

# 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, intake manifolds and cylinder heads.

## BBC Ultra Billet

### 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

## Magnum

Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
4.000	2.750	2.200	6.385	BBO42B-MG
4.250	2.750	2.200	6.385	BBP42B-MG
4.375	2.750	2.200	6.535	BBB42B-MG
4.500	2.750	2.200	6.700	BBQ42B-MG
4.750	2.750	2.200	6.700	BBS42B-MG
4.625	2.750	2.200	6.700	BBR42B-MG



## Magnum Big Block Stock Eliminator

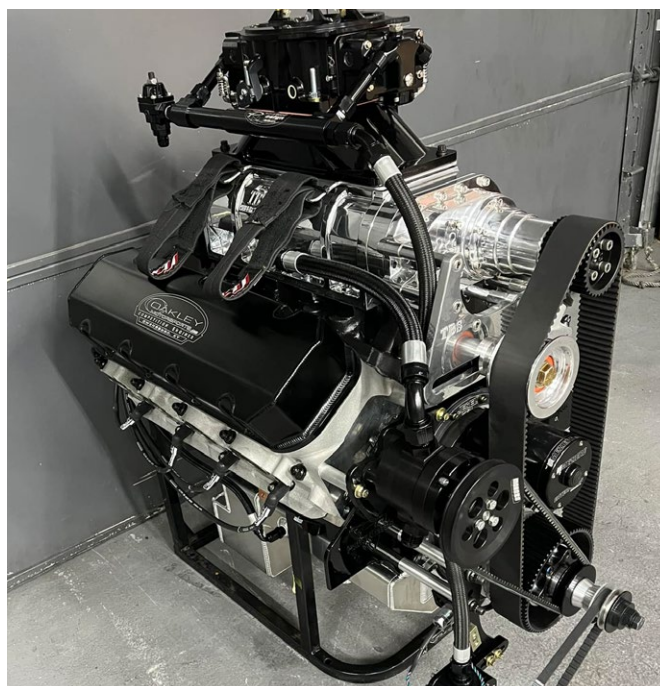
Stroke:	Main:	Pin:	Cammed for Rod Length	Part #
3.779	2.750	2.200	6.135	BB1542B-SE
4.013	2.750	2.200	6.135	BB1642B-SE

## Magnum Big Block Chevy

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

### Standard Features:

- 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



### Oakley Motorsports

Callies Big Block Magnum and Ultra Connecting Rods

# BIG BLOCK CHEVY



## 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



**Matt Bell**

Callies Ultra Billet BBC Crankshaft,  
Energy BBC Engine Block, Heads and Manifold

\* Pistons, Bearings and Cam Cores 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	867g.	U15210-CA
6.535	2.200	877g.	U15211-CA



## Big Block Enforcer XD I-Beam

Length	Journal	Typ. Wt.	Part #
6.700	2.200	884g.	U18214
6.700	2.200	884g.	U18214-CA

## Big Block Ultra I-Beam

Length	Journal	Typ. Wt.	Part #
6.385	2.200	809g.	U15110
6.535	2.200	817g.	U15111
6.660	2.200	822g.	U15113
6.700	2.200	826g.	U15114
6.750	2.200	825g.	U15115
6.800	2.200	829g.	U15116
6.385	2.200	809g.	U15110-CA
6.535	2.200	817g.	U15111-CA
6.660	2.200	822g.	U15113-CA
6.700	2.200	826g.	U15114-CA
6.750	2.200	825g.	U15115-CA
6.800	2.200	829g.	U15116-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

## Big Block Ultra XD H-Beam

Length	Journal	Typ. Wt.	Part #
6.700	2.200	823g.	U19114

## 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

## Big Block Ultra Long I-Beam

Length	Journal	Typ. Wt.	Part #
7.100	2.200	848g.	U15270
7.200	2.200	853g.	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	805g.	U15118
6.385	2.100	798g.	U15117-CA
6.535	2.100	805g.	U15118-CA



# BIG BLOCK CHEVY



## Callies Finish Ground Cams

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.



**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.

### Callies Finish Ground Cam List - Big Block Chevy

Callies Part #	Solid or Hyd	Duration @ .050		Advertised Duration (@ .020)		Cam Lift		Valve Lift w/1.7 Rocker		LSA + Advance	Lobe Ctr.		Lift @ TDC		Application	Specific Remarks
130 - BBC Std. Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		
130-001	SR	262	268	293	299	0.430	0.430	0.731	0.731	107 + 0	107	107	0.134	0.143		Std. Firing Order
130-003	SR	281	301	314	334	0.493	0.476	0.838	0.809	113 + 2	111	115	0.156	0.172		4/7 Swap
130-002	SR	287	312	320	350	0.515	0.485	0.876	0.825	115.5 + 2	113.5	117.5	0.159	0.174		4/7 Swap
130 - BBC 55mm Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		
130-004	SR	286	312	317	352	0.525	0.510	0.893	0.867	115.5 + 0	115.5	115.5	0.147	0.183		4/7 Swap
130-005	SR	286	317	317	350	0.566	0.535	0.962	0.910	118 + 0	118	118	0.138	0.202		4/7 Swap
130-006	SR	286	312	317	352	0.525	0.510	0.893	0.867	115.5 + 0	115.5	115.5	0.147	0.183		Same as 130-004 except tool steel
130-007	SR	286	317	317	350	0.566	0.535	0.962	0.910	118 + 0	118	118	0.138	0.202		Same as 130-005 except tool steel
131 - BBC 60mm Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust	Symmetrical Port Heads	
131-002	SR	282	310	313	345	0.600	0.580	1.020	0.986	120 + 0	120	120	0.121	0.182		4/7 Swap
131-001	SR	286	312	317	347	0.600	0.580	1.020	0.986	122 + 0	122	122	0.121	0.177		4/7 Swap
133 - 5" BBC 55mm		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		
133-001	SR	286	317	317	350	0.566	0.535	0.962	0.910	117.5 + 0	117.5	117.5	0.053	0.032		4/7 Swap

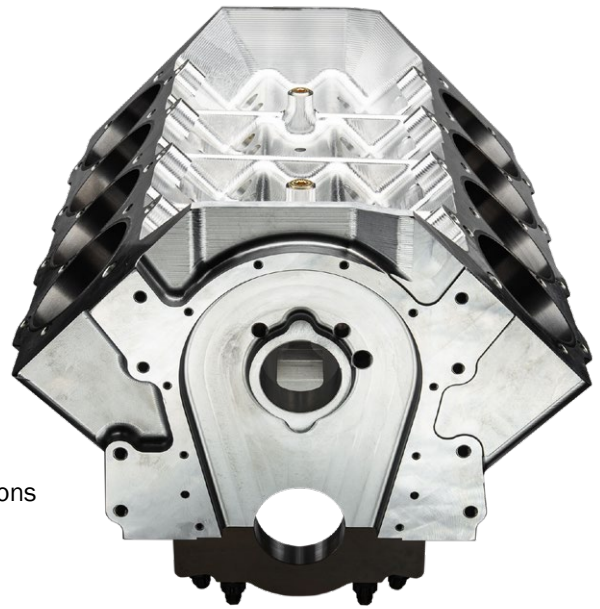
# ENERGY

## BILLET ALUMINUM BBC ENGINE BLOCK

Energy Manufacturing billet blocks begin life as a 490 pound block of high grade forged 6061 aluminum. Featuring rolled thread tapped holes for extra strength and high strength cylinder liners, careful attention is given to fit and finish of the overall block. Each semi-finished block is thoroughly heat treated to T6 Standards and cryogenically stress relieved.

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.**



## ENERGY MANUFACTURING, LTD.

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