

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

			Cammed for	
Stroke:	Main:	Pin:	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:	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





**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

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

\* Pistons, Bearings and Cam Cores also available.

### Big Block Ultra I-Beam - Rated for 1,800 HP

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	848a.	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 - Rated for 1,400 HP

Length	Journal	Typ. Wt.	Part #
6.385	2.200	800g.	U16200
6.480	2.200	800g.	U16205
6.535	2.200	807g.	U16210
6.660	2.200		U16220
6.700	2.200	817g.	U16230
6.750	2.200		U16235
7.100	2.200		U16250
7.200	2.200		U16255

### Big Block Ultra UD H-Beam - Rated for 1000 HP

Length	Journal	Typ. Wt.	Part #
6.385	2.100	· .	U16350
6.535	2.100		U16360

### **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

### **Callies Finish Ground Cams**





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

	Solid			Adve	ertised			Valve L	ift w/1.7	LSA +						
Callies Part #	or Hyd	Duration	050. @ n	Duration	(@ .020)	Cam	Lift	Roo	ker	Advance	Lobe	Ctr.	Lift @	TDC	Application	Specific Remarks
130 - BBC Std. Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		4/7 Swap Firing Order Unless Noted
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		
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		
130 - BBC 55mm Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		4/7 Swap Firing Order Unless Noted
130-017	SR	276	300	306	339	0.520	0.510	0.884	0.867	112 + 0	112	112	0.145	0.185		
130-015	SR	278	296	305	334	0.486	0.471	0.826	0.801	111 + 0	111	111	0.156	0.181		
130-016	SR	280	312	313	350	0.533	0.522	0.906	0.887	116 + 0	116	116	0.138	0.199		
130-030	SR	281	312	311	343	0.567	0.552	0.964	0.938	116 + 0	116	116	0.141	0.201		
130-014	SR	281	315	311	347	0.567	0.534	0.964	0.908	118 + 0	118	118	0.132	0.197		LS Firing Order
130-029	SR	283	308	315	343	0.525	0.510	0.893	0.867	116 + 0	116	116	0.146	0.182		Small Base Circle for 632
130-018	SR	283	312	315	347	0.525	0.510	0.893	0.867	116 + 0	116	116	0.146	0.193		Small Base Circle for 632
130-019	SR	283	312	315	347	0.550	0.525	0.935	0.893	117 + 0	117	117	0.142	0.191		
130-021	SR	283	315	315	350	0.565	0.550	0.961	0.935	118 + 0	118	118	0.137	0.196		



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 Part#	Solid or Hyd	Duration	n @ .050		rtised (@ .020)	Cam	Lift	Valve Li Roc		LSA + Advance	Lobe	Ctr.	Lift @	TDC	Application	Specific Remarks
130-024	SR	284	308	317	344	0.533	0.521	0.906	0.886	116 + 0	116	116	0.143	0.193		
130-008	SR	285	306	318	344	0.527	0.516	0.896	0.877	116 + 0	116	116	0.145	0.170		
130-023	SR	285	312	316	352	0.540	0.530	0.918	0.901	117 + 0	117	117	0.139	0.139		
130-013	SR	285	317	318	354	0.527	0.525	0.896	0.893	118 + 0	118	118	0.137	0.190		
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		
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
130-020	SR	286	312	317	352	0.550	0.525	0.935	0.893	117 + 0	117	117	0.146	0.190		LS Firing Order
130-005	SR	286	317	317	350	0.566	0.535	0.962	0.910	118 + 0	118	118	0.138	0.202		
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
130-026	SR	287	300	316	335	0.515	0.510	0.876	0.867	114 + 0	114	114	0.160	0.173		.820" lifter wheel
130-027	SR	287	300	316	335	0.515	0.510	0.876	0.867	114 + 0	114	114	0.160	0.173		.760" lifter wheel
130-009	SR	287	306	320	344	0.527	0.516	0.896	0.877	116 + 0	116	116	0.149	0.170		
130-012	SR	288	308	317	343	0.525	0.510	0.893	0.867	116 + 0	116	116	0.154	0.182		Small Base Circle for 632
130-025	SR	288	312	317	347	0.525	0.510	0.893	0.867	117 + 0	117	117	0.149	0.189		Small Base Circle for 632
130 - BBC 60mm Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust		4/7 Swap Firing Order Unless Noted
130-011	SR	283	312	315	347	0.540	0.530	0.918	0.901	117 + 0	117	117	0.142	0.191		LS Firing Order
130-028	SR	286	308	317	343	0.525	0.510	0.893	0.867	116 + 0	116	116	0.154	0.182		Same as 130-012 except 60mm
131 - BBC 60mm Brng.		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust	Symmetrical Port Heads Energy Block	4/7 Swap Firing Order Unless Noted
131-002	SR	282	310	313	345	0.600	0.580	1.020	0.986	120 + 0	120	120	0.121	0.182		
131-001	SR	286	312	317	347	0.600	0.580	1.020	0.986	122 + 0	122	122	0.121	0.177		
133 - 5" BS BBC 55mm		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		Intake	Exhaust	Intake	Exhaust	5.000" Bore Spacing Brodix Block	4/7 Swap Firing Order Unless Noted
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		



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



### **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

<sup>\*</sup>Alternate deck heights will require additional charge.



- 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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