CALLIES®

COMPSTAR

Performance Engine Components by Callies

ENERGY

Performance Engine Components 2024

If you are serious about being in the winner's circle, then you have to be serious about Callies.

Callies Performance Products began manufacturing high performance crankshafts in 1989. With many years of engineering and employee experience, we have grown to be the industry leader for innovative product design. This, along with our sister company, Energy Manufacturing, and our partnerships with various suppliers, Callies is truly your one stop shop for performance.

We take pride in staying ahead of the competition with the latest high tech design and manufacturing advantages. Utilizing the latest in computer aided solid modeling and CNC machining centers, Callies offers the best designed, highest quality crankshafts, connecting rods, and camshafts available on the market today.

At the heart of our commitment to excellence is one of the most experienced sales teams in the industry. Up-to-date information on the latest products and innovations is available to Callies customers through our expert sales staff. Information shared between Sales, Engineering, and Manufacturing personnel on a daily basis creates company-wide continuity, ensuring that Callies maintains a focus on developing performance products that exceed all of your needs.

P.O. Box 926, 901 South Union Street, Fostoria, OH 44830 | 419.435.2711 | Fax: 419.435.2625 | www.callies.com

ENERGY
MANUFACTURING

Energy Manufacturing, Ltd. was formed in 2009 and is a distinctive expansion of Callies Performance Products and Tecnoma Industries.

ENERGY is focused on precision machining and manufacturing for complex components and assemblies where partners need custom solutions or that have a specialized or demanding routine. This includes applications for the high performance racing market, defense, mining, and oil and gas sectors.

A state-of-the-art manufacturing facility and in-house design team means that ENERGY is suited to scale production to meet a large spectrum of volume and complexity. With billet aluminum engine blocks and various other accessories, ENERGY has the recipe for performance.

www.energymanufacturing.com | 419-355-9304

*** All HP ratings are for reference only. * Other part numbers may be available. Contact our sales department for availability.**

Table of Contents

ULTRA BILLET CRANKSHAFTS

Callies Ultra Billets are intended for use in cutting edge applications where durability and innovation are a must. Ultra billets are produced from low carbon-high nickel steel that receives multiple heat treatments. Our specialty steel and heat treat processing yields a crankshaft with fracture resisting ductility, stiffness, and a wear-resistant outer case.

Your Ultra billet can be ordered in many custom configurations. These high alloy crankshafts are intended for severe duty, high output applications.

Ultra Billets Are Manufactured For The Following Engine Families:

- **Small Block Chevy**
  4.400" and 4.500" Bore Spacing
- **Big Block Chevy**
  4.840", 4.900", 5.000", 5.300" Bore Spacing
- **LSx** *Cleveland Mains, all types, LT1*
- **SB Ford 302 and 351**
- **BB Ford 460**
- **Mopar Hemi - 440**
- **Gen III Hemi**
- **RY45**
- **Nissan GT-R**
- **Duramax**
- **RB30 Hybrid**
- **Noonan**
- **481X/Miner**

Each Ultra billet crankshaft is uniquely machined with our Ultra-Shed counterweight profiles. The Ultra-Shed leading edge profile gently moves oil away from the oncoming counterweight while the directional trailing edge directs oil away from the oncoming rod journal.

Optional center counterweight shown with Ultra-Shed leading and trailing edge contouring.

Rod journal holes and main bearing gun drill bores are all highly polished and radiused.

Our Aero-Shed super finish will give you a totally stress-riser free and incredibly aero efficient crankshaft. When the Ultra-Shed and Aero-Shed processes are combined, the result is a crankshaft with the lowest coefficient of drag in the industry.

Top Fuel Hemi with Aero-Shed super finish and splined post.

ULTRA BILLET UB / ULTRA UD CRANKSHAFTS

The Ultra Billet UB family of crankshafts represent the pinnacle of severe duty shafts. Designed specifically for the most harrowing, ultra-high output applications where no exceptions are to be made for reliability, years of experience and talent culminate to shape the industry's most capable crankshaft. Each Ultra Billet UB crankshaft is machined from Callies renowned 4330 bar stock, sourced from TimkenSteel right here in Ohio. Taking lessons from the Top Fuel world, where our crankshafts routinely outperform the competition, we've implemented similar design language into the Ultra Billet UB line. Two of the most prominent changes include increased material found on the pin arms and pin tops. These changes, along with others, allow for the most reliable crankshaft that is offered today— helping make sure you spend more time at the track than in the shop.

The Callies Ultra UD crankshaft family represents the most reliable and highest performing evolution in shaft design for naturally aspirated applications. Machined from Callies' American made 4330 bar stock or proprietary 4340 forgings, this crankshaft was specifically designed for circle track and endurance racing where the least amount of reciprocating weight is demanded, while not sacrificing strength. Improvements over the outgoing XB and XL cranks include more robust pin arms to decrease torsional fatigue, radially narrowed counterweights (versus pendulum-cut), as well as more material around the centerline to virtually eliminate flexing. These changes come together to make the best endurance crankshaft available.

MAGNUM CRANKSHAFTS

After years of service, **Magnum crankshafts** by Callies have established themselves as one of the most durable competition crankshafts ever produced. Magnum crankshafts are manufactured from SAE 4340 steel. Callies subjects this material to multiple heat treatments, resulting in a crankshaft with unsurpassed wear and strength characteristics. All Magnum cranks feature Callies Ultra-Case heat treatment.

Magnum Are Available For The Following Engine Families:

- **LSx/Gen V LT1**
- **Small Block Chevy**
- **Big Block Chevy**
- **Small Block Ford 302, 351**
- **Big Block Ford 460**
- **Duramax**
- **Gen III Hemi**
- **Ford 7.3 Godzilla**

Each Magnum crank will have gun drilled mains and fully profiled counterweights, regardless of engine type. A typical 4.000” stroke Small Block Chevy will weigh less than 48 pounds. Magnum crankshafts are available for a variety of engine types and can be manufactured to your specific configuration.

Many crankshafts are counterweighted to offset simple balance forces detected at main bearings 1 and 5 by today’s precision balancers. Callies Magnum Mass Correct counterweights have been strategically placed to reduce imbalance forces over the entire length of the shaft. The result is a crankshaft exhibiting superior bearing life and minimal wear.

Material distribution over the rod journal arms and critical strength generating regions of Magnum crankshafts has been enhanced as well. These slight design changes improve the strength to weight ratio, ensuring each Magnum crankshaft will have an extended fatigue resistant life.

COMPSTAR CRANKSHAFTS

COMPSTAR

Performance Engine Components by Callies

Compstar components were introduced in 2004 as a product line designed to meet and exceed the requirements of today's racer at a sensible price point. Callies' value driven approach is to design and engineer here in the U.S., then source through long term vendors while being supported by our engineers, giving us distinct technical and quality advantages. This, coupled with our American craftsmen who finish the components at our facility in Fostoria, Ohio, create a combination that is considerably more robust and stable than our competitors. We are not just an importer of product; we are a manufacturer that wants to bring products to our customers at all price points.

Our Compstar line also extends to Sport Series, which we have designed for maximum effort engines. They feature the best metallurgy and heat treatment on the market today.

Compstar Step by Step:

1. Compstar crankshafts begin their life overseas where they are forged using Callies owned dies, rather than generic forgings used by other manufacturers. You can be confident that you're getting our product by the triangle shaped notch in one of the counterweights. *(See ablove diagram.)*

2. The 4340 steel forgings are semi-finished, machined off-shore, then shipped to Callies to be finished.

3. All Compstar components are 100% Mag Particle inspected to verify there are no cracks or inclusions in the material. Additionally, our in house metallurgical laboratory verifies material and heat treatment to ensure it meets Callies engineering and quality requirements.

4. 100% of our Compstar crankshafts are finish sized and polished by American craftsmen, ensuring proper fitment and widths. Additional items checked are runout, bolt holes and oil holes.

5. Every crank then goes through our stringent Quality Control final check, guaranteeing your Compstar Engine Component is ready to race.

ULTRA CONNECTING ROD

ULTRA™

Callies has developed the **Ultra connecting rod** with the design goal of an uncompromised strength to weight ratio. Every Ultra connecting rod is produced from specially formulated 4330 TimkenSteel and precision forged for uniform grain flow and consistency. Many geometric nuances are incorporated into the design of Ultra connecting rods, which are subject to high output, high RPM applications. These design features enhance the Ultra against specific loads and stresses.

Ultra connecting rods are fastened by high alloy cap screws produced specifically for severe applications by ARP. Purpose built 260Ksi Ultra Bolts offer improved thread engagement for a smoother, more consistent net clamping load. To eliminate deformation and extrusion only Ampco 45 bronze silica alloy is used within the wrist pin housing bore. This material has a proven hardness more than 26% greater than commonly used Ampco 18 material. For high RPM or extreme horsepower applications, Ultra connecting rods are fitted with Custom Age bolts. These high strength alloy fasteners provide unparalleled clamping strength and toughness. Upgraded bolts are available for all Ultra I-Beam connecting rod configurations.

ULTRA ENFORCER

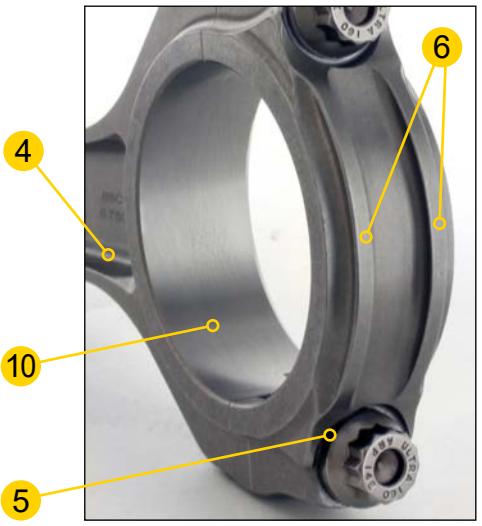
Designed with fortified tower flanges, **Enforcer I-beam** connecting rods are the ideal component for turbocharged and supercharged engines.

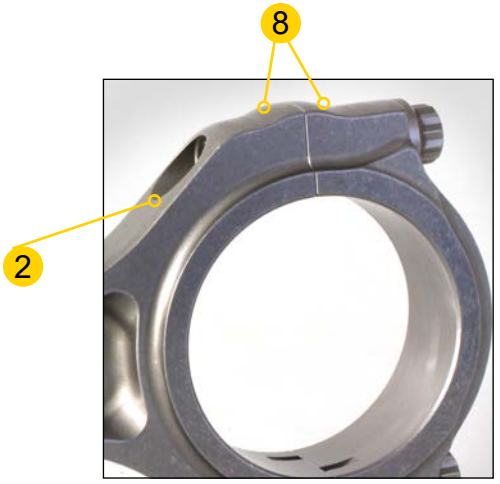
The I-beam design has been time tested and proven as the most stable configuration in high torque applications. High combustion forces generated within boosted engines are capable of buckling a standard connecting rod that had been intended for a naturally aspirated application.

ULTRA CONNECTING ROD

Ultra & Ultra Enforcer Connecting Rod Design Features

1. Truncated arc tower flanges improve stiffness and reduce weight.
2. Smooth notch free section at bearing housing shoulder.
3. Pressure Angle Arches disperse wrist pin induced strain.
4. Large web to flange transition radius.
5. Full fillet intersection of bolt spot face and interior gusset surfaces.
6. Stress spreading (twin rib caps) utilize the extended section concept of strength enhancement.
7. Precisely machined (Trapezoidal Contour) at the tower base eliminating parallel flange harmonics and increasing weight reduction.
8. Extended foot print at joint mating faces for superior housing stability.
9. Min/Max gusset; our analyzed design minimizes material yet achieves maximum stiffness.
10. Low carbon, high-alloy Timken specialty steel.





ULTRA ASSASSIN

Ultra Assassin diesel rods are made entirely in the USA. Like all Ultra rods they are made from specially formulated 4330V TimkenSteel. This material is then precision forged in Michigan and machined in our Fostoria, Ohio facility. Assassin Series Rods are near net as forged with minimal machining. They are fastened by high alloy cap screws made specifically for severe duty service by ARP Inc. To eliminate deformation and extrusion only AMS 642 bronze alloy is used within the wrist pin housing bore.

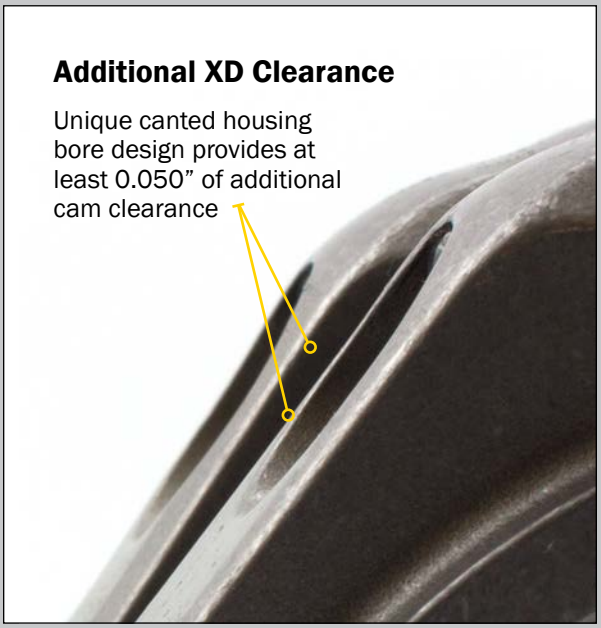
ULTRA CONNECTING ROD

ULTRA
Dirt / Oval Track Rods

Designed for naturally aspirated motors, the Ultra Dirt / Oval rods feature a tapered beam. This reduces the overall mass which in turn means a lighter bob weight and quicker throttle response. They also incorporate an enhanced big end where 7/16 bolts are utilized on the Honda rod journal. This increases clamping loads without the added expense required when using the small 3/8 fasteners. The Ultra Dirt / Oval rods are made from the same 4330V TimkenSteel material and 265 KSI Ultra bolts as any other rod in the Ultra family. These are also available with the CA Bolts and .866 Wrist pins.

ULTRA XD

The Ultra XD unique connecting rod design offers greater cam to connecting rod clearance. This innovation will allow the use of increased base circle cams for improved valve train performance, stability, and horsepower. For the first time, engine builders are given greater flexibility in selecting valve train components when using a standard cam height block. The Ultra XD concept has been track tested and proven to be a reliable, long term solution to troublesome connecting rod to camshaft interference problems.



Ultra H-Beam connecting rods are High Value American-made engine components. Ultra H-Beams are forged from the same premium 4330V material as our entire Ultra line. Savings resulting from streamlined manufacturing design are passed directly on to you. The Ultra H design ensures the geometry of these critical components will remain true under high tensile and compressive load situations.

ULTRA
(High Value) H-Beam Connecting Rods

COMPSTAR CONNECTING ROD

Performance Engine Components by Callies

Compstar Connecting Rods are given the same attention to detail as our Compstar Crankshafts. Although they begin their journey overseas, they are forged on Callies' own dies and are returned to our shop in Fostoria, Ohio to be finished. Every detail of this highly-stressed component has been carefully analyzed to maximize repeatability and dependability.

Compstar Rods Step by Step:

1. Compstar and Compstar Sport Series are forged overseas on Callies owned dies, not on the community dies shared by other manufacturers.

2. The 4340 steel forgings are semi-finish machined off-shore and then shipped to Callies to be finished.

3. Metallurgical checks confirm the material and heat treatment complies with our specifications.

4. At Callies, 100% of the parts are washed, ARP fasteners are installed and torqued, and each part is honed by American craftsman to final sizes.

5. Samples from each lot are checked in our Quality Control lab for adherence to our strict specifications. Parts are weight matched into sets creating consistency for the engine builder.

All the quality, reliability & workmanship you have relied upon for years from the Compstar line up is taken to the... *Xtreme*

- Specifically designed for power adder and diesel applications.
- The Compstar Xtreme utilizes the same proven 4340 material and ARP 2000 or L19 fasteners.
- Strength is added by thickening up the flanges of the H-beam and a reduced depth of cut towards the center of the rod.
- Non-essential weight has been taken out of the beam to help keep the overall weight of this rod in check.

Compstar Xtreme Currently Available For:
• LS • Small Block Chevy • Duramax • Big Block Chevy

CAMSHAFTS / CAM CORES

Callies Performance Products has developed some of the most extensive camshaft machining capabilities in North America. In addition to our comprehensive in house heat treat department we are able to produce and verify any complex contour found on today's camshafts.

Callies fully finished camshafts are machined and heat treated entirely in house. This continuity of manufacturing allows Callies to deliver high quality camshafts on schedule. Our finished cams are ground with the latest Landis CNC technology. They are ADCOLE and Jenoptik inspected for accuracy, making them the most consistent cams on the market today. If required, your cams can be finished with inverted flank lobe profiles and complex VVT oil channels and drillings.

Callies Cam Research Lab

Valvetrain durability is a key ingredient to the success of every engine. The Callies Cam Research Lab has been established to guarantee that our cams are capable of extended life cycles in abusive applications. When combined with our metallurgical capabilities, the Callies Cam Research Lab allows evaluation of lobe profiles, valvetrain systems and processing methods like no other cam company. Spintron testing enables our engineering staff to evaluate valvetrain stability in minute detail up to 11,000 RPM. Programmable test cycles allow complete event simulation. Sixteen channel data acquisition can provide monitoring of temperatures, pressures, flows, loads and strain. Let Callies help you design your next step forward.

VTG Valve Train Group

Valve Train Group – VTG is the finish ground series of camshafts manufactured by Callies Performance Products. We offer cams to serve a wide variety of applications for many popular engine platforms.

VTG cams are available in multiple types of aircraft quality materials. Less aggressive profiles fit nicely within our induction hardened 1050 or 4150 materials. 8620 carburized material works well for many racing applications. Tool steel is available for the most extreme applications.

Keeping the valvetrain under control is vital to a successful engine program. Our lobe profiles are designed to produce excellent power without sacrificing durability. They are precision ground in our Landis CNC grinders, with event timing and lobe profile tolerances verified in our Adcole inspection gages.
With a long history of superior quality grinding experience, VTG by Callies is the right choice for all of your camshaft needs.

CAMSHAFTS / CAM CORES

CARBOCORE
PERFORMANCE CAMSHAFT CORES

INDUROCORE
PERFORMANCE CAMSHAFT CORES

TITAN™
Tool Steel Camshafts

Carburized & Hardened 8620 steel camshaft cores are produced to AMS 2301 (AQ) standards. Our engineering staff can create an unground lobe profile to your exact requirement. Carbocore cams are machined and heat treated entirely in house.

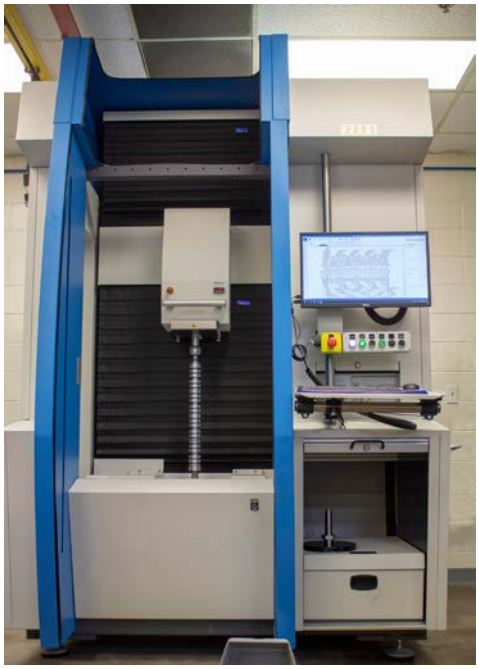
Callies Indurocore camshaft cores can be machined to your specification from either 1050 or 4150 alloy steel. Every Indurocore cam is induction hardened in house at Callies. This process is carefully monitored, guaranteeing metallurgical consistency. Indurocore cams are available for a wide range of engines.

Callies metallurgy and heat treat teams have perfected a revolutionary process that offers unrivaled camshaft durability. Titan Tool Steel Camshafts give you more options for performance, enhancing geometry while increasing life expectancy. Fully finished Titan cams are available for a wide range of engines and applications.

Engine Families Presently Supported:
(Cores or Finish Ground)

- Ford Powerstroke
- Cummins B series
- LS Std, 55mm, 60 mm
- SBC all bore spacings
- BBC all bore spacings
- Hemi
- LT
- Mopar T/F & T/A, 6 bolt
- Pontiac V8
- Holden V8
- Mopar R block
- Dodge Viper
- Duramax
- Ford 351 / 302
- Ford 429 / 460
- Ford Godzilla
- Noonan 4.900

SCAN THIS CODE TO SEE OUR FINISH GROUND CAMSHAFT OFFERINGS



Jenoptik Opticline inspection machine

Multiple Landis CNC cam grinders

LSx & GEN V LT1

Callies has developed a wide range of part numbers for the continually evolving and popular LS family of engines. You will find our selection of components to be the industry's most comprehensive offering.

Ultra LS cranks can be purchased with or without large fan angle center counterweights

LS Ultra Billet UB

Available Options:

- Stroke range of 2.720" to 4.750"
- LS1, LS7, LT1 posts are available
- 6, 8, or 9 bolt pattern flange options
- Rod Sizes: 1.850", 1.888", 2.000", 2.100", (2.200" w/sbc width) 2.200"
- Main Journal Sizes: Standard LS, Ford Cleveland 351
- 8 or 6 counterweight designs available
- No drill balance optional
- Aero efficient Ultra-Shed counterweight profiling is standard
- Aeroshed super finishing included with all Ultra billets
- All Ultra LS billets are produced from Timken 4330 alloy steel

Contact the Callies sales team for a full list of part numbers and options. 419-435-2711

LS/Gen V LT1 8 Counterweight Magnum

Average weight: 50-55 lbs.

LS1 Gen III - IV Standard Features

- Stroke range of 2.700" to 4.625"
- Fully counterweighted
- Counterweight prepped for a minimum 1850g bob weight
- Dual post keyways
- Gun drilled mains & lightened rods
- Heat Treatment = Perma Case Deep Nitride
- 1.825", 1.850", 1.888", 2.000", 2.100" rod journal diameters
- LS, LS7, or LT posts configurations
- Ford 351 mains available as custom

Stroke:	Main:	Pin:	Cammed for Rod Length		Part #:
3.625	2.559	2.100	6.100	LT Dry Sump	5UH-31W-MG
4.000	2.559	2.100	6.125		APO-31W-MG
4.000	2.559	2.100	6.125	LS7 Dry Sump	AWO-31W-MG
4.000	2.559	2.100	6.125	LT Dry Sump	5UO-31W-MG
4.000	2.559	2.100	6.125	LSA	5PO-31W-MG

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
4.000	2.750	2.100	6.125	APO-71W-MG
4.125	2.559	2.100	6.125	APU-31W-MG
4.125	2.750	2.100	6.125	APU-71W-MG
4.250	2.559	2.100	6.350	APP-31W-MG
4.250	2.750	2.100	6.350	APP-71W-MG

LS Ultra UD - Forged & Billet

Standard Features

- Stroke range of 2.720" to 4.250"
- Fully counterweighted
- Counterweight prepped for 1850g bob weight
- Gun drilled mains & lightened rods
- Available as a forging or a billet

Forged:

Stroke:	Main:	Pin:	Cammed for Rod Length		Part #:
3.625	2.559	2.000	6.125		APH-34W-UD
4.000	2.559	1.888	6.125		APO-39W-UD
4.000	2.559	2.000	6.125	LS7 Post	AWO-34W-UD
4.125	2.559	2.000	6.125		AWU-34W-UD

Billet:

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
3.625	2.559	1.888	6.125	APH-39@-UD
3.900	2.559	2.000	6.125	APC-34@-UD
4.000	2.559	2.000	6.125	APO-34@-UD
4.100	2.559	2.000	6.125	AP&-34@-UD

Contact Callies for a full list of part numbers and options.

Compstar LSx (6 and 8 Counterweight)

Average weight: 52 lbs. 6 cwt and 55 lbs. 8 cwt

Standard Features

- Typical weight for a 4.000” stroke, 2.100” journal = 51 lbs.
- 2.100” or 2.000” rod journals
- Standard LS main diameters only
- 3.625”, 4.000”, 4.100”, 4.125” strokes available
- All Compstar LS cranks are counterweight prepped to 1850 gram bob weight
- OEM 58 tooth reluctor or billet 24 tooth reluctors available

Compstar LSx 6 Counterweight

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
3.625	2.559	2.100	6.125	APH-317-CS24
3.625	2.559	2.100	6.125	APH-317-CS58
4.250	2.559	2.100	6.350	APP-317-CS

Compstar LSx 8 Counterweight

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
LS Wet Sump Post				
3.625	2.559	2.100	6.098	APH-31Q-CS
3.900	2.559	2.100	6.125	APC-31Q-CS
4.000	2.559	2.100	6.125	APO-31Q-CS
4.100	2.559	2.100	6.125	AP&-31Q-CS
4.125	2.559	2.100	6.125	APU-31Q-CS
LS Dry Sump				
3.625	2.559	2.100	6.100	AWH-31Q-CS
4.000	2.559	2.100	6.125	AWO-31Q-CS
4.125	2.559	2.100	6.125	AWU-31Q-CS

Compstar LT 8 Counterweight

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
LT Wet Sump Post				
3.625	2.559	2.100	6.100	5TH-31Q-CS
3.750	2.559	2.100	6.125	5TJ-31Q-CS
4.000	2.559	2.100	6.125	5TO-31Q-CS
LT Dry Sump Post				
3.625	2.559	2.100	6.100	5UH-31Q-CS
3.750	2.559	2.100	6.125	5UJ-31Q-CS
4.000	2.559	2.100	6.125	5UO-31Q-CS

Reluctors

Single piece billet reluctor wheels machined to OEM specification with either 24x or 58x notch patterns. Callies reluctor wheels for all LS and LT engines are final bored with a .007” undersize bore insuring installation security in the harshest of applications. All surfaces on Callies reluctor wheels are machine milled not laser cut to ensure smooth, strong signal.

LS Post Spacer

Allows for use of dry sump crank in wet sump application. Must be modified to be used with aftermarket balancer.

Part #CPP-0551

Timing Drives

Jesel : KBD-31666
RCD : 253500-055
Innovator’s West : 5202

LSx & GEN V LT1

*** Pistons, Bearings and Finish Ground Cams also available.**

Callies Connecting Rods

LS Ultra Enforcer I-Beam - Rated for 2,400 HP

Length:	Journal:	Typical Wt:	Part #:
6.125	2.100	662g.	U17175
6.125	2.100	710g.	U17175-CA

LS Ultra I-Beam - Rated for 2,000 HP

Length:	Journal:	Typical Wt:		Part #:
6.125	2.100	662g.		U17171
6.125	2.000	640g.	.927 pin	U17172
6.350	2.100	674g.		U17178
6.350	2.100	655g.	.866 pin	U17179
6.125	2.100	662g.		U17171-CA
6.350	2.100	674g.		U17178-CA

LS Ultra H-Beam - Rated for 1,600 HP

Length:	Journal:	Typical Wt:	Part #:
6.100-LW	2.100	620g.	U16290
6.125	2.100	649g.	U16300
6.125	2.000	650g.	U16310
6.200-LW	2.100	625g.	U16303
6.350	2.100	658g.	U16302
6.460	2.100	661g.	U16301

Compstar Connecting Rods

Compstar LS Xtreme

Length:	Journal:	Typical Wt:		Part #:
6.125	2.100	648g.	.927 pin	CSC6125DS2A2AX

LS Compstar H-Beam- Rated for 1,000 HP

Length:	Journal:	Typical Wt:		Part #:
6.100	2.100	611g.		CSC6100DS2A2AH
6.100	2.100	612g.	.943 pin	CSC6100DS6A2AH
6.125	2.000	595g.		CSC6125CS2A2AH
6.125	2.000	618g.		CSC6125DS2A2AH
6.440	2.000	639g.		CSC6440CS2A2AH
6.560	2.100	655g.		CSC6560DS2A2AH

Head Studs

Part #:	Description:	Material:	Tensile Strength
10413P	SBC LS Studs - 2004 & Later - All In One Length	Patriot Grade	180-220 ksi
11086	LT Loose Stud Assy - 4” x 7/16-14 x 7/16-20”	TorqueMaster	190-240 ksi
11087	LT Loose Stud Assy - 5” x 7/16-14 x 7/16-20”	TorqueMaster	190-240 ksi
10620	LSR Loose Stud Assy - 7” Head Stud - LSR 1/2”	TorqueMaster	190-240 ksi
10372	LSR Loose Stud Assy - 12pt. Heavy Nuts .825” collar .515” height	TorqueMaster	190-240 ksi
10257	LSR Loose Stud Assy - Washer - Diameter .875”x1225” thick	TorqueMaster	190-240 ksi

Main Studs

Part #:	Description:	Material:	Tensile Strength
10593	Chevrolet LS - Gen III LS Cast Iron	Patriot Grade	180-220 ksi

10790	Point Nut 7/16-20 12 point nut, .825 collar, 9/16 wrench .475 oah
10383	Washer 7/16 - 0.4375 ID 0.875 OD 0.125 thick - non-chamfer

Energy Manufacturing offers LS Engine Blocks

Energy products can be purchased by contacting Energy directly or by talking to your Callies sales representitive.

BIG BLOCK CHEVY

For over 30 years, Callies crankshafts have been the workhorse of Big Block Chevy engines in the motorsports industry. We are proud of this success and are pleased to offer continued excellence with our line of crankshafts, connecting rods, engine ready camshafts and Energy Manufacturing engine blocks.

Big Block Chevy Ultra Billet UB

Standard Features:

- Bore spacings available: Standard 4.840”, 4.900”, 5.000”, 5.300”
- Stroke range of 3.400” to 6.125”
- Flange options: 7/16″ or 1/2″ bolt holes available
- Rod journal diameters available: 1.888”, 2.000”, 2.100”, 2.200”, 2.375” Hemi
- 8 or 6 counterweight designs available
- Sold complete with no drill balance
- Aero efficient Ultra-Shed counterweight profile
- Aeroshed super finishing is standard
- Various keyway configurations available
- All Big Block Chevy Ultra Billet crankshafts are produced from high grade TimkenSteel material.
- Splined Post (RCD Style) available

Aeroshed finish and Ultra-Shed counterweight profiling.

Big Block Chevy Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
4.000	2.750	2.200	6.385	BBO-42B-MG
4.250	2.750	2.200	6.385	BBP-42B-MG
4.375	2.750	2.200	6.535	BBB-42B-MG
4.500	2.750	2.200	6.700	BBQ-42B-MG
4.750	2.750	2.200	6.700	BBS-42B-MG
4.625	2.750	2.200	6.700	BBR-42B-MG

Big Block Chevy Magnum Stock Eliminator

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.779	2.750	2.200	6.135	BB1542B-SE
4.013	2.750	2.200	6.135	BB1642B-SE

Big Block Chevy Magnum

Average weight for 4.500” Stroke, Balanced to 2350g Bob. = 69 lbs.

Standard Features:

- Stroke range of 3.500" to 5.750"
- Gun drilled mains, with 8 full counterweights
- All rod journals lightened
- Dual post keyways (additional available)
- Heat Treatment = Ultra Case Deep Nitride
- Enhanced rod oiling through the use of main bearing oil hole lead-ins
- One and two piece seal type flanges or star flange
- Custom flange bolt, dowel and post drilling available

BIG BLOCK CHEVY

COMPSTAR
Performance Engine Components by Callies

Compstar:

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #	
3.760	2.750	2.200	6.135	IB3425-CS	1 pc. seal
3.760	2.750	2.200	6.385	BB3425-CS	
4.000	2.750	2.200	6.385	IBO425-CS	1 pc. seal
4.000	2.750	2.200	6.385	BBO425-CS	
4.250	2.750	2.200	6.385	IBP4525-CS	1 pc. seal
4.250	2.750	2.200	6.385	BBP425-CS	
4.375	2.750	2.200	6.385	BBB425-CS	
4.500	2.750	2.200	6.585	BBQ425-CS	
4.625	2.750	2.200	6.700	BBR425-CS	Coming Soon
4.750	2.750	2.200	6.700	BBS425-CS	

Compstar Big Block Chevy
Average weight for 4.500" Stroke, Balanced to 2350g Bob. = 72 lbs.
Standard Features:
- 8 counterweight design
- All rod journals lightened
- Limited stroke availability
- Heat Treatment = Nitride Case

Motion Race Works
Justin Martin
Callies BBC Ultra Billet UB Crankshaft,
Energy Billet BBC Engine Block

*** Pistons, Bearings and Cams also available.**

BIG BLOCK CHEVY

Callies connecting rods were designed for the harshest of applications. Choose from a variety of BBC rods from our top of the line Ultra Enforcer I-Beams to our value added Compstar H-Beams.

Big Block Enforcer I-Beam

Length	Journal	Typ. Wt.	Part #
6.385	2.200	867g.	U15210
6.535	2.200	877g.	U15211
6.385	2.200	872g.	U15210-CA
6.535	2.200	882g.	U15211-CA

Big Block Enforcer XD I-Beam

Length	Journal	Typ. Wt.	Part #
6.700	2.200	875g.	U18214
6.700	2.200	880g.	U18214-CA

Big Block Ultra I-Beam

Length	Journal	Typ. Wt.	Part #
6.385	2.200	800g.	U15110
6.535	2.200	810g.	U15111
6.660	2.200	813g.	U15113
6.700	2.200	818g.	U15114
6.750	2.200	819g.	U15115
6.800	2.200	821g.	U15116
6.385	2.200	805g.	U15110-CA
6.535	2.200	815g.	U15111-CA
6.660	2.200	818g.	U15113-CA
6.700	2.200	823g.	U15114-CA
6.750	2.200	824g.	U15115-CA
6.800	2.200	826g.	U15116-CA

Big Block Ultra Long I-Beam

Length	Journal	Typ. Wt.	Part #
7.100	2.200	843g.	U15270
7.200	2.200	848g.	U15280
7.100	2.200	848g.	U15270-CA

Big Block Small Journal Ultra I-Beam

Length	Journal	Typ. Wt.	Part #
6.385	2.100	798g.	U15117
6.535	2.100	806g.	U15118
6.385	2.100	803g.	U15117-CA
6.535	2.100	811g.	U15118-CA

Big Block Ultra H-Beam

Length	Journal	Typ. Wt.	Part #
6.385	2.200	800g.	U16200
6.480	2.200	800g.	U16205
6.535	2.200	807g.	U16210
6.700	2.200	817g.	U16230

Compstar Xtreme Big Block

Length	Journal	Typ. Wt.	Part #
6.385	2.200	819g.	CSB6385ES3BDAX
6.535	2.200	827g.	CSB6535ES3BDAX
6.700	2.200	835g.	CSB6700ES3BDAX

Compstar Big Block H-Beam

Length	Journal	Typ. Wt.	Part #
6.135	2.200	813g.	CSB6135ES3B9AH
6.385	2.100	732g.	CSB6385DS3B9AH
6.385	2.200	816g.	CSB6385ES3B9AH
6.535	2.200	820g.	CSB6535ES3B9AH
6.660	2.200	805g.	CSB6660ES3B9AH
6.700	2.200	825g.	CSB6700ES3B9AH
6.800	2.200	842g.	CSB6800ES3B9AH

ENERGY MANUFACTURING

BBC Engine Blocks are available from Energy.

SMALL BLOCK CHEVY

No other brand of aftermarket components has seen the wide range of application and success as the Callies line for Small Block Chevy engines. With years of cross-application experience, no other brand has been able to provide the winning record and history of durability. You will find our line of crankshafts, connecting rods, and camshafts to be comprehensive and capable of handling your needs.

Small Block Chevy Ultra Billet UB

Available Options

- Types available: Standard 4.400, Spread Bore 4.500
- Stroke range of 2.600" to 4.500"
- BBC post or SBC post, various keyway configurations available
- Flange styles: Star or Full Round
- Rod journal sizes available: 1.850", 1.888", 2.000", 2.100"
- Main journal sizes available: 283, 350, 400
- 8 or 6 counterweight designs available
- Aero efficient Ultra-Shed counterweight profiling is standard
- Aeroshed superfinishing included with all Ultra billets

- All Small Block Chevy Ultra billet crankshafts are produced from TimkenSteel 4330v material
- Boost crankshafts have more material on the pin arms and taller pin tops

Small Block Chevy Ultra UD - Billet

Available Options

- Stroke range 2.750" - 4.250"
- Standard bore spacing and 4.500" available
- Several rod journal configurations available
- 283, 350, 400 main journals available
- SBC post standard, BBC post optional
- Optional no drill finish balance available upon request
- Eight counterweight design
- Narrowed counterweights to help reduce weight; benefits tremendously from light bobweights

Small Block Chevy Ultra UD - Billet
Standard 4.400" bore spacing

Stroke	Main	Pin:	Cammed for Rod Length	Part #
3.335	350	1.888	5.700	SAX-19@-UD
3.500	350	2.000	5.700	SAG-14@-UD
3.750	350	2.000	6.000	SAJ-14@-UD
3.875	400	2.000	6.000	SAM-24@-UD
4.000	400	2.000	6.000	SAO-24@-UD

4.500" Spread Bore

Typically ships standard with BBC Post, please inquire

Stroke	Main	Pin:	Cammed for Rod Length	Part #
3.875	350	1.888	5.850	S4M-19@-UD
3.875	400	2.000	5.850	S4M-24@-UD
4.000	350	2.000	5.850	S4O-14@-UD
4.000	400	2.000	5.850	S4O-24@-UD
4.125	400	2.000	6.000	S4U-24@-UD

Small Block Chevy Ultra UD- Forged

Available Options

- Stroke range 2.600" - 4.250"
- Several rod journal configurations available
- 283, 350, 400 main journals available
- SBC post standard, BBC post optional
- All rod journals lightened and mains gun-drilled
- Six counterweight design
- Full internal balance available upon request
- Narrowed counterweights to help reduce weight; benefits tremendously from light bobweights

Small Block Chevy Ultra UD - Forged

Stroke	Main	Pin:	Cammed for Rod Length		Part #
3.335	350	1.888	5.700		SAX-19A-UD
3.335	350	2.000	5.700		SAX-14A-UD
3.480	350	1.888	5.700		SAF-19A-UD
3.480	350	2.000	5.700		SAF-14A-UD
3.500	350	1.888	5.700		SAG-19A-UD
3.500	350	2.000	5.700		SAG-14A-UD
3.750	350	1.888	6.000		SAJ-19A-UD
3.750	400	2.000	6.000		SAJ-24A-UD
3.800	400	2.000	5.850		SAK-24A-UD
3.800	400	2.000	5.850	BBC Post	SMK-24A-UD
3.875	350	2.000	6.000		SAM-14A-UD
3.875	400	2.000	6.000		SAM-24A-UD
4.000	350	2.000	6.000		SAO-14A-UD
4.000	400	2.000	6.000		SAO-24A-UD
4.000	400	2.000	6.000	BBC Post	SMO-24A-UD

***Only a partial listing of available part numbers listed here. Call our sales team for more.**

Small Block Chevy Magnum

Average weight: 48 lbs.

Standard Features

- Stroke range of 2.600” to 4.375”
- 2.100”, 2.000”, 1.888” rod journal diameters
- 400 – 350 – 283 main bearing diameters
- BBC post or SBC post
- One or two piece type rear seal flange
- Gun drilled mains
- All rod journals lightened

Small Block Chevy Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.335	350	1.888	5.700	SAX19A-MG
3.335	350	2.000	5.700	SAX14A-MG
3.335	350	2.100	5.700	SAX11A-MG
3.400	350	2.000	5.700	SAW14A-MG
3.480	350	1.888	5.700	SAF19A-MG
3.480	350	2.000	5.700	SAF14A-MG
3.480	350	2.100	5.700	SAF11A-MG
3.500	350	2.000	5.700	SAG14A-MG
3.500	350	1.888	5.700	SAG19A-MG
3.500	350	2.100	5.700	SAG11A-MG
3.550	350	2.000	5.700	SAT14A-MG
3.550	350	2.100	5.700	SAT11A-MG
3.625	350	1.888	5.750	SAH19A-MG
3.625	350	2.000	5.750	SAH14A-MG

Small Block Chevy Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length		Part #
3.625	350	2.100	5.750		SAH11A-MG
3.750	350	2.100	5.850		SAXJ11A-MG
3.750	350	2.000	5.850		SAJ14A-MG
3.750	350	2.100	5.850	Big Block Post	SMJ11A-MG
3.750	400	2.000	5.850		SAJ24A-MG
3.750	400	2.100	5.850		SAJ21A-MG
3.750	400	2.100	5.850	Big Block Post	SMJ21A-MG
3.750	350	2.100	6.000	1 pc RMS	CAJ11A-MG
3.800	400	2.100	5.850		SAK21A-MG
3.875	350	5.211	5.850	1 pc RMS	CAM11A-MG
3.875	350	2.100	6.000		SAM11A-MG
3.875	400	2.100	6.000		SAM21A-MG
4.000	350	2.100	6.000		SAO11A-MG
4.000	400	2.100	6.000		SAO21A-MG

Compstar Small Block Chevy

Average weight for 3.750" Stroke, Balanced to 1750g. = 50 lbs.

Standard Features

- All Rod Journals Lightened
- Heat Tratment = Nitride Case

COMPSTAR
Performance Engine Components by Callies

Compstar Small Block Chevy

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.480	350	2.000	5.700	SAF-143-CM
3.480	350	2.100	5.700	SAF-113-CM
3.500	350	2.000	5.700	SAG-143-CM
3.500	350	2.100	5.700	SAG-113-CM
3.750	350	2.100	6.000	SAJ-113-CS
3.750	400	2.100	6.000	SAJ-213-CS

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.800	350	2.100	6.000	SAK-113-CS
3.800	400	2.100	6.000	SAK-213-CS
3.875	350	2.100	6.000	SAM-113-CS
3.875	400	2.100	6.000	SAM-213-CS
4.000	350	2.100	6.000	SAO-113-CS
4.000	400	2.100	6.000	SAO-213-CS

Compstar Racesaver

Standard Features

- Made for the 305 Racesaver Sprint Car class
- 4340 steel
- Rough balanced or counterweight preppred for 1525 bob weight

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.480	350	2.100	5.700	SAF-113-CR

SMALL BLOCK CHEVY

Compstar Comet Small Block Chevy

Average weight for 3.750" Stroke, Balanced to 1750g. = 43 lbs

- Gun Drilled Mains
- All Rod Journals Lightened
- Heat Treatment = Nitride Case

Compstar Comet

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.335	350	2.000	5.700	SAX143-CC
3.480	350	1.888	5.700	SAF193-CC
3.480	350	2.000	5.700	SAF143-CC

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.500	350	2.000	5.700	SAG143-CC
3.750	350	2.000	6.000	SAJ143-CC
3.750	350	2.100	6.000	SAJ113-CC

Small Block Enforcer I-Beam

Length	Journal	Typ. Wt.	Part #
6.000	2.100	703g.	U18235 **(XD)**
6.200	2.100	707g.	U14245
6.200	2.100	712g.	U14245-CA

Small Block Ultra XD I-Beam

Length	Journal	Typ. Wt.	Part #
5.850	2.100	648g.	U18130

Small Block Ultra I-Beam - Rated for 1,800 HP Drag Race and 950 HP Circle Track

Length	Journal	Typ. Wt.	Part #
5.700	2.100	645g.	U14125
5.850	2.100	648g.	U14130
5.850	2.000	629g.	U14131
6.000	2.100	659g.	U14135
6.000	2.000	635g.	U14136
6.125	2.100	660g.	U14140
6.125	2.000	640g.	U14141
6.200	2.100	665g.	U14145
6.200	2.000	641g.	U14146
6.250	2.100	668g.	U14150
6.250	2.000	647g.	U14151
5.850	2.100	653g.	U14130-CA
5.700	2.100	650g.	U14125-CA
5.850	2.000	634g.	U14131-CA
5.850	Honda	575g.	U14132-CA

Small Block Ultra I-Beam - continued

Length	Journal	Typ. Wt.	Part #
6.000	2.100	664g.	U14135-CA
6.000	2.000	640g.	U14136-CA
6.000	Honda	588g.	U14137-CA
6.125	2.100	665g.	U14140-CA
6.125	2.000	645g.	U14141-CA
6.125	Honda	590g.	U14142-CA
6.200	2.100	670g.	U14145-CA
6.200	2.000	646g.	U14146-CA
6.250	2.100	673g.	U14150-CA
6.250	2.000	652g.	U14151-CA

Small Block Ultra H-Beam - Rated for 1,400 HP Drag Race and 750 HP Circle Track

Length	Journal	Typ. Wt.	Part #
6.000	2.100	650g.	U16100
6.000	2.000	628g.	U16101
6.000	Honda	585g.	U16102
6.125	2.100	659g.	U16110
6.200	2.100	663g.	U16120

Peterson Motorsports
Callies Ultra UD Billet Crankshaft and Ultra Rods

Ultra UD Small Block H-Beam - Rated for 1000 HP

Length	Journal	Typ. Wt.	Part #
5.700	Honda	575g.	U16327
5.850	2.000	586g.	U16331
5.850	Honda	578g.	U16332
5.850	2.000	605g.	U16431
6.000	2.000	594g.	U16336
6.000	Honda	585g.	U16337
6.000	Honda	586g.	U16338

COMPSTAR
Performance Engine Components by Callies

All the quality, reliability & workmanship you have relied upon for years from the Compstar line up is taken to the **Xtreme**! Specifically designed for power adder and diesel applications. Strength is added by thickenng up the flanges of the H-beam and reducing depth of cut towards the center of the rod.

Compstar Small Block Xtreme

Length	Journal	Pin	Typ. Wt.	Part #
6.000	2.100	.927	645g.	CSA6000DS2A2AX
6.125	2.100	.927	650g.	CSA6125DS2A2AX

Compstar Small Block H-Beam - Rated for 700 HP

Length	Journal	Typ. Wt.	Part #
5.700	2.000	584g.	CSA5700CS2A2AH
5.700	2.100	606g.	CSA5700DS2A2AH
5.850	2.000	587g.	CSA5850CS2A2AH
5.850	2.100	612g.	CSA5850DS2A2AH
6.000	1.888	520g.	CSA6000AS2A0AH
6.000	2.000	593g.	CSA6000CS2A2AH
6.000	2.100	620g.	CSA6000DS2A2AH
6.125	2.000	596g.	CSA6125CS2A2AH
6.125	2.100	617g.	CSA6125DS2A2AH
6.200	2.000	598g.	CSA6200CS2A2AH
6.200	2.100	615g.	CSA6200DS2A2AH
6.250	2.100	619g.	CSA6250DS2A2AH
6.300	2.100	626g.	CSA6300DS2A2AH

TRE Racing Engines
Justin Curry's '68 Camaro
Callies Magnum Billet SB Chevy Crankshaft

*** Pistons, Bearings and Cams also available.**

FORD 460

Callies offers high quality domestically produced Ultra and Magnum crankshafts and connecting rods for the entire line of Ford V8 engines targeted for high HP / high torque applications. Callies crankshafts for the Ford 460 are made with 3.018 inch long gear and damper fit post lengths. Our Ford 460 shafts are machined with dual damper keyways for blower applications.

Ford 460 Ultra Billet UB

Available Options & Standard Features
- Stroke range of 3.625” to 5.300”
- Various post keyway configurations available
- Rod journal sizes: 2.100”, 2.200”
- Main journal sizes: Ford 460
- 8 or 6 counterweight designs
- Shipped complete with no drill balance included
- Aero efficient Ultra-Shed counterweight profiling is standard
- Aeroshed super finishing included with all Ultra billets
- All Big Block Ford Ultra billet crankshafts are produced from TimkenSteel 4330v alloy steel
- Short damper fit (High Performance Style)

Ford 460 Magnum Billet

Average weight: 79 lbs.

Standard Features
- Fully counterweighted (8 counterweight design)
- Machined with BBC post length & diameter
- Stroke range 3.625” to 5.000”
- Gun Drilled mains and lightened rods
- Perma Case deep nitride, 4340 steel
- Dual post keyways

Ford 460 Magnum Billet

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #	Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.625	3.000	2.200	6.700	9GH-H2@-MB	4.500	3.000	2.200	6.700	9GQ-H2@-MB
4.150	3.000	2.200	6.700	9G2-H2@-MB	4.750	3.000	2.200	6.700	9GS-H2@-MB
4.300	3.000	2.200	6.700	9G4-H2@-MB					

Ford 460 Magnum

Average weight: 68 lbs.

Standard Features
- Gun drilled mains
- Single 3/16 (Align- Ease) keyway with lead in witness mark with additional 1/4 key-way
- Short damper fit (High Performance Style)
- Heat Treatment = Perma Case Deep Nitride Options
- Full internal balance available

Ford 460 Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #	Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
4.150	3.000	2.200	6.700	992-H29-MG	4.500	3.000	2.200	6.700	99Q-H29-MG
4.300	3.000	2.200	6.700	994-H29-MG	4.750	3.000	2.200	6.700	99S-H29-MG

Ford 460-429 Ultra I-Beam - Rated for 2,000 HP

Length	Journal	Typ. Wt.	Part #
6.700	2.200	826g.	U15814
6.800	2.200	828g.	U15816

*** Pistons, Bearings and Cam Cores also available.**

Ford 351 / 302 Ultra Billet UB

Available Options
- Stroke range of 2.700” to 4.500”
- Various post keyway configurations available
- Rod journal sizes: 1.850”, 1.888”, 2.000”, 2.100”, 2.123”
- Main journal sizes: 302, 351
- 8 or 6 counterweight designs
- Shipped complete with no drill balance included
- Aero efficient Ultra-Shed counterweight profiling is standard
- Aeroshed super finishing included with all Ultra Billets
- Produced from TimkenSteel 4330v alloy steel

Ford 351 / 302 Ultra UD - Billet

Weight range of 39 lb. to 47 lb.

Available Options
- Stroke range of 2.700” to 4.125”
- Rod journal sizes 1.850”, 1.888”, 2.000”, 2.100”, 2.123”
- 351 Cleveland or 302 Ford type main diameters
- Optional full internal balance to your specific assembly weight (no drilling)
- Uniquely milled counterweight profiles for reduced weight and windage
- All rod journals lightened
- Gun drilled mains

Ford 351 / 302 Ultra UD - Billet

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.400	302	2.100	5.400	UWJ01@-UD
3.250	302	2.100	5.400	UJE01@-UD
3.500	302	2.100	6.000	EDG01@-UD
3.500	351C	2.100	6.000	EFG71@-UD
3.625	351C	2.100	6.100	EFH71@-UD
3.750	351C	2.000	6.100	EFJ74@-UD
3.750	351C	2.100	6.100	EFJ71@-UD
4.000	351C	2.000	6.200	EFO74@-UD
4.000	351C	2.100	6.200	EFO71@-UD
4.125	351C	2.100	6.200	EFU71@-UD

Ford 351 / 302 Ultra UD - Forged

Weight range of 39 lb. to 47 lb.

Available Options
- Stroke range of 2.700” to 4.125”
- Rod journal sizes 1.850”, 1.888”, 2.000”, 2.100”, 2.123”
- 351 Cleveland or 302 Ford type main diameters
- Optional full internal balance to your specific assembly weight
- Uniquely milled counterweight profiles for reduced weight and windage
- All rod journals lightened
- Gun drilled mains

Ford 351 / 302 Ultra UD - Forged

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.400	302	2.100	5.400	UWJ01V-UD
3.250	302	2.100	5.400	UJE01V-UD
3.500	302	2.100	6.000	EDG01V-UD
3.500	351C	2.100	6.000	EFG71V-UD
3.625	351C	2.100	6.100	EFH71V-UD
3.750	351C	2.000	6.100	EFJ74V-UD
3.750	351C	2.100	6.100	EFJ71V-UD
4.000	351C	2.000	6.200	EFO74V-UD
4.000	351C	2.100	6.200	EFO71V-UD
4.125	351C	2.100	6.200	EFU71V-UD

***Only a partial listing of available part numbers listed.**

FORD 351 / 302

Ford 351/302 Magnum

Avg. weight for 3.800" stroke balanced to 1750g Bob. = 48 lbs

Standard Features

- Gun drilled mains
- All rod journals lightened
- Stroke availability from 2.700" to 4.600"
- Heat Treatment = Perma Case Deep Nitride

Special Options

- Additional post keyways, custom post drilling
- 2.100", 2.000", 1.888", and 1.825" rod journal diameters
- 351 Cleveland or 302 Ford type main diameters

Ford 351/302 Magnum

Stroke:	Main:	Pin:	Rod Length	Part #
3.500	302	2.100	6.000	EDG01V-MG
3.500	351C	2.100	6.000	EFG71V-MG
3.500	302	2.100	6.000	UJG-01V-MG
3.625	351C	2.100	6.100	EFH71V-MG
3.750	351C	2.100	6.000	EFJ71V-MG
3.900	351C	2.100	6.200	EFC71V-MG
4.000	351C	2.100	6.200	EFO71V-MG
4.125	351C	2.100	6.200	EFU71V-MG
4.250	351C	2.100	6.200	EFP71V-MG
3.250	302	2.123	5.400	UJE0BV-MG
3.400	302	2.123	5.400	UJW0BV-MG
3.750	351C	2.000	6.100	EFJ74V-MG
4.000	351C	2.000	6.200	EFO74V-MG

***Only a partial listing of available part numbers for all crankshafts on this flyer. Contact our team for info.**

Ford SVO Enforcer I-Beam

Length	Journal	Typ. Wt.	Part #
6.200	2.100	712g.	U14945

Ford 351 Ultra I-Beam - Rated for 1,800 HP

Length	Journal	Typ. Wt.		Part #
6.200	2.000	630g.	.866 pin	U14846
6.200	2.100	670g.		U14845
6.250	2.100	671g.		U14850
6.250	2.000	635g.	.866 pin	U14851
6.200	2.000	635g.		U14846-CA
6.200	2.100	670g.		U14845-CA
6.250	2.100	671g.		U14850-CA

Ford 302 H-Beam - Rated for 1,500 HP

Length	Journal	Typ. Wt.	Part #
5.400	2.123	575g.	U16600

Compstar Small Block Ford H-Beam

Length	Journal	Typ. Wt.	Part #
5.400	2.123	571g.	CSF5400HSF2AH

*** Pistons, Bearings and Cam Cores also available.**

ENERGY MANUFACTURING

SBF Engine Blocks are available from Energy Manufacturing.

FORD GODZILLA

Callies has stepped up to the plate and brought a US-made, fully counterweighted, forged crank to market for the venerable 7.3" Ford Godzilla platform. Machined from an ultra-high quality 4340 forging, the Magnum crankshaft for the Godzilla is able to take on virtually any task; from stock replacement and hot rods to ultra high output drag racing.

Ford Godzilla Magnum

Average Weight for 4.500" Stroke, Unbalanced: 58 lb.

Available Options

- Stroke range of 3.000" to 4.600"
- Crafted from Callies' premium 4340 forging
- Fully counterweighted
- Several rod journal sizes available
- Rod throws lightened
- Gun drilled mains

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
3.976	2.657	2.086	6.300	8B5ABOV-MG
4.125	2.657	2.100	6.300	8RU-B1V-MG
4.375	2.657	2.100	6.350	8RB-B1V-MG

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #:
4.500	2.657	2.100	6.300	8RQ-B1V-MG
4.600	2.657	2.100	6.350	8R45B1V-MG

Ford Godzilla Ultra H-Beam - Rated for 1,600 HP

Length	Journal	Pin	Typ. Wt.	Part #
6.300	2.100	0.866	670g.	U16615
6.319	2.239	0.991	710g.	U16620
6.319	2.239	0.985	710g.	U16621
6.350	2.100	0.927	673g.	U16625

Ford Godzilla Valve Springs

PAC#	Spring Rate	Installed Height	Seat	Open @ .650" Lift	Max Lift	Coil Bind	
1282X	400 lb/In	2.350"	160 lb	420 lb	.800"	1.490"	
1282LX	400 lb/In	2.250"	199 lb	467 lb	.700"	1.490"	*

*w/ -.100" Retainer

PSI#	Spring Rate	Installed Height	Seat	Open @ .650" Lift	Max Lift	Coil Bind
CA21352	403 lb/In	2.362"	165 lb	427 lb	.675"	1.627"

Ford Godzilla Main Caps

Part #	Description
000-GZILLAKIT	Godzilla Main Caps
000-GZILLAMSTK	Godzilla Main Caps & Main Studs
000-GZILLAMHSTK	Godzilla Main Caps, Main Studs, & Head Studs

Ford Godzilla Main & Head Studs - OptiTorque

Part #	Description	Material	Tensile Strength
10696	Godzilla Main Stud Kit	Torque Master	190-240 ksi
10697	Godzilla Head Stud Kit	Torque Master	190-240 ksi

*** Finish Ground Cams also available.**

FORD COYOTE & MODULAR

Ford Coyote and Ford Modular engines have proven their exceptional capabilities both at the track and on the street. Callies Compstar 4340 Steel Crankshafts were designed to support the additional horsepower and torque being generated in these applications. These cranks are machined with large strength enhancing journal radii like all Compstar crankshafts and come nitrided. All standard OEM driveline, valvetrain and accessory components can still be utilized.

Ford Coyote and Ford Modular

Average weight: 46 lbs.

Standard features

- Machined from 4340 Steel
- All rod journals lightened
- Heat treatment = Nitride Case

Ford Coyote

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.650	2.656	2.087	5.850	2242BTL-CS
3.800	2.656	2.100	5.850	22K-B1L-CS
3.900	2.656	2.000	5.850	22C-B4L-CS

Ford Modular

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.543	2.657	2.086	5.933	S24014-CS
3.750	2.657	2.000	5.850	S24015-CS
3.800	2.657	2.000	5.850	S24016-CS

Ford Coyote Ultra H-Beam

Length	Journal	Typ. Wt.		Part #
5.850	2.100	634g.	.866 pin	U16610
5.850	2.000	618g.	.866 pin	U16611
5.850	1.888	610g.	.866 pin	U16612

Ford Modular Ultra I-Beam - Rated for 2,000 HP

Length	Journal	Typ. Wt.		Part #
5.933	2.239	639g.	.866 pin	U14825
5.933	2.239	644g.		U14825-CA

Compstar Ford Modular H-Beam

Length	Journal	Typ. Wt.		Part #
5.933	2.239	635g.	.866 pin	C24105
6.657	2.239	680g.	.866 pin	C24106

Chris Holbrook
Ford Coyote Crankshaft and Ultra H Coyote Rods

*** Pistons and Bearings also available.**

VIPER V-10

For all-out performance Viper engine builds, your answer for durability is the Compstar billet crankshaft. Produced from 4340 steel that is heat treated multiple times before final nitride, these shafts are tough and wear resistant. Compstar Vipers can be ordered with either 58 or 10 tooth timing configurations. For improved rod journal oiling, these shafts feature straight shot oil holes running directly from mains to rods. Post bolt holes are deep drilled for 3/4 x 16 threads, significantly strengthening the accessory drive damper fit for super charger applications.

Compstar Viper V-10
Average weight = 82 lbs.
Standard Features
- 2.100” or 2.123” rod journal diameters
- Standard Viper V-10 main bearings
- 7/16 x 20 flange bolt holes
- Deep hole post drilling, 3/4 x 16 threads

Antonio Calvo
Compstar Viper V-10 Crankshaft
Callies Ultra Enforcer Connecting Rods

Compstar Viper V-10

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.960	3.000	2.125	6.200	KV329JH-CS
4.200	3.000	2.100	6.200	KV1291H-CS

Dodge Viper Head Studs

Part #:	Description
10789	Viper Head Studs - Torque Master Material
11078	Viper Head Stud Kit (24 pieces) Torque Master Material

RY45 Ultra I-Beam - Rated for 2,000 HP

Length	Journal	Typ. Wt.	Part #
6.125	2.000	618g.	U14844-CA

Viper V-10 Ultra Enforcer I-Beam
Rated up to 250 HP per cylinder

Length	Journal	Typ. Wt.	Part #
6.200	2.123	764g.	U14345

Viper V-10 Ultra H-Beam - Rated for 1,500 HP

Length	Journal	Typ. Wt.	Part #
6.200	2.100	660g.	U16120

Compstar Viper V-10 H-Beam - Rated for 1,000 HP

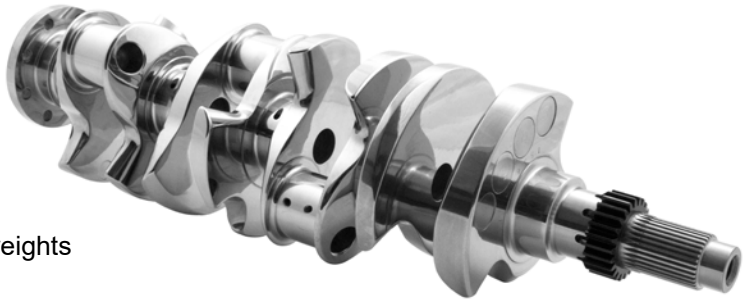
Length	Journal	Typ. Wt.	Part #
6.150	2.125	630g.	CSD6150GS2E1AH
6.250	2.125	628g.	CSD6250GS2E1AH

MOPAR / HEMI

Performance specific and durability enhanced, Callies crankshafts for the Big Block Mopar and Gen III Hemi are ready for anything your racing program can throw at them. With years of Mopar experience Callies has created an unsurpassed crankshaft for your Wedge or Hemi type engine.

Ultra Series for Big Block Mopar Top Fuel, Top Alcohol, Blower Drive

Standard Features
- Machined from EN30B alloy steel
- Rod journal diameters: 2.375” with large .180” fillet radii
- Main journal diameters: 2.750” or 3.000” with large .150” fillet radii
- RCD Splined post: long 2.340” or short 1.420” spline engagement available
- Sold complete with no drill balance included
- Aeroshed super finishing is standard
- Fully counterweighted with large, bearing saver counterweights
- All rod and main journals drilled for lightening
- PSI / RCD Spline Post Hemi Forged Billet also available



Mopar Magnum Billet

Average weight for a 4.500” stroke balanced to 2350g Bob. = 69 lbs.

Available Options & Standard Features
- Center counterweights
- 4340 Steel
- Gun drilled mains
- All Rod Journals Lightened
- Dual Post Keyways
- Stroke availability 4.125” to 5.000”
- 2.200 BB Chevy rod journal dia. & width

Mopar Magnum Billet

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #	Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
4.150	2.750	2.200	6.700	GE262@-MB	4.625	2.750	2.200	7.100	GER62@-MB
4.250	2.750	2.200	6.700	GEP62@-MB	4.750	2.750	2.200	7.100	GES62@-MB
4.500	2.750	2.200	7.100	GEQ62@-MB	5.000	2.750	2.200	7.100	GEV62@-MB

Mopar Magnum

Average weight for a 4.500” stroke balanced to 2350g Bob. = 64 lbs.

Available Options & Standard Features
- Gun drilled mains
- All Rod Journals Lightened
- Dual Post Keyways
- Stroke availability 3.750” to 5.000"
- Heat Treatment = Ultra Case Deep Nitride
- Custom Flange Bolt & Dowel Drilling
- 2.200 BB Chevy dia. & width, 2.375 Mopar rod journal dia. & width

Mopar Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #	Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
4.150	2.750	2.200	6.700	GE262J-MP	4.625	2.750	2.200	7.100	GER62J-MP
4.250	2.750	2.200	6.700	GEP62J-MP	4.750	2.750	2.200	7.100	GES62J-MP
4.500	2.750	2.200	7.100	GEQ62J-MP	5.000	2.750	2.200	7.100	GEV62J-MP

Gen III Ultra UB Hemi

Average weight = 60 lbs.

Standard Features

- Fully (8) Counterweighted design
- Machined from 4330 TimkenSteel
- Uniquely machined counterweight profile for reduced weight and windage
- Gun drilled mains
- All rod journals lightened
- Heat Treatment = Ultra Case Deep Nitride
- Full support pin top for added strength
- Available Upon Request: Full internal balance to your specific assembly weight - No Drilling

Gen III Hemi - 8 Counterweight Magnum

Average weight = 52 lbs.

Standard Features

- Stroke range of 2.800” to 4.600”
- Fully counterweight prepped for a minimum 1850g. bob weight
- Dual linear post keyways
- Average weight 47-55 lbs
- Gun drilled mains & lightened rods
- 2.100”, 2.000”, 1.888”, 1.850” rod journal diameters

Compstar Hemi Crankshafts are manufactured from 4340 steel and machined to popular strokes. These shafts will easily increase the power potential of Chrysler 6.4, 6.1, and 5.7 liter engines. Compstar Hemis can be ordered with either 32 or 60-2 reluctor wheels.

COMPSTAR
Performance Engine Components by Callies

Compstar Gen III Modern Hemi

Average weight for 4.050" stroke balanced to 1785g Bob. = 57 lbs.

Standard Features

- Sold preped for a 1785g. Bob weight
- Gun drilled mains
- All rod journals lightened
- Dual linear post keyways
- Limited stroke availability

Compstar Gen III Modern Hemi

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.800	2.559	2.100	6.125	YYKE18-CS
4.200	2.559	2.100	6.125	YY12E48-CS

Compstar 8 Counterweight Hemi

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.800	2.559	2.100	6.125	YYK-E1Q-CS
4.000	2.559	2.100	6.125	YYO-E1Q-CS
4.050	2.559	2.100	6.125	YY*-E1Q-CS
4.080	2.559	2.100	6.125	YYA-E1Q-CS

Compstar Big Block Mopar

Standard Features

- 6 Counterweight design
- Manufactured from 4340 steel
- All rod journals lightened
- Heat Treatment = Nitride Case
- Counterweight prepped to a 2400 Bob Weight

Compstar Big Block Mopar

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.760	2.750	2.200	6.535	GE3-65L-CS
4.150	2.750	2.200	6.535	GE2-62L-CS
4.250	2.750	2.200	6.535	GEP-62L-CS
4.500	2.750	2.200	6.700	GEQ-62L-CS
4.625	2.750	2.200	6.700	GER-62L-CS

Connecting Rods

Mopar Ultra Enforcer I-Beam - Rated for 2,000 HP

Length	Journal	Typ. Wt.	Part #
6.200	2.123	764g.	U14345

Compstar Xtreme - SBC Style
Use with Gen III Hemi - Rated for 1,800 HP

Length	Journal	Typ. Wt.	Part #
6.000	2.100	645g.	CSA6000DS2A2AX
6.125	2.100	653g.	CSA6125DS2A2AX

Gen III Hemi Compstar H-Beam - Rated for 1,000 HP

Length	Journal	Typ. Wt.	Part #
6.125	2.100	617g.	CSA6125DS2A2AH
6.150	2.125		CSD6150GS2E1AH
6.250	2.125		CSD6250GS2E1AH

Big Block Mopar Ultra I-Beam

Length	Journal	Typ. Wt.	Part #
7.100	2.200	848g.	U15270
7.100	2.200	848g.	U15270-CA

Compstar Xtreme - BBC Style
Use with Big Block Mopar - Rated for 1,800 HP

Length	Journal	Typ. Wt.	Part #
6.700	2.200		CSB6700ES3BDAX

Big Block Mopar Compstar H-Beam
Rated for 1,000 HP

Length	Journal	Typ. Wt.	Part #
6.760	2.375		CSE6760FS3D5AH
6.700	2.200	825g.	CSB6700ES3B9AH
6.800	2.200	842g.	CSB6800ES3B9AH
7.100	2.200		CSB7100ES3B9AH

Head Studs for Gen III Hemi - Cast Iron Block

Part #:	Material:	
CPP10625	**Patriot Grade**	**20 M12 & 10 M8**
CPP10626	**TorqueMaster**	**20 M12 & 10 M8**

Main Studs for Gen III Hemi - Cast Iron Block

Part #:	Material:
10414	**Patriot Grade**
10414-TM	**TorqueMaster**

OptiTorque	Material Grade	OptiTorque Tensile Strength
Patriot	8740 Chrome Moly	180-220 ksi
TorqueMaster	HSLA 6304	190-240 ksi

32 Tooth 6.4 OEM Reluctor

58 Tooth 6.4 Billet Reluctor

Reluctors

Part #:	
05037457A	**32 Tooth Chrysler 6.4 OEM Reluctor**
05037457AA	**32 Tooth Chrysler 6.4 Billet Reluctor**
04893290AA	**58 Tooth Chrysler 6.4 OEM Reluctor**
04893290AAB	**58 Tooth Chrysler 6.4 Billet Reluctor**

Reluctor Bolts

Part #:	
0658103AA	**Hemi reluctor bolts**

*** Finish Ground Cams also available**

Gen II Hemi / Wedge Cast Iron Block Components

Part #:	
832486-5-A-M	Main Bearing Cap #1,2,4
832486-5-B-M	Main Bearing Cap # 3
832486-5-C-M	Main Bearing Cap #5
000-1256	Rear Oil Seal Retainer
HAR3.500-5	Hex Bolt, 1/2-13 x 3.500
HAR4.000-5	Hex Bolt, 1/2-13 x 4.000
H3AJ2.750-5CL	Hex Bolt, 3/8-16 x 2.750
ARW78	Chamfered Washer 1/2 ID x 7/8
RJW750	Chamfered Washer 3/8 ID x 3/4
P5007167-7	Hollow Dowel 0.700x0.625
000-1257	Hollow Dowel Rev. IR 4340 CFA
91271A638	3/18" - 16 Thread Size, 3 1/2" Long Bolt

Part #:	
91375A617	Oil Gallery 3/8"-16 Plug 0.040"
P1737725	Distributor Bushing - Bronze
555-030-B	Press in Freeze Plugs 1.625"
22S-S12	12 AN Plug - Aux Pick Up
555-065-B	Press In Rear Cam Plug 2.1406
44605K232	1/4"-18 NPTF Pipe Plug
44605K233	3/8"-18 NPTF Pipe Plug
27931	1/2" Oil Pick Up Tube Adapter
91251A539	1/4"-20x5/8" A574 Socket Head
PD-17	Durabond Camshaft Bearing Kit
1122532	Dowel - Bell Housing 1/2"x3/4"

Gen III Main Caps

- Billet 4140 Material
- Fits OEM Cast Iron Blocks
- ID sized for proper boring and honing

Gen III Main Caps

Part #:	
000-G3HKIT	Main Caps
000-G3HMSTK	Main Caps / Main Stud Combo
000-G3HMHSTK	Main Caps / Main & Head Stud Combo

M16 Damper Bolt

Part #:
06512335AA

Gen III Hemi VVT Post Spacer

Part #:
CPP-0550
Used in all VVT applications

A licensing deal with Stellantis allows Energy Manufacturing and Callies Performance Products to produce and distribute: Cast Iron Gen 2 Hemi, Cast Iron Gen 2 Wedge, Cast Aluminum Gen 3 Hellephant, and Cast Aluminum Gen 3 Dragpak blocks.

ENERGY MANUFACTURING

MOPAR | OFFICIAL LICENSED PRODUCT

DuraMag

Stroke:	Main:	Pin:	Part #
3.898	3.146	2.477	D333MU@-MB

Duramag

Average weight = 78 lbs.

Standard Features

- Deep DuraCase nitride treatment that is durability and wear enhancing
- Large True Form fillet
- Keyed shear-proof timing fit
- Dual keyed shear-proof snout
- Keyed shear-proof timing gear fit
- Drilled rod journals for reduced inertia and ease of balance
- Standard Duramax diameter but with strength enhancing 2.154 width
- Machined from 4340 hardened steel
- Main bearing oil holes are machined with lead-ins for enhanced cold start oil flow to rod journals
- Will accept OEM post and flange bolts

Compstar DuraStar (Duramax)

Average weight = 70 lbs.

Standard Features

- Deep DuraCase nitride treatment that is durability and wear enhancing
- Large True Form fillet radii in all journals
- Keyed shear-proof timing gear fit
- Drilled rod journals for reduced inertia and ease of balance
- Stock 3.898" stroke with OEM journal diameters and width
- Machined from 4340 hardened steel
- Dual keyed damper fit
- Conservatively rated for 800hp @ 800 ft/lb torque
- Main bearing oil holes are machined with lead-ins for enhanced cold start oil flow to rod journals
- Will accept OEM post and flange bolt
- Will accommodate stock rods

Compstar DuraStar (Duramax)

Stroke:	Main:	Pin:	Part #
3.898	3.146	2.477	D333M81-CS

Compstar Xtreme: Duramax

Length	Journal	Typ. Wt.	Part #
6.418	2.480	1,180g.	CST6418MS0LCAX

Ultra Assassin: Power Stroke 6.0L 2003-2009

Length	Journal	Typ. Wt.	Part #
6.929	2.874	1,233g.	U13100

Sam Johnson
Engine : Dirty Hooker Diesel
Compstar DuraStar

*** Pistons, Bearings, Finish Ground Cams and Cam Cores also available.**

Ultra Billet UB - Tractor
Average weight = 260 lbs.
Standard Features
- EN30B Timken Material
- Full Support Robust Pin Arms
- Single Bolt Post
- 4 Dowel Pin Gear Drive

Ultra Billet UB - Tractor

Navistar / International

Stroke:	Main:	Pin:	Part #	Notes
4.750	3.374	2.997	S30003	Short OD Counterweights - Will fit in OEM style block.
5.000	3.374	2.997	S30002	Full counterweights - must be used in billet block or pan rails modified.
5.350	3.374	2.997	S30000	Short OD Counterweights - Will fit in OEM style block.
5.350	3.374	2.997	S30004	Full counterweights - must be used in billet block or pan rails modified.
5.750	3.374	2.997	S30001	Full counterweights - must be used in billet block or pan rails modified.
5.750	3.374	2.997	S30007	Short OD Counterweights - Will fit in OEM style block.
6.000	3.374	2.997	S30005	Short OD Counterweights - Will fit in OEM style block.

Detroit Diesel - 40 Series

Stroke:	Main:	Pin:	Part #	Notes
5.350	3.535	2.997	S30006	Short OD Counterweights - Will fit in OEM style block.

John Deere - Small Block

Stroke:	Main:	Pin:	Part #
5.375	3.750	2.997	S32000
5.750	3.750	2.997	S32001
5.750	3.370	2.997	S32004
6.000	3.750	2.997	S32002
6.060	3.750	2.997	S32003

El Niño - Driver Rhett Parish
Navistar / International Crankshaft

Shelton Motorsports
Navistar / International Crankshaft

NISSAN GT-R

At Callies, design consideration has been given to address the inadequacies of OEM crankshafts for the GT-R engine. Each Callies GT-R crank is carefully monitored, beginning with ultra pure 4330v steel that receives multiple heat treatments through final nitride & polish. Available with a Standard Post or Extended Post for better engagement. Callies GT-R crankshafts are machined to accommodate 2.200" Big Block Chevy rod journal diameters. These common diameters will allow engine builders easy access to a wide variety of bearing options. Standard main bearing, post, and seal diameters are used throughout this crankshaft.

Nissan GT-R Ultra Billet

Stroke:	Main:	Pin:	Part #
88.4mm	2.558	2.200	VIF-NI@-UL
94.4mm	2.558	2.200	VI43NI@-UL
98.4mm	2.558	2.200	VI50NI@-UL

Nissan GT-R Ultra Billet

Average weight 45 lbs

Standard Features

- Aeroshed super finish
- No-drill balance
- Aero-efficient Ultra-Shed profiling
- Straight shot oiling
- Deep-Case Nitriding performed and certified in house
- OEM main, post and seal diameters

Nissan VR38/GT-R Ultra Enforcer I-Beam

Rated for 2,000 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205	714g.	U15400
6.500	2.200	709g.	U15405

Nissan VR38/GT-R Ultra Sport Series I-Beam

Rated for 1,600 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205	714g.	U15300

Nissan VR38/GT-R Ultra Sport Series H-Beam

Tapered Pin End - Rated for 1,100 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205		U16510

ACSpeedtech

GTR Ultra Billet Crankshaft and Callies Ultra Enforcer Rods

SPORT SERIES - NISSAN

Designed for Maximum Effort engines, all SS (Sport Series) crankshafts are finished with the same care and detail as the entire line of Compstar crankshafts. All SS cranks are sold balanced and ready for assembly. SS crankshafts by Compstar feature the best metallurgy and heat treatment on the market today.
Sport Series (SS) connecting rods are available with either ARP 2000 or Custom Age 625 bolts for High Output applications. All Sport Series rods are H-beam design machined from fine grained 4340 steel.

COMPSTAR
Performance Engine Components by Callies

Callies Performance Products
SS SPORT SERIES

Nissan SR20

Stroke:	Main:	Pin:	Part #
91mm	54.9mm	45mm	S25003

Nissan SR20

Average weight: 37 lbs
Standard Features
- 91MM Stroke
- Factory Main and Rod Journal sizes
- Fully Counterweighted
- Straight Shot Oiling
- Material Certified by Callies in house Metallurgical Lab
- Ultra Cryo Treatment performed in house at Callies
- Ultra-Case Nitriding performed and certified in house
- All Journals ground with strength enhancing Tru-Form radii
- Rod and Main Journals finished to a 4RA or less
- No Drill Finish Balance
- Aeroshed finishing optional

Nissan RB26

Average weight: 42 lbs / 60 lbs
Standard Features
- Available in Standard and Full Counterweight
- 4340 Steel Certified by Callies in house Metallurgical Lab
- Ultra-Cryo treatment performed and certified by Callies
- Ultra-Case nitriding performed and certified by Callies
- All journals ground with strength enhancing Tru-Form radii
- Rod and main journal surface finish is refined to 4Ra or less
- Tear drop oil hole lead-ins
- Straight Shot Oiling
- No drill internal balance
- Aeroshed finishing optional

Nissan RB26

Stroke:	Main:	Pin:	Part #
73.7mm	54.9mm	47.9mm	S25005
77.7mm	54.9mm	47.9mm	S25004
79mm	54.9mm	47.9mm	S25001

Nissan RB26 - Full CWT

Stroke:	Main:	Pin:	Part #
73.7mm	54.9mm	47.9mm	S25006
77.7mm	54.9mm	47.9mm	S25007
79mm	54.9mm	47.9mm	S25008

Nissan RB30

Stroke:	Main:	Pin:	Part #	
90mm	54.9mm	49.9mm	S25011	
90mm	54.9mm	49.9mm	S25009	Full CWT Long Post

Nissan RB30

Average weight: 69 lbs
Standard Features
- Standard and long post available
- 4340 Steel Certified by Callies in house Metallurgical Lab
- Ultra-Cryo treatment performed and certified by Callies
- Ultra-Case nitriding performed and certified by Callies
- All journals ground with strength enhancing Tru-Form radii
- Rod and main journal surface finish is refined to 4Ra or less
- Tear drop oil hole lead-ins
- Straight Shot Oiling
- No drill internal balance
- Aeroshed finishing optional

SPORT SERIES - NISSAN

Nissan VG30

Average Weight: 41 lbs

Standard Features

- Factory Main and Rod Journal Sizes
- Straight Shot Oiling
- Material Certified by Callies in house Metallurgical Lab
- Ultra Cryo Treatment performed in house at Callies
- Ultra-Case Nitriding performed and certified in house
- All Journals ground with strength enhancing Tru-Form radii
- Rod and Main Journals finished to a 4RA or less
- No Drill Finish Balance
- Aeroshed finishing optional

Nissan VG30

Stroke:	Main:	Pin:	Part #
83mm	62.9mm	49.9mm	S25002

Nissan VR38/GT-R Ultra Enforcer I-Beam

Rated for 2,000 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205	714g.	U15400
6.500	2.200	709g.	U15405

Nissan VR38/GT-R Ultra Sport Series I-Beam

Rated for 1,600 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205	714g.	U15300

Nissan VR38/GT-R Ultra Sport Series H-Beam

Tapered Pin End - Rated for 1,100 HP

Length	Journal	Typ. Wt.	Part #
6.500	2.205	728g.	U16510

Nissan VQ35 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.677" / 144mm	2.165" / 55mm	0.866" / 23mm	C25101
5.677" / 144mm	2.165" / 55mm	0.866" / 23mm	C25101-CA

Jorge Lazcano
Nissan RBx Drag Extreme

ARP 2000 Sport Series Rod Bolt 3/8 x 1.600 and ARP Custom Age Sport Series Rod Bolt 3/8 x 1.600 also available.

SPORT SERIES - MITSUBISHI

Mitsubishi 4G63 6 Bolt

Average weight 36 lbs

Stroke:	Main:	Pin:	Part #
88mm	57mm	45mm	S23013
100mm	57mm	45mm	S23015

Mitsubishi 4G63 7 Bolt

Average weight 33 lbs

Stroke:	Main:	Pin:	Part #	
88mm	57mm	45mm	S23002	Forged
100mm	57mm	45mm	S23008	Forged
88mm	57mm	45mm	S23001	Billet
94mm	57mm	45mm	S23003	Billet
100mm	57mm	45mm	S23007	Billet
102mm	57mm	45mm	S23009	Billet

Mitsubishi 4B11

Average weight 32 lbs

Standard Features

- 8 counterweight design
- 4340 steel certified by Callies in house Metallurgical lab
- Ultra-Case nitriding performed and certified by Callies
- Rod and main journal surface finish refined to 4Ra or less
- All journals ground with strength enhancing Tru-Form radii
- Limited stroke availability
- Aeroshed finishing optional

Mitsubishi 4B11 Billet

Average weight 36 lbs

Stroke:	Main:	Pin:	Part #
94mm	52mm	52mm	S23004
96mm	52mm	52mm	S23005
98mm	52mm	52mm	S23006

Mitsubishi 4G63 Billet and Forged

Standard Features

- 8 counterweight design
- 4340 steel certified by Callies in house Metallurgical lab
- Ultra-Case nitriding performed and certified by Callies
- Rod and main journal surface finish refined to 4Ra or less
- All journals ground with strength enhancing Tru-Form radii
- Limited stroke availability
- Aeroshed finishing optional

Mitsubishi 4G63 7 Bolt - Full CWT

Average weight 36 lbs

Stroke:	Main:	Pin:	Part #	
88mm	57mm	45mm	S23017	Full CWT
94mm	57mm	45mm	S23018	Full CWT
100mm	57mm	45mm	S23019	Full CWT
102mm	57mm	45mm	S23020	Full CWT

4G63 Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #
5.906" / 150mm	1.890" / 45mm	0.866" / 22mm	U16730
6.024" / 153mm	1.890" / 45mm	0.866" / 22mm	U16740
6.142" / 156mm	1.890" / 45mm	0.866" / 22mm	U16750

** also available with Custom Age Bolts ** add -CA to part #

4B11T Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #
5.659" / 144mm	2.165" / 52mm	0.906" / 23mm	U16720-CA

Mitsubishi 4G63 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.906" / 150mm	1.890" / 45mm	0.866" / 22mm	C23101
5.906" / 150mm	1.890" / 45mm	0.866" / 22mm	C23101-CA
6.142" / 156mm	1.890" / 45mm	0.866" / 22mm	C23103
6.378" / 162mm	1.890" / 45mm	0.866" / 22mm	C23104

Mitsubishi 4B11T SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.659" / 144mm	2.165" / 52mm	0.906" / 23mm	C23102
5.659" / 144mm	2.165" / 52mm	0.906" / 23mm	C23102-CA

SPORT SERIES - HONDA

Designed for Maximum Effort engines, all SS (Sport Series) crankshafts are finished with the same care and detail as the entire line of Compstar crankshafts. All SS cranks are sold balanced and ready for assembly. SS crankshafts by Compstar feature the best metallurgy and heat treatment on the market today.
Sport Series (SS) connecting rods are available with either ARP 2000 or Custom Age 625 bolts for High Output applications. All Sport Series rods are H-beam design machined from fine grained 4340 steel.

COMPSTAR
Performance Engine Components by Callies

Callies Performance Products
SS SPORT SERIES™

Honda B Series

Average weight 30 lbs.

Standard Features
- B18 Strokes available 87.2, 89, 92, 95 mm
- 8 counterweight design
- 4340 steel certified by Callies in house Metallurgical lab
- Ultra-Cryo treatment performed in house at Callies
- Ultra-Case nitriding performed and certified by Callies
- Rod and main journal surface finish refined to 4Ra or less
- All journals ground with strength enhancing Tru-Form radii
- Limited stroke availability
- Aeroshed finishing optional

Honda B18 Billet

Knife Edge or Lightweight

Stroke:	Main:	Pin:	Part #
95mm	55mm	45mm	S22002

Honda B18 Full Counterweight

Stroke:	Main:	Pin:	Part #
87.2mm	55mm	45mm	S22008
89mm	55mm	45mm	S22009
92mm	55mm	45mm	S22001

Honda K Series

Stroke:	Main:	Pin:	Part #
90.7mm	55mm	45mm	S22003
99.9mm	55mm	45mm	S22004
106mm	55mm	45mm	S22005
102mm	55mm	45mm	S22006

Honda K Series

Average weight 33 lbs.

Standard Features
- Strokes 90.7, 99.9, 102 & 106 mm
- Fully Counterweighted Design
- 4340 steel certified by Callies in house Metallurgical lab
- Ultra-Cryo treatment performed in house at Callies
- Ultra-Case nitriding performed and certified by Callies
- Rod and main journal surface finish refined to 4Ra or less
- All journals ground with strength enhancing Tru-Form radii
- No Drill internal balance
- Aeroshed finishing optional

Honda F Series

Average weight 37 lbs.

Standard Features
- Strokes available 84 mm
- 8 counterweight design
- 4340 steel certified by Callies in house Metallurgical lab
- Ultra-Case nitriding performed and certified by Callies
- Rod and main journal surface finish refined to 4Ra or less
- All journals ground with strength enhancing Tru-Form radii
- Limited stroke availability
- Aeroshed finishing optional

Honda F Series

Stroke:	Main:	Pin:	Part #
84mm	55mm	45mm	S22007
90.7mm	55mm	45mm	S22010

Honda Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #
5.655" / 143.6mm	2.008" / 51mm	0.867" / 22mm	U16800
5.985" / 152mm	2.008" / 51mm	0.867" / 22mm	U16805

Honda K24 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.985" / 152mm	2.008" / 51mm	0.866" / 22mm	C22104
5.985" / 152mm	2.008" / 51mm	0.866" / 22mm	C22104-CA

Honda K20 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.472" / 138mm	2.008" / 51mm	0.866" / 22mm	C22105
5.472" / 138mm	2.008" / 51mm	0.866" / 22mm	C22105-CA

Honda B16 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.291" / 134mm	1.890" / 45mm	0.827" / 21mm	C22101
5.291" / 134mm	1.890" / 45mm	0.827" / 21mm	C22101-CA

Honda B18C SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.433" / 138mm	1.890" / 45mm	0.827" / 21mm	C22102
5.433" / 138mm	1.890" / 45mm	0.827" / 21mm	C22102-CA

Honda B18 A/B & B20 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.394" / 137mm	1.890" / 45mm	0.827" / 21mm	C22103
5.394" / 137mm	1.890" / 45mm	0.827" / 21mm	C22103-CA

4 Piston Racing - OGS All Motor World Record
Compstar *99.9 mm K Series Crankshaft*

SPORT SERIES - SUBARU

Subaru EJ20 / EJ25
Average weight 18 lbs.
Standard Features
- All rod journals drilled for lightening
- Material certified by Callies in house Metallurgical lab
- Ultra-Case nitriding performed and certified in house
- All journal diameters are held to .0005” tolerance
- Rod and main journal surface finish is refined to 4Ra or less
- Limited stroke availability
- Aeroshed finishing optional

Subaru EJ20 / EJ25

Stroke:	Main:	Pin:	Part #
75mm	60mm	52mm	S26001
79mm	60mm	52mm	S26002
83mm	60mm	52mm	S26005

Subaru FA20

Stroke:	Main:	Pin:	Part #
86mm	68mm	50mm	S26008

Subaru FA20
Average weight 18 lbs.
Standard Features
- All rod journals drilled for lightening
- Material certified by Callies in house Metallurgical lab
- Ultra-Case nitriding performed and certified in house
- All journal diameters are held to .0005” tolerance
- Rod and main journal surface finish is refined to 4Ra or less
- Limited stroke availability
- Aeroshed finishing optional

EJ20 Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #	
5.138" / 130mm	2.047" / 52mm	0.905" / 23mm	U16700-CA	
5.217" / 133mm	2.047" / 52mm	0.905" / 23mm	U16710-CA	(+2mm)
5.217” / 133mm	2.047” / 52mm	0.927”/ 23.5mm	U16711-CA	(+2mm)
5.295" / 134.5mm	2.1656" / 55mm	0.9063"/ 23mm	U16715-CA	(+4mm)

EJ20 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.138" / 130mm	2.047" / 52mm	0.905" / 23mm	C26101
5.138" / 130mm	2.047" / 52mm	0.905" / 23mm	C26101-CA

EJ20 + 2mm SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.217" / 133mm	2.047" / 52mm	0.905" / 23mm	C26102
5.217" / 133mm	2.047" / 52mm	0.905" / 23mm	C26102-CA

FA20 SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.091" / 129mm	2.084" / 53mm	0.867" / 22mm	C26103
5.091" / 129mm	2.084" / 53mm	0.867" / 22mm	C26103-CA

SPORT SERIES - TOYOTA

Machined as an enhancement to the formidable Toyota 2JZ engine, Compstar Sport Series crankshafts are your best choice for extreme durability. Beginning with high grade 4340 steel and finished with the proven Callies premium in house nitride treatment these crankshafts are start to finish the best available in today's market. Available in three strokes, all 2JZ shafts are machined to accommodate standard rod and main journal sizes.

Toyota 2JZ

Average weight 61 lbs

Standard Features

- Material certified by Callies in house Metallurgical Lab
- Ultra Cryo Treatment performed in house at Callies
- Ultra-Case nitriding performed and certified in house
- All journal diameters are held to .0005 tolerance
- Tear drop lead-ins on main oil holes
- Scalloped Counterweights for weight reduction
- No Drill Finish Balance optional
- Aeroshed finishing optional
- **2JZ Oil Pump Post Spline Gear also available**

Toyota 2JZ - Full CWT

Stroke:	Main:	Pin:	Part #
86mm	62mm	52mm	S27004
91mm	62mm	52mm	S27005
94mm	62mm	52mm	S27006

***** Toyota 2JZ Oil Pump Post Spline Gear also available**

Toyota 2JZ - Honda Pin

Stroke:	Main:	Pin:	Part #
86mm	62mm	47.95mm	S27007
90mm	62mm	47.95mm	S27008
91mm	62mm	47.95mm	S27009
94mm	62mm	47.95mm	S27010
96mm	64mm	47.95mm	S27011

Toyota 2JZ Ultra Enforcer I-Beam

Length	Journal	Pin	Part #	Fastener
5.590" / 142mm	2.047" / 52mm	0.866" / 22mm	U18100	7/16" ARP H11
5.590" / 142mm	1.888" / 48mm	0.866" / 22mm	U18101	7/16" ARP H11

* Custom Age Bolts Optional

Shiraz Kamal

Toyota 2JZ Crankshaft and Ultra Enforcer Connecting Rods

SPORT SERIES - FORD ECOBOOST

Callies Sport Series components for the Ford Duratec / Ecoboost engine system have been designed with seamless integration in mind. Callies has meticulously examined prints and products to ensure Sport Series components are compatible and easily installed into your next project. Every component has been designed or modified to offer specific performance advantages. Callies offers 1.6 L, 2.3 L lightweight and heavy weight, and 3.5L EcoBoost crankshafts.

Ford 1.6 L EcoBoost

Average Weight 27 lbs

Standard Features

- Stroke available 81.4 mm
- Fully Counterweighted Design
- 4340 Steel Certified by Callies in house Metallurgical Lab
- Ultra-Cryo treatment performed in house at Callies
- Ultra-Case Nitriding performed and Certified by Callies
- All journals ground with strength enhancing Tru-Form radii
- Rod & main journals finished to 4Ra or less
- Gun Drilled Mains
- Lightened Rod Journals
- Tear drop lead-in main oil holes
- No Drill Internal Balance Included
- Aeroshed finishing optional

Ford 1.6 L Ecoboost

Stroke:	Main:	Pin:	Part #
81.40mm	48mm	44mm	S24001
91.40mm	48mm	44mm	S24008

Ford 2.3 L EcoBoost - Lightweight Factory Modified with a weight reduction of over 9 lbs

Standard Features

- Guaranteed weight under 34 lbs
- All 4 rod journals are drilled for reduced inertia
- Internal balance shaft drive gear removed
- Ultra-Cryo Treatment performed in house at Callies
- Keyway in post either 3/16” or 3mm can be specified
- Shipped fully balanced (build ready)

Ford 2.3 L EcoBoost - Heavyweight Factory Modified

Standard Features

- Guaranteed weight under 40 lbs
- Internal balance shaft drive gear removed
- Ultra-Cryo Treatment performed in house at Callies
- Keyway in post either 3/16” or 3mm can be specified
- Shipped fully balanced (build ready)

Ford 2.3 L Ecoboost Lightweight

Stroke:	Main:	Pin:	Part #
94mm	52mm	52mm	QH47BTO-FM

Ford 2.3 L Ecoboost Heavyweight

Stroke:	Main:	Pin:	Part #
94mm	52mm	52mm	QH47BTO-FH

SPORT SERIES - FORD ECOBOOST

Ford 3.5 L Ecoboost

Stroke:	Main:	Pin:	Part #
86.7mm	67mm	56mm	S24002
91.40mm	67mm	56mm	S24007

Ford 3.5 L EcoBoost

Average Weight 42 lbs

Standard Features

- Stroke available 86.7 mm
- Fully Counterweighted Design
- 4340 Steel Certified by Callies in house Metallurgical Lab
- Ultra-Cryo treatment performed in house at Callies
- Ultra-Case Nitriding performed and Certified by Callies
- All journals ground with strength enhancing Tru-Form radii
- Rod & main journals finished to 4Ra or less
- Gun Drilled Mains
- Lightened Rod Journals
- Tear drop lead-in main oil holes
- No Drill Internal Balance Included
- Aeroshed finishing optional

Ford 2.3 EcoBoost Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #
5.879" / 149mm	2.166" / 52mm	0.886" / 22.5mm	U14820-CA

Ford 3.5 EcoBoost Ultra Enforcer Connecting Rod I-Beam

Length	Journal	Pin	Part #
6.011" / 153mm	2.205" / 56mm	0.906" / 23mm	U14821-CA

Ford 1.6 EcoBoost SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.276" / 134mm	1.849" / 44mm	0.827" / 21mm	C24103
5.276" / 134mm	1.849" / 44mm	0.827" / 21mm	C24103-CA

Ford 2.0 EcoBoost SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
6.137" / 156mm	2.166" / 52mm	0.886" / 22.5mm	C26102
6.137" / 156mm	2.166" / 52mm	0.886" / 22.5mm	C26102-CA

Ford 2.3 EcoBoost SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
5.879" / 149mm	2.166" / 52mm	0.886" / 22.5mm	C26101
5.879" / 149mm	2.166" / 52mm	0.886" / 22.5mm	C26101-CA
5.925" / 150.5mm	2.166" / 52mm	0.886" / 22.5mm	C24107

C24107 = Mazda Speed Length

Ford 3.5 EcoBoost SS Connecting Rod H-Beam

Length	Journal	Pin	Part #
6.011" / 153mm	2.205" / 56mm	0.906" / 23mm	C26104
6.011" / 153mm	2.205" / 56mm	0.906" / 23mm	C26104-CA

ENERGY MANUFACTURING

Ready to take your program to the next level? Here's why a billet block is the best choice.

Strength
Operating over 2000HP on a cast block greatly reduces the length of serviceability. Energy Manufacturing's billet block is not only an insurance for longevity but a guarantee to contain whatever additional power requirements you may necessitate.

Custom Ability
Cast blocks are constrained by the raw material available coming from the foundry, limiting head bolt and lifter position adjustments. Our billet allows for adjustments while minimizing the risk of reducing structural integrity.

Weight Reduction
Compared to a cast iron block, a billet aluminum block will average approximately 60% weight reduction allotting for you to be closer to class weight minimums and/or put the weight where you want it for proper transfer.

Economical
A billet block is an investment because of the ability to repair the block multiple times and maintain the same structural integrity. Where a cast block may need to be retired, a billet block can be resold at a less depreciated value than it's cast counterpart. Remaining serviceable 3-5 times longer and maintaining resale value will allow for you to invest in other areas of your program despite the higher initial cost.

For builders selecting from our inventory components, Energy Manufacturing will be available to service your program in as little as 30 days. If you do not see the product you are looking for in the following pages, please give us a call 419-355-9304.

SBF BILLET ALUMINUM ENGINE BLOCKS

ENERGY MANUFACTURING

Deck	Cam Heights	Main Size	Part #
9.750"	+1.273	351C	300-909
10.000"	+1.273	351C	300-906
10.200"	+1.273	351C	300-907

*Alternate deck heights will require additional charge.

SBF Standard Features:

- Deck Height(s): 9.750”, 10.000”, or 10.200”.
- Cylinder Bore Spacing(s): Standard
- Cylinder Bore Sizes: 4.100”-4.150”, customer specified
- Cylinder Sleeve Protrusion: 0 to +.008”, customer specified
- Cylinder Head Fastening per Deck: 9.750-10.200 Deck: (10) 1/2-13 studs & (4) 3/8-16 studs. Standard Pattern Optional additional (4) 3/8-16 SC-1 inner bolt holes or (4) Energy splayed inner bolts
- Cam Height(s): 9.750 - 10.200: Raised 1.273”
- Cam Bore Sizes: 55mm Babbitt, 55mm Roller/60mm Babbitt, or 60mm Roller. Delivered finish honed
- Lifter Bore Configuration(s): 9.750 - 10.200” Decks: Custom, Cam cores in stock
- Lifter Bore Style(s) & Size(s): Lifter Bore Style(s) & Size(s): 9.750-10.200 Deck: .937 Keyway lifter bushings
- Crank Bore(s): 351 Cleveland. Delivered finish honed
- Main Cap Material(s): Billet Aluminum
- Main Cap Fastening: Raised Cam Height Blocks: (2) 9/16” Doweled Vertical Studs, (2) 1/2” splayed studs
- Stroke Clearance: 9.750" - 10.200” Deck: 4.750” Max
- Supported Timing Drive(s): 9.750-10.200” Deck Jesel Belt Drive, RCD Gear Drive, or Innovator’s West Belt Drive

Additional Information: Priority Main Oiling, Wet or dry external pump only, Custom Rear Cam Plug, Raised Cam Height Blocks: Chevy Bell Housing, Enclosed Cam Tunnel, & Custom Oil Pan Pattern. Custom lifter and head bolt patterns available upon request.

Certain options are only available in some configurations. Please call to verify the combination you require is available

LS BILLET ALUMINUM ENGINE BLOCKS

ENERGY MANUFACTURING

LS block shown with 9.750" deck and plus .388" raised cam

LS Standard Features

- Deck Height(s): 9.240", 9.750", 10.000", 10.200"
- Cylinder Bore Spacing(s): Standard
- Cylinder Bore Sizes: 4.120"-4.165", customer specified
- Cylinder Sleeve Protrusion: 0 to +.008", customer specified
- Cylinder Head Fastening per Deck: (10) ½-13, (4) 3/8-16, (4) 3/8" shoe kit provisions. Standard Pattern Alternate fastening and pattern avalable at additional charge
- Cam Height(s): Raised 0.388"
- Cam Bore Sizes: 55mm Babbitt, 55mm Roller/60mm Babbitt, or 60mm Roller. Delivered finish honed
- Lifter Bore Configuration(s): Standard. Alternate lifter configurations available at additional charge
- Lifter Bore Size(s) & Style(s): .937 bushed keyway, .937 bushed standard, or 1.060 in Aluminum ready for bushing Delivered finish honed. Alternate size/style available at additional charge
- Crank Bore(s): 2.75" 351C. Delivered finish honed
- Main Cap Material(s): Billet Aluminum
- Main Cap Fastening: (4) 1/2" Vertical Studs, (2) 7/16" side bolts, (2) 1/4" Locating dowels
- Stroke Clearance: 4.750" Max
- Timing Drive(s): Jesel Belt Drive, RCD Gear Drive, or Innovator's West Belt Drive

Deck	Cam Heights	Main Size	Part #
9.240"	+0.388	351C	100-908
9.750"	+0.388	351C	100-905
10.000"	+0.388	351C	100-909
10.200"	+0.388	351C	100-907

*Alternate deck heights will require additional charge.

Additional Information: Priority Main Oiling, Dry Only, Custom lifter and head bolt patterns available upon request.

Certain options are only available in some configurations. Please call to verify the combination you require is available

BBC BILLET ALUMINUM ENGINE BLOCKS

ENERGY MANUFACTURING

Deck	Cam Heights	Main Size	Part #
9.800"	+0.400	STD	200-908
10.200"	+0.400	STD	200-911
9.800"	+0.600	STD	200-900
10.200"	+0.600	STD	200-901
10.600"	+0.600	STD	200-902

*Alternate deck heights will require additional charge.

BBC Standard Features:

- Deck Height(s): 9.800”, 10.200”, or 10.600”. Ask about ext. deck options
- Cylinder Bore Spacing(s): Standard
- Cylinder Bore Sizes: 4.500”-4.600”, customer specified
- Cylinder Sleeve Protrusion: 0 to +.008”, customer specified
- Cylinder Head Fastening per Deck: (16) 7/16-14 studs & (2) 7/16 Bolt clearance holes. Standard pattern. Alternate fastening and pattern available at additional charge
- Cam Height(s): Raised 0.400" and Raised 0.600”
- Cam Bore Sizes: 55mm Babbitt, 55mm Roller/60mm Babbitt, or 60mm Roller. Delivered finish honed
- Lifter Bore Configuration(s): Standard. Alternate configurations available at additional charge
- Lifter Bore Style(s) & Size(s): .937 bushed keyway, .937 bushed standard, or 1.060 in Aluminum ready for bushing. Delivered finish honed. Alternate size/style available at additional charge
- Crank Bore(s): Standard BBC. Delivered finish honed
- Main Cap Material(s): Billet Aluminum
- Main Cap Fastening: (2) 9/16” Doweled Vertical Studs, (2) 1/2” splayed studs
- Stroke Clearance: Raised 0.400: 4.750" Max, Raised 0.600: 5.250” Max, Raised 0.600 Ext. Deck: 5.750" Max
- Timing Drive(s): Jesel Belt Drive or RCD Gear Drive

Additional Information: Priority Main Oiling, Custom Rear Cam Plug, Wide DRCE Oil Pan Pattern, Dry Only, Custom lifter and head bolt patterns available upon request.

Certain options are only available in some configurations. Please call to verify the combination you require is available

GEN II CAST IRON HEMI & WEDGE ENGINE BLOCKS

HEMI®

MOPAR®

OFFICIAL LICENSED PRODUCT

Without steady and reliable access to a **Gen II Cast Iron Hemi / Wedge** in over a decade car enthusiasts and sportsman racers have been left to scour scrapyards, market places, and garages to create a workable and affordable solution. Our licensing deal with Fiat Chrysler Automobiles will allow you to tap into this legendary platform on demand at an affordable price.

Gen II Cast Iron Hemi / Wedge Engine Blocks Standard Features

• Configurations Available for Order:

Description	Part #
Hemi with 4.495” Semi Finish Bore	P5160208AA
Hemi with 4.245” Semi Finish Bore	P5160210AA
Hemi with 4.245” Semi Finish Bore	P5160211AA
• No lifter bores or pushrod clearance	
Wedge with 4.495” Semi Finish Bore	P5160213AA
Wedge with 4.313” Semi Finish Bore	P5160212AA

ENERGY MANUFACTURING

• Deck Height(s): Standard Deck: 10.725", Deck Thickness: .600"
• Camshaft: Cam Height: Standard 5.150"
• Camshaft: Housing Bore: Delivered with Standard Stepped Cam Tunnel at finish size. Max Cam Housing Bore Size: 60mm Roller Bearing
• Cylinder Bore: Max Cylinder Bore Diameter: 4.600”
• Lifter: Lifter Diamerter: .905", Lifter Angle: 45 degrees
• Main Cap Fastening: #1-4 Main Cap: (2) 1/2" Vertical Bolts, (2) 3/8" Side Bolts, #5 Main Cap: (2) 1/2" Vertical Bolts
• Delivered with Finish Honed Crankshaft Housing Bore

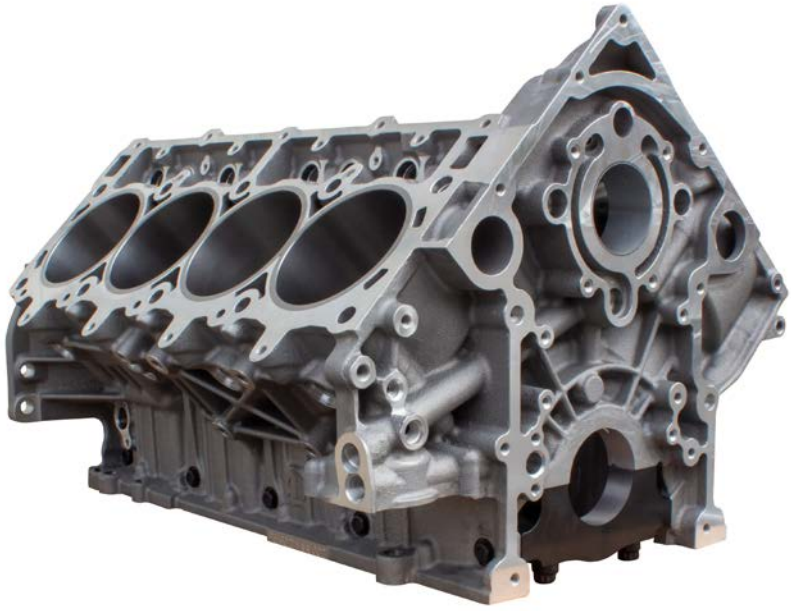
Included with Block: Block Plug Kit, Camshaft Bearings (Loose), 0.040" Oil Gallery Restrictors (Installed), Rear Oil Seal with Fasteners.

All block part numbers can have cylinder bores finish honed upon request for an additional charge.

GEN III HELLEPHANT & DRAGPAK ENGINE BLOCKS

MOPAR

OFFICIAL LICENSED PRODUCT



Gen III Cast Aluminum Engine Block Standard Features

Hellephant Block: **P5160271AA**

- 9.25” Deck Height(stock is 9.284”)
- 6.2/6.4 Timing Drive, VCT Solenoid
- Standard Lifter Pattern, .842 lifter bores
- Standard cam bore, bearings installed
- Delivered w/ 4.120” bores, require finish honing to 4.125”
- 4140 q/t billet main caps
- 4 bolt M1 & M5, 6 bolt M2-M4
- M12 Head Studs Included
- Do not plug main oil gallery on timing end

ENERGY MANUFACTURING

Dragpak Block: **P5160272AA**

- 9.25” Deck Height(stock is 9.284”)
- 6.1 Timing Drive, No VCT Solenoid
- .937 Keyway lifter bushings, require finish hone
- 60mmRB cam bore, bearings not included
- Delivered w/ 4.120” bores, require finish honing to 4.125”
- 4140 q/t billet main caps
- 4 bolt M1 & M5, 6 bolt M2-M4
- ½ Head Studs Included
- Plug main oil gallery on timing end

MOPAR Blocks can be purchased by calling Callies Performance Products at 419-435-2711

HEAVY METAL

High Density Heavy Metal	
Part #	**Length**
HMC-002	0.500 X 1.175
HMC-013	0.627 X 1.175
HMC-004	0.750 X 1.175
HMC-015	0.750 X 0.805
HMC-014	0.875 X 1.175
HMC-003-D	1.002 X 0.675
HMC-009	1.002 X 0.790
HMC-001-D	1.002 X 1.175
HMC-011-D	1.125 X 0.790
HMC-005	1.125 X 1.175
HMC-007-D	1.250 X 0.780
HMC-006-D	1.250 X 1.175
HMC016-D	1.2520 X 0.995
HMC017-D	1.2520 X 0.626
HMC018-D	1.2520 X 1.160
HMC019-D	1.0020 X 0.625
HMC020-D	1.0020 X 0.995

Callies tungsten heavy metal is machined to ease installation and produce an excellent final project. Our heavy metal slugs are centerless ground then precision turned and chamfered to length. The result is unmatched dimensional consistency.
A wide range of lengths are available to specifically match the variety of counterweight thicknesses found on Chevy, Ford and Mopar crankshafts. Diameters from .500" up to 1.375" make locating mass exactly where it's needed much easier. High density 97% tungsten material guarantees each piece of heavy metal will yield the maximum effect.

***Only a partial listing of available part numbers listed here.**

Callies also offers precision drills and reamers, ensuring a perfect interference fit for your heavy metal installation.

Many additional custom diameters and lengths are available, we may have exactly what you need!

Callies can simplify your engine builds by providing a comprehensive offering of the highest quality engine components available. We are experts at consolidating builds into a single shipment that will arrive at your shop on time, ready for installation. **Below is a partial listing of the world class manufacturers we handle.** Let us assist you with expert advice, the latest advancements in technology, and additional savings.

ACL · ARP automotive Racing products · DAIDO METAL RACING BEARINGS · KING RACING HIGH PERFORMANCE BEARINGS · TOTAL SEAL PISTON RINGS · DIAMOND Pistons · JE PISTONS · DART · CLEVITE · MAHLE · RaceTec PISTONS · SRP Sportsman Racing Products · PSI · CALICO COATINGS The Performance Advantage. · WISECO Performance Products

ULTRA ROD PART NUMBERS

Ultra Rod Part Numbers

Ultra Chevy Part Numbers

Chevy Small Block - I Beams

	Std	SJ	HJ	LW	XD-ENF	ENFORCER
5.700	U14125					
5.850	U14130	U14131	U14132			
6.000	U14135	U14136	U14137		U18235	
6.125	U14140	U14141	U14142	U14143		
6.200	U14145	U14146				U14245
6.250	U14150	U14151				

Chevy Small Block - H Beams

	Std	SJ	HJ		XD	
6.000	U16100	U16101	U16102		U19135	
6.110	U16105					
6.125	U16110					
6.200	U16120					

Chevy Small Block - H Beams (DIRT STYLE)

	DIRT-Std	DIRT-SJ	DIRT-HJ	DIRT-HJ.866	DIRT-SJ HW	
5.700			U16327			
5.850		U16331	U16332		U16431	
6.000		U16336	U16337	U16338		
6.125						

Chevy Big Block - I Beams

	Std	SJ	Custom		XD-ENF	ENFORCER
6.385	U15110	U15117				U15210
6.535	U15111	U15118				U15211
6.660	U15113					
6.700	U15114				U18214	
6.750	U15115					
6.800	U15116					
7.100	U15270					
7.200	U15280					

Chevy Big Block - H Beams

	Std				XD	
6.385	U16200					
6.480	U16205					
6.535	U16210					
6.700	U16230				U19114	

Ultra LS Part Numbers

LS1 - I Beams

	Std	SJ		.866 Pin		ENFORCER
6.125	U17171					U17175
6.350	U17178			U17179		

LS1 - H Beams

	Std	SJ				
6.100-LW	U16290					
6.125	U16300	U16310				
6.200-LW	U16303					
6.350	U16302					
6.460	U16301					
6.560	U16304					

LS - H Beam (Dirt Style)

	Std	SJ		Dirt-SJ .905W		
LS 6.200		U16346				
LS 6.485		U16347		U16367		

Ultra FORD Part Numbers

Ford Small Block - I Beams

	Std	SJ-.866	ENFORCER	Notes:
5.933	U14825			Modular
6.200	U14845	U14846	U14945	
6.250	U14850	U14851		

Ford Big Block - I Beams

	Std			Notes:
6.700	U15814			
6.800	U15816			

Ford Diesel - I Beam

	Std			Notes:
6.0L	U13100			Powerstroke

Ford - H Beams

	Std	SJ	HJ	Notes:
5.400	U16600			
5.850	U16610	U16611	U16612	Coyote .866 Pins
6.300	U16615			.866 Pin
6.319	U16620			Godzilla
6.319	U16621			Godzilla - OEM Pin
6.350	U16625			.927 Pin

Ford Small Block - H Beams (DIRT DTYLE)

	Std	SJ-.866		Notes:
6.000		U14856		No Bush, .905w

Ultra Sport Series Part Numbers

Enforcer - I Beams

	C-Line	ENFORCER	Notes:
	5.590	U18100	Toyota 2JZ
	5.590	U18101	Toyota 2JZ-Honda Journal
	6.500	U15400	Nissan GTR
	6.500	U15401	Nissan GTR - BB Bore, Cust Pin
	6.500	U15405	Nissan GTR - BB Bore
	5.138	U16700	Subaru EJ20
	5.217	U16710	Subaru EJ20+2mm
	5.217	U16711	Subaru EJ20+2mm .927 Pin
	5.295	U16715	Subaru EJ20+4mm
	5.659	U16720	Mitsubishi 4B11
	150 mm	U16730	Mitsubishi 4G63
	153 mm	U16740	Mitsubishi 4G63
	156 mm	U16750	Mitsubishi 4G63
	5.655	U16800	Honda 5.655
	5.985	U16805	Honda 5.985 K24
	5.879	U14820	2.3L Ecoboost
	6.011	U14821	3.5L Ecoboost

H Beam

	6.500	U16510	Nissan GTR - Tapered Pin End

Mopar Part Numbers

Mopar I Beam

	C-Line	ENFORCER	Notes:
	6.200	U14345	New Hemi/Viper

Premium Bolt Only (CA)

COMPSTAR ROD PART NUMBERS

Compstar Rod Part Numbers

Compstar Chevy Part Numbers				
Chevy Small Block - H Beams (.927 Pin)				
C-Line	**Std**	**SJ**	**HJ**	**Xtreme**
5.700	CSA5700DS2A2AH	CSA5700CS2A2AH		
5.850	CSA5850DS2A2AH	CSA5850CS2A2AH		
6.000	CSA6000DS2A2AH		CSA6000AS2A0AH	CSA6000DS2A2AX
6.000-SJ		CSA6000CS2A2AH		CSA6000CS2A2AX
6.125	CSA6125DS2A2AH	CSA6125CS2A2AH		CSA6125DS2A2AX
6.200	CSA6200DS2A2AH	CSA6200CS2A2AH		
6.250	CSA6250DS2A2AH			
6.300	CSA6300DS2A2AH			
Chevy Big Block - H Beams (.990 Pin)				
C-Line	**Std (1.700 Bolt)**	**SJ (1.545 bolt)**		**Xtreme**
6.135	CSB6135ES3B9AH			
6.385	CSB6385ES3B9AH	CSB6385DS3B9AH		CSB6385ES3BDAX
6.535	CSB6535ES3B9AH			CSB6535ES3BDAX
6.660	CSB6660ES3B9AH			
6.700	CSB6700ES3B9AH			CSB6700ES3BDAX
6.800	CSB6800ES3B9AH			

LS1 - H Beams				
C-Line	**.927 Pin**	**.943 Pin**	**.990 Pin/Xtreme**	**Xtreme**
6.100	CSC6100DS2A2AH			
6.100-SR		CSC6100DS6A2AH		
6.125	CSC6125DS2A2AH			CSC6125DS2A2AX
6.331			CSC6331DS3A2AX	
6.350				CSC6350DS2A2AX

Chrysler - H Beams				
C-Line	**.927 Pin**	**.990 Pin**		**Note**
6.760		CSE6760FS3D5AH		BB Mopar
6.250	CSD6250GS2E1AH			Viper

Compstar FORD Part Numbers				
Ford - H Beams				
C-Line	**Std**			
5.400	CSF5400HS2F2AH			

Diesel - H Beams				
C-Line				
6.418	CST6418MS0LCAX			Duramax

Compstar Sport Series Part Numbers		
H Beams		
Family	**C-Line**	**Part #**
Honda B16	5.290	C22101
Honda B18	5.433	C22102
		C22102-CA
Honda B20	5.394	C22103
		C22103-CA
Honda K24A	5.985	C22104
		C22104-CA
Honda K20A	5.472	C22105
		C22105-CA
Mitsubishi 4G63	5.906	C23101
		C23101-CA
Mitsubishi 4B11T	5.659	C23102
		C23102-CA
Mitsubishi 4G63	6.142	C23103
		C23103-CA
Mitsubishi 4G63	6.378	C23104
		C23104-CA
Ford 2.3L	5.879	C24101
		C24101-CA
Ford 2.0L	6.137	C24102
		C24102-CA
Ford 1.6L	5.276	C24103
Ford 3.5L	6.011	C24104
Ford 4.6L/5.0L	5.933	C24105
Ford 5.4L	6.657	C24106
Mazda 2.3	5.925	C24107
Nissan VQ35	5.677	C25101
Subaru EJ20	5.138	C26101
		C26101-CA
Subaru EJ20+2mm	5.217	C26102
		C26102-CA
Subaru FA20	5.091	C26103
		C26103-CA
CanAm Maverick X3	4.606	C27101
Artcic Cat Wildcat	5.000	C28101
Yamaha YXZ1000R	4.665	C29101
Polaris XP1000	4.921	C30101
Polaris XPT Turbo	4.915	C30102

ARP2000 Bolts are standard for SB-LS-Ford & Sport Series Rods

L19 Material Bolts are standard for BB Rods & Duramax Rods

"-CA" denotes sets available with Custom Age 625 Bolts

Reference Information:

Sets of 2	**Sets of 4**	**Sets of 8**
Sets of 3	**Sets of 6**	**Sets of 10**

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