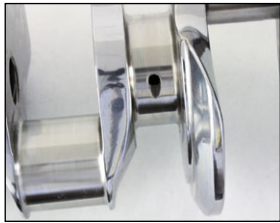


LSx & GEN V LT1



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, Iron Duke, 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 Callies for a full list of part numbers and options.

LS/Gen V LT1 8 Counterweight Magnum

Average weight: 50-55 lbs.

LS1 Gen III - IV Standard Features

- Stroke range of 2.7ummm00" 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
- Chevy 283 and Ford 351 mains available as custom



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

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

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 4.000 | 2.750 | 2.100 | 6.125 | APU-71V-MG |
| 4.125 | 2.559 | 2.100 | 6.125 | APU-31V-MG |
| 4.125 | 2.750 | 2.100 | 6.125 | APU-71V-MG |
| 4.250 | 2.559 | 2.100 | 6.350 | APP-31V-MG |
| 4.250 | 2.750 | 2.100 | 6.350 | APP-71V-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
- Scalloped flange
- Available as a forging or a billet

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

Forged:

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

LSx & GEN V LT1



We understand that not everyone has the need or budget for a Magnum or billet crankshaft, but still may want a product with more to offer than our Compstar line. This middle-ground has needed an option for several years, so Callies went to work for a solution. This has culminated in the creation of the Apex Series of crankshaft by Callies. Apex crankshafts are made on the same forgings that we use to make our Magnum Series, but are machined by the supplier that makes the Compstar line. Like Compstar, all Apex crankshafts are finish sized and fully inspected in-house. This results are the best bang-for-your-buck crankshaft on the market.

Apex LS/LT

Standard Features

- Made on Callies proprietary Magnum forging
- Ultra-pure, premium 4340 material
- Machined by our vetted and reliable Compstar supplier
- Nitrided for optimal hardness and wear resistance
- Every crankshaft is finished and inspected in-house at Callies
- Limited stroke and pin size combinations



Apex - LS Wet and Dry Sump Post:

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 3.625 | 2.559 | 2.100 | 6.100 | APH-31V-AS |
| 4.000 | 2.559 | 2.100 | 6.125 | APO-31V-AS |
| 4.000 | 2.559 | 2.100 | 6.125 Dry Sump Post | AWO-31V-AS |
| 4.125 | 2.559 | 2.100 | 6.125 | APU-31V-AS |
| 4.250 | 2.559 | 2.100 | 6.125 | APP-31V-AS |

Apex - LT Wet and Dry Sump Post:

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 3.625 | 2.559 | 2.100 | 6.100 Dry Sump Post | 5UH-31V-AS |
| 3.625 | 2.559 | 2.100 | 6.100 Wet Sump Post | 5TH-31V-AS |
| 4.000 | 2.559 | 2.100 | 6.125 Dry Sump Post | 5UO-31V-AS |
| 4.000 | 2.559 | 2.100 | 6.125 Wet Sump Post | 5TO-31V-AS |



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 |

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 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

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 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 LSx

Average weight: 55 lbs.

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 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

| Stroke: | Main: | Pin: | Cammed for Rod Length | Part #: |
|---------|-------|-------|-----------------------|------------|
| 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 |

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

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 | 2.100 | 618g. | CSC6125DS2A2AH |
| 6.440 | 2.000 | 639g. | CSC6440CS2A2AH |
| 6.560 | 2.100 | 655g. | CSC6560DS2A2AH |

Compstar LS Xtreme

| Length | Journal | Pin | Typ. Wt. | Part # |
|--------|---------|------|----------|----------------|
| 6.125 | 2.100 | .927 | 648g. | CSC6125DS2A2AX |



Head Studs

| Part #: | Description: | Material: |
|---------|--|---------------|
| 10413P | SBC LS Studs - 2004 & Later - All In One Length | Patriot Grade |
| 11086 | LT Loose Stud Assy - 4" x 7/16-14 x 7/16-20" | TorqueMaster |
| 11087 | LT Loose Stud Assy - 5" x 7/16-14 x 7/16-20" | TorqueMaster |
| 10620 | LSR Loose Stud Assy - 7" Head Stud - LSR 1/2" | TorqueMaster |
| 10372 | LSR Loose Stud Assy - 12pt. Heavy Nuts .825" collar .515" height | TorqueMaster |
| 10257 | LSR Loose Stud Assy - Washer - Diameter .875"x1.225" thick | TorqueMaster |

Main Studs

| Part #: | Description: | Material: |
|---------|---|---------------|
| 10593 | Chevrolet LS - Gen III LS Cast Iron | Patriot Grade |
| 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 | |

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



LSx & GEN V LT1



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

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.

LSx & GEN V LT1



Callies Finish Ground Cam List - LS1 3-Bolt

| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration | | Cam Lift | | Valve Lift | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
|----------------------------------|--------------|-----------------|---------|------------------------------|---------|----------|---------|-------------------------|---------|---------------|-----------|---------|------------|---------|------------------------|
| LS1 3-Bolt 55mm Hydraulic Roller | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | Intake | Exhaust | Intake | Exhaust | Stock Bottom End |
| 180-009 | HR | 210 | 218 | 261 | 266 | 0.325 | 0.325 | 0.553 | 0.553 | 108 + 3 | 105 | 111 | 0.085 | 0.075 | Cathedral Port - SBE |
| 180-010 | HR | 214 | 222 | 265 | 270 | 0.325 | 0.325 | 0.553 | 0.553 | 110 + 3 | 107 | 113 | 0.085 | 0.075 | Cathedral Port - SBE |
| 180-011 | HR | 218 | 226 | 269 | 274 | 0.325 | 0.325 | 0.553 | 0.553 | 112 + 3 | 109 | 115 | 0.085 | 0.075 | Cathedral Port - SBE |
| 180-012 | HR | 222 | 230 | 273 | 278 | 0.325 | 0.325 | 0.553 | 0.553 | 114 + 3 | 111 | 117 | 0.085 | 0.075 | Cathedral Port - SBE |
| 180-019 | HR | 216 | 228 | 267 | 277 | 0.368 | 0.368 | 0.626 | 0.626 | 108 + 2 | 106 | 110 | 0.092 | 0.102 | Rectangular Port - SBE |
| 180-020 | HR | 220 | 232 | 271 | 281 | 0.368 | 0.368 | 0.626 | 0.626 | 110 + 2 | 108 | 112 | 0.092 | 0.102 | Rectangular Port - SBE |
| 180-021 | HR | 224 | 236 | 275 | 285 | 0.368 | 0.368 | 0.626 | 0.626 | 112 + 2 | 110 | 114 | 0.092 | 0.102 | Rectangular Port - SBE |
| 180-022 | HR | 228 | 240 | 279 | 289 | 0.368 | 0.368 | 0.626 | 0.626 | 114 + 2 | 112 | 116 | 0.092 | 0.102 | Rectangular Port - SBE |
| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration (@ .006) | | Cam Lift | | Valve Lift w/1.7 Rocker | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
| LS1 3-Bolt 55mm Hydraulic Roller | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | Intake | Exhaust | Intake | Exhaust | |
| 180-001 | HR | 212 | 218 | 265 | 271 | 0.325 | 0.325 | 0.553 | 0.553 | 113 + 2 | 111 | 115 | 0.037 | 0.035 | |
| 180-038 | HR | 212 | 222 | 268 | 278 | 0.325 | 0.325 | 0.553 | 0.553 | 116 + 3 | 113 | 119 | 0.033 | 0.032 | |
| 180-023 | HR | 214 | 222 | 270 | 278 | 0.353 | 0.353 | 0.600 | 0.600 | 111 + 3 | 108 | 114 | 0.047 | 0.043 | |
| 180-052 | HR | 216 | 226 | 272 | 282 | 0.325 | 0.325 | 0.553 | 0.553 | 116 + 5 | 111 | 121 | 0.042 | 0.032 | |
| 180-040 | HR | 217 | 234 | 293 | 310 | 0.341 | 0.341 | 0.580 | 0.580 | 120 + 4 | 116 | 124 | 0.034 | 0.036 | |
| 180-002 | HR | 218 | 224 | 271 | 277 | 0.325 | 0.325 | 0.553 | 0.553 | 113 + 3 | 110 | 116 | 0.047 | 0.039 | |
| 180-057 | HR | 218 | 226 | 269 | 274 | 0.325 | 0.325 | 0.553 | 0.553 | 108 + 3 | 105 | 111 | 0.062 | 0.055 | |
| 180-024 | HR | 218 | 230 | 274 | 286 | 0.353 | 0.353 | 0.600 | 0.600 | 111 + 4 | 107 | 115 | 0.056 | 0.050 | |
| 180-042 | HR | 220 | 226 | 296 | 282 | 0.353 | 0.353 | 0.600 | 0.600 | 115 + 4 | 111 | 119 | 0.048 | 0.036 | |
| 180-041 | HR | 220 | 234 | 276 | 290 | 0.350 | 0.345 | 0.595 | 0.587 | 118 + 4 | 114 | 122 | 0.040 | 0.038 | |
| 180-025 | HR | 222 | 234 | 278 | 290 | 0.353 | 0.353 | 0.600 | 0.600 | 112 + 2 | 110 | 114 | 0.053 | 0.058 | |
| 180-014 | HR | 222 | 238 | 273 | 287 | 0.368 | 0.368 | 0.626 | 0.626 | 109 + 4 | 105 | 113 | 0.069 | 0.069 | |
| 180-003 | HR | 224 | 230 | 277 | 283 | 0.325 | 0.325 | 0.553 | 0.553 | 111 + 2 | 109 | 113 | 0.059 | 0.056 | |
| 180-043 | HR | 226 | 232 | 282 | 310 | 0.353 | 0.353 | 0.600 | 0.600 | 115 + 4 | 111 | 119 | 0.056 | 0.043 | |
| 180-015 | HR | 226 | 242 | 277 | 291 | 0.368 | 0.368 | 0.626 | 0.626 | 111 + 4 | 107 | 115 | 0.069 | 0.069 | |
| 180-029 | HR | 226 | 246 | 282 | 320 | 0.353 | 0.360 | 0.600 | 0.612 | 116 + 6 | 110 | 122 | 0.058 | 0.053 | |
| 180-044 | HR | 227 | 237 | 285 | 295 | 0.365 | 0.355 | 0.621 | 0.604 | 113 + 4 | 109 | 117 | 0.062 | 0.054 | |
| 180-055 | HR | 230 | 242 | 286 | 309 | 0.353 | 0.355 | 0.600 | 0.604 | 111 + 5 | 106 | 116 | 0.077 | 0.061 | |
| 180-016 | HR | 230 | 246 | 281 | 295 | 0.368 | 0.368 | 0.626 | 0.626 | 113 + 4 | 109 | 117 | 0.069 | 0.069 | |

LSx & GEN V LT1



| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration | | Cam Lift | | Valve Lift | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
|----------------|--------------|-----------------|-----|---------------------|-----|----------|-------|------------|-------|---------------|-----------|-----|------------|-------|------------------|
| 180-045 | HR | 232 | 242 | 333 | 343 | 0.380 | 0.380 | 0.646 | 0.646 | 117 + 5 | 112 | 122 | 0.646 | 0.646 | |
| 180-056 | HR | 232 | 244 | 288 | 311 | 0.360 | 0.356 | 0.612 | 0.605 | 115 + 5 | 110 | 120 | 0.068 | 0.053 | |
| 180-046 | HR | 232 | 248 | 288 | 315 | 0.360 | 0.355 | 0.612 | 0.604 | 118 + 5 | 113 | 123 | 0.059 | 0.050 | |
| 180-007 | HR | 232 | 249 | 299 | 323 | 0.363 | 0.353 | 0.617 | 0.600 | 120 + 5 | 115 | 125 | 0.055 | 0.048 | |
| 180-047 | HR | 234 | 239 | 310 | 316 | 0.360 | 0.358 | 0.612 | 0.609 | 115 + 4 | 111 | 119 | 0.065 | 0.051 | |
| 180-026 | HR | 234 | 248 | 301 | 322 | 0.362 | 0.362 | 0.615 | 0.615 | 112 + 4 | 108 | 116 | 0.078 | 0.071 | |
| 180-017 | HR | 234 | 250 | 285 | 299 | 0.368 | 0.368 | 0.626 | 0.626 | 115 + 4 | 111 | 119 | 0.069 | 0.069 | |
| 180-048 | HR | 236 | 248 | 288 | 315 | 0.366 | 0.355 | 0.622 | 0.604 | 112 + 4 | 108 | 116 | 0.062 | 0.069 | |
| 180-030 | HR | 236 | 250 | 292 | 317 | 0.355 | 0.362 | 0.604 | 0.615 | 114 + 4 | 110 | 118 | 0.074 | 0.066 | |
| 180-031 | HR | 236 | 256 | 292 | 330 | 0.355 | 0.355 | 0.604 | 0.604 | 117 + 7 | 110 | 124 | 0.074 | 0.060 | |
| 180-018 | HR | 238 | 254 | 289 | 303 | 0.368 | 0.368 | 0.626 | 0.626 | 117 + 4 | 113 | 121 | 0.069 | 0.069 | |
| 180-032 | HR | 240 | 252 | 307 | 326 | 0.360 | 0.367 | 0.612 | 0.624 | 114 + 2 | 112 | 116 | 0.075 | 0.078 | |
| 180-033 | HR | 240 | 256 | 307 | 330 | 0.355 | 0.355 | 0.604 | 0.604 | 114 + 4 | 110 | 118 | 0.082 | 0.077 | |
| 180-027 | HR | 242 | 254 | 309 | 328 | 0.362 | 0.362 | 0.615 | 0.615 | 111 + 3 | 109 | 113 | 0.088 | 0.089 | |
| 180-049 | HR | 242 | 258 | 309 | 316 | 0.362 | 0.355 | 0.615 | 0.604 | 113 + 3 | 110 | 116 | 0.085 | 0.087 | |
| 180-034 | HR | 242 | 260 | 309 | 334 | 0.355 | 0.355 | 0.604 | 0.604 | 114 + 3 | 111 | 117 | 0.082 | 0.086 | |
| 180-050 | HR | 244 | 258 | 302 | 316 | 0.365 | 0.355 | 0.621 | 0.604 | 118 + 5 | 113 | 123 | 0.077 | 0.065 | |
| 180-035 | HR | 246 | 260 | 298 | 334 | 0.366 | 0.370 | 0.622 | 0.629 | 114 + 4 | 110 | 118 | 0.094 | 0.083 | |
| 180-059 | HR | 246 | 260 | 298 | 334 | 0.366 | 0.370 | 0.622 | 0.629 | 108 + 2 | 106 | 110 | 0.109 | 0.109 | |
| 180-036 | HR | 248 | 260 | 315 | 334 | 0.355 | 0.355 | 0.604 | 0.604 | 114 + 4 | 110 | 118 | 0.095 | 0.083 | |
| 180-028 | HR | 250 | 264 | 317 | 338 | 0.362 | 0.362 | 0.615 | 0.615 | 114 + 4 | 110 | 118 | 0.098 | 0.089 | |
| 180-037 | HR | 250 | 264 | 319 | 338 | 0.370 | 0.370 | 0.629 | 0.629 | 114 + 4 | 110 | 118 | 0.097 | 0.089 | |
| 180-060 | HR | 258 | 272 | 332 | 346 | 0.366 | 0.370 | 0.622 | 0.629 | 108 + 2 | 106 | 110 | 0.120 | 0.129 | |
| 180-051 | HR | 260 | 270 | 328 | 343 | 0.382 | 0.382 | 0.649 | 0.649 | 109 + 4 | 105 | 113 | 0.130 | 0.115 | |



LSx & GEN V LT1



| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration (@ .020) | | Cam Lift | | Valve Lift w/1.7 Rocker | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
|---------------------------------------|--------------|-----------------|---------|------------------------------|---------|----------|---------|-------------------------|---------|---------------|-----------|---------|------------|---------|------------------|
| LS1 3-Bolt 55mm Solid Roller | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | Intake | Exhaust | Intake | Exhaust | |
| 180-062 | SR | 251 | 267 | 280 | 295 | 0.382 | 0.375 | 0.649 | 0.638 | 110 + 3.5 | 106.5 | 113.5 | 0.114 | 0.118 | Procharger |
| 180-013 | SR | 262 | 269 | 291 | 298 | 0.472 | 0.465 | 0.802 | 0.791 | 107 + 0 | 107 | 107 | 0.140 | 0.149 | Dirt Track |
| 180-054 | SR | 270 | 282 | 305 | 315 | 0.454 | 0.454 | 0.772 | 0.772 | 116 + 2 | 114 | 118 | 0.114 | 0.119 | Turbo Cam |
| 180-063 | SR | 278 | 294 | 308 | 326 | 0.485 | 0.485 | 0.825 | 0.825 | 114.5 + 6.5 | 108 | 121 | 0.166 | 0.134 | Procharger |
| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration (@ .020) | | Cam Lift | | Valve Lift w/1.7 Rocker | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
| LS1 3-Bolt 60mm Solid Roller | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | Intake | Exhaust | Intake | Exhaust | |
| 180-004 | SR | 260 | 280 | 293 | 308 | 0.420 | 0.430 | 0.714 | 0.731 | 113 + 0 | 113 | 113 | 0.101 | 0.145 | NA Drag Race Cam |
| 180-005 | SR | 260 | 280 | 290 | 311 | 0.420 | 0.430 | 0.714 | 0.731 | 113 + 0 | 113 | 113 | 0.101 | 0.135 | NA Drag Race Cam |
| 180-008 | SR | 271 | 274 | 300 | 306 | 0.522 | 0.525 | 0.887 | 0.893 | 115.5 + .5 | 115 | 116 | 0.122 | 0.122 | Turbo Cam |
| 180-061 | SR | 278 | 284 | 311 | 317 | 0.500 | 0.525 | 0.850 | 0.893 | 117 + 0 | 117 | 117 | 0.126 | 0.138 | Turbo Cam |
| 180-006 | SR | 281 | 284 | 310 | 316 | 0.522 | 0.525 | 0.887 | 0.893 | 115.5 + .5 | 115 | 116 | 0.145 | 0.143 | Turbo Cam |
| 180-039 | SR | 285 | 316 | 314 | 348 | 0.550 | 0.555 | 0.935 | 0.944 | 120 + .4 | 116 | 124 | 0.150 | 0.177 | Nitrous Cam |
| Callies Part # | Solid or Hyd | Duration @ .050 | | Advertised Duration (@ .020) | | Cam Lift | | Valve Lift w/1.9 Rocker | | LSA + Advance | Lobe Ctr. | | Lift @ TDC | | Specific Remarks |
| LS1 3-Bolt 55mm CID LS-CR Head | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | Intake | Exhaust | Intake | Exhaust | |
| 182-001 | SR | 268 | 282 | 299 | 312 | 0.485 | 0.485 | 0.922 | 0.922 | 115 + 0 | 115 | 115 | 0.107 | 0.148 | NA Drag Race Cam |
| 182-003 | SR | 271 | 292 | 302 | 322 | 0.485 | 0.485 | 0.922 | 0.922 | 116.5 + 1.5 | 115 | 118 | 0.113 | 0.152 | NA Drag Race Cam |
| 182-002 | SR | 278 | 292 | 309 | 322 | 0.485 | 0.485 | 0.922 | 0.922 | 115 + 0 | 115 | 115 | 0.128 | 0.165 | NA Drag Race Cam |



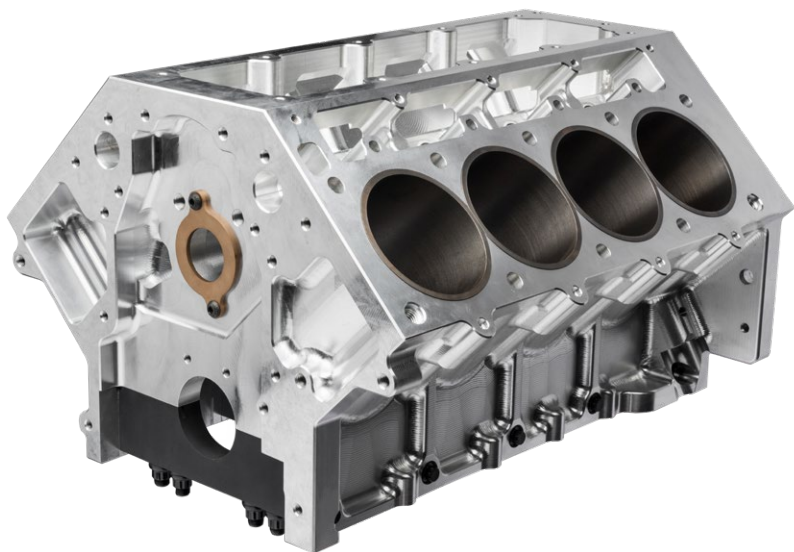
ENERGY

BILLET ALUMINUM LS 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 # |
|---------|-------------|-----------|---------|
| 9.240" | +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.



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) 1/2-13, (4) 3/8-16, (4) 3/8" shoe kit provisions. Standard Pattern.
Alternate fastening and pattern available 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.

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.**



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