression. In plain terms, these wires deliver the highest possible energy to the spark plugs so that your ignition upgrades reach their full potential, without creating interference for onboard electronics. The wires have a high dielectric strength insulator and heavy glass braid, topped with heavy-duty black silicone jackets and high-temperature black boots to resist damage from heat and abrasion.



Quick Tip



Standard Application Angles:

Engine Make	Distributor Cap End	Spark Plug End
Chevrolet SB	90	90
Chevrolet BB	90	90
Holden	90	Straight
GM LS	45	Straight(LS Specific)
Ford SB Windsor	90	90
Ford Cleveland	90	Straight
Chrysler	90	Straight

Type of Spark Plug Wire Ends



Features

Professional-grade silicone rubber outer jacket shields against chemicals, heat, moisture and gas. Remains flexible in most engine operation conditions.

High-dielectric strength Ethylene Propylene Diene Copolymer Compound (EPDM) eliminates voltage leaks and radio frequency interference (RFI).

The ferromagnetic compound absorbs the interferences 4 + 5. Perfect suppression all along the cable.

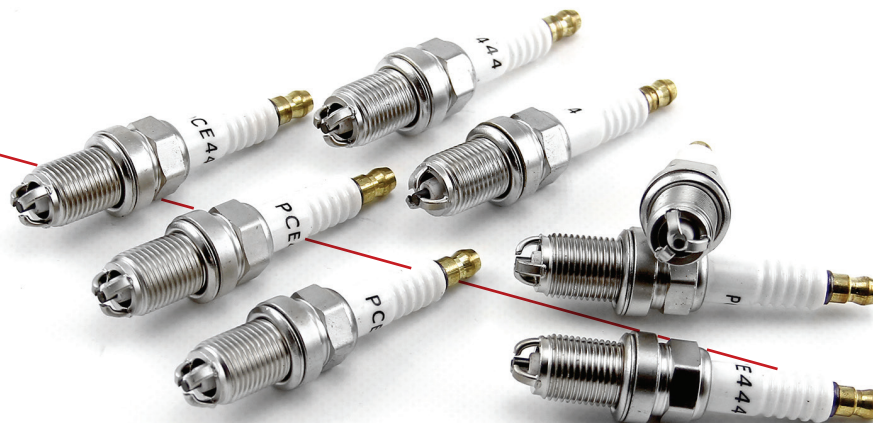
Woven fiberglass reinforced braid allows for superior pull strength between extrusions.

A synthetic string supports the ferromagnetic compound.

Stainless steel conductor spirally wound around the ferromagnetic compound, with 50 non-touching spirals per centimeter, to ensure high tension current conduction and canalizes the magnetic field induced in the core of the cable. Greater ignition current and longer spark duration.

Spark Plugs

Speedmaster™ copper core spark plugs feature a cold-formed steel shell with precision-rolled threads, a full copper core electrode to provide better performance, triple-ground electrode for more efficient combustion and a one-piece terminal post to add strength. Speedmaster™ copper core spark plugs use a copper-glass seal that bonds the insulator and terminal post center electrode together. This ensures full voltage at the spark gap and a 100 percent leak-proof, gas-tight seal. Keep your engine running smoothly and reliably with Speedmaster™ copper core spark plugs.



Starters

Maximum Cranking Power



High Torque gear reduction Starter Motors turn the engine over faster than any stock starters. Producing between 30 - 40% more cranking power Speedmaster™ starter motors also feature an offset design resulting in more clearance between the oil pan and the starter. Start your engines with starters that deliver maximum cranking power! Our lineup includes standard full-size starters for street machines, high-torque and high-compression starters for race engines, and compact mini starters for tight clearances.

Speedmaster™ Starter Benefits

- Maximum cranking torque under all conditions
- Environmentally designed to start in cold and hot weather conditions
- High-voltage tested armature and field coils to ensure reliable performance

Up to **40%** More cranking power



Compact

Speedmaster™ OEM-Style starters are manufactured from high-quality materials that exceed the factory specifications. They are designed to fit in the factory location and install easily without any modifications. They provide the torque necessary in several applications.



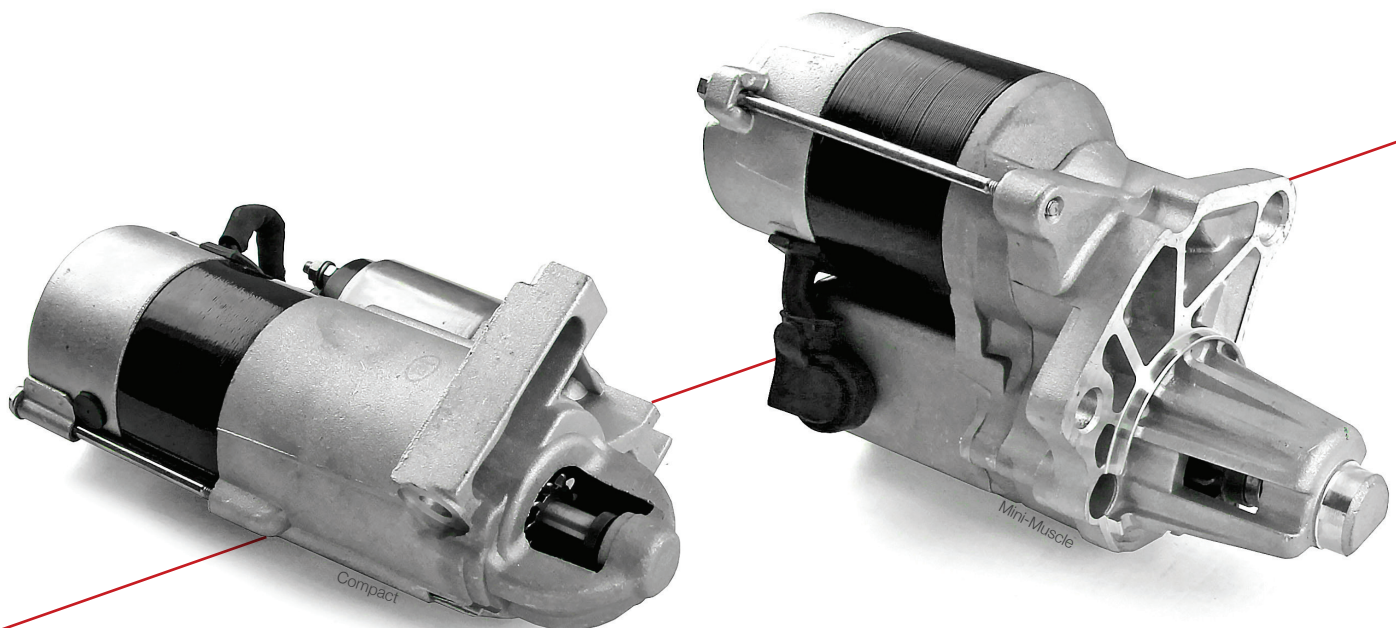
Mini-Muscle

Speedmaster™ mini-muscle small size allows you more clearance and offers high torque 3.75 to 1 gear reduction design that spins engines faster while requiring less amps. Features larger field windings, stronger armature and bigger brushes. These super mini-muscle are 2.5 horsepower motors which deliver about 40 percent more torque.



Thunder

Speedmaster™ Thunder Starters are designed to crank over the highest compression engines on a hot day in Death Valley. Not that too many race cars are sitting in Death Valley, but it's good to know that you have the oomph to make it happen. They feature all new components beginning with a 4.0 horsepower motor. This power is used to crank over the reduced 4.4:1 gear set to deliver great torque to the engine's ring gear to get the engine turning.

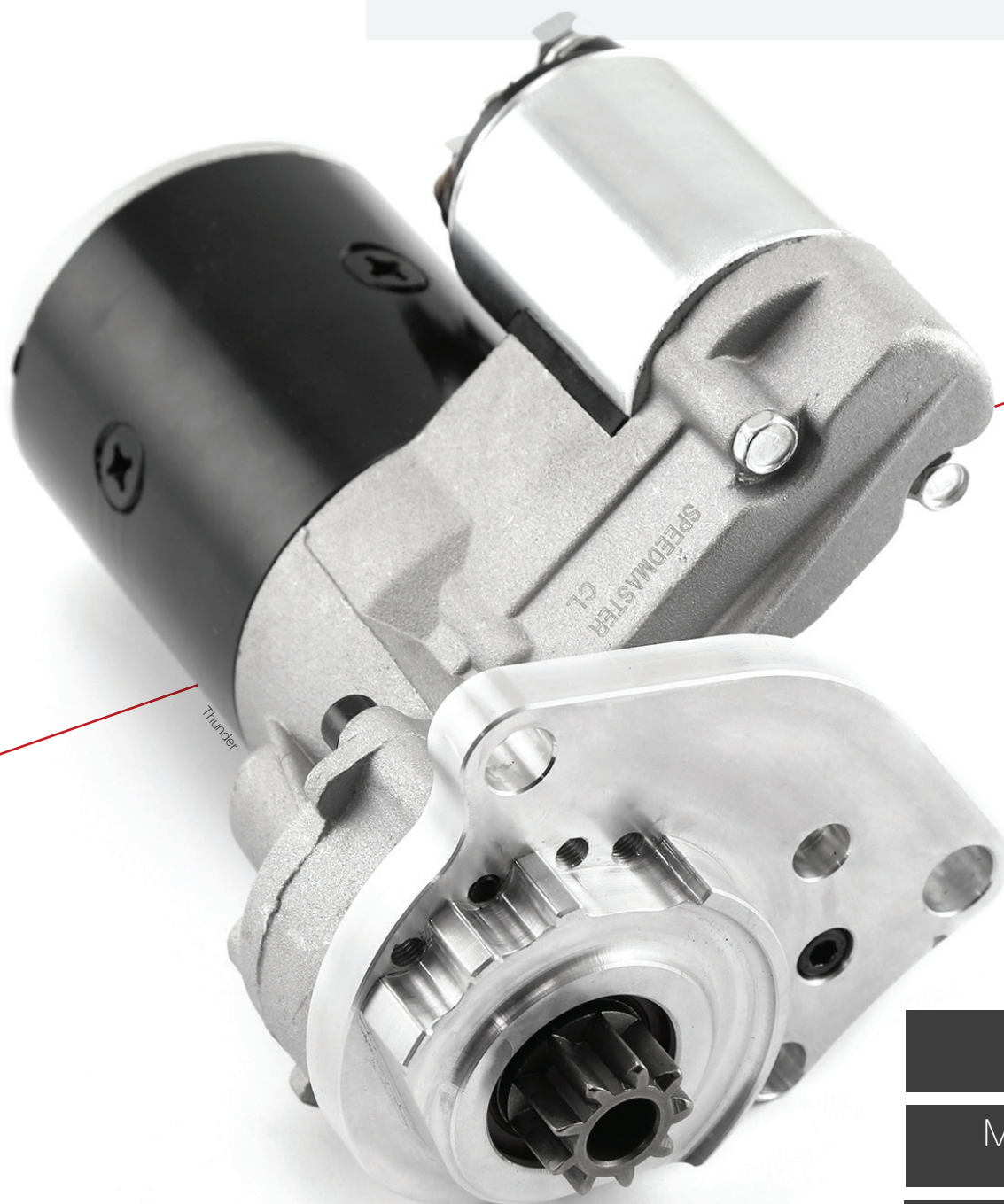
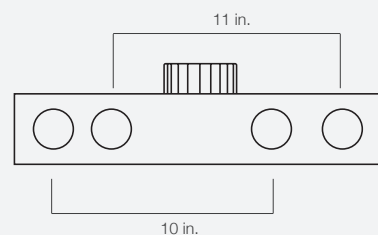


Quick Tip



Double Bolt Pattern

Most Chevrolet starters are offered with double bolt pattern to fit 10 in. (153-tooth) & 11 in. (168-tooth).



Available in:

Compact
OEM-Style

Mini-Muscle
2.5 HP

Thunder
4.0 HP

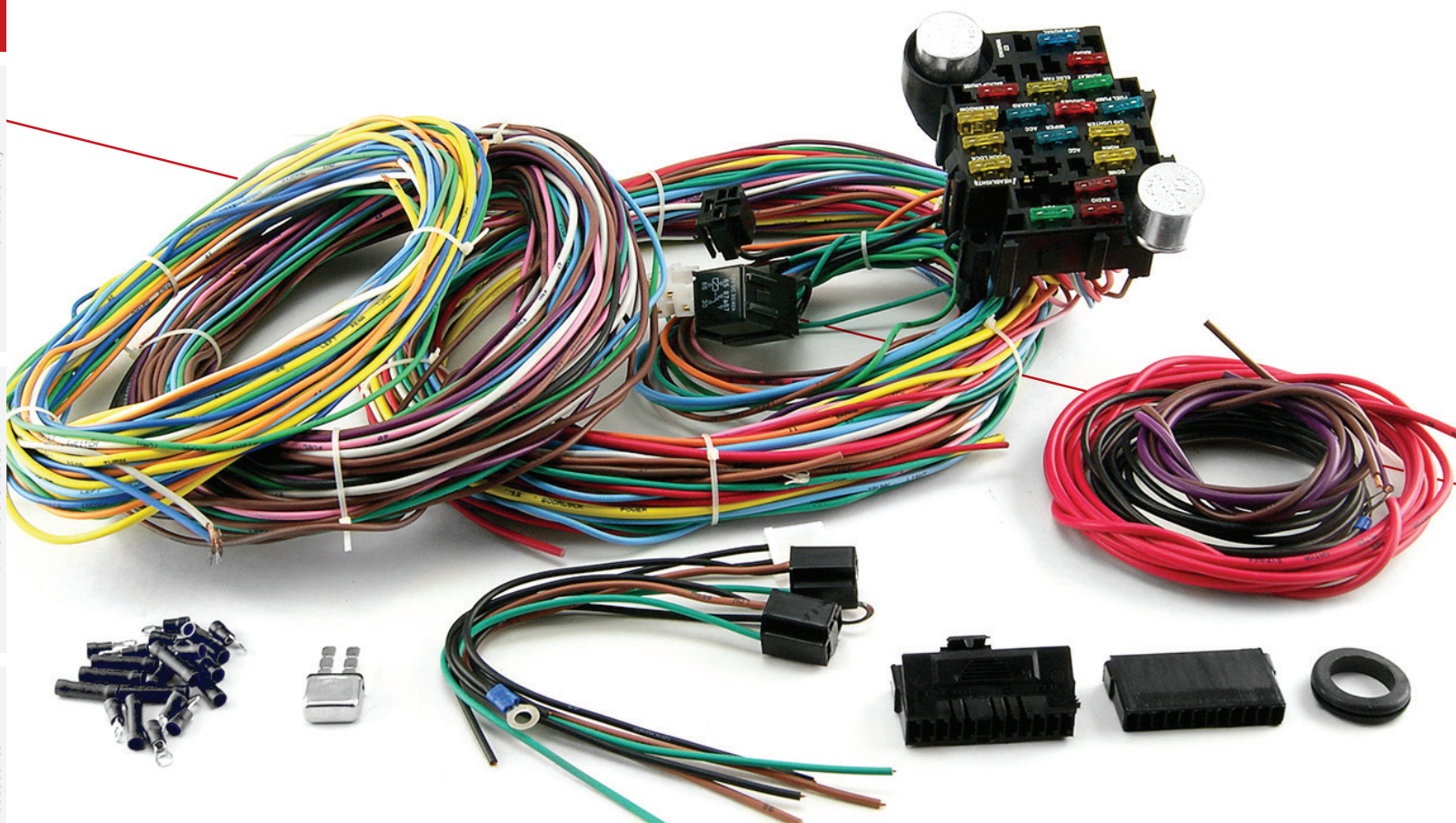
Wiring Harnesses

Easy Installation - Prewired

Speedmaster™ Universal Automotive Harnesses can be used in just about any vehicle where basic or more wiring is needed. Ample wire lengths make this kit especially suited for everything including trucks with long beds and extra cabs. Applications available in 20 and 22 circuit harnesses. Also available for GM keyed steering columns.

20 and 22 circuit harness kits includes air conditioning, heat, brake lights, coil, horn, electric fan, emergency flashers, dash instruments, headlights, radio (constant and ignition hot), turn signals, wipers, dome light, tail lights, third brake light, charging and starting.

Additionally the 22 circuit harnesses include power door locks, power windows, accessory plug, electric fuel pump, backup lights cruise control, electric choke, and power antenna.



Available in:

20 Circuit

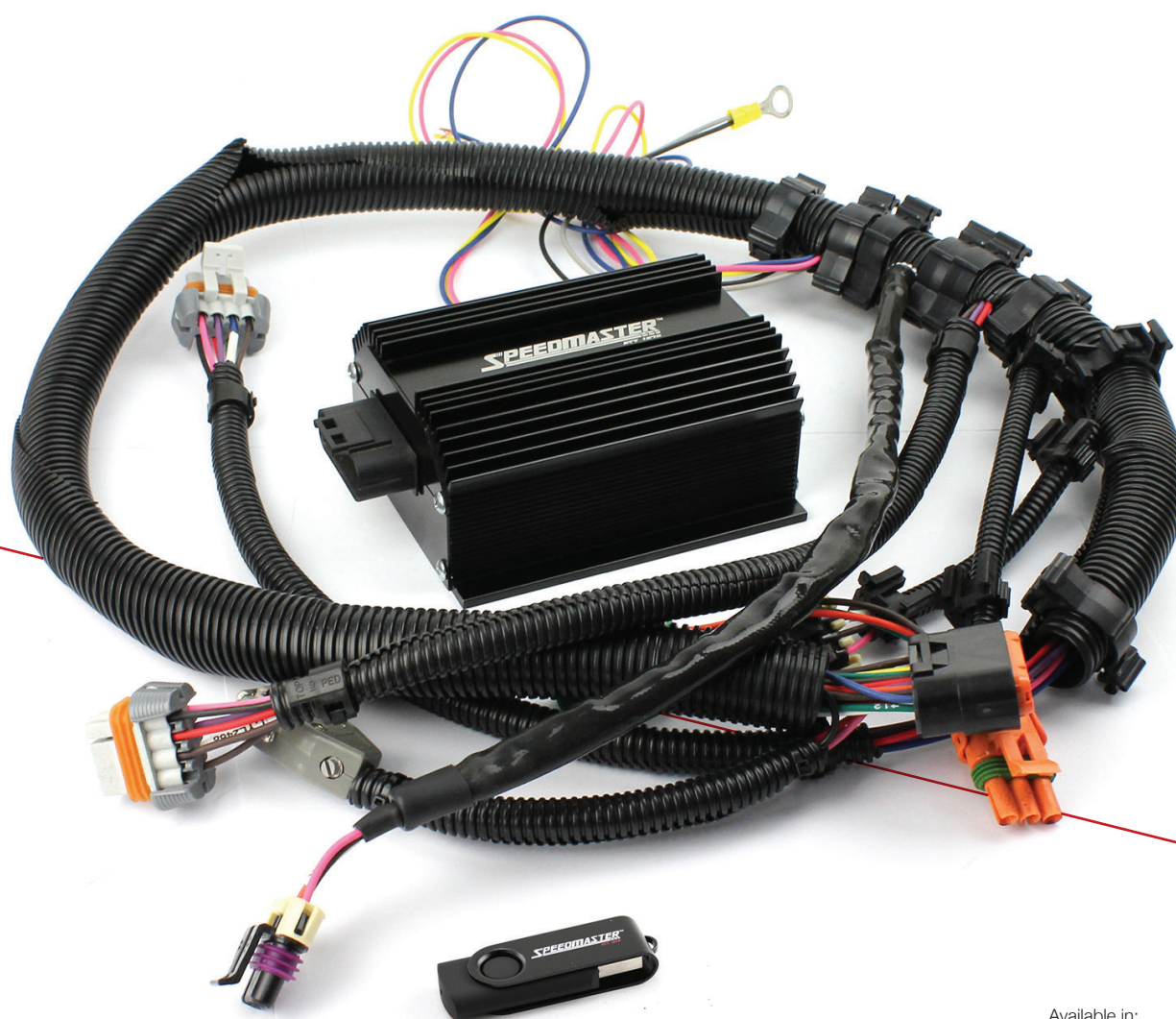
22 Circuit

Timing Controllers

EFI To Carb Conversion

The Speedmaster Ignition Controllers can now be installed on EFI or carburetor equipped engines. While it may seem blasphemous to some, putting a carburetor on a GM Gen-III V-8 is a great option for those wanting the advantages of the aluminum small block without the headaches of wiring a modern EFI system. The controllers allow you to map a timing advance curve with Speedmaster software. The Speedmaster Ignition Controller is available for LS1/LS6 type engines with a 24-tooth wheel, which can be identified by its black crank sensor connector and LS2/LS7 with a 58-tooth wheel, which can be easily recognized by its gray crank sensor connector. Both of these compact ignition controllers fit with matching factory connectors for a direct installation. Only a handful of connections are required; the coils, crank sensor, MAP sensor and the cam sensor. You'll have your carb'd LSX running in no time!

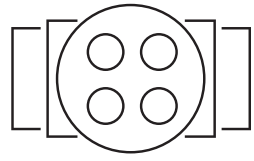
NOTE: SOFTWARE will be provided on USB that also includes INSTRUCTIONS and Full Speedmaster Catalog.



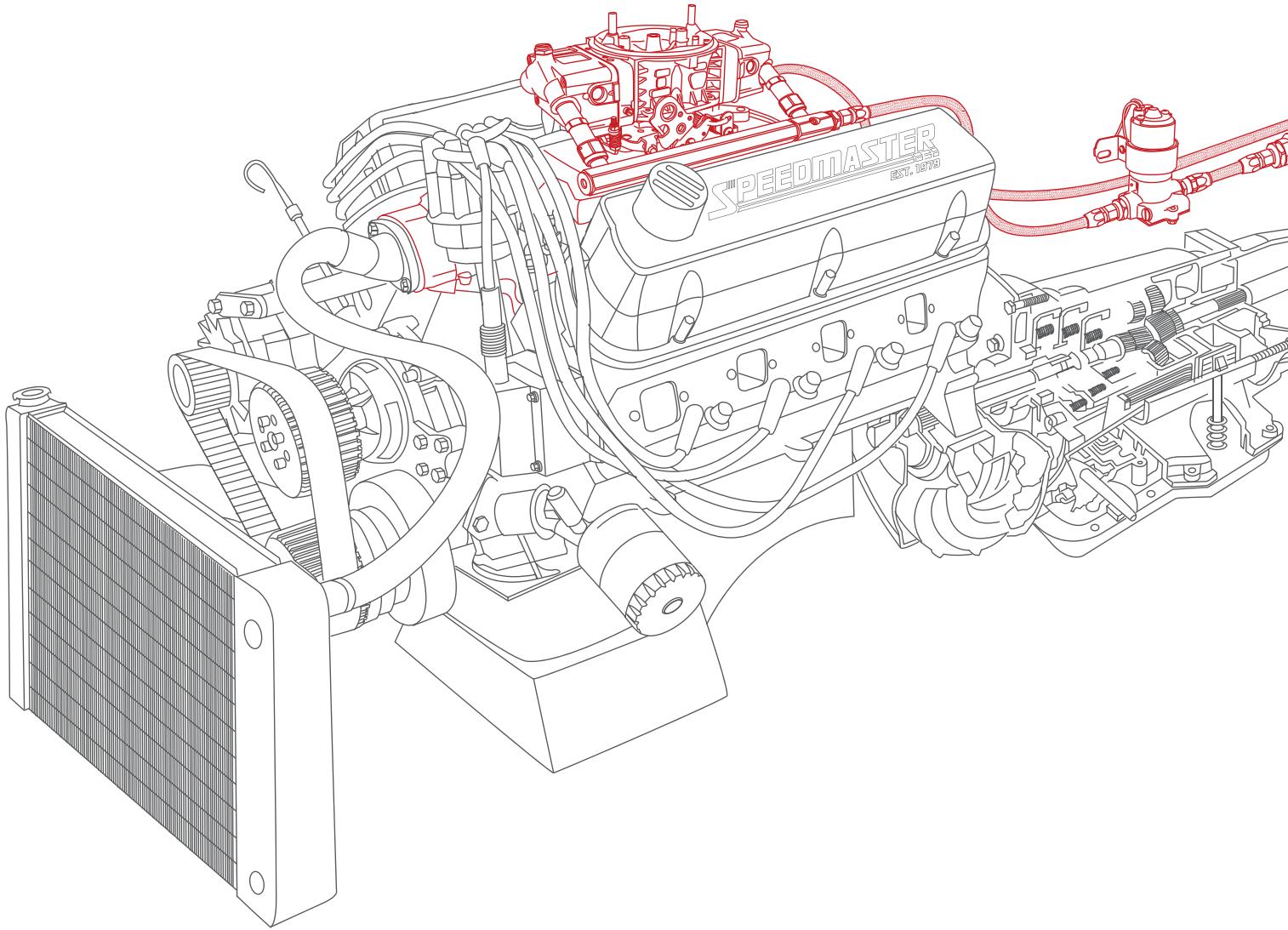
Available in:

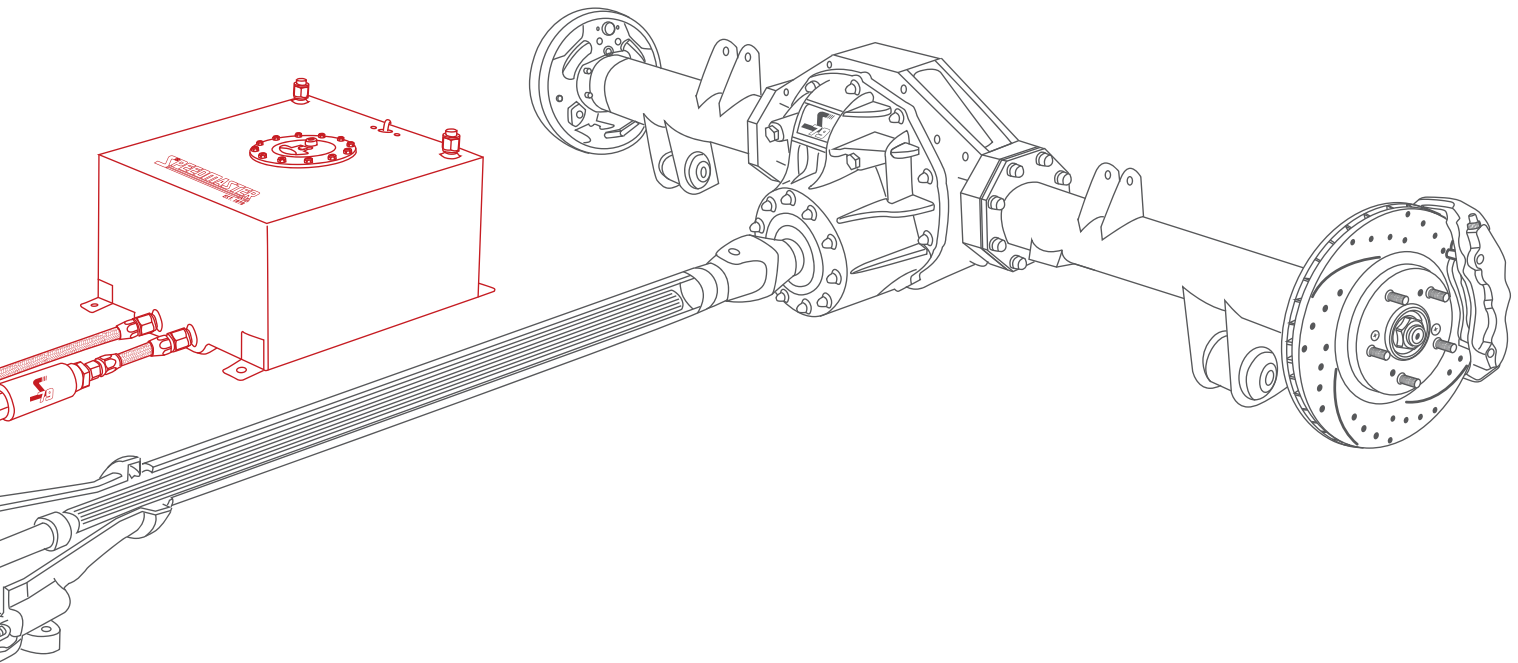
GM LS2 LS7
58-Tooth

GM LS1 LS6
24-Tooth



Air & Fuel Delivery





Air and Fuel Delivery (AFD) "Air & Fuel Delivery Parts and Plumbing Department" is a solutions based when it comes to fuel delivery in your car or boat. At Speedmaster™ we manufacture an extensive range of products, from fittings to carburetors, for vehicle applications with outstanding quality and value for money. In doing so, we cater to a broad range of applications, Such as Drag Racing, Hot Rods, Speedway, Marine, Street Applications & Sports Compact. We aim to offer all our customers a Superior product and the most Competitive price on the market.

Intake Manifolds

Take a Deep Breath

Your car breathes, just like you do. If a car is like your body, then the intake manifold is its lungs. The intake manifold is a series of tubes that distributes the air coming into the engine evenly to each of the cylinders, so that the right amount of air can mix with the right amount of fuel. During the first stroke (called the intake stroke) air from the intake manifold is sucked into each cylinder through a valve or valves. These intake valves are then closed for the other strokes (compression, combustion and exhaust) and reopen when the cycle starts all over again. It's the intake manifold that's responsible for making sure that there's enough air available when the valve opens for each intake stroke and that each cylinder gets the same amount of air as the others.



LowRise Street Legal

IDLE-5500
RPM RANGE

LowRise

The Speedmaster™ LowRise Manifolds are our lowest profile manifold and is also the only one that is street legal on pollution controlled vehicles. It is set up to accept a spread bore carb but comes with an adapter plate that permits the use of square bore carbs. To remain street legal with a square bore carb, you must use one that is also approved as street legal for your application.

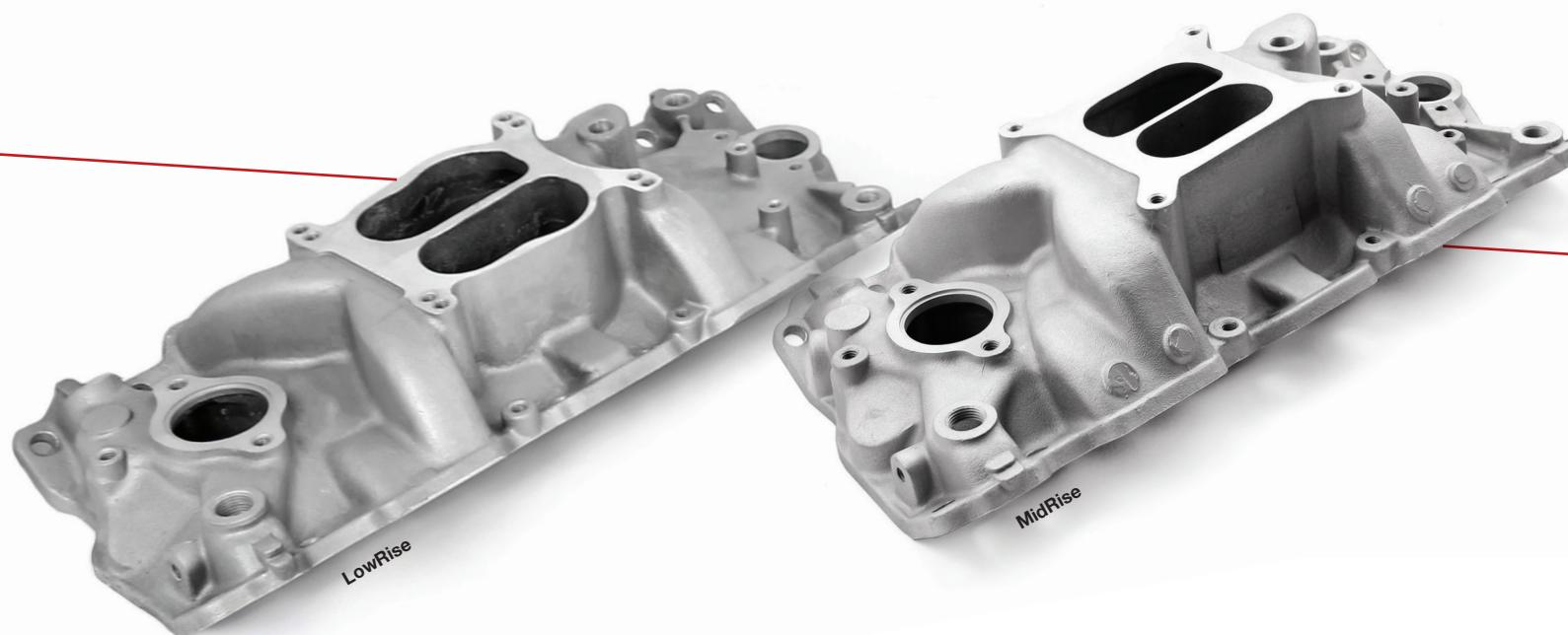
LowRise +Plus

The terrific LowRise +Plus is a step up from the LowRise. Due to its slightly taller height, it can provide more power and torque. It is about 3/8" taller than the LowRise. It also has a rear water crossover, nitrous bosses and a square bore carburetor flange.

MidRise Entry Level

1500-6500
RPM RANGE

The Speedmaster™ MidRise manifolds, along with the similar MidRise Air, are the most powerful dual plane manifolds available. For non-pollution controlled street machines, these are among the very best manifolds you can use. They feature a square bore carburetor flange, nitrous bosses, four corner water ports, and dual distributor hold downs. These manifolds are approximately 5/8" taller than the LowRise series. On medium horsepower engines, dyno tests have shown that this manifold comes very close to producing similar power and torque numbers as our shootout racing intake manifold.



Find the Right Fit

Whether you're shopping for a carbureted or fuel-injection intake manifold, consider the following factors:

- Hood clearance
- Cylinder head port design
- Carburetor/throttle body mounting

Because we know Appearance does Matter

Most Speedmaster™ manifolds are available in four different finishes for the look you want.



Ceramic Coated



Polished



Natural



Black

MidRise Air Air Passage Design

1500-6500
RPM RANGE

The Speedmaster™ MidRise Air design features the identical plenum and runner design as the normal MidRise. The main difference is that there is an open area under the plenum chamber. This feature is sometimes called an air gap design. The air flowing under the plenum provides a cooler charge for the incoming air with less heat transfer from the engine. This cooler air charge provides additional power. The MidRise Air design is very popular. However, if looks is your main interest, along with more power, the MidRise might be a better choice because it is impractical to polish the open area below the plenum on the MidRise Air.

HiRise Significant Power

3000-7500
RPM RANGE

HiRise

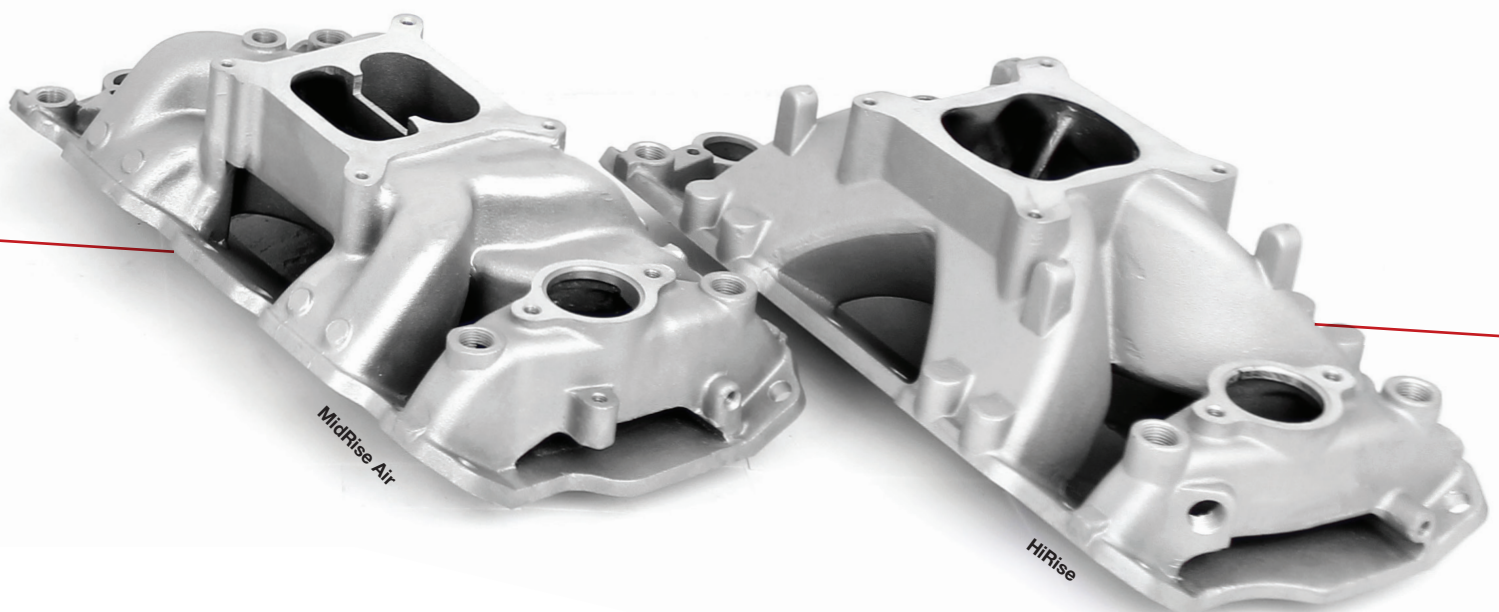
The HiRise intake manifolds are one of Speedmaster™ very most popular for those looking for the utmost in performance for the very least amount of cost.

HiRise +Plus

The HiRise +Plus which is an improved version of the HiRise. Depending upon exact engine configuration, this manifold has shown as much as 20 hp over the HiRise. Note that these increases mainly occur in the 7,500 to 8,000 rpm range.

HiRise RPM

For more performance with large cubic inch engines (420+) on fuel, or any size alcohol engine, the HiRise RPM is the manifold for you. It features a larger plenum and bigger runners than the other HiRise manifolds.



MidRise Air

HiRise

Intake Manifolds

Special Applications

ITB

Individual Throttle Body

The Speedmaster™ Individual throttle body EFI system have all the flash of classic Weber induction but provide higher state of tune and engine performance versatility of EFI. Delivering crisp EFI performance with systems capable of supporting up to 1000 hp. Fuel and air is delivered through precision cast aluminum 50mm IDA style throttle bodies that allow for superior idle characteristics and astounding throttle response while improving emissions and economy through tight air/fuel ratio control.

Fabricated

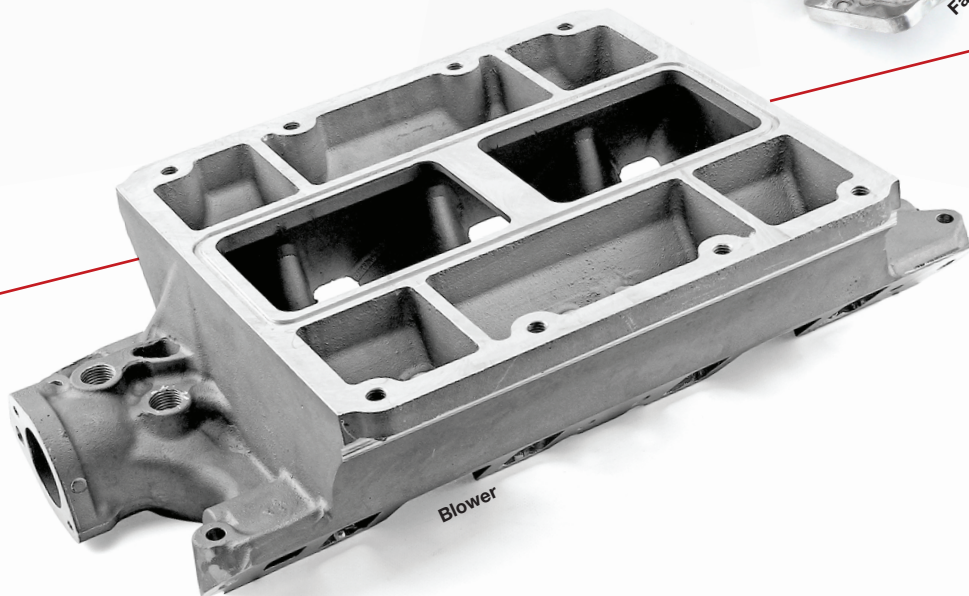
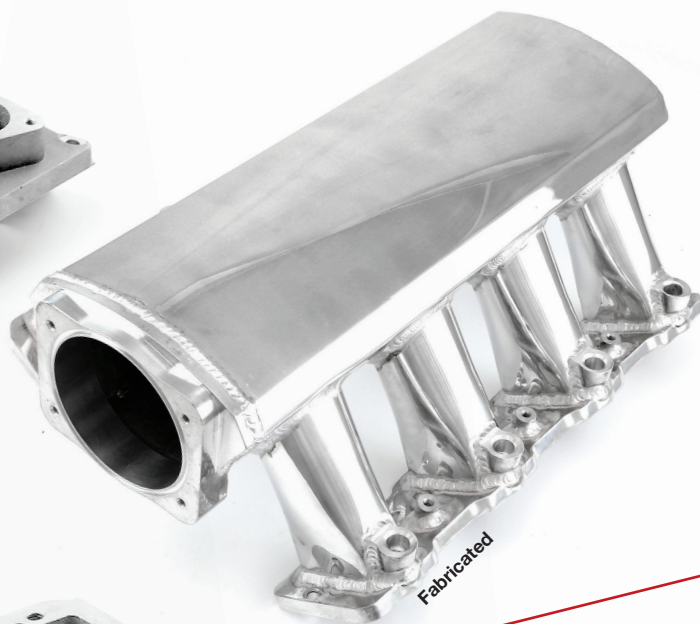
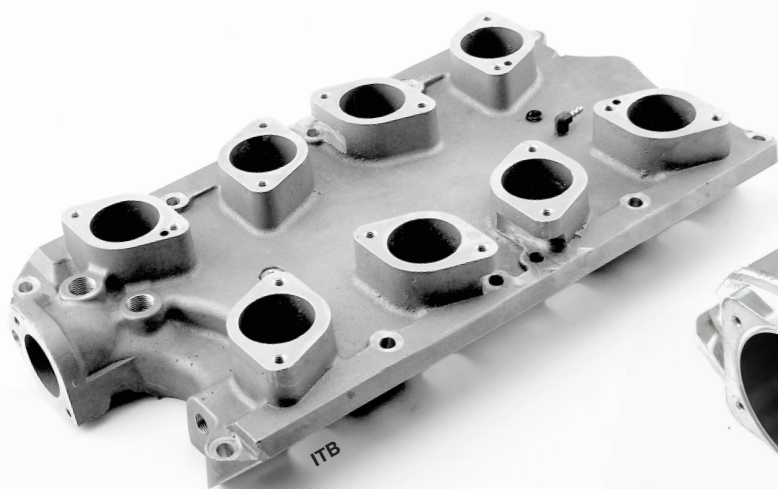
Sheet Metal

Speedmaster™ Fabricated Intake Manifolds are an affordable intake manifold that produces excellent overall performance across a broad RPM range. Their design increases the velocity of airflow, a great option for high horsepower and racing applications. Tig welded and aluminum alloy constructed, Speedmaster manufactured these fabricated intakes for precise fit and long lasting structural integrity.

Blower

6-71/8-71 Supercharger

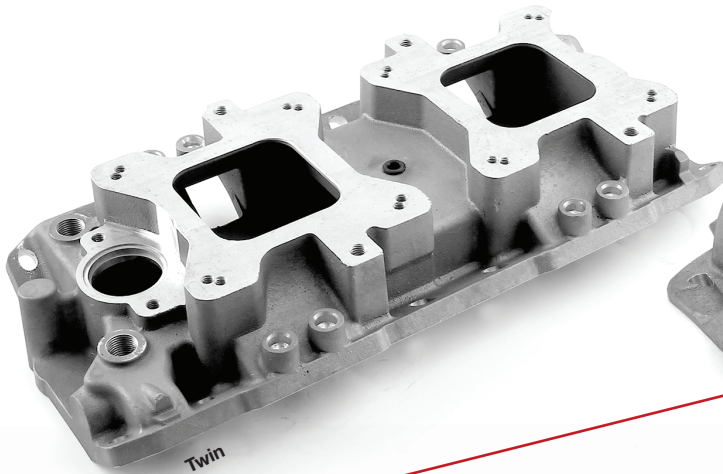
Speedmaster™ 8-71 and 6-71 supercharger manifolds are suitable for competition or street use. They feature heat treated materials, direct 6-71 / 8-71 blower bolt on, will clear distributor (except Hei), raised plenum for better distribution of air, threaded water ports near water outlet.



Twin Podium

1500-6500
RPM RANGE

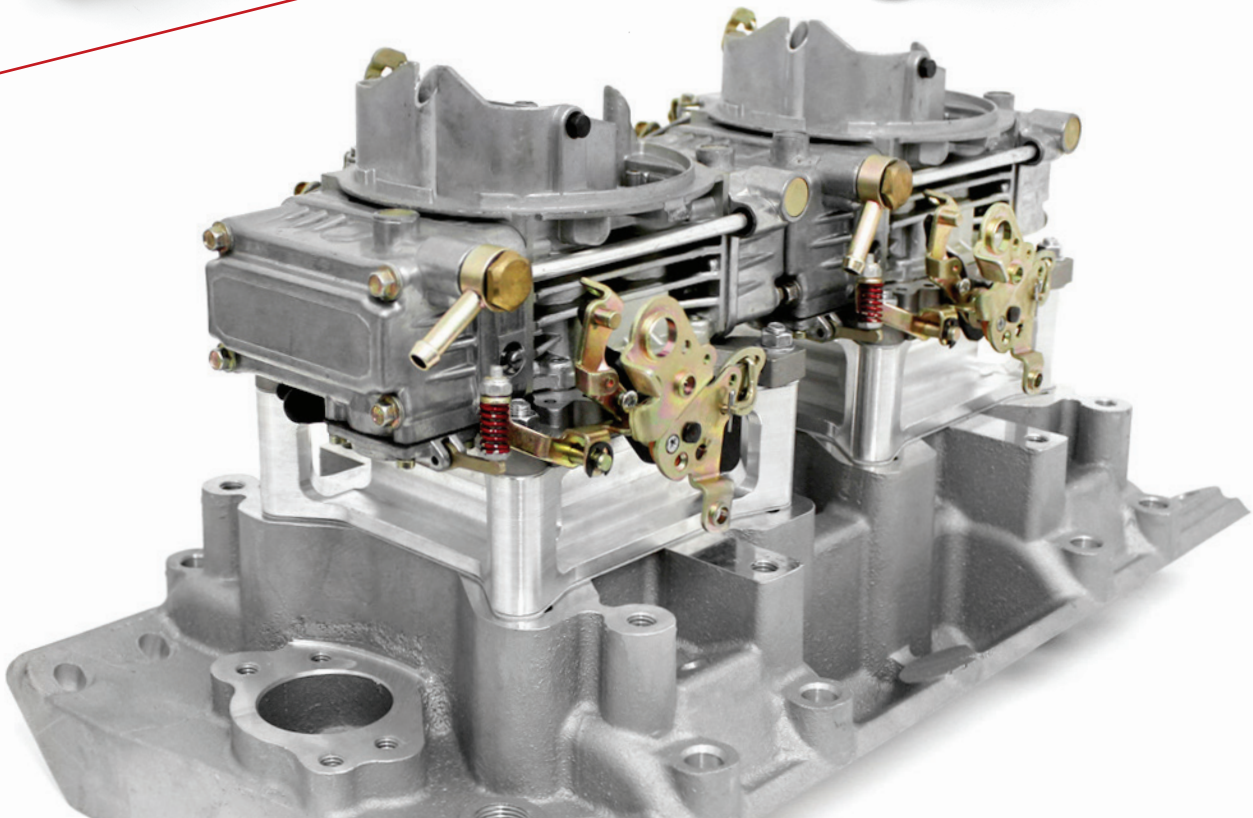
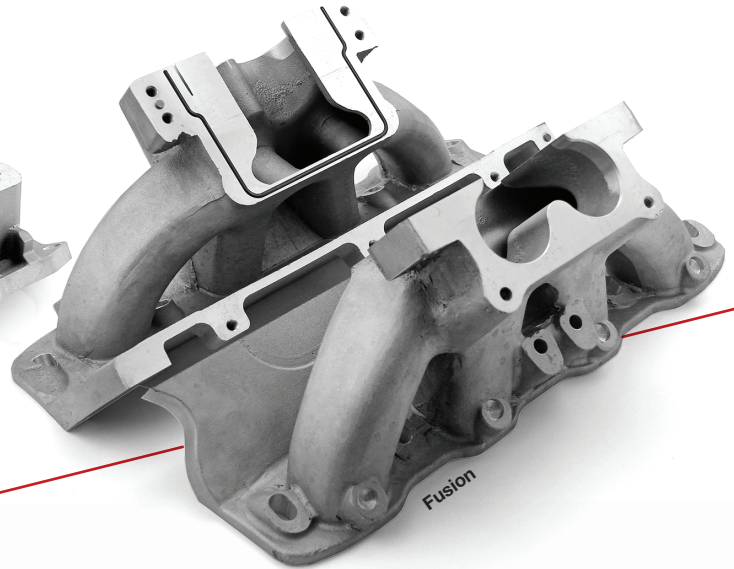
The Speedmaster™ Twin Manifolds combine two four-barrel carburetors to achieve the best balance of drivability, great looks, and outstanding performance for muscle car, street rod and marine applications. Featuring a low profile design and a high flow runner design these manifolds will improve performance from 1500-6500 RPM range.



Fusion Ultra High Flow

3500-7500
RPM RANGE

The unique two piece design is ready to bolt-on or perfect for serious engine builders who hand port or CNC machine the manifolds to suit specific combinations. Designed to work best on engines making up to 800+ hp and provides the highest average torque and horsepower without sacrificing top end performance. Cast with a 4500 Dominator flange it removes the need for spacers or specialised expensive welding and modifications.



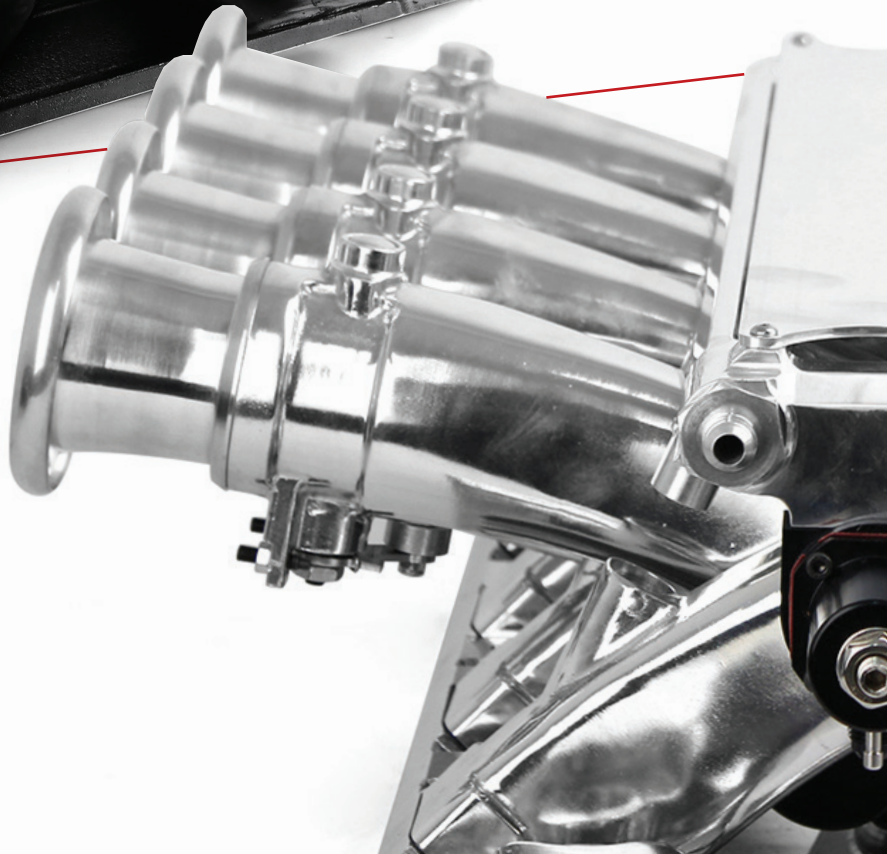


Intake Manifolds

Higher State of Tune

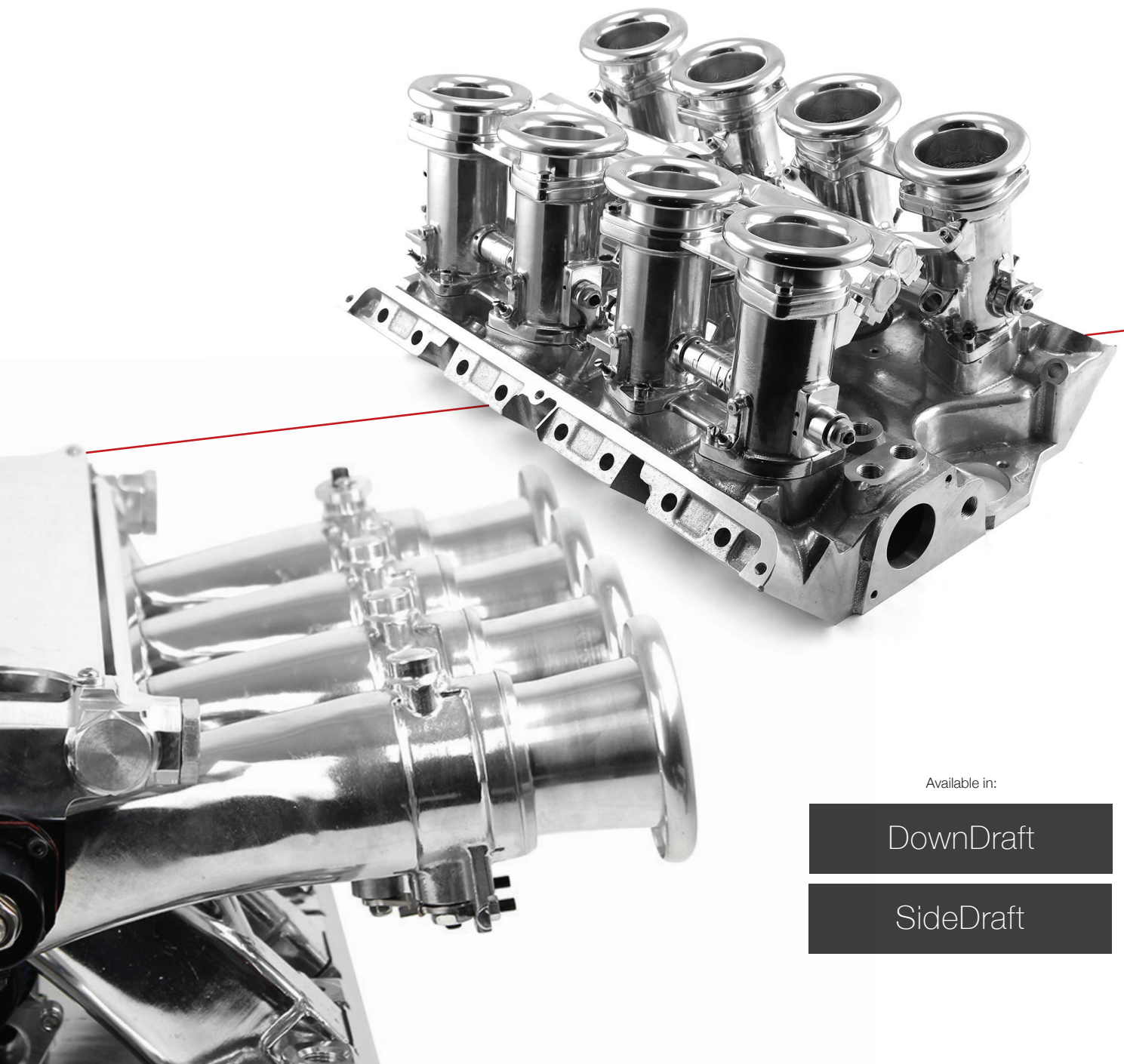
ITB Complete Individual Throttle Body

The Speedmaster™ Individual throttle body EFI system have all the flash of classic Weber induction but provide higher state of tune and engine performance versatility of EFI. Delivering crisp EFI performance with systems capable of supporting up to 1000 hp. Fuel and air is delivered through precision cast aluminum 50mm IDA style throttle bodies that allow for superior idle characteristics and astounding throttle response while improving emissions and economy through tight air/fuel ratio control.



Speedmaster™ Intake Manifold have won the 2015 Sema Show Global Media Awards.

The Speedmaster™ development team have been pushing the boundaries for years with a main objective "to improve the end user experience"; one of the many industry acknowledgments are the 6 in 6 years SEMA Show Global Media Awards for their research and development of their Pistons, Turnkey EFI system and Manifolds.



Available in:

DownDraft

SideDraft

Throttle Bodies

Smooth Air Flow

The key to improving power on any internal combustion engine is maximizing its volumetric efficiency. Speedmaster™ throttle bodies are designed and manufactured to deliver more air for increased performance. The throttle blade is securely staked to the throttle shaft to ensure a secure fit and finish and the throttle shaft rides on sealed ball bearings for smooth, safe operation. Speedmaster™ throttle bodies are available in several sizes to suit your application. Smaller sizes are slightly larger than stock and are a great first step for stock or mildly modified engines, while larger sizes are for more radical engine combinations, and in most cases, require port matching of the manifold for proper fitment.

LS High Flow

Speedmaster™ LS Hi Flow throttle bodies are ready to bolt on. Installation is a simple process for the novice or experienced enthusiast. LS Series throttle bodies were designed to provide smooth and predictable performance from idle to WOT (Wide Open Throttle). Featuring a factory style stamped steel throttle linkage for a precise, consistent fit and with the included throttle cable bracket it provides a low cost manifold alternative by allowing the use of the LS2 Manifold on applications that require a throttle cable. All throttle bodies are machined from billet 6061-T6 aluminum on precision CNC machining centers for consistent quality.

4-Barrel Smooth & Stable

Speedmaster™ 4-Barrel Throttle Bodies are designed to produce smooth, stable air flow at any rpm. The entire throttle body begins as a billet block of 6061-T6 aluminum for superior quality and produced on a state-of-the-art CNC machine. From here it is precisely machined resulting in overall accuracy to within 0.001"! The air inlets are formed with radiused openings to supply a smooth entrance for the air. Brass throttle blades control vibration & reduce thermal expansion. Bearing mounted butterfly shafts for smooth throttle action, Shorter height for better airflow, easier packaging for tight hood clearance and reduced weight Comes complete with billet arms and stops and provision for TPS on unit.



Available in:

Black
Anodized



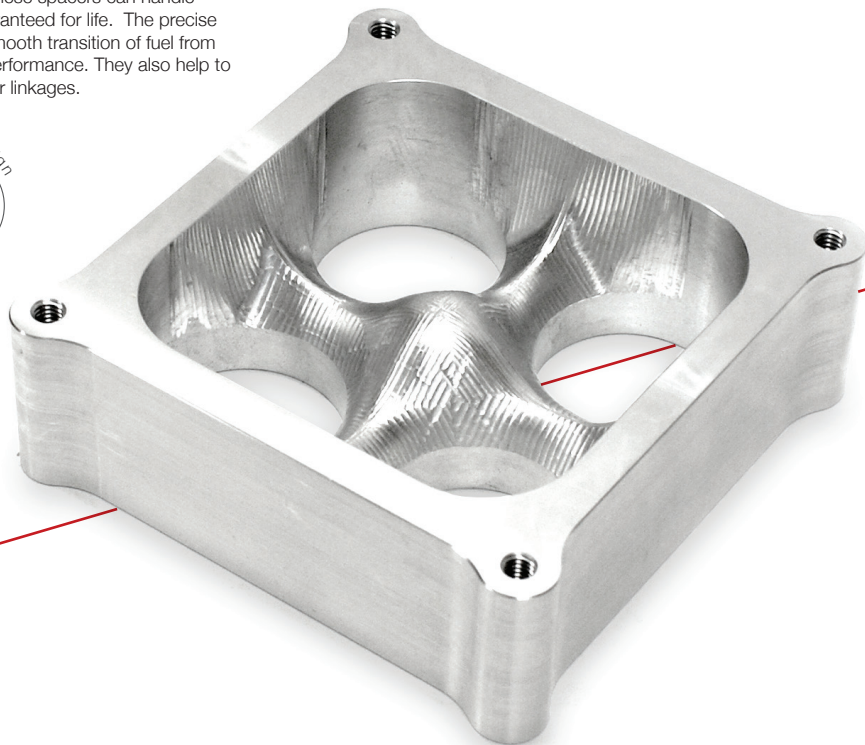
Natural
Anodized



Carburetor Spacers

Built to Endure the Tough Conditions

Individually milled from super durable 6061 T6 aluminum billets, these spacers can handle anything your vehicle can dish out. They're so tough, they're guaranteed for life. The precise design of these Speedmaster™ carburetor spacers provides a smooth transition of fuel from the carburetor to the intake manifold, to increase flow for more performance. They also help to insulate the carburetor from engine heat and provide clearance for linkages.

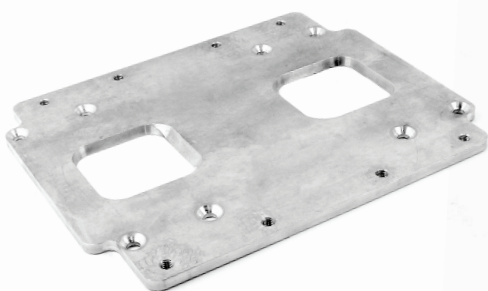


Adapter Plates

Convert/Adapt/Create

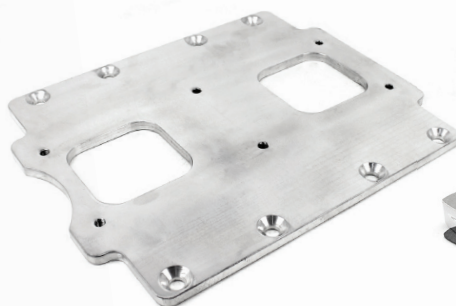
Twin Intake Manifold to Supercharger

To complement our Speedmaster Twin Carb Intake manifolds we have a range of supercharger adaptor plates available which allow for an easy and cost effective way of upgrading to a 67-1 through to a 14-71 Supercharger. These adaptor plates are available as an optional extra for all our Speedmaster Twin-carb Intake Manifolds.



Blower Intake Manifold to Dual Carb

Speedmaster Blower Intake to dual Carb adapter plates allow you to mount two carburetor on a blower intake manifold; These adaptor plates are available as an optional extra for our Speedmaster Blower Intake Manifolds.



Supercharger to Dual Carb

Speedmaster aluminum carburetor blower adaptor plate to suit a GMC style 6-71 / 10-71 superchargers. These Speedmaster supercharger carburetor top plate adapters will allow you to mount your carburetor on top of roots-style superchargers.



Carburetor Feed Lines

Speedmaster™ dual feed fuel lines are a great addition to any fuel system. The pre-assembled fuel lines clean up your engine compartment and properly deliver fuel to your carburetor.

Choose the Right Outlet Size

9/16-24 in.

Suits
Speedmaster™
Barry Grant
Demon

7/8-20 in.

Suits
Holley

Quick Tip



These Speedmaster™ universal fuel logs are CNC-machined from billet aluminum and are adjustable to fit a full range of carburetor applications with different styles and configurations of fuel bowls. Speedmaster™ fuel logs come complete with 2 sets of stanchions (9/16-24 in. & 7/8-20 in.) to attach them to the carburetor (Holley, Barry Grant, Demon or Speedmaster™).



Throttle Cable Brackets

Speedmaster™ brackets provide for throttle cable and throttle return spring installation. They are just what you need to install your throttle cable the right way. Throttle linkage kits make your carb installation look clean and professional, other kits on the market, have 3 separate items needed to complete the install, however this kit comes complete with the return spring assembly and brackets, also the passing gear bracket.



Carburetor Linkage Kits

Speedmaster™ sideways-mounted kits are designed for tunnel ram intake manifolds and even 6-71, 8-71 supercharger applications. These kits are competition-style sets using spherical-type rod ends for precise adjustment, and are designed for long and reliable service. They save you the hassle of trying to put together a linkage from scratch.





Fuel Cells

Superior Strength in a Lightweight Package

Made from 5051 aircraft aluminum alloy, Speedmaster™ aluminum fuel cells offer superior strength in a lightweight package. The cells have foam in the base to prevent fuel aeration, and have TIG-welded seams. Other features include a flush mount, aircraft-style cap and -10 AN pickup, vent, and return line fittings. Plus, all our models include a 0-90 ohm GM sending unit. Not to be used with methanol.



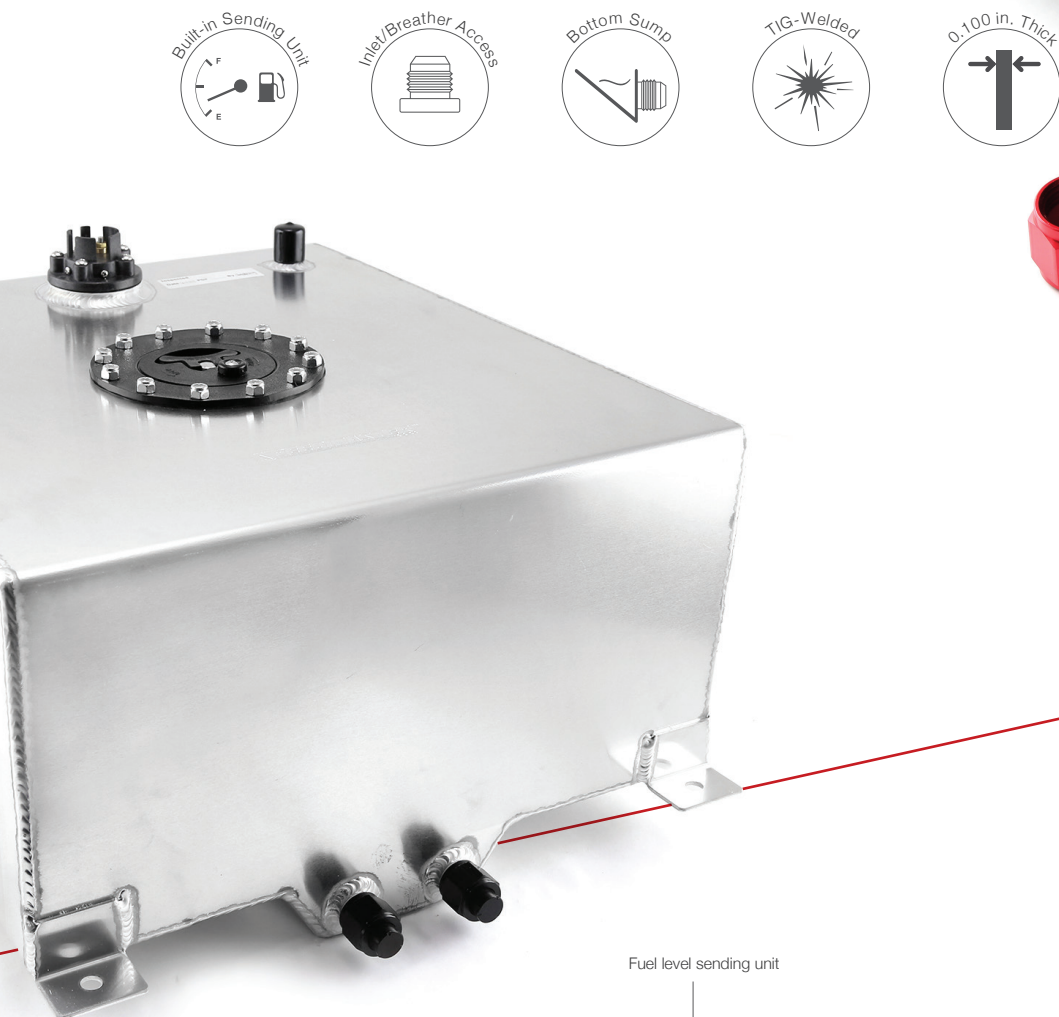
Available in:

Black
Painted



Natural
Satin





Quick Tip

Safety Foam Information

Under no circumstances should you remove the safety foam from your fuel cell, it serves the following important functions:

Explosion Prevention

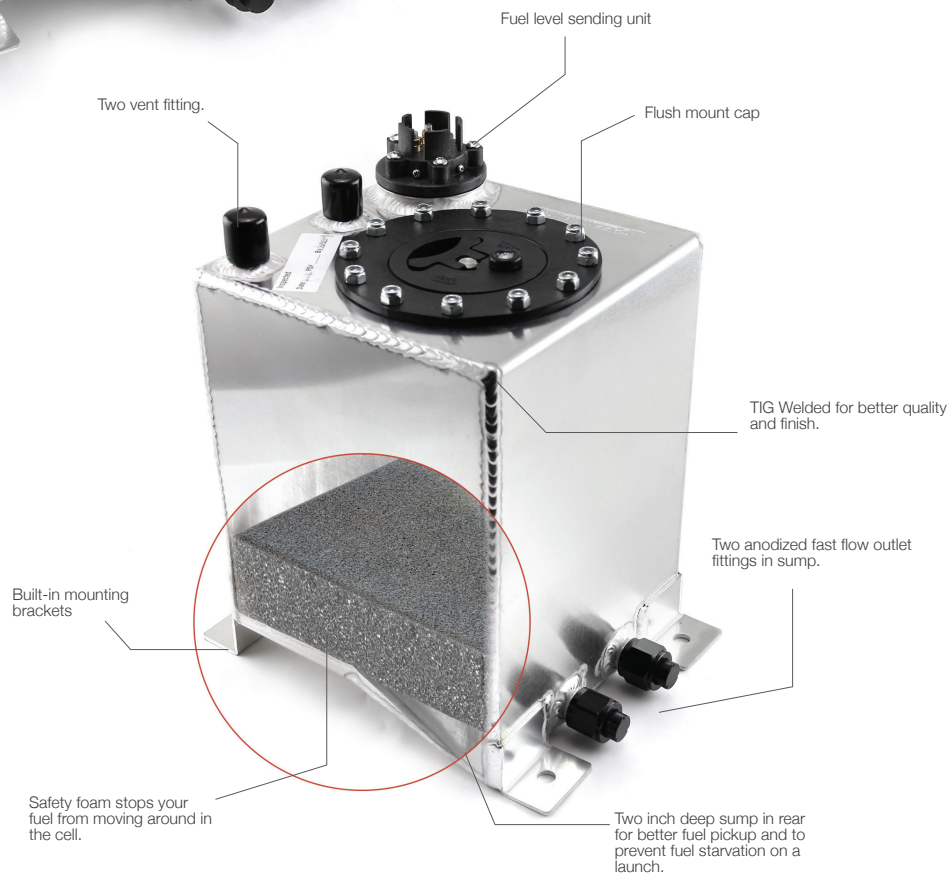
Safety foam virtually eliminates the possibility of an explosion in a properly installed fuel cell.

Surge Reduction

Safety foam eliminates sudden fuel movement when the vehicle quickly changes direction. This also helps prevent the fuel cell from rupturing if it receives a sudden impact. In a cell without safety foam, the sudden, violent movement of fuel can deform the cell from the inside out, often causing a massive rupture.

Atomization Prevention

If a fuel cell ruptures violently, a fine, atomized mist of fuel is ejected into the air, creating an explosion hazard. Safety foam minimizes this effect by resisting the rapid dispersment of fuel into the air during an impact.



Fuel Pumps

High Flow & Performance

The pump creates positive pressure in the fuel lines, pushing the gasoline to the engine. For different applications and needs check the full range that Speedmaster™ has to offer.



Electric Carb

Speedmaster™ **EC100** fuel pumps feature an improved design for street and strip applications. Externally accessible pressure relief valves and repair kits are readily available. Available in 95 Gph, 110 Gph & 140 Gph. Not for use with fuel injection systems.

Speedmaster™ **EC400** electric fuel pumps flow over 400 gph. They feature a billet aluminum housing with a hard coat, anodized billet aluminum impeller and high-carbon brushes for long life, low amp draw (only 9.5 amps), and high torque. The fuel pumps offer external line pressure adjustment (10-25 psi), so you can adjust them while running with no fuel mess. They are gasoline and alcohol compatible.



Electric EFI

Speedmaster™ Eruption Fuel Pumps are all in one; durable, reliable, good looking and they support high horsepower. For fuel injected engines up to 2000HP naturally aspirated and up to 1450HP with forced induction. For carbureted engines up to 2200HP naturally aspirated and up to 1650HP with forced induction. E85 and alcohol compatible. Flows up to 1000lbs per hour @ 45 PSI and features AN inlets and outlet ports.



Belt-Driven

Speedmaster™ Belt Driven Fuel Pump is capable of supporting 300 to 2,500 hp, these Speedmaster™ fuel pumps are made just for serious racers. They flow 2,700 lbs./hr. of fuel, deliver 2 to 200 psi worth of fuel pressure, and work with any type of fuel. That's enough fuel flow and pressure to support a 6-second drag car--fuel injected, blown, turbocharged, or otherwise! Their belt-driven design means there's no current draw, and the pumps require no priming.





Quick Tip

Choosing the Correct Fuel Pump

The better way to select a fuel pump to use in your fuel system is to consider three factors:

- How much horsepower your engine will produce.
- What fuel pressure is required for your engine.
- How much voltage is supplied to your fuel pump when the engine is running.



Available in:

Electric Carb
95Gph to 400Gph

Electric EFI
450Lbs/Hr to 1000Lbs/Hr

Belt-Driven
2,700Lbs/Hr

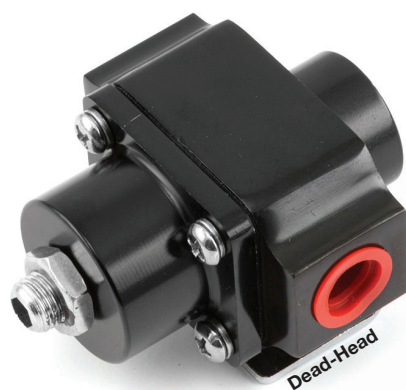
Fuel Pressure Regulators

Debris-Free

An essential part of the Fuel System, the Fuel Pressure Regulators' sole purpose is to maintain fuel pressure at a constant differential to manifold vacuum under all engine load conditions. The fuel pressure regulator is responsible for controlling the set fuel pressure of the system.

Dead-Head

The needle and seat assemblies that are installed in Speedmaster™ carburetors can sufficiently control fuel pressure up to about 8 psi. If the fuel pump is putting out more than 8 psi, a regulator should be used to keep the fuel pressure within safe limits and avoid the possibility of flooding. Speedmaster™ manufactures a number of regulators for most any need.



Return-Style

Speedmaster™ Return-Style regulators are ideal for use with high-volume electric or mechanical fuel pumps, where dynamic flow and rock-steady pressure control are desired. With their high-flow capacity, they're perfect for blow-through carburetor applications with a turbo or centrifugal supercharger.



EFI

Speedmaster™ EFI fuel pressure regulators give you total control of your fuel pressure settings. The regulators feature AN O-ring boss inlet, outlet, and return fittings, a 1/8 in. NPT gauge port, and a 1:1 fuel pressure rise from the boost reference port. Speedmaster™ EFI fuel pressure regulators are anodized for great looks and corrosion resistance.



Quick Tip

Choosing a Fuel Pressure Regulator

Inlet Fittings

A fuel pressure regulator can come with one or more inlet fittings. A unit with dual inlet regulators is an ideal match for vehicles with more than one fuel rail or for consumers who also want to fit fuel pressure regulators with gauges or sensors.

Vacuum Compensation

Some consumers may also want to look for fuel pressure regulators that have vacuum connections included. These components connect to the inlet manifold, and they keep the pressure differential between the manifold and the fuel rail even and consistent.

Available in:

Dead-Head
Carbureted Engines

Return-Style
Carbureted Engines

EFI
Boost/Vacuum Reference Port

Fuel Filters

Debris-Free

Take fuel, add in dirt and contaminants, and you've got a recipe for disaster. Luckily, our fuel filter selection is ready to keep your fuel system debris-free and your engine running strong and healthy! Choose from inline, canister, clear, and glass styles for carbureted and fuel injected engines—all designed to meet your engine's demands for fuel flow and filtration. Don't put your engine at risk.

Speedmaster™ Inline fuel filters are manufactured using the best Aircraft Grade Aluminum, and are precision coated with anodizing with the impeccable finish you've come to expect from all Speedmaster™ components. Comes complete with a 100 micron filter with is removable for cleaning.



Gauges, Analog

Speedmaster™ analog gauges are the perfect choice. A white dial face with performance-inspired graphics, a polished chrome bezel, and a classic domed lens reveal a look that truly reflects the American muscle style.

Proper fuel pressure is critical for adjusting your carburetor or fuel injection. These Speedmaster gauges come with a classic white face and are available in dry or liquid-filled designs, for accurate, steady readings. In addition, all gauges come with a 1/8 in. NPT male fitting.



Quick Tip

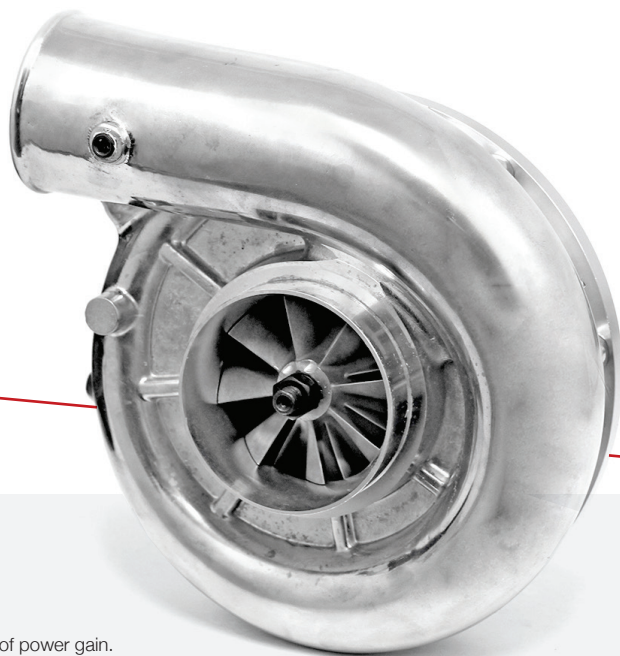
Fluid Filled Pressure Gauges

When reading fuel pressure, keep in mind that a fluid filled pressure gauge will change its reading as the temperature of the gauge case changes (Under hood temperature). Because it's sealed to contain the liquid inside, a liquid filled gauge no longer compares line pressure to actual atmospheric pressure, reporting the difference. Instead, it compares line pressure to the pressure inside the gauge case. As the liquid in the case heats or cools, it expands and contracts, causing case pressure to change as much as 1 psi for every 30 degrees temperature change of the gauge.

Supercharger Centrifugal Gearbox-Less

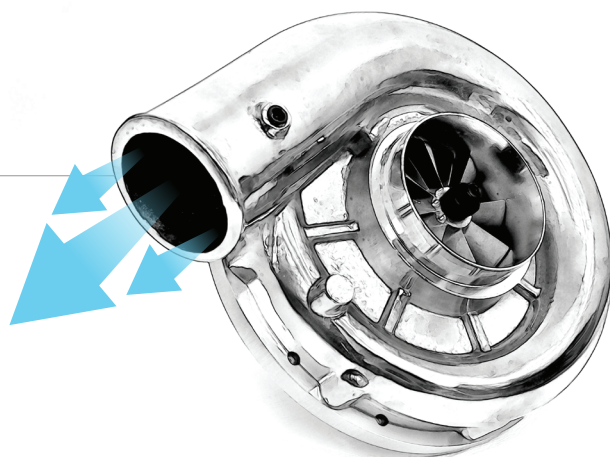
The supercharger has proven to be one of the most effective means for obtaining increased power from an internal combustion engine without having to make major engine modifications. This is accomplished by compressing combustion air before it enters the cylinders, which increases density. This results in improved cylinder filling, allowing more air and fuel to be burned in the combustion cycle, with dramatic increases in torque and horsepower. Speedmaster™ has developed its line of centrifugal superchargers to a performance level that has it regarded as the performance and technological leader in aftermarket supercharging.

+Horsepower
Torque



Speedmaster™ Gearbox-Less Supercharger Features:

- This design allows for supercharger installation and operation without oil lines.
- Extraordinary 78% peak efficiency.
- Ideal for latest generation of improved breathing, high -power street and strip engines.
- Vastly improved flow and efficiency at high boost levels, providing completely new levels of power gain.
- Helical gear design with 3.6:1 step-up.
- Includes remote fluid drain hose (attached to supercharger) that allows for simple fluid changes without removing the supercharger from the vehicle.
- A ventilated gear case assembly eliminates any potential internal pressure issues that are currently associated with non-vented competitive designs.
- Integrated gear case baffling for proper oil control.
- Simple oil slinger design does not require separate shaft or bearing set. This provides proper fluid delivery to gears and bearings.



Performance

Max Speed	52,000 RPM
Max Boost	22 PSI
Max Flow	1150 CFM
Max Power	775 HP
Peak Efficiency	78%

Dimensions

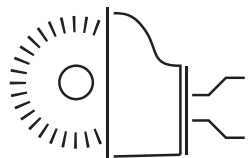
Discharge OD	2.750 in.
Inlet OD	3.500 in.
Discharge ID	2.380 in.
Inducer Diameter	3.100 in.

Overall Size

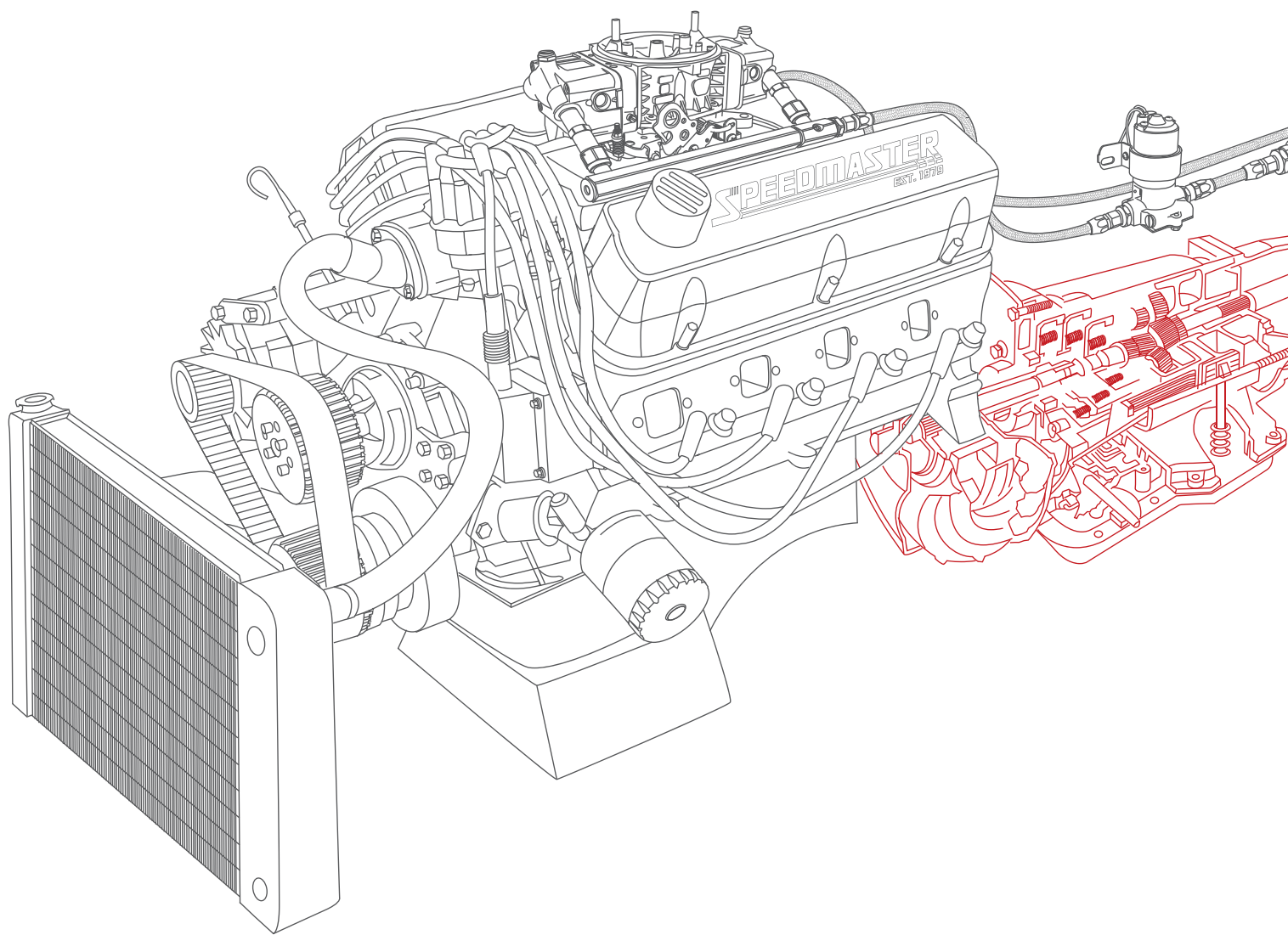
Height	29 cm
Length	24 cm
Width	22 cm

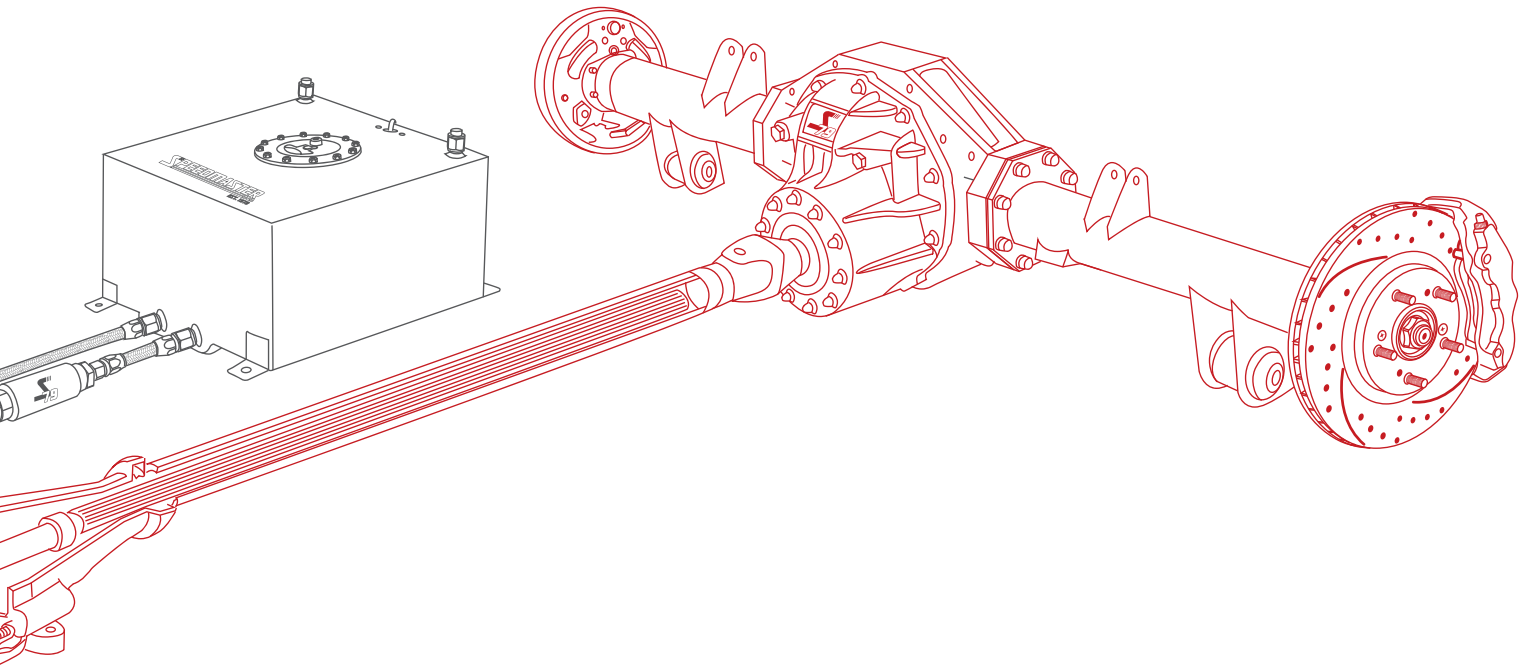
Performance specs apply to units equipped with standard gear case.





Driveline & Chassis





Driveline & Chassis (TDS) "Total Drive Line Solution Department" is a customer focused, passion driven department; with its sole aim being to solve all customers traction needs and wants. Our department utilizes both technical & Design knowledge, which has been attained over 40 years experience in the differential repair industry. The TDS mission has been cemented from years of constant commitment to the research and development by the founder of 'Ron's Signature Series' by Ron Smelt.

Flywheels and Flexplates

Born for High-RPM

The transmission can be one of the more confusing parts of a vehicle, but also one of the most important. Transmissions - whether manual or automatic - essentially take the power from the engine and apply it to the drive wheels. As such, this is one of the most critical systems in any car. Flywheels are used in manual transmissions and flexplates are used exclusively for automatics; essentially they serve as the link that marries the transmission to the engine.

Billet Flywheels

Manual Transmissions

Speedmaster™ flywheels are fully CNC machined from a high tensile aircraft billet steel. The high carbon steel material is incredibly strong and can withstand the rigors of the most extreme engines, drivers, and road conditions. Grab one of these race-ready Speedmaster™ billet steel flywheels for the durability and performance that you demand! To withstand the severe abuse of high-rpm racing in heavy drag cars, use Speedmaster™ billet steel flywheels.



Available in:

Black Oxide
SFI 1.1 + Post Machined



Natural
SFI 1.1





Black Oxide Finish

Black oxide is a conversion coating for ferrous materials. It is used to add mild corrosion resistance, for appearance, dimensional stability, anti-galling and more.

Billet Flexplates

Automatic Transmissions

Speedmaster™ Billet flexplates are clearly the superior choice for quality and precision. They are machined to exacting tolerances from 4340 round bar. Speedmaster's proprietary manufacturing process ensures the strongest gear tooth, least runout, and best longevity on the market. All of their flexplates are certified to SFI 29.1 or SFI 29.2



Available in:

Black Oxide
SFI 29.2



Natural
SFI 29.1



Transmission Pans

Automatic | Extra capacity and cooling

Speedmaster™ deep automatic transmission pans provide additional fluid capacity and cooling ability. No modifications to the dipstick are needed. They include a drain plug for clean and easy fluid changes. They feature a cast aluminum construction that not only adds strength and structural integrity to the transmission but helps dissipate heat and keeps the fluid cooler. The extra fluid these pans accommodate also allows torque converters to lock up better with some added horsepower.

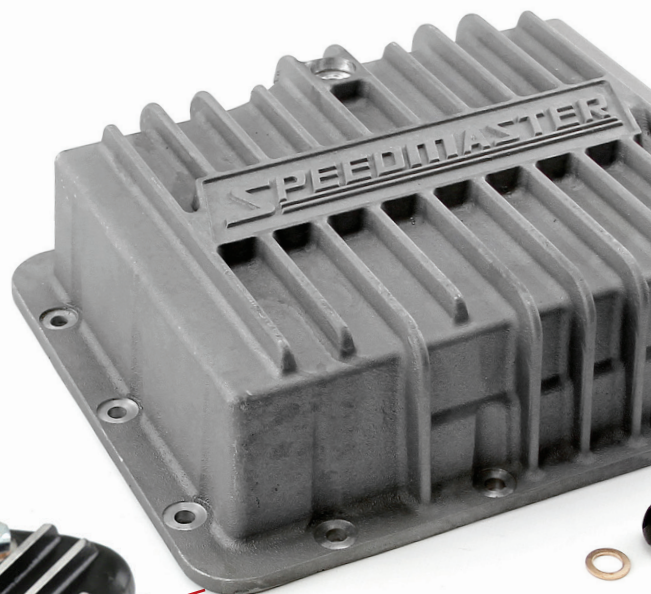


Available in:

Black
Painted

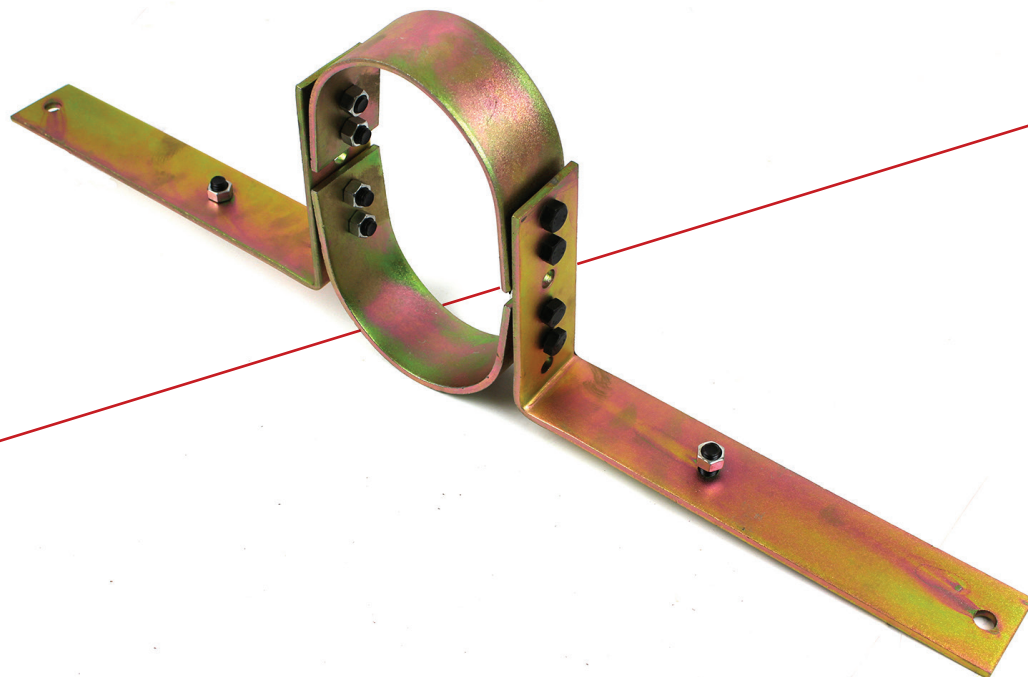


Natural
Satin



Driveshaft Safety Loops

The failure of a U-joint or driveshaft can have big consequences, ranging from major vehicle damage to slinging a driveshaft toward bystanders. Speedmaster™ safety loops surround the driveshaft with a heavy-gauge steel cage that restrains the shaft after a failure, making things safer for you and everyone nearby.



Automatic Transmission Tailhousings

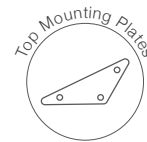
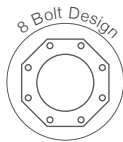
Speedmaster aluminum tailhousings feature light weight and improved strength, while using a tailshaft roller bearing rather than the factory bushing for superior lubrication and durability. The OEM bushing is a common failure point with transmissions, as it can run dry in high-speed applications. Speedmaster aluminum tailhousings are more rigid than other factory or aftermarket tailhousings, with increased structure for added support and durability.



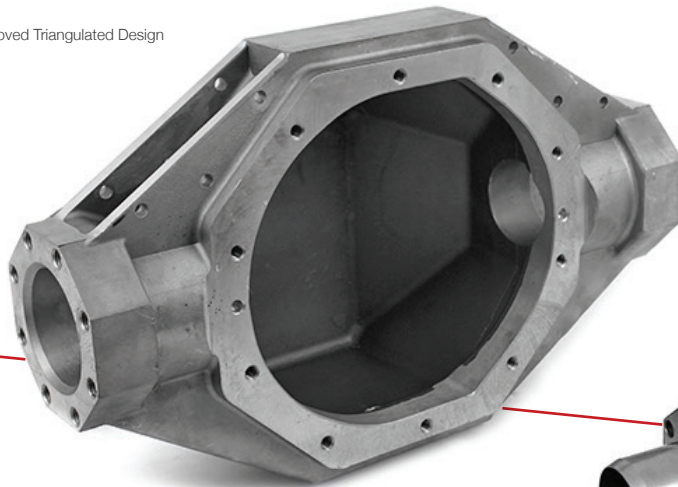
Rear Axle Housings

Innovative Performance

"STRONG AND VERSATILE" - That's what makes the 9 inch Ford diff so popular. Most people running performance street vehicles have had the misfortune to break either axles or a center and once you start combining high horse power with big tires, the inevitable occurs. The added stress is usually too much for the stock rear axle assembly. However Speedmaster™ is here to solve the problem, Speedmaster's Axle Housings combine brute strength and light weight with the added benefit of a removable third member for ease of set-up and maintenance.



Improved Triangulated Design



8 Bolts x 1/2" Tube Lock Design



Top Mounting Plates



3" Tube Diameter

8 Bolts Design



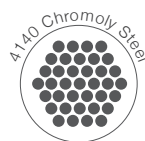
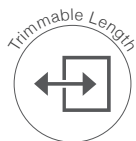
Extra Ribbing for Added Strength

Extra Oil Capacity

Axle Shafts

When Quality is the Aim

Speedmaster™ axles are produced using state of the art equipment and manufacturing techniques. We constantly strive to improve the processes and we stand behind the quality of Speedmaster™ axle shafts. These forged steel street axles are non-tapered with hardened bearing seats and machined to fit a variety of applications. These axles are available in any length up to 34 inch and if you choose to narrow your rear-end at a later time, these axles can be shortened to suit.



Product Benefits

- High strength 4140 Chromoly Forged shafts, 4140 Chromoly provides approximately 27 percent more strength than standard Axle steel of 1040.
- Speedmaster™ axles are Induction Harden to RC 56-60.
- Trim to desired length.
- Eliminates the cost and need for custom Axles!



Available in:

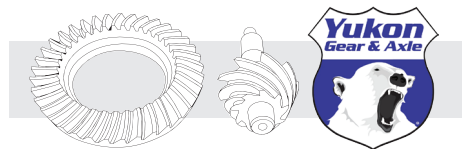
28-Spline
SuperStreet Series

31-Spline
Outlaw Series

35-Spline
Sportsman Series

Third Members

State of the Art



The aluminum available today is vastly different from that of years past. Technology has made aluminum products stronger and more durable. Knowing this, the Speedmaster™ engineers decided to have an aluminum Ford 9" dropout case built. You may say to yourself, "That's nothing new, other companies have been making them for years," and that's true; but as in every Speedmaster™ product, we look closely at what's out in the marketplace and how it can be improved. Our aluminum cases are made from A356-T6 aluminum, our bearing caps are one-piece billet, with a through bolt design and extra material is added to the bearing caps and extended nose design allows for reduced pinion deflection which extends bearing and gear life. This results in 50% less deflection that can occur with other units on the market. These cases are offered in 3.250" bearing diameter to accommodate 28, 31 and 35-spline carriers and spools. These extras truly make this Aluminum case the ultimate Ford 9" case, rated to 1200 horse power. All Speedmaster™ Extended Nose Aluminum third members come with 12 point through bolts and a Daytona style pinion support, which gives us an advantage over our competition.



Maximum strength



Withstand extreme use
(31 & 35 Spline only)



Avoid long term distortions



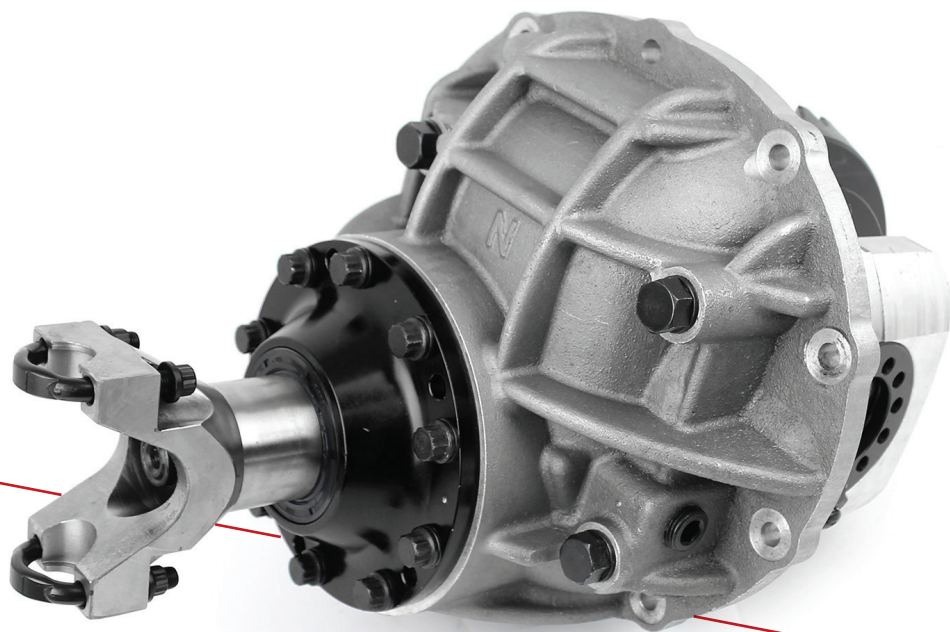
Superior wear resistance



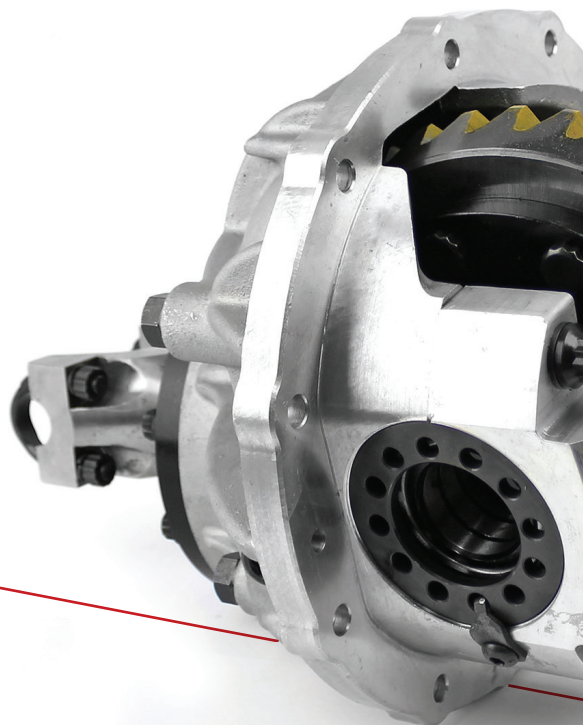
Faster reaction



Eliminates gear failure



28-Spline



31-Spline

35-Spline

Dropout: 1310 Series
Carrier: Full Spool or Torque Worm LSD
Case: Standard HD Aluminum Dropout
Pinion Support: Oversize

**Rated at 850HP, Limited to 350HP due to
Factory 28 spline Axles.

Dropout: 1350 Series
Carrier: Torque Worm LSD
Case: Long Nose HD Aluminum Dropout
Pinion Support: Daytona Style

**Rated at 850HP, Limited to 700HP due to Factory
31 spline Axles.

Dropout: 1350 Series
Carrier: Torque Worm LSD
Case: Long Nose HD Aluminum Dropout
Pinion Support: Daytona Style

Assembly:

Assembly has been carried out at the Speedmaster's TDS Department by the Head differential technician. Quality is assured with 40 years experience in the Differential Industry and full involvement in all forms of motorsport from V8 SUPERCAR To Group 1 Drag Racing. Our Technician is on hand to discuss your differential requirements, questions and upgrades.

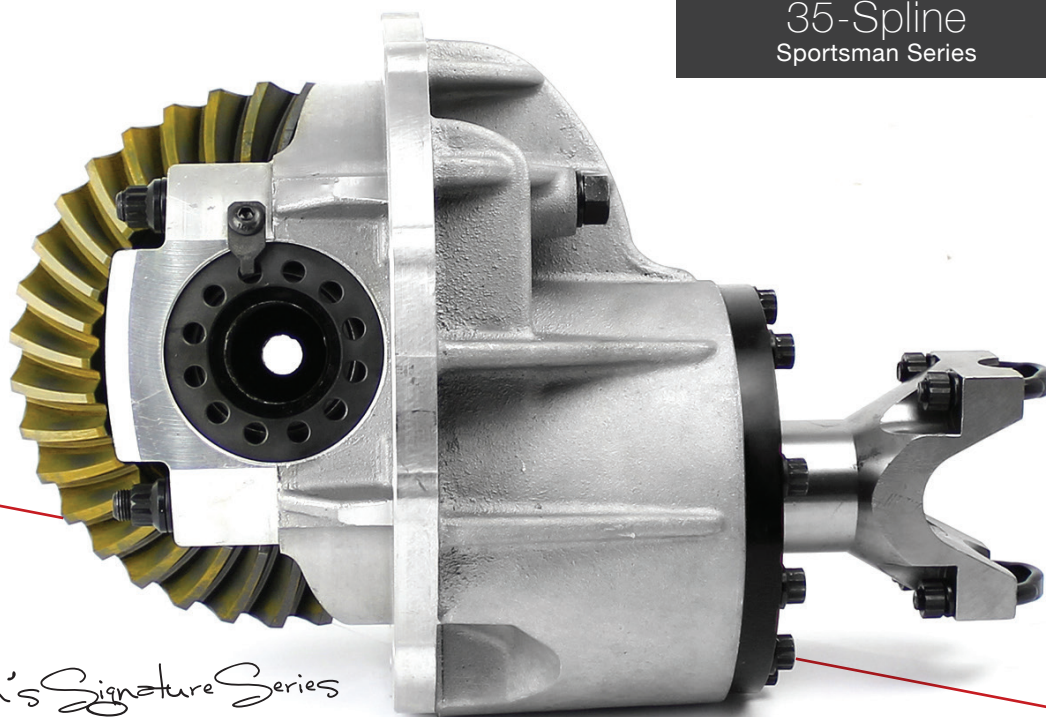


Available in:

28-Spline
SuperStreet Series

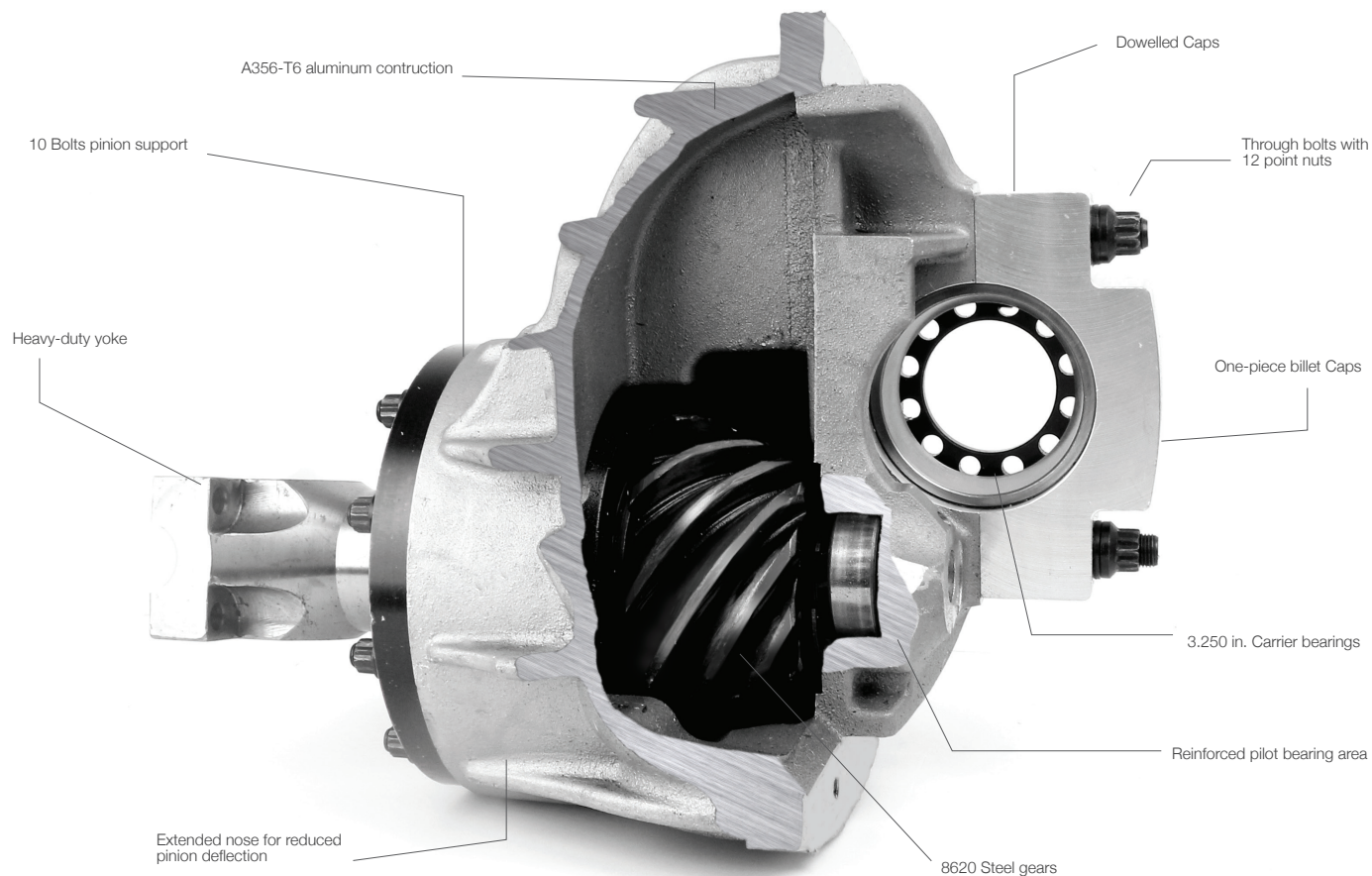
31-Spline
Outlaw Series

35-Spline
Sportsman Series



Ren's Signature Series

Third Members

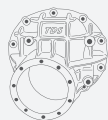


Custom build your Diff!

You are only 5 steps away from your all new Speedmaster™ Third Member. Please select one of the options from each section and let us do the hardwork for you. We will build your custom diff and deliver it to your door.

1

Third Member Case



- STD Nose
- Long Nose

2

Yoke



- 1310 Series
- 1350 Series

3

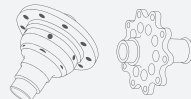
Ring & Pinion Gears



- 3.00:1
- 3.25:1
- 3.50:1
- 3.70:1
- 3.89:1
- 4.11:1
- 4.56:1
- 4.88:1
- 5.14:1

4

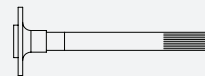
Differential Carrier



- Torque Worm LSD
- Full Spool
- Locker

5

Spline Count



- 28 Spline - Superstreet
- 31 Spline - Outlaw
- 35 Spline - Sportsman

Product Development

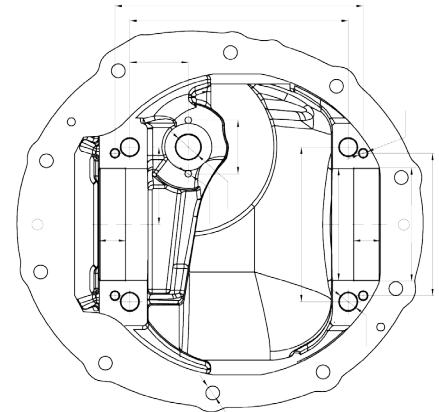
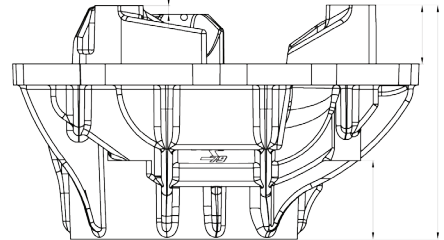
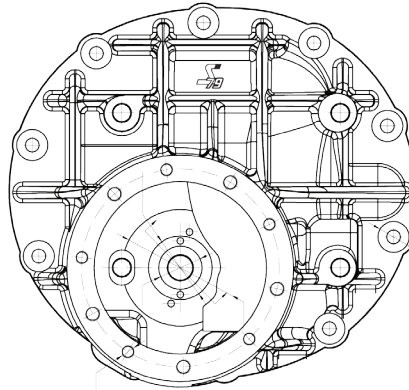
Automotive, Industrial, Mechanical & Concept Design

Using modern simulation tools, “virtual products” are created, enabling the functionality of a product to be analysed prior to prototyping and pre-production of hard parts, minimizing the number of design iterations. Both CAD data and detailed engineering drawings are used for manufacturing and validation.

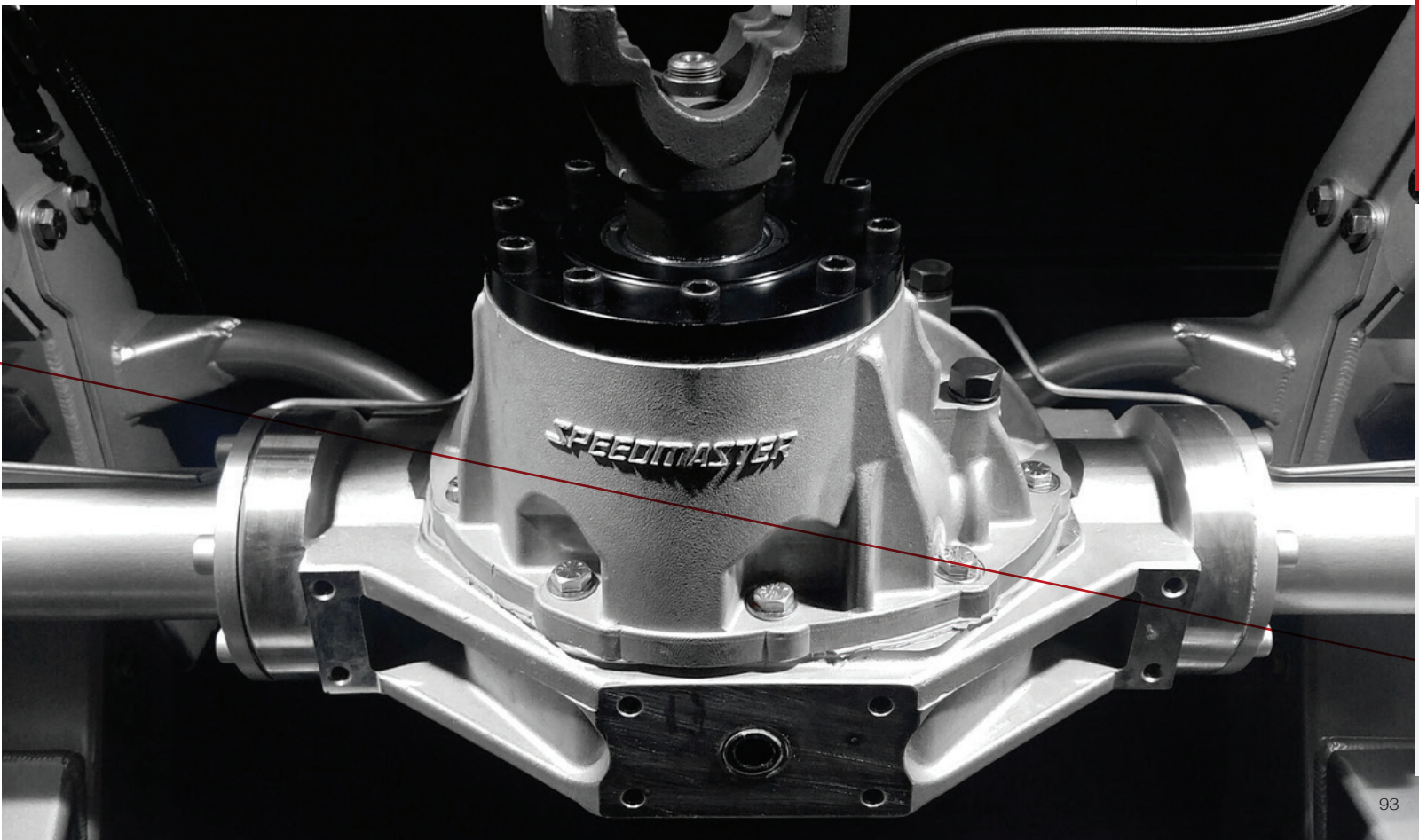
- Capable of translating all major software formats.
- 3D scanning with reverse engineering.
- Complete engineering drawings.
- Modeling in ptc pro engineer.
- Project management.
- Appq, fmea

Digital data can be translated from any of the major software formats being used around the world.

- Unigraphics, ideas
- Iges, step



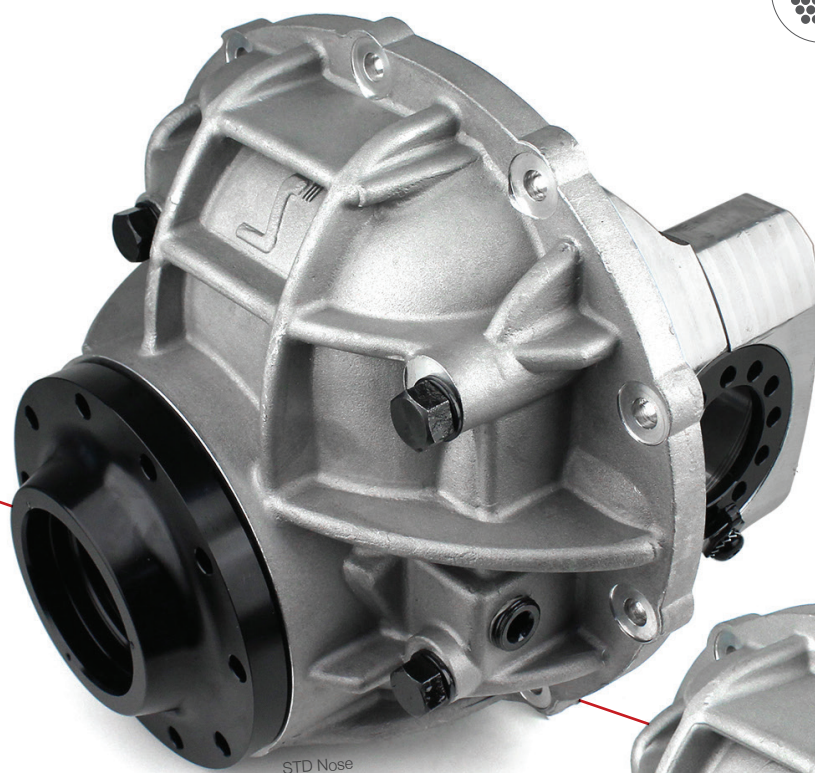
Speedmaster™
Track Proven



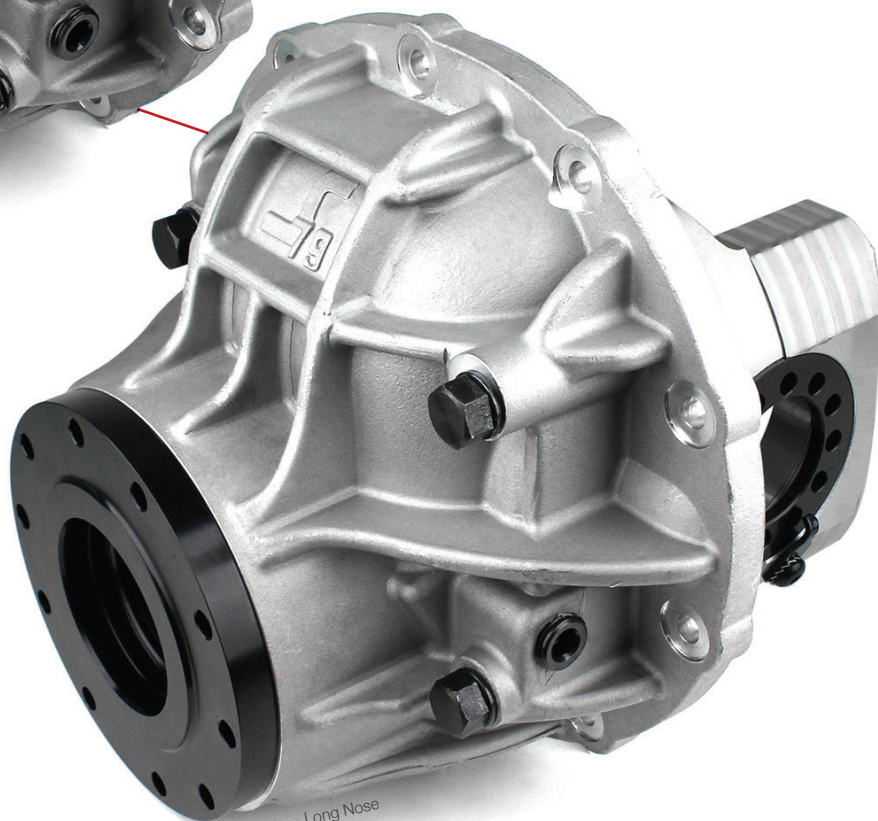
Third Member Case

HD Dropouts

Aluminum Dropouts are in improvement from the past. Current technology has made aluminum products stronger and more durable. Our aluminum cases are made from 356 T6 aluminum, our bearing caps are from one-piece billet, with a through bolt design and extra material is added to the bearing caps. This results in 50% less deflection that can occur with other units on the market.



STD Nose

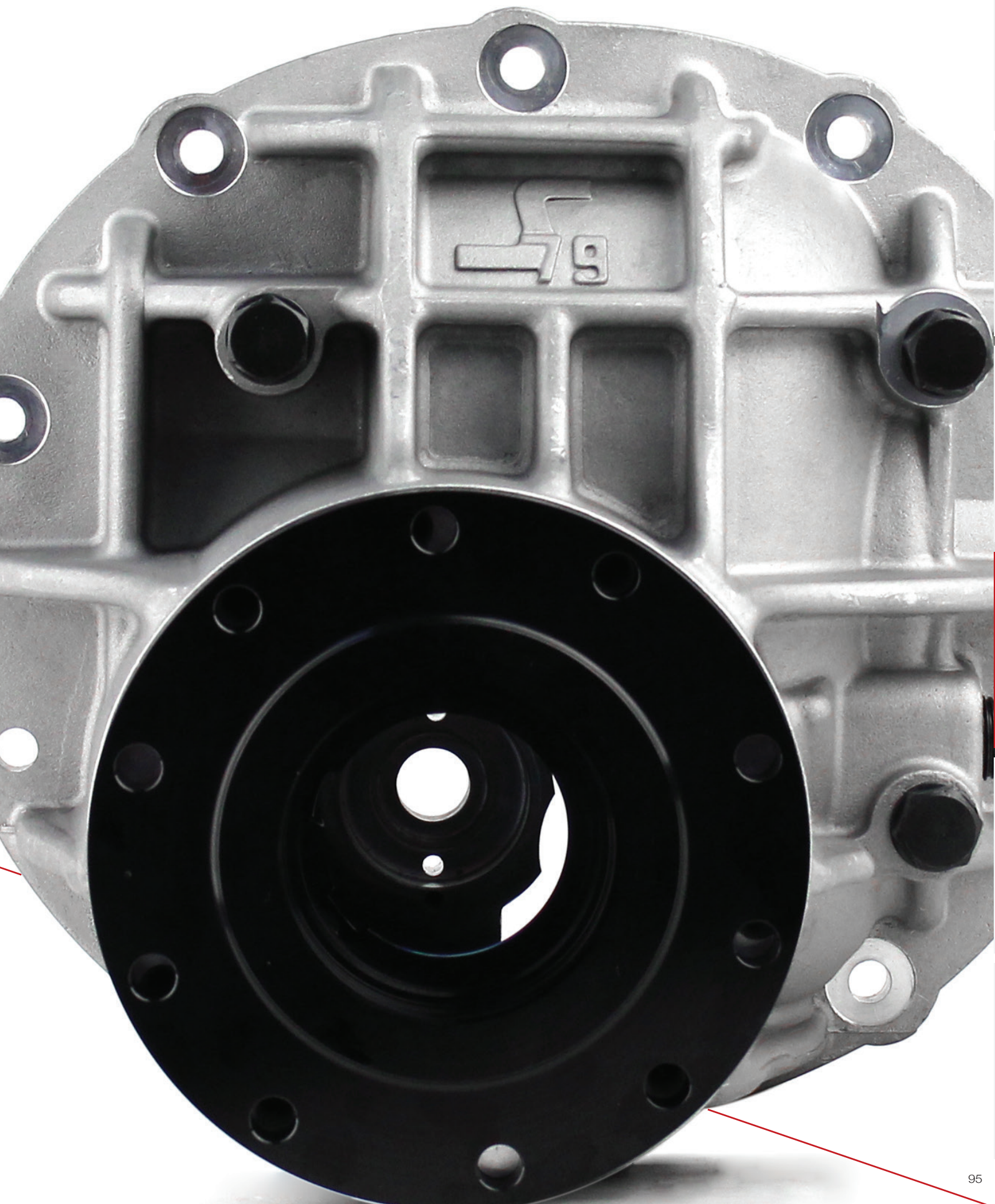


Long Nose

Available in:

STD Nose
SuperStreet Series

Long Nose
Outlaw Series



Differential Carriers

This is the new level

Torque Worm LSD

Maintenance-free

The Torque Worm is a torque biasing 6 pinion gear type limited slip unit. This is a preloaded unit allowing for a faster reacting unit. Unlike our competitors that only use 3 or 4 pinion gears. The use of 6 pinion gears means the stress on gears is spread over a greater surface area, reducing the load on all internal components.

The internal components are made from EN36 Material as used in racing such as V8 SUPERCAR. The outer cases made from 8620 Chrome-Nickel-Moly steel and the case hardened for long life and improved strength. The Torque Work unit is available in 28, 31 and 35 spline counts.



Locker

The purpose of the Locker is to maximize traction by delivering 100 percent of the torque and power to both drive wheels. They are engineered to keep both wheels in a constant drive mode and have the ability to automatically allow wheel speed differentiation when required to ease cornering at low speeds.

Full Spool

Spools are actually the lack of a differential. Spools are a 100% lock-up between both wheels of an axle all the time. Spools are generally used for racing and serious offroad use where little or no street driving is seen by the vehicle and a stronger, lighter rear end is needed. The speedmaster lightweight spools give you the traction you need by locking the axle shafts together, forcing your rear tires to turn at the same speed. They're CNC-machined from forged chromoly steel to provide a more rigid ring gear mounting. This eliminates gear failure caused by case deflection or differential side-gear failure.





Quick Tip



How to Choose the Appropriate Differential

Your differential transmits the power to the axle shafts while allowing the wheels to rotate at different speeds, since they travel different paths as a vehicle turns. The standard open differential works great for this application, but has its shortcomings when it comes to off road and performance driving. To remedy this, there are different options such as limited slip differentials, lockers & spools. They each have their advantages for different driving conditions. The following guide will help you decide which kind of differential works best for your driving needs.

Limited Slip

Distribute power to the axle with the most traction; Suitable for daily driving on pavement.

Off-Road	
Street	
Drivability	
Strength	

Lockers

Locked both axles but allows the tires to rotate at different speeds around corners; Great for extreme off road use.

Off-Road	
Street	
Drivability	
Strength	

Spools

Open differential with the strength & traction of a spool; Controlled by the driver.

Off-Road	
Street	
Drivability	
Strength	

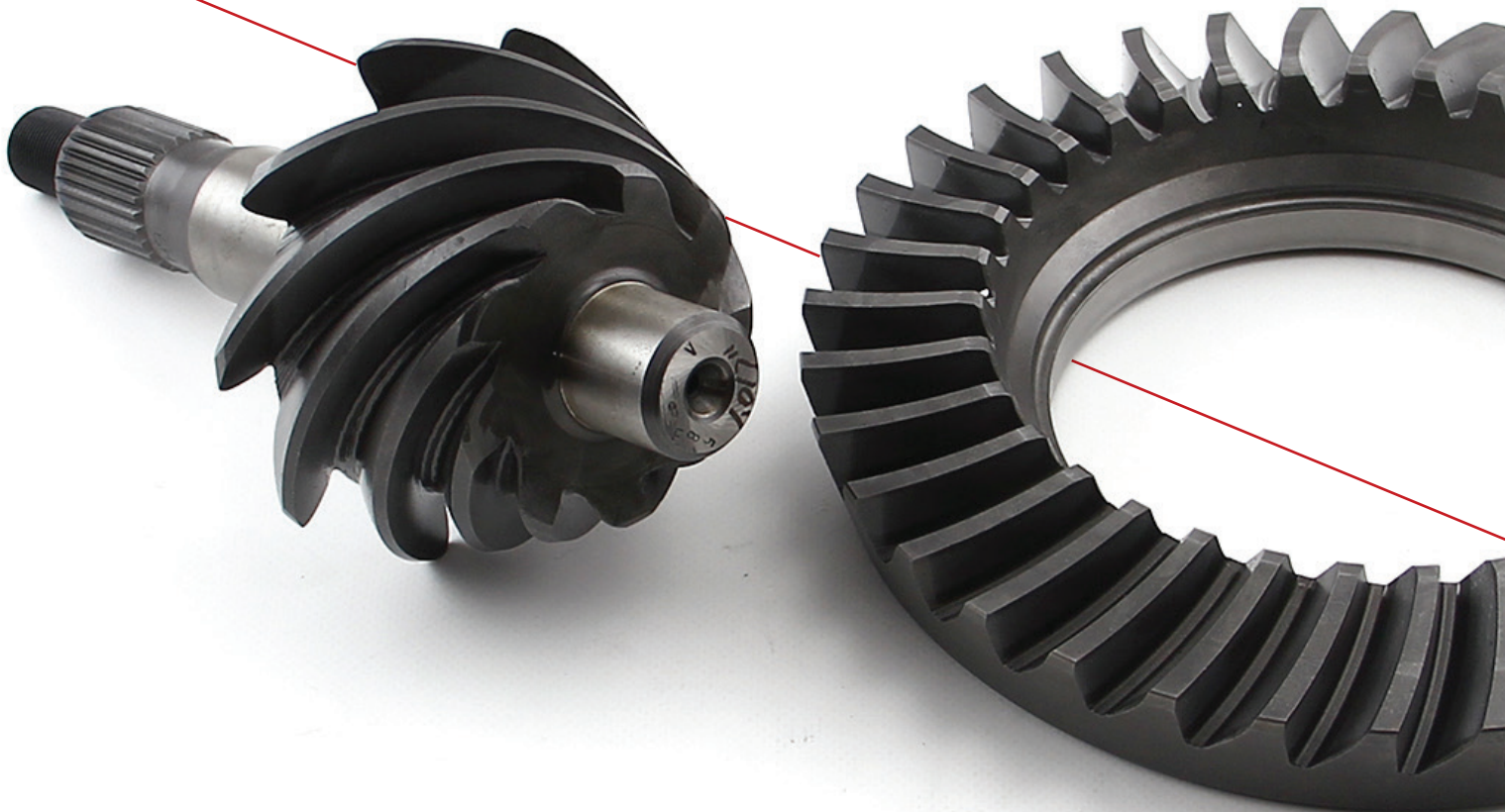
Ring and Pinion Gears

Ready for the Harshest Conditions

Ring and pinion gears are the automotive hardware that rotates the wheels of a car backwards and forwards; they work in conjunction with the drive shaft to create torque for the drive wheels. The pinion and drive shaft are attached and therefore must spin together to generate enough torque that in turn creates the power that moves the wheels forward.



These Speedmaster™ ring and pinion sets are engineered, manufactured and tested for maximum performance. These ring and pinion sets are CNC-cut from 8620 steel for outstanding durability, factory-lapped for a precise fit, and Rockwell-tested for hardness. Available in many different ratios to fit a variety of differentials.



What Gears Can Do for You

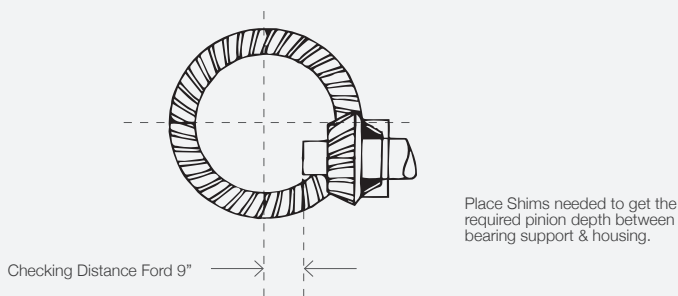
Avoid losing power & gas mileage when adding larger tires. The diagram below shows the impact of installing larger tires and changing the overall drive ratio on your vehicle. This diagram is based on 65 MPH and a 1:1 gear ratio on a manual transmission (4th gear). Please NOTE: RPM in overdrive will vary on vehicles equipped with an automatic or an overdrive transmission.

Tire Size	Gear Ratio	5th Gear	Engine RPM	Results
Before Changing Gears				
 35" Tall	 3.55	 SPEED 65	 RPM	Lacks performance and reduces fuel economy
After Changing Gears				
 35" Tall	 4.56	 SPEED 65	 RPM	Returns power band to factory settings



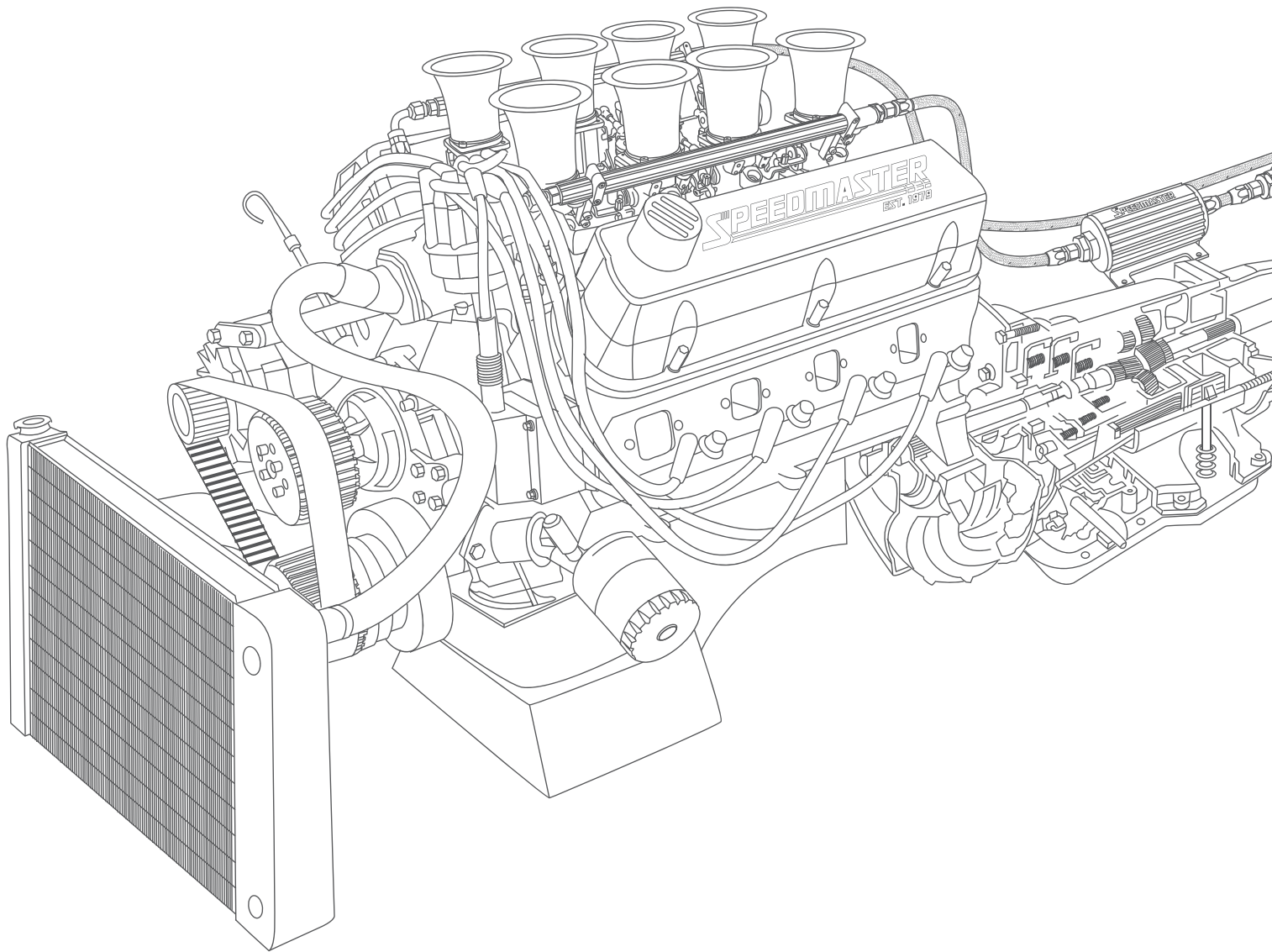
Checking Distance

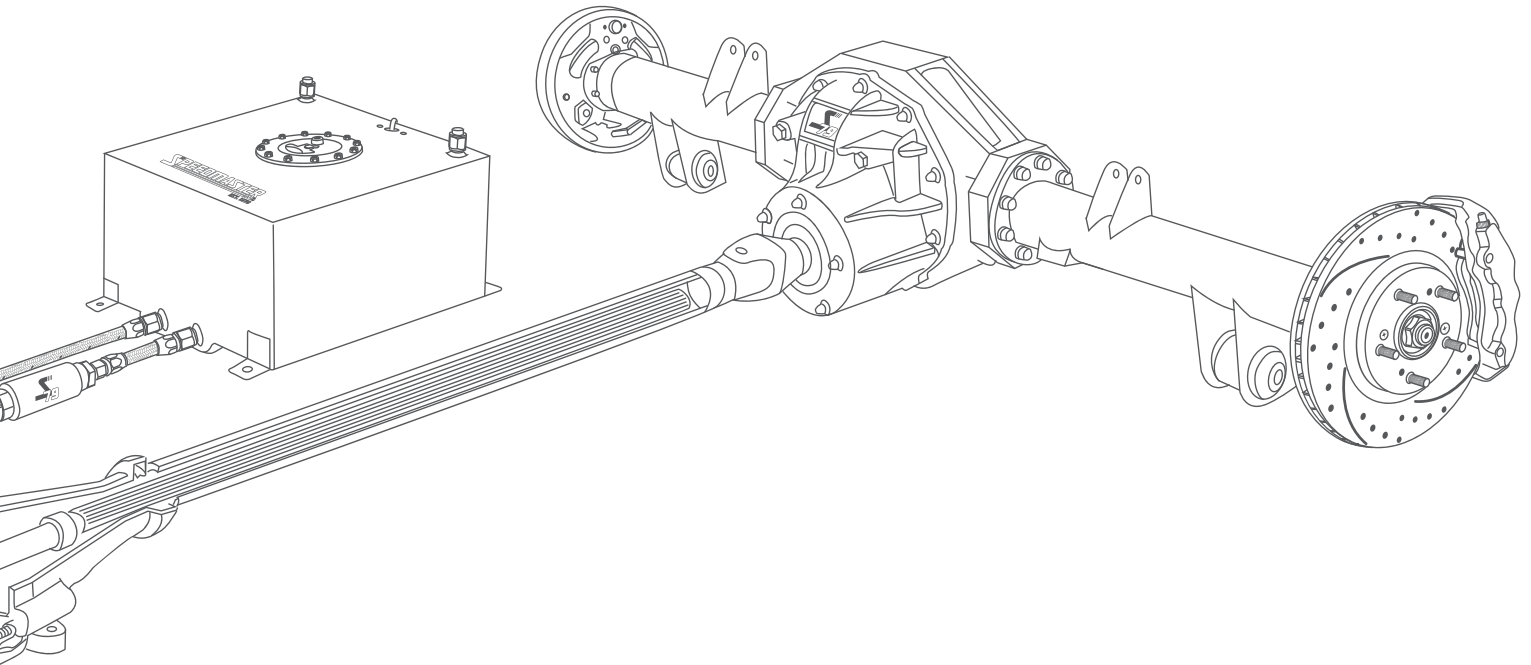
Each ring and pinion is pre-run and marked on the pinion face with its proper depth setting called the "Checking Distance". This dimension is from the face of the pinion to the axle center-line. A setting tool must be used to measure the checking distance. Pinion depth is adjusted by adding or subtracting shim distance. Stay +/- .002" of the pinion dimension (see Illustrations).





Tools & Accessories





Every automotive enthusiast and professional mechanic knows that it's nearly impossible to get the job done without the right tools. That's why Speedmaster™ is your place to go for garage equipment, specialty tools, and everyday problem solvers.

Nitrous Oxide Bottle Brackets

Speedmaster™ nitrous oxide bottle brackets are designed to mount your nitrous oxide bottle at the optimal usage angle for the best performance and consistency. They are manufactured from billet aluminum and have a bright machined finish. Suitable with 10-pound nitrous bottle, these lightweight billet aluminum (14.5mm thick) brackets bolt down quickly and simply with the supplied wing nuts. The bracket is lined with rubber to ensure the bottle does not move and is secure. Suits Bottle size 7 in. Diameter. Mounting rails are included in this package



Available in:

Single Bottle

Dual Bottle

Differential Storage Case

Store and protect your differentials the easy way with our Speedmaster horizontal differential storage cases.

Features include:

- Built-in carrying handles
- Stackable design to save space with multiple differentials
- Keep your differential dirt and debris-free





Tools & Shop Equipment

Piston Ring Compressors

Now you can install your pistons with the ease of fixed ring compressors and the versatility of adjustable band compressors. These Speedmaster™ adjustable piston ring compressors have adjustability to fit most engine builders needs. The tapered aluminum design makes installation easy, and the worm clamp speeds up adjustment.



Oil Pump Primers

Those first moments that an engine runs prior to building oil pressure are when damage can easily occur. Speedmaster™ oil pump primer kits let you spin the oil pump with a drill motor and bring up the oil pressure prior to starting the engine. This prevents unnecessary wear or damage to rotating, reciprocating, and valvetrain components. Speedmaster™ rugged primer shafts are rated at 170,000 psi to ensure extended service life. They also feature a special billet aluminum sleeve that accurately positions the shaft and keeps it from wobbling. Speedmaster oil pump primers make it easy to get oil to the top of your engine. They are designed to fit in your distributor hole and require no modifications to use. They feature a billet aluminum adjustable collar and black oxide coated steel shaft.



Pushrod Length Checkers

Speedmaster™ pushrod length checking tools are precision crafted from steel alloy for years of accurate measurements. Speedmaster™ offers these pushrod length checkers as easy and economical tools to lay out and determine proper pushrod length for proper valvetrain geometry. This is necessary to obtain the desired results from the cam and ensure that damage is not done to the rest of the valvetrain. Made from a 3/8 in. pushrod that is cut and threaded with over 1 in. of travel, they have a 3/8 in. ball tip on both ends.



Crankshaft Sockets

Speedmaster™ crankshaft turning sockets are a necessity for engine building. These steel black oxide sockets are available for several applications to assist you in turning the crank while adjusting valve lash and piston-to-valve clearance. Give your engine build a good turn with help from Speedmaster crankshaft turning sockets.



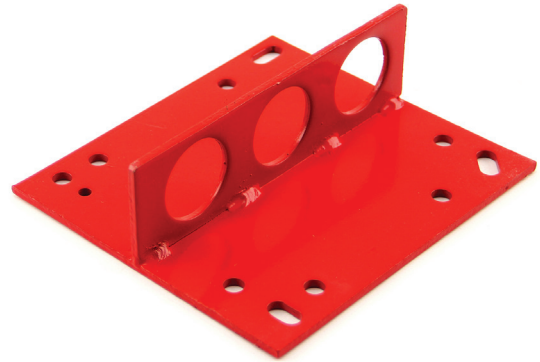
Degree Wheels

Speedmaster™ universal degree wheels are designed for the normal rebuild. They accurately measure camshaft centerline, valve timing, TDC, and BDC. Made from heavy-gauge metal with a silkscreen finish for long-lasting use, they include an adapter to fit virtually any engine.



Engine Lift Plates

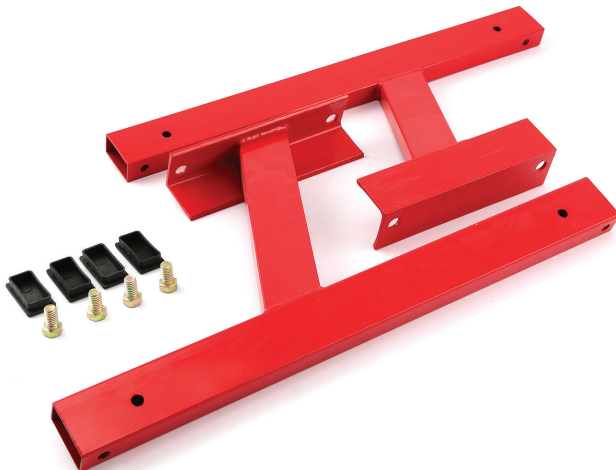
Speedmaster™ engine lift plates will allow you to lift your engine up by its intake manifold for easier maneuvering. You can also use them as a manifold cover when you store your engine. These lift plates fit most 4-barrel intake manifolds.



Engine Stands

Leg Stand

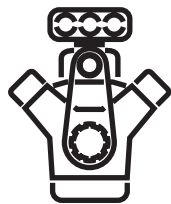
Speedmaster™ engine stands are constructed from high-quality steel tubing, the mount brackets are 1/4 inch steel plate with pre-drilled holes that match; the motor mount pattern welded to tubular steel supports. Tube steel featuring solid welds on all joints and plastic end caps are included. Red powdercoat finish for protection. They have been specially designed to clear most oversized dry sump oil pans with up to 9 in. deep sumps.



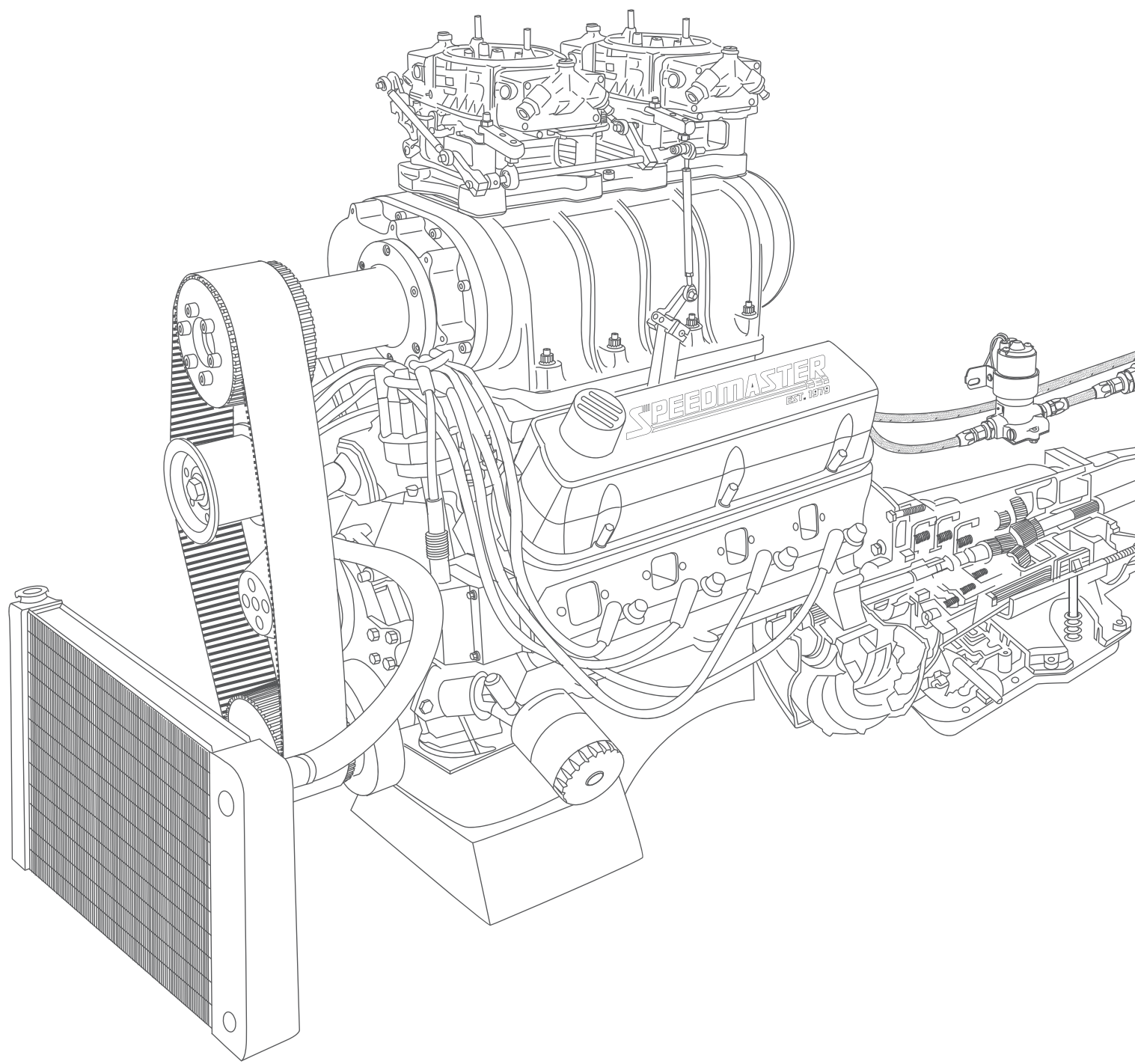
Rotable Head Stand

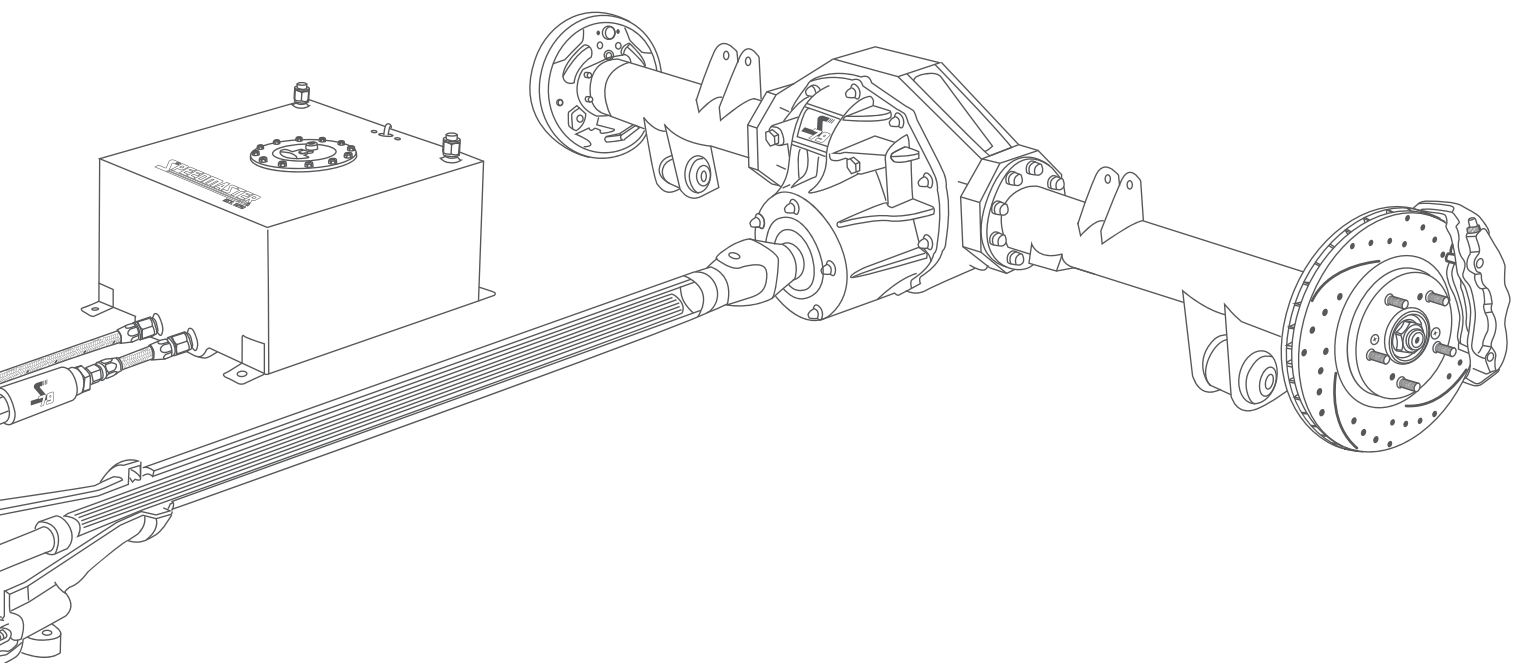
Speedmaster™ Rotable head engine stands are designed to be used to position engines that need to be repaired or rebuilt. They feature a 63 to 1 ratio gearbox that easily rotates engines to your desired position by turning a crank handle. They have a fully adjustable mounting head and adapter fingers, as well as a space-saving folding design that's great for storage.





Assemblies





Speedmaster "Assemblies Department" It's a one-stop-shop for a complete performance solution; incorporating all brand new parts that are designed to work with one another from the Speedmaster™ (and subsidiary) brand range. With unmatched value; you won't need to look around for all the parts needed when building an engine or driveline.

Engine Rotating Kits

We've done the Hard Work for You



Churn out all the asphalt-chewing, road-grating horsepower you want with our massive selection of rotating assemblies! Speedmaster™ kits bring together everything you need, including crankshaft, connecting rods, pistons, and other essential bottom-end components. Maximize your budget with a standard, all-in-one rotating assembly or maximize displacement with a cubic inch-enhancing stroker kit. We carry engine rotating kits for a large array of applications.

A Stroker kit is an aftermarket assembly that increases the displacement of a reciprocating engine by increasing the travel of the piston (that is, the piston moves further up and/or down in the cylinder). This is done by using a different crankshaft where the crank pin is moved further away from the center of the axis of rotation of the crankshaft.

Two key characteristics differentiate stroker kits

First, and most important, the crankshaft's rod journals are physically farther from the main journals than on the original equipment. A given extension in the distance between the rod and main journals results in twice that distance in increase of piston travel.

The second key characteristic of a stroker kit versus OEM is the required changes to allow a stroked crank to 'fit'. This is accomplished in one of three ways:

- Location of the piston pin (and the top of the rod) within the piston, or the compression height is shortened.
- Length of the rod is shortened.
- Height of the cylinder is lengthened.

Available in:

Street Series
Cast | I-5140 | Hypo

SuperStreet Series
Cast | H-4340 | Hypo

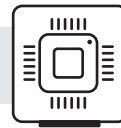
Outlaw Series
5140 | H-4340 | Forged

Sportsman Series
4340 | I-4340 | Forged

Racer Series
4340 | I-4340 | Race Forged






FAST
 FUEL AIR SPARK TECHNOLOGY

EZ-EFI
 2.0

Tuning your set-up has become even EZer thanks to FAST EZ-EFI 2.0 kits. These revolutionary self-tuners don't require a laptop or tuning experience. Simply hook them up, answer the basic Wizard setup questions, and the systems truly tune themselves--"EZ", right? Some kits include the innovative FAST 2.0 throttle body but FAST offers several choices, each a little different component wise--base kits, master kits with fuel systems, multi-port, and retro-fit kits--to fit your application with the simplest self-tuning engine control available. But no matter which one of the kits you choose you'll get a full-color touchscreen hand-held, a wide-band oxygen sensor, and a fully mesh wrapped wiring harness. Improved performance just doesn't get any EZer than this--FAST EZ-EFI 2.0 kits.

Speedmaster™ EFI Systems have won multiple Sema Show Global Media Awards.

The Speedmaster™ development team have been pushing the boundaries for years with a main objective "to improve the end user experience"; one of the many industry acknowledgments are the 6 in 6 years SEMA Show Global Media Awards for their research and development of their Pistons, Turnkey EFI system and Manifolds.



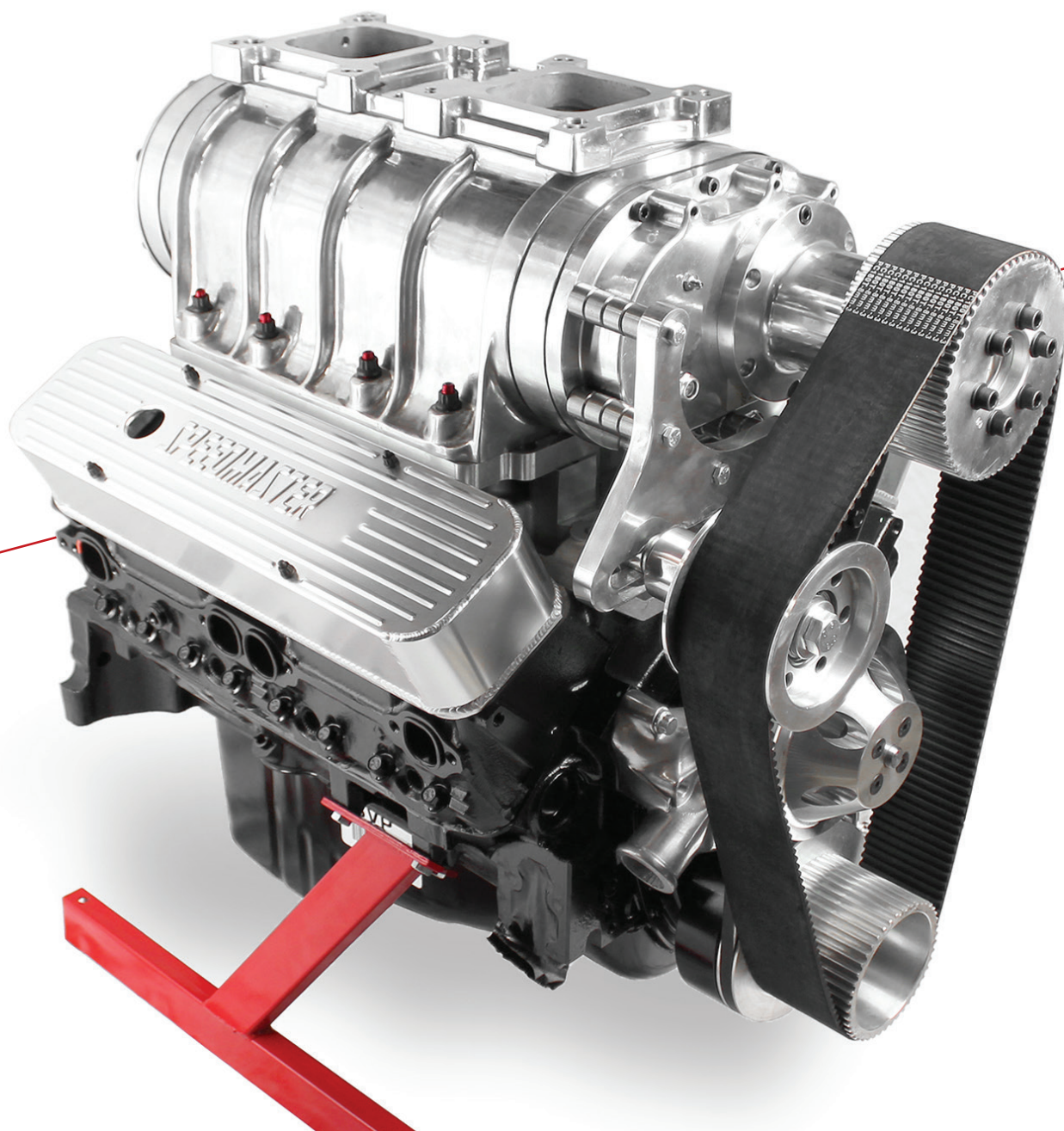
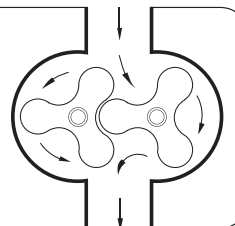
Superchargers Kits

It's all About Power



A supercharger is a compressor used to pump fresh air into the engine cylinders. Because more air, therefore oxygen, is forced into the cylinders this allows the engine to burn more fuel accordingly. The increased amounts of fuel and air in the cylinders cause a larger explosion in the cylinder when the spark plug is fired, subsequently more power is produced. In the process of powering a supercharger as much as a third of the total crankshaft power of the engine can be used, and in many applications superchargers are less efficient than the closely related turbocharger. However, because a turbocharger is powered by exhaust gases they suffer from 'turbo lag', this is because the pressure of the exhaust gas needs time to build up before spinning the turbine. Superchargers do not suffer from this problem, and in vehicles where power is more important than fuel economy superchargers are extremely common.

**+AIR MEANS +FUEL CAN BE ADDED,
+FUEL MEANS BIGGER EXPLOSION
= GREATER HORSEPOWER**



Let's boost your power output

Speedmaster's 6-71 Street Supercharger kits can give you 45-55 percent more streetable power. They feature double-pinned rotors (timed and clearanced after assembly), heavy duty front and rear bearing plates, and an intake manifold. The kits also come with a one-piece aluminum nose drive assembly, upper and lower drive pulleys, an idler pulley and bracket, a dual V-belt accessory drive pulley, a 3 in. Gilmer-style drive belt, and gaskets and hardware. Speedmaster™ also includes an adapter plate for two 4 barrel carburetors.



Quick Tip

Maintaining our Supercharged Car

Maintaining a supercharged car won't be much different than maintenance on any other vehicle. There are a few key differences and some things that need to be watched for.

Check oil levels. While it's important to keep proper oil levels on any vehicle, supercharged cars need to have special attention paid to this. The supercharge process creates more stress on the engine and without proper lubrication you can face very costly repairs later. Create a maintenance schedule that includes regular oil changes, and stick with it. It's not a good idea to use a synthetic oil in cars with a supercharger. The synthetic oil may last longer, but many car enthusiasts suggest using a conventional oil.

Use clean filters. A supercharged car relies on clean filters to perform at their maximum. A clogged or otherwise dirty filter will create more strain on the system, and can actually lead to more damage. An air filter in a supercharged vehicle will need to be replaced more often than in other types of vehicles. It's a good idea to change the air filter with every oil change.

Watch the clutch. Because of the added performance with a supercharged car, they tend to be driven much harder. This type of driving can lead to problems with the clutch because of the abuse that it takes. Have the clutch inspected regularly to avoid problems later.

Check tire alignment. For the same reason the clutch tends to go out quickly in a supercharged car, the tire alignment can get out of balance. It's a good idea to have the tires balanced regularly, and expect to spend extra money replacing tires more frequently with a supercharged vehicle.

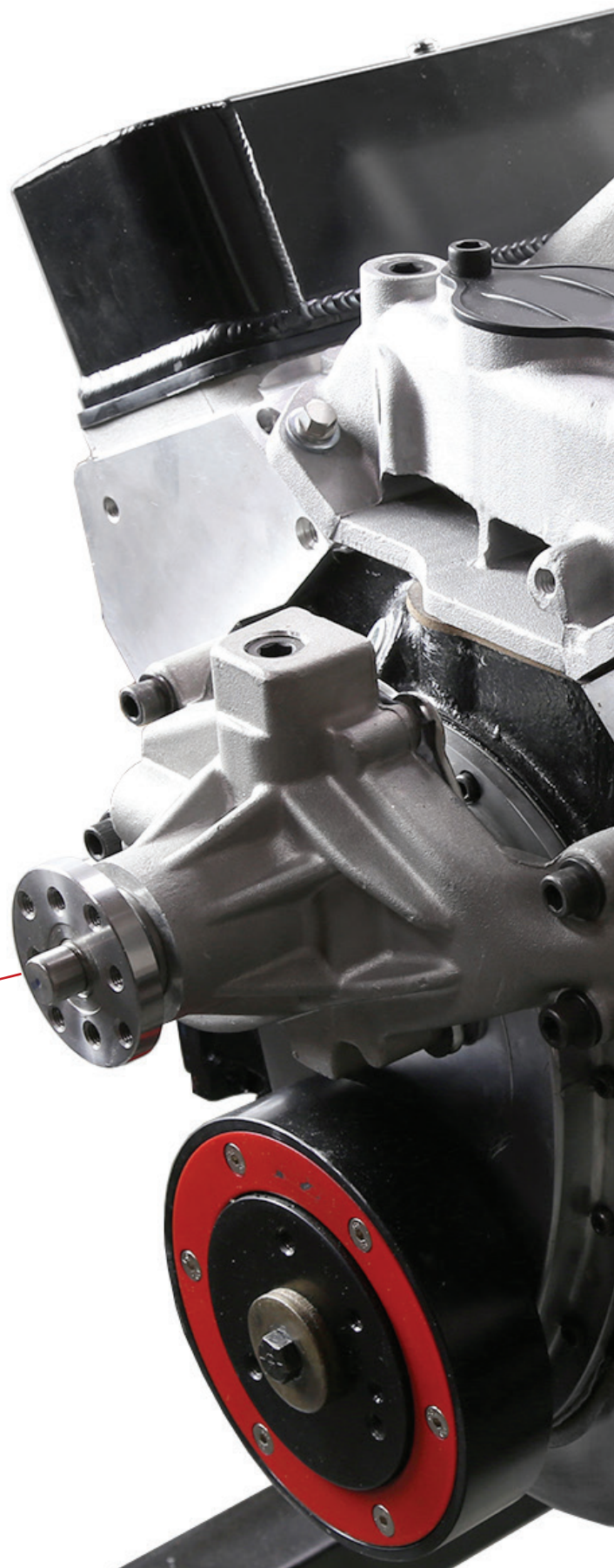
Use the best gasoline. If you've already spent the money on upgrading your car to a supercharged system, it's worth the extra money to use the right fuel. Using fuel grades that are low will lead to poor performance, and can create excess gunk in the engine. Most manufacturers suggest at least a premium fuel, if not a premium plus level gas. You may save a few bucks at the pump to purchase cheap fuel, but your performance will suffer, and you may find yourself sinking more money in to engine repairs later down the road.

Upgrade the cooling system. A supercharged car relies heavily on the coolant system. Superchargers create excess temperatures in the engine compartment of the car. An engine that is allowed to get too hot will end up costing potentially thousands of dollars in repairs later. This is so important with a supercharged car that many manufacturers suggest upgrading the temperature gauges. It's a good idea to regularly check the coolant levels, and stop running the car immediately if the temperature gauge creeps up even a little bit.

Crate Motors

Fully-Assembled

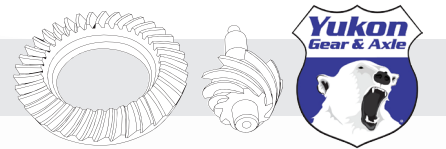
Speedmaster crate engines have become a huge success all over the world. We deliver reliable horsepower, torque and drivability. We use only quality name brand parts that we trust giving our customers a superior product for their money.





Axle Assemblies

Eager for Action



Can your axle assembly survive the high-torque, high-power output of your modified street/strip engine? Or how about the harsh, unforgiving terrain of your next off-road excursion? Make sure the answer is yes by replacing your stock or broken axle assembly with something better from Speedmaster. Broken axles equal broken dreams—avoid the nightmare with complete axle assemblies from Speedmaster™.



Assembly:

Assembly has been carried out at the Speedmaster's TDS Department by the Head differential technician. Quality is assured with 40 years experience in the Differential Industry and full involvement in all forms of motorsport from V8 SUPERCAR To Group 1 Drag Racing. Our Technician is on hand to discuss your differential requirements, questions and upgrades.

Available Differentials:

Full Spool (The Open Differential)

Torque Worm LSD (The Limited Slip Differential)

Locker (The Locking Differential)



Speedmaster™ Ford 9 inch **28-Spline** Modular Differential Complete is perfect for mildly built street cars up to 600 HP. For high performance street cars up to 700 horsepower we recommend upgrading to a **31-Spline**.

For absolutely serious street and racing applications, Ford 9 inch **35-Spline** Modular Differential Complete. Parts available for this unit are 1200 HP rated.

Ren's Signature Series





Maximum strength



Withstand extreme use



Avoid long term distortions



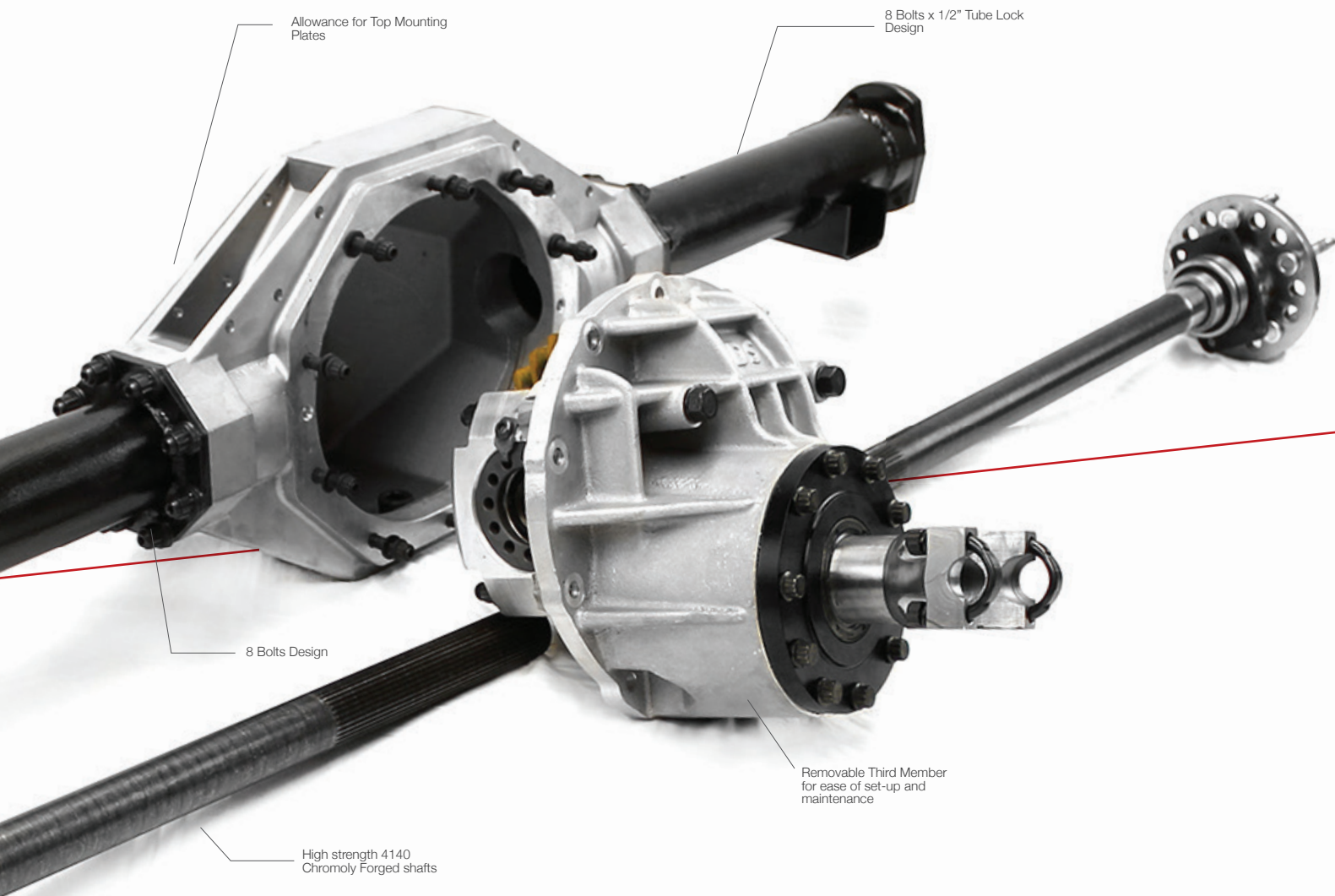
Superior wear resistance



Faster reaction



Eliminates gear failure

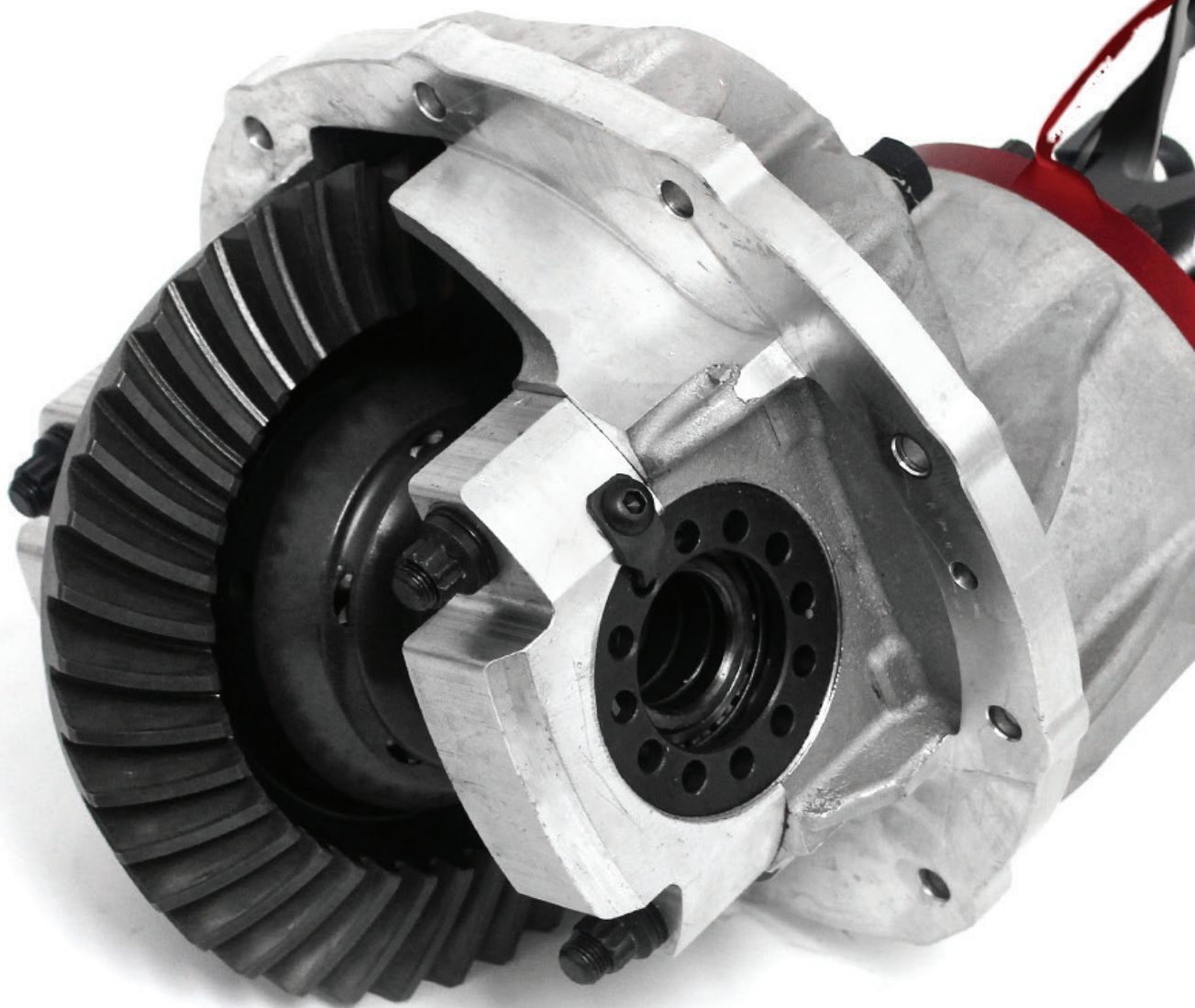


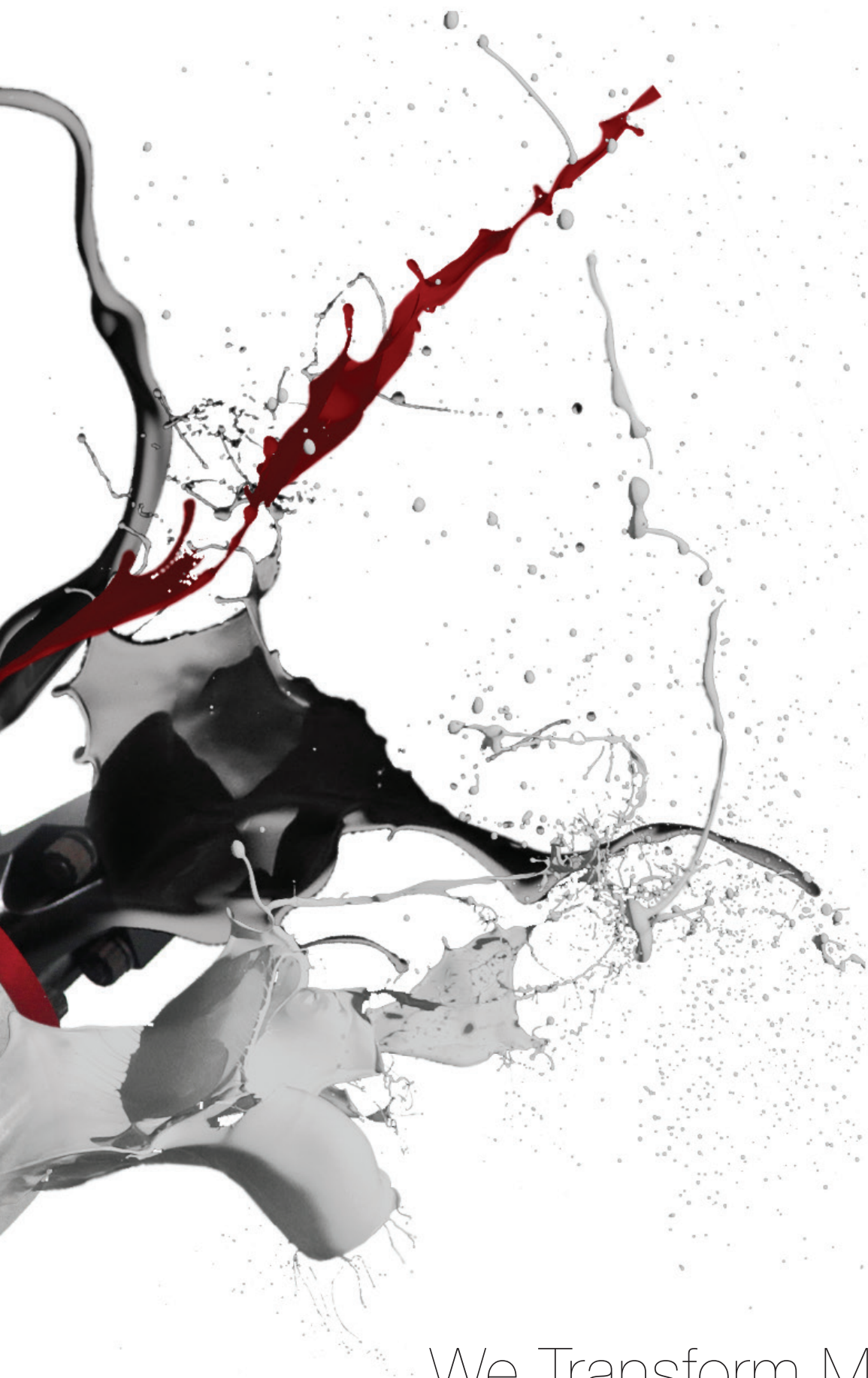
Available in:

28-Spline
SuperStreet Series

31-Spline
Outlaw Series

35-Spline
Sportsman Series





We Transform Matter into
High Performance Parts

Articles

Valve Train Geometry

As cam profiles continue to get more aggressive and valve springs pressure increase, the importance of pushrod knowledge has never been more critical. Here are some answers to the most common questions that you might have for Speedmaster™ tech support about pushrods.

Pushrod Length & Rocker Arm Geometry

A large number of variables are involved in determining the correct length pushrod for your application. Pushrod length is affected by any of the following:

- Block deck height
- Head deck height
- Head stud boss height
- Rocker arm brand/design
- Cam base circle size
- Lifter design/brand/pushrod seat height
- Valve stem length

Don't assume anything when determining the right pushrod for your new engine. A pushrod that fits one engine may not necessarily work in another. Any number of items can be different on your engine, requiring you to use a different pushrod length. Following the steps below will streamline the pushrod selection process, ensuring that you get the right parts the first time.

1. Buy a checking pushrod.

Do not buy pushrods when you buy the cam, lifters and other valve train components. As much as we would like to sell you pushrods at this time, nobody can predict ahead of time what length a given engine needs, unless it is bone stock.

Instead, invest in a checking pushrod at this time. They are available in two different designs, with the more expensive of the two being easier to measure once you have it adjusted to the proper length for your valve train. Neither is particularly expensive if you consider time lost and freight costs when returning pushrods.

Other companies offer their own versions of pushrod length checking devices, funny little plastic things with complicated instructions to calculate the length. The main disadvantage with these is that you have to order the pushrods and receive them before you know if your calculations are correct. With a checking pushrod, you can actually rotate the motor over and check the rocker arm/valve tip relationship as you adjust the pushrod length. When you get the correct geometry, it is a simple matter then to measure the length and place an order. Speedmaster™ carries a large number of various length and diameter pushrods so you get the correct length the first time.

2. Determine correct valve train geometry.

What is the correct length pushrod for your application? The one that produces correct valve train geometry. What is correct valve train geometry? When the rocker arm roller tip rolls from the intake side of the valve tip, across the center of the tip (at approximately mid-lift), to the exhaust side of the valve tip (at full lift) and back. See Diagram A.

3. Measure the resulting pushrod.

Measuring the length of a pushrod is a simple process. The most important thing to remember is that different manufacturers measure pushrods differently. Not all pushrods of a stated length will measure exactly the same. The three most common pushrod measurements are shown in Diagram B.

Theoretical Length: This assumes that the pushrod has no oil hole in the end of it. Therefore, the radius at either end is complete, which lengthens the pushrod approximately .017" in the case of a 5/16" pushrod with .100" diameter oil holes, minimally chamfered.

Actual Length: This is what you would measure if you had a set of calipers large enough to measure over the oil holes at each end of the pushrod. This is the measurement that most people can relate to. Unfortunately, this measurement is affected not only by the diameter of the oil holes but also by the entrance chamfer for each oil hole.

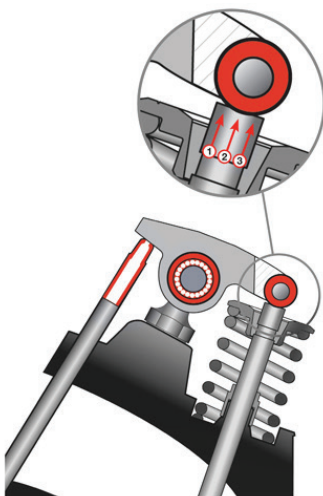
Gauge Length: Although the most difficult to measure (it requires a special length checking gauge), this measurement is the most reliable. This is because the oil holes and their chamfers are eliminated from the measurement. The only problem is that not all companies use the same gauge diameter. Speedmaster™ uses a .140" gauge diameter. All Magnum and Hi-Tech™ Pushrods listed in this catalog are measured using this technique. See Diagram B on the following page.

4. Simple measurement techniques.

We realize that most people don't have access to the special gauge required for these measurements or even a dial caliper large enough for most pushrods. We've developed two techniques to help you determine exact pushrod length so that the perfect valve train geometry is achieved in your engine.

Diagram A

1. Base Circle
2. Mid Lift
3. Max lift



Pushrod Measurement Techniques

Technique #1

This technique requires the use of a Speedmaster™ Pushrod Length Checker. These are marked with a standard length stamped in them. This number represents the gauge length of the part (.140" gauge diameter) with the two halves screwed completely together. Extending the pushrod one rotation lengthens the gauge length .050". For example, a pushrod stamped 7.800 and screwed apart one rotation would be $7.800 + .050 = 7.850$ gauge length. Therefore you would order the part number from the catalog that matches this gauge length, since gauge length is how they are listed.

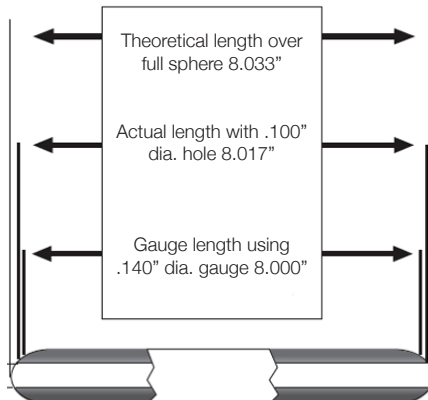
Technique #2

This technique requires one of our Magnum Pushrod Length Checkers. Once fixed, you don't need to have an expensive gauge or a pair of calipers to measure it. You just need a pushrod of a known length to compare it to (a standard). Then use a pair of common 6" calipers to measure the difference between the standard and yours.

Here are a few final hints about pushrods in general. It is always a good idea to buy a few spares when purchasing a set of custom length pushrods, and stick them in your toolbox. If one ever fails at the track and you need a replacement, it would be nearly impossible to borrow one from a fellow racer.

Another hint involves cup end pushrods. Measuring them for length is especially difficult, no matter which technique above you choose to use. The size and shape of the cup end varies greatly from manufacturer to manufacturer, so measuring from the ball end to the cup end over the cup surface is a dangerous practice. The best strategy is to drop a 5/16" diameter steel ball into the cup end, and do all measuring over this ball, subtracting the 5/16" diameter (.3125") to figure the length.

Diagram B





Speedmaster™
Peace of Mind

This product is covered under the Speedmaster Limited International Warranty.

For warranty details please visit:
speedmaster79.com/warranty

www.SPEEDMASTER79.com

