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# sales policies

## **CROWER CAMS & EQUIPMENT COMPANY**

3333 Main Street • Chula Vista • California • 91911-5899 • USA  
619-422-1191 • Fax: 619-422-9067 • [www.crower.com](http://www.crower.com) • email: [tech@crower.com](mailto:tech@crower.com)  
7am to 5pm PST • Monday through Friday • Closed from 12pm to 1pm PST for lunch

## **WHERE TO PURCHASE CROWER PRODUCTS**

Crower performance products are available at better speed shops and performance warehouses throughout the world. If you are having difficulty locating a Crower dealer in your area and wish to order direct, call 619-422-1191 or go online at [www.crower.com](http://www.crower.com).

## **MINIMUM ORDER**

The minimum order is \$20.00 (if less than \$20.00, a \$2.50 service charge will apply).

## **PAYMENT POLICY**

Crower accepts only U.S. postal money orders, certified checks, cashier's checks and bank drafts as deposits or full payments. Personal or non-certified checks will not be accepted. Company checks are acceptable only if you have established credit with Crower prior to your order. Open accounts may be arranged by contacting the Crower Accounting Department. Credit applications are available upon request. A minimum 50% deposit is required on all custom parts.

## **ONLINE ORDERING**

You can order any Crower product online at [www.crower.com](http://www.crower.com).

## **C.O.D. POLICY**

All shipments will be made C.O.D. (certified check or money order only, NO CASH), unless prepayment is received with the order or prior arrangements have been made for an open account. Prepayments must be made by cashier's check, certified check, or money order only. Company and personal checks will be accepted only with established credit.

## **FREIGHT & SHIPPING**

All shipping is F.O.B., Chula Vista, California. If no shipping instructions are received with your order, Crower will ship by the most reasonable means in accordance with the size, weight and destination of your order. If you desire special handling such as overnight and two day service (UPS and FedEx) please specify with your order. Drop shipments only if prepaid or open account. ***The cutoff for processing all next day and second day orders is 12pm PST (3pm EST).***

## **LIMITED WARRANTY**

All Crower racing products are 100% inspected for quality and quantity prior to shipment. Certain Crower products are covered by a limited warranty, others are not. If a product is covered, a warranty card will be enclosed in the packaging describing the specific terms and conditions of the warranty. All guarantees or warranty claims must be referred to the Crower factory. No dealer, jobber or warehouse is authorized to handle these claims directly.

## **RETURNS, BACKORDERS & SHORTAGES**

All merchandise ordered in error is subject to a 15% handling and restocking charge. Merchandise may not be returned without written authorization from Crower. Special order or custom made parts are not returnable or refundable. Original invoice number and date of purchase must be furnished. All items must be returned freight prepaid along with written authorization from Crower. Out of stock items will be backordered and held until parts are available or order is cancelled by the customer. If you do not wish to have out of stock items backordered, please specify with your order. If parcel is received intact and a shortage or error is discovered, you must report this to Crower immediately and follow it up in writing within 3 days after receipt of shipment. Merchandise sent in for refurbishing or specifications will be held for no longer than 60 days. Merchandise in our possession after 60 days will become property of Crower. ***No returns or refunds will be accepted after one year.***

## **VACATION NOTICE**

Crower will be closed during the Christmas holiday season. A notice will be mailed out notifying our dealers of the exact dates.

# warranty

## STATEMENT OF POLICY

- The warranties set forth below are made possible by Crower's state-of-the-art production facilities. All Crower products are tested in the laboratory and proven on the race track.
- **Crower does not warrant performance of the products due to Crower's lack of control during product installation and usage. Warranty is void on any race application.**
- Crower neither delegates nor authorizes any person(s) to assume obligations or liabilities on behalf of Crower in connection with any Crower products or sales of Crower products.
- Nothing in this statement shall alter or enlarge the terms of the warranties, obligations or liabilities issued with these products.

## WARRANTY PROVISIONS

Applies to all camshafts, valve train components, including hydraulic, solid, and roller lifters, valve springs, stainless steel rocker arms and pushrods, connecting rods, crankshafts, clutches.

### ONE YEAR WARRANTY

Crower warrants all of the above listed products against manufacturer's defects for one year from date of purchase by purchase user. Crower camshafts are designed to be used in conjunction with Crower kits to insure optimum performance. This warranty is valid only where complete Crower kit or one with comparable design characteristics and materials is used and proof of its purchase is returned to Crower with warranty card within thirty (30) days of purchase. If excessive lobe wear occurs during said one year period, purchaser must return the cam to Crower at 3333 Main Street, Chula Vista, CA 91911-5899, freight prepaid, where, at Crower's option, repair or replacement will be accomplished at no cost to purchaser and returned to purchaser, freight collect.

### THREE YEAR WARRANTY

Crower warrants all Crower camshafts against excessive lobe wear for an additional three year period after expiration of the one year warranty, as herein below provided. This warranty is valid only where complete Crower kit or one with comparable design characteristics and materials is used and proof of its purchase is returned to Crower with warranty card within thirty (30) days of purchase. If excessive lobe wear occurs during said three year period, purchaser must return the cam to Crower at above address, freight prepaid, where, at Crower's option, repair or replacement any above listed camshaft at a cost not to exceed fifty (50%) percent of the current list price and return to purchaser, freight collect.

## TERMS & DISCLAIMERS

The following terms apply to any Crower Warranty:  
Crower warranties are void when the said Crower product in question has been physically altered, improperly installed or used or otherwise damaged due to no fault of Crower or has not been used for the said purpose it was intended or for which it was designed. Purchaser must fill out and mail to Crower the completed Warranty card within thirty (30) days of purchase to obtain the benefits of the foregoing warranties. Failure to do so voids all of the express written warranties herein above set forth. Implied warranties of merchantability and fitness are limited for a term of one (1) year from date of purchase. Some states do not allow limitation on how long an implied warranty lasts so the above limitation may not apply to you. In no case will Crower be responsible for incidental or consequential damages occurred during operation or as a result of product failure. These warranties are not assignable or transferable. These warranties do not apply to reground camshafts or components used thereon. Each warranty will apply to all repaired or replaced camshafts or components until the expiration of the remaining period of the original warranty. This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state. Under no circumstances is Crower Cams & Equipment Company responsible or liable for any other products that may be damaged or destroyed during operation due to Crower's lack of control during installation and operation.

# history

It started as a one-man, part-time operation making engine parts for himself and his hot rod buddies more than 40 years ago. Today it has evolved into a multimillion dollar, multifaceted manufacturing operation, producing high performance engine equipment for a wide variety of applications, including cars, trucks, boats, tractors, motorcycles and antiques.

Crower Cams and Equipment Company, Inc., is a leading producer of aftermarket camshafts and valve train components. But over the years Crower has developed a more diverse line of products. Today, Crower is the world's largest manufacturer of aftermarket crankshafts and connecting rods, and the Crower line of clutches has been dominating the drag racing and tractor pulling series for nearly two decades.



*A young Bruce Crower, left, in his first shop in 1949 near Phoenix, Arizona.*

## EARLY THOUGHTS

Bruce Crower, president of Crower Cams, is the thinking man's racer, saying, "People don't think as much as they should. If you think hard enough, the answer will come." Born in 1930 to a church going family in Phoenix, Arizona, he has been thinking about, and implementing ways to improve the internal combustion engine for nearly six decades.

During high school, Bruce found that other hot rodders would buy parts that he made for his own '32 Ford roadster. As new ideas came to mind, instead of making just one part for himself, he would make several at a time and sell them to his fellow hot rodders. It was simple arithmetic to see the profit of making thousands of such parts and selling them nationwide.

## INTRODUCTION TO FAST MACHINES

In 1949, a fast, 80 cubic inch Harley led to a 120 mph, 300 cubic inch Merc-powered Deuce roadster that Bruce says was, "the first Arizona car to beat the bikes," and his own successful speed shop near Phoenix, Arizona. Uncle Sam, however, had other plans and he was drafted for the Korean war.



*Bruce's 120 mph Deuce roadster in 1949.*

After 18 months on a ground crew in the Air National Guard, developing his mechanical skills in a machine shop at Luke Field Air Force Base, he followed his parents to San Diego and landed a job as a machinist at Paul Schiefer Clutches. All over California, especially at Paradise Mesa, people were burning up the quarter mile.



*Bruce was the first to top mount a GMC blower.*

## THE CHRYSLER HEMI

And despite the infamous Bean Bandits' quantum leap from 120 to 140 mph with a Bruce Crower built engine, the flathead's reign was over the day Chrysler introduced its OHV Hemi. Bruce was quick to realize the



*Bruce ran 157 mph in this Hemi-powered Hudson.*

Hemi's potential, and by 1954 he was shakin' em up on the Bonneville salt flats with a 157 mph record breaking run behind the wheel of his Hemi-powered Hudson. Credited with being the first to top-mount a GMC blower, Bruce had fashioned his own intake manifold and a pulley system cast in coffee cans using old pistons as material.

## THE "U-FAB" INTAKE MANIFOLD

The intake/blower combo was a success, and not only put Bruce in the record books but also in the manifold business. There followed the phenomenally successful Crower "U-Fab" do-it-yourself manifold. Consisting of two cylindrical runners joined with hoses and clamps, the "U-Fab" was designed to hold four, six or eight Stromberg carburetors.



*The mega-popular "U-Fab" intake manifold.*

It was simple, inexpensive and extremely popular. "We sold thousands of them," according to Bruce.

# history

## 1955 - THE BEGINNING OF CROWER EQUIPMENT CO.

With \$312 in the bank Bruce booked a sixth page ad in Hot Rod for \$300. That one ad generated over \$10,000 dollars worth of orders, and suddenly I was, "controlling my own destiny with my own two hands, and the harder I worked, the more money I made." He worked until the wee hours of the morning assembling those kits, and finally hired his brother, Dave and eventual brother in-law, Loren in order to keep the production up with the demand. Thus the formation of Crower.

## THE "GLIDE"

Other speed merchants eventually followed his lead, tapping into Crower's market share. But Bruce and the boys had been thinking ahead, this time about a double disc clutch first seen in a Fiat. Crower combined this technology with a Schiefer clutch and applied it towards drag racing and, once again, enjoyed another overnight success with the "Crowerglide" centrifugal clutch. It quickly became the most popular clutch in drag racing.



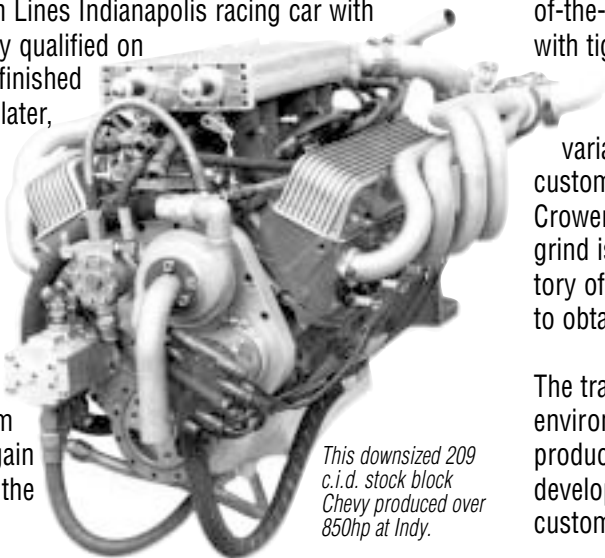
An early model "CrowerGlide" centrifugal clutch.

## CAMSHAFT TECHNOLOGY

Crower, however, was already moving on, this time in the direction of cam technology where once again they took advantage of an industry in low gear. The industry's shortcomings have always provided the impetus for Crower's ideas. Only the experiences at the Indianapolis 500 Brickyard have caused him to reevaluate his direction.

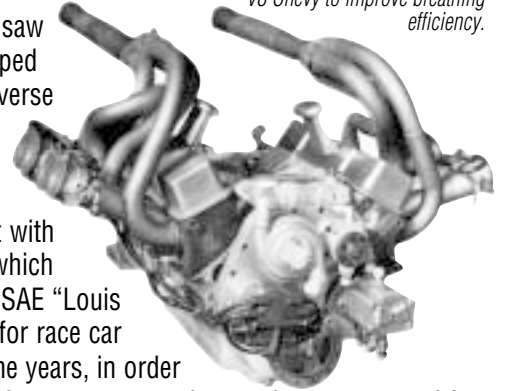
## THE INDY EXPERIENCE

In 1954, Bruce Crower was invited to work on the Offy-powered Dean Van Lines Indianapolis racing car with Jimmy Bryan. They qualified on the front row and finished second. Six years later, working on Jim Rathmann's team, all of their hard work paid off as they went on to win the 1960 Indy 500. He went on to win again as a member of Graham Hill's team, and again in 1967 as part of the A.J. Foyt team.



This downsized 209 c.i.d. stock block Chevy produced over 850hp at Indy.

Subsequent years saw Crower cars equipped with engines as diverse as a downsized small-block Chevy and a custom designed flat-eight with Cosworth heads, which received the 1977 SAE "Louis Schwitzer Award" for race car design. But over the years, in order to remain competitive, teams started preparing year around for the race, and Bruce decided that his time and money would be better spent investing in his own business in the area of high performance engine parts and engine research.



Bruce built this outside port design V8 Chevy to improve breathing efficiency.

## STATE-OF-THE-ART MANUFACTURING

Today, Crower Cams and Equipment Company is still family owned and operated, employing over 300 people at five separate facilities. Utilizing the latest in computer assisted



Bruce, third from right, was on Jim Rathmann's 1960 Indy winning crew with Smokey Yunick.

design (CAD), Crower engineers render multidimensional blueprints that are then downloaded into one of Crower's state-of-the-art CNC machining centers. This allows more flexibility, with tighter tolerances, and gives the customer more choices.

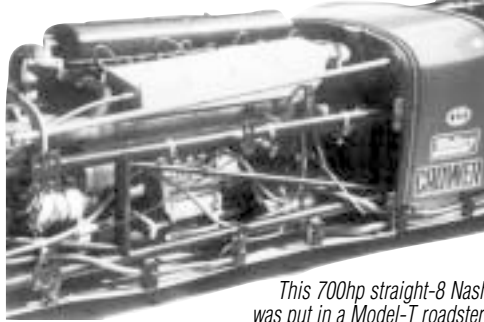
Choices that include ten different styles of 4340 steel billet or 6AL4V titanium connecting rods and four variations of 4340 forged crankshafts, depending on the customer's particular application, rpm range and budget. Crower also lists over 500 catalog camshafts, but, if a custom grind is desired, Crower has accumulated an extensive inventory of over 3000 master cam profiles to choose from in order to obtain the correct duration and lift figures required.

The transition to a fully computerized design and machining environment will only enhance Crower's already superior line of products. This, coupled with Crower's extensive product development and testing program, keeps Crower and it's customers one step ahead of the competition.

# history

## RESEARCH & DEVELOPMENT

Although Bruce Crower is no longer involved in the day-to-day manufacturing operation, he spends his time designing and developing new products at the company's research and development facility located at his Jamul ranch. This R&D facility houses a



*This 700hp straight-8 Nash was put in a Model-T roadster.*

complete machine shop and a fully operational, computer controlled Heenan-Froude engine dynamometer, capable of generating high levels of horsepower and torque on just about any type of engine. Before Crower introduces a new product to the market, you can be sure it

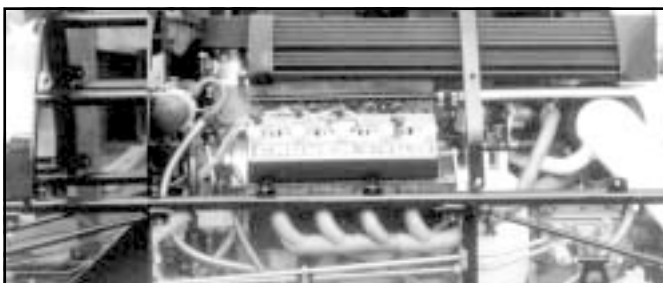


*Crower's custom built streamliner is powered by a turbocharged SB Chevy with 4-valve heads.*

has undergone a rigorous cycle of testing under dyno simulated racing conditions. Each Crower product is then evaluated for maximum horsepower and torque figures, as well as rpm specifications to insure product reliability.

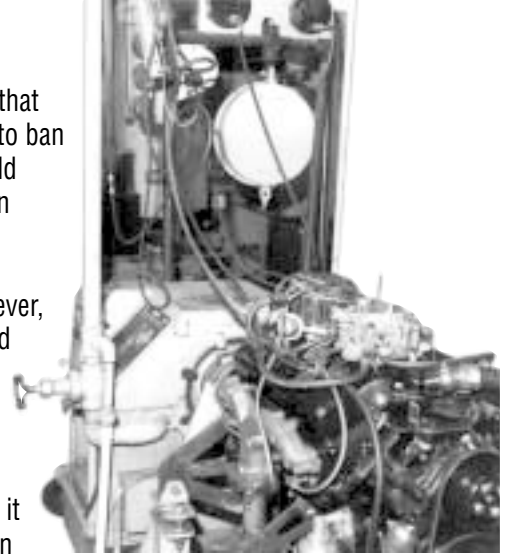
## THE BONNEVILLE SALT FLATS

In addition to product testing and development, both of Crower's Bonneville race cars were completely designed and constructed at the Jamul facility. A 1927 Model-T roadster equipped with a 700hp 1931 straight-8 Nash engine, and a state-of-the-art streamliner powered by a turbocharged small block Chevy and a pair of prototype Crower 4-valve cylinder heads. He first touted the idea of a four-valve production head for the small-block Chevy back in 1965 after inventing a head with an inlet port on the same plane as the exhaust port. Chevy engineers were so impressed they had prototypes drawn and cast within 30 days. Unfortunately, the various race sanctioning



*The streamliner's pair of 4-valve cylinder heads were handcrafted by Bruce.*

bodies indicated that they would have to ban it because it would have given certain racers an unfair advantage. The streamliner, however, is in the Unlimited Class and with the help of the heads and some other radical design solutions, it is projected to run over 440 mph at 1150 horsepower on the Bonneville salt flats.



*The Heenan-Froude dyno at Crower's R&D facility.*

## RECOGNIZING HIS DEDICATION

In recognition of Crower's innovative products for drag racing, Bruce Crower was inducted into the Drag Racing Hall of Fame located in Florida. An honor and privilege that is the direct result of his hard work and dedication to the industry that he loves so much.

## USING QUALITY, AMERICAN MADE MATERIALS

The secret to Crower's lasting success, according to Dave Crower, vice president and general manager of Crower, is that basically "we make what people ask for. We do it with better quality than anyone else, plus we do it lighter, which is the key to quicker elapsed times." Not one to compromise the strength and integrity of Crower's products, Crower uses USA milled materials in its manufacturing. Although cheaper products can be imported from other countries, the Crower philosophy has always been that "If a product is made right the first time, using the highest quality materials and the latest production methods, it will perform flawlessly to its intended ability."



*Bruce Crower being inducted into the Drag Racing Hall of Fame.*

# camshaft recommendation form

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE/ZIP: \_\_\_\_\_

PHONE: \_\_\_\_\_ FAX: \_\_\_\_\_

## WHICH TYPE OF CAMSHAFT ARE YOU INTERESTED IN:

- Hydraulic       Roller       Mushroom       Other: \_\_\_\_\_  
 Solid       Hydraulic Roller       Regrind      \_\_\_\_\_

## DESIRED ENGINE PERFORMANCE:

- More Low Speed Torque  
 More Mid-Range Power  
 Mid-Range and Top End Power

## TYPE OF SERVICE REQUIRED:

- Recommend Cam and Kit  
 Regrind Enclosed Cam

## ENGINE APPLICATION:

- Street Only       Drag Race: \_\_\_\_\_       Off-Road Only       Marine: \_\_\_\_\_  
 Street/Strip       Oval Track: \_\_\_\_\_<sup>Class</sup>       Truck/Tractor Pull       Other: \_\_\_\_\_<sup>Hull Specs/Prop or Jet Drive</sup>  
Track Length

## ENGINE SPECIFICATIONS:

Engine Make: \_\_\_\_\_ Year: \_\_\_\_\_  
Cubic Inches: \_\_\_\_\_ Bore and Stroke: \_\_\_\_\_  
Number of Cylinders: \_\_\_\_\_ Fuel: \_\_\_\_\_  
Rocker Arm Ratio: \_\_\_\_\_ Carburetor cfm: \_\_\_\_\_  
Piston Make: \_\_\_\_\_ Total Venturi Area: \_\_\_\_\_  
Compression Ratio: \_\_\_\_\_ Intake Manifold: \_\_\_\_\_  
Supercharger/Turbo: \_\_\_\_\_ Valve Head Diameter: \_\_\_\_\_  
Drive Ratio: \_\_\_\_\_ Valve Size: Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_  
Tappet Diameter: \_\_\_\_\_ Ported/Amount: \_\_\_\_\_

## CYLINDER HEAD FLOW DATA:

Circle 25" or 28" of water  
.200" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.300" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.400" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.500" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.600" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.700" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.800" Int \_\_\_\_\_ Exh \_\_\_\_\_  
.900" Int \_\_\_\_\_ Exh \_\_\_\_\_

## CHASSIS/RPM INFORMATION:

Weight: \_\_\_\_\_ Year and Make: \_\_\_\_\_  
Rear Axle Ratio: \_\_\_\_\_ Transmission Type: \_\_\_\_\_  
Minimum and Maximum RPM: \_\_\_\_\_ to \_\_\_\_\_ Overdrive%: \_\_\_\_\_  
Stall Speed: \_\_\_\_\_ Tire Size and Diameter: \_\_\_\_\_

## CURRENT CAMSHAFT INFORMATION:

Type Of Tappet Design (Hydraulic, Solid, Roller, etc): \_\_\_\_\_  
Advertised Duration: Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_  
Duration at .050": Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_  
Lobe Lift (w/o ratio): Intake: \_\_\_\_\_ Exhaust: \_\_\_\_\_  
Lobe Separation: \_\_\_\_\_  
Performance Remarks: \_\_\_\_\_

Complete all of the above information and send to:  
Attn: Camshaft Technical Support  
**CROWER CAMS & EQUIPMENT COMPANY, Inc.**  
3333 Main Street  
Chula Vista, CA 91911-5899  
For faster service fax this form to 619-422-9067 or  
complete the form online at [www.crower.com](http://www.crower.com)

# camshaft selection

**VEHICLE PACKAGE** It is the complete vehicle package that will determine how well your vehicle satisfies your performance preference.

By complete vehicle package we mean the interaction of all a vehicle's components and sub-systems, including the engine and its related parts (such as the carburetor, intake manifold, exhaust system, camshaft and ignition), the transmission, rear end gears, wheel and tire combinations and diameters and suspension pieces. All of these components must work in unison to produce the desired performance results.

**RPM POWER RANGE** Before thumbing through the collection of profiles listed on the following pages you will need to formulate a definite idea of your motoring requirements. Doing so will dictate what rpm power range you will be operating in most often (see Fig. 1). Because camshaft selection as well as carburetion, manifold choice and gearing are based on it, knowing your rpm power range is the key to building a successful vehicle package.

Be realistic when examining your driving style, the vehicle's present engine/drive train components and your pocket book. Be sure you can afford to purchase all of the components necessary to complete the desired vehicle package at your performance level. Remember, the further from stock you deviate in the engine department, the more modifications will be required elsewhere in the vehicle.

Refer to the five performance levels listed below for an idea of the components required to produce a successful vehicle package at the performance level you desire.

**LEVEL 1 CAMS  
MILEAGE & TORQUE** Approximate RPM Power Range:  
Hydraulic camshafts - Idle to 3500 / Redline: 4500.  
Solid camshafts - 1000 to 4000 / Redline: 5000.

Level 1 indicates a good stock replacement camshaft. These profiles are designed to enhance throttle response and low end torque in vans, trucks, passenger cars and mild marine applications while delivering fuel efficient motoring. High vacuum, smooth idle and maximum efficiency are characteristics of these cams. Stock or small cfm carburetor, small diameter tube headers and dual exhaust are recommended for maximum benefit. Intended for stock or near-stock engines and drive trains, 8.5:1 compression, 2.70 to 3.25 ring and pinion, automatic transmission with stock converter or four-speed manual transmission.

**LEVEL 2 CAMS  
MILEAGE & POWER** Approximate RPM Power Range:  
Hydraulic camshafts - 1500 to 4000 / Redline: 5500.  
Solid camshafts - 2000 to 5000 / Redline: 6000.

Level 2 profiles are for individuals that require more power and an extended rpm range. Works well with stock or near-stock engines and drive trains. These camshafts provide excellent low end and mid-range power for spirited street and offroad driving and mild marine applications. Modifications that should accompany installation of these cams include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increased compression (9.5:1) is recommended for maximum output. Aftermarket torque converter with slightly higher stall speed is recommended because stock factory converters do not allow the engine to provide adequate idle speed and off idle performance. Works well with four-speed manual transmission. Designed for lightly modified street engines.



# camshaft selection

## LEVEL 3 CAMS HIGH PERFORMANCE

Approximate RPM Power Range:  
 Hydraulic camshafts - 1800 to 4500 / Redline: 6000.  
 Solid camshafts - 2200 to 6000 / Redline: 7000.  
 Hydraulic roller camshafts - 2000 to 4700 / Redline: 6250.

Level 3 camshafts are designed for moderately modified engines. Intended for performance hot street/strip and performance marine applications, these profiles have a moderate lobe at idle and offer an extended rpm range with emphasis on upper bottom to top end power and a strong mid-range. These higher lift, longer duration camshafts demand close attention to rear end gearing and tire diameter combinations. The secret here is to pick a ring and pinion gear set and tire diameter that keeps the engine in its optimum rpm power range (see Fig. 1). These profiles perform well with four-speed manual transmissions or automatic transmissions if a high stall torque converter is employed. Headers, dual exhaust, larger than stock carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Mild porting and larger valves will improve performance.

## LEVEL 4 CAMS ULTRA PERFORMANCE

Approximate RPM Power Range:  
 Hydraulic camshafts - 2000 to 6000 / Redline: 6500.  
 Solid camshafts - 2500 to 6500 / Redline: 7500.  
 Hydraulic roller camshafts - 2200 to 5000 / Redline: 6500.

Level 4 camshafts are designed for heavily modified engines. They have a definite lobe at idle and are best suited for dual purpose hot street/drag strip, hot marine and oval track applications. These grinds exhibit strong mid-range to top end torque and horsepower. Headers, dual exhaust, large cfm carburetor, performance ignition and increased compression of 10.25:1 and above are required. Cylinder head modifications would be beneficial. Use with standard manual transmission or automatic with high stall torque converter. Again, close attention to proper ring and pinion and tire diameter selection is imperative.

## LEVEL 5 CAMS COMPETITION/RACE ONLY

Level 5 camshafts are designed for fully prepared, high compression, all-out racing engines and chassis. Extensive cylinder head modification, bigger valves, lightweight valve train, titanium valves, maximum flow carburetion or fuel injection, racing gas, alky or nitro, magneto or electronic ignition, performance rod and crank assembly and increased engine clearances are required for maximum benefit.

The wide selection of level 5 profiles enable the experienced engine builder to choose the proper camshaft for his particular application, whether it be drag racing, oval track competition, tractor pulling or performance marine. If you are uncertain as to which cam profile best suits your needs, please contact our technical support staff at 619-422-1191.

**RPM CHART  
Fig.1**

### RPM RANGE AT 60 MPH

Tire Diameter	Rear End Gear Ratio										
	2.18	2.50	2.74	3.08	3.23	3.50	3.73	3.90	4.10	4.56	4.88
<b>24</b>	1831	2100	2301	2587	2713	2940	3133	3276	3444	3830	4099
<b>26</b>	1690	1938	2124	2388	2504	2714	2892	3024	3179	3536	3784
<b>28</b>	1570	1800	1973	2218	2326	2520	2686	2808	2952	3283	3513
<b>30</b>	1465	1680	1841	2070	2170	2352	2507	2621	2755	3064	3279
<b>32</b>	1373	1575	1726	1940	2035	2205	2349	2457	2583	2873	3074
<b>34</b>	1293	1482	1625	1826	1915	2075	2212	2312	2431	2704	2894
<b>36</b>	1221	1400	1534	1725	1809	1960	2089	2184	2296	2554	2733
<b>38</b>	1157	1326	1454	1634	1714	1857	1979	2069	2175	2419	2589
<b>40</b>	1099	1260	1381	1552	1628	1764	1880	1966	2066	2298	2460
<b>42</b>	1046	1200	1315	1478	1550	1680	1790	1872	1968	2189	2342

**FORMULA:**  $\frac{\text{MPH} \times \text{Axle Ratio} \times 336}{\text{Tire Diameter}}$



199 232 234 (4.0L) 258 (4.2L) 6 cylinder

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4000 plus.	All cid	<b>44242</b>	242HDP 110°	242°	250°	184°	192°	.411"	.413"	84044
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 4250 plus.	All cid	<b>44243</b>	256HDP 112°	256°	264°	194°	204°	.437"	.445"	84044
BAJA BEAST / PERFORMANCE LEVEL 2 - Strong upper bottom/top end power. RPM Power Range: 1800 to 4250 / Redline: 5000 plus.	All cid	<b>44915</b>	280HDP 112°	280°	280°	208°	208°	.448"	.448"	84044
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip cam. Super top end power. RPM Power Range: 2000 to 5000 / Redline: 5500 plus.	All cid	<b>44245</b>	278HDP 112°	278°	284°	212°	218°	.462"	.475"	84044
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84044 or 84046

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 2 - Delivers versatile high torque, low end and mid-range power. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>44310</b>	260FDP 112°	260°	266°	210°	218°	.448"	.453"	84244
PRO-STREET / PERFORMANCE LEVEL 3 - Strong upper bottom to mid-range power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>44311</b>	282FDP 112°	282°	287°	238°	242°	.480"	.486"	84244
PRO-STREET / PERFORMANCE LEVEL 4 - Exhibits strong mid-range to top end performance. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	All cid	<b>44312</b>	292FDP 110°	292°	298°	248°	250°	.499"	.512"	84246
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00000</b>								84244 or 84246
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00006</b>								84244 or 84246

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84044</b>	66045-12	68315-12	87049D-12	Hydraulic Lifter. For rpm up to 6000.
<b>84046</b>	66045-12	68390X3-12	87049D-12	Hydraulic Lifter. For rpm over 6500 plus.
<b>84244</b>	66945-12	68315-12	87049D-12	Solid Lifter. For rpm up to 6750.
<b>84246</b>	66945-12	68315-12	87049D-12	Solid Lifter. For rpm over 7000 plus.

Spring pressure:

68315-12 Seat: 1.850" @ 105 lbs / Nose: 1.400" @ 257 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.100" (Machine work, use cutter 68985\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: Longer pushrods may be required to achieve proper hydraulic lifter preload (.050" off snap-ring). Use checking pushrod.



290 304 343 360 (5.9L) 390 401 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Excellent low end and mid-range power. RPM Power Range: 1500 to 4500 / Redline: 5500 plus.	343 up	<b>45915</b>	258H 112°	258°	264°	204°	210°	.445"	.448"	84045 See Page 12
POWER BEAST / PERFORMANCE LEVEL 2 - Excellent low end and mid-range power. RPM Power Range: 1750 to 4750 / Redline: 5750 plus.	343 up	<b>45916</b>	280HDP 110°	280°	289°	204°	214°	.450"	.474"	84045 See Page 12
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams are designed to enhance throttle response and low end torque while delivering fuel efficient motoring. High vacuum, smooth idle and maximum fuel efficiency are characteristic to these profiles. Stock or small cfm carburetor, small diameter tube headers, dual exhaust, and ignition rework are recommended for maximum benefit. Intended for low compression engines operating in the "economy zone." RPM Power Range: Idle to 3500 / Redline: 4500 plus.	290 304	<b>45236</b>	236HDP 112°	236°	246°	182°	184°	.395"	.400"	84045 See Page 12
	343 360	<b>45237</b>	246HDP 112°	246°	253°	184°	190°	.402"	.422"	84045 See Page 12
	390 401	<b>45238</b>	250HDP 112°	250°	258°	192°	196°	.427"	.432"	84045 See Page 12
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - These cams provide excellent low end and mid-range power and extended rpm range for spirited street and off-road driving. A perfect combination of mileage and power. Modifications should include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increase in compression ratio to 9.5:1 is recommended for maximum output. Works well with automatic transmission or 4-speed. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	290 304	<b>45239</b>	260HDP 112°	260°	266°	204°	210°	.446"	.450"	84045 See Page 12
	343 360	<b>45240</b>	270HDP 112°	270°	276°	210°	220°	.450"	.475"	84045 See Page 12
	390 401	<b>45241</b>	276HDP 112°	276°	281°	212°	220°	.464"	.488"	84045 See Page 12
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the performance oriented hot-street application, these cams offer an extended rpm range with emphasis on upper bottom to top end power. Performance gears, headers, dual exhaust, larger than stock cfm carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Works well with automatic transmission if matched with proper ring and pinion gears and/or high stall converter. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	290 304	<b>45241</b>	276HDP 112°	276°	281°	212°	220°	.464"	.488"	84045 See Page 12
	343 360	<b>45246</b>	293HDP 114°	293°	293°	223°	223°	.477"	.477"	84045 See Page 12
	390 401	<b>45243</b>	284HDP 112°	284°	290°	228°	234°	.512"	.525"	84045 See Page 12
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - The following grinds are best suited for dual purpose hot street/drag strip situations. These cams exhibit strong mid-range and top end torque and horsepower. Headers, dual exhaust, larger cfm carburetor, performance ignition and 11:1 compression are a must. Use with manual or automatic transmission. Low gearing a must. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	343 360	<b>45247</b>	305HDP 112°	305°	315°	234°	244°	.520"	.542"	84045 See Page 12
	390 401	<b>45245</b>	311HDP 112°	311°	316°	246°	250°	.547"	.557"	84045 See Page 12
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Strong mid to top end torque. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	290 343	<b>45210</b>	290HDP 108°	290°	298°	226°	236°	.498"	.496"	84045 See Page 12
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Emphasis on upper mid to top end power. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	360 401	<b>45211</b>	296HDP 108°	296°	302°	230°	242°	.504"	.501"	84045 See Page 12
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Explosive mid to top end torque and horsepower. RPM Power Range: 3000 to 6500 / Redline: 6700 plus.	360 401	<b>45212</b>	304HDP 108°	304°	312°	242°	246°	.533"	.562"	84045 See Page 12
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00001</b>								84045 See Page 12



290 304 343 360 (5.9L) 390 401 V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose camshaft with emphasis on mid-range power. RPM Power Range: 2500 to 6000 / Redline: 7000 plus.	290 343	<b>45315</b>	282FDP 108°	282°	287°	240°	242°	.478"	.486"	84245
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose camshaft with emphasis on mid to top end power. RPM Power Range: 3000 to 6500 / Redline: 7500 plus.	360 401	<b>45316</b>	292FDP 108°	292°	298°	246°	250°	.499"	.509"	84245
COMPU-PRO / PERFORMANCE LEVEL 5 - Does it all. Brutal power throughout the power range. RPM Power Range: 3500 to 7500 / Redline: 8000 plus.	290 343	<b>45317</b>	304FDP 108°	304°	310°	258°	262°	.534"	.549"	84345
COMPU-PRO / PERFORMANCE LEVEL 5 - Explosive power through the power range. RPM Power Range: 3750 to 7750 / Redline: 8250 plus.	360 401	<b>45318</b>	310FDP 108°	310°	318°	262°	270°	.547"	.563"	84345
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								See Below
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84045</b>	66045-16	68315-16	87049-16 <sup>A</sup>		Hydraulic Lifter.
<b>84245</b>	66945-16	68315-16	87049-16 <sup>A</sup>		Solid Lifter. For rpm up to 7000.
<b>84345</b>	66945-16	68390X3-16	87049-16 <sup>A</sup>	86071-16	Solid Lifter. For high rpm. Limited street use.

Spring pressure:

68315-16 Seat: 1.850" @ 105 lbs / Nose: 1.350" @ 275 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

A. Some 1973-74 engines were equipped with 11/32 exhaust valves and rotators. Order 87049-8 and 87050-8 steel retainers, and 86071-8 and 86072-8 valve stem seals.

\* Machine work required, specify 3/8 pilot shaft when ordering.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76551</b>	Timing gear set
<b>73645-16</b>	Rocker arms (1.6) 3/8

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: When installing solid or roller lifter camshafts, screw-in rocker studs are required. See stud specs or contact Crower.



196 (3.2L) 231 (3.8L) 252 (4.1L) V6 Evenfire 1978-86

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>54242</b>	242HDP 110°	242°	250°	180°	190°	.413"	.413"	84053
MILEAGE BEAST / PERFORMANCE LEVEL 2 - Perfect combination mileage/power with extended rpm range. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>54902</b>	272HDP 114°	272°	280°	194°	204°	.424"	.450"	84053
BAJA BEAST / PERFORMANCE LEVEL 3 - Good hot street cam with emphasis on upper bottom to top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>54915</b>	280HDP 112°	280°	290°	204°	214°	.450"	.474"	84053
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip cam with strong mid to top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	All cid	<b>54245</b>	278HDP 112°	278°	284°	212°	218°	.462"	.478"	84053
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00001</b>								84053

Note: Early 198-225 cid 1962-1967 cam cores are available from Crower. Specify when ordering.

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 3 - Extended rpm range with emphasis on upper bottom to top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>54310</b>	282FDP 107°	282°	287°	238°	242°	.483"	.486"	84253
COMPU-PRO / PERFORMANCE LEVEL 4 - Hot street/strip profile. Strong mid to top end torque and horsepower. RPM Power Range: 2200 to 6000 / Redline: 7000 plus.	All cid	<b>54311</b>	292FDP 108°	292°	298°	244°	248°	.501"	.514"	84253
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00000</b>								84253
CUSTOM GROUND ROLLER - Special order roller lifter (Indy) camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00006</b>								Call Crower

Note: Custom ground turbocharged/supercharged camshafts are available from Crower on a special order basis.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84053</b>	66050-12	68301X1-12	86032-12	Hydraulic Lifter.
<b>84253</b>	66950-12	68301X1-12	86032-12	Solid Lifter.

Spring pressure:

68301X1-12 Seat: 1.700" @ 101 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: Crower has an extensive inventory of Buick V6 cam profiles and roller lifters that were designed for the Buick V6 Indy turbo engines.



215 300 340 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances throttle response and low end torque while delivering fuel efficient drivability. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	300 cid	<b>50227</b>	246HDP 112°	246°	253°	184°	190°	.402"	.421"	84150
	340 cid	<b>50228</b>	250HDP 112°	250°	258°	192°	196°	.424"	.430"	84150
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage with extended rpm range. Strong low end and mid-range power for spirited driving on or off the road. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	300 cid	<b>50229</b>	258HDP 112°	258°	260°	196°	202°	.430"	.446"	84150
	340 cid	<b>50230</b>	260HDP 112°	260°	266°	202°	210°	.446"	.451"	84150
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - These cams offer extended rpm range with emphasis on upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	300 cid	<b>50231</b>	270HDP 112°	270°	276°	210°	218°	.451"	.477"	84150
	340 cid	<b>50232</b>	276HDP 112°	276°	281°	214°	218°	.488"	.490"	84150
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - These cams exhibit strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	300 cid	<b>50233</b>	280HDP 112°	280°	286°	220°	226°	.488"	.501"	84150
	340 cid	<b>50234</b>	284HDP 112°	284°	290°	228°	234°	.512"	.526"	84150
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84150

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 3 - Strong mid to top end torque and horsepower. RPM Power Range: 2000 to 5500 / Redline: 7000 plus.	300 cid	<b>50303</b>	282FDP 108°	282°	287°	238°	242°	.482"	.488"	84350
COMPU-PRO / PERFORMANCE LEVEL 3 - Strong mid-range and top end power. RPM Power Range: 2500 to 6000 / Redline: 7500 plus.	340 cid	<b>50304</b>	292FDP 108°	292°	298°	246°	250°	.502"	.514"	84350
COMPU-PRO / PERFORMANCE LEVEL 4 - Tremendous upper mid to top end torque and horsepower. RPM Power Range: 3000 to 6500 / Redline: 7500 plus.	340 cid	<b>50305</b>	304FDP 108°	304°	310°	256°	262°	.536"	.549"	84350
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84350
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

## ENGINEERED COMPONENT KITS

Note: For corresponding cam kits and accessories see BUICK 350 V8 on the following page.



350 V8 1968-80

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.55 / 1.55		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances throttle response. Low end torque and fuel efficiency. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	350 cid	<b>50256</b>	250HDP 112°	250°	258°	192°	196°	.411"	.419"	84150
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Power and mileage cam with extended rpm for spirited motoring. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	350 cid	<b>50257</b>	260HDP 112°	260°	266°	202°	210°	.434"	.436"	84150
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Strong upper bottom to top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	350 cid	<b>50258</b>	276HDP 112°	276°	281°	210°	220°	.446"	.468"	84150
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip profile with superior upper bottom to top end torque. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	350 cid	<b>50259</b>	284HDP 112°	284°	290°	226°	234°	.499"	.508"	84150
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Strong mid to top end torque and horsepower. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	350 cid	<b>50260</b>	296HDP 108°	296°	302°	228°	242°	.485"	.512"	84150
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range torque and horsepower. RPM Power Range: 3000 to 6500 / Redline: 6700 plus.	350 cid	<b>50261</b>	304HDP 108°	304°	312°	240°	246°	.516"	.544"	84150
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84150

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.55 / 1.55		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose cam profile. RPM Power Range: 2500 to 6500 / Redline: 7000 plus.	350 cid	<b>50353</b>	282FDP 108°	282°	287°	238°	242°	.467"	.471"	84350
COMPU-PRO / PERFORMANCE LEVEL 5 - Explosive power throughout the power band. RPM Power Range: 3000 to 7000 / Redline: 7250 plus.	350 cid	<b>50354</b>	292FDP 108°	292°	298°	246°	250°	.485"	.498"	84350
COMPU-PRO / PERFORMANCE LEVEL 5 - Superior mid-range and top end torque. RPM Power Range: 3500 to 7500 / Redline: 7750 plus.	350 cid	<b>50355</b>	304FDP 108°	304°	310°	256°	262°	.519"	.532"	84350
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84350
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84150</b>	66050-16	68405-16	87021-16	86072-16	Hydraulic Lifter.
<b>84350</b>	66950-16	68405-16	87021-16	86072-16	Solid Lifter.

Spring pressure:

68405-16 Seat: 1.700" @ 104 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



400 430 455 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances throttle response and low end torque while delivering fuel efficient drivability. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	400 430	<b>52236</b>	258HDP 112°	258°	260°	196°	202°	.430"	.446"	84052
	455 cid	<b>52237</b>	260HDP 112°	260°	266°	204°	210°	.448"	.446"	84052
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage with extended rpm range. Strong low end and mid-range power for spirited driving on or off the road. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	400 430	<b>52238</b>	270HDP 112°	270°	276°	210°	214°	.464"	.488"	84052
	455 cid	<b>52239</b>	276HDP 112°	276°	281°	212°	216°	.475"	.487"	84052
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot street application, these cams offer extended rpm range with emphasis on upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	400 430	<b>52240</b>	280HDP 112°	280°	286°	222°	228°	.488"	.499"	84052
	455 cid	<b>52241</b>	284HDP 112°	284°	290°	230°	236°	.514"	.525"	84052
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/drag strip profile. These cams exhibit strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 5000 / Redline: 6500 plus.	400 430	<b>52242</b>	297HDP 112°	297°	308°	238°	242°	.538"	.536"	84052
	455 cid	<b>52243</b>	311HDP 112°	311°	316°	248°	252°	.546"	.559"	84052
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Strong mid-range to top end torque. RPM Power Range: 2500 to 6000 / Redline: 6250 plus.	400 430	<b>52210</b>	296HDP 108°	296°	302°	232°	244°	.507"	.526"	84052
	455 cid	<b>52211</b>	304HDP 108°	304°	312°	242°	248°	.531"	.560"	84052
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84052

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84052</b>	66050-16	68302X1-16	87022-16	For rpm up to 6500.

Spring pressure:

68302X1-16 Seat: 1.850" @ 91 lbs / Nose: 1.350" @ 256 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

Note: When using high lift cams (over .480") or modified valve stem lengths, a longer pushrod is required to achieve proper lifter preload (.050" off snap-ring). Use checking pushrod to determine length and call with specs.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 6500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.





400 430 455 V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose profile. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	All cid	<b>52310</b>	282FDP 108°	282°	287°	238°	242°	.482"	.488"	84252
COMPU-PRO / PERFORMANCE LEVEL 5 - Explosive horsepower throughout the power band. RPM Power Range: 3000 to 6500 / Redline: 7000 plus.	All cid	<b>52311</b>	292FDP 108°	292°	298°	246°	250°	.499"	.509"	84252
COMPU-PRO / PERFORMANCE LEVEL 5 - Superior mid-range and top end torque. RPM Power Range: 3500 to 7000 / Redline: 7000 plus.	All cid	<b>52312</b>	304FDP 108°	304°	310°	258°	262°	.533"	.549"	84252
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84252
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84252</b>	66950-16	68302X1-16	87022-16	For rpm up to 7000.

Spring pressure:

68302X1-16 Seat: 1.850" @ 91 lbs / Nose: 1.300" @ 275 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

Note: If exceeding 7000 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: Solid lifter camshafts require adjustable pushrods. See pushrods or contact Crower.



194 230 250 inline 6 cylinder

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.75 / 1.75		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>03240</b>	240HDP 114°	240°	248°	182°	192°	.436"	.452"	84008
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>03241</b>	248HDP 112°	248°	258°	192°	200°	.448"	.460"	84008
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street profile with strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>03242</b>	262HDP 112°	262°	272°	204°	212°	.478"	.490"	84008
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip cam. Super top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	All cid	<b>03243</b>	272HDP 112°	272°	276°	210°	212°	.490"	.508"	84008
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84008

Note: 292 cid cam cores are available from Crower on a special order basis.

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.75 / 1.75		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose camshaft. RPM Power Range: 2250 to 6000 / Redline: 6500 plus.	All cid	<b>03311</b>	282FDP 107°	282°	287°	238°	242°	.525"	.532"	84303
COMPU-PRO / PERFORMANCE LEVEL 5 - Does it all. Brutal power throughout the power range. RPM Power Range: 3000 to 6500 / Redline: 7000 plus.	All cid	<b>03312</b>	292FDP 107°	292°	298°	248°	252°	.548"	.564"	84303
COMPU-PRO / PERFORMANCE LEVEL 5 - Explosive power. Superior mid-range and top end torque. RPM Power Range: 3500 to 7000 / Redline: 7500 plus.	All cid	<b>03313</b>	304FDP 107°	304°	310°	258°	264°	.585"	.600"	84303
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84303
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

Note: 292 cid cam cores are available from Crower on a special order basis.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84008</b>	66000-12	68301X1-12	86032-12	86072-12	Hydraulic Lifter.
<b>84303</b>	66900-12	68390X3-12	87048-12	86072-12	Solid Lifter.

Spring pressure:

68301X1-12 Seat: 1.700" @ 101 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73628-12</b>	Rocker arms (1.6) 3/8



173 60° (2.8L) 189 (3.1L) V6

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>03040</b>	240HDP 114°	240°	248°	182°	192°	.386"	.387"	84008
MILEAGE BEAST / PERFORMANCE LEVEL 2 - Perfect combination power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>03002</b>	258HDP 109°	258°	265°	194°	202°	.390"	.410"	84008
BAJA BEAST / PERFORMANCE LEVEL 3 - Strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 5750 plus.	All cid	<b>03015</b>	278HDP 112°	283°	286°	204°	214°	.422"	.444"	84008
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip cam. Super top end torque. RPM Power Range: 2000 to 5000 / Redline: 6000 plus.	All cid	<b>03043</b>	278HDP 112°	278°	284°	212°	218°	.435"	.449"	84008
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Strong mid-range and top end torque and horsepower. RPM Power Range: 2200 to 6200 / Redline: 6500 plus.	All cid	<b>03050</b>	290HDP 108°	290°	298°	226°	234°	.470"	.492"	84008
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84008

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 3 - Extended rpm range with emphasis on upper bottom to top end power, strong mid-range. RPM Power Range: 2200 to 6000 / Redline: 7000 plus.	All cid	<b>03065</b>	260FDP 112°	260°	266°	212°	216°	.420"	.423"	84303
COMPU-PRO / PERFORMANCE LEVEL 4 - Hot street/strip profile. Strong mid to top end torque and horsepower. RPM Power Range: 2500 to 6500 / Redline: 7500 plus.	All cid	<b>03066</b>	282FDP 110°	282°	287°	236°	242°	.449"	.458"	84303
COMPU-PRO / PERFORMANCE LEVEL 5 - Fantastic top end profile with plenty of horsepower. RPM Power Range: 3000 to 7000 / Redline: 8000 plus.	All cid	<b>03067</b>	292FDP 108°	292°	298°	248°	250°	.470"	.479"	84303
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84303

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84008</b>	66000-12	68301X1-12	86032-12	86072-12	Hydraulic Lifter.
<b>84303</b>	66900-12	68390X3-12	87048-12	86072-12	Solid Lifter.

Spring pressure:

68301X1-12 Seat: 1.700" @ 101 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



200 229 90° V6 (3.8L)

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>03140</b>	240HDP 114°	240°	248°	182°	190°	.386"	.387"	84008
MILEAGE BEAST / PERFORMANCE LEVEL 2 - Perfect combination power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>03102</b>	270HDP 112°	270°	278°	194°	204°	.398"	.422"	84008
BAJA BEAST / PERFORMANCE LEVEL 3 - Strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>03115</b>	278HDP 114°	278°	288°	204°	214°	.422"	.444"	84008
POWER BEAST / PERFORMANCE LEVEL 4 - Street/strip cam. Super top end torque. RPM Power Range: 2000 to 5500 / Redline: 6250 plus.	All cid	<b>03103</b>	288HDP 112°	288°	298°	214°	224°	.444"	.467"	84008
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Strong mid-range and top end torque and horsepower. RPM Power Range: 2200 to 6200 / Redline: 6500 plus.	All cid	<b>03150</b>	280HDP 108°	280°	288°	226°	232°	.474"	.484"	84008
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Explosive mid to top end power with emphasis on the upper end. RPM Power Range: 2500 to 6500 / Redline: 6700 plus.	All cid	<b>03151</b>	296HDP 108°	296°	308°	228°	244°	.509"	.498"	84008
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84008

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose grind for most applications. RPM Power Range: 2200 to 6200 / Redline: 6750 plus.	All cid	<b>03165</b>	282FDP 110°	282°	287°	238°	244°	.451"	.460"	84303
COMPU-PRO / PERFORMANCE LEVEL 5 - Vicious horsepower throughout the power band. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	All cid	<b>03166</b>	292FDP 108°	292°	298°	246°	250°	.468"	.479"	84303
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84303

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84008</b>	66000-12	68301X1-12	86032-12	86072-12	Hydraulic Lifter.
<b>84303</b>	66900-12	68390X3-12	87048-12	86072-12	Solid Lifter.

Spring pressure:

68301X1-12 Seat: 1.700" @ 101 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required.



200 229 90° V6 (3.8L)

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ULTRA ACTION / PERFORMANCE LEVEL 5 - High torque, all purpose grind. RPM Power Range: 2200 to 6200 / Redline: 6500 plus.	All cid	<b>03401</b>	284R 105°	284°	294°	254°	260°	.621"	.624"	84508
ULTRA ACTION / PERFORMANCE LEVEL 5 - Brutal mid-range. Perfect oval track profile. RPM Power Range: 4000 to 7500 / Redline: 7000 plus.	All cid	<b>03402</b>	294R 105°	294°	302°	260°	268°	.624"	.621"	84508
ULTRA ACTION / PERFORMANCE LEVEL 5 - Impressive mid-range and top end profile for the drags. RPM Power Range: 4500 to 8000 / Redline: 8500 plus.	All cid	<b>03403</b>	297R 105°	297°	304°	264°	268°	.624"	.623"	84508
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00002</b>								84508

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84508</b>	66289-12	68380X2-12	87048-12	86072-12	For rpm up to 7500 plus.

Spring pressure:

68380X2-12 Seat: 1.800" @ 197 lbs / Nose: 1.200" @ 452 lbs / Coil bind: 1.110" (Machine work, use cutter 68999\*).

Optional springs:

68363-12 or 68670-12 (Longer valve stems are required).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73650-12</b>	Rocker arms (1.5) 7/16
<b>76501</b>	Timing gear set



262 90° V6 (4.3L)

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>03340</b>	240HDP 114°	240°	248°	182°	190°	.386"	.387"	84008
MILEAGE BEAST / PERFORMANCE LEVEL 2 - Perfect combination power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>03302</b>	260HDP 108°	260°	272°	194°	204°	.398"	.420"	84008
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Strong upper bottom/top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>03342</b>	264HDP 112°	264°	270°	202°	206°	.419"	.420"	84008
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip cam. Super top end torque. RPM Power Range: 2000 to 5500 / Redline: 6000 plus.	All cid	<b>03343</b>	278HDP 112°	278°	284°	212°	218°	.435"	.449"	84008
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Strong mid-range and top end torque and horsepower. RPM Power Range: 2200 to 6200 / Redline: 6500 plus.	All cid	<b>03350</b>	280HDP 108°	280°	288°	226°	232°	.474"	.484"	84008
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Explosive mid to top end power with emphasis on the upper end. RPM Power Range: 2500 to 6500 / Redline: 6700 plus.	All cid	<b>03351</b>	296HDP 108°	296°	308°	228°	244°	.509"	.498"	84008
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84008

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, all purpose grind for most applications. RPM Power Range: 2200 to 6200 / Redline: 6750 plus.	All cid	<b>03365</b>	282FDP 110°	282°	287°	238°	244°	.451"	.460"	84303
COMPU-PRO / PERFORMANCE LEVEL 5 - Vicious horsepower throughout the power band. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	All cid	<b>03366</b>	292FDP 108°	292°	298°	246°	250°	.468"	.474"	84303
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84303

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84008</b>	66000-12	68301X1-12	86032-12	86072-12	Hydraulic Lifter.
<b>84303</b>	66900-12	68390X3-12	87048-12	86072-12	Solid Lifter.

Spring pressure:

68301X1-12 Seat: 1.700" @ 101 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



262 90° V6 (4.3L)

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ULTRA ACTION / PERFORMANCE LEVEL 5 - High torque, all purpose grind. RPM Power Range: 3500 to 7000 / Redline: 7500 plus.	All cid	<b>03450</b>	284R 105°	284°	294°	254°	260°	.621"	.624"	84508
ULTRA ACTION / PERFORMANCE LEVEL 5 - Brutal mid-range. Perfect oval track profile. RPM Power Range: 4000 to 7500 / Redline: 7500 plus.	All cid	<b>03451</b>	294R 105°	294°	302°	260°	268°	.624"	.621"	84508
ULTRA ACTION / PERFORMANCE LEVEL 5 - Impressive mid-range and top end profile for the drags. RPM Power Range: 4500 to 8000 / Redline: 8000 plus.	All cid	<b>03452</b>	297R 105°	297°	304°	264°	268°	.624"	.623"	84508
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								84508

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84508</b>	66289-12	68380X2-12	87048-12	86072-12	For rpm up to 7500 plus.

Spring pressure:

68380X2-12 Seat: 1.800" @ 197 lbs / Nose: 1.200" @ 470 lbs / Coil bind: 1.110" (Machine work, use cutter 68999\*).

Optional springs:

68363-12 or 68670-12 (Longer valve stems are required).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73650</b>	Rocker arms (1.5) 7/16
<b>76501</b>	Timing gear set

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



## BEAST HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE BEAST / PERFORMANCE LEVEL 1 - Smooth idle, fuel efficient design. Exceeds factory replacement cam. Economical price. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	283 350 400	<b>00902</b>	246H 112°	246°	252°	192°	198°	.393"	.402"	84002
BAJA BEAST / PERFORMANCE LEVEL 2 - Strong bottom end power. Excellent for trucks and heavy cars. Economical price. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	283 350 400	<b>00915</b>	258H 112°	258°	264°	204°	208°	.414"	.417"	84002
TORQUE BEAST / PERFORMANCE LEVEL 3 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1800 to 5500 / Redline: 6000 plus.	283 350 400	<b>00904</b>	288H 112°	288°	298°	214°	224°	.444"	.467"	84000
HOT STREET BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top-end power. Healthy sound. Economical price. RPM Power Range: 2000 to 5700 / Redline: 6200 plus.	283 350 400	<b>00903</b>	278H 112°	278°	284°	218°	226°	.462"	.470"	84000
ULTRA BEAST / PERFORMANCE LEVEL 4 - Upper mid-range to top end power. High stall convertor or 4-speed. Economical price. RPM Power Range: 2800 to 6200 / Redline: 6500 plus.	283 350 400	<b>00917</b>	304H 112°	304°	316°	234°	244°	.488"	.509"	84000

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84002</b>	66000-16	68301X3-16	86032-16	Hydraulic Lifter.
<b>84000</b>	66000-16	68301X1-16	86032-16	For rpm over 5500.

Spring pressure:

68301X3-16 Seat: 1.700" @ 104 lbs / Nose: 1.200" @ 269 lbs / Coil bind: 1.125" (Stock O.D., no machine work).

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

Cam core configurations differ between '57-'87 and '88-'92 Chevrolet engines and cannot be interchanged.

BE SMART! Crower performance camshafts feature high lift, fast action features that can cause stock or other aftermarket valve train components to fail. Be sure to use a Crower engineered kit to avoid possible damage.

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## CROWER CAM BREAK-IN PROCEDURE

This applies to all hydraulic and solid lifter camshafts using higher than stock spring pressure:

- Do not use block restrictors in the oil galleys. This severely limits oil flow to the cam, lifters and overhead.
- Break-in cam and lifters with low pressure springs only. Do not exceed 225 to 250 lbs open pressure.
- During break-in run engine for 35 to 45 minutes and vary rpm from 2000 to 3000.
- Recommend adding Engine Oil Supplement (EOS) or equivalent to fortify oil. Use Crower #86084.
- For break-in procedure Crower recommends 10W/30 motor oil. Heavier weight oils do not cold flow.
- Do not use synthetic oils during break-in period.
- For further information, please refer to the Crower Installation booklet that accompanies the camshaft.

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>76501</b>	Timing gear set
<b>76501K</b>	Timing gear kit

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.







262 267 283 302 305 307 327 350 400 V8 Small Block

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams are designed to enhance throttle response and low-end torque in vans, trucks and passenger cars while delivering fuel efficient motoring. High vacuum, smooth idle and maximum fuel efficiency are characteristic to these profiles. Stock or small cfm carburetor, small diameter tube headers, dual exhaust, and ignition rework are recommended for maximum benefit. Intended for low compression engines operating in the "economy zone." RPM Power Range: Idle to 3500-3700 / Redline: 4500 plus.	262 283	<b>00236</b>	236HDP 112°	236°	246°	180°	184°	.371"	.384"	84002
	302 327	<b>00237</b>	246HDP 112°	246°	253°	184°	192°	.371"	.395"	84002
	350 cid	<b>00238</b>	250HDP 112°	250°	258°	192°	196°	.392"	.399"	84002
	400 cid	<b>00239</b>	254HDP 112°	254°	265°	204°	210°	.431"	.431"	84002 or 84000
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - These cams provide excellent low end and mid-range power and extended rpm range for spirited street and off-road driving. A perfect combination of mileage and power. Modifications should include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increase in compression ratio to 9.5:1 is recommended for maximum output. Works well with automatic transmission or 4-speed. RPM Power Range: 1300-1500 to 4000-4200 / Redline: 5500 plus.	262 283	<b>00238</b>	250HDP 112°	250°	258°	192°	196°	.392"	.399"	84002 or 84000
	302 327	<b>00239</b>	254HDP 112°	254°	265°	204°	210°	.431"	.431"	84002 or 84000
	350 cid	<b>00240</b>	267HDP 112°	267°	272°	210°	216°	.445"	.445"	84000
	400 cid	<b>00241</b>	270HDP 112°	270°	276°	214°	218°	.456"	.458"	84000
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the performance oriented hot street application. These cams offer an extended rpm range with emphasis on upper bottom to top end power (strong mid-range). Performance gears, headers, dual exhaust, larger than stock cfm carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Works well with automatic transmission if matched with proper ring and pinion gears and/or high stall converter. RPM Power Range: 1600-1800 to 4500-4800 / Redline: 6000 plus.	262 283	<b>00240</b>	267HDP 112°	267°	272°	210°	216°	.445"	.445"	84000
	302 327	<b>00241</b>	270HDP 112°	270°	276°	214°	218°	.456"	.458"	84000
	350 cid	<b>00242</b>	280HDP 112°	280°	286°	220°	226°	.462"	.470"	84000 or 84102
	400 cid	<b>00243</b>	284HDP 112°	286°	289°	225°	230°	.454"	.463"	84000 or 84102
ULTRA-PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - The following grinds are best suited for dual purpose hot street/drag strip situations. These cams exhibit strong mid-range and top end torque and horsepower. Headers, dual exhaust, larger cfm carburetor, performance ignition and 11:1 compression are a must. Cylinder head modifications would be beneficial. Use with standard transmission or automatic with high stall converter. Low gearing a must. RPM Power Range: 2000-2200 to 6000-6200 / Redline: 6500 plus.	262 283	<b>00242</b>	280HDP 112°	280°	286°	220°	226°	.462"	.470"	84000 or 84102
	302 327	<b>00243</b>	284HDP 112°	286°	289°	225°	230°	.454"	.463"	84000 or 84102
	350 cid	<b>00244</b>	288HDP 112°	288°	296°	234°	246°	.497"	.504"	84000 or 84102
	400 cid	<b>00245</b>	311HDP 112°	311°	316°	244°	252°	.507"	.524"	84000 or 84102

Valve timing events are available online at: [www.crower.com/valtime.html](http://www.crower.com/valtime.html)

See following page for kits and accessories

## HYDRAULIC CAMSHAFTS (continued)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Lope at idle. Hot street/drag cam with strong mid-range power. RPM Power Range: 2000-2400 to 6000-6200	350 cid	<b>00210</b>	278HDP 108°	286°	289°	225°	229°	.454"	.463"	84000 or 84102
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Explosive mid-range torque. RPM Power Range: 2500 to 6500 plus.	350 cid	<b>00211</b>	296HDP 108°	296°	308°	232°	242°	.500"	.518"	84000 or 84102
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle and mid-range acceleration. RPM Power Range: 2750 to 6500 plus.	350 cid	<b>00212</b>	304HDP 108°	300°	308°	240°	248°	.492"	.510"	84000 or 84102
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Brutal mid to top end torque and horsepower. RPM Power Range: 3000 to 6500 plus.	350 cid	<b>00213</b>	308HDP 106°	303°	311°	248°	256°	.507"	.527"	84102
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Extremely rough idle. Top-end power only. RPM Power Range: 3500 to 6500 plus.	350 cid	<b>00214</b>	302HDP 105°	302°	312°	250°	256°	.537"	.537"	84102
TURBOMASTER 1 - This cam provides excellent low end and mid-range power with mild boost (6 to 12 lbs). Rpm Power Range: 1800 to 5000 / Redline: 6000 plus.	350 400	<b>00978</b>	278HT 114°	278°	260°	212°	200°	.432"	.401"	84000 or 84102
TURBOMASTER 2 - For more boost (12 lbs plus) and higher rpm, this cam will extend your mid-range and top end power. RPM Power Range: 2200 to 6000 / Redline: 6500 plus.	350 400	<b>00979</b>	290HT 114°	290°	272°	226°	208°	.465"	.420"	84000 or 84102
SUPERCHARGER 1 - Excellent low and mid-range torque with moderate boost levels (5 to 10 lbs), this cam romps. RPM Power Range: 2400 to 6500 / Redline: 6500 plus.	350 400	<b>00980</b>	288HC 114°	288°	288°	232°	232°	.459"	.459"	84000 or 84102
SUPERCHARGER 2 - A very healthy blower cam for increased boost (10 lbs plus) and higher rpm. RPM Power Range: 2800 to 6500 / Redline: 6500 plus.	350 400	<b>00981</b>	304HC 114°	304°	304°	236°	236°	.506"	.506"	84000 or 84102
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc.	All cid	<b>00001</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84002</b>	66000-16	68301X3-16	86032-16		For rpm up to 6000 max. Daily street use.
<b>84000</b>	66000-16	68301X1-16	86032-16		For rpm up to 6500 max. Limited street use.
<b>84006</b>	66000-16	68311X1-16	86032-16		Race only applications.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	For rpm over 6500 plus. Limited street use.

### Spring pressure:

68301X3-16 Seat: 1.700" @ 104 lbs / Nose: 1.250" @ 247 lbs / Coil bind: 1.125" (Stock O.D., no machine work).

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

### Optional spring:

68100X200-16 Seat: 1.700" @ 134 lbs / Nose: 1.200" @ 290 lbs / Coil bind: 1.030" (Machine work, use cutter 68990\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Cam core configurations differ between '57-'87 and '88-'92 Chevrolet engines and cannot be interchanged.

Note: If using 3.750" stroke or above cranks, specify "S" after cam p/n for small base circle consideration.

For severe duty applications, Crower offers a high-lube "CamSaver" lifter that channels more oil to the cam lobe and lifter surface. Specify lifter 66000X3-16 when ordering corresponding component kit.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76501K</b>	Timing gear kit

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

REMEMBER! Increasing rocker ratio on intake (1.6) will make the cam approximately 5° bigger for more top end.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## 420 SERIES HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Gross Lift 1.5 / 1.5		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
262-307-327 cid	1800	3800	5200	5700	<b>00220</b>	112°	242°	250°	194°	202°	101°	111°	.401"	.420"	84000
305-350 cid	1200	3200	4600	5100											
383 cid	1000	3000	4300	4700											
406 cid	Idle	2900	4100	4500											
					Small Base Circle										
262-307-327 cid	1900	3900	5600	6100	<b>00221</b>	112°	246°	254°	198°	206°	105°	116°	.408"	.429"	84000
305-350 cid	1300	3300	4800	5200											
383 cid	1200	3200	4500	4900											
406 cid	1100	3100	4300	4700											
					Small Base Circle										
262-307-327 cid	2100	4100	5800	6200	<b>00222</b>	111°	254°	262°	206°	214°	116°	125°	.429"	.450"	84000 or 84006
305-350 cid	1500	3500	5000	5450											
383 cid	1300	3300	4600	5100											
406 cid	1200	3200	4400	4900											
					Small Base Circle										
262-307-327 cid	2400	4400	6000	6500	<b>00223</b>	110°	262°	270°	214°	222°	125°	134°	.450"	.470"	84000 or 84006
305-350 cid	1800	3800	5200	5700											
383 cid	1600	3600	4900	5400											
406 cid	1500	3500	4700	5200											
					Small Base Circle										
262-307-327 cid	2700	4700	6100	6600	<b>00224</b>	110°	270°	278°	222°	230°	134°	142°	.470"	.488"	84000 or 84006
305-350 cid	2100	4100	5500	5900											
383 cid	1800	3800	5000	5500											
406 cid	1700	3700	4800	5200											
					Small Base Circle										
262-307-327 cid	3000	5000	6200	6700	<b>00225*</b>	108°	278°	286°	230°	238°	142°	150°	.488"	.501"	84006 or 84102
305-350 cid	2400	4400	5700	6200											
383 cid	2000	4000	5200	5700											
406 cid	1900	3900	5000	5500											
					Small Base Circle										
262-307-327 cid	3300	5300	6400	6900	<b>00226*</b>	108°	290°	298°	242°	250°	154°	162°	.507"	.522"	84006 or 84102
305-350 cid	2700	4700	6000	6500											
383 cid	2400	4400	5500	6000											
406 cid	2300	4300	5300	5700											
					Small Base Circle										
262-307-327 cid	3600	5600	6700	7100	<b>00227*</b>	108°	298°	305°	250°	260°	162°	168°	.522"	.549"	84006 or 84102
305-350 cid	3000	5000	6200	6700											
383 cid	2600	4600	5800	6200											
406 cid	2500	4500	5500	6000											
					Small Base Circle										
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>										

\*Indicates premium Pro55 cam core, others are Proferal core. Crower recommends using the factory cast iron distributor gear. If running 3.750" or higher stroke, use the part number with "S" for added rod clearance.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84000</b>	66000-16	68301X1-16	86032-16		Up to 6000 rpm. Daily street use.
<b>84006</b>	66000-16	68311X1-16	86032-16		Up to 6500+ rpm. Limited street use.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	Up to 6700+ rpm. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil Bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76501K</b>	Timing gear kit

Note: Running 1.6 ratio rockers will add .030" to gross lift for more top end.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## HYDRAULIC CAMSHAFTS FOR EFI, FORCED INDUCTION & NOS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Gross Lift 1.5 / 1.5		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
262-307-327 cid	2200	4200	5800	6300	<b>00230</b> Small Base Circle	114°	262°	270°	214°	222°	125°	134°	.450"	.470"	84006 or 84102
305-350 cid	1600	3600	5000	5500											
383 cid	1400	3400	4700	5200											
406 cid	1300	3300	4500	5000											
262-307-327 cid	2500	4500	5900	6400	<b>00231</b> Small Base Circle	114°	270°	278°	222°	230°	134°	142°	.470"	.488"	84006 or 84102
305-350 cid	1900	3900	5300	5900											
383 cid	1600	3600	4800	5300											
406 cid	1500	3500	4600	5200											
262-307-327 cid	3000	4800	6000	6500	<b>00232*</b> Small Base Circle	114°	278°	286°	230°	238°	142°	150°	.488"	.501"	84006 or 84102
305-350 cid	2200	4200	5500	6000											
383 cid	1800	3800	5000	5500											
406 cid	1700	3700	4800	5300											
262-307-327 cid	3100	5100	6200	6700	<b>00233*</b> Small Base Circle	114°	290°	298°	242°	250°	154°	162°	.507"	.522"	84006 or 84102
305-350 cid	2500	4500	5800	6300											
383 cid	2200	4200	5300	5800											
406 cid	2100	4100	5100	5500											
262-307-327 cid	3400	5400	6500	6900	<b>00234*</b> Small Base Circle	114°	298°	308°	250°	260°	162°	168°	.522"	.549"	84006 or 84102
305-350 cid	2800	4800	6000	6500											
383 cid	2400	4400	5600	6000											
406 cid	2300	4300	5300	5800											
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>										

\*Indicates premium Pro55 cam core, others are Proferal core. Crower recommends using the factory cast iron distributor gear. If running 3.750" or higher stroke, use the part number with "S" for added rod clearance.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84000</b>	66000-16	68301X1-16	86032-16		Up to 6000 rpm. Daily street use.
<b>84006</b>	66000-16	68311X1-16	86032-16		Up to 6500+ rpm. Limited street use.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	Up to 6700+ rpm. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil Bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" ( Machine work, use cutter 68985\*).

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76501K</b>	Timing gear kit

Note: Running 1.6 ratio rockers will add .030" to gross lift for more top end.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## MARINE HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Lobe Lift		Gross Lift		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
262-307-327 cid	2300	3800	5100	5600	<b>00215</b>	112°	246°	258°	202°	210°	.283"	.294"	.425"	.441"	84000
305-350 cid	2100	3600	4800	5300											
383 cid	1800	3300	4400	4900											
406 cid	1700	3200	4300	4800											
					Small Base Circle										
262-307-327 cid	2500	4000	5600	5800	<b>00216</b>	112°	258°	270°	214°	222°	.303"	.313"	.456"	.470"	84000
305-350 cid	2300	3800	4800	5500											
383 cid	2000	3500	4500	5100											
406 cid	1900	3400	4300	5000											
					Small Base Circle										
262-307-327 cid	2600	4100	5800	6000	<b>00217</b>	113°	274°	282°	226°	234°	.320"	.330"	.480"	.495"	84000 or 84006
305-350 cid	2600	4100	5000	5800											
383 cid	2400	3900	4600	5400											
406 cid	2300	3800	4400	5300											
					Small Base Circle										
262-307-327 cid	2700	4200	6000	6050	<b>00218*</b>	113°	278°	286°	230°	238°	.325"	.334"	.488"	.501"	84006 or 84102
305-350 cid	2600	4300	5200	5900											
383 cid	2500	4000	4900	5500											
406 cid	2400	3900	4700	5400											
					Small Base Circle										
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>										

\*Indicates premium Pro55 cam core, others are Proferal core. Crower recommends using the factory cast iron distributor gear. If running 3.750" or higher stroke, use the part number with "S" for added rod clearance.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84000</b>	66000-16	68301X1-16	86032-16		Up to 6000 rpm. Daily street use.
<b>84006</b>	66000-16	68311X1-16	86032-16		Up to 6500+ rpm. Limited street use.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	Up to 6700+ rpm. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil Bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" ( Machine work, use cutter 68985\*).

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76501K</b>	Timing gear kit

Note: Running 1.6 ratio rockers will add .030" to gross lift for more top end.



262 267 283 302 305 307 327 350 400 V8 Small Block

## STOCK LIFT RULE HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit	
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		
PERFORMANCE LEVEL 5 Heavy car, 1/4 mile track, low end Redline: 6500 rpm maximum	283 - 327 cid / 3250 - 6000 rpm 350 - 372 cid / 3000 - 5750 rpm 383 - 400 cid / 2750 - 5500 rpm	See Descrip	<b>00250</b>	218H224 108°	266°	274°	218°	224°	.390"	.408"	84006
PERFORMANCE LEVEL 5 Lighter car, 3/8 mile track, low end Redline: 6500 rpm maximum	283 - 327 cid / 3500 - 6250 rpm 350 - 372 cid / 3250 - 6000 rpm 383 - 400 cid / 3000 - 5750 rpm	See Descrip	<b>00251</b>	228H236 106°	294°	294°	228°	236°	.390"	.410"	84006
PERFORMANCE LEVEL 5 3/8 mile, high bank track, mid to top Redline: 6500 rpm maximum	283 - 327 cid / 3750 - 6500 rpm 350 - 372 cid / 3500 - 6250 rpm 383 - 400 cid / 3250 - 6000 rpm	See Descrip	<b>00252</b>	238H242 106°	300°	300°	238°	242°	.390"	.410"	84006
PERFORMANCE LEVEL 5 Heavy car, 1/4 mile track, low end Redline: 6500 rpm maximum	283 - 327 cid / 3250 - 6000 rpm 350 - 372 cid / 3000 - 5750 rpm 383 - 400 cid / 2750 - 5500 rpm	See Descrip	<b>00253</b>	218H226 108°	266°	276°	218°	226°	.419"	.420"	84006
PERFORMANCE LEVEL 5 Lighter car, 3/8 mile track, low end Redline: 6500 rpm plus	283 - 327 cid / 3500 - 6250 rpm 350 - 372 cid / 3250 - 6000 rpm 383 - 400 cid / 3000 - 5750 rpm	See Descrip	<b>00254</b>	228H234 106°	294°	296°	228°	234°	.419"	.417"	84006
PERFORMANCE LEVEL 5 3/8 mile, high bank track, mid to top Redline: 6500 rpm plus	283 - 327 cid / 3750 - 6500 rpm 350 - 372 cid / 3500 - 6250 rpm 383 - 400 cid / 3250 - 6000 rpm	See Descrip	<b>00255</b>	234H242 106°	296°	296°	234°	242°	.417"	.416"	84006
PERFORMANCE LEVEL 5 Heavy car, 1/4 mile track, low end Redline: 6500 rpm plus	283 - 327 cid / 2750 - 5750 rpm 350 - 372 cid / 2500 - 5500 rpm 383 - 400 cid / 2250 - 5250 rpm	See Descrip	<b>00256</b>	220H226 108°	264°	278°	220°	226°	.451"	.453"	84006
PERFORMANCE LEVEL 5 Lighter car, 3/8 mile track, low end Redline: 6500 rpm plus	283 - 327 cid / 3000 - 6000 rpm 350 - 372 cid / 2750 - 5750 rpm 383 - 400 cid / 2500 - 5500 rpm	See Descrip	<b>00257</b>	228H236 106°	282°	288°	228°	236°	.449"	.449"	84006
PERFORMANCE LEVEL 5 3/8 mile, high bank track, mid to top Redline: 6500 rpm plus	283 - 327 cid / 3250 - 6250 rpm 350 - 372 cid / 3000 - 6000 rpm 383 - 400 cid / 2750 - 5750 rpm	See Descrip	<b>00258</b>	236H242 106°	288°	292°	236°	242°	.449"	.446"	84006
PERFORMANCE LEVEL 5 1/2 mile, high bank track, mid to top Redline: 6500 rpm plus	283 - 327 cid / 3500 - 6500 rpm 350 - 372 cid / 3250 - 6250 rpm 383 - 400 cid / 3000 - 6000 rpm	See Descrip	<b>00259</b>	242H248 106°	292°	296°	242°	248°	.446"	.447"	84006
VACUUM RULE - PERF LEVEL 5 Lighter car, 3/8 mile track, low end Redline: 6500 rpm plus	283 - 327 cid / 3750 - 6500 rpm 350 - 372 cid / 3500 - 6250 rpm 383 - 400 cid / 3250 - 6000 rpm	See Descrip	<b>00252V</b>	238H242 116°	300°	300°	238°	242°	.390"	.410"	84006
VACUUM RULE - PERF LEVEL 5 3/8 mile, high bank track, mid to top Redline: 6500 rpm plus	283 - 327 cid / 3750 - 6500 rpm 350 - 372 cid / 3500 - 6500 rpm 383 - 400 cid / 3250 - 6500 rpm	See Descrip	<b>00255V</b>	234H242 114°	296°	296°	234°	242°	.417"	.416"	84006
VACUUM RULE - PERF LEVEL 5 1/2 mile, high bank track, mid to top Redline: 6500 rpm plus	283 - 327 cid / 3500 - 6500 rpm 350 - 372 cid / 3250 - 6500 rpm 383 - 400 cid / 3000 - 6500 rpm	See Descrip	<b>00259V</b>	242H248 114°	292°	296°	242°	248°	.446"	.447"	84006

Note: Small base circle cams are available if using 3.750" stroke and 350 style rods. Specify "S" after part number. If using 400 style or stroker rods the above base circle will work.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84006</b>	66000-16	68311X1-16	86032-16		For rpm up to 6500 plus.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	For rpm up to 6500 plus.
<b>84102-3</b>	66000X3-16	68390X3-16	87048-16	86072-16	For rpm up to 6500 plus. "CamSaver" Lifters.

Spring pressure:

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 1132 pilot shaft when ordering.

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

## ACCESSORIES

Part No.	Description
<b>66000X5-16</b>	Cheater hydraulic lifters (solid lifters)
<b>69795-16</b>	Pushrods (special length for #66000X5-16 lifters)



262 267 283 302 305 307 327 350 400 V8 Small Block

## SHORT TRACK HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Duration @ 200"		Gross Lift 1.5 / 1.5		Gross Lift 1.6 / 1.5	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
302-327 cid	2800	4000	5500	6000	<b>00270</b>	226HDP 108°	277°	288°	224°	230°	137°	140°	.471"	.497"	.502"	.497"
305-350 cid	2600	3800	5300	5800												
383-406* cid	2400	3600	5100	5600												
302-327 cid	2950	4150	5650	6150	<b>00271</b>	228HDP 108°	288°	290°	230°	238°	140°	149°	.497"	.497"	.530"	.497"
305-350 cid	2750	3950	5450	5450												
383-406* cid	2550	3750	5250	5750												
302-327 cid	3050	4250	5750	6250	<b>00272</b>	234HDP 107°	290°	300°	235°	245°	147°	153°	.507"	.516"	.541"	.516"
305-350 cid	2850	4050	5550	6050												
383-406* cid	2650	3850	5350	5850												
302-327 cid	3200	4400	5900	6400	<b>00273</b>	236HDP 107°	292°	294°	239°	248°	151°	159°	.506"	.513"	.539"	.513"
305-350 cid	3000	4200	5700	6200												
383-406* cid	2800	4000	5500	6000												
302-327 cid	3350	4550	6050	6550	<b>00274</b>	244HDP 107°	298°	302°	245°	252°	156°	165°	.504"	.534"	.538"	.534"
305-350 cid	3150	4350	5850	6350												
383-406* cid	2950	4150	5650	6150												
302-327 cid	3500	4700	6200	6700	<b>00275</b>	246HDP 107°	303°	311°	248°	257°	163°	169°	.507"	.526"	.568"	.537"
305-350 cid	3300	4500	6000	6500												
383-406* cid	3100	4300	5800	6300												
CUSTOM GROUND HYDRAULIC - Call with all engine data including head flow data, valve sizes, operating power range, etc when ordering.					<b>00001</b>											

\* These cid engines (383, 406) require a smaller base circle for 3.750" or larger stroke cranks. Add an "S" at the end of desired cam part number (example: 00275S) if smaller base circle is desired.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84000</b>	66000-16	68301X1-16	86032-16		For rpm up to 6500 plus.
<b>84006</b>	66000-16	68311X1-16	86032-16		For rpm up to 6700 plus.
<b>84102</b>	66000-16	68390X3-16	87048-16	86072-16	For rpm up to 6700 plus.
<b>84102X3</b>	66000X3-16	68390-3	87048-16	86072-16	For rpm up to 6700 plus. "CamSaver" Lifters.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil Bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" ( Machine work, use cutter 68985\* ).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Cam core configurations differ between '57-'87 and '88-'92 Chevrolet engines and cannot be interchanged.

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3).

Note: If using 3.750" stroke or above cranks contact Crower for smaller base circle camshafts for more rod clearance.

BE SMART! Crower performance camshafts feature high lift, fast action features that can cause stock or other aftermarket valve train components to fail. Be sure to use a Crower engineered kit to avoid possible damage.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050")

LIFT RULE CAMSHAFTS: Crower has a complete line of camshafts that will satisfy any max lift requirement.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3Ø
<b>73640-16</b>	Rocker arms (1.6) 3Ø
<b>76501K</b>	Timing gear kit

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

REMEMBER! Increasing rocker ratio on intake (1.6) will make the cam approximately 5° bigger for more top end.

HIGH RPM! Crower highly recommends the use of rollerized rockers. See rocker section for ratios and stud diameters.

These camshafts will work with the following carburetor sizes: 350 (210 cfm), 390 (410 cfm), 500 (350 cfm).

If you can supply cylinder head flow data, engine specs, operating power ranges and exhaust manifold configurations we will be able to grind you a camshaft that is far superior than any other brand currently available.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## HYDRAULIC ROLLER CAMSHAFTS (ORIGINAL SERIES)

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Gross Lift 1.6 / 1.6		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
262-302 cid	2200	3400	4700	5200	<b>00408</b>	198HR210 112°	273°	288°	200°	212°	.435"	.462"	.464"	.493"	84542
327 cid	2000	3200	4500	5000	Early model										
350 cid	1700	3000	4300	4800											
383 cid	1600	2900	4200	4700	<b>00408LM</b>										
406 cid	1500	2800	4100	4600	LM is step nose										
262-302 cid	2400	3600	4900	5400	<b>00400</b>	200HR208 114°	260°	269°	204°	212°	.451"	.474"	.482"	.506"	84542
327 cid	2200	3400	4700	5200	Early model										
350 cid	1900	3200	4500	5000											
383 cid	1800	3100	4400	4900	<b>00400LM</b>										
406 cid	1700	3000	4300	4800	LM is step nose										
262-302 cid	2400	3600	4900	5400	<b>00409</b>	210HR215 110°	284°	288°	212°	218°	.462"	.470"	.493"	.501"	84542 or 84544
327 cid	2200	3400	4700	5200	Early model										
350 cid	1900	3200	4500	5000											
383 cid	1800	3100	4400	4900	<b>00409LM</b>										
406 cid	1700	3000	4300	4800	LM is step nose										
262-302 cid	2700	3900	5400	5900	<b>00401</b>	208HR216 114°	269°	278°	214°	220°	.474"	.498"	.507"	.531"	84542 or 84544
327 cid	2500	3700	5200	5700	Early model										
350 cid	2300	3500	5000	5500											
383 cid	2200	3400	4900	5400	<b>00401LM</b>										
406 cid	2100	3300	4800	5300	LM is step nose										
262-302 cid	3000	4200	5700	6200	<b>00402</b>	216HR224 114°	278°	286°	220°	228°	.498"	.519"	.531"	.553"	84543 or 84544
327 cid	2800	4000	5500	6000	Early model										
350 cid	2600	3800	5300	5800											
383 cid	2500	3700	5200	5700	<b>00402LM</b>										
406 cid	2400	3600	5100	5600	LM is step nose										
262-302 cid	3300	4500	6000	6500	<b>00403</b>	224HR232 114°	286°	294°	226°	236°	.519"	.540"	.552"	.576"	84543 or 84544
327 cid	3100	4300	5800	6300	Early model										
350 cid	2900	4100	5600	6100											
383 cid	2800	4000	5500	6000	<b>00403LM</b>										
406 cid	2700	3900	5400	5900	LM is step nose										
262-302 cid	3400	4600	6100	6600	<b>00418</b>	230HR230 108°	306°	306°	230°	230°	.480"	.480"	.512"	.512"	84543 or 84544
327 cid	3100	4400	5900	6400	Early model										
350 cid	3000	4200	5700	6200											
383 cid	2900	4100	5600	6100	<b>00418LM</b>										
406 cid	2800	4000	5500	6000	LM is step nose										
262-302 cid	3500	4700	6200	6700	<b>00404</b>	232HR240 114°	294°	310°	236°	244°	.540"	.565"	.579"	.602"	84543 or 84544
327 cid	3200	4500	6000	6500	Early model										
350 cid	3100	4300	5800	6300											
383 cid	3000	4200	5700	6200	<b>00404LM</b>										
406 cid	2900	4100	5600	6100	LM is step nose										

"LM" cores fit 305-350 cid 1987-up only (w/step nose). Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

Note: The above cams are ground on cast steel cores. If 8620 steel billet core with integral cast iron gear is desired, specify part number 00050. Crower recommends using the factory stock cast iron distributor gear.

Note: Late model Chevrolet 305 and 350 V8 engines (1988-up) use a different cam core configuration than 1957-87 Chevrolet V8 engines and cannot be interchanged. Specify engine year when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Plug	Pushrods	Keepers	Remarks
<b>84570</b>	66313-16	68301X1-16	86032-16	86085	69710-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84542LM</b>	66330-16	68301X1-16	86032-16	86099	69715-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84571</b>	66313-16	68304-16	86032-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84543LM</b>	66330-16	68304-16	86032-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.
<b>84572</b>	66313-16	68390X3-16	87048-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84544LM</b>	66330-16	68390X3-16	87048-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68304-16 Seat: 1.800" @ 106 lbs / Nose: 1.250" @ 317 lbs / Coil bind: 1.090" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering. Note: If using stock GM hydraulic roller lifters, use Crower pushrod 69720 (7.200").

## ACCESSORIES

Part No.	Description
<b>73602-16</b>	Self aligning rocker arms (1.5) 3/8 - Late Model
<b>73603-16</b>	Self aligning rocker arms (1.6) 3/8 - Late Model
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76513</b>	Timing gear set (87-up)



# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## HYDRAULIC ROLLER CAMSHAFTS FOR EFI, FORCED INDUCTION & NOS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Grind Lobe Center	Advertised Intake	Duration Exhaust	Duration @ .050"		Lobe Lift		Gross Lift 1.5 / 1.5		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM					Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
262-302 cid	2200	3600	5300	6100	<b>00480</b> Early model	196HR204 114°	245°	254°	196°	204°	.310"	.323"	.465"	.484"	84542
307-327 cid	2000	3500	5200	5700											
305-350 cid	1700	3200	4900	5400											
383 cid	1600	3100	4550	5050											
406 cid	1500	3000	4500	5000											
					<b>00480LM</b> LM is step nose										
262-302 cid	2400	3800	5700	6300	<b>00481</b> Early model	204HR213 114°	255°	264°	204°	213°	.323"	.337"	.484"	.505"	84543
307-327 cid	2200	3700	5600	6100											
305-350 cid	1900	3400	5200	5700											
383 cid	1700	3200	4800	5300											
406 cid	1600	3100	4700	5200											
					<b>00481LM</b> LM is step nose										
262-302 cid	2600	4000	5900	6400	<b>00482</b> Early model	213HR221 114°	264°	273°	213°	221°	.337"	.350"	.505"	.525"	84543
307-327 cid	2400	3900	5750	6250											
305-350 cid	2200	3700	5550	6050											
383 cid	2000	3500	5200	5700											
406 cid	1900	3400	5100	5600											
					<b>00482LM</b> LM is step nose										
262-302 cid	2800	4100	6000	6500	<b>00483</b> Early model	221HR230 114°	273°	284°	221°	230°	.350"	.363"	.525"	.545"	84543
307-327 cid	2500	4000	5800	6300											
305-350 cid	2400	3900	5750	6250											
383 cid	2100	3600	5400	5900											
406 cid	2000	3500	5300	5800											
					<b>00483LM</b> LM is step nose										
262-302 cid	3000	4300	6200	6700	<b>00484</b> Early model	228HR236 114°	284°	286°	230°	236°	.363"	.370"	.545"	.555"	84543 or 84544
307-327 cid	2700	4200	5900	6400											
305-350 cid	2600	4100	5850	6300											
383 cid	2300	3800	5700	6200											
406 cid	2200	3700	5600	6100											
					<b>00484LM</b> LM is step nose										
CUSTOM GROUND HYDRAULIC ROLLER - Early or late model (step nose) hyd roller cam ground to your specs on cast steel cam core w/stock cast iron gear.					<b>00009</b>										

"LM" cores fit 305-350 cid 1987-up only (w/step nose). Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

Note: The above cams are ground on cast steel cores. If 8620 steel billet core with integral cast iron gear is desired, specify part number 00050. Crower recommends using the factory stock cast iron distributor gear.

Note: Late model Chevrolet 305 and 350 V8 engines (1988-up) use a different cam core configuration than 1957-87 Chevrolet V8 engines and cannot be interchanged. Specify engine year when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Plug	Pushrods	Keepers	Remarks
<b>84570</b>	66313-16	68301X1-16	86032-16	86085	69710-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84542LM</b>	66330-16	68301X1-16	86032-16	86099	69715-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84571</b>	66313-16	68304-16	86032-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84543LM</b>	66330-16	68304-16	86032-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.
<b>84572</b>	66313-16	68390X3-16	87048-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84544LM</b>	66330-16	68390X3-16	87048-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68304-16 Seat: 1.800" @ 106 lbs / Nose: 1.250" @ 317 lbs / Coil bind: 1.090" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 1132 pilot shaft when ordering.

Note: If using stock GM hydraulic roller lifters, use Crower pushrod 69720 (7.200").

## ACCESSORIES

Part No.	Description
<b>73602-16</b>	Self aligning rocker arms (1.5) 3/8 - Late Model
<b>73603-16</b>	Self aligning rocker arms (1.6) 3/8 - Late Model
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76513</b>	Timing gear set (87-up)





262 267 283 302 305 307 327 350 400 V8 Small Block

## 350 SERIES HIGH LIFT HYDRAULIC ROLLER CAMSHAFTS

Note: These cams use .000" intake, .000" exhaust valve lash.

C.I.D. Group and RPM Range	Part Number	Lobe Center	Advised Duration @ .006"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.5 / 1.5		
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PERFORMANCE LEVEL 1 Good stock replacement for mileage/performance.	283 - 327 cid / 1900 - 5100 rpm 350 - 372 cid / 1600 - 4800 rpm 383 - 400 cid / 1400 - 4400 rpm	<b>00460</b> <b>00460LM</b>	110°	242°	250°	192°	200°	112°	121°	.303"	.316"	.455"	.474"
PERFORMANCE LEVEL 1 Strong torque, excellent mileage and smooth idle.	283 - 327 cid / 2000 - 5200 rpm 350 - 372 cid / 1700 - 4900 rpm 383 - 400 cid / 1600 - 4550 rpm	<b>00461</b> <b>00461LM</b>	110°	245°	254°	196°	204°	116°	125°	.310"	.323"	.465"	.484"
PERFORMANCE LEVEL 1 Smooth idle, great for towing, very fuel efficient.	283 - 327 cid / 2200 - 5500 rpm 350 - 372 cid / 1800 - 5000 rpm 383 - 400 cid / 1600 - 4650 rpm	<b>00462</b> <b>00462LM</b>	110°	250°	260°	200°	209°	121°	130°	.316"	.330"	.474"	.495"
PERFORMANCE LEVEL 1 Smooth idle, daily usage for near stock engines.	283 - 327 cid / 2200 - 5600 rpm 350 - 372 cid / 1900 - 5200 rpm 383 - 400 cid / 1700 - 4800 rpm	<b>00463</b> <b>00463LM</b>	110°	255°	264°	204°	213°	125°	134°	.323"	.337"	.484"	.505"
PERFORMANCE LEVEL 2 Strong torque, good mid-range power.	283 - 327 cid / 2300 - 5700 rpm 350 - 372 cid / 2100 - 5400 rpm 383 - 400 cid / 1800 - 5000 rpm	<b>00464</b> <b>00464LM</b>	110°	260°	270°	209°	217°	130°	139°	.330"	.343"	.495"	.514"
PERFORMANCE LEVEL 2 Mild street performance, slight lobe at idle. Headers & intake rec.	283 - 327 cid / 2400 - 5750 rpm 350 - 372 cid / 2200 - 5550 rpm 383 - 400 cid / 2000 - 5200 rpm	<b>00465</b> <b>00465LM</b>	110°	264°	273°	213°	221°	134°	142°	.337"	.350"	.505"	.525"
PERFORMANCE LEVEL 2 Strong mid-range, good throttle response, 2000 stall recommended.	283 - 327 cid / 2400 - 5750 rpm 350 - 372 cid / 2300 - 5700 rpm 383 - 400 cid / 2000 - 5300 rpm	<b>00466</b> <b>00466LM</b>	110°	270°	277°	217°	225°	139°	147°	.343"	.357"	.514"	.535"
PERFORMANCE LEVEL 2 Fair idle, moderate performance, good mid-range HP (2000 stall).	283 - 327 cid / 2500 - 5800 rpm 350 - 372 cid / 2400 - 5750 rpm 383 - 400 cid / 2100 - 5400 rpm	<b>00467</b> <b>00467LM</b>	110°	273°	284°	221°	230°	142°	151°	.350"	.363"	.525"	.544"
PERFORMANCE LEVEL 3 Noticeable idle, good mid-range, requires headers.	283 - 327 cid / 2600 - 5850 rpm 350 - 372 cid / 2500 - 5800 rpm 383 - 400 cid / 2200 - 5600 rpm	<b>00468</b> <b>00468LM</b>	110°	277°	286°	225°	232°	147°	155°	.357"	.367"	.535"	.550"
PERFORMANCE LEVEL 3 Slight lobe at idle, needs headers, 2500 stall recommended.	283 - 327 cid / 2700 - 5900 rpm 350 - 372 cid / 2600 - 5850 rpm 383 - 400 cid / 2300 - 5700 rpm	<b>00469</b> <b>00469LM</b>	110°	284°	286°	230°	236°	151°	159°	.363"	.370"	.544"	.555"
PERFORMANCE LEVEL 3 Rough idle, aftermarket intake and headers a must.	283 - 327 cid / 2800 - 5950 rpm 350 - 372 cid / 2750 - 5900 rpm 383 - 400 cid / 2400 - 5850 rpm	<b>00470</b> <b>00470LM</b>	110°	286°	292°	232°	240°	155°	163°	.366"	.373"	.549"	.559"
PERFORMANCE LEVEL 4 Street/strip applications, rough idle, 2500 stall required.	283 - 327 cid / 2900 - 6000 rpm 350 - 372 cid / 2800 - 5950 rpm 383 - 400 cid / 2400 - 5900 rpm	<b>00471</b> <b>00471LM</b>	110°	286°	292°	236°	240°	159°	163°	.370"	.373"	.555"	.559"

"LM" indicates Late Model 305-350 cid w/step nose core (1987-up). Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

Note: The above cams are ground on cast steel cores. If 8620 steel billet core with integral cast iron gear is desired, specify part number 00050. Crower recommends using the factory stock cast iron distributor gear.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Plug	Pushrods	Keepers	Remarks
<b>84570</b>	66313-16	68301X1-16	86032-16	86085	69710-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84542LM</b>	66330-16	68301X1-16	86032-16	86099	69715-16	86107-16	Up to 6000 rpm. Daily street use.
<b>84571</b>	66313-16	68304-16	86032-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84543LM</b>	66330-16	68304-16	86032-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.
<b>84572</b>	66313-16	68390X3-16	87048-16	86085	69710-16	86107-16	Up to 6500 max. Limited street use.
<b>84544LM</b>	66330-16	68390X3-16	87048-16	86099	69715-16	86107-16	Up to 6500 max. Limited street use.

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68304-16 Seat: 1.800" @ 106 lbs / Nose: 1.250" @ 317 lbs / Coil bind: 1.090" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 1/32 pilot shaft when ordering. Note: If using stock GM hydraulic roller lifters, use Crower pushrod 69720 (7.200").

## ACCESSORIES

Part No.	Description
<b>73602-16</b>	Self aligning rocker arms (1.5) 3/8 - Late Model
<b>73603-16</b>	Self aligning rocker arms (1.6) 3/8 - Late Model
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>76501</b>	Timing gear set
<b>76513</b>	Timing gear set (87-up)



LT1 and LS1 V8

## HYDRAULIC ROLLER CAMSHAFTS - LT1

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
<b>STOCK REPLACEMENT</b> Increased performance in stock LT1 engines. RPM Power Range: Idle to 5000, redline: 5500 max	350 cid	<b>00560</b>	254HR262 114°	254°	262°	204°	212°	.485°	.505°	84552
<b>STAGE 1</b> Works well in stock or slightly modified engines. RPM Power Range: 1000 to 5500, redline: 6000 max	350 cid	<b>00561</b>	262HR266 114°	262°	266°	208°	216°	.495°	.515°	84553 or 84554
<b>STAGE 2</b> Modified computer, exhaust and high flow intake recommended. RPM Power Range: 1500 to 5800, redline: 6300 max	350 cid	<b>00562</b>	274HR284 114°	274°	284°	221°	230°	.525°	.545°	84553 or 84554
<b>STAGE 3</b> Mid to top end power in highly modified engines. RPM Power Range: 2000 to 6000, redline: 6500 max	350 cid	<b>00563</b>	277HR286 114°	277°	286°	225°	232°	.535°	.550°	84553 or 84554
<b>CUSTOM GROUND HYD ROLLER</b> - Special order hydraulic roller lifter camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc.	All cid	<b>00052</b>								

## HYDRAULIC ROLLER CAMSHAFTS - LS1/LS6

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
<b>STAGE 1</b> Works well in stock or slightly modified engines. RPM Power Range: 1000 to 5500, redline: 6000 max	350 cid	<b>00571</b>	258HR262 114°	258°	262°	208°	216°	.514°	.514°	84555 or 84556
<b>STAGE 2</b> Modified computer, exhaust and high flow intake recommended. RPM Power Range: 1500 to 5800, redline: 6300 max	350 cid	<b>00572</b>	272HR280 114°	272°	280°	217°	226°	.553°	.575°	84555 or 84556
<b>STAGE 3</b> Mid to top end power in highly modified engines. RPM Power Range: 2000 to 6000, redline: 6500 max	350 cid	<b>00573</b>	285HR289 114°	285°	289°	226°	232°	.566°	.566°	84555 or 84556
<b>CUSTOM GROUND HYD ROLLER</b> - Special order hydraulic roller lifter camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc.	All cid	<b>00053</b>								

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Pushrods	Keepers	Remarks
<b>84552</b>	66330-16	68301X1-16	86032-16	69715-16	86107-16	For rpm up to 6000 max. Daily street use.
<b>84553</b>	66330-16	68304-16	86032D-16	69715-16	86107-16	For rpm up to 6500 max. Limited street use.
<b>84554</b>	66330-16	68311X1-16	86032-16	69715-16	86107-16	Race only applications.
<b>84555</b>	66330-16	68304-16	86037-16	Stock	Stock	For rpm up to 6500 max. Limited street use.
<b>84556</b>	66330-16	68311X1-16	86037T-16	Stock	Stock	For rpm over 7000 plus. Race only.
<b>84575</b>	66330-16	68155-16	87028T-16	Stock	Stock	Conical spring, titanium retainer for LS1 (8mm).
<b>84576</b>	66330-16	68155-16	87029T-16	Stock	Stock	Conical spring, titanium retainer for LT1 (11/32).

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68304-16 Seat: 1.800" @ 106 lbs / Nose: 1.250" @ 317 lbs / Coil bind: 1.090" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil bind: 1.070" (Stock O.D., no machine work).

68155-16 Seat: 1.750" @ 115 lbs / Nose: 1.250" @ 295 lbs / Coil bind: 1.150" (Stock O.D., conical design).

Optional spring:

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*). LT1 only.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
<b>69740-16</b>	Pushrods - Stock LS1 length
<b>73602-16</b>	Rocker arms (1.5) 3/8 self aligning tip - LT1 Only
<b>73603-16</b>	Rocker arms (1.6) 3/8 self aligning tip - LT1 Only
<b>73660-16*</b>	Rocker arms (1.5) 3/8 use w/guide plates - LT1 Only
<b>73661-16*</b>	Rocker arms (1.6) 3/8 use w/guide plates - LT1 Only
<b>76802</b>	Cloyes Timing Gear Set - LS1
<b>76504</b>	Cloyes Timing Gear Set - LT1

\*Use with guide plate #70517-8.



262 267 283 302 305 307 327 350 400 V8 Small Block

## SOLID CAMSHAFTS (ORIGINAL SERIES)

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque at low revs. Rumpy idle. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	302 327	<b>00320</b>	264SF 112°	264°	270°	230°	236°	.458"	.468"	84295
PRO-STREET / PERFORMANCE LEVEL 3 - High torque with more mid-range. Crisp rpm. Really nice camshaft. RPM Power Range: 2400 to 6400 / Redline: 6800 plus.	350 400	<b>00321</b>	274SF 114°	274°	282°	242°	248°	.482"	.504"	84295
PRO-STREET / PERFORMANCE LEVEL 4 - High revving, super mid to top end power in small c.i.d. engines. Radical grind. RPM Power Range: 2800 to 6600 / Redline: 7000 plus.	302 327	<b>00322</b>	282SF 112°	282°	292°	248°	254°	.504"	.528"	84295 or 84299
PRO-STREET / PERFORMANCE LEVEL 4 - High revving, super mid to top end power. RPM Power Range: 3000 to 6900 / Redline: 7200 plus.	350 400	<b>00323</b>	294SF 114°	294°	300°	256°	262°	.528"	.545"	84299
COMPU-PRO / PERFORMANCE LEVEL 4 - Broad power band. Short oval profile. Heavy car. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	350 400	<b>00350</b>	268FDP 107°	268°	274°	238°	244°	.497"	.503"	84299
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval track cam. Strong off corner. RPM Power Range: 2500 to 6500 / Redline: 7500 plus.	350 400	<b>00355</b>	276FDP 105°	276°	282°	244°	250°	.503"	.518"	84299 or 84292-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Most popular NASCAR and Sportsman grind. Great high torque and mid-range power. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	350 400	<b>00351</b>	288FDP 105°	288°	292°	254°	262°	.525"	.546"	84299 or 84292-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Super torque at higher revs. Fast track cam. RPM Power Range: 3500 to 7500 / Redline: 7500 plus.	350 400	<b>00356</b>	294FDP 105°	294°	302°	260°	266°	.540"	.557"	84299 84292-980 84293-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Super drag or big, 1/2 mile oval track grind. Low gear, heavy car. RPM Power Range: 3750 to 7500 / Redline: 7500 plus.	350 400	<b>00352</b>	298FDP 105°	298°	302°	262°	266°	.543"	.557"	84292-980 or 84293-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Superb extended power range. Top end drag and oval track grind. RPM Power Range: 4000 to 7500 / Redline: 7500 plus.	350 400	<b>00357</b>	302FDP 107°	302°	310°	268°	278°	.557"	.587"	84292-980 or 84293-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Top end profile for added punch above 7000 rpm. Top end drag and super speedway oval grind. RPM Power Range: 4500 to 7500 / Redline: 7500 plus.	350 400	<b>00353</b>	310FDP 107°	310°	316°	272°	278°	.575"	.588"	84292-980 or 84293-980
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call with all engine data including head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00000</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84295</b>	66900-16	68301X1-16	86032-16		7000 plus rpm. Street applications.
<b>84292X980</b>	66900X980-16	68311X1-16	86032-16	86072-16	Race only. Stock O.D. spring.
<b>84299</b>	66900-16	68390X3-16	87048-16	86072-16	Race only. Limited street.
<b>84293X980</b>	66900X980-16	68398-16	87054-16	86072-16	Race only w/1.5 to 1.8 ratio

Spring pressure:

68301X1-16 Seat: 1.700" @ 105 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.130" (Stock O.D., no machine work).

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil Bind: 1.070" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 116 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

68398-16 Seat: 1.825" @ 151 lbs / Nose: 1.325" @ 351 lbs / Coil bind: 1.080" (Machine work, use cutter 68987\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Cam core configurations differ between '57-'87 and '88-'92 Chevrolet engines and cannot be interchanged.

## ACCESSORIES

Part No.	Description
<b>66971X980-16</b>	Lightweight solid lifters, no chamfer (73g) Pushrods
<b>73600-16</b>	Rocker arms (1.5) 3/8
<b>73640-16</b>	Rocker arms (1.6) 3/8
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16. Higher ratios available.
<b>76501</b>	Timing gear set
<b>76801</b>	Hex-A-Just timing gear set (early model block)

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

REMEMBER! Increasing rocker ratio on intake (1.6) will make the cam approximately 5° bigger for more top end.



262 267 283 302 305 307 327 350 400 V8 Small Block

## 290 SERIES HIGH ROCKER RATIO SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.6 / 1.5		Gross Lift 1.7 / 1.6	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
262-307-327	3200	4700	6500	7000	<b>00304</b>	110°	266°	274°	236°	244°	144°	152°	.326"	.340"	.522"	.510"	.554"	.544"
305-350 cid	2800	4300	6100	6600														
383-406 cid	2600	4100	5600	6100														
262-307-327	3400	4900	6700	7200	<b>00305</b>	108°	270°	278°	240°	248°	148°	156°	.333"	.346"	.533"	.519"	.566"	.554"
305-350 cid	3000	4500	6200	6700														
383-406 cid	2700	4200	5700	6200														
262-307-327	3500	5000	6800	7300	<b>00306</b>	108°	274°	278°	244°	248°	152°	156°	.340"	.346"	.544"	.519"	.578"	.554"
305-350 cid	3100	4600	6300	6800														
383-406 cid	2800	4300	5800	6300														
262-307-327	3700	5200	7000	7500	<b>00307</b>	106°	278°	286°	248°	256°	156°	165°	.346"	.360"	.554"	.540"	.588"	.576"
305-350 cid	3400	4900	6500	7000														
383-406 cid	3000	4500	6000	6500														
262-307-327	3800	5300	7100	7600	<b>00308</b>	105°	282°	290°	252°	260°	161°	167°	.353"	.366"	.565"	.549"	.600"	.586"
305-350 cid	3500	5000	6600	7100														
383-406 cid	3100	4600	6100	6600														
262-307-327	3900	5400	7200	7800	<b>00309</b>	105°	286°	294°	256°	264°	165°	173°	.360"	.373"	.576"	.559"	.612"	.597"
305-350 cid	3600	5100	6700	7200														
383-406 cid	3200	4700	6200	6700														
262-307-327	4200	5700	7400	7900	<b>00312</b>	106°	290°	294°	260°	264°	161°	173°	.366"	.373"	.584"	.559"	.622"	.597"
305-350 cid	3700	5200	6800	7300														
383-406 cid	3300	4800	6300	6800														
262-307-327	4200	5700	7450	7950	<b>00313</b>	106°	294°	298°	264°	268°	173°	177°	.373"	.380"	.597"	.570"	.634"	.608"
305-350 cid	3900	5400	6950	7450														
383-406 cid	3450	4950	6400	6900														
262-307-327	4500	6000	7600	8100	<b>00316</b>	108°	298°	302°	268°	272°	177°	181°	.380"	.386"	.608"	.579"	.646"	.618"
305-350 cid	4000	5500	7050	7550														
383-406 cid	3600	5100	6500	7000														
262-307-327	4600	6100	7650	8150	<b>00317</b>	108°	302°	306°	272°	276°	181°	185°	.386"	.393"	.618"	.589"	.656"	.629"
305-350 cid	4200	5700	7150	7650														
383-406 cid	3750	5250	6600	7100														
262-307-327	4700	6200	7700	8200	<b>00318</b>	108°	306°	310°	276°	280°	185°	188°	.393"	.400"	.629"	.600"	.668"	.640"
305-350 cid	4350	5850	7200	7700														
383-406 cid	3900	5400	6650	7150														

These latest solid lifter profiles are multipurpose and are working extremely well in NASCAR late model, drag racing and street/strip applications. Available in any lobe center. Cam cores are ground from Pro 55 cores.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84292X980</b>	66900X980-16	68311X1-16	86032-16	86072-16	Stock O.D. spring, coolface lifter option
<b>84293X980</b>	66900X980-16	68398-16	87054-16	86072-16	1.5 to 1.8 ratio, coolface lifter option
<b>84265</b>	66900-16	68385X2-16	86767-16		For .100" long valves
<b>84265X980</b>	66900X980-16	68385X2-16	86767-16		For .100" long valves, coolface lifter option

Spring pressure:

68311X1-16 Seat: 1.750" @ 120 lbs / Nose: 1.250" @ 389 lbs / Coil bind: 1.070" (Stock O.D., no machine work).

68398-16 Seat: 1.825" @ 155 lbs / Nose: 1.325" @ 351 lbs / Coil bind: 1.080" (Machine work required, use cutter #68987).

68385X2-16 Seat: 1.900" @ 166 lbs / Nose: 1.350" @ 398 lbs / Coil bind: 1.100" (Machine work required, use cutter #68979).

Cam core configurations differ between '57-'87 and '88-'92 Chevrolet engines and cannot be interchanged.

Super 7° titanium retainers available for kit #84293-980. Specify #86754 retainer when ordering.

Super 7° keepers required for #86767-16 retainers (kit #84265 and #84265X980).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>76801</b>	Hex-A-Just timing gear set (early model block)
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>73671-16</b>	Rocker arms (1.65) 7/16
<b>73643-16</b>	Rocker arms (1.7) 7/16
<b>73674-8</b>	Long arm/Backset rocker arms (1.6) 7/16
<b>73672-8</b>	Long arm/Backset rocker arms (1.65) 7/16
<b>73673-8</b>	Long arm/Backset rocker arms (1.7) 7/16
<b>73676-8</b>	Long arm/Backset rocker arms (1.75) 7/16
<b>73675-8</b>	Long arm/Backset rocker arms (1.8) 7/16

Long Arm rockers come in 8 only pcs for intake. For exhaust use conventional Crower stainless, stud mount rocker arm.

WARNING! If running over 7500 rpm with higher rocker ratio you must contact factory for custom lobe and valve train consideration.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## 220 SERIES SOLID CAMSHAFTS (HIGH RPM)

Note: These cams use .018" intake, .020" exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.7 / 1.6		Gross Lift 1.8 / 1.7	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
262-307-327	3500	5000	7600	8100	<b>00330</b>	106°	276°	285°	242°	251°	147°	156°	.335"	.345"	.570"	.552"	.603"	.586"
305-350 cid	3200	4700	7000	7500														
383-406 cid*	2800	4300	6500	7000														
262-307-327	3600	5100	7700	8200	<b>00331</b>	106°	280°	290°	246°	255°	151°	159°	.340"	.349"	.578"	.558"	.612"	.593"
305-350 cid	3300	4800	7300	7800														
383-406 cid*	2900	4400	6600	7100														
262-307-327	3600	5100	7800	8300	<b>00332</b>	107°	285°	296°	251°	261°	156°	165°	.345"	.356"	.587"	.570"	.621"	.605"
305-350 cid	3400	4900	7400	7900														
383-406 cid*	3100	4600	6900	7400														
262-307-327	3700	5200	7900	8400	<b>00333</b>	107°	290°	300°	255°	265°	159°	170°	.349"	.362"	.593"	.579"	.628"	.615"
305-350 cid	3600	5100	7600	8100														
383-406 cid*	3200	4700	7000	7500														
262-307-327	3800	5300	8000	8400	<b>00334</b>	108°	293°	303°	259°	269°	165°	173°	.356"	.365"	.605"	.584"	.640"	.620"
305-350 cid	3700	5200	7700	8200														
383-406 cid*	3300	4800	7100	7600														
262-307-327	3900	5400	8100	8400	<b>00335</b>	108°	298°	307°	263°	273°	167°	178°	.359"	.370"	.610"	.592"	.646"	.629"
305-350 cid	3850	5350	7750	8250														
383-406 cid*	3400	4900	7150	7650														
262-307-327	4300	5800	8400	8400	<b>00336</b>	109°	301°	308°	267°	276°	171°	179°	.360"	.372"	.612"	.595"	.648"	.632"
305-350 cid	4100	5600	7900	8400														
383-406 cid*	3500	5000	7200	7700														
262-307-327	4600	6100	8400	8400	<b>00337</b>	109°	307°	314°	273°	281°	178°	186°	.370"	.381"	.629"	.610"	.666"	.647"
305-350 cid	4300	5800	8000	8400														
383-406 cid*	3800	5300	7350	7850														
262-307-327	4700	6200	8500	8500	<b>00338</b>	110°	310°	316°	276°	283°	182°	187°	.376"	.384"	.639"	.614"	.677"	.652"
305-350 cid	4350	5850	8050	8400														
383-406 cid*	3900	5400	7400	7900														
262-307-327	4800	6300	8500	8500	<b>00339</b>	110°	312°	319°	279°	285°	184°	189°	.379"	.385"	.644"	.616"	.682"	.654"
305-350 cid	4400	5900	8100	8400														
383-406 cid*	4000	5500	7500	8000														

The above cores are Pro 55. \* requires a smaller base circle for 3.750" or larger stroke cranks. Add an "S" at the end of desired cam part number (example: 00275S) if smaller base circle is desired.

Note: These cams require #66971-16 No Chamfer lifters or, if running .874" lifter bores, use #66915-16.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84309X980</b>	66971X980-16*	68385X2-16	86767-16	For .100" long valves, coolface lifter option

Spring pressure:

68385X2-16 Seat: 1.900" @ 166 lbs / Nose: 1.300" @ 422 lbs / Coil bind: 1.100" (Machine work required, use cutter #68979).

Super 7° keepers required for #86767-16 retainers.

\*.842" diameter No Chamfer Lifters

## AVAILABLE SPECIALTY CORES

Description	Size
Stock Block with Roller Bearings (Pro 55 cast material)	1.875"
Stock Rocket Block or Stock Big Block Chevrolet (Pro 55 cast material)	1.948"
Stock Rocket Block with Roller Bearings (50mm) (Pro 55 cast material)	1.968"
55mm (Hard Face 8620 steel billet only)	2.165"
Hard Face (8620 steel billet only) All bearing configuration available	Specify

To order the above cores specify #00003. For hard face cores specify #00033.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>76801</b>	Hex-A-Just timing gear set (early model block)
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>73671-16</b>	Rocker arms (1.65) 7/16
<b>73643-16</b>	Rocker arms (1.7) 7/16
<b>73674-8</b>	Long arm/Backset rocker arms (1.6) 7/16
<b>73672-8</b>	Long arm/Backset rocker arms (1.65) 7/16
<b>73673-8</b>	Long arm/Backset rocker arms (1.7) 7/16
<b>73676-8</b>	Long arm/Backset rocker arms (1.75) 7/16
<b>73675-8</b>	Long arm/Backset rocker arms (1.8) 7/16

Long Arm rockers come in 8 only pcs for intake. For exhaust use conventional Crower stainless, stud mount rocker arm.



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## ROLLER CAMSHAFTS (ORIGINAL SERIES)

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
TORQUE BEAST ROLLER / PERFORMANCE LEVEL 4 - Torque and mid-range power for drag and oval track racing. Cast steel core. RPM Power Range: 2500 to 6500 / Redline: 7000 maximum	350 400	<b>00422</b>	268R 112°	268°	277°	240°	248°	.546"	.564"	Call Crower
POWER BEAST ROLLER / PERFORMANCE LEVEL 4 - Mid-range torque with emphasis on top end horsepower. Cast steel core. RPM Power Range: 2750 to 6750 / Redline: 7000 plus.	350 400	<b>00423</b>	277R 110°	277°	285°	244°	253°	.564"	.582"	Call Crower
ULTRA BEAST ROLLER / PERFORMANCE LEVEL 5 - Intended for performance applications with emphasis on top end. Cast steel core. RPM Power Range: 3000 to 7000 / Redline: 7250 maximum	350 400	<b>00424</b>	285R 108°	285°	293°	253°	261°	.582"	.603"	Call Crower
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. 8620 steel billet. RPM Power Range: 2500 to 6500 / Redline: 7000 maximum.	350 400	<b>00425</b>	280R 112°	280°	288°	246°	248°	.554"	.567"	Call Crower
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. 8620 steel billet. RPM Power Range: 3000 to 7000 / Redline: 7500 maximum.	350 400	<b>00426</b>	288R 112°	288°	290°	250°	252°	.570"	.584"	Call Crower
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. 8620 steel billet. RPM Power Range: 3250 to 7250 / Redline: 7750 maximum.	350 400	<b>00427</b>	290R 112°	290°	296°	260°	266°	.585"	.597"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque 1/4 and 3/8 mile oval track profile. RPM Power Range: 2800 to 6800 / Redline: 7200 plus.	350 400	<b>00429</b>	276R 104°	276°	286°	248°	250°	.614"	.620"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track grind. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	350 400	<b>00430</b>	284R 105°	284°	294°	256°	260°	.626"	.627"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range torque and top end oval track profile. RPM Power Range: 3500 to 7500 / Redline: 8000 plus.	350 400	<b>00431</b>	290R 105°	290°	296°	258°	262°	.626"	.626"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 and 1/2 mile oval track grind. RPM Power Range: 4000 to 8000 / Redline: 8000 plus.	350 400	<b>00432</b>	294R 105°	294°	302°	260°	268°	.626"	.624"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Excellent big cid engine profile. Perfect for 3/8 to 1/2 mile oval. RPM Power Range: 4500 to 8000 / Redline: 8000 plus.	350 400	<b>00433</b>	297R 105°	297°	304°	264°	268°	.626"	.626"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - 1/2 mile or longer in big cid engine. Torque and mid-range for drag. RPM Power Range: 5000 to 8000 / Redline: 8000 plus.	350 400	<b>00434</b>	299R 105°	299°	308°	262°	272°	.639"	.629"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile for small motor. Excellent for big oval track motor. RPM Power Range: 5200 to 8000 / Redline: 8000 plus.	350 400	<b>00435</b>	305R 105°	305°	310°	268°	272°	.626"	.627"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Torque and mid-range power for drag and oval track racing. RPM Power Range: Varies on valve train, heads, manifold, etc...	350 400	<b>00436</b>	303R 103°	303°	312°	270°	278°	.633"	.644"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag race profile for 350 cid with automatic transmission. RPM Power Range: Varies on valve train, heads, manifold, etc...	350 cid	<b>00439</b>	316R 108°	316°	319°	282°	286°	.672"	.687"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - This cam is drag race only or modifieds with 4 or 5 speed transmission. RPM Power Range: Varies on valve train, heads, manifold, etc...	350 400	<b>00440</b>	319R 108°	319°	326°	286°	288°	.686"	.636"	Call Crower
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.		<b>00002</b>								

Note: For corresponding cam kits and accessories see CHEVROLET 350 V8 on the following page.

## ROLLER CAMSHAFTS FOR EFI, FORCED INDUCTION & NOS

Note: These cams use .018" intake, .020" exhaust valve lash.

Description / Performance Level RPM Power Range	Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.5 / 1.5		Gross Lift 1.6 / 1.5	
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
PERFORMANCE LEVEL 4 Great 9:1, 355 cid, mid-range. RPM: 3000 to 7000 max	<b>00550*</b>	114°	280°	288°	247°	255°	159°	167°	.365"	.382"	.548"	.573"	.584"	.573"
PERFORMANCE LEVEL 4 High stall, heavy car, low gears. RPM: 3500 to 7500 max	<b>00551*</b>	114°	282°	290°	248°	254°	163°	171°	.373"	.391"	.560"	.587"	.597"	.587"
PERFORMANCE LEVEL 4 Strip Special - Easy on train. Excellent with 1.6 rockers (int).	<b>00552*</b>	114°	290°	296°	254°	262°	171°	177°	.391"	.408"	.587"	.612"	.626"	.612"
PERFORMANCE LEVEL 5 Super Stock & Bracket classes. High rocker ratio recommended.	<b>00553*</b>	114°	296°	306°	262°	270°	177°	186°	.408"	.425"	.612"	.638"	.653"	.638"
PERFORMANCE LEVEL 5 2 carbs, high stall or 4-speed. Awesome top end cam!	<b>00554*</b>	114°	306°	314°	270°	278°	186°	194°	.425"	.442"	.638"	.663"	.680"	.663"
PERFORMANCE LEVEL 5 Big engine, injected/carb, comp. RPM: 5500 to 8500 max	<b>00555*</b>	114°	314°	322°	278°	284°	194°	201°	.442"	.459"	.663"	.689"	.707"	.689"
PERFORMANCE LEVEL 5 Major top end power. RPM: 5600 to 8500 rpm max	<b>00556*</b>	114°	325°	332°	284°	292°	201°	210°	.459"	.475"	.689"	.713"	.734"	.713"

\*Indicates spec change from previous listings. The above cores are 8620 steel billet. Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84420</b>	66200-16	68385X2-16	87055-16	86072-16	Stock length valves (.650" max lift), 10° keeper
<b>84425</b>	66200-16	68705-16	86767-16*	86072-16	.100"+ long valve (.750" max lift), Super 7° keeper
<b>84430</b>	66200-16	68804-16	86781-16*	86072-16	.100"+ long valve. Limited street. Super 7° keeper

Spring pressure:

68385X2-16 Seat: 1.850" @ 187 lbs / Nose: 1.250" @ 445 lbs / Coil bind: 1.100" (1.525" O.D.)

68705-16 Seat: 1.950" @ 160 lbs / Nose: 1.250" @ 511 lbs / Coil bind: 1.125" (1.530" O.D.)

68804-16 Seat: 1.950" @ 235 lbs / Nose: 1.250" @ 582 lbs / Coil bind: 1.100" (1.550" O.D.)

\*86781-16 and 86767-16 retainers require Super 7° keepers. Titanium valves required to achieve high rpm.

Due to the wide variety of valve train combinations (i.e. lifter bore diameters, offsets, valve lengths, installed heights, etc...), we highly recommend that you contact Crower for your specific valve train needs.

Note: When ordering a .930" - .950" base circle cams for 3.750" or larger stroker cranks, add an "S" at the end of the part number. Example: 00432S. For strokes of 3.900" or larger contact Crower for .850" base circle camshafts.

HIGH RPM! With today's high engine rpm and increased rocker ratios, valve train life is extremely critical. Increased spring pressures are mandatory for insuring reliable valve train life. Contact Crower's technical assistance department for proper high rpm recommendations.

INTEGRAL CAST IRON GEAR OPTION: Premium 8620 steel billet, copper plated cam cores with integral cast iron cam gear are available from Crower on a special order basis (specify part number 00050). Crower highly recommends using the factory stock cast iron distributor gear for extended cam and distributor gear life.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
<b>66200-16</b>	Standard .842" dia roller lifters. Others available.
<b>66292-16</b>	Offset .842" dia roller lifters
	Pushrods. Refer to pushrod section.
<b>76801</b>	Hex-A-Just timing gear set (early model block)
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>73671-16</b>	Rocker arms (1.65) 7/16
<b>73643-16</b>	Rocker arms (1.7) 7/16
<b>73674-8</b>	Long arm/Backset rocker arms (1.6) 7/16
<b>73672-8</b>	Long arm/Backset rocker arms (1.65) 7/16
<b>73673-8</b>	Long arm/Backset rocker arms (1.7) 7/16
<b>73676-8</b>	Long arm/Backset rocker arms (1.75) 7/16
<b>73675-8</b>	Long arm/Backset rocker arms (1.8) 7/16

Long Arm rockers come in 8 only pcs for intake. For exhaust use conventional Crower stainless, stud mount rocker arm.

WARNING! If running over 7500 rpm with higher rocker ratio you must contact factory for custom lobe and valve train consideration.

Specify "H" after part number for Hippo Oiling feature on roller lifters.

Ex. 66290X874H-16

Shaft Rockers are available. Refer to the new section under Valve Train.



# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## 390 SERIES LOW ROCKER RATIO ROLLER CAMSHAFTS (LIMITED RPM)

Note: These cams use .016" intake, .018" exhaust valve lash.

C.I.D. Group	Low RPM	RPM Range		Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.5 / 1.5		Gross Lift 1.6 / 1.55		
		Peak Torque	Peak HP			Top RPM	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
262-307-327	3300	4800	7500	8000	<b>00501</b>	110°	280°	291°	250°	257°	174°	169°	.410"	.391"	.615"	.587"	.656"	.606"
305-350 cid	3200	4700	7000	7500														
383-406 cid	2900	4400	6600	7100														
262-307-327	3400	4900	7600	8100	<b>00502</b>	108°	284°	295°	255°	262°	179°	173°	.421"	.400"	.631"	.601"	.674"	.622"
305-350 cid	3300	4800	7300	7800														
383-406 cid	3000	4500	6800	7300														
262-307-327	3700	5200	7800	8300	<b>00503</b>	108°	289°	299°	260°	264°	183°	178°	.429"	.408"	.643"	.612"	.686"	.632"
305-350 cid	3500	5000	7600	8100														
383-406 cid	3100	4600	7000	7500														
262-307-327	3800	5300	7900	8400	<b>00504</b>	106°	294°	302°	265°	269°	187°	181°	.438"	.417"	.657"	.626"	.701"	.646"
305-350 cid	3600	5100	7700	8200														
383-406 cid	3200	4700	7100	7600														
262-307-327	3900	5400	8000	8500	<b>00505</b>	105°	299°	306°	268°	273°	191°	185°	.446"	.424"	.669"	.636"	.714"	.657"
305-350 cid	3800	5300	7800	8300														
383-406 cid	3400	4900	7200	7700														
262-307-327	4000	5500	8100	8600	<b>00506</b>	105°	302°	312°	271°	278°	194°	190°	.454"	.434"	.681"	.652"	.726"	.672"
305-350 cid	3900	5400	7900	8400														
383-406 cid	3400	4900	7300	7800														
262-307-327	4200	5700	8200	8700	<b>00507</b>	106°	306°	317°	276°	282°	198°	194°	.460"	.442"	.690"	.663"	.736"	.685"
305-350 cid	4000	5500	8000	8500														
383-406 cid	3500	5000	7400	7900														

The above cores are 8620 steel billet. Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84430</b>	66200-16	68804-16	86781-16*	86072-16	.100"+ long valve. Up to .700" lift
<b>84431</b>	66200-16	68805-16	86780-16*	86072-16	.100"+ long valve. High rpm.
<b>84432</b>	66200-16	68806-16	86780-16*	86072-16	.100"+ long valve. High pressure.

Spring pressure:

68804-16 Seat: 1.950" @ 235 lbs / Nose: 1.250" @ 582 lbs / Coil bind: 1.100" (1.550" O.D.)

68805-16 Seat: 2.000" @ 280 lbs / Nose: 1.300" @ 663 lbs / Coil bind: 1.180" (1.600" O.D.)

68806-16 Seat: 2.050" @ 255 lbs / Nose: 1.300" @ 696 lbs / Coil bind: 1.160" (1.600" O.D.)

\*86780 and 86781 retainers require Super 7° keepers. Titanium valves required to achieve high rpm.

Due to the wide variety of valve train combinations (i.e. lifter bore diameters, offsets, valve lengths, installed heights, etc...), we highly recommend that you contact Crower for your specific valve train needs.

Note: When ordering a .930" - .950" base circle cams for 3.750" or larger stroker cranks, add an "S" at the end of the part number. Example: 00432S. For strokes of 3.900" or larger contact Crower for .850" base circle camshafts.

HIGH RPM! With today's high engine rpm and increased rocker ratios, valve train life is extremely critical. Increased spring pressures are mandatory for insuring reliable valve train life. Contact Crower's technical assistance department for proper high rpm recommendations.

INTEGRAL CAST IRON GEAR OPTION: Premium 8620 steel billet, copper plated cam cores with integral cast iron cam gear are available from Crower on a special order basis (specify part number 00050). Crower highly recommends using the factory stock cast iron distributor gear for extended cam and distributor gear life.

## AVAILABLE CAM JOURNAL SIZES

Description	Size
Stock Small Block Chevrolet	1.868"
Stock Block with Roller Bearings	1.875"
Stock Rocket Block or Stock Big Block Chevrolet	1.948"
Stock Rocket Block with Roller Bearings (50mm)	1.968"
55mm	2.165"

To order the above cores specify #00003. Special firing orders available (1-8-7-3-6-5-4-2). Use #00060.

55mm is available on special order basis only. Use #00060.

## ACCESSORIES

Part No.	Description
<b>66200-16</b>	Standard .842" dia roller lifters. Others available.
<b>66292-16</b>	Offset .842" dia roller lifters
	Pushrods. Refer to pushrod section.
<b>76801</b>	Hex-A-Just timing gear set (early model block)
<b>73601-16</b>	Rocker arms (1.5) 7/16
<b>73641-16</b>	Rocker arms (1.6) 7/16
<b>73671-16</b>	Rocker arms (1.65) 7/16
<b>73643-16</b>	Rocker arms (1.7) 7/16
<b>73674-8</b>	Long arm/Backset rocker arms (1.6) 7/16
<b>73672-8</b>	Long arm/Backset rocker arms (1.65) 7/16
<b>73673-8</b>	Long arm/Backset rocker arms (1.7) 7/16
<b>73676-8</b>	Long arm/Backset rocker arms (1.75) 7/16
<b>73675-8</b>	Long arm/Backset rocker arms (1.8) 7/16

Long Arm rockers come in 8 only pcs for intake. For exhaust use conventional Crower stainless, stud mount rocker arm.

WARNING! If running over 7500 rpm with higher rocker ratio you must contact factory for custom lobe and valve train consideration.

Specify "H" after part number for Hippo Oiling feature on roller lifters.

Ex. 66290X874H-16

Shaft Rockers are available. Refer to the new section under Valve Train.

# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## 310 SERIES OVAL TRACK ROLLER CAMSHAFTS (8500 MAX RPM / TIGHT LASH)

Note: These cams use .012" intake, .018" exhaust valve lash.

C.I.D. Group	Low RPM	RPM Range		Top RPM	Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.7 / 1.6		Gross Lift 1.8 / 1.7	
		Peak Torque	Peak HP				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
307-327 cid	3600	5100	7500	8000	<b>00510*</b>	106°	277°	292°	248°	258°	164°	163°	.377"	.368"	.641"	.589"	.678"	.625"
305-350 cid	3400	4900	7300	7800														
383-406 cid	3000	4500	6900	7400														
307-327 cid	3800	5300	7600	8100	<b>00511*</b>	106°	283°	297°	254°	264°	173°	175°	.393"	.406"	.668"	.650"	.707"	.690"
305-350 cid	3700	5200	7700	8200														
383-406 cid	3200	4700	7100	7600														
307-327 cid	3900	5400	7900	8400	<b>00512*</b>	107°	289°	301°	260°	268°	180°	179°	.408"	.415"	.694"	.664"	.734"	.705"
305-350 cid	3800	5300	7800	8300														
383-406 cid	3400	4900	7300	7800														
307-327 cid	4000	5500	8000	8500	<b>00513*</b>	107°	293°	307°	264°	274°	184°	185°	.418"	.430"	.711"	.688"	.752"	.731"
305-350 cid	3900	5400	7900	8400														
383-406 cid	3600	5100	7400	7900														
307-327 cid	4100	5600	8450	8550	<b>00514*</b>	108°	297°	311°	268°	278°	187°	190°	.430"	.437"	.731"	.699"	.774"	.742"
305-350 cid	4000	5500	7950	8450														
383-406 cid	3700	5200	7500	8000														
307-327 cid	4300	5800	8100	8600	<b>00515*</b>	108°	303°	315°	274°	282°	193°	194°	.445"	.445"	.757"	.712"	.801"	.756"
305-350 cid	4200	5700	8000	8500														
383-406 cid	3800	5300	7600	8100														

\*Indicates the above cams come in Standard 18° head and block. Specify bearing size also (i.e. 50mm). Note: Cam specs will vary depending on bearing size.

For SB2 head and Standard block, specify "SS" after desired part number. Specify bearing size also (i.e. 50mm).

For SB2 head and SB2 block, specify "SB2" after desired part number. Specify bearing size also (i.e. 50mm).

The above cores are 8620 steel billet. Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84430</b>	66200-16	68804-16	86781-16*	86072-16	.100"+ long valve. Up to .700" lift
<b>84431</b>	66200-16	68805-16	86780-16*	86072-16	.100"+ long valve. High rpm.
<b>84432</b>	66200-16	68806-16	86780-16*	86072-16	.100"+ long valve. High pressure.

Spring pressure:

68804-16 Seat: 1.950" @ 235 lbs / Nose: 1.250" @ 582 lbs / Coil bind: 1.100" (1.550" O.D.)

68805-16 Seat: 2.000" @ 280 lbs / Nose: 1.300" @ 663 lbs / Coil bind: 1.180" (1.600" O.D.)

68806-16 Seat: 2.050" @ 255 lbs / Nose: 1.300" @ 696 lbs / Coil bind: 1.160" (1.600" O.D.)

\*86780 and \*86781 retainers require Super 7° keepers. Titanium valves required to achieve high rpm.

Due to the wide variety of valve train combinations (i.e. lifter bore diameters, offsets, valve lengths, installed heights, etc...), we highly recommend that you contact Crower for your specific valve train needs.

Note: When ordering a .930" - .950" base circle cams for 3.750" or larger stroker cranks, add an "S" at the end of the part number. Example: 00432S. For strokes of 3.900" or larger contact Crower for .850" base circle camshafts.

HIGH RPM! With today's high engine rpm and increased rocker ratios, valve train life is extremely critical. Increased spring pressures are mandatory for insuring reliable valve train life. Contact Crower's technical assistance department for proper high rpm recommendations.

INTEGRAL CAST IRON GEAR OPTION: Premium 8620 steel billet, copper plated cam cores with integral cast iron cam gear are available from Crower on a special order basis (specify part number 00050). Crower highly recommends using the factory stock cast iron distributor gear for extended cam and distributor gear life.

## AVAILABLE CAM JOURNAL SIZES

Description	Size
Stock Small Block Chevrolet	1.868"
Stock Block with Roller Bearings	1.875"
Stock Rocket Block or Stock Big Block Chevrolet	1.948"
Stock Rocket Block with Roller Bearings (50mm)	1.968"
55mm	2.165"

To order the above cores specify #00003. Special firing orders available (1-8-7-3-6-5-4-2). Use #00060. 55mm is available on special order basis only. Use #00060.

## ACCESSORIES

Part No.	Description
<b>66290-16</b>	.842" dia roller lifters. No offset.
<b>66290X874-16</b>	.874" dia roller lifters. No offset.
<b>66290X903-16</b>	.903" dia roller lifters. No offset.
<b>66292-16</b>	.842" dia roller lifters. Intake Offset (.180").
<b>66292X874-16</b>	.874" dia roller lifters. Intake Offset (.180").
<b>66292X903-16</b>	.903" dia roller lifters. Intake Offset (.180").
<b>66296-16</b>	.842" dia roller lifters. Specify Offset.
<b>66296X874-16</b>	.874" dia roller lifters. Specify Offset.
<b>66296X903-16</b>	.903" dia roller lifters. Specify Offset.
<b>66282-16</b>	SB2/Std .842" dia roller lifters. Int/Exh Offset.
<b>66282X874-16</b>	SB2/Std .874" dia roller lifters. Int/Exh Offset.
<b>66282X903-16</b>	SB2/Std .903" dia roller lifters. Int/Exh Offset.
<b>66283-16</b>	SB2/SB2 .842" dia roller lifters. All Center.
<b>66283X874-16</b>	SB2/SB2 .874" dia roller lifters. All Center.
<b>66283X903-16</b>	SB2/SB2 .903" dia roller lifters. All Center.

Specify "H" after part number for Hippo Diling feature on roller lifters.

Ex. 66290X874H-16



# Chevrolet

262 267 283 302 305 307 327 350 400 V8 Small Block

## 230 SERIES ROLLER CAMSHAFTS (HIGH RPM FOR BUSCH / TRUCK / ARCA)

Note: These cams use .018" intake, .020" exhaust valve lash.

C.I.D. Group	RPM Range			Part Number	Lobe Center	Advised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.8 / 1.7		Gross Lift 1.9 / 1.8	
	Low RPM	Peak Torque	Peak HP			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
307-327 cid	3800	5300	8000	<b>00520*</b>	108°	285°	294°	252°	260°	162°	167°	.380"	.374"	.684"	.635"	.722"	.673"
305-350 cid	3500	5000	7800														
383-406 cid	3200	4700	7600														
307-327 cid	4000	5500	8200	<b>00521*</b>	108°	289°	299°	256°	265°	166°	172°	.388"	.383"	.698"	.651"	.737"	.689"
305-350 cid	3600	5100	8000														
383-406 cid	3200	4700	7800														
307-327 cid	4100	5600	8300	<b>00522*</b>	108°	293°	304°	260°	270°	170°	177°	.397"	.393"	.714"	.668"	.754"	.707"
305-350 cid	3800	5300	8100														
383-406 cid	3400	4900	7900														
307-327 cid	4200	5700	8400	<b>00523*</b>	108°	295°	307°	262°	273°	173°	181°	.402"	.402"	.724"	.683"	.764"	.723"
305-350 cid	3900	5400	8200														
383-406 cid	3400	4900	8000														
307-327 cid	4300	5800	8500	<b>00524*</b>	108°	297°	310°	264°	276°	175°	183°	.406"	.406"	.731"	.690"	.771"	.730"
305-350 cid	4000	5500	8300														
383-406 cid	3500	5000	8100														
307-327 cid	4500	6000	8700	<b>00525*</b>	108°	301°	313°	268°	279°	179°	188°	.415"	.412"	.747"	.700"	.788"	.741"
305-350 cid	4100	5600	8500														
383-406 cid	3600	5100	8100														
307-327 cid	4500	6000	8800	<b>00526*</b>	108°	305°	313°	272°	279°	183°	188°	.424"	.412"	.763"	.721"	-	-
305-350 cid	4200	5700	8600														
383-406 cid	3800	5300	8400														
307-327 cid	4800	6300	8900	<b>00527*</b>	108°	311°	321°	278°	287°	190°	195°	.437"	.428"	.786"	.727"	-	-
305-350 cid	4400	5900	8700														
383-406 cid	4000	5500	8500														
307-327 cid	4900	6400	9000	<b>00528*</b>	108°	315°	323°	282°	291°	194°	199°	.445"	.428"	.801"	.727"	-	-
305-350 cid	4500	6000	8800														
383-406 cid	4100	5600	8600														

\* indicates the above cams come in Standard 18° head and block. Specify bearing size also (i.e. 50mm). Note: Cam specs will vary depending on bearing size.

For SB2 head and Standard block, specify "SS" after desired part number. Specify bearing size also (i.e. 50mm).

For SB2 head and SB2 block, specify "SB2" after desired part number. Specify bearing size also (i.e. 50mm).

The above cores are 8620 steel billet. Small base circle cams available for 383 and 406. Specify "S" after part number when ordering.

## ENGINEERED COMPONENT KITS

### Description

Due to the wide variety of valve train combinations (i.e. lifter bore diameters, offsets, valve lengths, installed heights, etc...), we highly recommend that you contact Crower for your valve train needs.

Spring pressure:

68804-16	Seat: 1.950" @ 235 lbs / Nose: 1.250" @ 582 lbs / Coil bind: 1.100" (1.550" O.D.)
68805-16	Seat: 2.000" @ 280 lbs / Nose: 1.300" @ 663 lbs / Coil bind: 1.180" (1.600" O.D.)
68806-16	Seat: 2.050" @ 255 lbs / Nose: 1.300" @ 696 lbs / Coil bind: 1.160" (1.600" O.D.)

## AVAILABLE CAM JOURNAL SIZES

### Description

### Size

Stock Small Block Chevrolet	1.868"
Stock Block with Roller Bearings	1.875"
Stock Rocket Block or Stock Big Block Chevrolet	1.948"
Stock Rocket Block with Roller Bearings (50mm)	1.968"
55mm	2.165"

To order the above cores specify #00003. Special firing orders available (1-8-7-3-6-5-4-2 or 1-8-7-2-6-5-4-3). Use #00060.

55mm is available on special order basis only. Use #00060.

## ACCESSORIES

### Part No.

### Description

<b>66290-16</b>	.842" dia roller lifters. No offset.
<b>66290X874-16</b>	.874" dia roller lifters. No offset.
<b>66290X903-16</b>	.903" dia roller lifters. No offset.
<b>66292-16</b>	.842" dia roller lifters. Intake Offset (.180").
<b>66292X874-16</b>	.874" dia roller lifters. Intake Offset (.180").
<b>66292X903-16</b>	.903" dia roller lifters. Intake Offset (.180").
<b>66296-16</b>	.842" dia roller lifters. Specify Offset.
<b>66296X874-16</b>	.874" dia roller lifters. Specify Offset.
<b>66296X903-16</b>	.903" dia roller lifters. Specify Offset.
<b>66282-16</b>	SB2/Std .842" dia roller lifters. Int/Exh Offset.
<b>66282X874-16</b>	SB2/Std .874" dia roller lifters. Int/Exh Offset.
<b>66282X903-16</b>	SB2/Std .903" dia roller lifters. Int/Exh Offset.
<b>66283-16</b>	SB2/SB2 .842" dia roller lifters. All Center.
<b>66283X874-16</b>	SB2/SB2 .874" dia roller lifters. All Center.
<b>66283X903-16</b>	SB2/SB2 .903" dia roller lifters. All Center.

Specify "H" after part number for Hippo Oiling feature on roller lifters.

Ex. 66290X874H-16



## BEAST HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE BEAST / PERFORMANCE LEVEL 1 - Smooth idle, fuel efficient design. Exceeds factory replacement cam. Economical price. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	396 454	<b>01902</b>	248H 112°	248°	252°	192°	198°	.447"	.454"	84003
TORQUE BEAST / PERFORMANCE LEVEL 2 - Strong bottom end power. Excellent for trucks and heavy cars. Economical price. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	396 454	<b>01903</b>	282H 112°	282°	292°	204°	214°	.478"	.503"	84003
BAJA BEAST / PERFORMANCE LEVEL 3 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1500 to 4500 / Redline: 5500 plus.	396 454	<b>01915</b>	268H 112°	268°	274°	210°	216°	.478"	.481"	84001
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top-end power. Healthy sound. Economical price. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	396 454	<b>01904</b>	292H 112°	292°	302°	214°	224°	.503"	.529"	84001 or 84103
HOT STREET BEAST / PERFORMANCE LEVEL 4 - Upper mid-range to top end power. High stall convertor or 4-speed. Economical price. RPM Power Range: 2500 to 5800 / Redline: 6500 plus.	396 454	<b>01101</b>	278H 112°	278°	284°	220°	228°	.515"	.530"	84103

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84003</b>	66000-16	68140-16	87063-16		For rpm up to 5000 max. Daily street use.
<b>84001</b>	66000-16	68302X1-16	87063-16		For rpm up to 6000 max. Limited street use.
<b>84103</b>	66000-16	68340-16	87063-16	86071-16	For rpm over 6500 plus. Limited street use.

Spring pressure:

68140-16 Seat: 1.875" @ 96 lbs / Nose: 1.300" @ 242 lbs / Coil bind: 1.100" (Stock O.D., no machine work).

68302X1-16 Seat: 1.875" @ 84 lbs / Nose: 1.300" @ 270 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 118 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

For severe-duty applications, Crower recommends running the high-lube "CamSaver" lifter that channels more oil to the cam/lifter surface (#66000X3-16).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## CROWER CAM BREAK-IN PROCEDURE

This applies to all hydraulic and solid lifter camshafts using higher than stock spring pressure:

- Do not use block restrictors in the oil galleys. This severely limits oil flow to the cam, lifters and overhead.
- Break-in cam and lifters with low pressure springs only. Do not exceed 225 to 250 lbs open pressure.
- During break-in run engine for 35 to 45 minutes and vary rpm from 2000 to 3000.
- Recommend adding Engine Oil Supplement (EOS) or equivalent to fortify oil. Use Crower #86084.
- For break-in procedure only, Crower recommends 10W/30 motor oil. Heavier weight oils do not cold flow.
- Do not use synthetic oils during break-in period.
- For further information, please refer to the Crower Installation booklet that accompanies the camshaft.

## ACCESSORIES

Part No.	Description
<b>66000X3-16</b>	CamSaver lifter option Pushrods
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit



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## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams are designed to enhance throttle response and low-end torque in vans, trucks and passenger cars while delivering fuel efficient motoring. High vacuum, smooth idle and maximum fuel efficiency are characteristic to these profiles. Stock or small cfm carburetor, small diameter tube headers, dual exhaust, and ignition rework are recommended for maximum benefit. Intended for low compression engines operating in the "economy zone." RPM Power Range: Idle to 3500-3700 / Redline: 4500 plus.	396 cid	<b>01237</b>	246HDP 112°	246°	253°	184°	192°	.425"	.445"	84003
	402 427	<b>01238</b>	250HDP 112°	250°	258°	192°	194°	.445"	.452"	84003
	454 cid	<b>01239</b>	260HDP 112°	260°	266°	202°	210°	.471"	.476"	84003
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - These cams provide excellent low end and mid-range power and extended rpm range for spirited street and off-road driving. A perfect combination of mileage and power. Modifications should include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increase in compression ratio to 9.5:1 is recommended for maximum output. Works well with automatic transmission or 4-speed. RPM Power Range: 1300-1500 to 4000-4200 / Redline: 5500 plus.	396 cid	<b>01239</b>	260HDP 112°	260°	266°	202°	210°	.471"	.476"	84003
	402 427	<b>01240</b>	270HDP 112°	270°	272°	210°	216°	.493"	.508"	84003 or 84001
	454 cid	<b>01241</b>	276HDP 112°	276°	278°	214°	218°	.518"	.520"	84003 or 84001
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the performance oriented hot street application. These cams offer an extended rpm range with emphasis on upper bottom to top end power (strong mid-range). Performance gears, headers, dual exhaust, larger than stock cfm carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Works well with automatic transmission if matched with proper ring and pinion gears and/or high stall converter. RPM Power Range: 1600-1800 to 4500-4800 / Redline: 6000 plus.	396 cid	<b>01241</b>	276HDP 112°	276°	278°	214°	218°	.518"	.520"	84003 or 84001
	402 427	<b>01242</b>	280HDP 112°	280°	286°	218°	226°	.522"	.527"	84001
	454 cid	<b>01243</b>	284HDP 112°	284°	290°	224°	232°	.542"	.517"	84001 or 84103
ULTRA-PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - The following grinds are best suited for dual purpose hot street/drag strip situations. These cams exhibit strong mid-range and top end torque and horsepower. Headers, dual exhaust, larger cfm carburetor, performance ignition and 11:1 compression are a must. Cylinder head modifications would be beneficial. Use with standard transmission or automatic with high stall converter. Low gearing a must. RPM Power Range: 2000-2200 to 6000-6200 / Redline: 6500 plus.	396 cid	<b>01243</b>	284HDP 112°	284°	290°	224°	232°	.542"	.517"	84103
	402 427	<b>01244</b>	290HDP 112°	290°	298°	232°	244°	.562"	.571"	84103
	454 cid	<b>01245</b>	311HDP 112°	311°	316°	246°	250°	.578"	.593"	84103
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Lope at idle. Hot street/drag cam with strong mid-range power. RPM Power Range: 2000-2400 to 6000-6200 / Redline: 6500 plus.	396 427	<b>01205</b>	280HDP 108°	280°	288°	220°	232°	.529"	.527"	84103
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Lope at idle. Hot street/drag cam with strong mid-range power. RPM Power Range: 2000-2400 to 6000-6200 / Redline: 6500 plus.	454 cid	<b>01206</b>	290HDP 108°	290°	302°	232°	242°	.525"	.537"	84103
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Explosive mid-range torque. RPM Power Range: 3000-3400 to 6500 / Redline: 6700 plus.	396 427	<b>01207</b>	296HDP 108°	296°	306°	238°	244°	.532"	.530"	84103
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Explosive mid-range torque. RPM Power Range: 3000-3400 to 6600 / Redline: 6800 plus.	454 cid	<b>01208</b>	306HDP 108°	306°	314°	246°	252°	.535"	.535"	84103
TURBOMASTER 1 - This cam provides excellent low end and mid-range power with mild boost (6 to 12 lbs). RPM Power Range: 1800 to 5000 / Redline: 6000 plus.	396 427	<b>01978</b>	278HT 114°	278°	260°	214°	200°	.493"	.456"	84001

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)



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## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
TURBOMASTER 2 - For more boost (12 lbs plus) and higher rpm, this cam will extend your mid-range and top end power. RPM Power Range: 2200 to 6000 / Redline: 6250 plus.	454 cid	<b>01979</b>	290HT 114°	290°	280°	226°	212°	.510"	.490"	84001
SUPERCHARGER 1 - Excellent low and mid-range torque with moderate boost levels (5 to 10 lbs), this cam romps. RPM Power Range: 2400 to 6000 / Redline: 6000 plus.	396 427	<b>01980</b>	288HC 114°	288°	288°	228°	228°	.496"	.496"	84001 or 84103
SUPERCHARGER 2 - A very healthy blower cam for increased boost (10 lbs plus) and higher rpm's. RPM Power Range: 2800 to 6500 / Redline: 6500 plus.	454 cid	<b>01981</b>	304HC 114°	304°	304°	246°	246°	.536"	.536"	84001 or 84103
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84003</b>	66000-16	68140-16	87063-16		For rpm up to 5000 max. Daily street use.
<b>84001</b>	66000-16	68302X1-16	87063-16		For rpm up to 6000 max. Limited street use.
<b>84103</b>	66000-16	68340-16	87063-16	86071-16	For rpm over 6500 plus. Limited street use.

### Spring pressure:

68140-16 Seat: 1.875" @ 96 lbs / Nose: 1.300" @ 242 lbs / Coil bind: 1.100" (Stock O.D., no machine work).

68302X1-16 Seat: 1.875" @ 84 lbs / Nose: 1.300" @ 270 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 118 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

Note: If engine is equipped with exhaust valve rotators see rotation eliminator cups.

Note: For proper oiling on 1965 and 1966 engines, rear cam bearing must be grooved. Specify when ordering cam.

Note: Two-gear drives and reverse engine rotation camshafts are available on a special order basis.

BE SMART! Crower performance camshafts feature high lift, fast action features that can cause stock or other aftermarket valve train components to fail. Be sure to use a Crower engineered kit to avoid possible damage.

For severe duty applications, Crower offers a high-lube "CamSaver" lifter that channels more oil to the cam lobe and lifter surface. Specify lifter 66000X3-16 when ordering corresponding component kit.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050"). Do not exceed .550" gross lift using stock rocker arms.

Note: Early 348-409 cid 1958-1965 cam cores are available from Crower on a special order basis.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit

IMPORTANT! Stock big block Chevrolet single springs are designed for cams with approximately .400" lift. When stock valve springs are used with performance cams over .470" lift, coil bind and retainer to valve guide interference will occur.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



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## 390 SERIES HYDRAULIC CAMSHAFTS (BALL NOSE)

Note: These cams use .000" intake, .000" exhaust valve lash.

Description	RPM Power Range			Part Number	Lobe Center	Advised Duration @ .006"		Duration @ .050"		Duration @ .200"		Gross Lift 1.7 / 1.7			
	Low	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust		
PERFORMANCE LEVEL 1 Good stock replacement for mileage/performance. Idle similar to factory.	396 cid / 1900	5000	5500 rpm	<b>01290</b>	114°	262°	272°	204°	214°	109°	119°	.273"	.285"	.464"	.485"
427 cid / 1800	4900	5400 rpm													
454 cid / 1550	4600	5100 rpm													
502 cid / 1550	4350	4850 rpm													
PERFORMANCE LEVEL 1 Strong torque throughout power band, excellent mileage and smooth idle.	396 cid / 2000	5200	5700 rpm	<b>01291</b>	114°	266°	278°	209°	221°	114°	129°	.279"	.297"	.474"	.505"
427 cid / 1900	5100	5600 rpm													
454 cid / 1700	4800	5200 rpm													
502 cid / 1700	4500	5000 rpm													
PERFORMANCE LEVEL 2 Good performance street camshaft with bottom end power.	396 cid / 2200	5400	5900 rpm	<b>01292</b>	112°	272°	286°	214°	225°	119°	133°	.285"	.303"	.485"	.515"
427 cid / 2100	5300	5800 rpm													
454 cid / 1900	5000	5500 rpm													
502 cid / 1850	4650	5150 rpm													
PERFORMANCE LEVEL 2 Works well in big cubic inch engines. Mild performance and towing.	396 cid / 2300	5500	6000 rpm	<b>01293</b>	112°	278°	294°	221°	233°	129°	142°	.297"	.315"	.505"	.536"
427 cid / 2200	5400	5900 rpm													
454 cid / 2000	5100	5600 rpm													
502 cid / 1900	4700	5200 rpm													
PERFORMANCE LEVEL 3 Fair idle, excellent mid-range horsepower. Moderate performance.	396 cid / 2400	5600	6100 rpm	<b>01294</b>	112°	286°	294°	225°	233°	133°	142°	.303"	.315"	.515"	.536"
427 cid / 2300	5500	6000 rpm													
454 cid / 2100	5200	5700 rpm													
502 cid / 2000	4900	5400 rpm													
PERFORMANCE LEVEL 3 Good for street machine. Likes headers and aftermarket intake.	396 cid / 2500	5700	6200 rpm	<b>01295</b>	110°	289°	301°	229°	237°	138°	146°	.309"	.320"	.525"	.545"
427 cid / 2400	5600	6100 rpm													
454 cid / 2200	5300	5800 rpm													
502 cid / 2100	5000	5500 rpm													
PERFORMANCE LEVEL 3 performance usage with good mid-range and upper rpm torque and power.	396 cid / 2600	5800	6300 rpm	<b>01296</b>	110°	294°	304°	233°	240°	142°	150°	.315"	.327"	.535"	.557"
427 cid / 2600	5700	6200 rpm													
454 cid / 2400	5500	6000 rpm													
502 cid / 2400	5100	5600 rpm													
PERFORMANCE LEVEL 4 Rough idle, brutal mid-range torque and horsepower. Modifications required.	396 cid / 2700	5900	6400 rpm	<b>01297</b>	108°	304°	311°	240°	248°	150°	158°	.327"	.340"	.557"	.578"
427 cid / 2650	5850	6350 rpm													
454 cid / 2500	5600	6100 rpm													
502 cid / 2500	5200	5700 rpm													
PERFORMANCE LEVEL 4 Rough idle, explosive mid-range to top end horsepower. Modifications required.	396 cid / 3000	6000	6500 rpm	<b>01298</b>	108°	311°	312°	248°	256°	158°	163°	.340"	.360"	.578"	.612"
427 cid / 2900	5900	6400 rpm													
454 cid / 2800	5800	6300 rpm													
502 cid / 2800	5500	6000 rpm													

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84003</b>	66000-16	68140-16	87063-16		For rpm up to 5000 max. Daily street use.
<b>84001</b>	66000-16	68302X1-16	87063-16		For rpm up to 6000 max. Limited street use.
<b>84103</b>	66000-16	68340-16	87063-16	86071-16	For rpm over 6500 plus. Limited street use.

Spring pressure:

68140-16 Seat: 1.875" @ 96 lbs / Nose: 1.300" @ 242 lbs / Coil bind: 1.100" (Stock O.D., no machine work).

68302X1-16 Seat: 1.875" @ 84 lbs / Nose: 1.300" @ 270 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 118 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

Note: If engine is equipped with exhaust valve rotators see rotation eliminator cups.

Note: For proper oiling on 1965 and 1966 engines, rear cam bearing must be grooved. Specify when ordering cam.

Note: Two-gear drives and reverse engine rotation camshafts are available on a special order basis.

For severe duty applications, Crower offers a high-lube "CamSaver" lifter that channels more oil to the cam lobe and lifter surface. Specify lifter 66000X3-16 when ordering corresponding component kit.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050"). Do not exceed .550" gross lift using stock rocker arms.

Note: Early 348-409 cid 1958-1965 cam cores are available from Crower on a special order basis.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit

IMPORTANT! Stock big block Chevrolet single springs are designed for cams with approximately .400" lift. When stock valve springs are used with performance cams over .470" lift, coil bind and retainer to valve guide interference will occur.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



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## HYDRAULIC ROLLER CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Gross Lift 1.7 / 1.7		Recommended Component Kit
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
396 cid	2050	3250	4500	5000	<b>01400</b>	205HR213 112°	264°	272°	205°	213°	110°	120°	.488"	.512"	84551
402 cid	2050	3250	4500	5000	Early model										
427 cid	1900	3150	4400	4900											
454 cid	1750	2875	4125	4500	<b>01400LM</b>										
502 cid	1700	2750	3950	4250	LM is step nose										
396 cid	2250	3450	5000	5500	<b>01401</b>	213HR222 112°	276°	282°	213°	222°	120°	128°	.512"	.540"	84551
402 cid	2250	3450	5000	5500	Early model										
427 cid	2150	3345	4900	5400											
454 cid	1950	3145	4700	5200	<b>01401LM</b>										
502 cid	1850	3045	4600	5100	LM is step nose										
396 cid	2500	3700	5300	5800	<b>01402</b>	222HR229 110°	278°	286°	222°	229°	128°	137°	.540"	.563"	84551
402 cid	2500	3700	5300	5800	Early model										
427 cid	2400	3600	5200	5700											
454 cid	2300	3400	5000	5500	<b>01402LM</b>										
502 cid	2200	3300	4900	5400	LM is step nose										
396 cid	2750	3950	5550	6050	<b>01403</b>	229HR237 110°	287°	296°	229°	237°	137°	145°	.563"	.586"	84551
402 cid	2750	3950	5550	6050	Early model										
427 cid	2650	3850	5450	5950											
454 cid	2450	3650	5250	5750	<b>01403LM</b>										
502 cid	2330	3520	5100	5650	LM is step nose										
396 cid	3050	4200	5750	6300	<b>01404</b>	236HR245 110°	292°	303°	236°	245°	145°	154°	.586"	.612"	84551
402 cid	3050	4200	5750	6300	Early model										
427 cid	3000	4100	5700	6200											
454 cid	2750	3900	5500	5950	<b>01404LM</b>										
502 cid	2700	3700	5400	5800	LM is step nose										
396 cid	3300	4450	6050	6600	<b>01405</b>	245HR253 110°	303°	311°	245°	253°	154°	162°	.612"	.636"	84551
402 cid	3300	4450	6050	6600	Early model										
427 cid	3200	4350	5900	6450											
454 cid	3000	4150	5650	6200	<b>01405LM</b>										
502 cid	2900	4000	5525	6100	LM is step nose										
396 cid	3570	4700	6100	6650	<b>01406</b>	253HR260 110°	309°	318°	253°	260°	162°	171°	.636"	.659"	84551
402 cid	3570	4700	6100	6650	Early model										
427 cid	3450	4570	6000	6500											
454 cid	3240	4390	5780	6300	<b>01406LM</b>										
502 cid	3120	4270	5675	6170	LM is step nose										

CUSTOM GROUND HYDRAULIC ROLLER - Special order hydraulic roller lifter cam ground to your specs on cast steel cam core using stock cast iron dist gear.	<b>00010</b>														84551
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Note: The above cams are ground on cast steel cores. Crower recommends using the factory stock cast iron distributor gear. If 8620 steel billet core with integral cast iron gear is desired, specify part number 00050.

Note: The RPM power ranges listed above are approximations, your RPM ranges may vary depending on engine setup (cylinder head flow, etc.). "LM" cores fit 454-502 cid 1994-up only (w/step nose).

Gen VI camshafts are different and require 8620 steel billet core with cast iron gear (#00050).

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Plug	Pushrods	Remarks
<b>84579</b>	66314-16	68340-16	87063M-16	86086	71755-8 & 71855-8	For 9.800" deck.
<b>84551LM</b>	66331-16	68340-16	87063M-16		71760-8 & 71860-8	For Late Model block.

Spring pressure:

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" ( Machine work, use cutter 68986).

Note: If running a tall deck block use .400" longer pushrods. Other lengths available on a special order basis.

Note: If engine is equipped with exhaust valve rotators see rotation eliminator cups.

Note: For proper oiling on 1965 and 1966 engines, rear cam bearing must be grooved. Specify when ordering cam.

Note: Two-gear drives and reverse engine rotation camshafts are available on a special order basis.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

CAUTION! For sustained running at high rpm use valve spring (68385X2-16).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511K</b>	Timing gear kit

IMPORTANT! Stock big block Chevrolet single springs are designed for cams with approximately .400" lift. When stock valve springs are used with performance cams over .470" lift, coil bind and retainer to valve guide interference may occur.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.





366 396 402 427 454 502 & Rodeck V8 Big Block

## SOLID CAMSHAFTS (ORIGINAL SERIES)

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque mid-range and top end grind. RPM Power Range: 2000 to 6000 / Redline: 6400 plus.	396 427	<b>01320</b>	282F 114°	282°	292°	238°	242°	.510"	.515"	84302
PRO-STREET / PERFORMANCE LEVEL 3 - High torque mid-range and top end grind. RPM Power Range: 2000 to 6500 / Redline: 7000 plus.	454 cid	<b>01321</b>	294F 114°	294°	300°	244°	246°	.517"	.532"	84302
PRO-STREET / PERFORMANCE LEVEL 4 - High revving, super mid to top end power. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	396 427	<b>01322</b>	300F 114°	300°	310°	246°	254°	.530"	.558"	84302
PRO-STREET / PERFORMANCE LEVEL 4 - High revving, super mid to top end power. RPM Power Range: 3000 to 7500 / Redline: 7750 plus.	454 cid	<b>01323</b>	310F 114°	310°	318°	252°	258°	.554"	.571"	84302
COMPU-PRO / PERFORMANCE LEVEL 4 - Broad power band. Short oval profile. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	396 427	<b>01349</b>	274FDP 105°	274°	288°	242°	252°	.564"	.587"	84302 or 84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval track cam. RPM Power Range: 2500 to 6500 / Redline: 7500 plus.	454 cid	<b>01351</b>	288FDP 107°	288°	292°	252°	262°	.601"	.620"	84302 or 84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Great high torque, good mid-range oval track grind. RPM Power Range: 3000 to 7000 / Redline: 8000 plus.	396 427	<b>01355</b>	292FDP 107°	292°	300°	254°	260°	.595"	.622"	84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Short oval grind with super torque RPM Power Range: 3500 to 7500 / Redline: 8500 plus.	454 cid	<b>01352</b>	298FDP 107°	298°	302°	258°	264°	.619"	.627"	84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Superior upper bottom, mid-range and top end power. RPM Power Range: 3750 to 7750 / Redline: 8500 plus.	396 427	<b>01356</b>	304FDP 107°	304°	310°	262°	266°	.626"	.634"	84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Superb extended power band for fast 3/8 and 1/2 mile ovals. RPM Power Range: 4000 to 8000 / Redline: 8500 plus.	454 cid	<b>01353</b>	310FDP 107°	310°	316°	276°	282°	.653"	.661"	84301-980
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end profile for added punch above 7000 rpm. RPM Power Range: 4500 to 8000 / Redline: 8500 plus.	454 cid	<b>01354</b>	320FDP 110°	320°	326°	284°	292°	.682"	.689"	84301-980
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84302 or 84301-980

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84302</b>	66900-16	68340-16	87063M-16	86071-16	7000 plus rpm. Street applications.
<b>84301X980</b>	66900X980-16	68385X2-16	87053-16	86071-16	Race only.

Spring pressure:

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

Optional spring (race only):

68385X2-16 Seat: 1.950" @ 144 lbs / Nose: 1.300" @ 422 lbs / Coil bind: 1.100" (Machine work, use cutter 68979).

Note: If engine is equipped with exhaust valve rotators see rotation eliminator cups.

Note: For proper oiling on 1965 and 1966 engines, rear cam bearing must be grooved. Specify when ordering cam.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required.

Note: Steel billet hardface cams are available from Crower on a special order basis. Contact Crower for information.

## ACCESSORIES

Part No.	Description
	Longer pushrods required for high lift cams
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit

IMPORTANT! Stock big block Chevrolet single springs are designed for cams with approximately .400" lift. When stock valve springs are used with performance cams over .470" lift, coil bind and retainer to valve guide interference may occur.

If using 11/32 valve stem dia., must specify for different retainers/keepers.

# Chevrolet

366 396 402 427 454 502 & Rodeck V8 Big Block

## 220 SERIES SOLID CAMSHAFTS (HIGH RPM)

Note: These cams use .018" intake, .020" exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.7 / 1.7		Gross Lift 1.8 / 1.7	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
396 cid	2700	4200	6300	6800	<b>01330</b>	108°	276°	285°	242°	251°	147°	156°	.335"	.345"	.570"	.587"	.603"	.587"
427 cid	2700	4200	6100	6600														
454 cid	2500	4000	5700	6200														
502 cid	2400	3900	5300	5800														
396 cid	3000	4500	6700	7200	<b>01332</b>	108°	285°	296°	251°	261°	156°	165°	.345"	.356"	.587"	.605"	.621"	.605"
427 cid	3000	4500	6350	6850														
454 cid	2700	4200	5900	6400														
502 cid	2800	4100	5600	6100														
396 cid	3300	4700	6900	7400	<b>01334</b>	108°	293°	303°	259°	269°	165°	173°	.356"	.365"	.605"	.621"	.640"	.621"
427 cid	3250	4750	6600	7100														
454 cid	3100	4600	6100	6600														
502 cid	3000	4500	5800	6300														
396 cid	3500	5000	7200	7700	<b>01336</b>	110°	301°	308°	267°	276°	171°	179°	.360"	.372"	.612"	.632"	.648"	.632"
427 cid	3500	5000	6800	7300														
454 cid	3200	4800	6400	6900														
502 cid	3200	4700	6000	6500														
396 cid	3700	5300	7500	8000	<b>01338</b>	110°	310°	316°	276°	283°	182°	187°	.376"	.384"	.639"	.653"	.676"	.653"
427 cid	3600	5200	7150	7650														
454 cid	3550	5050	6700	7200														
502 cid	3500	5000	6200	6700														
396 cid	4000	5600	7700	8200	<b>01339</b>	110°	312°	319°	279°	285°	184°	189°	.379"	.385"	.644"	.655"	.682"	.655"
427 cid	4100	5500	7300	7800														
454 cid	3700	5200	7000	7500														
502 cid	3700	5100	6400	6900														

The above cams are ground on Pro55 cores.

Note: These cams require #66971-16 No Chamfer lifters or, if running .874" lifter bores, use #66915-16.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84370</b>	66971-16*	68340-16	87063-16	86071-16	7000 plus rpm. Street applications.
<b>84371</b>	66971-16*	68385X2-16	87053-16	86071-16	Race only.

Spring pressure:

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

68385X2-16 Seat: 1.950" @ 144 lbs / Nose: 1.300" @ 422 lbs / Coil bind: 1.100" (Machine work, use cutter 68979).

\* indicates No Chamfer .842" diameter lifters.

Note: If engine is equipped with exhaust valve rotators see rotation eliminator cups.

Note: For proper oiling on 1965 and 1966 engines, rear cam bearing must be grooved. Specify when ordering cam.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required.

Note: Steel billet hardface cams are available from Crower on a special order basis. Contact Crower for information.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Longer pushrods required for high lift cams
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit

IMPORTANT! Stock big block Chevrolet single springs are designed for cams with approximately .400" lift. When stock valve springs are used with performance cams over .470" lift, coil bind and retainer to valve guide interference may occur.

If using 11/32 valve stem dia., must specify for different retainers/keepers.



366 396 402 427 454 502 & Rodeck V8 Big Block

## ROLLER CAMSHAFTS (ORIGINAL SERIES)

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.7 / 1.7		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. RPM Power Range: 2500 to 6000 / Redline: 6750 plus.	427 454	<b>01475</b>	286R 112°	286°	290°	242°	250°	.581"	.573"	84610
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. RPM Power Range: 3000 to 7000 / Redline: 7000 plus.	427 454	<b>01476</b>	290R 112°	290°	296°	252°	254°	.585"	.578"	84610
STREET ROLLER / PERFORMANCE LEVEL 4 - Intended for performance oriented hot-street applications. RPM Power Range: 3200 to 7000 / Redline: 7250 plus.	427 454	<b>01477</b>	296R 112°	296°	300°	254°	260°	.580"	.587"	84610
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque and mid-range profile for bracket and marine applications. RPM Power Range: 2800 to 6800 / Redline: 7200 plus.	427 454	<b>01485</b>	296R 107°	296°	302°	256°	266°	.641"	.636"	84511
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong mid-range design for bracket and marine use. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	427 454	<b>01486</b>	290R 107°	290°	306°	260°	270°	.651"	.677"	84511
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong mid-range design for bracket and marine use. RPM Power Range: 4500 to 8000 / Redline: 8400 plus.	427 454	<b>01487</b>	306R 107°	306°	314°	270°	276°	.678"	.661"	84511
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 and 1/2 mile oval track grind. RPM Power Range: 4800 to 8300 / Redline: 8700 plus.	427 454	<b>01488</b>	309R 108°	309°	316°	276°	280°	.728"	.716"	84512
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Big cid profile for 3/8 and 1/2 mile oval. RPM Power Range: 5300 to 8800 / Redline: 9000 plus.	427 454	<b>01489</b>	318R 108°	318°	326°	284°	288°	.758"	.745"	84512
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Super competition profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	427 454	<b>01490</b>	321R 110°	321°	330°	288°	290°	.777"	.731"	84512
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Super competition profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	427 454	<b>01491</b>	328R 110°	328°	336°	286°	292°	.801"	.780"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - A very radical profile for competition use only. RPM Power Range: Varies on valve train, heads, manifold, etc...	427 454	<b>01492</b>	336R 112°	336°	340°	294°	300°	.779"	.717"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Extremely radical competition profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	427 454	<b>01493</b>	340R 112°	340°	347°	298°	300°	.802"	.784"	Call Crower
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call with all engine data incl. head flow data, valve sizes, operating power range, etc when ordering.	All cid	<b>00002</b>								See Below or Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Rev Kit	Plug	Remarks
<b>84610</b>	66201-16	68389-16	87063-16	86071-16	86108-16	82006	86086	Limited street use.
<b>84511</b>	66201-16	68363-16	87064-16	86071-16	86111-16	82001	86086	For rpm up to 7500 max.
<b>84512</b>	66201-16	68365-16	87056-16	86071T-16	86111-16	82001	86086	For rpm up to 8000 plus.

Spring pressure:

68389-16 Seat: 1.900" @ 132 lbs / Nose: 1.250" @ 411 lbs / Coil bind: 1.140" (Machine work, use cutter 68986).

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68977).

68365-16 Seat: 1.925" @ 259 lbs / Nose: 1.300" @ 654 lbs / Coil bind: 1.230" (Machine work, use cutter 68989).

Optional springs:

6855X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.100" @ 870 lbs / Coil bind: 1.020"

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73605-16</b>	Rocker arms (1.7) 7/16
<b>73608-16</b>	Rocker arms (1.8) 7/16
<b>76511</b>	Timing gear set
<b>76511K</b>	Timing gear kit

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: Special cam cores available for Torrington bearing applications.

# Chevrolet

366 396 402 427 454 502 & Rodeck V8 Big Block

## 230 SERIES ROLLER CAMSHAFTS (HIGH RPM)

Note: These cams use .018" intake, .020" exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration @ .020"		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift 1.7 / 1.7		Gross Lift 1.8 / 1.7	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
396 cid	3200	4700	6800	7300	<b>01520</b>	108°	289°	299°	256°	265°	166°	172°	.388"	.383"	.660"	.651"	.698"	.651"
427 cid	3000	4500	6600	7100														
454 cid	2700	4200	6300	6800														
502 cid	2300	3800	5800	6300														
396 cid	3300	4800	7000	7500	<b>01521</b>	110°	295°	307°	262°	273°	173°	181°	.402"	.402"	.683"	.683"	.723"	.683"
427 cid	3100	4600	6800	7300														
454 cid	2800	4300	6500	7000														
502 cid	2550	4050	6000	6500														
396 cid	3600	5100	7200	7700	<b>01522</b>	110°	301°	313°	268°	279°	179°	188°	.415"	.412"	.706"	.700"	.747"	.700"
427 cid	3400	4900	7000	7500														
454 cid	3100	4600	6700	7200														
502 cid	2800	4300	6200	6700														
396 cid	3800	5300	7400	7900	<b>01523</b>	110°	311°	321°	278°	287°	190°	195°	.437"	.428"	.743"	.728"	.786"	.728"
427 cid	3600	5100	7200	7700														
454 cid	3300	4800	6900	7400														
502 cid	3100	4600	6400	6900														
396 cid	3950	5450	7600	8100	<b>01524</b>	112°	315°	323°	280°	289°	194°	199°	.445"	.421"	.757"	.716"	.801"	.716"
427 cid	3750	5250	7400	7900														
454 cid	3450	4950	7100	7600														
502 cid	3400	4900	6600	7100														
396 cid	4000	5500	7700	8200	<b>01525</b>	112°	319°	348°	285°	309°	203°	221°	.526"	.496"	.894"	.843"	-	-
427 cid	3800	5300	7500	8000														
454 cid	3500	5000	7200	7700														
502 cid	3550	5050	6700	7200														

The above cores are 8620 steel billet.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Plug	Remarks
<b>84517</b>	66293-16	68806-16	86780-16	86086	Limited street use. Requires Super 7° keepers.
<b>84516</b>	66293-16	68860-16	86780-16	86086	For rpm up to 8000 max. Requires 7° keepers.
<b>84519</b>	66293-16	68848-16	86069-16	86086	Triple spring. Requires 10° keepers.

Spring pressure:

68806-16 Seat: 2.000" @ 279 lbs / Nose: 1.250" @ 733 lbs / Coil bind: 1.160"

68860-16 Seat: 1.950" @ 287 lbs / Nose: 1.100" @ 864 lbs / Coil bind: 1.010"

68848-16 Seat: 2.100" @ 329 lbs / Nose: 1.250" @ 960 lbs / Coil bind: 1.150"

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
<b>66201-16</b>	.842" dia roller lifters. No offset.
<b>66375-16</b>	.874" dia roller lifters. No offset.
<b>66291-16</b>	.842" dia roller lifters. No offset, Severe-Duty
<b>66293-16</b>	.842" dia roller lifters. Intake Offset, Severe-Duty
<b>66297-16</b>	.842" dia roller lifters. Specify Offset, Severe-Duty
<b>66291X874-16</b>	.874" dia roller lifters. No offset, Severe-Duty
<b>66293X874-16</b>	.874" dia roller lifters. Intake Offset, Severe-Duty
<b>66297X874-16</b>	.874" dia roller lifters. Specify Offset, Severe-Duty

Shaft Rockers are available. Refer to the new section in Valve Train area.

Titanium valves are mandatory on all ratios over 1.7:1.





1994-1998 (Early Model Cylinder Head)

## 4.6L/5.4L SOHC MODULAR (2 Valve) - Low Lift Design

Note: These cams use .000" intake and exhaust valve lash.

Description	Part Number	Advertised Duration		Duration @ .050"		Lobe Lift		Gross Lift (1.8)		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (1994-98)	<b>Stock</b>	233° Lobe 242° Valve	242° Lobe 254° Valve	186° Lobe 202° Valve	191° Lobe 207° Valve	.256"	.259"	.461"	.466"	Stock
STAGE 1 - BAJA BEAST Lifted trucks looking for added bottom end power & torque. Tow package. RPM Range: Idle to 5500+ on 4.6L, 5.4L will be lower.	<b>62915-2</b>	234° Lobe 248° Valve	242° Lobe 256° Valve	186° Lobe 202° Valve	193° Lobe 209° Valve	.278"	.294"	.500"	.529"	Stock
STAGE 1 Excellent for stock replacement. No other modifications required. RPM Range: 1250 to 5750+ on 4.6L, 5.4L will be lower.	<b>62810-2</b>	234° Lobe 248° Valve	248° Lobe 262° Valve	186° Lobe 202° Valve	197° Lobe 213° Valve	.278"	.294"	.500"	.529"	Stock
STAGE 2 Hot street profile. Emphasis on mid range. Spring recommended. RPM Range: 1500 to 6000+ on 4.6L, 5.4L will be lower.	<b>62811-2</b>	252° Lobe 266° Valve	256° Lobe 270° Valve	204° Lobe 220° Valve	208° Lobe 224° Valve	.296"	.296"	.532"	.532"	84702
STAGE 2 Designed specifically for supercharger applications for street use. RPM Range: 1750 to 6500+ on 4.6L, 5.4L will be lower.	<b>62812-2</b>	258° Lobe 272° Valve	258° Lobe 272° Valve	212° Lobe 230° Valve	212° Lobe 230° Valve	.296"	.296"	.532"	.532"	84702
STAGE 3 Street/strip profile. Emphasis on top end power. Spring required. RPM Range: 2000 to 6750+ on 4.6L, 5.4L will be lower.	<b>62813-2</b>	262° Lobe 276° Valve	262° Lobe 276° Valve	216° Lobe 234° Valve	216° Lobe 234° Valve	.293"	.293"	.527"	.527"	84702
CUSTOM GROUND 4.6L/5.4L CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00080-2</b>									

The above cams are ground on factory 114 lobe center. Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84702</b>	68197-16	87024-16	Low pressure spring steel retainer for street and high mileage use.
<b>84704</b>	68197-16	87024T-16	High open pressure spring titanium retainer for limited street & race.

Spring pressure:

68197-16 Seat: 1.570" @ 94 lbs / Nose: 1.050" @ 205 lbs / Coil bind: 0.970" (No machine work required).

Retainer option:

87024T-16 Titanium retainer option available for race and limited street applications.

## INDIVIDUAL MASTER LISTINGS

Master Number	Adv Dur (.006")	Duration @ .050"	Duration @ .200"	Lobe Lift	Gross Lift
<b>B1737</b>	252°	204°	121°	.296"	.533"
<b>B1738</b>	256°	208°	123°	.296"	.533"
<b>B1739</b>	258°	212°	124°	.296"	.533"
<b>B1740</b>	262°	216°	127°	.293"	.527"

The specifications listed above are taken at the cam lobe, not the valve.

## ACCESSORIES

Part No.	Description
<b>974341-8</b>	Stainless steel valves - 44.5 mm head dia (8 only int)
<b>97434E-8</b>	Stainless steel valves - 34 mm head dia (8 only exh)
<b>974321-8</b>	Stainless steel valves - 46.83 mm head - M-6049-D46 Cyl Head
<b>97435E-8</b>	Stainless steel valves - 36 mm head - M-6049-D46 Cylinder Head

Note: When ordering valves, be sure to specify one set int and one set exh.

## STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard and 1mm oversize. Titanium valves also available.





1999-up (Late Model Cylinder Head)

## 4.6L/5.4L SOHC MODULAR (2 Valve) - High Lift Design

Note: These cams use .000" intake and exhaust valve lash.

Description	Part Number	Advertised Duration		Duration @ .050"		Lobe Lift		Gross Lift (1.8)		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (1999-up)	<b>Stock</b>	233° Lobe 242° Valve	239° 252°	184° Lobe 200° Valve	191° 209°	.280"	.295"	.504"	.531"	Stock
STAGE 1 - BAJA BEAST Tow package. Specifically designed for heavy trucks/SUV applications. RPM Range: Idle to 5500+ on 4.6L, 5.4L will be lower.	<b>62905-2</b>	243° Lobe 257° Valve	250° 264°	193° Lobe 209° Valve	196° 212°	.294"	.303"	.529"	.545"	Stock
STAGE 1 Excellent for stock replacement. No other modifications required. RPM Range: Idle to 5500+ on 4.6L, 5.4L will be lower.	<b>62800-2</b>	246° Lobe 260° Valve	250° 264°	200° Lobe 216° Valve	204° 220°	.300"	.305"	.540"	.549"	Stock
STAGE 2 Hot street profile. Emphasis on mid range. Spring recommended. RPM Range: 1250 to 6000+ on 4.6L, 5.4L will be lower.	<b>62801-2</b>	254° Lobe 268° Valve	258° 272°	208° Lobe 224° Valve	212° 228°	.311"	.317"	.559"	.570"	84702
STAGE 2 Designed specifically for supercharger applications for street use. RPM Range: 1500 to 6500+ on 4.6L, 5.4L will be lower.	<b>62802-2</b>	262° Lobe 276° Valve	262° 276°	216° Lobe 234° Valve	216° 234°	.322"	.322"	.581"	.581"	84702 or 84703
STAGE 3 Street/strip profile. Emphasis on top end power. Spring required. RPM Range: 1750 to 6750+ on 4.6L, 5.4L will be lower.	<b>62803-2</b>	266° Lobe 280° Valve	270° 284°	220° Lobe 238° Valve	224° 242°	.328"	.334"	.590"	.601"	84702 or 84703
STAGE 3 Designed specifically for supercharger applications for street/strip. RPM Range: 2000 to 7000+ on 4.6L, 5.4L will be lower.	<b>62804-2</b>	274° Lobe 288° Valve	274° 288°	228° Lobe 246° Valve	228° 246°	.340"	.340"	.612"	.612"	84702 or 84703
STAGE 4 Race grind. ECU mods and tuning required. Rough idle is common. RPM Range: 2250 to 7250+ on 4.6L, 5.4L will be lower.	<b>62805-2</b>	274° Lobe 288° Valve	278° 292°	228° Lobe 246° Valve	232° 250°	.340"	.345"	.612"	.621"	84702 or 84703
CUSTOM GROUND 4.6L/5.4L CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00080-2</b>									

The above cams are ground on factory 114 lobe center. 1999 and up SOHC engines require cam gears to replace pressed on units. Valve timing events are available online at: [www.crower.com/valtime.html](http://www.crower.com/valtime.html)

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84702</b>	68197-16	87024-16	Low pressure spring, steel retainer for street and high mileage use.
<b>84703</b>	68198-16	87025T-16	High pressure spring, titanium retainer (+.060") for limited street & race.

Spring pressure:

68197-16 Seat: 1.660" @ 80 lbs / Nose: 1.050" @ 205 lbs / Coil bind: 0.975" (No machine work required).

68198-16 Seat: 1.720" @ 74 lbs / Nose: 1.100" @ 245 lbs / Coil bind: 1.040" (No machine work required).

Retainer option:

87024T-16 Titanium retainer option available for race and limited street applications.

## INDIVIDUAL MASTER LISTINGS

Master Number	Adv Dur @ .006"	Duration @ .050"	Duration @ .200"	Lobe Lift	Gross Lift
<b>B1706</b>	246°	200°	117°	.300"	.540"
<b>B1707</b>	250°	204°	122°	.305"	.549"
<b>B1708</b>	254°	208°	127°	.311"	.559"
<b>B1709</b>	258°	212°	132°	.317"	.570"
<b>B1710</b>	262°	216°	136°	.322"	.581"
<b>B1711</b>	266°	220°	140°	.328"	.590"
<b>B1712</b>	270°	224°	145°	.334"	.601"
<b>B1713</b>	274°	228°	149°	.340"	.612"
<b>B1714</b>	278°	232°	154°	.345"	.621"

The specifications listed above are taken at the cam lobe, not the valve.

## ACCESSORIES

Part No.	Description
<b>86052</b>	Right Hand Cam Gear with all hardware
<b>86053</b>	Left Hand Cam Gear with all hardware
<b>974351-8</b>	Stainless steel valves - 44.5 mm head dia (8 only int)
<b>97435E-8</b>	Stainless steel valves - 36 mm head dia (8 only exh)
<b>974361-8</b>	Stainless steel valves - 45.5 mm head dia (8 only int)
<b>97436E-8</b>	Stainless steel valves - 37 mm head dia (8 only exh)

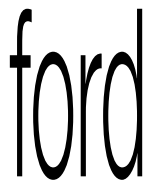
Note: When ordering valves, be sure to specify one set int and one set exh.

## STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard and 1mm oversize. Titanium valves also available.

**Ford Timing Gears Part Numbers:**  
 F8AE-6256-BA (Left Hand Gear)  
 F8AE-6256-AA (Right Hand Gear)  
 F1AZ-6278-A (Washer)  
 F1AZ-6A340-A (Bolt)  
 F3AZ-6265-A (Spacer)





## 4.6L/5.4L DOHC MODULAR (4 Valve)

Note: These cams use .000" intake and exhaust valve lash.

Description	Part Number	Advertised Duration (.006")		Duration @ .050"		Lobe Lift		Gross Lift (1.8)		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS	<b>Stock</b>	220° Lobe 232° Valve	228° 240°	172° Lobe 186° Valve	178° 194°	.218"	.217"	.392"	.390"	Stock
STAGE 1 - BAJA BEAST Tow package. Specifically designed for heavy trucks/SUV applications. Stock Idle.	<b>62925-4</b>	223° Lobe 235° Valve	227° 239°	178° Lobe 194° Valve	182° 198°	.236"	.238"	.425"	.428"	Stock
STAGE 1 Excellent for stock replacement. No other modifications required. Stock Idle.	<b>62820-4</b>	223° Lobe 235° Valve	232° 244°	178° Lobe 194° Valve	188° 204°	.236"	.240"	.425"	.432"	Stock
STAGE 2 Hot street profile. Emphasis on mid range. Spring recommended. Slight Lobe at Idle.	<b>62821-4</b>	239° Lobe 251° Valve	245° 257°	194° Lobe 210° Valve	200° 216°	.264"	.264"	.475"	.475"	84710 or 84711
STAGE 2 Designed specifically for supercharger applications for street use. Slight Lobe at Idle.	<b>62822-4</b>	252° Lobe 264° Valve	252° 264°	208° Lobe 224° Valve	208° 224°	.266"	.266"	.479"	.479"	84710 or 84711
STAGE 3 Street/strip profile. Emphasis on top end power. Spring required. Rough Idle.	<b>62823-4</b>	258° Lobe 270° Valve	262° 274°	212° Lobe 228° Valve	216° 232°	.268"	.270"	.482"	.486"	84710 or 84711
STAGE 3 Designed specifically for supercharger applications for 3/4 race. Rough Idle.	<b>62824-4</b>	258° Lobe 270° Valve	258° 270°	212° Lobe 228° Valve	212° 228°	.268"	.268"	.482"	.482"	84710 or 84711
STAGE 4 Race grind. ECU mods and tuning required. Rough idle is expected. Rough Idle.	<b>62825-4</b>	266° Lobe 278° Valve	274° 286°	220° Lobe 236° Valve	226° 242°	.272"	.275"	.490"	.495"	84710 or 84711
CUSTOM GROUND 4.6L/5.4L CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00084-4</b>									

The above cams are ground on factory 114 lobe center. Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84710</b>	68194-32	87026T-32	High pressure spring and titanium retainer kit. Limited street.
<b>84711</b>	68194-32	87026-32	High pressure spring and steel retainer kit. Daily street use.

Spring pressure:

68194-32 Seat: 1.420" @ 76 lbs / Nose: 0.910" @ 244 lbs / Coil bind: 0.850" (No machine work required).

## INDIVIDUAL MASTER LISTINGS

Master Number	Adv Dur (.006")	Duration @ .050"	Duration @ .200"	Lobe Lift	Gross Lift
<b>B1755</b>	223°	178°	-	.236"	.425"
<b>B1756</b>	227°	182°	-	.238"	.428"
<b>B1757</b>	232°	188°	-	.240"	.432"
<b>B1758</b>	239°	194°	-	.264"	.475"
<b>B1759</b>	245°	200°	-	.264"	.475"
<b>B1760</b>	252°	208°	-	.266"	.479"
<b>B1761</b>	258°	212°	-	.268"	.482"
<b>B1762</b>	262°	216°	-	.270"	.486"
<b>B1763</b>	266°	220°	-	.272"	.490"
<b>B1764</b>	274°	226°	-	.275"	.495"

The specifications listed above are taken at the cam lobe, not the valve.

## ACCESSORIES

Part No.	Description
<b>97437I-16</b>	Stainless steel valves - 37 mm head dia (16 only int)
<b>97437E-16</b>	Stainless steel valves - 30 mm head dia (16 only exh)
<b>97438I-16</b>	Stainless steel valves - 38 mm head dia (16 only int)
<b>97438E-16</b>	Stainless steel valves - 31 mm head dia (16 only exh)

Note: When ordering valves, be sure to specify one set int and one set exh.

## STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard and 1mm oversize. Titanium valves also available.





## FOCUS ZX3 - Twin Cam (1998-up)

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Lobe Center	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (1998-up)	<b>Stock</b>	112°	276° Lobe 252° Valve	273° 249°	206° Lobe 200° Valve	205° 199°	.346"	.341"	Stock
STOCK REPLACEMENT Mild profile for automatic transmission. Stock idle. RPM Range: Idle to 6500+	<b>62500-2*</b>	114°	262° Lobe 238° Valve	262° 238°	214° Lobe 208° Valve	214° 208°	.352"	.352"	Stock
STAGE 1 Automatic or mild turbo/supercharger. No head work required. RPM Range: Idle to 6500+	<b>62501-2*</b>	114°	268° Lobe 244° Valve	268° 244°	220° Lobe 214° Valve	220° 214°	.374"	.374"	Stock
STAGE 2 Street/Strip package. Perfect for all-motor use. Spring #68195 rec. RPM Range: 1000 to 7000+.	<b>62502-2*</b>	114°	280° Lobe 256° Valve	276° 252°	232° Lobe 226° Valve	228° 222°	.413"	.393"	84169
STAGE 2 Forced induction special. Designed specifically for turbo or super charged applications. Requires spring kit. RPM Range: 1500-up.	<b>62502T-2*</b>	114°	276° Lobe 252° Valve	276° 252°	228° Lobe 222° Valve	228° 222°	.393"	.393"	84169
STAGE 3 - 3/4 Race Recommended for mostly strip use. Must clearance cylinder head. RPM Range: 1200 to 8000+	<b>62503-2*</b>	114°	292° Lobe 268° Valve	284° 260°	244° Lobe 238° Valve	236° 230°	.433"	.413"	84169
STAGE 4 - Full Race All out, all motor drag profile. Not for the inexperienced tuner. RPM Range: 1300 to 8500+	<b>62504-2*</b>	114°	300° Lobe 276° Valve	292° 268°	252° Lobe 246° Valve	244° 238°	.454"	.433"	84169
CUSTOM GROUND ZX3 CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00071-2</b>								

\* Indicates a spec change from previous catalog. Note: If running ZX2 cylinder head, the intake cams will work with your application, however the exhaust cams will not fit. Must run factory exhaust cam.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84169</b>	68195-16	87082-16	Fits ZX3 and ZX2 heads

Spring pressure:

68195-16 Seat: 1.400" @ 66 lbs / Nose: 0.950" @ 174 lbs / Coil bind: 0.860" (\*No machine work required on most heads).

\* Due to casting inconsistencies, some cylinder heads may require machine work for valve spring, use cutter #68974.

## INDIVIDUAL MASTER LISTINGS

Master Number	Adv Dur (.010")	Duration @ .050"	Duration @ .200"	Lobe Lift	Lift mm
<b>B1587</b>	268°	220°	152°	.374"	9.5
<b>B1588</b>	276°	228°	160°	.393"	10.0
<b>B1589</b>	284°	236°	168°	.413"	10.5
<b>B1590</b>	292°	244°	176°	.433"	11.0
<b>B1591</b>	300°	252°	184°	.454"	11.5

More masters available upon request.

## ACCESSORIES

Part No.	Description
<b>86054FB</b>	Adjustable Cam Sprocket (1 only). All black.
<b>86054FC</b>	Adjustable Cam Sprocket (1 only). Black & Silver.
<b>97430I-8</b>	Stainless steel valves - 32 mm head dia (8 only int)
<b>97430E-8</b>	Stainless steel valves - 28 mm head dia (8 only exh)
<b>97431I-8</b>	Stainless steel valves - 33 mm head dia (8 only int)
<b>97431E-8</b>	Stainless steel valves - 29 mm head dia (8 only exh)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.



## ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design reduces unwanted harmonics which could cause valve train failure.





2000cc 4 Cylinder (3 Bearing)

## SOLID CAMSHAFTS

Note: These cams use .008" intake, .010" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ULTRA BEAST / PERFORMANCE LEVEL 4 - Race only performance. Emphasis on upper mid-range and top end power. RPM Power Range: 2750 to 6750 / Redline: 7000 max.	All cid	<b>25360</b>	296FDP 107°	292°	296°	231°	242°	.448"	.450"	See Below
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>25304</b>	240FDP 112°	240°	264°	202°	216°	.445"	.469"	See Below
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>25305</b>	250FDP 110°	250°	276°	216°	226°	.469"	.491"	See Below
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street. Strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>25306</b>	264FDP 108°	264°	288°	230°	240°	.490"	.513"	See Below
ULTRA-PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Hot street/drag. Strong mid to top end power. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	All cid	<b>25307</b>	276FDP 108°	276°	302°	234°	250°	.514"	.534"	See Below
COMPU-PRO / PERFORMANCE LEVEL 5 - Super torque, short oval/radical street grind. RPM Power Range: 2500 to 6000 plus.	All cid	<b>25308</b>	288FDP 106°	288°	302°	254°	268°	.528"	.561"	See Below
COMPU-PRO / PERFORMANCE LEVEL 5 - Super mid-range to top end profile. RPM Power Range: 3000 to 6500 plus.	All cid	<b>25309</b>	302FDP 106°	302°	308°	264°	268°	.563"	.573"	See Below
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range with exceptional top end torque. RPM Power Range: 4000 to 7500 plus.	All cid	<b>25310</b>	308FDP 106°	308°	312°	272°	280°	.570"	.571"	See Below
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								See Below

Note: The above solid profiles are ground with a smaller base circle than stock. If using stock length valves, you must use .055" thick lash caps (86126-8) in kit below. Check follower geometry with Dykem hi-spot blue or any other non-drying compound and adjust valve length accordingly (see diagram 1). Duration numbers @ .050" have been refigured to reflect valve lift.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Lash Caps	Remarks
<b>84304</b>	66990-8	68324-8	87044-8	86126-8	For rpm up to 7000 max.

Spring pressure:

68324-8 Seat: 1.600" @ 118 lbs / Nose: 1.000" @ 283 lbs / Coil bind: 0.910" (Machine work, use cutter 68983\*).

\* Machine work required, specify 516 pilot shaft when ordering.

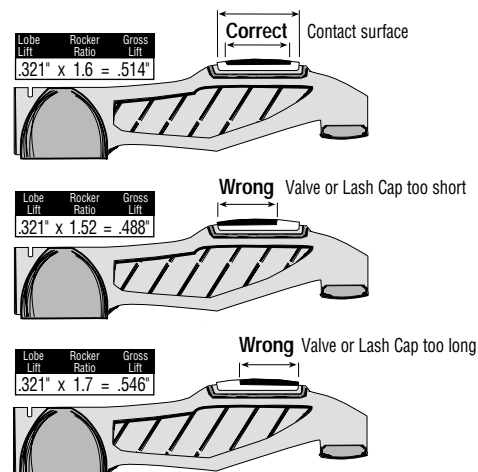
Note: Ford overhead camshafts are susceptible to lobe wear. We highly recommend breaking in new cam and followers with a light pressure break-in spring for a minimum of 30 minutes.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

Diagram 1. Follower Geometry (Sample based on intake of 25307)



Note: When you achieve the indicated gross lift for your cam, the geometry and wear pattern are correct. Failure to achieve proper follower geometry will result in severe lobe wear.



2300cc 1974-up 2000cc 1982-up (4 Bearing)

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.66 / 1.66		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 3 - Excellent low end and mid-range power. RPM Power Range: 1800 to 4500 / Redline: 5500 plus.	All cid	<b>24915</b>	280H 108°	280°	280°	222°	222°	.410"	.410"	See Below
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power/mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>24273</b>	270HDP 110°	270°	286°	228°	238°	.476"	.493"	See Below
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street. Strong upper bottom/top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>24274</b>	286HDP 110°	286°	297°	244°	253°	.488"	.511"	See Below

Note: Lift rule camshafts are available from Crower on a special order basis.

## SOLID CAMSHAFTS

Note: These cams use .012" intake, .014" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.66 / 1.66		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
POWER BEAST / PERFORMANCE LEVEL 4 - High torque racing profile with bottom end power. RPM Power Range: 2800 to 6400 / Redline: 6800 plus.	All cid	<b>24360</b>	302F 109°	302°	307°	252°	262°	.459"	.461"	See Below
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 5 - Torque with excellent mid-range power. RPM Power Range: 3000 to 6500 / Redline: 7000 plus.	All cid	<b>24372</b>	288FDP 106°	288°	292°	257°	264°	.554"	.554"	See Below
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 5 - Strong mid-range and top end power profile. RPM Power Range: 4000 to 7000 / Redline: 7500 plus.	All cid	<b>24374</b>	311FDP 103°	311°	315°	274°	278°	.582"	.582"	See Below
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power. RPM Power Range: 4500 to 7500 / Redline: 8000 plus.	All cid	<b>24376</b>	314FDP 103°	314°	318°	278°	282°	.596"	.596"	See Below
CUSTOM GROUND HYDRAULIC or SOLID - Special order hydraulic or solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid									See Below

Note: The above solid profiles are ground with a smaller base circle than stock. If using stock length valves, you must use .100" thick lash caps (86127-8) in kit below. Check follower geometry with Dykem hi-spot blue or any other non-drying compound and adjust valve length accordingly (see diagram 1). Duration numbers @ .050" have been refigured to reflect valve lift.

Note: Lift rule camshafts are available from Crower on a special order basis.

## ENGINEERED COMPONENT KITS

Part No.	Followers	Springs	Retainers	Lash Caps	Remarks
<b>84105</b>	66993-8	68324-8	87049-8		Hydraulic Lifter.
<b>84206</b>	66993-8	68324-8	87049-8	86127-8	Solid Lifter.

Spring pressure:

68324-8 Seat: 1.600" @ 118 lbs / Nose: 1.000" @ 283 lbs / Coil bind: 0.910" (Machine work, use cutter 68983\*).

Optional spring (stock diameter):

68147-8 Seat: 1.550" @ 78 lbs / Nose: 1.100" @ 177 lbs / Coil bind: 1.000" (Stock O.D. 1.369", no machine work).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: Ford overhead camshafts are susceptible to lobe wear. We highly recommend breaking in new cam and followers with a light pressure break-in spring for a minimum of 30 minutes.

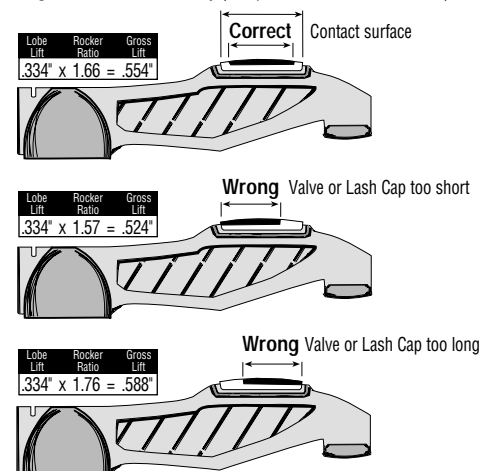
Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

## CONVERSION KITS

Part No.	Remarks
<b>76450-8</b>	Comes with heavy duty adjusters, nuts, sleeves and stabilizer spring.

Diagram 1. Follower Geometry (Sample based on intake of 24372)



Note: When you achieve the indicated gross lift for your cam, the geometry and wear pattern are correct. Failure to achieve proper follower geometry will result in severe lobe wear.



240 300 Inline 6 Cylinder

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	All cid	<b>19210</b>	248HDP 112°	248°	254°	184°	192°	.405"	.411"	84010
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	All cid	<b>19211</b>	252HDP 112°	252°	258°	192°	196°	.426"	.440"	84010
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street profile. Strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	All cid	<b>19212</b>	260HDP 112°	260°	268°	202°	210°	.443"	.448"	84010
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Hot street/drag. Strong mid-to-top end power. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	All cid	<b>19213</b>	266HDP 112°	266°	274°	210°	213°	.456"	.461"	84010
HYDRAULIC HAULER / PERFORMANCE LEVEL 4 - Hot street/drag profile with strong mid-range power. RPM Power Range: 2500 to 6500 / Redline: 6700 plus.	All cid	<b>19205</b>	284HDP 110°	284°	290°	220°	222°	.509"	.517"	84010
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84010

Note: Cam cores for 144, 170, 200 and 250 cid Ford engines are available from Crower on a special order basis.

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 5 - Fantastic high torque mid-range grind. RPM Power Range: 3000 to 6500 plus.	All cid	<b>19311</b>	274FDP 105°	274°	280°	238°	242°	.528"	.539"	84310
COMPU-PRO / PERFORMANCE LEVEL 5 - Explosive power throughout the power band. RPM Power Range: 3500 to 7000 plus.	All cid	<b>19312</b>	284FDP 105°	284°	290°	248°	252°	.558"	.563"	84310
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84310
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00006</b>								Call Crower

Note: Cam cores for 144, 170, 200 and 250 cid Ford engines are available from Crower on a special order basis.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84010</b>	66015-12	68305-12	87048-12	86072-12	Hydraulic Lifter. For rpm up to 6500 plus.
<b>84310</b>	66915-12	68390X3-12	87048D-12	86072-12	Solid Lifter. For rpm up to 7500 plus.

Spring pressure:

68305-12 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 233 lbs / Coil bind: 1.050" (Stock OD, no machine work).

68390X3-12 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

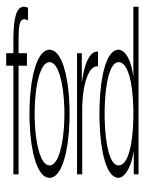


221 255 (4.2L) 260 289 302 (5.0L) & Boss 302 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	289 302	<b>15915</b>	258H 112°	258°	264°	204°	210°	.443"	.452"	See Following Page
TORQUE BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	289 302	<b>15916</b>	272H 112°	272°	279°	210°	220°	.448"	.474"	See Following Page
POWER BEAST / PERFORMANCE LEVEL 3 - Emphasis on upper mid-range and top end power. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	289 302	<b>15917</b>	288H 112°	288°	300°	214°	224°	.474"	.498"	See Following Page
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque while delivering fuel efficient motoring. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	289 302	<b>15206</b>	236HDP 112°	236°	246°	180°	184°	.395"	.400"	See Following Page
	302 cid	<b>15207</b>	246HDP 112°	246°	253°	184°	194°	.402"	.421"	See Following Page
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited offroad use. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	221 289	<b>15208</b>	250HDP 112°	250°	258°	194°	198°	.422"	.437"	See Following Page
	302 cid	<b>15209</b>	260HDP 112°	260°	266°	204°	210°	.459"	.464"	See Following Page
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer extended rpm range with emphasis on upper bottom to top end power with strong mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	221 289	<b>15210</b>	270HDP 112°	270°	276°	210°	214°	.464"	.488"	See Following Page
	302 cid	<b>15211</b>	276HDP 112°	276°	281°	212°	216°	.491"	.500"	See Following Page
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	221 289	<b>15212</b>	280HDP 112°	280°	286°	220°	226°	.491"	.502"	See Following Page
	302 cid	<b>15213</b>	284HDP 112°	284°	290°	228°	234°	.513"	.530"	See Following Page
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Lope at idle. Hot street/strip cam with strong mid-range power. RPM Power Range: 2200 to 6200 plus.	302 cid	<b>15922</b>	274HDP 108°	274°	284°	220°	228°	.491"	.512"	See Following Page
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle with explosive upper bottom and mid-range torque. RPM Power Range: 2500 to 6500 plus.	302 cid	<b>15923</b>	290HDP 108°	290°	298°	226°	238°	.502"	.499"	See Following Page
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle with explosive mid-range torque and acceleration. RPM Power Range: 2700 to 6700 plus.	302 cid	<b>15924</b>	296HDP 108°	296°	302°	230°	244°	.507"	.506"	See Following Page
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle with explosive mid-range and top end horsepower. RPM Power Range: 3000 to 6700 plus.	302 cid	<b>15925</b>	304HDP 108°	304°	312°	240°	248°	.536"	.563"	See Following Page
TURBOMASTER - Intended for turbocharged hot street/strip and marine use. This cam offers extended rpm on mid-range and top end. RPM Power Range: 2000 to 6500 plus.	289 302	<b>15929</b>	290HT 114°	290°	272°	226°	210°	.486"	.462"	See Following Page
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine. Emphasis on upper bottom to top end power. RPM Power Range: 2400 to 6700 plus.	289 302	<b>15930</b>	288HC 114°	288°	288°	228°	228°	.464"	.464"	See Following Page



221 255 (4.2L) 260 289 302 (5.0L) & Boss 302 V8

## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
SUPERCHARGER - Dual purpose hot street/strip drag cam designed specifically to enhance B&M type blower. Good mid to top end power. RPM Power Range: 2400 to 6700 plus.	289 302	<b>15931</b>	304HC 114°	304°	304°	246°	246°	.507"	.507"	See Below
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

## ENGINEERED COMPONENT KITS (see dia. 2)

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84013<sup>A</sup></b>	66015-16	68305X1-16	87048-16		For rpm up to 6000 max. Daily street use.
<b>84117<sup>A</sup></b>	66015-16	68405-16	87048-16	86072-16	For rpm up to 6500 plus. Limited street use.
<b>84118<sup>B</sup></b>	66015-16	68100X200-16	87048-16	86072-16	For rpm up to 6500 max. Daily street use.
<b>84119<sup>B</sup></b>	66015-16	68390X3-16	87048-16	86072-16	For rpm up to 6700 plus. Limited street use.

Spring pressure:

68305X1-16 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 250 lbs / Coil bind: 1.050" (Stock O.D., no machine work).

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

68100X200-16 Seat: 1.800" @ 107 lbs / Nose: 1.300" @ 254 lbs / Coil bind: 1.030" (Machine work, use cutter 68990\*).

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.100" (Machine work, use cutter 68985\*).

A. Indicates short installed keeper height (1.625"). See diagram 2.

B. Indicates high installed keeper height (1.725"). See diagram 2.

Note: If keeper height is longer or shorter than correct height ( $\pm .050$ " tolerance), contact Crower for a recommendation.

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If using Boss heads contact the factory for special spring and retainer recommendations. Boss 302 engines employ a 1.73 rocker ratio, so the gross lifts listed on this page, as well as the previous page, are incorrect for the Boss 302. To figure the correct gross lift for Boss 302 heads divide the gross lift listed by 1.6 (lobe lift) then multiply the lobe lift by 1.73 (Boss 302 rocker ratio).

Note: Camshafts for 289/302 cid engines can be used in 351W engines by changing the firing order to 1-5-4-2-6-3-7-8.

Some early Ford heads use 5/16 valve stems. Please specify when ordering as the above kits are designed for 11/32 stems.

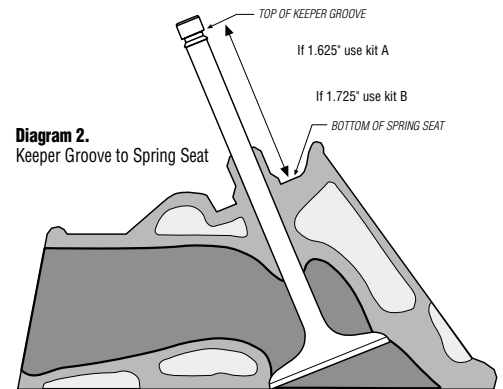
CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73609-16</b>	Rocker arms (1.6) 3/8
<b>73611-16</b>	Rocker arms (1.7) 3/8
<b>76523</b>	Timing gear set
<b>70504-8</b>	Guide plates for 5/16 pushrod
<b>76014</b>	Distributor gear (.500" shaft dia)

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrod section or contact Crower.



**Diagram 2.**  
Keeper Groove to Spring Seat

Accurately measure the distance from the top of keeper groove to bottom of spring seat (see arrows indicating measurement in diagram 2).

If your measurement is 1.625" select a kit number with the letter "A".

If your measurement is 1.725" select a kit number with the letter "B".

Note: If heads have been extensively modified (machined spring pockets, longer valves, etc.) contact Crower for proper spring, keeper, cup and retainer recommendations. Have your keeper/seat measurement available.



221 255 (4.2L) 260 289 302 (5.0L) & Boss 302 V8

## HYDRAULIC ROLLER CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PERFORMANCE LEVEL 1 - Launches hard with A.O.D. transmission. Torque all over the tach! Brutal bottom end. 302 cid / 2100 - 5300 rpm / Redline: 5800 rpm maximum	See Descrip	<b>15510</b>	212HR212 114°	275°	275°	212°	212°	.531"	.531"	See Below
PERFORMANCE LEVEL 2 - Big sound. Excellent 5-speed cam for heavy car. Strong low and mid-range torque. 302 cid / 2200 - 5500 rpm / Redline: 6000 rpm maximum	See Descrip	<b>15511</b>	218HR224 114°	278°	282°	218°	224°	.468"	.486"	See Below
PERFORMANCE LEVEL 2 - Most popular Ford hyd roller grind, blows away Chevrolets. Heavy mid-range. 302 cid / 2400 - 5700 rpm / Redline: 6200 rpm maximum	See Descrip	<b>15512</b>	222HR228 112°	282°	286°	222°	228°	.496"	.512"	See Below
PERFORMANCE LEVEL 3 - Big cid camshaft (320-347 cid) with higher compression, good cylinder heads and valve train components. 302 cid / 2600 - 6000 rpm / Redline: 6500 rpm maximum	See Descrip	<b>15513</b>	228HR234 112°	288°	298°	228°	234°	.512"	.531"	See Below
PERFORMANCE LEVEL 4 - Aggressive rpm camshaft, high stall A.O.D. or a 5-speed with low gears. For well prepared engines. 302 cid / 2700 - 6200 rpm / Redline: 6500 rpm maximum	See Descrip	<b>15514</b>	234HR240 110°	298°	304°	234°	240°	.534"	.545"	See Below
PERFORMANCE LEVEL 5 - Top end insanity for serious, professionally built engines only. 1/4 mile drag special. 302 cid / 3000 - 6300 rpm / Redline: 6500 rpm maximum	See Descrip	<b>15515</b>	236HR242 110°	300°	310°	236°	242°	.524"	.529"	See Below
CUSTOM GROUND HYDRAULIC ROLLER - Special order hydraulic roller lifter cam ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below
O.E.M. FACTORY STOCK SPECIFICATIONS 1989-1992 Ford Mustang 302 H.O. Engine equipped with Hydraulic Roller camshaft.		<b>Stock</b>	115°	272°	272°	211°	211°	.437"	.437"	
SVO FACTORY STOCK SPECIFICATIONS #E-303 302 H.O. Engine equipped with Hydraulic Roller camshaft.		<b>E-303</b>	110°	-	-	220°	220°	.480"	.480"	
SVO FACTORY STOCK SPECIFICATIONS #B-303 302 H.O. Engine equipped with Hydraulic Roller camshaft.		<b>B-303</b>	110°	-	-	224°	224°	.498"	.498"	

Note: The above cores are 8620 steel billet.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Keepers	Remarks
<b>84563</b>	66335-16	68315-16	87048D-16	86107X2-8 & 86107-8	6000 max rpm. Daily street use.
<b>84564</b>	66335-16	68390X3-16	87048-16	86107X2-8 & 86107-8	6500 plus rpm. Limited street use.

Spring pressure:

68315-16 Seat: 1.800" @ 120 lbs / Nose: 1.300" @ 303 lbs / Coil bind: 1.175" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If using Boss heads contact the factory for special spring and retainer recommendations. Boss 302 engines employ a 1.73 rocker ratio, so the gross lifts listed on this page, as well as the previous page, are incorrect for the Boss 302. To figure the correct gross lift for Boss 302 heads divide the gross lift listed by 1.6 (lobe lift) then multiply the lobe lift by 1.73 (Boss 302 rocker ratio).

Note: The above 302 cid camshafts use a 351W firing order to 1-3-7-2-6-5-4-8.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If 289 retro fit, specify 1.050" base circle.

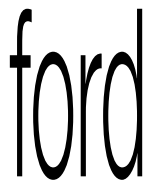
CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
<b>70325-16</b>	Pushrods (5/16 diameter, 6.255" length)
<b>73609-16</b>	Rocker arms (1.6) 3/8
<b>73611-16</b>	Rocker arms (1.7) 3/8
<b>76523</b>	Timing gear set
<b>70504-8</b>	Guide plates for 5/16 pushrod
<b>76014</b>	Distributor gear (.500" shaft dia)

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



221 255 (4.2L) 260 289 302 (5.0L) & Boss 302 V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 2 - High torque grind with mid-range and top end power. Delivers mileage and horsepower. RPM Power Range: 2000 to 5500 / Redline: 6000 plus.	289 302	<b>15320</b>	260FDP 114°	260°	266°	212°	216°	.450"	.453"	See Below
PRO-STREET / PERFORMANCE LEVEL 3 - High torque grind with mid-range and top end power. RPM Power Range: 2200 to 6000 / Redline: 7000 plus.	289 302	<b>15321</b>	282FDP 112°	282°	288°	238°	242°	.478"	.488"	See Below
PRO-STREET / PERFORMANCE LEVEL 4 - High revving with superior mid-range and top end power. RPM Power Range: 2500 to 7500 / Redline: 7500 plus.	289 302	<b>15322</b>	292FDP 110°	292°	298°	248°	252°	.499"	.512"	See Below
COMPU-PRO / PERFORMANCE LEVEL 4 - High torque, short oval camshaft. RPM Power Range: 2500 to 6000 / Redline: 7000 plus.	289 302	<b>15313</b>	274FDP 105°	274°	288°	242°	254°	.542"	.528"	See Below
COMPU-PRO / PERFORMANCE LEVEL 5 - Excellent high torque and mid-range power oval track grind. RPM Power Range: 3000 to 7000 / Redline: 8000 plus.	289 302	<b>15314</b>	288FDP 105°	288°	299°	252°	258°	.563"	.579"	See Below
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 8000 plus.	289 302	<b>15315</b>	302FDP 107°	302°	311°	266°	276°	.605"	.619"	See Below
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								See Below

## ENGINEERED COMPONENT KITS (see dia. 2)

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84213<sup>A</sup></b>	66915-16	68305X1-16	87048-16		For rpm up to 6000 max. Daily street use.
<b>84217<sup>A</sup></b>	66915-16	68405-16	87048-16	86072-16	For rpm up to 7000 plus. Limited street use.
<b>84218<sup>B</sup></b>	66915-16	68100X200-16	87048-16	86072-16	For rpm up to 6500 max. Daily street use.
<b>84219<sup>B</sup></b>	66915-16	68390X3-16	87048-16	86072-16	For rpm up to 7500 plus. Limited street use.

Spring pressure:

68305X1-16 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 250 lbs / Coil bind: 1.050" (Stock O.D., no machine work).

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

68100X200-16 Seat: 1.800" @ 107 lbs / Nose: 1.300" @ 254 lbs / Coil bind: 1.030" (Machine work, use cutter 68990\*).

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.300" @ 331 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

A. Indicates short installed keeper height (1.625"). See diagram 2.

B. Indicates high installed keeper height (1.725"). See diagram 2.

Note: If keeper height is longer or shorter than correct height ( $\pm .050$ " tolerance), contact Crower for a recommendation.

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If using Boss heads contact the factory for special spring and retainer recommendations. Boss 302 engines employ a 1.73 rocker ratio, so the gross lifts listed on this page, as well as the previous page, are incorrect for the Boss 302. To figure the correct gross lift for Boss 302 heads divide the gross lift listed by 1.6 (lobe lift) then multiply the lobe lift by 1.73 (Boss 302 rocker ratio).

Note: Camshafts for 289/302 cid engines can be used in 351W engines by changing the firing order to 1-5-4-2-6-3-7-8.

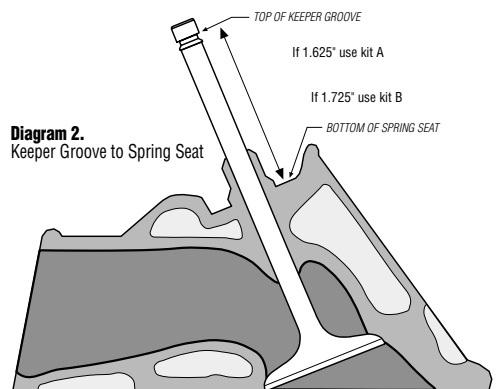
Some early Ford heads use 5/16 valve stems. Please specify when ordering as the above kits are designed for 11/32 stems.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73609-16</b>	Rocker arms (1.6) 3/8
<b>73611-16</b>	Rocker arms (1.7) 3/8
<b>76523</b>	Timing gear set
<b>70504-8</b>	Guide plates for 5/16 pushrod
<b>76014</b>	Distributor gear (.500" shaft dia)



**Diagram 2.**  
Keeper Groove to Spring Seat

Accurately measure the distance from the top of keeper groove to bottom of spring seat (see arrows indicating measurement in diagram 2).

If your measurement is 1.625" select a kit number with the letter "A".

If your measurement is 1.725" select a kit number with the letter "B".

Note: If heads have been extensively modified (machined spring pockets, longer valves, etc.) contact Crower for proper spring, keeper, cup and retainer recommendations. Have your keeper/seat measurement available.



221 255 (4.2L) 260 289 302 (5.0L) & Boss 302 V8

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 7500 plus.	289 302	<b>15415</b>	280R 112°	280°	288°	232°	242°	.528"	.530"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track and drag race profile. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	289 302	<b>15416</b>	285R 106°	285°	292°	254°	260°	.597"	.578"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 to 1/2 mile super oval track profile. RPM Power Range: 4000 to 7500 / Redline: 8000 plus.	289 302	<b>15417</b>	292R 106°	292°	302°	256°	266°	.606"	.600"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 5200 to 8000 / Redline: 8250 plus.	289 302	<b>15418<sup>A</sup></b>	300R 108°	300°	310°	268°	274°	.680"	.669"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 5500 to 8000 / Redline: 8250 plus.	289 302	<b>15419<sup>A</sup></b>	316R 110°	316°	324°	282°	284°	.702"	.682"	Call Crower
CUSTOM ORDER ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								Call Crower

A. These high lift cams require longer stem valves and higher spring pressure. Please contact Crower for a properly engineered kit.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84510</b>	66215-16	68390X3-16	87048-16	86072-16	For rpm up to 7500 max. Limited street use.
<b>84513</b>	66215-16	68380X2-16	87048-16	86072-16	For rpm up to 8000 plus. Race only.

Spring pressure:

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985\*).

68380X2-16 Seat: 1.800" @ 197 lbs / Nose: 1.200" @ 470 lbs / Coil bind: 1.110" (Machine work, use cutter 68999\*).

Optional springs (race only):

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68992\*).

68670S-16 Seat: 1.900" @ 180 lbs / Nose: 1.200" @ 654 lbs / Coil bind: 1.010" (Machine work, use cutter 68979\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: If using Boss heads contact the factory for special spring and retainer recommendations. Boss 302 engines employ a 1.73 rocker ratio, so the gross lifts listed on this page, as well as the previous page, are incorrect for the Boss 302. To figure the correct gross lift for Boss 302 heads divide the gross lift listed by 1.6 (lobe lift) then multiply the lobe lift by 1.73 (Boss 302 rocker ratio).

Note: Camshafts for 289/302 cid engines can be used in 351W engines by changing the firing order to 1-5-4-2-6-3-7-8.

Some early Ford heads use 5/16 valve stems. Please specify when ordering as the above kits are designed for 11/32 stems.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73609-16</b>	Rocker arms (1.6) 3/8
<b>73611-16</b>	Rocker arms (1.7) 3/8
<b>76523</b>	Timing gear set
<b>70504-8</b>	Guide plates for 5/16 pushrod
<b>76014</b>	Distributor gear (.500" shaft dia)

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.







351W V8 1969-up

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. RPM Power Range: 1200 - 3800 / Redline: 5200 plus.	351	<b>15935</b>	258H 112°	258°	264°	202°	210°	.438"	.446"	84125
POWER BEAST / PERFORMANCE LEVEL 4 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1750 - 6000 / Redline: 6500 plus.	351	<b>15903</b>	298H 112°	298°	304°	224°	234°	.498"	.520"	84125
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Enhances mileage and torque in stock engines. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	351	<b>15224</b>	250HDP 112°	250°	258°	192°	198°	.426"	.430"	84125
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage with extended rpm's. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	351	<b>15233</b>	270HDP 112°	270°	276°	212°	218°	.475"	.489"	84125
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street/strip grind with emphasis on upper bottom to top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	351	<b>15236</b>	280HDP 112°	280°	286°	220°	226°	.488"	.501"	84125
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Street/strip grind with strong mid to top end power. RPM Power Range: 2200 to 6000 / Redline: 7000 plus.	351	<b>15237</b>	297HDP 112°	297°	308°	236°	242°	.538"	.534"	84125
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range torque. RPM Power Range: 2500 to 6500 plus.	351	<b>15254</b>	284HDP 108°	284°	294°	224°	232°	.498"	.501"	84125
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Violent mid-range acceleration and torque. RPM Power Range: 2700 to 6700 plus.	351	<b>15255</b>	296HDP 108°	296°	304°	230°	246°	.506"	.506"	84125 or 84126
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range acceleration and torque. RPM Power Range: 3000 to 6700 plus.	351	<b>15256</b>	304HDP 108°	304°	312°	242°	250°	.536"	.506"	84125 or 84126
TURBOMASTER - This cam provides excellent low end and mid-range power with extended rpm range plus mileage for spirited offroad use. RPM Power Range: 1800 to 5500 plus.	351	<b>15938</b>	278HT 114°	278°	260°	212°	200°	.466"	.430"	84125 or 84126
TURBOMASTER - Intended for turbocharged hot street/strip and marine use. This cam offers extended rpm's on upper bottom and top. RPM Power Range: 2000 to 6500 plus.	351	<b>15939</b>	290HT 114°	290°	272°	226°	210°	.486"	.462"	84125 or 84126
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid to top end. RPM Power Range: 2400 to 6700 plus.	351	<b>15940</b>	288HC 114°	288°	288°	226°	226°	.467"	.467"	84125 or 84126
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.		<b>00001</b>								

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Seat Cups	Remarks
<b>84125</b>	66015-16	68100X200-16	87048-16	86072-16	68951-16	6500 rpm max. Daily street use.
<b>84126</b>	66015-16	68390X3-16	87048-16	86072-16	68951-16	7500 rpm max. Limited street use.

Spring pressure:

68100X200-16 Seat: 1.800" @ 107 lbs / Nose: 1.300" @ 254 lbs / Coil bind: 1.030" (Stock O.D., no machine work).

68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Stock O.D., no machine work).

Note: To eliminate using seat cups, you can machine heads with cutter 68990 (84125) or 68985 (84126).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73609-16</b>	Rocker arms (1.6) 3/8

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.



351W V8 1969-up

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque profile with emphasis on mid-range and top end power. RPM Power Range: 2200 to 6000 / Redline: 6500 plus.	351	<b>15358</b>	260FDP 112°	260°	264°	228°	226°	.474"	.485"	84218
PRO-STREET / PERFORMANCE LEVEL 4 - High revving profile with superior mid-range and top end power. RPM Power Range: 2500 to 6500 / Redline: 7000 plus.	351	<b>15359</b>	282FDP 112°	282°	288°	242°	250°	.538"	.557"	84219
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, high revving profile, perfect for short oval track applications. RPM Power Range: 3500 to 6500 / Redline: 7000 plus.	351	<b>15345</b>	288FDP 105°	288°	299°	252°	258°	.562"	.579"	84219
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, high revving profile, perfect for midsize oval track applications. RPM Power Range: 4000 to 7000 / Redline: 7500 plus.	351	<b>15346</b>	296FDP 106°	296°	306°	260°	268°	.586"	.605"	84219
COMPU-PRO / PERFORMANCE LEVEL 5 - Emphasis on mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 8000 plus.	351	<b>15347</b>	310FDP 108°	310°	316°	276°	278°	.622"	.629"	84219
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	351	<b>00000</b>								84218 or 84219

## ROLLER CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 4 - Perfect for street/strip. Emphasis on mid-range power. RPM Power Range: 2500 to 6500 / Redline: 7000 plus.	351	<b>15458</b>	280R 112°	280°	288°	232°	242°	.528"	.530"	84510
PRO-STREET / PERFORMANCE LEVEL 5 - Perfect for street/strip. Emphasis on mid-range and top end power. RPM Power Range: 4000 to 7500 / Redline: 8000 plus.	351	<b>15459</b>	290R 110°	290°	296°	248°	252°	.558"	.547"	84510
COMPU-PRO / PERFORMANCE LEVEL 5 - Emphasis on mid-range and top end, excellent drag profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	351	<b>15445</b>	285R 106°	285°	292°	254°	260°	.597"	.578"	84513
COMPU-PRO / PERFORMANCE LEVEL 5 - Emphasis on mid-range and top end, excellent drag profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	351	<b>15446</b>	300R 107°	300°	310°	268°	274°	.680"	.669"	84509
COMPU-PRO / PERFORMANCE LEVEL 5 - Emphasis on mid-range and top end, excellent drag profile. RPM Power Range: Varies on valve train, heads, manifold, etc...	351	<b>15447</b>	309R 108°	309°	314°	276°	282°	.685"	.656"	84509
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	351	<b>00002</b>								84513 or 84509

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Remarks
<b>84218</b>	66915-16	68100X200-16	87048-16	86072-16		6500 max. Daily street use.
<b>84219</b>	66915-16	68390X3-16	87048-16	86072-16		7500 max. Limited street use.
<b>84510</b>	66215-16	68390X3-16	87048-16	86072-16		7000 rpm. Limited street use.
<b>84513</b>	66215-16	68380X2-16	87048-16	86072-16		8000 rpm. Race only.
<b>84509</b>	66215-16	68670S-16	86067D-16	86072-16	86110-16	8500 rpm. Race only.

Spring pressure:

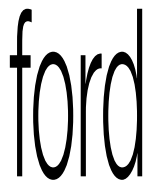
68100CX200-16 Seat: 1.800" @ 107 lbs / Nose: 1.300" @ 254 lbs / Coil bind: 1.030" (Machine work, use cutter 68990).  
 68390X3-16 Seat: 1.800" @ 115 lbs / Nose: 1.250" @ 355 lbs / Coil bind: 1.110" (Machine work, use cutter 68985).  
 68380X2-16 Seat: 1.800" @ 197 lbs / Nose: 1.200" @ 470 lbs / Coil bind: 1.110" (Machine work, use cutter 68999).  
 68670S-16 Seat: 1.900" @ 196 lbs / Nose: 1.200" @ 654 lbs / Coil bind: 1.010" (Machine work, use cutter 68979).

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76015</b>	Bronze distributor gear (.530" shaft dia)
<b>73609-16</b>	Rocker arms (1.6) 3/8

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



351C 351M 400 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. Good for stock replacement. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	351 400	<b>15965</b>	258H 112°	258°	264°	200°	210°	.477"	.486"	84125
TORQUE BEAST / PERFORMANCE LEVEL 2 - Delivers impressive mid-range and top end power. RPM Power Range: 2000 to 4800 / Redline: 6000 plus.	351 400	<b>15975</b>	282H 112°	282°	292°	204°	214°	.486"	.512"	84125
POWER BEAST / PERFORMANCE LEVEL 3 - Exhibits broad stump pulling power and torque. Good for stock replacement. RPM Power Range: 2200 to 5000 / Redline: 6200 plus.	351 400	<b>15973</b>	292H 112°	292°	302°	214°	224°	.512"	.538"	84125
ULTRA BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. RPM Power Range: 2200 to 5000 / Redline: 6200 plus.	351 400	<b>15966</b>	278H 112°	278°	284°	220°	226°	.529"	.540"	84125
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque while delivering fuel efficient motoring. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	351 cid	<b>15229</b>	250HDP 112°	250°	258°	192°	196°	.460"	.465"	84125
	400 cid	<b>15230</b>	260HDP 112°	260°	266°	204°	210°	.481"	.488"	84125
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited offroad use. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	351 cid	<b>15240</b>	270HDP 112°	270°	276°	210°	220°	.486"	.510"	84125
	400 cid	<b>15241</b>	276HDP 112°	276°	281°	214°	220°	.527"	.534"	84125 or 84124
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer an extended rpm range with upper bottom and top end power with strong emphasis on mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	351 cid	<b>15242</b>	280HDP 112°	280°	286°	220°	226°	.526"	.540"	84125 or 84124
	400 cid	<b>15243</b>	284HDP 112°	284°	290°	228°	234°	.557"	.574"	84125 or 84124
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	351 cid	<b>15244</b>	297HDP 112°	297°	308°	234°	240°	.578"	.578"	84125 or 84124
	400 cid	<b>15245</b>	311HDP 112°	311°	316°	246°	252°	.593"	.606"	84125 or 84124
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle with explosive upper bottom and mid-range torque. RPM Power Range: 2500 to 6500 plus.	351 cid	<b>15266</b>	280HDP 108°	280°	288°	222°	230°	.540"	.540"	84125 or 84124
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Strong idle with violent mid-range acceleration and torque. RPM Power Range: 2700 to 6700 plus.	351 cid	<b>15267</b>	290HDP 108°	290°	302°	238°	248°	.536"	.543"	84125 or 84124
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Very rough idle with violent mid-range and top end acceleration and power. RPM Power Range: 3000 to 6700 plus.	351 cid	<b>15268</b>	302HDP 108°	302°	312°	244°	248°	.548"	.545"	84125 or 84124
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid to top end. RPM Power Range: 2400 to 6700 plus.	351 400	<b>15981</b>	304HC 114°	304°	304°	246°	246°	.548"	.548"	84125 or 84124
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								84125 or 84124



351C 351M 400 V8

## 390 SERIES HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
351C cid 400 cid	1800 1500	3300 3000	5000 4500	5500 5000	<b>15170</b>	112°	264°	272°	202°	210°	112°	115°	.282"	.280"	.488"	.484"
351C cid 400 cid	2000 1600	3500 3100	5300 4800	5800 5300	<b>15171</b>	112°	269°	278°	207°	216°	116°	125°	.287"	.292"	.497"	.505"
351C cid 400 cid	2100 1800	3600 3300	5500 5000	6000 5500	<b>15172</b>	112°	277°	283°	215°	221°	126°	130°	.300"	.297"	.519"	.514"
351C cid 400 cid	2300 2000	3800 3500	5700 5200	6300 5700	<b>15173</b>	110°	280°	287°	219°	225°	131°	134°	.306"	.303"	.530"	.524"
351C cid 400 cid	2400 2100	3900 3600	5900 5500	6400 6000	<b>15174</b>	110°	289°	295°	227°	233°	140°	142°	.318"	.316"	.550"	.547"
351C cid 400 cid	2500 2300	4000 3800	6100 5800	6500 6300	<b>15175</b>	108°	298°	303°	236°	241°	149°	150°	.332"	.328"	.574"	.567"
351C cid 400 cid	2600 2500	4100 4000	6300 6000	6500 6500	<b>15176</b>	108°	304°	310°	242°	248°	156°	158°	.344"	.340"	.595"	.588"
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>											

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Seat Cups	Remarks
<b>84125</b>	66015-16	68100X200-16	87048-16	86072-16	68951-16	6500 max rpm. Daily street use.
<b>84124</b>	66015-16	68315-16	87050-16	86072-16		6500 max rpm. Limited street use.

Spring pressure:

68100X200-16 Seat: 1.800" @ 107 lbs / Nose: 1.250" @ 274 lbs / Coil bind: 1.030"

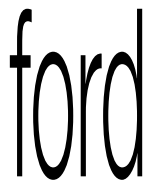
68315-16 Seat: 1.850" @ 105 lbs / Nose: 1.250" @ 322 lbs / Coil bind: 1.150" (Stock O.D.)

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73615-16</b>	Rocker arms (1.73) 7/16
<b>73619-16</b>	Rocker arms (1.8) 7/16
<b>76531</b>	Timing gear set

Note: If using guide plates, heat-treated pushrods (RC60 series) are required. See pushrod section or contact Crower.



351C 351M 400 V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque grind with mid-range and top end power. RPM Power Range: 2200 to 5750 / Redline: 6000 plus.	351 400	<b>15388</b>	282FDP 112°	282°	288°	238°	242°	.524"	.533"	84225
PRO-STREET / PERFORMANCE LEVEL 4 - High revving with superior mid-range and top end power. RPM Power Range: 2500 to 6000 / Redline: 6250 plus.	351 400	<b>15389</b>	292FDP 112°	292°	298°	246°	250°	.541"	.548"	84225
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval camshaft. RPM Power Range: 3500 to 6500 / Redline: 7000 plus.	351 400	<b>15380</b>	288FDP 105°	288°	294°	254°	258°	.569"	.580"	84225 or 84226
COMPU-PRO / PERFORMANCE LEVEL 5 - Great high torque oval track grind with emphasis on mid-range power. RPM Power Range: 4000 to 7000 / Redline: 7500 plus.	351 400	<b>15381</b>	298FDP 106°	298°	306°	262°	268°	.592"	.607"	84226
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 8000 plus.	351 400	<b>15382</b>	311FDP 107°	311°	316°	274°	282°	.618"	.638"	84226
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	351 400	<b>00000</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Seat Cups	Remarks
<b>84225</b>	66915-16	68100X200-16	87048-16	86072-16	68951-16	Solid Lifter. 6000 max rpm.
<b>84226</b>	66915-16	68390X3-16	87048-16	86072-16	68951-16	Solid Lifter. 7500 max rpm. Limited street.

Spring pressure:

68100X200-16 Seat: 1.825" @ 100 lbs / Nose: 1.325" @ 247 lbs / Coil bind: 1.030" (Seat cups eliminate machine work).

68390X3-16 Seat: 1.825" @ 106 lbs / Nose: 1.325" @ 310 lbs / Coil bind: 1.110" (Seat cups eliminate machine work).

Note: Some stock cylinder heads come with multi-groove keepers on the exhaust. If so, you must order retainer 87049-16 which is designed to fit multi-groove keepers. See retainer specs or contact Crower.

Note: If you machine heads to eliminate use of spring cups, see seat cutters or contact Crower.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>73615-16</b>	Rocker arms (1.73) 7/16
<b>73619-16</b>	Rocker arms (1.8) 7/16
<b>76531</b>	Timing gear set

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



351C 351M 400 V8

## ROLLER CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 7500 plus.	All cid	<b>15480</b>	284R 110°	275°	284°	234°	244°	.570"	.572"	84520
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track profile. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	All cid	<b>15481</b>	285R 106°	285°	292°	252°	260°	.645"	.626"	84521 or 84519
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 to 1/2 mile super oval track profile. RPM Power Range: 4000 to 7500 / Redline: 8000 plus.	All cid	<b>15482</b>	297R 106°	297°	304°	262°	268°	.662"	.636"	84521 or 84519
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 5200 to 8000 / Redline: 8250 plus.	All cid	<b>15483</b>	304R 106°	304°	312°	270°	276°	.690"	.672"	84521 or 84519
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 5500 to 8000 / Redline 8250 plus.	All cid	<b>15484</b>	311R 108°	311°	318°	280°	284°	.759"	.736"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Top end drag profile with plenty of power. RPM Power Range: 5200 to 8000 / Redline: 8250 plus.	All cid	<b>15485</b>	319R 110°	319°	324°	288°	292°	.795"	.736"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Top end drag profile with plenty of power. RPM Power Range: 5500 to 8000 / Redline: 8250 plus.	All cid	<b>15486</b>	334R 112°	334°	338°	294°	302°	.783"	.724"	See Below
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Remarks
<b>84520</b>	66218-16	68340-16	87062S-16	86072-16	86107X1-16	7500 rpm plus. Limited street use.
<b>84521</b>	66218-16	68363-16	87062-16	86072-16	86107X1-16	8000 rpm. Race only.
<b>84519</b>	66218-16	68365-16	86069-16	86072T-16	86110-16	8500 rpm. Race only

Spring pressure:

68340-16 Seat: 1.875" @ 128 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986\*).

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68992\*).

68365-16 Seat: 1.925" @ 259 lbs / Nose: 1.300" @ 660 lbs / Coil bind: 1.230" (Machine work, use cutter 68989\*).

Optional spring (race only):

6855X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.100" @ 870 lbs / Coil bind: 1.020" (Machine work, use cutter 68980\*).

68671-16 Seat: 2.000" @ 233 lbs / Nose: 1.300" @ 678 lbs / Coil bind: 1.110" (Machine work, use cutter 68981\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: For high performance applications, we recommend using single groove valves and valve stem keepers. The above kits are designed for 11/32 single groove valve stems and 7° and 10° single groove keepers. Race applications must use .100" long valves.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76531</b>	Timing gear set
<b>73615-16</b>	Rocker arms (1.73) 7/16

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

HIGH RPM! Crower highly recommends the use of rollerized rockers. See rockers for ratios and stud diameters.



332 352 360 390 406 410 427 428 V8 FE 1963-up

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.76 / 1.76		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	332 390	<b>16915</b>	268H 112°	268°	274°	204°	210°	.484"	.496"	84016
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	390 428	<b>16903</b>	292H 112°	292°	302°	214°	224°	.521"	.547"	84116
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque while delivering fuel efficient motoring. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	332 352	<b>16236</b>	246HDP 112°	246°	253°	186°	192°	.445"	.466"	84016
	390 428	<b>16237</b>	250HDP 112°	250°	258°	192°	196°	.468"	.473"	84016
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited offroad use. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	332 352	<b>16238</b>	260HDP 112°	260°	266°	204°	210°	.489"	.500"	84016
	390 428	<b>16239</b>	270HDP 112°	270°	276°	210°	220°	.494"	.523"	84016
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer extended rpm range with emphasis on upper bottom to top end power with strong mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	332 352	<b>16240</b>	276HDP 112°	276°	281°	214°	220°	.537"	.543"	84016
	390 428	<b>16241</b>	280HDP 112°	280°	286°	222°	228°	.538"	.552"	84016 or 84116
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	332 352	<b>16242</b>	284HDP 112°	284°	290°	228°	230°	.566"	.587"	84016 or 84116
	390 428	<b>16243</b>	297HDP 112°	297°	308°	236°	242°	.591"	.588"	84116
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range torque and power. RPM Power Range: 2500 to 6500 plus.	390 428	<b>16255</b>	280HDP 108°	280°	288°	224°	232°	.549"	.550"	84016 or 84116
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Violent mid-range acceleration and torque. RPM Power Range: 2700 to 6700 plus.	390 428	<b>16256</b>	290HDP 108°	290°	302°	238°	248°	.550"	.557"	84016 or 84116
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range acceleration and torque. RPM Power Range: 3000 to 6700 plus.	390 428	<b>16257</b>	302HDP 108°	302°	312°	244°	250°	.554"	.556"	84116
TURBOMASTER - Intended for turbocharged hot street/strip and marine use. This cam offers extended rpm's on upper bottom and top. RPM Power Range: 2000 to 6500 plus.	390 428	<b>16979</b>	290HT 114°	290°	280°	224°	212°	.528"	.502"	84016 or 84116
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid-range to top. RPM Power Range: 2200 to 6700 plus.	390 428	<b>16980</b>	288HC 114°	288°	288°	226°	226°	.533"	.533"	84116
SUPERCHARGER - Dual purpose hot street/strip cam designed to enhance B&M/Roots type supercharger. Strong mid to top end power. RPM Power Range: 2400 to 6800 plus.	390 428	<b>16981</b>	304HC 114°	304°	304°	244°	244°	.556"	.556"	84016
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Following Page



332 352 360 390 406 410 427 428 V8 FE 1963-up

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.76 / 1.76		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	390 428	<b>16360</b>	284F 114°	284°	284°	245°	245°	.524"	.524"	84316
PRO-STREET / PERFORMANCE LEVEL 3 - High torque grind with mid-range and top end power. RPM Power Range: 2250 to 5500 / Redline: 6000 plus.	390 428	<b>16356</b>	260FDP 114°	260°	266°	228°	228°	.526"	.537"	84317
PRO-STREET / PERFORMANCE LEVEL 4 - High revving with superior mid-range and top end power. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	390 428	<b>16357</b>	278FDP 114°	278°	284°	240°	243°	.530"	.535"	84317
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval camshaft. RPM Power Range: 2500 to 6000 / Redline: 7000 plus.	390 428	<b>16331</b>	290FDP 108°	290°	298°	247°	252°	.551"	.565"	84317 or 84316
COMPU-PRO / PERFORMANCE LEVEL 5 - Great high torque mid-range oval track grind. RPM Power Range: 3000 to 7000 / Redline: 7500.	390 428	<b>16332</b>	300FDP 108°	300°	310°	255°	260°	.579"	.593"	84317 or 84316
COMPU-PRO / PERFORMANCE LEVEL 5 - Strong mid-range and top end profile. RPM Power Range: 4000 to 7250 / Redline: 7500 plus.	390 428	<b>16333</b>	312FDP 108°	312°	318°	263°	272°	.588"	.602"	84316
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 7500 plus.	390 428	<b>16334</b>	320FDP 110°	320°	328°	273°	281°	.628"	.648"	84316
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84317 or 84316

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84016</b>	66016-16	68302X1-16	87063M-16		Hydraulic. 6000 plus rpm. Daily street use.
<b>84116</b>	66016-16	68340-16	87063-16	86071-16	Hydraulic. 7000 plus rpm. Limited street use.
<b>84317</b>	66916-16	68302X1-16	87063M-16	86071-16	Solid. 6500 plus rpm. Daily street use.
<b>84316</b>	66916-16	68340-16	87063-16	86071-16	Solid. 7500 plus rpm. Limited street use.

Spring pressure:

68302X1-16 Seat: 1.850" @ 91 lbs / Nose: 1.350" @ 256 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986\*).

\* Machine work required, specify 38 pilot shaft when ordering.

Lightweight option: Crower deep seated, solid lifters (66925-16) and pushrods (70138-16) insures proper valve train geometry.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76525</b>	Timing gear set
<b>76016</b>	Distributor gear (.500" shaft dia)

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.





332 352 360 390 406 410 427 428 V8 FE 1963-up

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.76 / 1.76		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 7500 plus.	390 428	<b>16462</b>	280R 110°	280°	288°	234°	244°	.580"	.582"	84524
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track profile. RPM Power Range: 3750 to 7000 / Redline: 7500 plus.	390 428	<b>16463</b>	290R 108°	290°	296°	248°	254°	.651"	.655"	84524 or 84525
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong mid-range design. RPM Power Range: 4000 to 7250 / Redline: 7750 plus.	390 428	<b>16464</b>	296R 108°	296°	301°	254°	260°	.654"	.663"	84525
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 to 1/2 mile super oval track profile. RPM Power Range: 4250 to 7500 / Redline: 8000 plus.	390 428	<b>16465</b>	301R 108°	301°	306°	258°	264°	.663"	.675"	84525
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 4500 to 7750 / Redline: 8250 plus.	390 428	<b>16466</b>	306R 108°	306°	310°	264°	268°	.675"	.675"	84525
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 4750 to 8000 / Redline: 8500 plus.	390 428	<b>16467</b>	314R 110°	314°	318°	278°	282°	.752"	.771"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast top end power profile. RPM Power Range: 5000 to 8250 / Redline: 8750 plus.	390 428	<b>16468</b>	318R 110°	318°	324°	282°	286°	.770"	.783"	Call Crower
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84524</b>	66216-16	68385X2-16	87063-16	86071-16	7000 plus rpm. Limited street use.
<b>84525</b>	66216-16	68363-16	87063-16	86071-16	7500 plus rpm to .700" max lift.

Spring pressure:

68385X2-16 Seat: 1.900" @ 166 lbs / Nose: 1.300" @ 422 lbs / Coil bind: 1.100" (Machine work, use cutter 68979\*).

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68992\*).

Optional spring (race only):

68555X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.100" @ 870 lbs / Coil bind: 1.020" (Machine work, use cutter 68980\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76525</b>	Timing gear set

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



370 429 460 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	370 460	<b>22915</b>	268H 112°	268°	274°	203°	210°	.481"	.488"	84022
POWER BEAST / PERFORMANCE LEVEL 3 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	429 460	<b>22903*</b>	293H 112°	268°	286°	210°	226°	.510"	.536"	84022
ULTRA BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Economical price. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	460 cid	<b>22917</b>	268H 112°	303°	308°	224°	234°	.538"	.562"	84122
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque while delivering fuel efficient motoring. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	370 429	<b>22237</b>	250HDP 112°	250°	258°	191°	195°	.453"	.460"	84022
	460 cid	<b>22238</b>	260HDP 112°	260°	266°	204°	209°	.481"	.486"	84022
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited offroad use. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	370 429	<b>22239</b>	270HDP 112°	270°	276°	211°	218°	.484"	.509"	84022
	460 cid	<b>22240</b>	276HDP 112°	274°	281°	215°	221°	.527"	.535"	84022
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer extended rpm range with emphasis on upper bottom to top end power with strong mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	370 429	<b>22241</b>	280HDP 112°	280°	286°	220°	226°	.524"	.541"	84022
	460 cid	<b>22242</b>	284HDP 112°	284°	290°	227°	232°	.552"	.569"	84022 or 84122
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 7000 plus.	370 429	<b>22243</b>	297HDP 112°	297°	308°	237°	240°	.580"	.576"	84122
	460 cid	<b>22244</b>	311HDP 112°	311°	316°	246°	250°	.588"	.604"	84122
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range torque. RPM Power Range: 2500 to 6500 plus.	429 460	<b>22205</b>	280HDP 108°	280°	288°	222°	232°	.536"	.540"	84022 or 84122
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Violent mid-range acceleration and torque. RPM Power Range: 2700 to 6700 plus.	429 460	<b>22206</b>	290HDP 108°	290°	302°	236°	245°	.535"	.545"	84022 or 84122
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range acceleration and top end horsepower. RPM Power Range: 3000 to 6700 plus.	460 cid	<b>22207</b>	302HDP 108°	302°	312°	244°	251°	.540"	.541"	84022 or 84122
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid to top end. RPM Power Range: 2200 to 6500 plus.	429 460	<b>22980</b>	288HC 114°	288°	288°	228°	228°	.500"	.500"	84022 or 84122
SUPERCHARGER - Dual purpose hot street/strip cam designed to enhance B&M/Roots type supercharger. Strong mid to top end power. RPM Power Range: 2400 to 6700 plus.	429 460	<b>22981</b>	304HC 114°	304°	304°	244°	244°	.541"	.541"	84022 or 84122
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								Kits on Following Page

\*Indicates spec change from previous catalog.



370 429 460 V8

## 390 SERIES HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
429 cid 460 cid	1500 1100	3000 2600	4600 4100	5100 4600	<b>22170</b>	112°	264°	272°	202°	210°	112°	115°	.282"	.280"	.488"	.484"
429 cid 460 cid	1700 1300	3200 2800	4800 4300	5300 4800	<b>22171</b>	112°	269°	278°	207°	216°	116°	125°	.287"	.292"	.497"	.505"
429 cid 460 cid	1900 1600	3400 3100	5000 4600	5500 5100	<b>22172</b>	112°	277°	283°	215°	221°	126°	130°	.300"	.297"	.519"	.514"
429 cid 460 cid	2100 1800	3600 3300	5200 4800	5700 5300	<b>22173</b>	111°	280°	287°	219°	225°	131°	134°	.306"	.303"	.530"	.524"
429 cid 460 cid	2300 2000	3800 3500	5400 5000	5900 5500	<b>22174</b>	110°	289°	295°	227°	233°	140°	142°	.318"	.316"	.550"	.547"
429 cid 460 cid	2500 2300	4000 3800	5600 5200	6100 5700	<b>22175</b>	110°	298°	303°	236°	241°	149°	150°	.332"	.328"	.574"	.567"
429 cid 460 cid	2700 2500	4200 4000	5800 5400	6300 5900	<b>22176</b>	108°	304°	310°	242°	248°	156°	158°	.344"	.340"	.595"	.588"
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>											

## MARINE HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

C.I.D. Group	RPM Range				Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Duration @ .200"		Lobe Lift		Gross Lift	
	Low RPM	Peak Torque	Peak HP	Top RPM			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust
429 cid 460 cid	1600 1300	3100 2800	4700 4300	5200 4800	<b>22220</b>	114°	277°	283°	215°	221°	126°	130°	.300"	.297"	.519"	.484"
429 cid 460 cid	2000 1700	3500 3200	5100 4700	5600 5200	<b>22221</b>	114°	289°	295°	227°	233°	140°	142°	.318"	.316"	.550"	.546"
429 cid 460 cid	2400 2200	3900 3700	5400 5100	5900 5600	<b>22222</b>	114°	304°	310°	242°	248°	156°	158°	.344"	.340"	.595"	.588"
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications.					<b>00001</b>											

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84022</b>	66015-16	68302X1-16	87062S-16		Hydraulic. 6500 max rpm. Daily street use.
<b>84122</b>	66015-16	68340-16	87062-16	86072-16	Hydraulic. 6500 max rpm. Limited street use.

Spring pressure:

68302X1-16 Seat: 1.800" @ 107 lbs / Nose: 1.250" @ 292 lbs / Coil bind: 1.150" (Machine work, use cutter 68976).

68340-16 Seat: 1.900" @ 118 lbs / Nose: 1.300" @ 384 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Pushrods
<b>73615-16</b>	Rocker arms (1.73) 7/16
<b>73619-16</b>	Rocker arms (1.8) 7/16
<b>76535</b>	Timing gear set (1972-up)

Note: If using guide plates, heat-treated pushrods (RC60 series) are required. See pushrod section or contact Crower.

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ULTRA BEAST / PERFORMANCE LEVEL 4 - Delivers impressive mid-range and top end power. RPM Power Range: 2750 to 6500 / Redline: 7000 plus.	429 460	<b>22360</b>	317F 112°	294°	304°	244°	254°	.588"	.614"	84322
PRO-STREET / PERFORMANCE LEVEL 3 - High torque grind with mid-range and top end power. RPM Power Range: 2250 to 5500 / Redline: 6000 plus.	429 460	<b>22354</b>	260FDP 112°	260°	266°	228°	228°	.516"	.533"	84322
PRO-STREET / PERFORMANCE LEVEL 4 - High revving with superior mid-range and top end power. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	429 460	<b>22355</b>	278FDP 110°	278°	284°	238°	241°	.519"	.524"	84322
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval camshaft. RPM Power Range: 2500 to 6000 / Redline: 7000 plus.	429 460	<b>22356</b>	290FDP 108°	290°	298°	247°	251°	.538"	.552"	84322
COMPU-PRO / PERFORMANCE LEVEL 5 - Great high torque profile with mid-range power. RPM Power Range: 3000 to 7000 / Redline: 7400 plus.	429 460	<b>22357</b>	300FDP 108°	300°	310°	255°	255°	.569"	.578"	84322
COMPU-PRO / PERFORMANCE LEVEL 5 - Strong mid-range/top end profile. RPM Power Range: 4000 to 7250 / Redline: 7500 plus.	429 460	<b>22358</b>	312FDP 108°	312°	318°	263°	269°	.590"	.602"	84322
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 7750 plus.	429 460	<b>22359</b>	320FDP 108°	320°	328°	273°	279°	.614"	.633"	84322
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84322

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84022</b>	66015-16	68302X1-16	87062S-16		Hydraulic. 6000 plus rpm. Daily street use.
<b>84122</b>	66015-16	68340-16	87062-16	86072-16	Hydraulic. 7000 plus rpm. Limited street use.
<b>84322</b>	66915-16	68340-16	87062-16	86072-16	Solid. 7500 plus rpm. Limited street use.

### Spring pressure:

68302X1-16 Seat: 1.850" @ 91 lbs / Nose: 1.350" @ 256 lbs / Coil bind: 1.150" (Machine work, use cutter 68976).

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

### Optional spring (race only):

68385X2-16 Seat: 1.900" @ 166 lbs / Nose: 1.300" @ 422 lbs / Coil bind: 1.100" (Machine work, use cutter 68979).

68389-16 Seat: 1.900" @ 132 lbs / Nose: 1.300" @ 383 lbs / Coil bind: 1.140" (Machine work, use cutter 68986).

Note: Screw-in rocker studs should be used when installing solid lifter camshafts to insure proper valve adjustment.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76535</b>	Roller timing gear set (1972 - up)
<b>73620-16</b>	Rocker arms (1.73) 7/16

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.73 / 1.73		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 7500 plus.	429 460	<b>22401</b>	286R 110°	275°	284°	234°	244°	.570"	.572"	84526
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track profile. RPM Power Range: 3750 to 7000 / Redline: 7500 plus.	429 460	<b>22402</b>	290R 108°	290°	296°	249°	254°	.642"	.645"	84527
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong mid-range design. RPM Power Range: 4000 to 7250 / Redline: 7750 plus.	429 460	<b>22403</b>	300R 108°	300°	310°	258°	268°	.654"	.648"	84527
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Fast 3/8 to 1/2 mile super oval track profile. RPM Power Range: 4250 to 7500 / Redline: 8000 plus.	429 460	<b>22404</b>	308R 108°	308°	314°	264°	268°	.666"	.668"	84527
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 4500 to 7750 / Redline: 8250 plus.	429 460	<b>22405</b>	316R 108°	316°	322°	272°	277°	.690"	.698"	84527
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 4750 to 8000 / Redline: 8500 plus.	429 460	<b>22406</b>	322R 110°	322°	328°	282°	280°	.757"	.721"	84528
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Full top end power profile. RPM Power Range: 5000 to 8250 / Redline: 8750 plus.	429 460	<b>22407</b>	330R 110°	330°	338°	284°	288°	.769"	.754"	84528
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Remarks
<b>84526</b>	66217-16	68389-16	87062-16	86072-16		7000 plus rpm. Limited street use.
<b>84527</b>	66217-16	68363-16	87064-16	86072-16	86110-16	8000 plus rpm. Race only.
<b>84522</b>	66217-16	68555X1-16	86067D-16	86072-16	86110-16	8500 plus rpm. Race only.

### Spring pressure:

68389-16 Seat: 1.900" @ 132 lbs / Nose: 1.300" @ 383 lbs / Coil bind: 1.140" (Machine work, use cutter 68987\*).

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68992\*).

68555X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.100" @ 870 lbs / Coil bind: 1.020" (Machine work, use cutter 68980\*).

### Optional springs:

68671-16 Seat: 1.950" @ 263 lbs / Nose: 1.300" @ 678 lbs / Coil bind: 1.110" (Machine work, use cutter 68981\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: Screw-in rocker studs should be used when installing roller lifter cams to insure proper valve adjustment.

Note: Roller cams and kits available for Boss 429. Contact Crower for technical assistance.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76013</b>	Alum/Bronze distributor gear
<b>76535</b>	Roller timing gear set (1972 - up)
<b>73620-16</b>	Rocker arms (1.73) 7/16

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: If exceeding 8000 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.



**RACE CORE ALSO AVAILABLE  
GO ONLINE FOR DETAILS**

## B SERIES VTEC (B16A / B18C / B17A) - Twin Cam

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Lobe	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK CIVIC Si (1999-2000)	<b>Civic Si</b>	Mid	284°	282°	224°	220°	.265"	.244"	.412"	.379"	Stock
STOCK GSR (94-up)	<b>GSR</b>	Mid	290°	292°	236°	224°	.273"	.244"	.423"	.378"	Stock
JDM SPEC CIVIC TYPE R (98-up)	<b>CTR</b>	Mid	294°	305°	240°	232°	.289"	.269"	.447"	.416"	Stock
STAGE 1 Performance oriented street use. CTR+ profile that will work with Type R valve springs. Also works w/mild turbo. RPM Range: Idle to 8500+. 14+ hp over B18C.	<b>63401-2*</b>	Mid Sec Pri	296° 278° 259°	306° 288° 230°	242° 200° 176°	234° 201° 179°	.290" .214" .141"	.270" .204" .131"	.449" .321" .204"	.418" .306" .190"	84163
STAGE 2 - Forced Induction Special Designed specifically for turbo/blower. Features short duration, low overlap and high valve lift. Requires kit #84161. RPM Range: Idle to 9500+. Horsepower varies w/boost.	<b>63401T-2*</b>	Mid Sec Pri	308° 278° 259°	309° 288° 230°	233° 200° 176°	235° 201° 179°	.301" .214" .141"	.287" .204" .131"	.466" .321" .204"	.445" .306" .190"	84161
STAGE 2 Stock idle lobes (sec/pri) with #63402 VTEC (mid) lobes. Recommend #84163 spring unless stock rev limit. RPM Range: Idle to 9250+. 18+ hp over B18C.	<b>63402A-2*</b>	Mid Sec Pri	311° 278° 259°	308° 288° 230°	255° 200° 176°	248° 201° 179°	.301" .214" .141"	.301" .204" .131"	.466" .321" .204"	.466" .306" .190"	84163
STAGE 2 - 3/4 Race Road/Rally Race and Street/Strip. Requires #84161 kit with rev limiter mod. VTEC controller also recommended. RPM Range: 1000 to 9500+. 20+ hp over built B18C.	<b>63402-2*</b>	Mid Sec Pri	311° 284° 269°	308° 273° 259°	255° 215° 196°	248° 213° 193°	.301" .243" .181"	.301" .234" .174"	.466" .364" .262"	.466" .351" .252"	84163 or 84161
STAGE 3 - Full Race Drag Race and rough Street/Strip. Requires #84161 kit with modified revs. VTEC controller (6200 min) recommended. RPM Range: 1200 to 9750+. 22+ hp over built B18C.	<b>63403-2*</b>	Mid Sec Pri	305° 282° 291°	305° 284° 283°	263° 216° 198°	255° 214° 199°	.302" .243" .215"	.302" .234" .203"	.468" .364" .311"	.468" .351" .294"	84161
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications.	<b>00063-2</b>										

\*Indicates a spec change from previous listings. Duration figures are taken at the valve.

Complete dyno figures available online at [www.crower.com](http://www.crower.com). Gross lift calculated by using the following rocker ratios: Mid (VTEC) - 1.55, Secondary - 1.50, Primary - 1.45.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84163S</b>	68185-16	87093S-16	<b>New</b> Steel retainer intended for high mileage B18C applications
<b>84163</b>	68185-16	87093-16	Titanium retainer intended for race and limited street
<b>84163D</b>	68185-16	87093D-16	Titanium retainer. B16A w/high lift cams (+.060" inst height)
<b>84161</b>	68188-16	87093-16	<b>New</b> Titanium retainer. High pressure spring for rpm over 9500
<b>84161D</b>	68188-16	87093D-16	<b>New</b> Titanium retainer. High pressure spring, high lift cams (+.060")

86115-16 Premium steel billet valve keepers (locks) available in standard or +.050" inst ht (#86115X1-16). Call for titanium.

Spring pressure:

68185-16 Seat: 1.350" @ 49 lbs / Nose: 0.900" @ 186 lbs / Coil bind: 0.805" (No machine work required).

68188-16 Seat: 1.350" @ 82 lbs / Nose: 0.900" @ 224 lbs / Coil bind: 0.765" (No machine work required).

Optional spring:

68186-16 Seat: 1.350" @ 73 lbs / Nose: 0.900" @ 193 lbs / Coil bind: 0.790" (Eibach spring, no machine work required).

Note: Crower titanium retainers weigh 7.5 grams vs. 12 grams stock steel. Crower steel retainers weigh 10.5 grams.

**Note: Some machine work on retainer #87093D may be required on the underside of rocker to allow retainer clearance.**



### ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design (327g) reduces unwanted harmonics which could cause valve train failure.

## ACCESSORIES

Part No.	Description
<b>86054BB</b>	Adjustable Cam Sprocket (1 only). All black.
<b>86054BC</b>	Adjustable Cam Sprocket (1 only). Black & Silver.
<b>97400I-8</b>	Stainless steel valves - 33 mm head dia (8 only int)
<b>97400E-8</b>	Stainless steel valves - 28 mm head dia (8 only exh)
<b>97401I-8</b>	Stainless steel valves - 33.5 mm head dia (8 only int)
<b>97401E-8</b>	Stainless steel valves - 28.5 mm head dia (8 only exh)
<b>97402I-8</b>	Stainless steel valves - 34 mm head dia (8 only int)

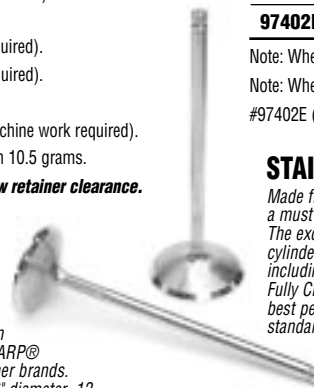
Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

#97402E (29mm head dia) has been discontinued. Rec 1/2mm over on exh.

### STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard, 1/2 mm and 1 mm oversize. Titanium valves also available.



## H22 SERIES VTEC - Twin Cam

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Lobe	Advised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK Type SH	<b>SH</b>	Mid	288°	308°	231°	234°	.289"	.268"	.448"	.415"	Stock
STOCK JDM SPEC	<b>JDM</b>	Mid	286°	302°	230°	228°	.289"	.268"	.448"	.415"	Stock
STOCK REPLACEMENT "Hopped Up" stock profile with more aggressive ramp speeds and total area. No modifications required. RPM Range: Idle to 7400+	<b>63420-2*</b>	Mid Sec Pri	305° 214° 210°	323° 285° 276°	232° 183° 175°	234° 191° 183°	.287" .215" .179"	.269" .208" .169"	.445" .323" .260"	.417" .312" .245"	Stock
STAGE 1 Proven performer in all motor applications on the street. No ECU mods or aftermarket valve springs required. RPM Range: Idle to 7500+	<b>63421-2*</b>	Mid Sec Pri	307° 214° 210°	318° 285° 276°	238° 183° 175°	238° 191° 183°	.296" .215" .179"	.276" .208" .169"	.459" .323" .260"	.428" .312" .245"	Stock
STAGE 2 Excellent for turbo or supercharged applications. Features short duration and high lift. Requires spring #68184-16. RPM Range: Idle to 8000+	<b>63421T-2*</b>	Mid Sec Pri	308° 214° 210°	309° 285° 276°	233° 183° 175°	235° 191° 183°	.299" .215" .179"	.289" .208" .169"	.463" .323" .260"	.448" .312" .245"	84167
STAGE 2 Stock idle lobes (sec/pri) with similar #63422 VTEC (mid) lobes. Recommend #84167 kit unless stock revs. RPM Range: Idle to 8000	<b>63422A-2*</b>	Mid Sec Pri	311° 214° 210°	308° 285° 276°	255° 183° 175°	248° 191° 183°	.302" .215" .179"	.301" .208" .169"	.468" .323" .260"	.467" .312" .245"	84167
STAGE 2 Road/Rally Race and Street/Strip. Most popular profile. Requires #84167 kit. VTEC controller, air/fuel mods rec. RPM Range: 1000 to 8000+	<b>63422-2*</b>	Mid Sec Pri	311° 280° 278°	308° 289° 256°	255° 199° 198°	248° 201° 199°	.302" .216" .196"	.301" .204" .182"	.468" .324" .284"	.467" .306" .263"	84167
STAGE 3 Drag Race and rough Street/Strip. Requires #84167 kit. VTEC controller, fuel/air add-ons also recommended. RPM Range: 1100 to 8200+	<b>63423-2*</b>	Mid Sec Pri	305° 267° 262°	305° 269° 254°	263° 216° 198°	255° 210° 193°	.302" .243" .184"	.302" .236" .176"	.468" .365" .267"	.468" .354" .255"	84167
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications.	<b>00065-2</b>										

\*Indicates a spec change from previous listings. Duration figures are taken at the valve.

Complete dyno figures available online at [www.crower.com](http://www.crower.com). Gross lift calculated by using the following rocker ratios: Mid Lobe (VTEC) - 1.55, Secondary Lobe - 1.50, Primary Lobe - 1.45.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84167</b>	68184-16	87093D-16	Titanium retainer is +.060" inst. ht. Rocker machining may be required.

Spring pressure:

68184-16 Seat: 1.460" @ 89 lbs / Nose: 0.950" @ 220 lbs / Coil bind: 0.790" (No machine work required).

Optional spring:

68187-16 Seat: 1.460" @ 78 lbs / Nose: 0.950" @ 210 lbs / Coil bind: 0.875" (Eibach spring, no machine work required).

**Note: Some machine work may be required on the underside of rocker to allow retainer clearance.**



### ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design (363g) reduces unwanted harmonics which could cause valve train failure.



## ACCESSORIES

Part No.	Description
<b>86054H</b>	Adjustable Cam Sprocket (1 only). All black.
<b>97415I-8</b>	Stainless steel valves - 35 mm head dia (8 only int)
<b>97415E-8</b>	Stainless steel valves - 30 mm head dia (8 only exh)
<b>97416I-8</b>	Stainless steel valves - 35.5 mm head dia (8 only int)
<b>97416E-8</b>	Stainless steel valves - 30.5 mm head dia (8 only exh)
<b>97417I-8</b>	Stainless steel valves - 36 mm head dia (8 only int)
<b>97417E-8</b>	Stainless steel valves - 31 mm head dia (8 only int)
<b>97418I-8</b>	Stainless steel valves - 37 mm head dia (8 only int)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

### STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Choose from standard, 1/2 mm, 1 mm and 2 mm oversize. Titanium valves also available. Contact Crower for availability.

# honda / acura

## B18A/B SERIES NON-VTEC - Twin Cam

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Advertised Duration		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit		
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust			
FACTORY OEM SPECS (B18B - LS)	<b>Stock</b>	220° 265°	Lobe Valve	222° 267°	185° 194°	Lobe Valve	187° 196°	.225"	.217"	.394"	.380"	Stock
STOCK REPLACEMENT Similar to stock idle and rpm range. No other mods required. RPM Range: Idle to 6800+	<b>62401-2*</b>	246° 291°	Lobe Valve	250° 295°	190° 201°	Lobe Valve	194° 205°	.226"	.218"	.396"	.382"	Stock
STAGE 1 Street use with emphasis on mid range power. Slight lobe at idle. RPM Range: Idle to 7250+	<b>62402-2*</b>	245° 290°	Lobe Valve	251° 296°	193° 203°	Lobe Valve	198° 208°	.238"	.228"	.417"	.399"	Stock
STAGE 2 <b>New</b> Turbo Special. Short duration and high lift grind. Requires #84162 kit. RPM Range: 900 to 8000+.	<b>62402T-2*</b>	256° 301°	Lobe Valve	256° 301°	193° 203°	Lobe Valve	193° 203°	.268"	.268"	.469"	.469"	84162
STAGE 2 Street/Strip package. Most popular N/A profile. Requires #84162 kit. RPM Range: 1000 to 8000+.	<b>62403-2*</b>	250° 295°	Lobe Valve	250° 295°	211° 221°	Lobe Valve	210° 220°	.241"	.235"	.422"	.411"	84162
STAGE 3 - 3/4 Race Recommended for mostly strip use in N/A applications. Rough idle. RPM Range: 1100 to 8200+	<b>62404-2*</b>	263° 308°	Lobe Valve	258° 303°	216° 226°	Lobe Valve	214° 224°	.254"	.248"	.445"	.434"	84162
STAGE 3 - Full Race <b>New</b> All out, all motor drag profile. Not for the inexperienced tuner. RPM Range: 1200 to 8500+	<b>62405A-2*</b>	308° 353°	Lobe Valve	305° 350°	230° 241°	Lobe Valve	227° 238°	.273"	.268"	.478"	.469"	84162
CUSTOM GROUND B18A/B CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00062-2</b>											84162

\*Indicates a spec change from previous listings.

Complete dyno figures available online at [www.crower.com](http://www.crower.com).

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84162</b>	68181-16	87092-16	Titanium retainer. Fits B18A and B18B.

Spring pressure:

68181-16 Seat: 1.400" @ 48 lbs / Nose: 0.950" @ 148 lbs / Coil bind: 0.710" (No machine work required).

Optional spring:

68182-16 Seat: 1.400" @ 70 lbs / Nose: 0.950" @ 202 lbs / Coil bind: 0.800" (No mach work / High pressure design).

Note: Crower titanium retainers weigh 5.5 grams vs. 12 grams stock.

Installed height on int = 1.320", exh = 1.425"



## ACCESSORIES

Part No.	Description
<b>86054BB</b>	Adjustable Cam Sprocket (1 only). All black.
<b>86054BC</b>	Adjustable Cam Sprocket (1 only). Black & Silver.
<b>974071-8</b>	Stainless steel valves - 31 mm head dia (8 only int)
<b>97407E-8</b>	Stainless steel valves - 28 mm head dia (8 only exh)
<b>974081-8</b>	Stainless steel valves - 31.5 mm head dia (8 only int)
<b>97408E-8</b>	Stainless steel valves - 28.5 mm head dia (8 only exh)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.



## D16Z6 & D16Y8 VTEC - Single Cam

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Lobe	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STOCK D16Z6 SOHC VTEC (92-95)	<b>Stock</b>	Int Mid / Exh	304°	303°	212°	204°	.246"	.207"	.394"	.373"	Stock
STOCK D16Y8 SOHC VTEC (96-up)	<b>Stock</b>	Int Mid / Exh	288°	292°	218°	204°	.248"	.204"	.397"	.367"	Stock
STOCK REPLACEMENT Similar to stock profile. Excellent for mild turbo and nitrous on the street with no other mods. RPM Range: Idle to 7000+	<b>63440Z</b> <b>63440Y</b>	Mid Sec Pri	288° 293° 293°	299° - -	220° 197° 197°	207° - -	.243" .205" .205"	.203" - -	.389" .328" .328"	.365" - -	Stock
STAGE 1 Features far more aggressive ramp rates than stock with added duration. Idle lobes remain same as stock. RPM Range: Idle to 7200+	<b>63441Z</b> <b>63441Y</b>	Mid Sec Pri	292° 293° 293°	302° - -	228° 197° 197°	208° - -	.254" .205" .205"	.214" - -	.406" .328" .328"	.385" - -	84166
STAGE 2 <b>New</b> Designed specifically for turbo or supercharged engines. Short duration reduces overlap, for more cylinder pressure. RPM Range: Idle to 8000+	<b>63441ZT</b> <b>63441YT</b>	Mid Sec Pri	312° 293° 293°	318° - -	234° 197° 197°	217° - -	.269" .205" .205"	.237" - -	.430" .328" .328"	.427" - -	84166
STAGE 2 Street/Strip. Slight lobe at idle due to increased sec/pri lobe specifications. Most popular all-motor profile. RPM Range: 1000 to 7500+	<b>63442Z</b> <b>63442Y</b>	Mid Sec Pri	319° 295° 295°	310° - -	235° 204° 204°	223° - -	.270" .205" .205"	.242" - -	.432" .332" .332"	.436" - -	84166
STAGE 3 Race cams. Requires extensive cylinder head modifications. VTEC controller and ECU tuning a must. RPM Range: 1200 to 8000+	<b>63443Z</b> <b>63443Y</b>	Mid Sec Pri	329° 295° 295°	317° - -	239° 204° 204°	226° - -	.276" .210" .210"	.260" - -	.442" .332" .332"	.468" - -	84166
CUSTOM GRIND - Crower can custom grind cams to your desired specs, also proprietary applications.	<b>00067</b>										84166

Note: Specify "Z" after part number if D16Z6 (92-95) or "Y" after part number if D16Y8 (96-up). All duration figures listed above are specific to the D16Y8.

Gross lift calculated by using the following rocker ratios: Int Mid Lobe (VTEC) - 1.60, Int Sec Lobe - 1.60, Int Pri Lobe - 1.60, Exhaust - 1.80.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84166</b>	68180-16	87096-16	Fits D16Z6 (92-95) and D16Y8 (96-up) cylinder heads

Spring pressure:

68180-16 Seat: 1.975" @ 58 lbs / Nose: 1.500" @ 154 lbs / Coil bind: 1.320" (No machine work required).



### ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design (367g) reduces unwanted harmonics which could cause valve train failure.



## ACCESSORIES

Part No.	Description
<b>86054YC</b>	D16Y8 Adjustable Cam Sprocket (1 only). Black & Silver.
<b>86054YB</b>	D16Y8 Adjustable Cam Sprocket (1 only). All Black.
<b>86054ZC</b>	D16Z6 Adjustable Cam Sprocket (1 only). Black & Silver.
<b>86054YC</b>	D16Z6 Adjustable Cam Sprocket (1 only). All Black.
<b>974031-8</b>	Stainless steel valves - 30 mm head dia (8 only int)
<b>97403E-8</b>	Stainless steel valves - 26 mm head dia (8 only exh)
<b>974041-8</b>	Stainless steel valves - 30.5 mm head dia (8 only int)
<b>97404E-8</b>	Stainless steel valves - 26.5 mm head dia (8 only exh)

Note: When ordering sprockets, Y = D16Y8 (96-up), Z = D16Z6 (92-95).

Note: When ordering valves, be sure to specify one set int and one set exh.

### STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Available in standard and 1/2 mm oversize. Titanium valves also available. Contact Crower for availability.

## 4G63 TURBO ECLIPSE & TALON - Twin Cam

Note: These cams use .000" intake (cold), .000" exhaust valve lash (cold).

Description	Part Number	Advertised Duration		Duration @ 1mm		Duration @ .050"		Gross Lift		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (Eclipse 4G63)	<b>Stock</b>	216° Lobe 230° Valve	208° 222°	181° Lobe 198° Valve	172° 189°	174° Lobe 190° Valve	165° 181°	.366"	.343"	Stock
STOCK REPLACEMENT Excellent for stock replacement, mild turbo and nitrous on the street. RPM Range: Idle to 7000+	<b>64411-2*</b>	220° Lobe 234° Valve	215° 229°	184° Lobe 201° Valve	173° 190°	175° Lobe 191° Valve	165° 181°	.367"	.347"	Stock
STAGE 1 Street use and more aggressive turbo and nitrous. Slight lobe at idle. RPM Range: Idle to 7500+	<b>64412-2*</b>	238° Lobe 252° Valve	240° 254°	197° Lobe 214° Valve	198° 215°	188° Lobe 204° Valve	188° 204°	.391"	.372"	Stock
STAGE 2 <b>New</b> Specs derived from the popular 264 Intake / 272 Exhaust combination. RPM Range: Idle to 7750.	<b>64416-2</b>	238° Lobe 252° Valve	241° 255°	197° Lobe 214° Valve	202° 219°	188° Lobe 204° Valve	196° 212°	.398"	.378"	84175
STAGE 2 Most popular profile for street/strip. Excellent all purpose turbo. RPM Range: 1000 to 8000.	<b>64413-2*</b>	244° Lobe 258° Valve	241° 255°	202° Lobe 219° Valve	202° 219°	195° Lobe 211° Valve	196° 212°	.391"	.378"	84175
STAGE 3 - 3/4 Race Recommended for mostly strip use. Rough idle, springs required. RPM Range: 1100 to 8250+	<b>64414-2*</b>	246° Lobe 260° Valve	244° 258°	203° Lobe 220° Valve	204° 221°	196° Lobe 212° Valve	198° 214°	.410"	.391"	84175
STAGE 4 - Full Race <b>New</b> Top end insanity. Not for the inexperienced tuner. Race only. RPM Range: 1200 to 8500+	<b>64415-2*</b>	250° Lobe 264° Valve	245° 259°	210° Lobe 227° Valve	205° 222°	202° Lobe 218° Valve	196° 212°	.425"	.418"	84175
CUSTOM GROUND 4G63 CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles, as well as mechanical profiles also available.	<b>00064-2</b>									

\*Indicates spec change from previous listings.

**If running a non-turbo 4G63 engine, the above cams are compatible for use. If running the Evo engine, cams are available but only on a custom order basis. Contact Crower for details.**

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84175</b>	68190-16	87095-16	15% more pressure than factory spring

Spring pressure:

68190-16 Seat: 1.550" @ 74 lbs / Nose: 1.050" @ 210 lbs / Coil bind: 0.900" (No machine work required).

Note: Crower titanium retainers weigh 7 grams vs. 14.5 grams stock.



### ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design reduces unwanted harmonics which could cause valve train failure. Specify #86054M (sold separately).



## ACCESSORIES

Part No.	Description
<b>86054M</b>	Adjustable Cam Sprocket (1 only). All black.
<b>97420I-8</b>	Stainless steel valves - 34 mm head dia (8 only int)
<b>97420E-8</b>	Stainless steel valves - 30.5 mm head dia (8 only exh)
<b>97421I-8</b>	Stainless steel valves - 34.5 mm head dia (8 only int)
<b>97421E-8</b>	Stainless steel valves - 31 mm head dia (8 only exh)
<b>97422I-8</b>	Stainless steel valves - 35 mm head dia (8 only int)
<b>97422E-8</b>	Stainless steel valves - 31.5 mm head dia (8 only int)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.

### STAINLESS STEEL VALVES

Made from the highest grade stainless steel, this new Crower valve is a must for high horsepower, high boost and high rpm applications. The exclusive "Pro Flo" head design delivers a significant increase in cylinder head flow figures, while the tip area is hardened to RC50, including past the critical keeper groove area for added strength. Fully CNC machined and swirl polished to insure that you will get the best performance valve available on the market. Available in standard, 1/2 mm and 1mm oversize. Titanium valves also available. Contact Crower for availability.

# mitsubishi / dsm / mopar

## DODGE NEON - Twin Cam (Rear Exhaust)

Note: These cams use .000" intake and exhaust valve lash (cold).

Description	Part Number	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift 1.75 / 1.75		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (Neon 2.0L)	<b>Stock</b>	222°	222°	174°	172°	.198"	.180"	.347"	.315"	Stock
STAGE 1 Works with stock valve springs and retainers. Daily driver, mild idle. RPM Range: Idle to 6700+	<b>64450N-2*</b>	234°	234°	184°	184°	.200"	.200"	.350"	.350"	Stock
STAGE 2 Aggressive street use and nitrous. Slight lobe at idle. Springs req. RPM Range: 1500 to 7000+	<b>64451N-2</b>	241°	241°	196°	196°	.230"	.230"	.403"	.403"	84176
STAGE 2 - Forced Induction Special <b>New</b> Designed specifically for Turbo/Supercharger appl. Springs required. RPM Range: 1500 to 7000+	<b>64454N-2</b>	238°	238°	188°	188°	.230"	.220"	.403"	.385"	84176
STAGE 3 - 3/4 Race Most popular profile for the street/strip. Springs/retainers mandatory. RPM Range: 2000 to 7200+	<b>64452N-2</b>	248°	248°	200°	200°	.234"	.234"	.410"	.410"	84176
STAGE 4 - Full Race Recommended for drag race use. Springs, ECU mods required. RPM Range: 2200 to 7500+	<b>64453N-2</b>	254°	254°	216°	216°	.265"	.265"	.463"	.463"	84176
CUSTOM GROUND NEON CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles, as well as mechanical profiles also available.	<b>00076-2</b>									

\*Indicates spec change from previous listings. Note: Cam specs are taken at the cam lobe. Specs at the valve will be higher.

## PT CRUISER - Twin Cam (Rear Exhaust)

Available on a custom order basis. Specify #00077-2. Stock specs on PT Cruiser (2.4L): 172/174 @ .050", .328"/.262" gross lift

## 420A MITSUBISHI ECLIPSE NON-TURBO - Twin Cam (Front Exhaust)

Note: These cams use .000" intake and exhaust valve lash (cold).

Description	Part Number	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift 1.75 / 1.75		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (Eclipse Non-Turbo)	<b>Stock</b>	222°	220°	172°	168°	.185"	.157"	.324"	.275"	Stock
STAGE 1 Aggressive street use and nitrous. Slight lobe at idle. Kit #84176 req. RPM Range: 1500 to 7000+	<b>64461-2*</b>	234°	238°	184°	184°	.200"	.176"	.350"	.308"	84176
STAGE 2 - 3/4 Race Most popular profile for the street/strip. Lobe at idle. #84176 required. RPM Range: 2000 to 7200+	<b>64462-2*</b>	241°	241°	196°	194°	.222"	.204"	.388"	.357"	84176
STAGE 3 - Full Race Recommended for drag race use. Heavy engine mods required. RPM Range: 2200 to 7500+	<b>64463-2*</b>	254°	250°	205°	200°	.254"	.250"	.444"	.437"	84176
CUSTOM GROUND 420A CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles, as well as mechanical profiles also available.	<b>00069-2</b>									

\*Indicates spec change from previous listings. Note: Cam specs are taken at the cam lobe. Specs at the valve will be higher.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84176</b>	68190-16	87084-16	15% more pressure than factory spring

Spring pressure:

68190-16 Seat: 1.500" @ 88 lbs / Nose: 1.100" @ 195 lbs / Coil bind: 0.920" (No machine work required).

Note: Crower titanium retainers weigh 7 grams vs. 12.5 grams stock.

## ACCESSORIES

Part No.	Description
<b>86054N</b>	420A Adjustable Cam Sprockets (1 only)

Note: When ordering sprockets, be sure to specify two.



## DODGE MAGNUM V8 & V10 TRUCK HYDRAULIC ROLLER CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description	Part Number	Lobe Center	Advertised Duration (.006")		Duration @ .050"		Lobe Lift		Gross Lift 1.6 / 1.6		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STAGE 1 Street use with emphasis on idle and mid range power. RPM Range: Idle to 5500+	<b>34418</b> 35417 (V10)	114°	251°	262°	200°	208°	.317"	.330"	.507"	.528"	84565
STAGE 2 Street/Strip package. ECU mods recommended. RPM Range: 1000 to 5700.	<b>34419</b> 35419 (V10)	114°	262°	270°	208°	216°	.330"	.343"	.528"	.549"	84566
CUSTOM GROUND MAGNUM CAMS - Special order custom ground profiles available for an additional charge.	<b>00060</b>										

Note: The above cores are cast steel. 8620 steel billet cores also available. Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

### ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seat Cups	Remarks
<b>84565</b>	66325-16	68405-16	87044-16	68940-16	Steel retainer
<b>84566</b>	66325-16	68405-16	87040-16	68940-16	Titanium retainer

Spring pressure:

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.150" @ 316 lbs / Coil bind: 0.980"

See Viper kits below for V10 Magnum truck component kits.

### ACCESSORIES

Part No.	Description
<b>73656K</b>	Stainless steel rocker arms (1.7) for Magnum V8
<b>73656PK</b>	V8 Rocker kit (1.7 rockers, guide plates, pushrods)
<b>73659K</b>	Stainless steel rocker arms (1.7) for Magnum V10

PK kit uses #70518-8 guide plates and #69695-16 pushrods (6.950" - +.050")

Note: Rockers are not intended to be run in excess of 5500 rpm.

## DODGE V10 VIPERS (RT10 & GTS) HYDRAULIC ROLLER CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description	Part Number	Lobe Center	Advertised Duration (.006")		Duration @ .050"		Lobe Lift		Gross Lift 1.6 / 1.6		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STAGE 1 <b>New</b> Daily driver, good for 30+ hp increase over stock. RPM Range: 1750 to 5750, redline 6250 rpm.	<b>36421</b>	114°	278°	285°	214°	223°	.315"	.330"	.504"	.528"	84548
STAGE 2 <b>New</b> Street/Strip package, higher compression, headers. RPM Range: 2000 to 6000, redline 6500 w/ECU mods.	<b>36422</b>	114°	285°	291°	223°	230°	.330"	.328"	.528"	.525"	84548
STAGE 3 - 3/4 Race <b>New</b> Extensive engine mods, rough idle, ECU programming. RPM Range: 2250 to 6250, redline 6750+.	<b>36423</b>	114°	290°	300°	230°	238°	.345"	.345"	.552"	.552"	84548
STAGE 4 - Full Race <b>New</b> Not for the inexperienced tuner. Intended for big top end. RPM Range: 2500 to 6500, redline 7000+.	<b>36424</b>	116°	300°	300°	238°	238°	.345"	.345"	.552"	.552"	84549
CUSTOM GROUND VIPER CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available.	<b>00059</b>										

Note: 2003 and up 3-bolt cam cores are also available but only on a custom order basis.

### ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Cups	Remarks
<b>84548</b>	66325-20	68405-20	87044-20	68940-20	Steel retainer
<b>84549</b>	66325-20	68405-20	87040-20	68940-20	Titanium retainer, limited street

Spring pressure:

68405-20 Seat: 1.700" @ 110 lbs / Nose: 1.150" @ 316 lbs / Coil bind: 0.980" (Possible machine work req.).

68404-20 Seat: 1.700" @ 82 lbs / Nose: 1.150" @ 263 lbs / Coil bind: 0.950" (Possible machine work req.).

### VIPER STROKER KITS

Crower offers complete stroker kits for the V10 Viper engine platform. Features a Crower billet crankshaft (you spec stroke), Crower billet connecting rods, custom JE pistons, pins, rings and locks. Leadtimes are in the 12-16 week range. Call Crower for complete details and pricing.

**3.880" stroke x 4.000" bore = 488 cubic inches (stock)**

**4.000" stroke x 4.030" bore = 512 cubic inches (650 hp / 650 ft lbs torque w/mods)**

### ACCESSORIES

Part No.	Description
<b>73663K</b>	Stainless steel rocker arms (1.7) up to 6300 rpm max
<b>76847</b>	Cloyes Hex-A-Just Timing Gear Set (95-up)





273 340 360 & 1967-up 318 LA V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. Good for stock replacement. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	318 340	<b>31915</b>	250H 112°	250°	254°	200°	208°	.423"	.441"	84031
TORQUE BEAST / PERFORMANCE LEVEL 2 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1500 to 4250 / Redline: 5500 plus.	318 360	<b>31917</b>	278H 112°	278°	288°	204°	214°	.422"	.444"	84031
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1750 to 4500 / Redline: 5750 plus.	318 360	<b>31918</b>	288H 112°	288°	298°	214°	224°	.444"	.467"	84031
ULTRA BEAST / PERFORMANCE LEVEL 3 - Upper mid-range to top end power. Emphasis on top end. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	318 360	<b>31916</b>	269H 112°	269°	282°	223°	234°	.480"	.494"	84031
HOT STREET BEAST / PERFORMANCE LEVEL 4 - Explosive performance gains on top end power. Economical price. RPM Power Range: 2200 to 5000 / Redline: 6500 plus.	318 360	<b>31919</b>	318H 112°	318°	328°	232°	242°	.450"	.476"	84031
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque with fuel economy. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	318 cid	<b>31237</b>	246HDP 112°	246°	253°	186°	192°	.386"	.396"	84031
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited driving. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	318 cid	<b>31240</b>	260HDP 112°	260°	267°	214°	219°	.455"	.474"	84031
	340 360	<b>31241</b>	267HDP 112°	267°	271°	218°	222°	.474"	.485"	84031 or 84131
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer extended rpm range with emphasis on upper bottom to top end power with strong mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	273 cid	<b>31241</b>	267HDP 112°	267°	271°	218°	222°	.474"	.485"	84031 or 84131
	318 cid	<b>31242</b>	271HDP 112°	271°	284°	222°	234°	.485"	.495"	84031 or 84131
	340 360	<b>31243</b>	282HDP 112°	282°	292°	227°	237°	.480"	.503"	84031 or 84131
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	318 cid	<b>31242</b>	271HDP 112°	271°	284°	222°	234°	.485"	.495"	84031 or 84131
	340 cid	<b>31243</b>	282HDP 112°	282°	292°	227°	237°	.480"	.503"	84031 or 84131
	360 cid	<b>31244</b>	292HDP 112°	292°	310°	236°	249°	.534"	.552"	84131
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range torque. RPM Power Range: 2500 to 6500 plus.	340 360	<b>31204</b>	280HDP 108°	280°	292°	218°	227°	.474"	.480"	84131
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Violent mid-range acceleration and torque. RPM Power Range: 2700 to 6500 plus.	340 360	<b>31205</b>	290HDP 108°	290°	298°	224°	234°	.507"	.522"	84131
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range acceleration and torque. RPM Power Range: 3000 to 6700 plus.	340 360	<b>31206</b>	302HDP 108°	302°	312°	240°	249°	.554"	.549"	84131

## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
TURBOMASTER - This cam provides excellent low end and mid-range power with extended rpm range plus mileage for spirited offroad use. RPM Power Range: 1800 to 5000 plus.	340 360	<b>31978</b>	278HT 114°	278°	260°	214°	201°	.431"	.402"	84031
TURBOMASTER - Intended for turbocharged hot street/strip and marine use. Delivers extended rpm's on upper bottom and top. RPM Power Range: 2000 to 6500 plus.	340 360	<b>31979</b>	290HT 114°	290°	272°	228°	210°	.467"	.420"	84031
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid to top end. RPM Power Range: 2400 to 6500 plus.	340 360	<b>31980</b>	288HC 114°	288°	288°	227°	227°	.465"	.465"	84131
SUPERCHARGER - Dual purpose hot drag and marine camshaft designed to enhance supercharger systems. Strong mid to top end. RPM Power Range: 2400 to 6700 plus.	340 360	<b>31981</b>	304HC 114°	304°	304°	238°	238°	.501"	.501"	84131
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84031</b>	66031-16	68305X1-16	87049-16		For rpm up to 6000 plus.
<b>84131</b>	66031-16	68405-16	87049-16	86071-16	For rpm up to 7500 plus.

Spring pressure:

68305X1-16 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 250 lbs / Coil bind: 1.050" (Stock O.D., no machine work).

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

Note: When using high lift cams (over .480") or modified valve stem lengths, a longer pushrod is required to achieve proper lifter preload (.050" off snap-ring). Use checking pushrod to determine length and call with specs.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76541</b>	Timing gear set

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



273 340 360 & 1967-up 318 LA V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque grind with mid-range and top end power. RPM Power Range: 2200 to 6000 / Redline: 6500 plus.	All cid	<b>31320</b>	278FDP 112°	278°	288°	229°	229°	.446"	.456"	84231
PRO-STREET / PERFORMANCE LEVEL 4 - High revving with superior mid-range and top end power. RPM Power Range: 2500 to 6500 / Redline: 7000 plus.	All cid	<b>31321</b>	294FDP 112°	294°	298°	243°	245°	.521"	.528"	84231
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval camshaft. RPM Power Range: 3500 to 6500 / Redline: 7000 plus.	All cid	<b>31312</b>	304FDP 108°	304°	310°	250°	254°	.545"	.558"	84331
COMPU-PRO / PERFORMANCE LEVEL 5 - Great high torque mid-range oval track grind. RPM Power Range: 4000 to 7000 / Redline: 7500 plus.	All cid	<b>31313</b>	310FDP 105°	310°	318°	263°	265°	.573"	.581"	84331
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 8000 plus.	All cid	<b>31314</b>	318FDP 106°	318°	324°	270°	276°	.591"	.609"	Call Crower
COMPU-PRO / PERFORMANCE LEVEL 5 - Superior power on the top end with added punch above 7000 rpm. RPM Power Range: 5000 to 8000 / Redline: 8250 plus.	All cid	<b>31315</b>	324FDP 108°	324°	330°	278°	280°	.609"	.618"	Call Crower
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84231</b>	66931-16	68305X1-16	87049-16		For rpm up to 6500 plus.
<b>84331</b>	66931-16	68405-16	87049-16	86071-16	For rpm up to 7500 plus.

Spring pressure:

68305X1-16 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 250 lbs / Coil bind: 1.050" (Stock O.D., no machine work).

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.200" @ 297 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

#70176-16 or longer pushrods are required with adjustable rocker arms.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76541</b>	Roller timing gear set

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: Longer pushrods required (70176-16) with Mopar adjustable rockers.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



273 340 360 & 1967-up 318 LA V8

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	All cid	<b>31406</b>	270R 112°	270°	280°	236°	246°	.550"	.548"	84529
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque oval track and drag profile. RPM Power Range: 3000 to 7000 / Redline: 7500 plus.	All cid	<b>31407</b>	294R 108°	294°	298°	258°	262°	.624"	.627"	84530
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong upper mid-range and top end power. RPM Power Range: 4000 to 7500 / Redline: 8000 plus.	All cid	<b>31408</b>	300R 105°	300°	306°	258°	268°	.685"	.702"	84531
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque drag profile with mid-range and top end power. RPM Power Range: 5200 to 8000 / Redline: 8250 plus.	All cid	<b>31409</b>	304R 106°	304°	310°	268°	274°	.645"	.623"	84530 or 84531
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 5200 to 8000 / Redline: 8250 plus.	All cid	<b>31410</b>	309R 104°	309°	318°	269°	280°	.716"	.716"	84531
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Super competition drag profile. Excellent top end power. RPM Power Range: 5500 to 8000 / Redline: 8250 plus.	All cid	<b>31411</b>	322R 107°	322°	322°	285°	285°	.691"	.691"	84531
CUSTOM ORDER ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84529N</b>	Stock	68390X2-16	87049-16	86071-16	7000 plus rpm. Limited street use.
<b>84530N</b>	Stock	68380X2-16	87049D-16	86071-16	For rpm up to 8000 plus.

Spring pressure:

68390X2-16 Seat: 1.800" @ 113 lbs / Nose: 1.300" @ 349 lbs / Coil bind: 1.070" (Machine work, use cutter 68999\*).

68380X2-16 Seat: 1.800" @ 197 lbs / Nose: 1.200" @ 470 lbs / Coil bind: 1.110" (Machine work, use cutter 68999\*).

A. Requires longer stem valves to achieve installed spring height.

\* Machine work required, specify 38 pilot shaft when ordering.

#70176-16 or longer pushrods are required with adjustable rocker arms.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76541</b>	Roller timing gear set

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.

Note: Longer pushrods required with Mopar adjustable rockers.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.





350 361 383 400 413 426 440 B V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Exhibits broad stump pulling power and torque. Good for stock replacement. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	383 cid	<b>32915</b>	250H 112°	250°	254°	200°	207°	.423"	.444"	84032
TORQUE BEAST / PERFORMANCE LEVEL 2 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1500 to 4250 / Redline: 5500 plus.	383 cid	<b>32917</b>	278H 112°	278°	288°	204°	214°	.422"	.444"	84032
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1750 to 4500 / Redline: 5750 plus.	350 361	<b>32918</b>	288H 112°	288°	298°	214°	224°	.444"	.467"	84032
ULTRA BEAST / PERFORMANCE LEVEL 3 - Upper mid-range to top end power. Emphasis on top end. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	383 413	<b>32916</b>	265H 112°	265°	269°	218°	222°	.475"	.484"	84032
HOT STREET BEAST / PERFORMANCE LEVEL 4 - Explosive performance gains on top end power. Economical price. RPM Power Range: 2200 to 5000 / Redline: 6500 plus.	426 440	<b>32919</b>	312H 109°	312°	320°	242°	252°	.521"	.551"	84032
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams enhance throttle response and low end torque with fuel economy. RPM Power Range: Idle to 3500 / Redline: 4500 plus.	426 440	<b>32239</b>	252HDP 112°	252°	256°	200°	208°	.423"	.444"	84032
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Perfect combination of power and mileage. Provides excellent low end and mid-range power with extended rpm's for spirited driving. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	350 361	<b>32239</b>	252HDP 112°	252°	256°	200°	208°	.423"	.444"	84032
	383 413	<b>32240</b>	260HDP 112°	260°	267°	212°	218°	.456"	.477"	84032
	426 440	<b>32241</b>	267HDP 112°	267°	271°	220°	223°	.478"	.486"	84032
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the hot marine/strip application, these cams offer extended rpm range with emphasis on upper bottom to top end power with strong mid-range. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	350 361	<b>32241</b>	267HDP 112°	267°	271°	220°	223°	.478"	.486"	84032
	383 413	<b>32242</b>	271HDP 112°	271°	284°	222°	234°	.486"	.496"	84032 or 84132
	426 440	<b>32243</b>	282HDP 112°	282°	292°	228°	236°	.478"	.502"	84032 or 84132
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Dual purpose hot street/strip camshaft. Delivers strong mid-range and top end torque and horsepower. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	383 413	<b>32242</b>	271HDP 112°	271°	284°	222°	234°	.486"	.496"	84032 or 84132
	426 440	<b>32243</b>	282HDP 112°	282°	292°	228°	236°	.478"	.502"	84032 or 84132
	426 440	<b>32244</b>	292HDP 112°	292°	310°	238°	249°	.534"	.552"	84032 or 84132
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Violent mid-range acceleration and torque. RPM Power Range: 2700 to 6700 plus.		<b>32206</b>	294HDP 108°	294°	304°	230°	241°	.509"	.530"	84032 or 84132
HI-DRAULIC HAULER / PERFORMANCE LEVEL 5 - Rough idle. Explosive mid-range acceleration and torque. RPM Power Range: 3000 to 6800 plus.		<b>32207</b>	300HDP 108°	300°	310°	238°	249°	.528"	.552"	84032 or 84132



350 361 383 400 413 426 440 B V8

## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Extremely violent mid-range and top end horsepower. RPM Power Range: 3200 to 6500 / Redline: 6800 plus.	426 440	<b>32208</b>	308HDP 108°	308°	316°	249°	253°	.530"	.546"	84132
TURBOMASTER - This cam provides excellent low end and mid-range power with extended rpm range plus mileage for spirited offroad use. RPM Power Range: 1800 to 5000 plus.	426 440	<b>32978</b>	278HT 114°	278°	260°	213°	202°	.435"	.406"	84032 or 84132
TURBOMASTER - Intended for turbocharged hot street/strip and marine use. This cam offers extended rpm's on upper bottom and top. RPM Power Range: 2000 to 6500 plus.	426 440	<b>32979</b>	290HT 114°	290°	272°	228°	210°	.471"	.423"	84132
SUPERCHARGER - Designed for B&M/Roots type supercharged street/strip and marine applications. Emphasis on mid to top end. RPM Power Range: 2400 to 6700 plus.	426 440	<b>32980</b>	288HC 114°	288°	288°	230°	230°	.461"	.461"	84132
SUPERCHARGER - Dual purpose hot drag and marine camshaft designed to enhance supercharger systems. Strong mid to top end. RPM Power Range: 2400 to 6800 plus.	426 440	<b>32981</b>	304HC 114°	304°	304°	236°	236°	.501"	.501"	84132
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

Note: Three-bolt cams are available. Specify when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84032</b>	66032-16	68302X1-16	87063-16		For rpm up to 6000 max. Daily street use.
<b>84132</b>	66032-16	68340-16	87063-16	86071-16	For rpm up to 7000 plus.

Spring pressure:

68302X1-16 Seat: 1.875" @ 80 lbs / Nose: 1.350" @ 256 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

Low Block: 350, 361, 383, 400 cid.

High Block: 413, 426, 440 cid.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Note: When using high lift cams (over .480") or modified valve stem lengths, a longer pushrod is required to achieve proper lifter preload (.050" off snap-ring). Use checking pushrod to determine length and call with specs.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76543</b>	Timing gear set (1 bolt)

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crowder.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crowder.



350 361 383 400 413 426 440 B V8

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High torque profile, excellent bottom and mid-range power for near stock motor. RPM Power Range: 2000 to 5000 / Redline: 5500 plus.	383 413	<b>32307</b>	260FDP 112°	260°	260°	226°	226°	.511"	.511"	84330
PRO-STREET / PERFORMANCE LEVEL 4 - High torque profile with big mid-range power. RPM Power Range: 3000 to 6000 / Redline: 6500 plus	426 440	<b>32309</b>	294FDP 112°	294°	298°	240°	244°	.519"	.531"	84330
PRO-STREET / PERFORMANCE LEVEL 5 - High revving with superior mid-range and top end power. RPM Power Range: 3500 to 6500 / Redline: 7000 plus.	426 440	<b>32310</b>	304FDP 110°	304°	310°	251°	255°	.548"	.557"	84330 or 84332
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, short oval camshaft. RPM Power Range: 3800 to 6800 / Redline: 7200 plus.	383 413	<b>32313</b>	310FDP 108°	310°	318°	265°	267°	.574"	.585"	84332
COMPU-PRO / PERFORMANCE LEVEL 5 - Great torque, mid-range oval track grind. RPM Power Range: 4200 to 7200 / Redline: 7500 plus.	426 440	<b>32314</b>	318FDP 108°	318°	324°	271°	277°	.591"	.609"	84332
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end power for extra pop above 7000 rpm. RPM Power Range: 4500 to 7500 / Redline: 7750 plus.	426 440	<b>32315</b>	324FDP 108°	324°	330°	279°	281°	.608"	.617"	84332
COMPU-PRO / PERFORMANCE LEVEL 5 - Superior power on the top end with added punch above 7000 rpm. RPM Power Range: 5000 to 8000 / Redline: 8250 plus.	426 440	<b>32316</b>	336FDP 110°	336°	342°	289°	292°	.635"	.642"	84332
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								See Below

Note: Three-bolt cams are available. Specify when ordering.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84330</b>	66932-16	68302X1-16	87063-16		For rpm up to 6500 plus. Daily street use.
<b>84332</b>	66932-16	68340-16	87063-16	86071-16	For rpm up to 7500 plus.

Spring pressure:

68302X1-16 Seat: 1.875" @ 80 lbs / Nose: 1.350" @ 256 lbs / Coil bind: 1.150" (Stock O.D., no machine work).

68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986\*).

\* Machine work required, specify 3/8 pilot shaft when ordering.

Low Block: 350, 361, 383, 400 cid.

High Block: 413, 426, 440 cid.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76543</b>	Timing gear set (1 bolt)

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If using guide plates, heat-treated pushrods (RC 60 series) are required. See pushrods or contact Crower.



350 361 383 400 413 426 440 B V8

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Excellent street/strip profile. RPM Power Range: 2500 to 6000 / Redline: 6500 plus.	426 440	<b>32412</b>	270R 110°	270°	280°	236°	246°	.550"	.548"	84545
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque profile with strong bottom and mid-range power. RPM Power Range: 3500 to 7250 / Redline: 7500 plus.	426 440	<b>32413</b>	294R 108°	294°	298°	256°	265°	.624"	.627"	84546
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Strong upper mid-range and top end power. RPM Power Range: 3750 to 7500 / Redline: 7750 plus.	426 440	<b>32414</b>	304R 106°	304°	310°	262°	268°	.650"	.624"	84546
ULTRA-ACTION / PERFORMANCE LEVEL 5 - High torque with mid-range and top end drag profile. RPM Power Range: 4000 to 7750 / Redline: 8000 plus.	426 440	<b>32415</b>	300R 105°	300°	306°	261°	263°	.686"	.696"	84546
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Mid-range and top end drag profile. RPM Power Range: 4250 to 8000 / Redline: 8250 plus.	426 440	<b>32416</b>	309R 104°	309°	318°	269°	280°	.714"	.716"	84546
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Top end drag profile, excellent for competition. RPM Power Range: 4500 to 8250 / Redline: 8500 plus.	426 440	<b>32417</b>	332R 107°	322°	322°	284°	284°	.765"	.765"	See Below
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Super competition drag profile. Excellent top end power. RPM Power Range: 4500 to 8250 / Redline: 8500 plus.	426 440	<b>32418</b>	336R 105°	336°	336°	291°	291°	.782"	.782"	See Below
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84545</b>	66232-16	68389-16	87063-16	86071-16	6500 plus rpm. Limited street use.
<b>84546</b>	66232-16	68363-16	87063-16	86071-16	8000 plus rpm. Race only to .700" max lift.

Spring pressure:

68389-16 Seat: 1.900" @ 132 lbs / Nose: 1.300" @ 383 lbs / Coil bind: 1.140" (Machine work, use cutter 68987\*).

68363-16 Seat: 1.900" @ 212 lbs / Nose: 1.200" @ 560 lbs / Coil bind: 1.100" (Machine work, use cutter 68992\*).

Optional springs (race only over .725" max lift and/or 8000 rpm):

68555X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.100" @ 870 lbs / Coil bind: 1.020"

68848-16 Seat: 2.100" @ 329 lbs / Nose: 1.300" @ 913 lbs / Coil bind: 1.150"

\* Machine work required, specify 3/8 pilot shaft when ordering.

Low Block: 350, 361, 383, 400 cid.

High Block: 413, 426, 440 cid.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76545</b>	Timing gear set (3 bolt)

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.



426 Hemi V8 1966-1971

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - Power and mileage with extended rpm range for spirited motoring. RPM Power Range: 1500 to 4000 / Redline: 5500 plus.	426 cid	<b>33240</b>	280HDP 112°	280°	286°	211°	219°	.475"	.483"	84133
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Hot street/strip cam. Strong upper bottom and top end power. RPM Power Range: 1800 to 4500 / Redline: 6000 plus.	426 cid	<b>33241</b>	294HDP 112°	294°	300°	222°	233°	.505"	.525"	84133
ULTRA PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - Good competition profile with super mid to top end performance. RPM Power Range: 2000 to 6000 / Redline: 6500 plus.	426 cid	<b>33242</b>	300H 112°	300°	300°	233°	233°	.543"	.525"	84133
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	426 cid	<b>00001</b>								See Below

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 3 - High torque profile with emphasis on bottom end power. RPM Power Range: 2800 to 6000 plus.	426 cid	<b>33253</b>	284FDP 112°	284°	294°	238°	249°	.520"	.512"	84333
COMPU-PRO / PERFORMANCE LEVEL 4 - Strong mid-range and top end profile that offers excellent torque and horsepower. RPM Power Range: 3200 to 6400 plus.	426 cid	<b>33254</b>	304FDP 108°	304°	308°	251°	255°	.571"	.563"	84333
COMPU-PRO / PERFORMANCE LEVEL 4 - Explosive mid-range to top end profile for high horsepower applications. RPM Power Range: 4000 to 7000 plus.	426 cid	<b>33255</b>	310FDP 106°	310°	318°	269°	280°	.618"	.617"	84333
COMPU-PRO / PERFORMANCE LEVEL 5 - High torque, high horsepower profile with emphasis on the top end. RPM Power Range: 4500 to 7500 plus.	426 cid	<b>33256</b>	318FDP 106°	318°	324°	280°	282°	.637"	.626"	84333
HARDFACE / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33380</b>	328F 108°	328°	328°	282°	282°	.646"	.626"	Call Crower
HARDFACE / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33381</b>	332FDP 108°	332°	328°	294°	287°	.670"	.614"	Call Crower
HARDFACE / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33383</b>	354FDP 108°	354°	348°	305°	302°	.667"	.646"	Call Crower
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	426 cid	<b>00000</b>								See Below
CUSTOM GROUND HARDFACE SOLID - Special order hardface solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	426 cid	<b>00033</b>								84334

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Remarks
<b>84133</b>	66033-16	68340-16	87064-16	86070-16	86109-16	Hydraulic Lifter. 6500 plus rpm.
<b>84333</b>	66933-16	68340-16	87064-16	86070-16	86109-16	Solid Lifter. 7500 plus rpm.

Spring pressure:  
68340-16 Seat: 1.900" @ 119 lbs / Nose: 1.350" @ 359 lbs / Coil bind: 1.080" (Machine work, use cutter 68986).

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76545</b>	Timing gear set

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.57 / 1.52		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STREET ROLLER / PERFORMANCE LEVEL 4 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: 2500 to 6000 plus.	426 cid	<b>33470</b>	284R 110°	272°	280°	238°	246°	.576"	.558"	84538
STREET ROLLER / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: 3500 to 7500 plus.	426 cid	<b>33471</b>	298R 108°	298°	304°	263°	268°	.626"	.630"	84538
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33472</b>	308R 105°	308°	314°	278°	285°	.689"	.652"	84534
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33473</b>	318R 106°	318°	322°	286°	290°	.720"	.711"	84534 or 84539
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33474</b>	336R 114°	336°	340°	295°	307°	.715"	.711"	84534 or 84539
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Call for camshaft characteristics, as they depend on engine setup. RPM Power Range: Varies on valve train, heads, gearing, etc...	426 cid	<b>33475</b>	340R 114°	340°	348°	299°	303°	.739"	.696"	84534 or 84539
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	426 cid	<b>00002</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Keepers	Remarks
<b>84538</b>	66232-16	68340-16	87064-16	86070-16	86109-16	For rpm up to 6000 plus.
<b>84534</b>	66232-16	68555X1-16	87056-16	86070-16	86109-16	Application determines rpm.
<b>84537</b>	66232-16	68848-16	86069-16	86070T-16	86109-16	Application determines rpm.

Spring pressure:

68340-16 Seat: 1.800" @ 165 lbs / Nose: 1.150" @ 477 lbs / Coil bind: 1.080" (Machine work, use cutter 68986\*).

68555X1-16 Seat: 2.000" @ 239 lbs / Nose: 1.300" @ 690 lbs / Coil bind: 1.020"

68848-16 Seat: 2.100" @ 329 lbs / Nose: 1.300" @ 913 lbs / Coil bind: 1.150"

\* Machine work required, specify 5/16 pilot shaft when ordering.

Note: If using 11/32 valve stems, change to keeper 86110-16.

Note: If running blown application, see heavy-duty roller lifters listed under accessories.

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See spring and retainer specs or contact Crower for proper recommendations.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

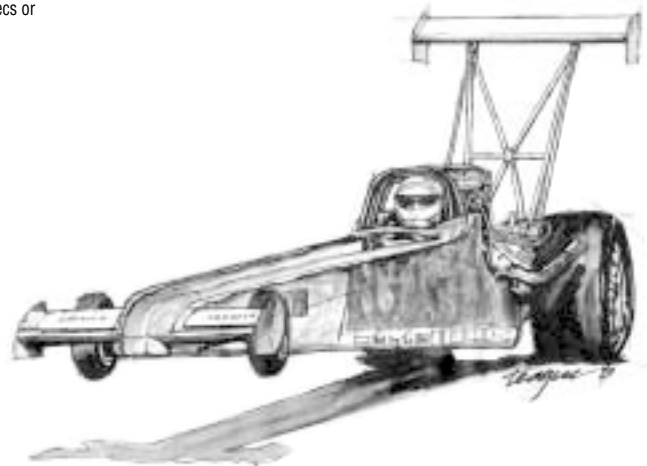
Part No.	Description
<b>73680-16</b>	Billet rocker adjusting screw and lock nut
<b>70188-16</b>	Tapered pushrods 3/8
<b>76545</b>	Timing gear set
<b>66284-16</b>	Roller lifters w/.903" body & .812" O.D. bearing
<b>66285-16</b>	Roller lifters w/high seat (+.150")
<b>66272-16</b>	Roller lifters w/1.000" body & "nitro" bearing

Crower has an extensive inventory of single and double tapered pushrods available on a special order basis. Customer must furnish accurate pushrod length.

## SPECIAL ORDER DRAG RACING CAMSHAFTS

KB Aluminum JP1 TFX Milodon & Rodeck

As of last count we have accumulated over 80 different combinations of proven drag racing cam profiles and lobe center configurations. So rather than list each profile and lobe center, we felt that it would be more beneficial to encourage you to call our experienced technical support staff with your accumulated data and specifications. In a joint effort, that will be kept in the strictest of confidence, we will formulate the right combination of intake and exhaust lobe characteristics designed specifically for your application. We are currently involved with some of the top racers and engine builders and are achieving tremendous success with this style of format.



# oldsmobile

260 307 (5.0L) 350 (5.7L) 400 403 425 455 1967-up (39° bank angle)

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
BAJA BEAST / PERFORMANCE LEVEL 2 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1500 to 4250 / Redline: 5500 plus.	260	<b>56915</b>	280H 112°	280°	289°	204°	214°	.450"	.474"	84057
	350									
POWER BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1750 to 4500 / Redline: 5750 plus.	350	<b>56903</b>	289H 112°	289°	300°	214°	224°	.474"	.498"	84057
	425									
ULTRA BEAST / PERFORMANCE LEVEL 4 - Upper mid-range to top end power. Emphasis on top end. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	455 cid	<b>56919</b>	304H 112°	304°	316°	234°	244°	.520"	.542"	84057
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - These cams are designed to enhance throttle response and low-end torque in vans, trucks and passenger cars while delivering fuel efficient motoring. High vacuum and smooth idle are characteristic of these profiles. Stock or small cfm carburetor, small diameter tube headers, dual exhaust, and ignition rework are recommended for maximum benefit. RPM Power Range: Idle to 3500-3700 / Redline: 4500 plus.	400	<b>56258</b>	250HDP 112°	250°	258°	192°	196°	.429"	.445"	84057
	403									
	425 cid	<b>56260</b>	260HDP 112°	260°	266°	203°	211°	.448"	.450"	84057
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - These cams provide excellent low end and mid-range power and extended rpm range for spirited street and offroad driving. A perfect combination of mileage and power. Modifications should include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increase in compression ratio to 9.5:1 is recommended for maximum output. Works well with automatic transmission or 4-speed. RPM Power Range: 1300-1500 to 4000-4200 / Redline: 5500 plus.	260 cid	<b>56258</b>	250HDP 112°	250°	258°	192°	196°	.429"	.445"	84057
	350 cid									
	400 425									
	455 cid									
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the performance oriented hot street application. These cams offer an extended rpm range with emphasis on upper bottom to top end power (strong mid-range). Performance gears, headers, dual exhaust, larger than stock cfm carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Works well with automatic transmission if matched with proper ring and pinion gears and/or high stall converter. RPM Power Range: 1600-1800 to 4500-4800 / Redline: 6000 plus.	260 cid	<b>56261</b>	270HDP 112°	270°	276°	210°	219°	.451"	.474"	84057
	350 cid									
	400 425									
	455 cid									
ULTRA-PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - The following grinds are best suited for dual purpose hot street/drag strip situations. These cams exhibit strong mid-range and top end torque and horsepower. Headers, dual exhaust, larger cfm carburetor, performance ignition and 11:1 compression are a must. Cylinder head modifications would be beneficial. Use with standard transmission or automatic with high stall converter. Low gearing a must. RPM Power Range: 2000-2200 to 6000-6200 / Redline: 6500 plus.	260 cid	<b>56263</b>	280HDP 112°	280°	286°	220°	227°	.485"	.496"	84157
	350 cid									
	400 425									
	455 cid									
	260 cid	<b>56262</b>	276HDP 112°	276°	281°	215°	221°	.488"	.494"	84057
	350 cid									
	400 425									
	455 cid									
	260 cid	<b>56264</b>	284HDP 112°	284°	290°	229°	236°	.520"	.528"	84057
	350 cid									
	400 425									
	455 cid									
	260 cid	<b>56265</b>	297HDP 112°	297°	308°	237°	240°	.538"	.533"	84157
	350 cid									
	400 425									
	455 cid									
	260 cid	<b>56266</b>	311HDP 112°	311°	316°	247°	251°	.546"	.557"	84157
	350 cid									
	400 425									
	455 cid									

# oldsmobile

260 307 (5.0L) 350 (5.7L) 400 403 425 455 1967-up (39° bank angle)

## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
HI-DRAULIC HAULER / PERFORMANCE LEVEL 3 - Lope at idle. Hot street/strip cam with strong mid-range power RPM Power Range: 2500 to 6500 plus.	400 cid	<b>56270*</b>	284HDP 108°	288°	298°	228°	238°	.464"	.482"	84157
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Explosive mid-range power and torque. RPM Power Range: 3000 to 6600 plus.	400 cid	<b>56271</b>	296HDP 108°	296°	304°	229°	241°	.505"	.532"	84157
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Violent mid-range acceleration. RPM Power Range: 3500 to 6700 plus.	400 cid	<b>56272</b>	304HDP 108°	304°	312°	244°	249°	.540"	.568"	84157
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.6 / 1.6		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
COMPU-PRO / PERFORMANCE LEVEL 3 - High revving, super mid to top end power RPM Power Range: 3000 to 7000 plus.	400 455	<b>56360</b>	274FDP 110°	274°	278°	238°	242°	.526"	.539"	84357
COMPU-PRO / PERFORMANCE LEVEL 4 - Super torque with explosive mid-range power. RPM Power Range: 3500 to 7500 plus.	400 455	<b>56361</b>	284FDP 108°	284°	290°	248°	255°	.552"	.568"	84357
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end profile for added power above 7000 rpm. RPM Power Range: 4000 to 8000 plus.	400 455	<b>56362</b>	300FDP 108°	300°	308°	260°	268°	.584"	.601"	84357
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84357
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00003 or 00006</b>								Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84057</b>	66056-16	68305X1-16	87048-16		Hydraulic Lifter. 6000 plus rpm.
<b>84157</b>	66056-16	68405-16	87048-16	86072-16	Hydraulic Lifter. 7000 plus rpm.
<b>84357</b>	66962-16	68405-16	87048-16	86072-16	Solid Lifter. 7500 plus rpm.

Spring pressure:

68305X1-16 Seat: 1.700" @ 68 lbs / Nose: 1.200" @ 250 lbs / Coil bind: 1.050" (Stock O.D., no machine work).

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.100" @ 338 lbs / Coil bind: 0.980" (Machine work, use cutter 68983\*).

\* Machine work required, specify 11/32 pilot shaft when ordering.

Note: For lifts over .480" pushrods 70049-16 or 70050-16 are required. All solid lifter profiles require adjustable pushrods.

Non-adjustable pushrods can be used if you have proper lifter preload (.050" off snap-ring). Custom length pushrods are available from Crower to achieve proper lifter preload. Customer must furnish accurate pushrod length. In order to assist in proper preload measurement, Crower offers an adjustable checking pushrod.

Note: 1964-66 Oldsmobile blocks require 45° cam cores and cannot be interchanged with late model (39°) cam cores. Early model 45° camshafts are available on a special order basis. Customer must furnish lifter bore diameter when ordering.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76561</b>	Timing gear set
<b>73644-16</b>	Rocker arms (1.6) 7/16

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If engine is to be run over 7500 rpm, Crower highly recommends the use of titanium retainers.

Note: If making valve train adjustable with Ford rockers, screw-in studs and guide plates are required. Call Crower for details.





287 301 316 341 350 370 389 400 421 455 V8

## HYDRAULIC CAMSHAFTS

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
MILEAGE BEAST / PERFORMANCE LEVEL 1 - Exhibits broad stump pulling power and torque. RPM Power Range: 1200 to 3800 / Redline: 5200 plus.	265 287	<b>60917</b>	278H 112°	278°	288°	204°	214°	.422"	.444"	84160
BAJA BEAST / PERFORMANCE LEVEL 2 - Low to mid-range torque for daily drivability. Economical price. RPM Power Range: 1500 to 4250 / Redline: 5500 plus.	301 350	<b>60915</b>	272H 112°	272°	279°	211°	220°	.422"	.443"	84160
TORQUE BEAST / PERFORMANCE LEVEL 3 - Delivers impressive mid-range and top end power. Healthy sound. Economical price. RPM Power Range: 1750 to 4500 / Redline: 5750 plus.	370 421	<b>60918</b>	288H 112°	288°	298°	214°	224°	.444"	.467"	84160
POWER BEAST / PERFORMANCE LEVEL 4 - Upper mid-range to top end power. Emphasis on top end. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	421 455	<b>60916</b>	278H 112°	278°	289°	221°	229°	.455"	.470"	84160
ULTRA BEAST / PERFORMANCE LEVEL 4 - Hot street profile that delivers impressive mid-range and top end power. RPM Power Range: 2000 to 4800 / Redline: 6200 plus.	428 455	<b>60919</b>	304H 112°	304°	316°	231°	240°	.470"	.470"	84160
MILEAGE COMPU-PRO / PERFORMANCE LEVEL 1 - Intended for low compression engines operating in the "economy zone." RPM Power Range: Idle to 3500-3700 / Redline: 4500 plus.	421 455	<b>60239</b>	260HDP 112°	260°	266°	203°	213°	.419"	.422"	84160
POWER COMPU-PRO / PERFORMANCE LEVEL 2 - These cams provide excellent low end and mid-range power and extended rpm range for spirited street and offroad driving. A perfect combination of mileage and power. Modifications should include small diameter tube headers, low restriction dual exhaust, aftermarket manifold, increased cfm carburetor and reworked or performance ignition. Increase in compression ratio to 9.5:1 is recommended for maximum output. Works well with automatic transmission or 4-speed. RPM Power Range: 1300-1500 to 4000-4200 / Redline: 5500 plus.	265 287	<b>60239</b>	260HDP 112°	260°	266°	203°	213°	.419"	.422"	84160
	370 421	<b>60240</b>	270HDP 112°	270°	276°	210°	221°	.422"	.446"	84160
	421 455	<b>60241</b>	276HDP 112°	276°	281°	215°	221°	.457"	.464"	84160
HIGH PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 3 - Intended for the performance oriented hot street application. These cams offer an extended rpm range with emphasis on upper bottom to top end power (strong mid-range). Performance gears, headers, dual exhaust, larger than stock cfm carburetor, performance manifold and increased compression (9.5:1 to 10.5:1) are required. Works well with automatic transmission if matched with proper ring and pinion gears and/or high stall converter. RPM Power Range: 1600-1800 to 4500-4800 / Redline: 6000 plus.	265 287	<b>60240</b>	270HDP 112°	270°	276°	210°	221°	.422"	.446"	84160
	301 350	<b>60241</b>	276HDP 112°	276°	281°	215°	221°	.457"	.464"	84160
	370 421	<b>60242</b>	280HDP 112°	280°	286°	221°	229°	.456"	.468"	84160
	428 455	<b>60243</b>	284HDP 112°	284°	290°	228°	235°	.479"	.494"	84160
ULTRA-PERFORMANCE COMPU-PRO / PERFORMANCE LEVEL 4 - The following grinds are best suited for dual purpose hot street/drag strip situations. These cams exhibit strong mid-range and top end torque and horsepower. Headers, dual exhaust, larger cfm carburetor, performance ignition and 11:1 compression are a must. Cylinder head modifications would be beneficial. Use with standard transmission or automatic with high stall converter. Low gearing a must. RPM Power Range: 2000-2200 to 6000-6200 / Redline: 6500 plus.	265 287	<b>60242</b>	280HDP 112°	280°	286°	221°	229°	.456"	.468"	84160
	301 350	<b>60243</b>	284HDP 112°	284°	290°	228°	235°	.479"	.494"	84160
	370 421	<b>60244</b>	297HDP 112°	297°	308°	239°	241°	.500"	.500"	84160
	428 455	<b>60245</b>	311HDP 112°	311°	316°	248°	253°	.512"	.524"	84160

## HYDRAULIC CAMSHAFTS (cont.)

Note: These cams use .000" intake and exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
HI-DRAULIC HAULER / PERFORMANCE LEVEL 3 - Lope at idle. Hot street/strip cam with strong mid-range power. RPM Power Range: 2500 to 6500 plus.	389 400	<b>60210</b>	278HDP 108°	278°	288°	229°	239°	.480"	.501"	84160
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Explosive mid-range power and torque. RPM Power Range: 3000 to 6500 plus.	389 400	<b>60211</b>	296HDP 108°	296°	308°	236°	242°	.509"	.516"	84160
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Rough idle. Violent mid-range acceleration. RPM Power Range: 3250 to 6500 plus.	428 455	<b>60212</b>	304HDP 108°	304°	312°	239°	247°	.497"	.522"	84160
HI-DRAULIC HAULER / PERFORMANCE LEVEL 4 - Brutal mid to top end torque and horsepower. RPM Power Range: 3500 to 6500 plus.	428 455	<b>60213</b>	308HDP 108°	308°	314°	248°	256°	.518"	.537"	84160
CUSTOM GROUND HYDRAULIC - Special order hydraulic lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00001</b>								See Below

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84160</b>	66060-16	68404-16	87048D-16	86072-16	For rpm up to 6500 plus.

Spring pressure:

68404-16 Seat: 1.600" @ 116 lbs / Nose: 1.100" @ 302 lbs / Coil bind: 0.910" (Stock O.D., no machine work).

Note: Non-adjustable pushrods can be used if you have proper lifter preload (.050" off snap-ring). Custom length pushrods are available from Crower to achieve proper lifter preload. Customer must furnish accurate pushrod length.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Note: The above kit will not work if using Pontiac heads with 1.65:1 rocker ratio (springs are too short). Contact Crower for special spring and retainer combination. See diagram 2.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

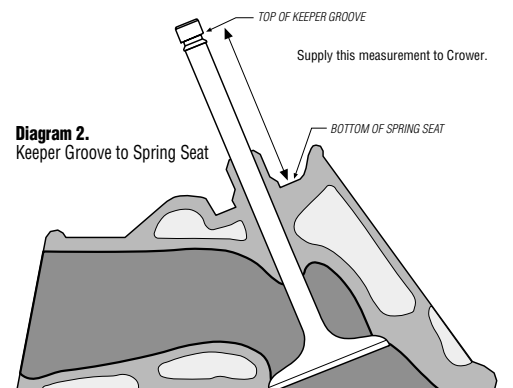
## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76565</b>	Timing gear set
<b>73622-16</b>	Rocker arms (1.6) 3/8
<b>73623-16</b>	Rocker arms (1.6) 7/16

Note: If exceeding 7500 rpm, high pressure springs and titanium retainers may be required. See specs or contact Crower.

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If making valve train adjustable with rockers, screw-in studs and guide plates are required. Call Crower for details.



**Diagram 2.**  
Keeper Groove to Spring Seat

Accurately measure the distance from the top of keeper groove to bottom of spring seat (see arrows indicating measurement in diagram 2).

Note: If heads have been extensively modified (machined spring pockets, longer valves, etc.) contact Crower for proper spring, keeper, cup and retainer recommendations. Have your keeper/seat measurement available.

## SOLID CAMSHAFTS

Note: These cams use .022" intake, .024" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
PRO-STREET / PERFORMANCE LEVEL 3 - High revving, super mid to top end power grind. RPM Power Range: 2800 to 6000 plus.	389 455	<b>60310</b>	284FDP 112°	284°	288°	240°	248°	.477"	.501"	84360
PRO-STREET / PERFORMANCE LEVEL 4 - Super upper mid-range and top end power profile. RPM Power Range: 3000 to 6500 plus.	389 455	<b>60311</b>	292FDP 112°	292°	302°	247°	252°	.505"	.517"	84360
COMPU-PRO / PERFORMANCE LEVEL 4 - High revving, superior upper bottom profile with emphasis on mid to top end power. RPM Power Range: 4500 to 7500 plus.	389 455	<b>60353</b>	304FDP 108°	304°	312°	255°	262°	.527"	.546"	84360
COMPU-PRO / PERFORMANCE LEVEL 5 - Super high end profile with extended rpm power band. RPM Power Range: 5000 to 7750 plus.	389 455	<b>60354</b>	312FDP 110°	312°	316°	264°	274°	.555"	.580"	84360
COMPU-PRO / PERFORMANCE LEVEL 5 - Upper mid-range and top end profile for added power above 7000 rpm. RPM Power Range: 5200 to 8000 plus.	389 455	<b>60355</b>	318FDP 110°	318°	324°	274°	280°	.579"	.591"	84360
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00000</b>								84360

## ROLLER CAMSHAFTS

Note: These cams use .026" intake, .028" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
ULTRA-ACTION / PERFORMANCE LEVEL 5 - All range camshaft for heavy car, high stall with compression and headers. RPM Power Range: 3000 to 6500 plus.	389 455	<b>60450</b>	275R 112°	275°	284°	233°	242°	.495"	.496"	84568
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Radical mid-range cam, shifts at 6500 rpm with a redline of 7000. RPM Power Range: 4000 to 7000 max.	389 455	<b>60451</b>	284R 108°	284°	294°	247°	254°	.582"	.567"	Call Crower
ULTRA-ACTION / PERFORMANCE LEVEL 5 - Large cid camshaft (455 cid or bigger). Smashing mid-range power hit and top end performer. RPM Power Range: 4500 to 7250 plus.	389 455	<b>60452</b>	294R 108°	294°	298°	257°	263°	.649"	.636"	Call Crower
CUSTOM GROUND ROLLER - Special order roller lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	All cid	<b>00002</b>								Call Crower

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Seals	Remarks
<b>84360</b>	66962-16 <sup>A</sup>	68405-16	87048D-16	86072-16	Solid Lifter. For rpm up to 7000 plus.
<b>84568</b>	66260-16	68380X2-16	87048D-16	86072-16	Roller Lifter. For rpm up to 7500 plus.

Spring pressure:

68405-16 Seat: 1.700" @ 110 lbs / Nose: 1.100" @ 338 lbs / Coil bind: 0.980" (Stock O.D., no machine work).

68380X2-16 Seat: 1.800" @ 197 lbs / Nose: 1.250" @ 446 lbs / Coil bind: 1.110"

A. Lifter 66962-16 is a special high oil band tappet with high pushrod seat. It is not a Chevrolet solid lifter.

CAUTION! When using high lift cams pay close attention to retainer, oil seal and valve guide clearance at full lift (minimum .050").

Note: The above kit will not work if using Pontiac heads with 1.65:1 rocker ratio (springs are too short). Contact Crower for special spring and retainer combination.

Note: For proper valve adjustment on solid lifter profiles, Crower "Sure-Lock" rocker nuts (86053) must be used.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## ACCESSORIES

Part No.	Description
	Spring seat cutter
	Pushrods
<b>76565</b>	Timing gear set
<b>73622-16</b>	Rocker arms (1.6) 3/8
<b>73623-16</b>	Rocker arms (1.6) 7/16

Note: If using longer than stock valves you may require spring and retainer modifications. See specs or contact Crower.

Note: If engine is to be run over 7500 rpm, Crower highly recommends the use of titanium retainers

Note: If making valve train adjustable with rockers, screw-in studs and guide plates are required. Call Crower for details.



## SUPRA 2JZ-GTE 6 Cylinder - Twin Cam (93-98)

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Advised Duration		Duration @ .050"		Duration @ .200"		Gross Lift		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (2JZGTE)	<b>Stock</b>	263° Lobe 239° Valve	268° 244°	200° Lobe 194° Valve	204° 198°	128° Lobe 124° Valve	133° 129°	.338"	.346"	Stock
STOCK REPLACEMENT Excellent for stock replacement, mild turbo and nitrous on the street. RPM Range: Idle to 7000+	<b>61400-2</b>	256° Lobe 232° Valve	256° 232°	208° Lobe 202° Valve	208° 202°	136° Lobe 132° Valve	136° 132°	.344"	.344"	Stock
STAGE 1 Street use and more aggressive turbo and nitrous. Slight lobe at idle. RPM Range: Idle to 7500+	<b>61401-2</b>	268° Lobe 244° Valve	268° 244°	222° Lobe 216° Valve	222° 216°	151° Lobe 147° Valve	151° 147°	.362"	.362"	84168
STAGE 2 Street/Strip package. Lobe at idle, extended rpms. Kit #84168 required. RPM Range: 1000 to 8000.	<b>61402-2</b>	268° Lobe 244° Valve	276° 252°	220° Lobe 214° Valve	228° 222°	152° Lobe 148° Valve	160° 156°	.374"	.393"	84168
STAGE 3 - 3/4 Race Recommended for mostly strip use. Springs required, similar to 272. RPM Range: 1200 to 8500+	<b>61402A-2</b>	276° Lobe 252° Valve	276° 252°	230° Lobe 224° Valve	230° 224°	160° Lobe 156° Valve	160° 156°	.372"	.380"	84168
STAGE 3 - Full Race Drag use, limited street profile. Rough idle, ECU mods recommended. RPM Range: 1300 to 9000+	<b>61403-2</b>	276° Lobe 252° Valve	284° 260°	228° Lobe 222° Valve	236° 230°	160° Lobe 156° Valve	168° 164°	.393"	.413"	84168
CUSTOM GROUND 2JZ CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available. See specs listed below.	<b>00072-2</b>									

Note: The above cores will not fit the non-turbo 2JZ cylinder head. No cores available at time of publication.

## ENGINEERED COMPONENT KITS

Part No.	Springs	Retainers	Remarks
<b>84168</b>	68195-24	87085-24	Fits 2JZ cylinder heads

Spring pressure:

68195-24 Seat: 1.325" @ 82 lbs / Nose: 0.980" @ 166 lbs / Coil bind: 0.860" (No machine work required).

## INDIVIDUAL MASTER LISTINGS

Master Number	Adv Dur (.010")	Duration @ .050"	Duration @ .200"	Lobe Lift	Lift mm
<b>B1587</b>	268°	220°	152°	.374"	9.5
<b>B1588</b>	276°	228°	160°	.393"	10.0
<b>B1589</b>	284°	236°	168°	.413"	10.5
<b>B1590</b>	292°	244°	176°	.433"	11.0
<b>B1591</b>	300°	252°	184°	.452"	11.5

More masters available upon request.

## ACCESSORIES

Part No.	Description
<b>86054T</b>	Adjustable Cam Sprocket (1 only). All black.
<b>97440I-12</b>	Stainless steel valves - 33.6 mm head dia (12 only int)
<b>97440E-12</b>	Stainless steel valves - 29 mm head dia (12 only exh)
<b>97441I-12</b>	Stainless steel valves - 34.6 mm head dia (12 only int)
<b>97441E-12</b>	Stainless steel valves - 30 mm head dia (12 only exh)

Note: When ordering valves, be sure to specify one set int and one set exh.

Note: When ordering sprockets, be sure to specify two.



### ADJUSTABLE SPROCKETS

Crower's new cam sprockets are made from premium 6061-T6 billet aluminum and incorporate a four bolt ARP® fastening system to prevent the slippage found in other brands. For the ultimate tuner, Crower sprockets feature 5/16" diameter, 12 point ARP® fasteners with a hardened washer to prevent galling and stripping. The lightweight design reduces unwanted harmonics which could cause valve train failure. Specify #86054T (sold separately).



## 2T / 2TC / 3TC 4 Cylinder

Note: These cams use .014" intake (cold), .016" exhaust valve lash (cold).

Description	Part Number	Lobe Center	Advertised Duration (.020")		Duration @ .050"		Lobe Lift		Gross Lift 1.4 / 1.4		Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
STAGE 1 Stock replacement. RPM Range: Idle to 5500+	<b>61850*</b>	110°	256°	256°	194°	194°	.254"	.254"	.355"	.355"	Stock
STAGE 1 Mild street, similar to stock idle. Good for bottom end performance. Works well with automatic transmission. RPM Range: Idle to 6000+	<b>61851*</b>	108°	260°	266°	206°	214°	.250"	.260"	.350"	.364"	Stock
STAGE 2 Excellent normally aspirated street. Emphasis on mid-range power. Tight center for torque and lope at idle. RPM Range: 1000 to 7000+	<b>61852*</b>	108°	274°	280°	220°	230°	.253"	.268"	.354"	.375"	TRD
STAGE 2 - 3/4 Race Excellent for turbo and nitrous for street/strip applications. Wide center for top end performance. RPM Range: 2600 to 7200+	<b>61853*</b>	114°	286°	280°	240°	230°	.263"	.268"	.368"	.375"	TRD
STAGE 4 - Full Race Race turbo (30+ lbs boost minimum). Also works well with NOS. RPM Range: 2600 to 7200+	<b>61854*</b>	112°	290°	296°	258°	268°	.360"	.370"	.504"	.518"	TRD
STAGE 5 - Full Race Performance built, race oriented application. Not for the inexperienced tuner. Top end insanity. RPM Range: 3000 to 8000+	<b>61855*</b>	114°	300°	300°	268°	268°	.370"	.370"	.518"	.518"	TRD
CUSTOM GROUND SOLID - Special order solid lifter camshaft ground to your specifications. Call our technical support staff for personalized camshaft assistance.	<b>00000</b>										

\* Indicates spec change from previous listings. Contact TRD regarding spring and retainer availability.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)

## 4AGE 4 Cylinder - Twin Cam

Note: These cams use .006" intake (cold), .008" exhaust valve lash (cold).

Description	Part Number	Advertised Duration (.010")		Duration @ .050"		Lobe Lift		Gross Lift		Rec Kit
		Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
FACTORY OEM SPECS (4AGE)	<b>Stock</b>	255°	258°	204°	204°	.298"	.298"	-	-	Stock
STAGE 1 Street use. Slight lope at idle. RPM Range: 2000 to 7000+	<b>61821-2*</b>	268°	268°	212°	212°	.305"	.305"	-	-	Stock
STAGE 2 Use for 4AGZE forced induction applications. Features big lift profile. RPM Range: 2500 to 7500.	<b>61822-2*</b>	272°	272°	224°	224°	.305"	.305"	-	-	TRD
STAGE 3 - 3/4 Race Recommended for mostly strip use. Rough idle. RPM Range: 3000 to 8500+	<b>61823-2*</b>	280°	280°	228°	228°	.315"	.315"	-	-	TRD
STAGE 3 - Full Race All out, all motor drag profile. Not for the inexperienced tuner. RPM Range: 3500 to 9000+	<b>61824-2*</b>	288°	298°	228°	238°	.320"	.332"	-	-	TRD
CUSTOM GROUND 4AGE CAMS - Special order custom ground profiles available for an additional charge. Proprietary and confidential profiles also available. See specs listed below.	<b>00070-2</b>									

\* Indicates spec change from previous listings. Contact TRD regarding spring and retainer availability.

Valve timing events are available online at: [www.crower.com/valvtime.html](http://www.crower.com/valvtime.html)



## 22R (4 Cylinder)

Note: These cams use .006" intake, .008" exhaust valve lash.

Description	Part Number	Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.5 / 1.5				Rec Kit
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust			
CARBURETOR - STAGE 1 10:1 compression, low to mid-range torque. Heavy vehicle. RPM Range: 2200 to 6200+	<b>61800</b>	108°	270°	276°	216°	220°	.430"	.430"	-	-	Stock
CARBURETOR - STAGE 1 10:1+ compression, header, intake manifold, carb mods. RPM Range: 3000 to 7000+	<b>61801</b>	108°	286°	290°	226°	236°	.429"	.443"	-	-	Stock
CARBURETOR - STAGE 2 11:1+ compression, header, big single, or dual carbs. RPM Range: 3400 to 7200+	<b>61803</b>	108°	290°	298°	236°	240°	.443"	.417"	-	-	68218-8
CARBURETOR - STAGE 3 (3/4 Race) 12:1+ compression, header, big single, or dual carbs, porting, etc... RPM Range: 4200 to 8000+	<b>61804*</b>	106°	298°	304°	248°	254°	.489"	.504"	-	-	68218-8
CARBURETOR - STAGE 4 (Full Race) Professionally prepared, purpose built, race only engine. RPM Range: 5000 to 8500+	<b>61805</b>	106°	308°	308°	264°	264°	.566"	.566"	-	-	68218-8
EFI - STAGE 1 Excellent stock replacement cam. No other modifications required, straight forward remove and replace. RPM Range: 1500 to 5500+	<b>61802</b>	114°	252°	260°	204°	210°	.420"	.438"	-	-	Stock
EFI - STAGE 2 <b>New</b> Street/Strip profile and all purpose daily driver. Headers, performance exhaust recommended. RPM Range: 2000 to 6000+	<b>61807</b>	114°	270°	276°	216°	220°	.430"	.430"	-	-	Stock
EFI - STAGE 3 (3/4 Race) <b>New</b> Excellent for turbo and nitrous for street/strip applications. Wide center for top end performance. RPM Range: 2500 to 7000+	<b>61808</b>	114°	280°	280°	226°	226°	.445"	.445"	-	-	68218-8
EFI - STAGE 4 (Full Race) <b>New</b> Mostly strip, not for daily driver. Very rough idle, aftermarket valve springs, ECU mods required. RPM Range: 3000 to 7500+	<b>61809</b>	114°	290°	298°	236°	240°	.443"	.417"	-	-	68218-8

\*Indicates design change from previous listings.

Optional spring:

68218-8 Inner spring for rpm over 6000 rpm. Use with stock outer.

## SOLID CAMSHAFTS

Note: These cams use .006" intake, .008" exhaust valve lash.

Description (Note: See pages 8-9 for a detailed explanation of each Performance Level)	C.I.D. Group	Part Number	Grind Lobe Center	Advertised Duration		Duration @ .050"		Gross Lift 1.1 / 1.1		Recommended Component Kit
				Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
Smooth idle. Great all around stock replacement cam. Super torque profile. RPM Power Range: 1000 to 5000 plus.	All cid	<b>61002</b>	B260F 110°	260°	268°	220°	227°	.375"	.381"	84261
Fair idle. Good bottom end profile with mid-range power. Emphasis on torque. RPM Power Range: 1800 to 6000 plus.	All cid	<b>61000</b>	M268F 110°	268°	268°	227°	227°	.354"	.354"	84261
Fair idle. Competition profile. Super torque and mid-range profile for 1600cc engines. RPM Power Range: 2000 to 7000 plus.	All cid	<b>61003</b>	VW276F 107°	276°	284°	234°	244°	.398"	.421"	84261 or 84361
Fair idle. High torque profile with emphasis on the top end for 1800cc engines and under. RPM Power Range: 2000 to 7000 plus.	All cid	<b>61004</b>	VW284F 107°	284°	290°	244°	252°	.424"	.446"	84261 or 84361
Fair idle. Broad mid-range and top end power for 2180cc engines and under. RPM Power Range: 2500 to 7500 plus.	All cid	<b>61005</b>	VW290F 107°	290°	298°	252°	260°	.447"	.460"	84361
Fair idle. Broad mid-range and top end power for engines with increased compression. RPM Power Range: 3000 to 8000 plus.	All cid	<b>61006</b>	VW298F 107°	298°	306°	260°	272°	.462"	.482"	84361
Rough idle. Strong mid-range and top end power for 2000cc engines or larger with increased compression. RPM Power Range: 3500 to 8500 plus.	All cid	<b>61007</b>	VW306F 107°	306°	312°	272°	280°	.481"	.500"	84361
CUSTOM GROUND VW CAMS - Special order custom ground profiles available. Proprietary and confidential profiles also available. See specs listed below.		<b>00004</b>								

Note: Increasing rocker ratio and spring pressure in these camshafts may enhance the performance characteristics of these camshafts, depending on engine setup.

## ENGINEERED COMPONENT KITS

Part No.	Lifters	Springs	Retainers	Remarks
<b>84261</b>	66961-8	68141-8	87045-8	For rpm up to 6500 plus.
<b>84361</b>	66961-8	68404-8	87044-8	For rpm up to 8000 plus.

Spring pressure:

68141-8 Seat: 1.600" @ 52 lbs / Nose: 1.050" @ 150 lbs / Coil bind: 0.850" (Stock O.D., no machine work).

68404-8 Seat: 1.600" @ 116 lbs / Nose: 1.100" @ 281 lbs / Coil bind: 0.950"

Optional spring (heavy duty):

68146-8 Seat: 1.600" @ 117 lbs / Nose: 1.100" @ 261 lbs / Coil bind: 0.975" (Stock O.D., no machine work).

## SPECIAL ORDER VOLKSWAGEN CAMSHAFTS COMPETITION PROFILES

Whether you're running the Type 1, 3 or 4 engine, Crower has hundreds of cam profiles that will deliver increased performance. Call with the following information for a proper recommendation:

- Engine specs (bore, stroke, etc...).
- Connecting rod length.
- Intake and exhaust flow figures (intake and exhaust manifold lengths).
- Intended operating power range and type of fuel.
- Data on your best existing camshaft.
- Rocker ratio information (intake and exhaust).
- Installed valve spring height (see diagram 2).
- Conventional flat tappet (cast iron), hardface or roller tappet (Type 1 and 3 only).

If budget considerations are not an issue, roller tappet profiles (conventional or inverse radius) deliver the highest lift rates per degree, producing more area under the lift curve, as well as reduced friction, therefore increasing horsepower and torque.

## ACCESSORIES

Part No.	Description
<b>86061</b>	Replacement cam gear
<b>86059-3</b>	Cam bolts - Air Cooled

Note: Water cooled cam cores also available for Rabbit, Scirocco, Jetta and Dasher (1972-90) 4 cyl.

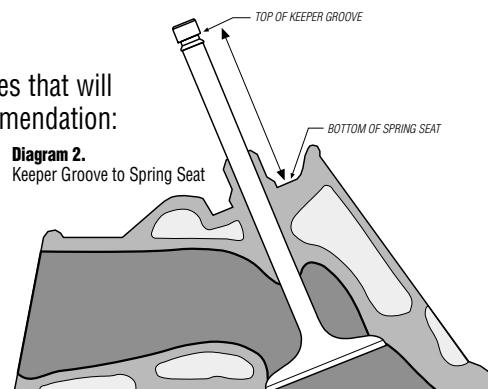
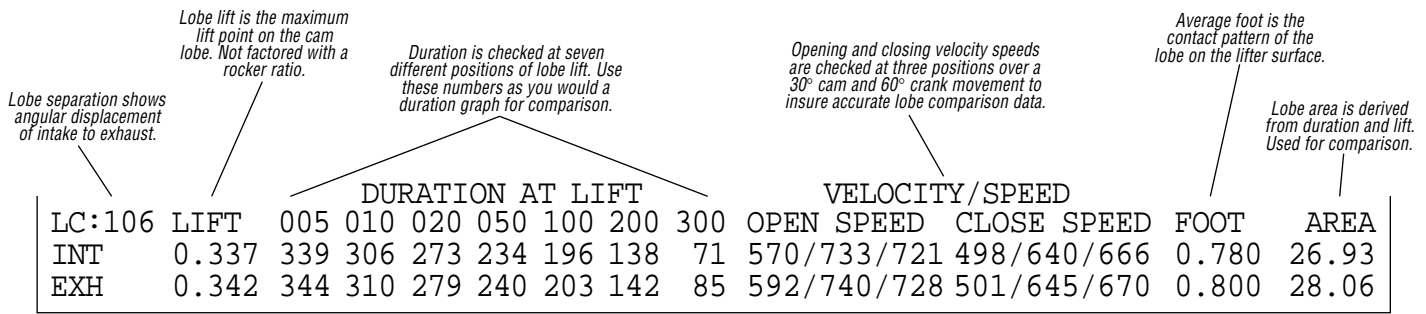


Diagram 2.  
Keeper Groove to Spring Seat

# custom camshafts



CROWER COMPUTERIZED LOBE ANALYSIS

## CUSTOM CAMSHAFTS

Crower has a variety of custom cam cores and cam options available to choose from. Please contact a Crower cam technician for further information on the following:

Part No.	Description
00000	Custom - Solid/Flat Tappet Camshaft
00001	Custom - Hydraulic Tappet Camshaft
00002	Custom - 8620 Steel Billet Roller Tappet Camshaft
00003	Custom - 8620 Steel Billet Roller Tappet Camshaft (low volume)
00004	Custom - Volkswagen Camshaft
00005	Custom - Mushroom Tappet Camshaft
00006	Custom - Harris Runner Billet Roller Tappet Camshaft
00007	Custom - Cast Iron Hydraulic or Solid/Flat Tappet Camshaft
00014	Custom - Gun Drilled Cam Core Option (SB Chevrolet)
00015	Custom - Gun Drilled Cam Core Option (BB Chevrolet)
00033	Custom - 8620 Steel Billet Hardface Solid/Flat Tappet Camshaft
00044	Custom - INRAD (Inverse Radius) Roller Tappet Camshaft (MIR)
00045	Custom - INRAD (Inverse Radius) Roller Tappet Camshaft (SIR)
00050	Custom - 8620 Steel Billet Roller Tappet Camshaft w/Cast Iron Gear

Note: Contact Crower for pricing and availability.

## LOW VOLUME SEMI CORES

Crower has cam cores available for these applications:

### DOMESTICS

- Buick 198, 225 V6 1962-71 (odd fire)
- Cadillac 368, 425 472, 500 V8 1968-84
- Cadillac 250 V8 (4.1L) 1982-87
- Chevrolet 216, 235, 261 Inline 6 cyl. 1937-63
- Chevrolet 292 Inline 6 cyl. 1964-73
- Chevrolet 164 Corvair Flat 6 cyl. 1964-69 (std. rot.)
- Chevrolet 164 Corvair Flat 6 cyl. 1964-69 (rev. rot.)
- Chevrolet 348, 409 V8 1958-65
- Chevrolet 366, 396, 402, 427, 454, 500 V8 (rev. rot.)
- Chrysler 331, 392 Hemi V8 1951-58 (roller tappet only)
- Dodge 170, 198, 225 Inline 6 cyl. 1960-75
- Dodge 2.2L, 2.5L 4 cyl.
- Ford & Cortina 1600 cc 4 cyl.
- Ford 144, 170, 200 Inline 6 cyl. 1960-up
- Ford Flathead 239 V8 1948 (no nose)
- Ford Flathead 239 V8 1949-53 (long nose)
- Ford 272, 292, 312 V8 1955-62
- International 266, 304, 345, 392 V8
- Pontiac 151 4 cyl. Iron Duke w/3 main journals, 2 gears (flat tappet)
- Pontiac 151 4 cyl. Iron Duke w/3 main journals, 2 gears (roller tappet)

### FOREIGN

- Acura B18A/B non VTEC
- BMW 6 cyl. 1972-80
- Holden V8 (all appl.)
- Honda/Acura B series VTEC
- Honda H22 VTEC
- Honda D16Z6 & D16Y8 VTEC
- Mitsubishi/DSM 4G63
- Mitsubishi/DSM 420A
- Nissan "L" Series 16, 18, 20 4 cyl. 1969-80 (drilled for oil)
- Nissan "Z" Series 240, 260, 280 6 cyl. 1977-80 (drilled for oil)
- Toyota Supra 2JZ (1994-98)
- Toyota 3TC 4 cylinder
- Volvo B-18, B-20 4 cyl.
- VW 4 cyl. Type 2 & 4 Air Cooled 411, 914
- VW Rabbit, Scirocco, Jetta, Dasher, 1.5, 1.6, 1.7, 1.8 4 cyl. (gas)

## IMPORT REGRINDS

If you're lacking performance, send Crower your used or damaged camshaft for complete lobe analysis and regrinding or repair. Cams will be straightened and then checked-out (sample shown above) to establish original specs. A Crower technician will analyze all of the data and, based on your performance parameters, regrind your cam to desired specs.

Description	Duration
<b>#1 TOURING PROFILE (250F)</b> (Solid Lifter) Improves entire rpm range from 1000 to 6000. Smooth idle. Stock applications with no more than 10.5:1 compression.	250°
<b>#2 RALLY SPORT PROFILE (264F)</b> (Solid Lifter) Slight lobe at idle. Improves rpm range from 1500 to 6500. Greatly improves high gear acceleration for passing and hills.	264°
<b>#3 SLALOM/AUTOCROSS PROFILE (270F)</b> (Solid Lifter) Slight lobe at idle, but smooth into the throttle. Improves rpm range from 2000 to 6700 plus. More power for passing and hills.	270°
<b>#4 CLUB RACER PROFILE (284F)</b> (Solid Lifter) Racy lobe at idle. Extends rpm range from 2500 to 6500 with redline at 7100 plus. Increased compression, valve pocketing in combustion chamber and added carburetion will enhance total power.	284°
<b>#5 COMPETITION PROFILE (290F)</b> (Solid Lifter) Race only. Very rough idle, especially with added carburetion. Higher compression pistons or head milling advised as peak horsepower develops in 5500 to 6500 rpm range.	290°
<b>#6 ROAD RACING PROFILE (304F)</b> (Solid Lifter) Race only. Requires extensive modifications like 13:1 compression, grouped exhaust system, individual carburetion, inlet valve pocketing and engine balance. Rpm range from 4500 to 8000.	304°

Note: Lift figures are not provided because of the variety of rocker ratios from engine to engine.

## AVAILABLE REGRINDS

Part No.	Description
65000	Regrind - Hydraulic or Solid (any popular engine make)
65001	Regrind - Roller (any popular engine make)
65002	Regrind - Tractor (gas or diesel)
65003	Regrind - VW (single pattern)
65004	Regrind - VW (dual pattern)
65006	Regrind - Special Order Application (low volume)
65007	Regrind - INRAD Roller or Solid (low volume)
65008	Regrind - Hardface with 180° weld (low volume)
65009	Regrind - Hardface with 360° weld (low volume)
65010	Regrind - Custom Order
65014	Regrind - 4 cyl Twin Cam
65016	Regrind - 6 cyl Twin Cam
65020	Regrind - VTEC DOHC (B series, H22, etc...)
65021	Regrind - VTEC SOHC (D series)



# camshaft accessories



## ADVANCE & RETARD CAMSHAFT BUSHINGS

Using Crower camshaft bushings is the easy way to “tune” your camshaft timing. You’ll receive five advance or retard bushings that are individually stamped to display amounts advance/retard in cam degrees (0°, 1°, 2°, 3°, 4°). Features a shouldered lip that retains the bushing and eliminates fallout.

Part No.	Description
<b>72000</b>	CHEVROLET 0° (1 only)
<b>72001</b>	CHEVROLET 1° (1 only)
<b>72002</b>	CHEVROLET 2° (1 only)
<b>72003</b>	CHEVROLET 3° (1 only)
<b>72004</b>	CHEVROLET 4° (1 only)
<b>72005</b>	CHEVROLET BUSHING KIT 0°-4° (set/5)
<b>72011</b>	FORD 289-460 V8 (set/4 - 1° not included)

Note: Ford kits come with special dowel pin.



## LIGHTWEIGHT FUEL PUMP PUSHROD

The Crower fuel pump pushrod is manufactured from lightweight steel tubing that is heat-treated for added strength. The bronze tip insures proper surface mating with the fuel pump eccentric lobe on 8620 steel billet camshafts. This surface compatibility eliminates the wear problems associated with stock designs. For cast iron hydraulic and solid cams we offer a lightweight model with a steel tip at each end to protect against wear.

Part No.	Description
<b>76200</b>	CHEVROLET 262-454 V8 (8620 steel cams)
<b>76201</b>	CHEVROLET 262-454 V8 (cast iron cams)
<b>76202</b>	CHEVROLET 90° V6 (8620 steel billet cams)



## CAM THRUST PLUGS

Roller cam lobes are ground flat, without the taper found in hydraulic and solid lobes. The cam thrust plug sits between the front of the timing gear and the back of the front cover and prevents forward cam travel and ignition flutter in roller grinds. Available in choice of two styles: phenolic (non-galling material) or fully rollerized for reduced friction.

Part No.	Description	Style
<b>86085</b>	CHEVROLET 262-400 V8	Solid
<b>86086</b>	CHEVROLET 396-454 V8	Solid
<b>86087</b>	MOPAR 426 Hemi V8	Solid
<b>86089</b>	CHEVROLET 262-400 V8	Rollerized
<b>86090</b>	CHEVROLET 396-454 V8	Rollerized
<b>86091</b>	MOPAR “B”	Rollerized
<b>86099</b>	CHEVROLET 262-400 (Late Model)	



## ULTRA-LOCK CAMSHAFT BOLTS

Crower ultra-lock cam bolts are special “grade 8” tempered steel aircraft bolts that feature nylock inserts for positive holding. Their unique design eliminates the possibility of loose bolts in both the sprockets and the gears.

Part No.	Description
<b>86060-3</b>	CHEVROLET V8 5/16 (set/3)
<b>86059-3</b>	VW - Air Cooled (set/3)



## CAM GEAR & BLOCK PROTECTOR KIT

Friction reducing needle bearing design eliminates the cam gear from scuffing or galling your block face. Back of cam timing gear must be machined. Machining specs included. See Timing Gear Kits for pre-machined, race-ready applications.

Part No.	Description
<b>76400</b>	CHEVROLET 90° V6 & 262-400 V8
<b>76401</b>	CHEVROLET 396-454 V8
<b>76410</b>	CHEVROLET V8 Captive Assembly (Oversize)

# camshaft accessories



## CLOYES TIMING GEAR SETS

Crower offers Cloyes Timing Chains. The high performance Cloyes True roller chain is intended for high performance racing applications. Comes with three position bottom crank sprocket keyway and extra tough billet steel gears.

### CLOYES TRUE ROLLER

Part No.	Description
76555	AMC 4 cyl (2.5L), 6 cyl (4.0L)
76551	AMC 290-401 V8
76569	BUICK 181, 196, 252 V6 w/integral dist gear
76567	BUICK 198, 225, 231 V6 w/o gear and V8
76501	CHEVROLET 262-400 V8 and 90° V6
76504	CHEVROLET LT1 V8 '94-'97 <i>New</i>
76505	CHEVROLET LT4 V8 1996 <i>New</i>
76513	CHEVROLET 262-400 V8 1985-up
76511	CHEVROLET 396-454 V8 1965-up
76523	FORD 221-289, 302, 351W V8 '62-'84
76531	FORD 351C, 351M, 400 V8 '70-'82
76525	FORD 332-428 V8 '64-'74
76533	FORD 429-460 V8 '68-'71
76535	FORD 429-460 V8 '72-up
76541	MOPAR 273 318 392 V8 Magnum
76543	MOPAR 361, 440, 426 "B" V8 (1bolt)
76545	MOPAR 350,361,383,400,413,426 Hemi,440
76561	OLDSMOBILE 260-455 V8 '64-'83
76565	PONTIAC 287-455 V8
76567	ROVER 215 (3.5L) V8
86061	VW Cam Gear - Air Cooled



## CLOYES HEX-A-JUST TIMING GEAR SETS

Crower offers Cloyes patented timing adjustment system for precise installation without machining or fumbling with a variety of offset bushings. Simply dial in the timing and lock the gear in place.

Part No.	Description
76801	CHEVROLET 262-400 V8 and 90° V6
76813	CHEVROLET 262-400 V8 '85-up
76806	CHEVROLET 262-400 "Rocket"
76813	CHEVROLET 262-400 (LT1) V8 & V6
76802	CHEVROLET LS1 V8 1998-UP <i>New</i>
76811	CHEVROLET 396-454 V8 '65-up
76827	FORD 221-289, 351W V8 '62-'84 and 302 5.0L
76831	FORD 351C, 351M, 400 V8 '70-'82
76825	FORD 352-428 "FE" '64-'74
76833	FORD 429-460 V8 '68-up
76845	MOPAR 350-426W, Hemi V8 (w/3 bolt cam)
76847	DODGE Viper V10 '95-up
76861	OLDSMOBILE 260F-455 V8 '65-'83

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## CLOYES TIMING GEAR KITS

Includes rollerized cam thrust plug, rollerized cam gear and block protector kit, advance and retard camshaft bushings and specially machined Cloyes True timing chain set. The ultimate setup for precision cam timing and block protection.

Part No.	Description
76501K	CHEVROLET 200-229 90° V6
76501K	CHEVROLET 262-400 V8
76511K	CHEVROLET 396-454 V8



## PRECISION CAMSHAFT GEAR DRIVES

Made from lightweight aluminum alloy, the Shaver-Wesmar gear drive is designed to provide accurate, consistent cam timing under the toughest racing conditions. Features gears precision cut from 8620 steel with 20° pressure angle, a crack resistant steel idler gear support, Torrington bearings and a tough black oxide finish. Quick and easy installation without any machine work required. The absolute highest quality available. Fully adjustable.

Part No.	Description
76600	CHEVROLET 262-400 V8

Note: Fits most small block Chevrolet applications. Call for details.

# camshaft accessories



## DEGREE WHEEL

This easy to use tool is a must for determining proper valve timing when installing your camshaft. The 7" black faced wheel is made from lightweight aluminum with bright numerals and graduation lines for maximum accuracy and readability. 7/16 mounting hole in center. Includes degreasing instructions.

Part No.	Description
<b>87600</b>	Degree Wheel and Instructions



## DEGREE KIT

Crower's degreasing kit contains all the components necessary for achieving optimum valve timing when installing your cam. Our kit includes a 7" degree wheel with 7/16 mounting hole, pointer, 1" travel dial indicator, indicator stand, magnetic base, TDC bolt stop and checking springs.

Part No.	Description
<b>87601</b>	Degree Wheel Kit and Instructions



## DISTRIBUTOR GEARS

Made from premium aluminum bronze alloy, these precision machined gears are highly recommended for performance cam applications and are mandatory when running 8620 steel billet roller camshafts.

Part No.	Description	Shaft Dia.
<b>76000</b>	CHEVROLET V8 & 90° V6 (Accel BE1)	.491"
<b>76001</b>	CHEVROLET V8 & 90° V6	.500"
<b>76003</b>	CHEVROLET V8 & 90° V6 (Accel)	.500"
<b>76002</b>	CHEVROLET V8 & 90° V6	.427"
<b>76005</b>	CHEVROLET V6 & 60°	.427"
<b>76006</b>	CHEVY II & CHEVY 4 & 6 cyl.	.491"
<b>76010</b>	DONOVAN V8	.484"
<b>76013</b>	FORD 351C-400, Boss 351, 429-460	.530"
<b>76014</b>	FORD 289-302 & Boss 302 V8	.500"
<b>76015</b>	FORD SVO 302-351W V8	.530"
<b>76016</b>	FORD 351C-400, Boss 351, 429-460	.500"
<b>76017</b>	FORD 352-428 V8	.500"
<b>76018</b>	FORD 289-302 & Boss 302 V8	.467"
<b>76019</b>	FORD 240-300 6 cyl.	.530"
<b>76020</b>	FORD 352-428 V8	.467"
<b>76030</b>	OLDSMOBILE V8	.491"
<b>76040</b>	MOPAR "B", 426 Hemi V8	.484"
<b>76010</b>	MOPAR "LA" V8	.484"
<b>76060</b>	PONTIAC V8	.489"
<b>76006</b>	PONTIAC 4 cyl. 151 (77-78)	.491"
<b>76062</b>	PONTIAC 4 cyl. 151 (79-85)	.491"
<b>76063</b>	PONTIAC 4 cyl. 151 (86-89)	.500"
<b>76100</b>	CHEVROLET V8 Reverse Rotation	.491"

Warning: If 8620 steel billet cam core, bronze gear is mandatory. If cast iron cam or cast iron gear, Crower recommends factory gear.



## PROFESSIONAL DEGREE WHEEL

Crower's new professional degree wheel features a large 11" diameter surface made from rugged .040" gauge aluminum. The unique, easy to read surface was designed by engine builders for engine builders.

Part No.	Description
<b>87602</b>	Degree Wheel and Instructions



## ASSEMBLY PRELUDE

Crower's assembly prelude is formulated especially for prelubrication of cam lobes and lifter surfaces (hydraulic and solid) prior to engine oil circulation. The petroleum based compound increases the load carrying capacity of the engine oil during break-in to prevent scuffing and galling. Includes special additives that withstand the extreme pressures exerted on cams and lifters. Also recommended for use on valve stems, rocker arms and pushrod tips.

Part No.	Description
<b>86093</b>	Cam & Lifter Prelude (1 oz.)
<b>86094</b>	Cam & Lifter Prelude (8 oz.)
<b>86095</b>	Cam & Lifter Prelude (16 oz.)

# lifters - flat face



## HYDRAULIC LIFTERS

Crower hydraulic lifters will compliment any hydraulic cam. Features ball-check oil control valving, precision radius faces and quick break-in. New lifters must be used when installing a new camshaft to avoid premature lobe and lifter wear.

Part No.	Description
66045-12	AMC 6 cyl. 1964-up (set/12)
66045-16	AMC V8 1966-up (set/16)
66050-12	BUICK V6 Evenfire 1978-up (set/12)
66050-16	BUICK V8 1964-1980 (set/16)
66000-12	CHEVROLET 6 cyl. (set/12)
66000-16	CHEVROLET V8 (set/16)
66000R-16	CHEVROLET V8 Race Series (set/16)
66016-12	FORD 144 250 6 cyl. (set/12)
66015-12	FORD 240 300 6 cyl. (set/12)
66015-16	FORD 221-460 V8 (set/16)
66016-16	FORD 332-429 Hemi V8 (set/16)
66031-16	MOPAR 273-360 LA V8 (set/16)
66032-16	MOPAR 350-440 B V8 (set/16)
66033-16	MOPAR 426 Hemi V8 (set/16)
66056-16	OLDSMOBILE V8 1968-up (set/16)
66060-16	PONTIAC V8 1955-up (set/16)



## CHEATER HYDRAULIC LIFTERS

Crower cheater hydraulic lifters are really solid lifters, they just look like hydraulics. Call Crower for more information.

Part No.	Description
66000X5-16	CHEVROLET V8 .842" body dia (set/16)
66015X5-16	CHEVROLET or FORD V8 .874" body dia

Note: Requires .150" or longer pushrods.



## CAMSAVER HYDRAULIC LIFTERS

The maximum in cam lobe and lifter life. If high spring pressures or extreme and unusual operating conditions have you worried about lobe scuff and lifter wear, insist on Crower "high-lube" CamSaver lifters. These lifters deliver 20% to 30% more oil to your lobe and lifter faces for the best possible insurance against premature lobe and lifter failure. Specially machined flats put 12 to 16 ounces of additional oil per minute at each lobe without adversely affecting engine oil pressure (nominal drop of just 1 or 2 pounds). Crower CamSaver lifters incorporate the same precision ground radius face and finish as our standard lifters to insure quick break-in and trouble free operation.

Part No.	Description
66045X3-12	AMC 6 cyl. 1964-up (set/12)
66045X3-16	AMC V8 1966-up (set/16)
66050X3-12	BUICK V6 Evenfire 1978-up (set/12)
66050X3-16	BUICK V8 1964-1980 (set/16)
66000X3-12	CHEVROLET 6 cyl. (set/12)
66000X3-16	CHEVROLET V8 (set/16)
66000RX3-16*	CHEVROLET V8 Race Series (set/16)
66016X3-12	FORD 144 250 6 cyl. (set/12)
66015X3-12	FORD 240 300 6 cyl. (set/12)
66015X3-16	FORD 221-460 V8 (set/16)
66016X3-16	FORD 332-429 Hemi V8 (set/16)
66031X3-16	MOPAR LA Block (set/16)
66032X3-16	MOPAR B Block (set/16)
66056X3-16	OLDSMOBILE V8 1968-up (set/16)
66060X3-15	PONTIAC V8 1955-up (set/16)

\*Indicates Crower's all new Race Series lifter that features super hard wear surface (65RC) and heavy-duty snap ring.



## SOLID LIFTERS

To avoid premature lobe wear and insure long cam and lifter life be sure to specify Crower solid lifters. Features precision ground radius faces and finish for fast break-in and trouble free operation.

Part No.	Description
66945-12	AMC 6 cyl. 1964-up (set/12)
66945-16	AMC V8 1966-up (set/16)
66950-12	BUICK V6 Evenfire 1978-up (set/12)
66950-16	BUICK V8 1964-1980 (set/16)
66900-12	CHEVROLET 6 cyl. (set/12)
66900-16	CHEVROLET V8 (set/16)
66971-16	CHEVROLET V8 .842" dia (set/16) - No Chamfer
66915-12	FORD 240 300 6 cyl. (set/12)
66915-16	FORD 221-351, 429-460 V8 (set/16)
66916-16	FORD 332-428 Hemi V8 (set/16)
66925-16	FORD 332-428 V8 (set/16) - Deep Seat
66972-16	FORD V8 .874" dia (set/16) - No Chamfer
66931-16	MOPAR 273-360 LA V8 (set/16)
66932-16	MOPAR 361-440 B V8 (set/16)
66933-16	MOPAR 426 Hemi V8 (set/16)
66958-16	OLDSMOBILE V8 (.921" dia) '68-up (set/16)
66962-16	PONTIAC V8 1955-up (set/16)



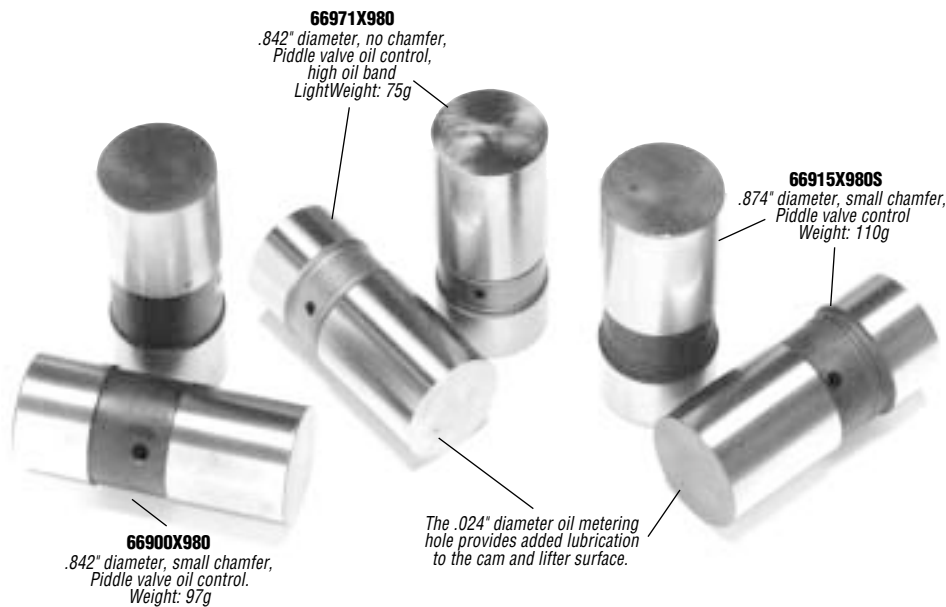
## FORD CAM FOLLOWERS & CONVERSION KITS

Fully compatible with Crower's 2000 and 2300 Ford camshafts. Allows for the maximum horsepower, torque and rpm performance. The perfect compliment to any 2000cc or 2300cc cam. Ford conversion kits make it possible to change existing hydraulic setups to a solid (mechanical) for more power. Includes heavy-duty adjusters, nuts, sleeves and stabilizer spring.

Part No.	Description	Ratio
66990-8	FORD 2000cc w/insert (set/8)	Stock
66993-8	FORD 2300cc w/insert, groove (set/8)	Stock
76450-8	FORD Conversion Kit (Hyd to Solid)	

Note: For 2000cc and 2300cc cam profiles and detailed follower and conversion kit information see cam section.

# lifters - flat face



**66971X980**  
 .842" diameter, no chamfer,  
 Piddle valve oil control,  
 high oil band  
 LightWeight: 75g

**66915X980S**  
 .874" diameter, small chamfer,  
 Piddle valve control  
 Weight: 110g

**66900X980**  
 .842" diameter, small chamfer,  
 Piddle valve oil control.  
 Weight: 97g

The .024" diameter oil metering  
 hole provides added lubrication  
 to the cam and lifter surface.

**CROWER EDM OILING**  
 Electronic Discharge Machine  
 allows Crower engineers to place  
 precision holes without the use of  
 a drill bit. Delivers more oil to  
 critical, high load areas.

## COOLFACE SOLID LIFTERS

Better engine builders know that cam lobe and lifter wear is caused by inadequate oil lubrication at the cam and lifter surface.

With today's high rpm, high rocker ratio and high spring pressures, cam and lifter failure is at an all time high.

Crower's all new "CoolFace" lifter option is a must for these applications. Features a small diameter oil metering port (.024") that is precision machined in the face of the lifter. No significant oil pressure loss, but significantly improved cam and lifter longevity.

Crower has a complete inventory of .842" and .874" diameter lifters to choose from, including piddle valve, edge orifice, small chamfer, no chamfer and lightweight designs. Call Crower for pricing and availability. Crower also offers the "CoolFace" option on competitor's solid lifters as well. Send your competing brand lifters in to Crower for precision EDM machining.

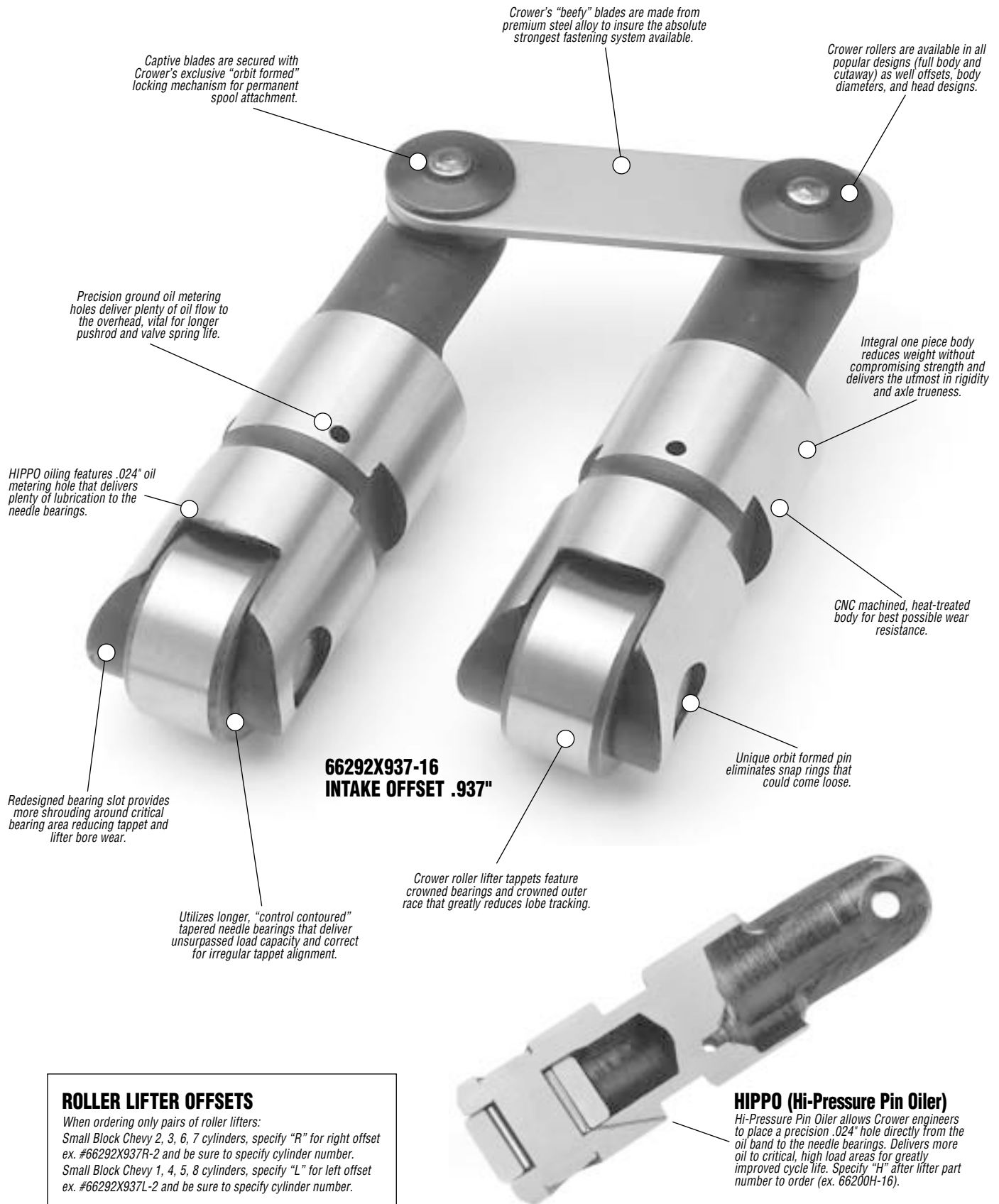
**66900X980**  
**SMALL CHAMFER .842"**

## COOLFACE SOLID LIFTER OPTION

Part No.	Description
<b>66900X980-16</b>	.842" (97g) small chamfer
<b>66900X980S-16</b>	.842" (97g) small chamfer, high seat (+.150")
<b>66971X980-16</b>	.842" (75g) LightWeight, no chamfer
<b>66972X980-16</b>	.874" (84g) no chamfer
<b>66915X980S-16</b>	.874" (110g) small chamfer, high seat (+.065")

Warning: Block restrictors are not recommended.

# lifters - roller



Captive blades are secured with Crower's exclusive "orbit formed" locking mechanism for permanent spool attachment.

Crower's "beefy" blades are made from premium steel alloy to insure the absolute strongest fastening system available.

Crower rollers are available in all popular designs (full body and cutaway) as well offsets, body diameters, and head designs.

Precision ground oil metering holes deliver plenty of oil flow to the overhead, vital for longer pushrod and valve spring life.

Integral one piece body reduces weight without compromising strength and delivers the utmost in rigidity and axle trueness.

HIPPO oiling features .024" oil metering hole that delivers plenty of lubrication to the needle bearings.

CNC machined, heat-treated body for best possible wear resistance.

Redesigned bearing slot provides more shrouding around critical bearing area reducing tappet and lifter bore wear.

Unique orbit formed pin eliminates snap rings that could come loose.

**66292X937-16**  
**INTAKE OFFSET .937"**

Utilizes longer, "control contoured" tapered needle bearings that deliver unsurpassed load capacity and correct for irregular tappet alignment.

Crower roller lifter tappets feature crowned bearings and crowned outer race that greatly reduces lobe tracking.

## ROLLER LIFTER OFFSETS

When ordering only pairs of roller lifters:  
Small Block Chevy 2, 3, 6, 7 cylinders, specify "R" for right offset  
ex. #66292X937R-2 and be sure to specify cylinder number.  
Small Block Chevy 1, 4, 5, 8 cylinders, specify "L" for left offset  
ex. #66292X937L-2 and be sure to specify cylinder number.

## HIPPO (Hi-Pressure Pin Oiler)

Hi-Pressure Pin Oiler allows Crower engineers to place a precision .024" hole directly from the oil band to the needle bearings. Delivers more oil to critical, high load areas for greatly improved cycle life. Specify "H" after lifter part number to order (ex. 66200H-16).

# lifters - roller



## ROLLER LIFTERS

The best roller tappets on the market. Delivers 200% more life expectancy than competing brands. Features crowned bearings and crowned outer race that greatly reduces lobe tracking. No offsets.

Part No.	Description
66206-8	CHEVY II 4 cyl. (set/8)
66207-12	CHEVROLET 194-250 6 cyl. '62-up (set/12)
66208-12	CHEVROLET 173 60° 2.8L V6 (set/12)
66200-16	CHEVROLET 262-400 V8 '57-up (set/16)
66374-16	CHEVROLET 262-400 V8 (.874" body dia.)
66202-16	CHEVROLET LS1 (set/16)
66201-16	CHEVROLET 396-454 V8 '64-up (set/16)
66375-16	CHEVROLET 396-454 V8 (.874" body dia.)
66214-12	FORD 240-300 6 cyl. '65-up (set/12)
66215-16	FORD 221-302 351W V8 '62-up (set/16)
66218-16	FORD 351C, 351M, 400 V8 '63-up (set/16)
66216-16	FORD 332-428 V8 '63-up (set/16)
66217-16	FORD 370-460 V8 '68-up (set/16)
66232-16	MOPAR 426 Hemi 440 B V8 (set/16)
66260-16	PONTIAC 289-455 V8 '64-'81 (set/16)

For High Pressure Pin Oiling (HIPPO), specify "H" after p/n.

Ex: 66200H-16

Also available in pairs by replacing -16 with -2.



## HI-SEAT OFFSET ROLLER LIFTERS

Crower's "Hi-Seat" roller lifters feature a .200" offset, integral rev-kit button and Crower's "Hi-Seat" pushrod design. Allows for shorter pushrods, eliminating unwanted flex and weight.

Part No.	Description
66275-16	CHEVROLET 265-400 V8 .842" dia (set/16)
66277-16	CHEVROLET 265-400 V8 .874" dia (set/16)

Note: Standard offsets include 4 left int, 4 right int, 8 straight exh.

For High Pressure Pin Oiling (HIPPO), specify "H" after p/n.

Ex: 66275H-16

**CROWER**



## SEVERE-DUTY ROLLER LIFTERS

Crower offers a series of special Severe-Duty roller lifters designed for full race applications. These rollers feature a special alloy body and some feature a larger O.D. bearing. This larger O.D. bearing has a thicker wall than our standard designs in order to withstand today's high cylinder pressure and high impact camshafts.

Part No.	Description
66219-16	FORD 429 Boss "Z Bar" (set/16)
66284-16	MOPAR 426 Hemi (.903" body/.812" bearing OD)
66284X4-16	MOPAR 383-440 (.903" body/pushrod oiling)
66285-16	MOPAR 426 Hemi (.150" higher seat)
66272-16	MOPAR 426 Hemi (1" body/.895" bearing OD)
66284X1-16	ARIAS 8.3L (Standard Seat - 1.300")
66284H-16	ARIAS 8.3L (High Seat - 1.450")
66284X2-16	ARIAS 10.0L
66284BA-16	BAE Spread Bore (.903" body)

For High Pressure Pin Oiling (HIPPO), specify "H" after p/n.

Ex: 66219H-16



## HYDRAULIC ROLLER LIFTERS

Crower hydraulic roller lifters combine the performance level characteristics of a roller with the reliability of a hydraulic. Completely redesigned body and bearing. Can be retrofitted for earlier style blocks.

Part No.	Description
66313-16*	CHEVROLET 262-400 V8 (set/16)
66330-16	CHEVROLET 262-400 V8 - Late Model (set/16)
66314-16*	CHEVROLET 396-454 V8 (set/16)
66331-16	CHEVROLET 396-454 V8 - Late Model (set/16)
66335-16	FORD 302 V8 (set/16)
66325-16	DODGE Magnum V8 (set/16)
66325-20	DODGE Magnum V10 and Viper V10 (set/20)

\*Requires a different pushrod length than previous hyd rollers.



## CUTAWAY SEVERE-DUTY ROLLER LIFTERS

A must for high cylinder pressure, high engine rpm applications. Crower's Cut-Away style roller lifters feature a special alloy body, lightweight design, a heavy-duty blade that's been moved up to fit late model blocks. Standard or offset (180").

Part No.	Description
66289-12	CHEVY 220-262 (4.3L) 90° V6
66298-12	CHEVY 220-262 (4.3L) 90° V6 Intake Offset
66290-16	CHEVY 262-400 V8 .842"
66290X874-16	CHEVY 262-400 V8 .874"
66290X903-16	CHEVY 262-400 V8 .903" body / .812" bearing
66290X937H-16	CHEVY 262-400 V8 .937" body / .850" bearing
66292-16	CHEVY 262-400 V8 .842" Intake Offset
66292X874-16	CHEVY 262-400 V8 .874" Intake Offset
66292X903-16	CHEVY 262-400 V8 .903"/.812" Intake Offset
66292X937H-16	CHEVY 262-400 V8 .937"/.850" Intake Offset
66296-16	CHEVY 262-400 V8 .842" Specify Offset
66296X874-16	CHEVY 262-400 V8 .874" Specify Offset
66296X903-16	CHEVY 262-400 V8 .903"/.812" Specify Offset
66296X937H-16	CHEVY 262-400 V8 .937"/.850" Specify Offset
66282-16	CHEVY 262-400 SB2/Std. .842" Int&Exh Offset
66282X874-16	CHEVY 262-400 SB2/Std. .874" Int&Exh Offset
66282X903-16	CHEVY 262-400 SB2/Std. .903" Int&Exh Offset
66282X937H-16	CHEVY 262-400 SB2/Std. .937" Int&Exh Offset
66283-16	CHEVY 262-400 SB2/SB2 .842" All Centers
66283X874-16	CHEVY 262-400 SB2/SB2 .874" All Centers
66283X903-16	CHEVY 262-400 SB2/SB2 .903" All Centers
66283X937H-16	CHEVY 262-400 SB2/SB2 .937" All Centers
66291-16	CHEVY 396-454 V8 .842"
66291X874-16	CHEVY 396-454 V8 .874"
66291X903-16	CHEVY 396-454 V8 .903" body / .812" bearing
66291X937H-16	CHEVY 396-454 V8 .937" body / .850" bearing
66293-16	CHEVY 396-454 V8 V8 .842" Intake Offset
66293X874-16	CHEVY 396-454 V8 V8 .874" Intake Offset
66293X903-16	CHEVY 396-454 V8 V8 .903"/.812" Intake Offset
66293X937H-16	CHEVY 396-454 V8 V8 .937"/.850" Intake Offset
66297-16	CHEVY 396-454 V8 V8 .842" Specify Offset
66297X874-16	CHEVY 396-454 V8 V8 .874" Specify Offset
66297X903-16	CHEVY 396-454 V8 V8 .903"/.812" Spec Offset
66297X937H-16	CHEVY 396-454 V8 V8 .937"/.850" Spec Offset
66286-12	BUICK V6
66252-16	BUICK/DART V8 (.200" offset)
66378-16	FORD 289-351W V8 .874" Intake Offset
66379-16	FORD 429-460 V8 .874 Intake Offset
66294-16	PONTIAC 455 V8 All Centers
66295-16	PONTIAC 455 V8 Intake Offset

Warning: Never submerge roller lifters in parts washers due to possible contamination from suspended metal fines in the solvent. Crower recommends .0015" - .0025" tappet bore clearance.

For High Pressure Pin Oiling (HIPPO), specify "H" after p/n.

## GROOVE LOCK ROLLER LIFTERS

Eliminates blades and weighs in at 97g (.842").

Part No.	Description
66274-16	CHEVROLET 265-400 V8 .842" dia (set/16)
66274X874-16	CHEVROLET 265-400 V8 .874" dia (set/16)

Note: Requires drill jig (#66575) to install. Specify lifter bore size.

# pushrod accessories & rev kits



## PUSHROD GUIDE PLATES

Crower's pushrod guide plates are specially hardened for added strength and durability. They are positioned on the rocker arm studs to guarantee proper pushrod alignment. Crower's unique guide plate design reduces the flex and rocker arm slop found in other brands, providing more pushrod stability and added strength. Adjustable guide plates are also available. Please specify when ordering.

Part No.	Description	Pushrod Dia.
70502-8	CHEVROLET 262-400 V8	5/16
70500-8	CHEVROLET 262-400 V8	3/8
70511-8	CHEVROLET 262-400 V8 (.150")	5/16
70509-8	CHEVROLET 262-400 V8 (.150")	3/8
70505-8	CHEVROLET 262-400 V8 (.225")	3/8
70517-8	CHEVROLET 262-400 V8 Adjustable	5/16
70516-8	CHEVROLET 262-400 V8 Adjustable	3/8
70506-8	CHEVROLET 396-454 V8	3/8
70503-8	CHEVROLET 396-454 V8	7/16
70504-8	FORD 289-302 V8	5/16
70501-8	FORD 351C-400 V8	3/8
70512-8	FORD 351C	5/16
70508-8	FORD 429-460 V8	5/16
70507-8	FORD 429-460 V8	3/8
70518-8	DODGE 318-360 Magnum V8	5/16
70518-6	DODGE Magnum V6	5/16



## ADJUSTABLE CHECKING PUSHRODS

Crower adjustable checking pushrods have  $\pm .250"$  adjustment travel in order to obtain accurate measurements for determining the optimum pushrod length. Overall lengths are listed with the adjustable end in the middle of the adjustment range. Made from 5/16 tubing with two pushrods per package.

Part No.	Description	Overall Length
70477-2	Adjustable Checking Pushrods	6.300"
70478-2	Adjustable Checking Pushrods	6.800"
70479-2	Adjustable Checking Pushrods	7.250"
70470-2	Adjustable Checking Pushrods	7.500"
70471-2	Adjustable Checking Pushrods	7.750"
70472-2	Adjustable Checking Pushrods	8.250"
70473-2	Adjustable Checking Pushrods	8.400"
70474-2	Adjustable Checking Pushrods	9.550"
70475-2	Adj. Checking Pushrods (Low Blk)	8.250"/9.250"
70476-2	Adj. Checking Pushrods (High Blk)	8.650"/9.650"

Note: Also available with a cup end and adjustable bottom.



## PRECISION ADJUSTABLE CHECKING PUSHRODS

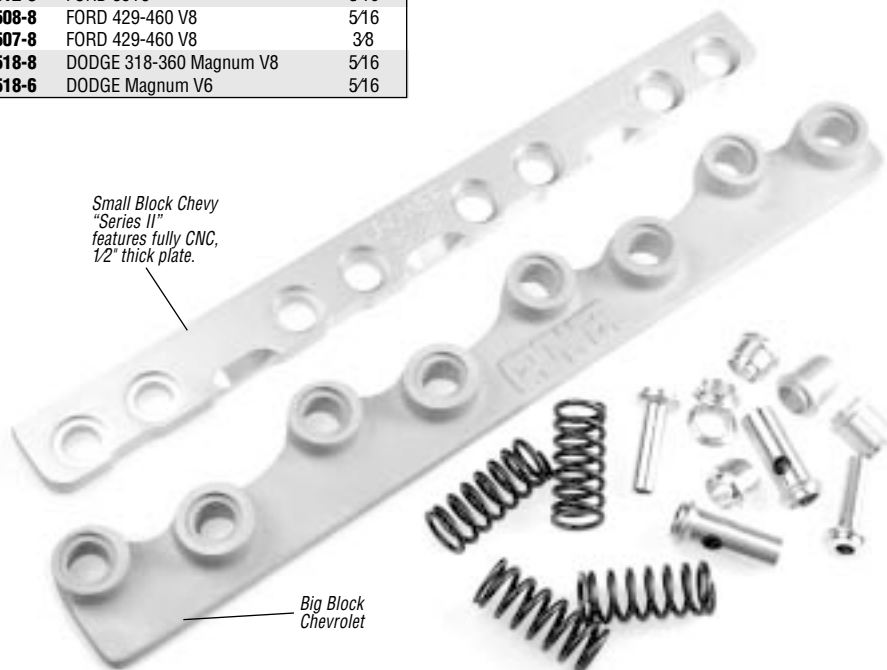
Correct pushrod length is critical in achieving proper valve train geometry. Crower precision checking pushrods guarantee accurate measurements for determining the optimum pushrod length. Precision crafted from steel alloy with a black oxide finish for added durability, Crower checking pushrods are extremely easy to use. Each complete revolution is equal to .050".

Part No.	Description	Length
70480	Precision Checking Pushrod	5.500" to 6.500"
70481	Precision Checking Pushrod	6.500" to 7.500"
70482	Precision Checking Pushrod	7.500" to 8.500"
70483	Precision Checking Pushrod	8.500" to 9.500"
70485	Checking Kit (one ea of above)	5.500" to 9.500"

## HI-REV KITS

Crower highly recommends installing a Hi-Rev kit in any roller cam or extreme rpm application to provide added stability to the valve train. Each Crower Hi-Rev Kit includes two lightweight aluminum alloy bars, spacers, and springs required for quick and easy installation. Available for both standard and cutaway design Crower roller lifter tappets. Cutaway designs must specify intake and exhaust rocker offsets.

Part No.	Description	Head
82001	CHEVY 396-454 (66201)	Stock
82004	CHEVY 396-454 (66201 for truck block)	Stock
82006	CHEVY 396-454 (street applications)	Stock
82020	CHEVY 262-400 Series II (66200)	Stock
82020X1	CHEVY 262-400 Series II (66200) Hi-Pressure	Stock
82027	CHEVY 262-400 Series II (66275 Offset) 18°, 11x, -12	"
82027H	CHEVY 262-400 Series II (66275) Hi-Pressure	"
82029	CHEVY 262-400 Series II (66200) 18°, 11x, -12	"
82030	CHEVY 262-400 Series II (w/.050" Offset Plates) Stock	"
83000	CHEVY 262-400 Cutaway Lifters (All Offset)	Stock
83003	CHEVY 262-400 Cutaway Lifters (All Center)	Stock
83007	CHEVY 262-400 Cutaway (Offset/Center) 18°, 11x, -12	"
83008	BUICK HEAD Cutaway Lifters (All Offset)	Stock



Small Block Chevy "Series II" features fully CNC, 1/2" thick plate.

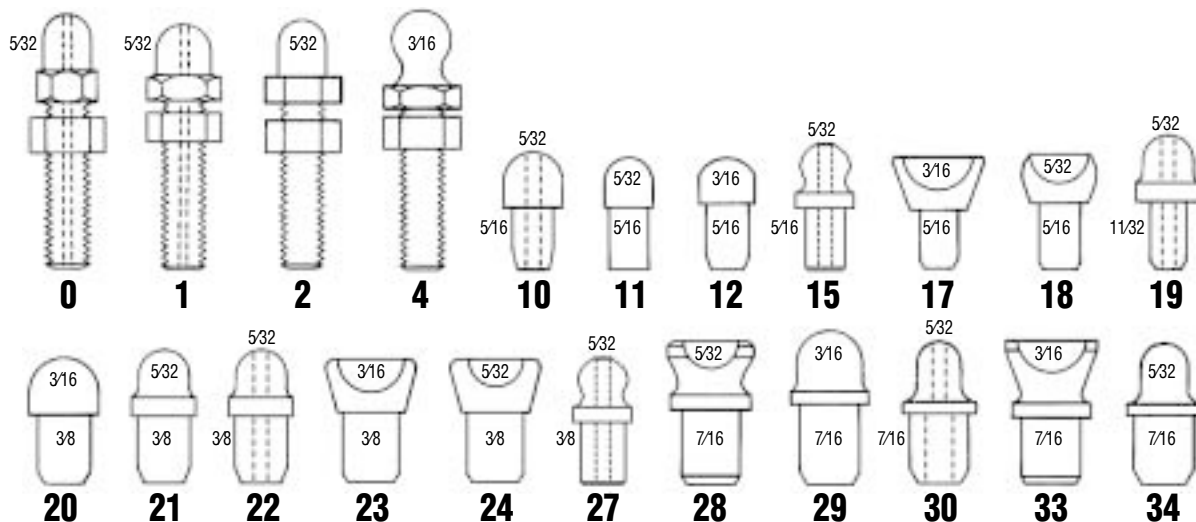
Big Block Chevrolet





# pushrods

## MOST POPULAR PUSHROD ENDS



### CROWER PUSHRODS

Only the finest 4130 seamless chromoly tubing is used to manufacture Crower pushrods. All ends are heat-treated to a surface hardness of RC60 for maximum durability and wear resistance. Crower's standard pushrod design features an end-to-tube spot weld fastener for extended use. For severe duty or guide plate applications see our vast assortment of RC60 Series pushrods.

### ADJUSTABLE PUSHRODS

When going from hydraulic to solid lifters, adjustable pushrods are often required if there is no adjustment provision at the rocker arm. The overall length of Crower adjustable pushrods is listed with adjustable end in the middle of the adjustment range.

### NON-ADJUSTABLE PUSHROD KITS

Non-adjustable pushrod kits include the following:

- 16 non-adjustable pushrods (1/4" longer than stock) with one end out.
- 16 pushrod ends.
- One adjustable pushrod (two if intake & exhaust are different lengths).

### CUSTOM LENGTH PUSHRODS

Crower is one of the world's largest producers of custom pushrods and can fabricate a pushrod set for any engine make. Specify overall length, tube diameter, tube strength and type of ends you require. Three piece pushrods are available on a special order basis.

### CORRECT VALVE TRAIN GEOMETRY

Correct pushrod length is critical in achieving proper valve train geometry. When measuring pushrod lengths, be sure to consider any head or block milling. We recommend using a checking pushrod for the most accurate measurement (refer to pushrod accessories located later in this section).

### ORDERING

When ordering Crower pushrods, please include the part number, cubic inch, model, make and year of engine, type of rocker arm and lifter used, as well as the overall pushrod length, tube diameter, tube strength and type of ends desired. This information is critical in order to manufacture the correct pushrods required.

### AMC NON-ADJUSTABLE PUSHROD SETS

Part No.	Engine Make	Application	Length	Overall Length	Tube O.D.	Ends Top Bot
70158-12	232-258 6 cyl.	Hyd Lifter & Non-Adj Rocker	Stock	9.625"	5/16	15 15
70158X1-12	232-258 6 cyl.	Hyd Lifter & Non-Adj Rocker	+ .050"	9.675"	5/16	15 15
70158X2-12	232-258 6 cyl.	Hyd Lifter & Non-Adj Rocker	+ .100"	9.725"	5/16	15 15
70156-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	Stock	7.813"	5/16	15 15
70156X1-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	+ .050"	7.854"	5/16	15 15
70156X2-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	+ .100"	7.922"	5/16	15 15
70157-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	Stock	8.031"	5/16	15 15
70157X1-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	+ .050"	8.078"	5/16	15 15
70157X2-16	290-401 V8	Hyd Lifter & Non-Adj Rocker	+ .100"	8.125"	5/16	15 15

### BUICK NON-ADJUSTABLE PUSHROD SETS

Part No.	Engine Make	Application	Length	Overall Length	Tube O.D.	Ends Top Bot
70190-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	Stock	8.578"	5/16	15 15
70190X1-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	+ .050"	8.625"	5/16	15 15
70190X2-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	+ .100"	8.672"	5/16	15 15
70191-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	Stock	8.688"	5/16	15 15
70191X1-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	+ .050"	8.734"	5/16	15 15
70191X2-12	196-252 V6	Hyd Lifter & Non-Adj Rocker	+ .100"	8.797"	5/16	15 15

### ADJUSTABLE PUSHROD SETS

Part No.	Engine Make	Application	Length	Overall Length	Tube O.D.	Ends Top Bot
70019-12	196-252 V6	Hyd or Solid & Non-Adj Rocker	Stock	8.687"	5/16	1 10
70029-16	300 V8	Hyd or Solid & Non-Adj Rocker	Stock	8.750"	5/16	2 11
70033-16	340 V8	Hyd or Solid & Non-Adj Rocker	Stock	9.343"	5/16	2 11
70036-16	350 V8	Hyd or Solid & Non-Adj Rocker	Stock	9.687"	5/16	2 11
70038-16	350 V8	Hyd or Solid & Non-Adj Rocker	Stock	9.687"	5/16	1 10
70034-16	400-455 V8	Hyd or Solid & Non-Adj Rocker	Stock	9.375"	3/8	1 22

### CHEVROLET NON-ADJUSTABLE PUSHROD SETS

Part No.	Engine Make	Application	Length	Overall Length	Tube O.D.	Ends Top Bot
70115-12	194-250 6 cyl.	Hyd Lifter & Non-Adj Rocker	Stock	9.625"	5/16	15 15
70115X1-12	194-250 6 cyl.	Hyd Lifter & Non-Adj Rocker	+ .050"	9.675"	5/16	15 15
70115X2-12	194-250 6 cyl.	Hyd Lifter & Non-Adj Rocker	+ .100"	9.725"	5/16	15 15
70116-12	200 229 90° V6	Hyd Lifter & Non-Adj Rocker	Stock	7.813"	5/16	15 15
70116X1-12	200 229 90° V6	Hyd Lifter & Non-Adj Rocker	+ .050"	7.854"	5/16	15 15
70116X2-12	200 229 90° V6	Hyd Lifter & Non-Adj Rocker	+ .100"	7.922"	5/16	15 15
70100-16	265-400 V8	Solid Lifter & Non-Adj Rocker	Stock	7.790"	5/16	15 15
70100X1-16	265-400 V8	Solid Lifter & Non-Adj Rocker	+ .050"	7.840"	5/16	15 15
70100X2-16	265-400 V8	Solid Lifter & Non-Adj Rocker	+ .100"	7.890"	5/16	15 15

\* Indicates limited supply. Refer to Crower's one piece pushrods if out of stock.

continued





# pushrods

## SEVERE-DUTY CHRYSLER HEMI PUSHRODS

Unblown and Blown Alcohol applications:

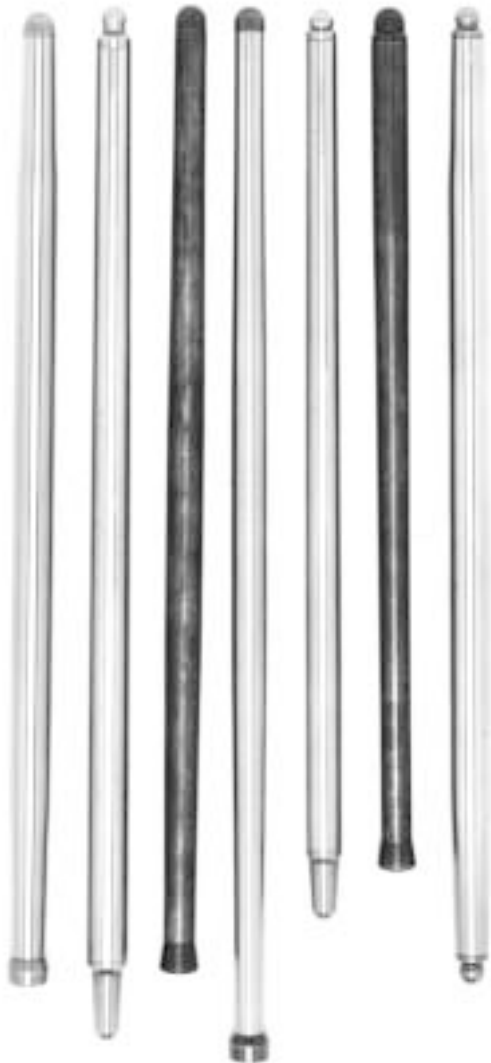
- Double tapered (3/8 to 7/16 to 3/8)
- .083" wall thickness
- Heat treated
- Includes special alloy cup & ball
- For pricing refer to **#70195**
- Custom lengths also available

Top Fuel and Pro Stock applications:

- Double tapered (7/16 to 1/2 to 7/16)
- .120" wall thickness
- Heat treated
- T/F features special alloy cup & ball
- Pro Stock features ball & ball w/oiling
- For pricing refer to **#70196**
- Custom lengths also available
- Must be ordered through Crower

### POPULAR OVERALL LENGTHS

Intake Length	Exhaust Length
10.325"	11.280"
10.725"	11.625"
10.910"	11.820"
11.625"	12.187"
11.700"	12.475"
11.781"	12.312"
12.025"	12.825"
12.187"	12.675"
12.217"	12.732"
12.300"	12.800"
12.315"	13.065"
12.662"	13.187"
Custom	Custom



## SEVERE-DUTY SB CHEVROLET & FORD PUSHRODS

High rocker ratio, high spring pressure applications:

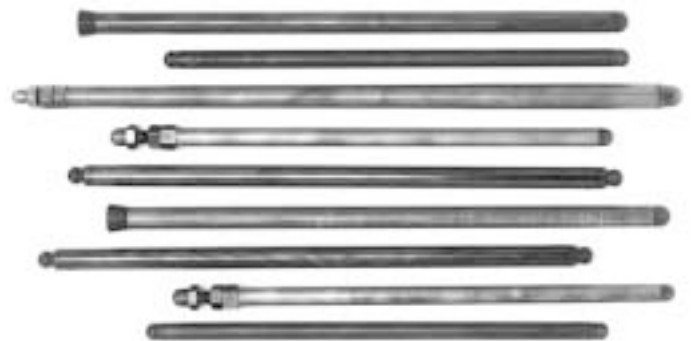
- Double tapered (5/16 to 3/8 to 5/16)
- .120" wall thickness
- Heat treated
- Includes full ball (#15 end)
- For pricing refer to **#70197**
- Custom lengths also available
- Must be ordered through Crower



Note: To insure adequate intake port clearance, the taper (3/8) can be adjusted the length of the pushrod. For more information on this procedure, please contact Crower.

## CUSTOM PUSHRODS

Crower custom pushrods are made from the finest alloy steel tubing available and are heat treated for wear resistance and durability. Since 1960, Crower has been supplying top teams in drag racing, stock car and open wheel classes with the finest pushrods available on the market. Crower pushrods are also available for vintage and antique restoration, as well as marine applications. For more information and details about a pushrod for you particular application, give the Crower technical support team a call. We'll fix you up with the correct length, wall thickness, tube diameter, taper and pushrod ends that you require.



**#73680**  
Heavy-duty Chrysler adjuster with 3/8 shank and 5/16 ball radius. Replacement for stock.



**#73681**  
Heavy-duty Chrysler adjuster with 7/16 shank and 3/8 ball radius. Both feature special steel alloy, double heat-treat, H-11 nut.

# rocker arms

- Back in 1957, Crower pioneered the very first aluminum shaft rocker arm assembly mounted on a stock small block Chevy cast iron cylinder head. The race was the Indy 500 and Crower has been making high quality rocker arms ever since.
- The weak link in any pushrod engine is the rocker arm and rocker stiffness is an important factor toward developing horsepower.
- Crower is making an effort to raise the bar substantially toward perfecting shaft rockers for high performance engines.



studflex



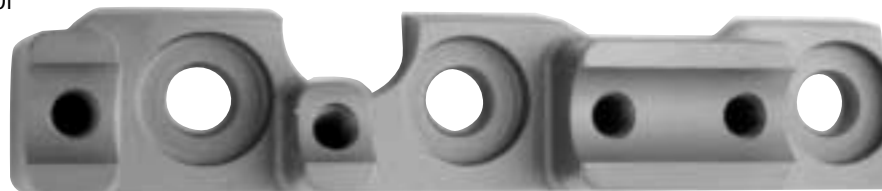
8000+  
RPM

Of course, we didn't do it in a vacuum. Over the decades of working with you, the racers and engine builders, we've learned to study the problems you encounter. We've made note of your wish lists. We've scrutinized failed components...done our home work!

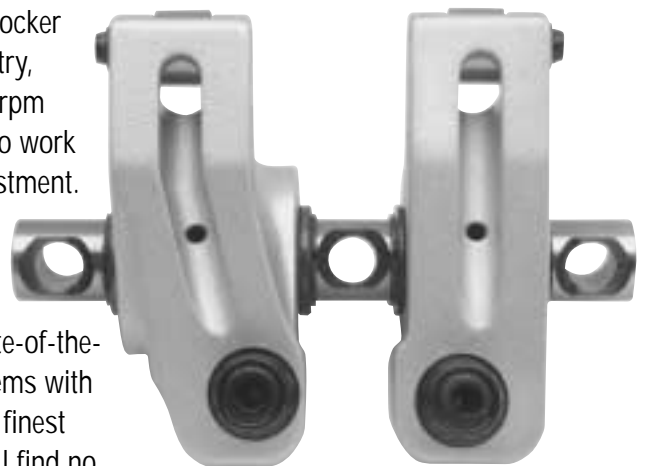
Consequently, we've been able to consistently offer solid, viable, cost effective solutions that do not compromise strength.

You'll find that all our stud and shaft mount rocker arm systems achieve the critical balance of lightweight without compromising enduring strength. Crower valve train components are characteristically strong, able to maintain dimensional integrity under load and at high rpm so valve actuation is extremely accurate. Our rocker systems are well thought out with regard to proper geometry, minimizing friction and heat build-up so the parts live and rpm freely. The shaft setups are user friendly so they are easy to work on at the track and provide accurate, repeatable valve adjustment. Crower rocker systems (stud or shaft mount) are available for most popular cylinder heads, often in your choice of material, stainless steel or aluminum.

Crower Cams & Equipment Company...good materials, state-of-the-art production facilities and savvy engineers solving problems with creativity, technology and common sense. The result? The finest valve train componentry you can equip yourself with! You'll find no better rocker systems available at any price!



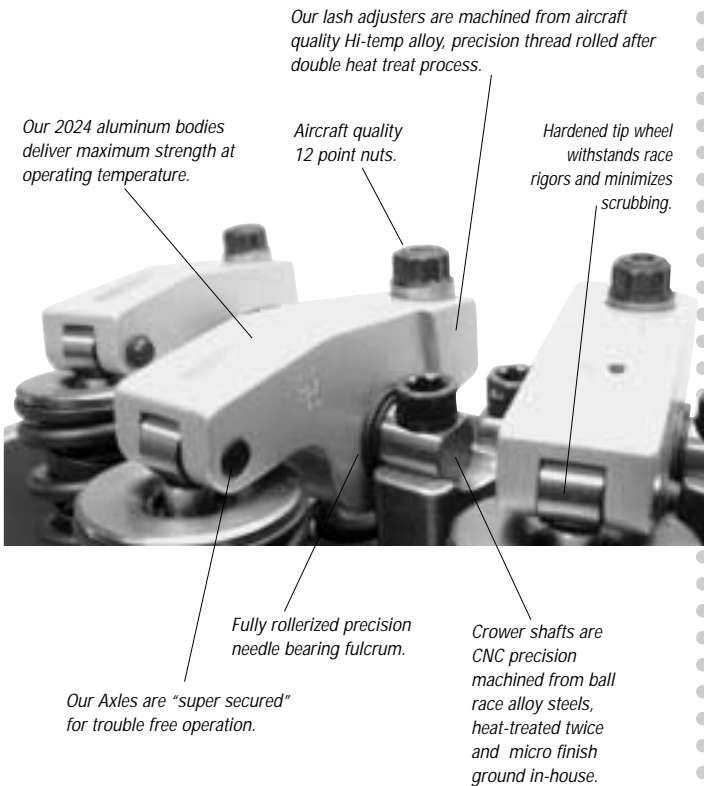
stopflex



# there is a better way geometry

## anatomy of a crowerocker

### key features & terminology



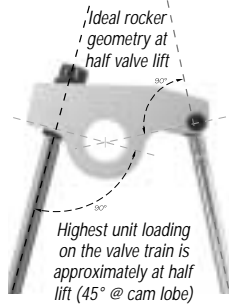
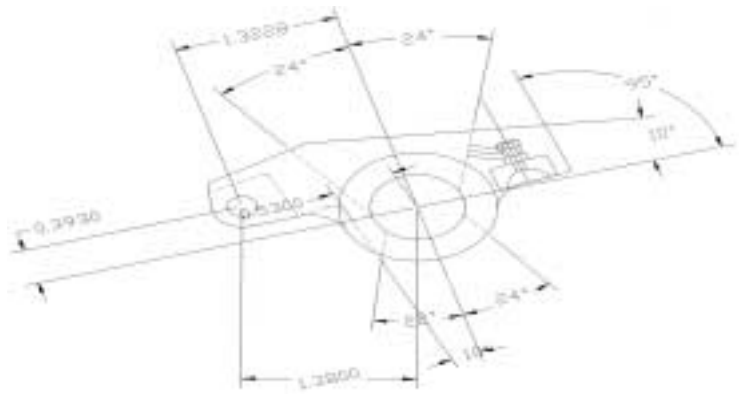
### needle bearing tip option

Crower has raised the bar on valve train technology with a new needle bearing roller tip option available on all new Crower stud and shaft mount rocker arm assemblies.

Specify #73715R after rocker part number for stainless steel, #72915R for aluminum.

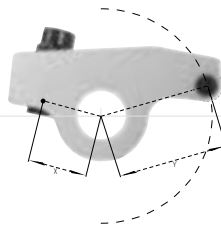
Results are greatly reduced friction for added horsepower and reduced valve guide and valve stem wear.

The lighter tip delivers greater valve control for increased rpm and improves valve spring longevity by decreasing heat over traditional non needle designs.



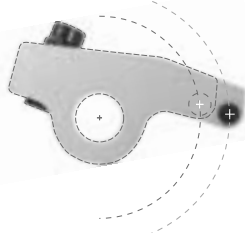
This configuration minimizes tip travel across the valve stem and keeps contact centered on top of the valve, reducing frictional losses due to valve guide side loading and tip scrubbing. Pushrod deflection is also minimized for more accurate valve action.

### rocker ratio



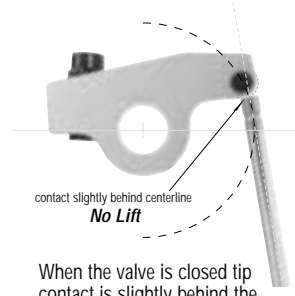
Rocker arm ratio is determined by dividing the distance from the fulcrum to the tip centerpoints (Y) by the distance from the fulcrum to the pushrod seat centerpoints (X). This theoretical ratio may vary from our net/advertised ratio due to measured valve train deflection under load.

### long arm

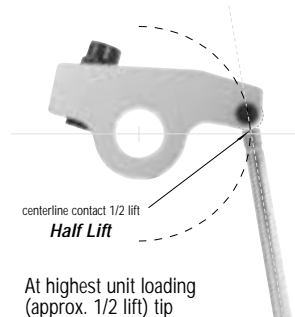


Higher rocker ratios require extending the arm of the rocker. Long arm rockers allow proper pushrod seat positioning in relation to the fulcrum point. An additional long arm benefit is reduced back and forth tip travel across the valve stem. Less scrubbing and valve stem side loading occur and associated frictional losses are minimized.

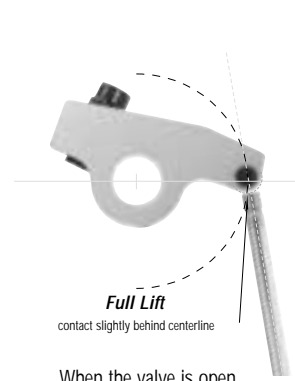
### tip travel



When the valve is closed tip contact is slightly behind the centerline of the valve.

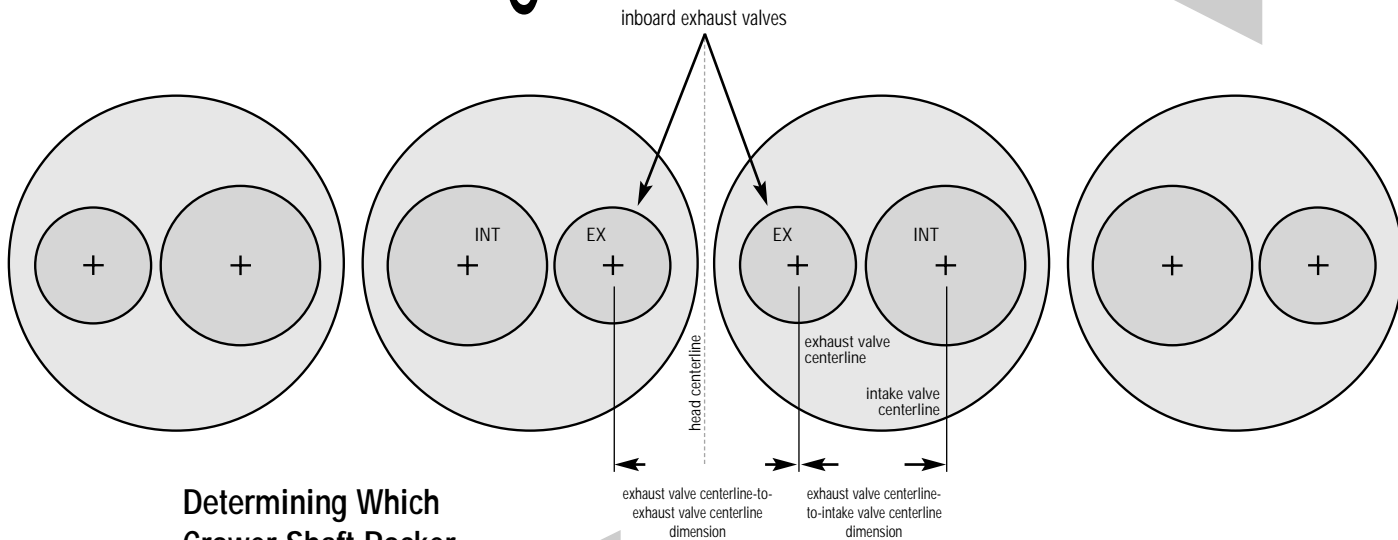


At highest unit loading (approx. 1/2 lift) tip contact ideally is on the centerline of the valve. The valve train is overcoming spring pressure and, more importantly, rapidly accelerating its mass. To minimize deflection, side loading and frictional loss, we want the valve train geometry in its strongest and straightest configuration at this point.



When the valve is open, tip contact is slightly behind the centerline of the valve. The valve train in this position (at high RPM) feels the least amount of unit loading as float approaches...everything gets momentarily weightless.

# useful ordering information



## Determining Which Crower Shaft Rocker System Fits Your Needs

If you're not sure or don't know which Crower Shaft Rocker System will fit your cylinder head, or the type/model of head you have and need help, follow these simple procedures:

1. You'll need to provide us with some critical information and dimensions.
  - a. Cylinder head manufacturer
  - b. Engine type
  - c. Intake and exhaust valve distances from cylinder head centerline.
  - d. Rocker stud spacing from cylinder head centerline.

### Here's how you do it.

Measure the distance between the centerlines of the two inboard exhaust valves and record the value. If you divide this measurement in two you'll know the distance each valve is from the cylinder head centerline.

Now measure the distance between the centerline of the exhaust valve and the centerline of the intake valve.

2. Follow the same procedure for the studs.
3. Supply us the dimensions and we'll take it from there!

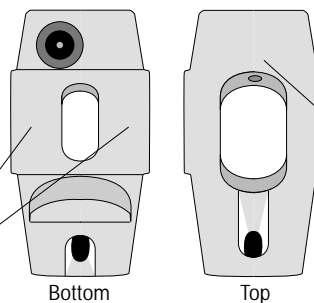
## Rocker Body Identification

To order replacement rockers and insure correct fit you'll need to provide your Crower technician with the following info.

- |   |                                  |
|---|----------------------------------|
| Rocker Bodies without I.D. numbers:                               | Rocker Bodies with I.D. numbers: |
| • Rocker arm Ratio  | • Rocker arm Body I.D. number    |
| • Rocker arm Offset   | • Rocker arm Ratio               |
| • Which valve the rocker actuates (intake or exhaust)             | • Rocker arm Offset              |
| • Which cylinder the rocker is mounted on (2,4,6,8-1,3,5,7, etc.) |                                  |
| • Name/brand of cylinder head                                     |                                  |

Rocker Body I.D. Locations

Stud Mount Rockers



Ratio and Offset Locations

Shaft Mount Rockers





# stud-mount rocker arms stainless steel



## ENDURO STAINLESS STEEL ROLLERIZED ROCKERS



Made from 17-4PH stainless steel with 1025 heat-treating, these proven rollerized rockers feature premium, oversized needle bearings, sure-lock rocker nuts and alloy steel tip rollers. Superior lightweight body design provides plenty of clearance for large diameter springs (1.560"). Includes sure-locks.

Part No.	Description	Ratio	Stud
73645-16*	AMC 290-401 V8	1.6	3/8
73646-16*	AMC 290-401 V8	1.6	7/16
73648-12*	AMC 6 cyl.	1.6	3/8
73647-12*	AMC 6 cyl.	1.6	7/16
73625-8	Chevy II 4 cyl.	1.75	3/8
73628-12	Chevrolet 230 250 292 6cyl.	1.6	3/8
73629-12	Chevrolet 230 250 292 6 cyl.	1.75	3/8
73630-12	Chevrolet 230 250 292 6 cyl.	1.6	7/16
73631-12	Chevrolet 230 250 292 6 cyl.	1.75	7/16
73649-12	Chevrolet 200 229 90° V6	1.6	3/8
73650-12	Chevrolet 200 229 90° V6	1.5	7/16
73651-12	Chevrolet 200 229 90° V6	1.65	7/16
73652-12	Chevrolet 200 229 90° V6	1.6	7/16
73635-16	Chevrolet 265-400 V8	1.35	7/16
73600-16	Chevrolet 265-400 V8	1.5	3/8
73660-16	Chevrolet 265-400 V8 LT1	1.5	3/8
73640-16	Chevrolet 265-400 V8	1.6	3/8
73661-16	Chevrolet 265-400 V8 LT1	1.6	3/8
73670-16	Chevrolet 265-400 V8	1.65	3/8
73601-16	Chevrolet 265-400 V8	1.5	7/16
73641-16	Chevrolet 265-400 V8	1.6	7/16
73671-16	Chevrolet 265-400 V8	1.65	7/16
73643-16	Chevrolet 265-400 V8	1.7	7/16
73604-16	Chevrolet 396-454 V8	1.55	7/16
73606-16	Chevrolet 396-454 V8	1.6	7/16
73605-16	Chevrolet 396-454 V8	1.7	7/16
73607-16	Chevrolet 396-454 V8	1.75	7/16
73608-16	Chevrolet 396-454 V8	1.8	7/16
73609-16	Ford 289 302 351W V8	1.6	3/8
73610-16	Ford 289 302 351W V8	1.65	3/8
73611-16	Ford 289 302 351W V8	1.7	3/8
73612-16	Ford 289 302 351W V8	1.6	7/16
73613-16	Ford 289 302 351W V8	1.65	7/16
73614-16	Ford 289 302 351W V8	1.7	7/16
73637-16	Ford 289 302 351W V8	1.75	7/16
73638-16	Ford 289 302 351W V8	1.8	7/16
73618-16	Ford Boss 351C 400 429 460	1.6	7/16
73616-16	Ford Boss 351C 400 429 460	1.65	7/16
73615-16	Ford Boss 351C 400 429 460	1.73	7/16
73617-16	Ford Boss 351C 400 429 460	1.75	7/16
73619-16	Ford Boss 351C 400 429 460	1.8	7/16
73626-16	Pontiac V8	1.5	3/8
73622-16	Pontiac V8	1.6	3/8
73627-16	Pontiac V8	1.5	7/16
73623-16	Pontiac V8	1.6	7/16
73624-16	Pontiac V8	1.65	7/16
73644-16*	Oldsmobile 67-91 V8 V8	1.6	7/16

\* Requires machine work

Note: Rocker arms can be purchased in 1/2 sets (8 intake and 8 exhaust for split ratio applications) or individually.

Note: Specify stud 88400 (3/8) or 88401 (7/16) when ordering.

## ENDURO LONG ARM/ BACKSET ROLLERIZED ROCKERS



Crower's Long Arm/Backset trunnion rollerized rockers are made to the same high tolerances as our standard stainless steel rocker arms with a .090" backset trunnion and these added features:

- Increased area under the lift curve
- Additional spring clearance (1.650")
- Smoother valve action
- Less side loading on stems/guides
- Drop on installation
- Set of 8 for intake (use standard Crower stainless steel rockers on exhaust)

Part No.	Description	Ratio	Stud
73677-8	Chevrolet 265-400 V8	1.5	7/16
73674-8	Chevrolet 265-400 V8	1.6	7/16
73672-8	Chevrolet 265-400 V8	1.65	7/16
73673-8	Chevrolet 265-400 V8	1.7	7/16
73676-8	Chevrolet 265-400 V8	1.75	7/16
73675-8	Chevrolet 265-400 V8	1.8	7/16
73678-8	Chevrolet 265-400 V8	1.85	7/16
73679-8	Chevrolet 265-400 V8	1.9	7/16

Note: May be purchased as mixed ratios intake and exhaust.



## STAMPED STEEL ROCKER ARMS

Crower's stamped steel rockers utilize a longer slot for high lift, aftermarket cams. Made from high strength steel alloy and stamped to resist the rocker flex for the longest possible operating life.

Part No.	Description	Ratio
73050-16	Chevrolet 265-400 (set 16)	1.5
73051-16	Chevrolet 265-400 (set 16)	1.6
73053	Chevrolet 265-400 (8 ea/8 ea) Kit	1.5/1.6
73052-16	Chevrolet 396-454 (set 16)	1.7

Note: For small block Chevrolet, a 1.6 ratio will raise gross valve lift for a nominal horsepower increase. All rockers listed are 3/8 stud.

## NEEDLE BEARING TIP OPTION

All Crower stud and shaft mount rocker arms are available with Crower's new needle bearing roller tip option. Results are greatly reduced friction for added horsepower and reduced valve guide and valve stem wear. The lighter tip delivers greater valve control for increased rpm and improves valve spring longevity by decreasing heat over traditional non needle designs. Specify #73715R option for stainless steel (stud or shaft) or #72915R option for aluminum (stud or shaft) when ordering rocker arms.

## LATE MODEL ROCKERS

Crower's self-aligning rocker arms are available for late model small and big block Chevrolet, Dodge Magnum truck and the V10 Viper. Features include:

- Self aligning roller tip holds rocker in place
- 25 hp, 4 mph on 1/4 mile with 1.7's on V10
- Emissions Legal certified ARB #D-410

Part No.	Description	Ratio	Stud
73602-12	V6 Chevy 85-96, 97-98 Vortec	1.5	3/8
73603-12	V6 Chevy 85-96, 97-98 Vortec	1.6	3/8
73602-16	SB Chevy 85-96, 97-98 Vortec, LT1	1.5	3/8
73603-16	SB Chevy 85-96, 97-98 Vortec, LT1	1.6	3/8
73660-16	SB Chevy Narrow Body, Non Align	1.5	3/8
73661-16	SB Chevy Narrow Body, Non Align	1.6	3/8
73608-16	BB Chevy 85-96, 97-98 Vortec	1.8	7/16
73653K*	V6 Dodge Magnum	1.6	3/8
73654K*	V6 Dodge Magnum	1.7	3/8
73655K*	V8 Dodge Magnum	1.6	3/8
73656K*	V8 Dodge Magnum	1.7	3/8
73657K*	V10 Dodge Magnum	1.6	3/8
73659K*	V10 Dodge Magnum	1.7	3/8
73662K*	V10 Dodge Viper	1.6	7/16
73663K*	V10 Dodge Viper	1.7	7/16

\* "K" incl. rocker studs. 5500 RPM limit on "K" kits (6300 on Viper).

## DODGE MAGNUM ROLLER ROCKER KITS

Our "PK" kits are a must in order to maintain valve train integrity when RPM's over 5500 are reached. If sustained high RPM is expected, you must upgrade to 68305X1 spring. "PK" kits include rocker studs, guide plates (#70518) & 1 pc. pushrods (#69695).

Part No.	Description	Ratio	Stud
73653PK*	V6 Dodge Magnum	1.6	3/8
73654PK*	V6 Dodge Magnum	1.7	3/8
73655PK*	V8 Dodge Magnum	1.6	3/8
73656PK*	V8 Dodge Magnum	1.7	3/8

## ENDURO CENTERLINE ROLLERIZED ROCKERS



When installing a .100" long valve, the rocker arm tip must be backed up .050" to insure centerline contact at half lift. Crower offsets the rocker stud hole in the trunnion, pulling the rocker tip back into correct alignment with the valve stem. Re-establishing correct geometry reduces valve guide wear and promotes more accurate valve timing.

Part No.	Description	Ratio
73690-16	Chevrolet 265-400 (set 8) .050 backset	1.5
73691-16	Chevrolet 265-400 (set 8) .050 backset	1.55
73692-16	Chevrolet 265-400 (set 8) .050 backset	1.6
73693-16	Chevrolet 265-400 (set 8) .050 backset	1.65
73694-16	Chevrolet 265-400 (set 8) .050 backset	1.7
73696-16	Chevrolet 265-400 (set 8) .050 backset	1.75
73695-16	Chevrolet 265-400 (set 8) .050 backset	1.8
73682-8	Chevrolet 396-454 (set 8) .050 backset	1.65
73683-8	Chevrolet 396-454 (set 8) .050 backset	1.7
73684-8	Chevrolet 396-454 (set 8) .050 backset	1.75
73685-8	Chevrolet 396-454 (set 8) .050 backset	1.8
73686-8	Chevrolet 396-454 (set 8) .090 backset	1.65
73687-8	Chevrolet 396-454 (set 8) .090 backset	1.7
73688-8	Chevrolet 396-454 (set 8) .090 backset	1.75
73689-8	Chevrolet 396-454 (set 8) .090 backset	1.8

The above rockers come in sets of 8 to mix ratios. Note: 7/16 stud diameter.

# stud-mount rocker arms

## aluminum



### ALUMINUM STUD ROLLERIZED ROCKERS

Crower's Enduro aluminum stud mount rocker arms are fully CNC machined from USA made, premium aluminum extrusion. Crower's unique "full arch" design reduces the rocker flex found in other brands. Results are increased rpm, greater area under the lift curve and added spring clearance (1.625"). Double-step, serrated pins feature our rotor clip design that eliminates pin loosening. USA made needle bearings. When vertical valve cover clearance is an issue, specify "LP" when ordering.

Part No.	Description	Ratio	Stud
72845-16*	AMC 290-401 V8	1.6	3/8
72846-16*	AMC 290-401 V8	1.6	7/16
72848-12*	AMC 6 cyl.	1.6	3/8
72847-12*	AMC 6 cyl.	1.6	7/16
72825-8	Chevy II 4 cyl.	1.75	3/8
72828-12	Chevrolet 230 250 292 6cyl.	1.6	3/8
72829-12	Chevrolet 230 250 292 6 cyl.	1.75	3/8
72830-12	Chevrolet 230 250 292 6 cyl.	1.6	7/16
72831-12	Chevrolet 230 250 292 6 cyl.	1.75	7/16
72850-12	Chevrolet 200 229 90° V6	1.5	7/16
72852-12	Chevrolet 200 229 90° V6	1.6	7/16
72854-12	Chevrolet 200 229 90° V6	1.65	7/16
72835-16	Chevrolet 265-400 V8	1.35	7/16
72800-16	Chevrolet 265-400 V8	1.5	3/8
72840-16	Chevrolet 265-400 V8	1.6	3/8
72870-16	Chevrolet 265-400 V8	1.65	3/8
72801-16	Chevrolet 265-400 V8	1.5	7/16
72841-16	Chevrolet 265-400 V8	1.6	7/16
72871-16	Chevrolet 265-400 V8	1.65	7/16
72843-16	Chevrolet 265-400 V8	1.7	7/16
72804-16	Chevrolet 396-454 V8	1.55	7/16
72806-16	Chevrolet 396-454 V8	1.6	7/16
72805-16	Chevrolet 396-454 V8	1.7	7/16
72807-16	Chevrolet 396-454 V8	1.75	7/16
72808-16	Chevrolet 396-454 V8	1.8	7/16
72809-16	Ford 289 302 351 W V8	1.6	3/8
72810-16	Ford 289 302 351W V8	1.65	3/8
72811-16	Ford 289 302 351W V8	1.7	3/8
72832-16	Ford 289 302 351W 351-N V8	1.5	7/16
72833-16	Ford 289 302 351W 351-N V8	1.55	7/16
72812-16	Ford 289 302 351W 351-N V8	1.6	7/16
72813-16	Ford 289 302 351W 351-N V8	1.65	7/16
72814-16	Ford 289 302 351W 351-N V8	1.7	7/16
72837-16	Ford 289 302 351W 351-N V8	1.75	7/16
72838-16	Ford 289 302 351W 351-N V8	1.8	7/16
72818-16	Ford Boss 351C 400 429 460	1.6	7/16
72816-16	Ford Boss 351C 400 429 460	1.65	7/16
72815-16	Ford Boss 351C 400 429 460	1.73	7/16
72817-16	Ford Boss 351C 400 429 460	1.75	7/16
72819-16	Ford Boss 351C 400 429 460	1.8	7/16
72826-16	Pontiac V8	1.5	3/8
72822-16	Pontiac V8	1.6	3/8
72827-16	Pontiac V8	1.5	7/16
72823-16	Pontiac V8	1.6	7/16
72824-16	Pontiac V8	1.65	7/16
72844-16	Oldsmobile 67-91 V8	1.6	7/16

\* Requires machine work

### ALUMINUM CENTERLINE ROLLERIZED ROCKERS

When installing a .100" long valve, the rocker arm tip must be backed up .050" to insure centerline contact at half lift. Crower offsets the rocker stud hole in the trunnion, pulling the rocker tip back into correct alignment with the valve stem. Re-establishing correct geometry reduces valve guide wear and promotes more accurate valve timing.

Part No.	Description	Ratio	Stud
72890-8	Chevrolet 265-400 V8 (set 8)	1.5	7/16
72891-8	Chevrolet 265-400 V8 (set 8)	1.55	7/16
72892-8	Chevrolet 265-400 V8 (set 8)	1.6	7/16
72893-8	Chevrolet 265-400 V8 (set 8)	1.65	7/16
72894-8	Chevrolet 265-400 V8 (set 8)	1.7	7/16
72896-8	Chevrolet 265-400 V8 (set 8)	1.75	7/16
72895-8	Chevrolet 265-400 V8 (set 8)	1.8	7/16
72897-8	Chevrolet 396-454 V8 (set 8)	1.7	7/16
72898-8	Chevrolet 396-454 V8 (set 8)	1.8	7/16

The above rockers come in sets of 8 to mix ratios.

### OFFSET ALUMINUM INTAKE ROCKERS



Crower has a .150" offset aluminum rocker available in 7/16" stud diameter only. These rockers include the same features as our Enduro Aluminum rockers, but in an offset design. Order only for the intake and then 8 only standard stud mount rockers on the exhaust (see p/n at left).

Part No.	Description	Ratio	Stud
72801X1-8	Chevrolet 265-400 V8	1.5	7/16
72841X1-8	Chevrolet 265-400 V8	1.6	7/16
72871X1-8	Chevrolet 265-400 V8	1.65	7/16
72812X1-8	Ford 351-N V8	1.6	7/16
72813X1-8	Ford 351-N V8	1.65	7/16
72814X1-8	Ford 351-N V8	1.7	7/16
72837X1-8	Ford 351-N V8	1.75	7/16
72838X1-8	Ford 351-N V8	1.8	7/16

Note: These rockers come 8 only for the intake side. You must order 8 only standard design rockers for the exhaust side.

### BREAK-IN ALUMINUM ROLLERIZED ROCKERS

Reduce cam and lifter break-in failures by running Crower's new break-in rocker arms first. Features a reverse offset trunnion (.050") that repositions the pushrod closer to the stock position. In other words, Crower moves the rocker arm and pushrod forward .050" for easier installation. Current break-in rockers on the market only offer center trunnion stud hole positions that require extensive cylinder head modifications to the pushrod hole in order to achieve proper pushrod and head clearance. Crower's break-in rockers drop on with no machine work required. Spring pockets machined for 1.560" O.D. spring

Part No.	Description	Ratio	Stud
72881-16	Chevrolet 265-400 V8	1.2	7/16
72886-16	Chevrolet 265-400 V8	1.35	7/16
72882-16	Chevrolet 396-454 V8	1.4	7/16
72884-16	Ford 289 302 351W V8	1.3	7/16
72885-16	Ford 351C V8	1.33	7/16

#### Example A

.350 Lobe Lift  
 $\times 1.7$  **Rocker Ratio**  
 .595 Gross Lift  
 -.020 Lash  
**.575 Net Valve Lift**

#### Example B

.350 Lobe Lift  
 $\times 1.2$  **Rocker Ratio**  
 .420 Gross Lift  
 -.020 Lash  
**.400 Net Valve Lift**

As you can see in example (A), net valve lift is .575" and example (B) is .400" net. Depending on spring rate, this could be as much as 100 lbs. or more reduced open pressure.

### NEEDLE BEARING TIP OPTION

All Crower stud and shaft mount rocker arms are available with Crower's new needle bearing roller tip option. Results are greatly reduced friction for added horsepower and reduced valve guide and valve stem wear. The lighter tip delivers greater valve control for increased rpm and improves valve spring longevity by decreasing heat over traditional non needle designs. Specify #73715R option for stainless steel (stud or shaft) or #72915R option for aluminum (stud or shaft) when ordering rocker arms.

# stud-mounted rocker arms accessories

## SURE LOCK ROCKER NUTS

Made from high quality, heat treated chromoly steel, Crower sure lock nuts allow for precise adjustments. Includes nuts, Allen head set screws and hex wrench.

Part No.	Stud Dia.	Shank Dia.	Engine
86050-16	7/16	.600"	V8
86050S-16	7/16	.600"	V8
86051-16	3/8	.530"	V8
86051S-16	3/8	.530"	V8
86052-12	3/8	.530"	6 cyl
86053-16	3/8	-	Pontiac

"S" indicates shorter design for stock valve cover clearance.

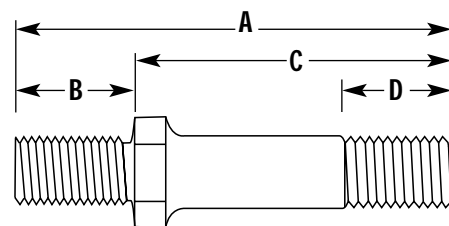


Small Block Chevy

## CROWBAR STUD GIRDLES

Eliminate high rev stud flex and increase your overall horsepower with the Crower "CrowBar" stud girdle. "Crowbar" stud girdles utilize a unique clamping design engineered for quick and easy adjustments or removal with just one wrench. Precision CNC machined from premium 6061T6 aluminum provides true bolt-on installation. Comes complete with the highest quality adjusting nuts that feature a 9/16 hex with premium locking set screw for positive rocker arm adjustment.

Part No.	Description	Stud Dia.
73911	Chevrolet 265-400 (stock, Cast Iron Bowtie, Brodix)	3/8
73901	Chevrolet 265-400 (Stock, Bowtie, Brodix Trk1, AFR 180-210, Edelbrock)	7/16
73905	AFR 220	7/16
73904	Brodix, 40/60 w/relocated studs	7/16
73951	Chevrolet 396-454 (Stock)	7/16
73952	Chevrolet 396-454 (.250" long valves)	7/16
73955	Dart BBC "D" series w/relocated studs	7/16
73960	Ford 351C	7/16
73965	Ford 351N	7/16
73961	Ford 460 (Cast iron, Cobra Jet)	7/16
73962	Ford 460 (TFS/SVO)	7/16



## ALLOY ROCKER STUDS

Crower screw-in rocker studs are rated to 190,000 p.s.i. tensile strength and insure reliability in your valve train. Machined and finished from 8740 aircraft quality steel and heat-treated for maximum strength. All threads are cold rolled for concentricity and extreme durability.

Part No.	Description	Stud Dia.
88419-12	Chevrolet 60° V6 2.8-3.1 (80-94)	3/8 top, 10mm bottom
88400-16	Chevrolet 265-400	3/8 top, 7/16 bottom
	A=2.430" B=0.680" C=1.750" D=0.800"	
88402-16	Chevrolet 396-454 (Alum Heads)	7/16
	Int: A=2.825" B=0.815" C=1.900" D=1.000"	
	Exh: A=3.310" B=1.300" C=2.010" D=1.030"	
88401-16	Chev 265-400 & 396-454	7/16
	A=2.650" B=0.750" C=1.900" D=0.650"	
88405-16	Chevrolet 396-454 (Alum Heads Exh. only)	7/16
	A=3.310" B=1.300" C=2.010" D=1.030"	
88425-16	Chevrolet (Special appl. +.250")	7/16
	A=2.825" B=.815" C=1.900" D=1.000"	
88418-16	Chev Late Model & Mark V	7/16 top, 3/8 bottom*
	A=2.650" B=0.750" C=1.900" D=1.000"	
88401-16	Ford 302, 351C	7/16
	A=2.650" B=0.750" C=1.900" D=0.650"	
88416-16	Dodge Magnum V8	3/8 top, 5/16 bottom
	A=2.430" B=0.700" C=1.760" D=0.800"	
88416-20	Dodge V10 Truck	
	A=2.430" B=0.700" C=1.760" D=0.800"	3/8
88417-20	Dodge Viper V10	7/16 top, 3/8 bottom
	A=2.450" B=0.750" C=1.700" D=0.800"	

\*Must reuse factory guide plates with 3/8 mounting hole.



## STUD GIRDLE LOCK-NUT ADJUSTERS

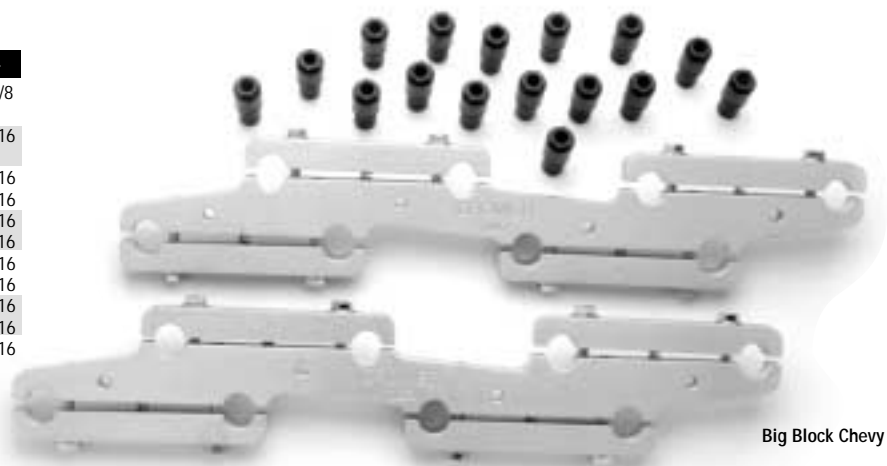
Designed for use with Crower's "CrowBar" stud girdles. Made from high strength steel alloy and heat treated for added durability. These aircraft quality adjusting nuts feature a premium hex with locking set screw to provide positive rocker arm adjustment. Our 3/8 screw-in rocker stud adjuster has a 9/16 hex. The 7/16 screw-in rocker stud adjuster has a 9/16 hex. Specify quantity.

Part No.	Description	Fits Stud Dia.
73934-16	SBC (all) & BBC exhaust (short)	7/16
73935-8	BBC Intake only (long)	7/16
73936-16	All 3/8 stud applications	3/8

## CROWBAR REPLACEMENT PARTS

Part No.	Description
73932	Clamp bolt, SBC stud girdles
73933	Washer, SBC stud girdles
73937-1	Clamp bolt, BBC stud girdles
73938-1	Washer, BBC stud girdles
73939-1	Spring, BBC stud girdles
73921	Stud girdle bar, 1 only* for 73901 & 73911
73924	Stud girdle bar, 1 only* for 73904
73929	Stud girdle bar, 1 only* for 73909
73941	Stud girdle bar, 1 only* for 73951
73942	Stud girdle bar, 1 only* for 73952
73945	Stud girdle bar, 1 only* for 73955
73970	Stud girdle bar, 1 only* for 73960
73971	Stud girdle bar, 1 only* for 73961
73972	Stud girdle bar, 1 only* for 73962
73975	Stud girdle bar, 1 only* for 73965

\*Replacement bar is for one side (one head) only. No adjusters, all other hardware included.



Big Block Chevy

# shaft-mounted rocker arms

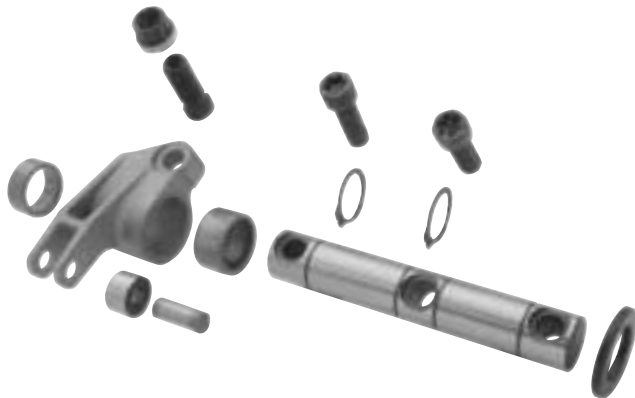
## stainless steel



For those of you that feel most confident running a valve train based in steel, we offer you the Crower collection of shaft mounted stainless steel rocker arms. Each and every configuration has been religiously scrutinized to offer extreme rigidity and accuracy while optimizing moment of inertia phenomena/condition.

Crower engineers made ease of installation and maintenance a top priority so you'll never waste a moment when time is critical at the track. Our stainless steel shaft rocker systems are a perennial favorite of grand national racers and marine endurance competitors.

Sustained high temperature has little affect on the strength properties of stainless steel so components made from this material should have a longer life expectancy than similar components made from aluminum.



### Offset Guide



# stainless steel shaft mounted rocker systems

## AFR

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74131	180/210	1.480	.250	.100
74132	215 RR	1.480	.450	.100
74132	220	1.480	.450	.100
74130	227	1.480	.450	.100

## All Pro

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74134	23° 40/60	1.480	.450	.100
74135	17°	1.650	.450	.175

## Brodix

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74116	Track I	1.480	.150	.100
74116	SBC Irwindale Spec	1.480	.150	.100
74112	-8 through -11	1.480	.250	.100
74126	10x 11x 40/60 & ASCS	1.480	.250	.100
74127**	10x 11x 40/60 & ASCS	1.480	.450	.100
74114	10x 11x 40/60 LA*	1.650	.250	.100
74129	Track 1x 40/60	1.480	.250	.100
74122	-12 LA*	1.650	.500	.100
74136	12X12	1.650	.550	.100
74124	12X12 RP LA*	1.650	.550	.100
74125	18° Clone LA*	1.650	.550	.250
74126	18x 40/60	1.480	.250	.100
74002	BBC -2 w/Std. Valves	1.650	.000	.000
74003	BBC 2X +.250 int valve	1.650	.000	.000
74004	BBC 2X +.250 int/+.100 exh	1.650	.000	.000
74005	BBC 2X +.350 int/+.100 exh	1.650	.000	.000
74006	BBC -4	1.650	.000	.000

## Canfield

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74111	23° 400	1.480	.100	.100
74131	Small Runner	1.480	.250	.100
74132	Large Runner	1.480	.450	.100

## Dart

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74112	SBC Pro 1	1.480	.250	.100
74111	Dart II Sportsman	1.480	.100	.100
74112**	Dart II Sportsman	1.480	.250	.100
74111	230 Iron Eagle	1.480	.100	.100
74112**	230 Iron Eagle	1.480	.250	.100
74127	23° RR 40/60	1.480	.450	.100
74117	18° Clone	1.650	.550	.250
74010	BBC Pro 1	1.650	.000	.000

Most shaft rocker assemblies are available with optional offsets. If you don't find the offset you require, please ask about availability.

\* LA = Long Arm \*\*Optional offset

Ratios over 1.8 may require a long arm rocker arm. Arm lengths over 1.650 are available in aluminum only.

## Edelbrock

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74111	SBC Performer	1.480	.100	.100
74131	SBC Victor Jr.	1.480	.250	.100
74117	SBC Victor 18°	1.650	.550	.250
74127	SBC Victor 23° High Port	1.480	.450	.100
74003	BBC Victor	1.650		
74163	Pontiac BB 326-455	1.480	.100	.100
74165	Pontiac BB 326-455	1.480	specify	specify

## GM Castings

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74218	V6 18° LA*	1.650	.550/.650	.250
74111	SBC Iron & Bowtie	1.480	.100	.100
74119	SBC Phase 6 Alum. Bowtie	1.480	.450	.100
74117	SBC 18° LA*	1.650	.550	.250
74122	Pontiac/SBC 15° LA*	1.650	.475	.100
74126	Pontiac/SBC 23° 867 40/60	1.480	.250	.100
74127**	Pontiac/SBC 23° 867 40/60	1.480	.450	.100
74163	Pontiac BBC 326/455	1.480	.100	.100

## Pro Action

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74116	Iron Lightening	1.480	.150	.100
74123	23° Iron RR	1.480	.450	.100
74153	23° Iron RR LA*	1.650	.450	.100
74138	Pro Action 14°	1.650	.550	.250

## TFS

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74154	-5 18° SBC	1.480	.550	.250
74111	23° SBC	1.480	.100	.100

## World Products

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
74111	SR Torquer	1.480	.100	.100
74112	Sportsman II	1.480	.250	.100

### NEEDLE BEARING TIP OPTION

All Crower stud and shaft mount rocker arms are available with Crower's new needle bearing roller tip option. Results are greatly reduced friction for added horsepower and reduced valve guide and valve stem wear. The lighter tip delivers greater valve control for increased rpm and improves valve spring longevity by decreasing heat over traditional non needle designs. Specify #73715R option for stainless steel (stud or shaft) or #72915R option for aluminum (stud or shaft) when ordering rocker arms.

# shaft-mounted rocker arms stainless

## replacement components

### 17-4 steel

#### Stainless Steel Shaft Rocker Mounting Base Stands

Crower Shaftrocker Assembly Application      Stand I.D.#      Order This Stand Part No.

#### AFR

74131	180/210	010	74400X010
74132	215 RR	025	74000X025
74132	220	025	74400X025
74130	227	025	74400X025

#### All Pro

74134	23° 40/60	021	74400X021
74135	17°	013	74400X013

#### Brodix

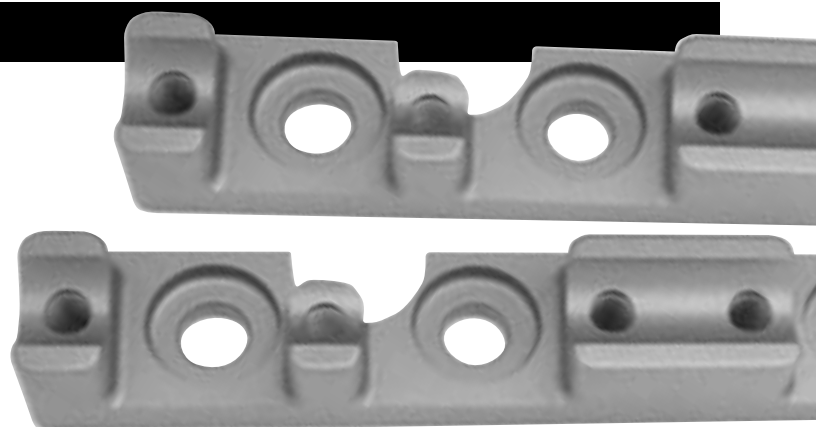
74116	Track I	010	74400X010
74116	Irwindale Spec	010	74400X010
74112	-8 through -11	010	74400X010
74126	10x 11x 40/60 ASCS	021	74400X021
74127	10x 11x 40/60 ASCS	021	74400X021
74114	10x 11x 40/60 LA	013	74400X013
74129	Track 1x 40/60	021	74400X021
74122	-12 & LA	023	74400X023
74136	12X12	023	74400X023
74124	12X12 RP LA	023	74400X023
74125	18° Clone LA	013	74400X013
74126	18x 40/60	021	74400X021
74002	BBC -2	048 Intake	74400X048
	standard valves	049 Exhaust	74400X049
74003	BBC 2x .250 long intake valve, standard exhaust valve	072 Intake	74400X072
		073 Exhaust	74400X073
74004	BBC 2x .250 long intake valve, .100 long exhaust valve	072 Intake	74400X072
		074 Exhaust	74400X074
74005	BBC 2x .350 long intake valve, .100 long exhaust valve	075 Intake	74400X075
		074 Exhaust	74400X074
74006	BBC -4	076 Intake	74400X076
	standard valves	077 Exhaust	74400X077

#### Canfield

74111	23° 400	010	74400X010
74131	Small Runner	010	74400X010
74132	Large Runner	025	74400X025

#### Dart

74111	Dart II Sportsman	010	74400X010
74112	Dart II Sportsman	010	74400X010
74111	230 Iron Eagle	010	74400X010
74112	230 Iron Eagle	010	74400X010
74127	23° RR 40/60	021	74400X021
74117	18° Clone	011	74400X011
74010	BBC Pro 1	070 Intake	74400X070
		071 Exhaust	74400X071



Crower Shaftrocker Assembly Application      Stand I.D.#      Order This Stand Part No.

#### Edelbrock

74131	SBC Victor Jr.	010	74400X010
74111	SBC Performer	010	74400X010
74117	SBC Victor 18°	011	74400X011
74127	SBC Victor 23° High Port	021	74400X021
74003	BBC Victor .250 intake valve, .100 exhaust valve	072 Intake	74400X072
		073 Exhaust	74400X073
74163	Pontiac BBC 326-455	060	74400X060
74165	Pontiac BBC 326-455	060	74400X060

#### GM Castings

74218	V6 18° LA	006	74400X006
74111	SBC Cast Iron & Bowtie	010	74400X010
74119	SBC Phase 6 Alum. Bowtie	010	74400X010
74117	SBC 18° LA	011	74400X011
74122	Pontiac/SBC 15° LA	023	74400X023
74126	Pontiac/SBC 23° 867 40/60	021	74400X021
74127	Pontiac/SBC 23° 867 40/60	021	74400X021
74163	Pontiac/BBC 326/455	060	74400X060

#### Pro Action

74116	Iron Lightening	010	74400X010
74123	23° Iron RR	020	74400X020
74153	23° Iron RR LA	011	74400X011
74138	Pro Action 14°	016	74400X016

#### TFS

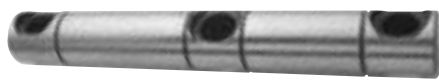
74154	-5 18° SBC	010	74400X010
74111	23° SBC	010	74400X010

#### World Products

74111	SR Torquer	010	74400X010
74112	Sportsman II	010	74400X010

NOTE: I.D. numbers are stamped on all mounting base stands. When you are ordering your replacement base stand please reference this I.D. number handy to ensure you get the correct part.

# stainless steel 17-4 stainless steel stainless steel stainless steel



## SHAFT REPLACEMENTS

Part No.	Description
74501X001	Chevrolet SB Cylinders 1, 5, 8, 4
74501X002	Chevrolet SB Cylinders 3, 7, 6, 2
74501X003	Chevrolet SB SB2
74501X004	Pontiac
74501X020	Chevrolet BB



## TORX HEAD SHAFT BOLTS

Shaft bolt fastens rocker shaft to the mounting base stand.  
(5/16-24 X 1 Torx Plus)  
#74524 1 Only



## SNAP RINGS

Snap ring for Stainless shaft rocker assemblies. 11/16 shaft.  
1 Only.  
#74529



## STAND-TO-CYLINDER HEAD SHIMS

Mounting base stand shimming is often required to achieve optimum rocker arm-to-valve geometry. Available in three thicknesses. Specify head when ordering.

Part No.	Description
74527X025	.025 Thick 1 only
74527X050	.050 Thick 1 only
74527X100	.100 Thick 1 only
74530X045	Inv. Shft. Rk. 1 only

## STAND BOLTS

Fasteners for securing mounting base stands to cylinder head. Specify length: 3/4", 1", 1 1/4".

Part No.	Dia.	Length
74525X001	7/16"	3/4"
74525X002	7/16"	1"
74525X004	7/16"	1 1/4"
74525X005	3/8"	3/4"
74525X006	3/8"	1"



## STAINLESS STEEL SHAFT ROCKER REPLACEMENT BODIES

Our replacement bodies are built to the same exacting tolerances as our shaft assemblies for true bolt-on accuracy and repeatability. They include the adjusting components, tip assembly and bearings. They are fully assembled, ready for mounting. Specify engine, head, which cylinder, intake or exhaust, ratio and offset when ordering.

#74510 Shaft Rocker Body 1 only



## ASSEMBLED STAINLESS STEEL SHAFT ROCKER REPLACEMENTS

Our mounted replacement bodies are fully assembled, ready for mounting. They include the adjusting components, tip assembly, bearings, shaft and shaft spacers. Specify which cylinder, ratio and offset when ordering.

#74503 Shaft Rocker - 1 Assembled Pair for 1 pc. stand  
#74505 Shaft Rocker - 1 Assembled Rocker for individual stand



## SHAFT SPACERS

Hardened steel spacers for proper valve stem-to-rocker tip alignment.

#74526X000 11/16 x 1 1/8 x Custom  
#74526X010 11/16 x 1 1/8 x .010 thick  
#74526X045 11/16 x 1 1/8 x .045 thick  
#74526X055 11/16 x 1 1/8 x .055 thick  
#74526X065 11/16 x 1 1/8 x .065 thick  
#74526X075 11/16 x 1 1/8 x .075 thick  
#74526X085 11/16 x 1 1/8 x .085 thick  
#74526X100 11/16 x 1 1/8 x .100 thick  
#74526X125 11/16 x 1 1/8 x .125 thick  
#74526X145 11/16 x 1 1/8 x .145 thick  
#74526X190 11/16 x 1 1/8 x .190 thick  
#74526X250 11/16 x 1 1/8 x .250 thick



## LASH ADJUSTMENT COMPONENTS

#74522 3/8 lash adjuster screw, 1 only

#74523 Lash adjuster jam nut, 1 only  
3/8-24 12pt



## NEEDLE BEARINGS

#74528X001 11/16" dia. x 3/8"  
#74528X002 11/16" dia. x 1/2"  
#74528X003 11/16" dia. x 3/4"



## AXLE PIN & WHEEL ASSEMBLIES

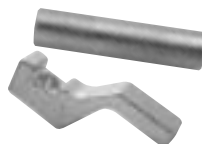
This replacement kit contains one each of the following:  
Axle pin, tip wheel  
#74520 1set  
Individual parts:  
#74520P Axle pin, 1 only  
#74520T Tip wheel, 1 only

## accessories



## TORX DRIVE SOCKET

Fits our shaft bolts.  
#74306



## SHAFT HEIGHT GAUGE KIT

Clever tool makes quick work of setting optimum stand/shaft height.

#74300X001 fits 5/16" valve  
#74300X002 fits 11/32" valve  
#74300X003 fits 3/8" valve )

## ADJUSTABLE PUSHROD GAUGE

Allows you to quickly determine the precise pushrod length requirement. A must have tool for achieving optimum valve train geometry.

Part No. Description  
70480 5.500" to 6.500"  
70481 6.500" to 7.500"  
70482 7.500" to 8.500"  
70483 8.500" to 9.500"  
70485 includes one of each length

## E-Z WRENCH

A must have for quick rocker adjustment. 7/16 12 point wrench with 1/8 hex.

#74305



## MOUNTING KIT

Kit for individual mounting base stand shaft rocker systems.  
#74308 Includes:

1-jig  
1-3/16" drill  
1-Drill stop  
1-Hold down bolt  
32 #74530 shims  
32 #74531 dowel pins

## TESTING/CHECKING SPRING

Set of 2  
87601-SPR

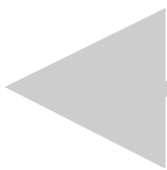


## SPRING COMPRESSOR ADAPTER SHAFT

#74303

# shaft-mounted rocker arms

## aluminum



Each of our Aluminum Shaft Rocker configurations is impeccably designed and produced to maximize valve train rigidity and accuracy while offering a minimal amount of reciprocating mass.

We have utilized the longest arm lengths practical for each application. The results are minimal rocker tip travel and associated frictional losses as well as the capability to accommodate large diameter valve springs with ease.

Speaking of ease, these set-ups allow for the quickest at-the-track valve train modifications around. Any task that requires rocker removal can be performed without concern for absolute accuracy and repeatability upon reassembly.



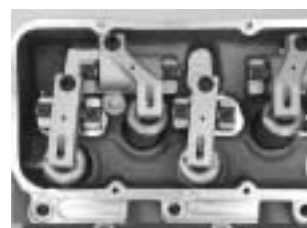
*Typical Brodix -11*



*Typical SB2*



*Typical AFR 227*



*Typical Olds/BB Buick*

## Offset Guide

straight



.100" Offset



.150"-.175" Offset



.250" Offset



.350"-.650" Offset





# aluminum shaft mounted rocker systems

## AFR

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75131	180/210	1.520	.250	.100
75132	215 RR	1.520	.450	.100
75132	220	1.520	.450	.100
75130	227	1.520	.450	.100

## All Pro

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75134	23° 40/60	1.520	.450	.100
75135	17°	1.620	.450	.175

## Brodix

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75116	Track I	1.480	.150	.100
75116	Irwindale Spec	1.480	.150	.100
75126	Track 1x 40/60	1.520	.250	.100
75112	-8 through -11	1.480	.250	.100
75126	10x 11x 40/60 & ASCS	1.520	.250	.100
75127**	10x 11x 40/60 & ASCS	1.520	.450	.100
75122	-12 & LA*	1.650	.500	.100
75136	12X12	1.650	.550	.100
75124	12X12RP LA*	1.650	.550	.100
75137	12X12RP XLA***	1.750	.550	.100
75129	18° Clone	1.520	.550	.250
75125	18° Clone LA*	1.650	.550	.250
75126	18x 40/60	1.520	.250	.100
75287	351 Ford Irwindale Spec	1.480	.000	.000
75000	BBC Special Order	1.650	.000	.000
75002	BBC -2 w/Std. Valves	1.650	.000	.000
75003	BBC 2X +.250 int valve	1.650	.000	.000
75004	BBC 2X +.250 int/+.100 exh	1.650	.000	.000
75005	BBC 2X +.350 int/+.100 exh	1.650	.000	.000
75006	BBC -4	1.650	.000	.000
75009	Big Duke	1.650	1.300/.600	

## Canfield

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75111	23° 400	1.480	.100	.100
75131	Small Runner	1.520	.250	.100
75132	Large Runner	1.520	.450	.100

## Dart

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75112**	SBC Pro 1	1.480	.250	.100
75111	Dart II Sportsman	1.480	.100	.100
75112**	Dart II Sportsman	1.480	.250	.100
75111	230 Iron Eagle	1.480	.100	.100
75112**	230 Iron Eagle	1.480	.250	.100
75127	23° RR 40/60	1.520	.450	.100
75128	18° Clone	1.520	.550	.250
75117	18° Clone LA*	1.650	.550	.250
75007	Big Chief/14° Olds	1.650	1.300/.600	.000
75010	BBC Pro 1	1.650	.000	.000

Most shaft rocker assemblies are available with optional offsets. If you don't find the offset you require, please ask about availability.

\* LA = Long Arm \*\*Optional offset \*\*\*XLA = Extra Long Arm

## Edelbrock

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75131	SBC Victor Jr.	1.520	.250	.100
75111	SBC Performer	1.480	.100	.100
75128	SBC Victor 18°	1.520	.550	.250
75117	SBC Victor 18° LA*	1.650	.550	.250
75127	SBC Victor 23° High Port	1.520	.450	.100
75283	302/351 Ford Victor Jr.	1.480	.000	.000
75282	Ford V-351 Edelbrock	1.520	.500	.000
75163	Pontiac BB 326-455	1.520	.100	.100
75165**	Pontiac BB 326-455	1.520	specify	specify

## Ford & SVO

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75283	302/351 Stock Production	1.480	.000	.000
75280	Ford 351-N (SVO)	1.480	.150	.150
75286	Yates 1pc. stand	1.650		
75085	Ford 351C, 429/460 CJ Individual stand	1.650	.000	.000
75087	C460 1pc. stand	1.750	1.00	

## GM Castings

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75218	V6 18° LA	1.650	.550/.650	.250
75111	SBC Iron & Bowtie	1.480	.100	.100
75116	SBC Iron & Bowtie	1.480	.150	.100
75119	SBC Phase 6 Alum. Bowtie	1.520	.450	.100
75128	SBC 18°	1.520	.550	.250
75117	SBC 18° LA*	1.650	.550	.250
75115	SB 2-2 18° 1pc. stand	1.650	.150	.150
75120	SB 2-2 Head & Block	specify	specify	specify
75122	Pontiac/SBC 15° LA	1.650	.500	.100
75126	Pontiac/SBC 23° 867 40/60	1.520	.250	.100
75127**	Pontiac/SBC 23° 867 40/60	1.520	.450	.100
75163	Pontiac BB 326/455	1.520	.100	.100

## Pro Action

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75116	Iron Lightening & 23°	1.480	.150	.100
75123	23° Iron RR	1.520	.450	.100
75153	23° Iron RR LA*	1.650	.450	.100
75138	14°	1.650	.550	.250

## TFS

Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75154	-5 18° SBC	1.520	.550	.250
75112	23° SBC	1.480	.250	.100

## World Products

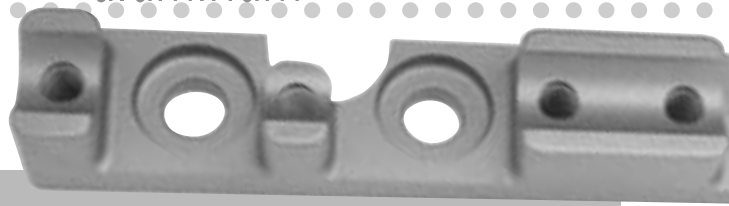
Part#	Description	Arm Lgth	Intake Offset	Exh Offset
75111	SR Torquer	1.480	.100	.100
75112	Sportsman II	1.480	.250	.100

NOTE: I.D. numbers are stamped on all mounting base stands. When you are ordering your replacement base stand please reference this I.D. number handy to ensure you get the correct part.

# shaft-mounted rocker arms

aluminum  
aluminum  
aluminum

replacement components



## Aluminum Shaft Rocker Mounting Base Stands

Crower Shaftrocker Assembly Application      Stand I.D.#      Order This Stand Part No.

### AFR

75131	180/210	110	75400X110
75132	215 RR	125	75400X125
75132	220	125	75400X125
75130	227	125	75400X125

### All Pro

75134	23° 40/60	121	75400X121
75135	17°	113	75400X113

### Brodix

75116	Track I	114	75400X114
75116	Irwindale Spec	114	75400X114
75126	Track 40/60	121	75400X121
75112	-8 through -11	114	75400X114
75126	10x 11x 40/60 ASCS	121	75400X121
75127	10x 11x 40/60 ASCS	121	75400X121
75122	-12 LA	123	75400X123
75136	12X12	123	75400X123
75124	12X12RP LA	123	75400X123
75137	12X12RP XLA	119	75400X119
75129	18° Clone	121	75400X121
75125	18° Clone LA	113	75400X113
75126	18x	121	75400X121
75287	351 Ford Irwindale Spec	151	75400X151
75002	BBC -2	148 Intake	75400X148
	standard valves	149 Exhaust	75400X149
75003	BBC 2x .250 long intake valve,	172 Intake	75400X172
	standard exhaust valve	173 Exhaust	75400X173
75004	BBC 2x .250 long intake valve,	172 Intake	75400X172
	.100 long exhaust valve	174 Exhaust	75400X174
75005	BBC 2x .350 long intake valve,	175 Intake	75400X175
	.100 long exhaust valve	174 Exhaust	75400X174
75006	BBC -4	176 Intake	75400X176
	standard valves	177 Exhaust	75400X177
75009	Big Duke	145 Exhaust	75400X145
		147 1.330 Int.os	75400X147
		146 .600 Int.os	75400X146

### Canfield

75111	23° 400	114	75400X114
75131	Small Runner	110	75400X110
75132	Large Runner	125	75400X125

### Dart

75112	SBC Pro I	114	75400X114
75111	Dart II Sportsman	114	75400X114
75112	Dart II Sportsman	114	75400X114
75111	230 Iron Eagle	114	75400X114
75112	230 Iron Eagle	114	75400X114
75127	23° RR 60/40	121	75400X121
75128	18° Clone	120	75400X120
75117	18° Clone LA	111	75400X111
75007	Big Chief/14° Olds	145 Exhaust	75400X145
		147 1.330 Int.os	75400X147
		144 .600 Int.os	75400X144
75010	BBC Pro 1	170 Intake	75400X170
		171 Exhaust	75400X171

Crower Shaftrocker Assembly Application      Stand I.D.#      Order This Stand Part No.

### Edelbrock

75131	SBC Victor Jr.	110	75400X110
75111	Performer	114	75400X114
75128	SBC Victor 18°	120	75400X120
75118	SBC Victor 18° LA	111	75400X111
75127	SBC Victor 23° High Port	121	75400X121
75283	302/351 Ford Victor Jr.	156	75400X156
75282	Ford V-351 Edelbrock	152	75400X152
75163	Pontiac BB 326-455	160	75400X160
75165	Pontiac BB 326-455	160	75400X160

### Ford SVO

75283	302/351 Stock Production	156	75400X156
75280	Ford 351-N (SVO)	151	75400X151
75286	Nascar Yates 1 pc. Stand	127	75400X127
75085	Ford 351C, 429/460 CJ	153 Intake	75400X153
	Individual Stand	154 Exhaust	75400X154
75087	Ford C460 1pc. stand	155	75000X155

### GM Castings

75218	V6 18° LA	106	75400X106
75111	SBC Iron & Bowtie	114	75400X114
75116	SBC Iron & Bowtie	114	75400X114
75119	SBC Phase 6 Alum. Bowtie	110	75400X110
75128	SBC 18°	120	75400X120
75117	SBC 18° LA	111	75400X111
75115	SBC 2-2 18° 1pc. stand	130	75400X130
75120	SBC 2-2 Head & Block	131	75400X131
75122	Pontiac/SBC 15°	123	75400X123
75126	Pontiac/SBC 23° 867 60/40	121	75400X121
75127	Pontiac/SBC 23° 867 60/40	121	75400X121
75163	Pontiac BB 326/455	160	75400X160

### TFS

75154	-5 18° SBC	110	75400X110
75111	23° SBC	114	75400X114

### Pro Action

75116	Iron Lightening	114	75400X114
75123	23° Iron RR	110	75400X110
75153	23° Iron RR LA	111	75400X111
75138	14°	116	75400X116

### World Products

75111	SR Torquer	114	75400X114
75112	Sportsman II	114	75400X114

# aluminum aluminum aluminum aluminum



## SHAFT REPLACEMENTS

Part No.	Description
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75501X001	Chevrolet SB Cylinders 1, 5, 8, 4
75501X002	Chevrolet SB Cylinders 3, 7, 6, 2
75501X003	Chevrolet SB SB2 1.6 bolt centers
75501X004	Pontiac
75501X005	Ford 351N
75501X006	Ford 302 & Windsor
75501X007	Ford Victor 351
75501X020	Chevrolet BB, Ford 460, Olds & Big Duke Exh.
75501X021	Olds 14" & Big Duke .600 intake offset
75501X022	Olds 14" & Big Duke 1.3 intake offset
75501X003	Ford 351 Yates 1.6 bolt centers



## TORX HEAD SHAFT BOLTS

Shaft bolt fastens rocker shaft to the mounting base stand.  
(5/16-24 X 1 1/4 12 Pt)  
#75524 1 Only



## SNAP RINGS

Snap ring for Aluminum shaft rocker assemblies. 9/16 shaft.  
1 Only.  
#75529



## STAND-TO-CYLINDER HEAD SHIMS

Mounting base stand shimming is often required to achieve optimum rocker arm-to-valve geometry. Available in three thicknesses. Specify head when ordering.

Part No.	Description
74527X025	.025 Thick 1 only
74527X050	.050 Thick 1 only
74527X100	.100 Thick 1 only
74530X045	Inv. Stand. Rk. 1 only

## STAND BOLTS

Fasteners for securing mounting base stands to cylinder head. Specify length: 3/4", 1", 1 3/4".

Part No.	Dia.	Length
74525X001	7/16"	3/4"
74525X002	7/16"	1"
74525X004	7/16"	1 1/4"
74525X005	3/8"	3/4"
74525X005	3/8"	1"

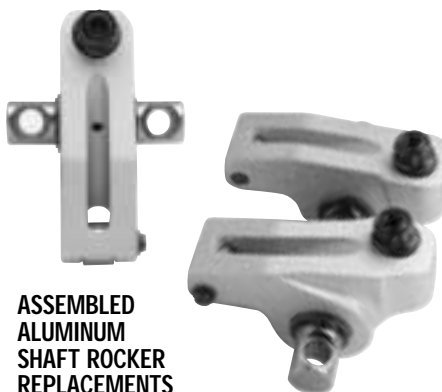


## ALUMINUM SHAFT ROCKER REPLACEMENT BODIES

Our replacement bodies are built to the same exacting tolerances as our shaft assemblies for true bolt-on accuracy and repeatability. They include the adjusting components, tip assembly and bearings. They are fully assembled, ready for mounting. Specify engine, head, which cylinder, intake or exhaust, ratio and offset when ordering.



#75510 Aluminum Shaft Rocker Body 1 only



## ASSEMBLED ALUMINUM SHAFT ROCKER REPLACEMENTS

Our assembled replacement bodies are fully complete, ready for mounting. They include the adjusting components, tip assembly, bearings, shaft and shaft spacers. Specify which cylinder, ratio and offset when ordering.

#75503	Shaft Rocker - 1 Assembled Pair for 1 pc. stand
#75505	Shaft Rocker - 1 Assembled Rocker for individual stand

## SHAFT SPACERS FOR ALUMINUM SHAFT ROCKERS

Hi-temp 6/6 nylon

#75526X000	9/16 x 3/4 x Custom
#75526X030	9/16 x 3/4 x .030 thick
#75526X050	9/16 x 3/4 x .050 thick
#75526X060	9/16 x 3/4 x .060 thick
#75526X085	9/16 x 3/4 x .085 thick
#75526X100	9/16 x 3/4 x .100 thick
#75526X105	9/16 x 3/4 x .105 thick
#75526X290	9/16 x 3/4 x .290 thick
#75526X395	9/16 x 3/4 x .395 thick



## AXLE PIN & WHEEL ASSEMBLIES

This replacement kit contains one each of the following:  
Axle pin, tip wheel & Rotor Clip.  
#75520 1set

Individual parts:  
#75520C Rotor Clip, 1 only  
#75520P Axle pin, 1 only  
#75520T Tip wheel, 1 only



## LASH ADJUSTMENT COMPONENTS

#75522	Lash adjuster screw, 1 only
#75523	Lash adjuster jam nut, 1 only
#75523W	Jam nut washer, 1 only

## NEEDLE BEARINGS

#75528X001	9/16" dia. x 3/8"
#75528X002	9/16" dia. x 1/2"
#75528X003	9/16" dia. x 3/4"

## accessories

**TORX DRIVE SOCKET**  
Fits our shaft bolts.  
3/8" drive  
#74306



## SHAFT HEIGHT GAUGE KIT

Clever tool makes quick work of setting optimum stand/shaft height.

#75300X001	fits 5/16" valve
#75300X002	fits 11/32" valve
#75300X003	fits 3/8" valve

## ADJUSTABLE PUSHROD GAUGE

Allows you to quickly determine the precise pushrod length requirement. A must tool for achieving optimum valve train geometry.

Part No.	Description
70480	5.500" to 6.500"
70481	6.500" to 7.500"
70482	7.500" to 8.500"
70483	8.500" to 9.500"
70485	includes one of each length

## E-Z WRENCH

A must have for quick rocker adjustment.  
7/16 12 point wrench with 1/8 hex  
#74305



## MOUNTING KIT

Kit for individual mounting base stand shaft rocker systems.  
#74308 Includes:

- 1-jig
- 1-3/16" drill
- 1-Drill stop
- 1-Hold down bolt
- 32 #74530 shims
- 32 #74531 dowel pins

## TESTING/CHECKING SPRING

Set Of 2  
#87601SPR



## SPRING COMPRESSOR ADAPTER SHAFT

#75304

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	.885/.610	1.045/.745	.950/.630 (top)	1.000/.645 (top)	1.080/.720	1.090/.780
<b>O.D./I.D. Middle</b>	-	-	1.060/.740 (bottom)	1.070/.710 (bottom)	-	-
<b>O.D./I.D. Inner</b>	-	-	-	-	-	-
<b>Installed Height</b>	1.975	1.400	1.660	1.720	1.420	1.550
<b>Rate</b>	212	251	New 189	New 275	New 330	289
<b>Part #</b>	<b>68180</b>	<b>68195</b>	<b>68197</b>	<b>68198</b>	<b>68194</b>	<b>68190</b>
<b>Type</b>	Single	Single	Single Conical	Single Conical	Single	Single
<b>Color Code</b>	None	None	None	None	None	None
<b>Damper</b>	No	No	No	No	No	No
<b>Free Length</b>	2.310	1.690	2.240	1.900	1.650	1.820
<b>Wire Diameter</b>	.140	.146	.134/.162 (ovate)	.188/.144 (ovate)	.181/.144 (ovate)	.160
<b>Material</b>	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	53	-	-	-	-	-
<b>1.950</b>	63	-	-	-	-	-
<b>1.900</b>	72	-	-	-	-	-
<b>1.850</b>	82	-	-	-	-	-
<b>1.800</b>	92	-	60	-	-	-
<b>1.750</b>	104	-	67	-	-	-
<b>1.700</b>	113	-	74	80	-	-
<b>1.650</b>	123	-	82	94	-	42
<b>1.600</b>	133	-	90	108	-	55
<b>1.550</b>	144	-	98	122	-	74
<b>1.500</b>	154	42	106	135	-	88
<b>1.450</b>	165	54	113	149	-	101
<b>1.400</b>	175	66	121	163	82	111
<b>1.350</b>	-	79	130	177	98	122
<b>1.300</b>	-	90	141	190	114	135
<b>1.250</b>	-	104	151	204	131	149
<b>1.200</b>	-	115	163	218	148	163
<b>1.150</b>	-	126	177	232	165	177
<b>1.100</b>	-	139	191	245	181	195
<b>1.050</b>	-	149	-	-	198	211
<b>1.000</b>	-	161	-	-	214	231
<b>0.950</b>	-	174	-	-	230	-
<b>Coil Bind</b>	1.320	.860	.980	1.020	.840	.920
<b>7° Titanium Retainer</b>	<b>87096</b> (5.5mm)	<b>87085</b> (6mm)	<b>87024T</b> (7mm)	<b>87025T</b> (7mm)	<b>87026T</b> (7mm)	<b>87095</b> (6.5mm)
<b>7° Titanium Retainer</b>	-	<b>87082</b> (6mm)	-	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	-	-	-	-	-	-
<b>Titanium Super 7°</b>	-	-	-	-	-	-
<b>7° Steel Retainer 5/16</b>	-	-	<b>87024</b> (7mm)	<b>87025</b> (7mm)	<b>87026</b> (7mm)	-
<b>7° Steel Retainer 11/32</b>	-	-	-	-	-	-
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	-	-	-	-	-
<b>Seat Cup</b>	-	-	-	-	-	-
<b>Seat Disc</b>	-	-	-	-	-	-

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.105/.820	1.105/.820	1.160/.860	1.160/.870	1.160/.865	1.175/.875
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	.800/.627	.811/.608	.860/.660	.865/.660	.860/.655	.820/.628
<b>Installed Height</b>	1.350	1.350	1.350	1.460	1.460	1.350
<b>Rate</b>	234	314	273	250	275	295
<b>Part #</b>	<b>68181</b>	<b>68182</b>	<b>68186</b>	<b>68184</b>	<b>68187</b>	<b>68185</b>
<b>Type</b>	Dual	Dual	Dual	Dual	Dual	Dual
<b>Color Code</b>	Orange	Orange	Eibach	Red	Eibach	None
<b>Damper</b>	No	No	No	No	No	No
<b>Free Length</b>	1.635	1.635	1.620	1.815	1.780	1.580
<b>Wire Diameter</b>	.140/.085	.140/.104	.148/.098	.148/.098	.147/.096	.146/.096
<b>Material</b>	Silicone	Silicone	Eiballoy	Silicone	Eiballoy	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	-	-	-	-	-	-
<b>1.950</b>	-	-	-	-	-	-
<b>1.900</b>	-	-	-	-	-	-
<b>1.850</b>	-	-	-	-	-	-
<b>1.800</b>	-	-	-	-	-	-
<b>1.750</b>	-	-	-	-	-	-
<b>1.700</b>	-	-	-	-	-	-
<b>1.650</b>	-	-	-	44	33	-
<b>1.600</b>	-	-	-	55	44	-
<b>1.550</b>	-	28	-	68	55	-
<b>1.500</b>	-	42	34	78	67	-
<b>1.450</b>	36	56	47	91	80	28
<b>1.400</b>	48	70	60	101	91	38
<b>1.350</b>	56	84	73	113	102	49
<b>1.300</b>	70	98	86	122	110	60
<b>1.250</b>	83	113	99	139	129	74
<b>1.200</b>	95	127	111	153	141	89
<b>1.150</b>	106	141	124	167	154	103
<b>1.100</b>	118	155	136	180	167	115
<b>1.050</b>	129	169	148	193	182	136
<b>1.000</b>	139	185	161	205	195	152
<b>0.950</b>	148	202	175	220	210	167
<b>Coil Bind</b>	.710	.800	.790	.790	.875	0.805
<b>7° Titanium Ret 5/16</b>	<b>87092</b> (6.5mm)	<b>87092</b> (6.5mm)	<b>87093</b> (5.5mm)	<b>87093D</b> (+.060")	<b>87093D</b> (+.060")	<b>87093</b> (5.5mm)
<b>7° Titanium Ret 11/32</b>	-	-	-	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	-	-	-	-	-	-
<b>Titanium Super 7°</b>	-	-	-	-	-	-
<b>7° Steel Retainer 5/16</b>	-	-	-	-	-	-
<b>7° Steel Retainer 11/32</b>	-	-	-	-	-	-
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	-	-	-	-	-
<b>Seat Cup</b>	-	-	-	-	-	-
<b>Seat Disc</b>	Stock .108 step inner	Stock .108 step inner	Stock .080 step inner	Stock .080 step inner	Stock .080 step inner	Stock .080 step inner

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.180/.880	1.220/.915	1.235/.900	1.240/.930	1.055/.650 (top)	1.250/.940
<b>O.D./I.D. Middle</b>	-	-	-	-	1.250/.845 (bottom)	-
<b>O.D./I.D. Inner</b>	.870/.670	.915/.704	-	-	-	.910/.680
<b>Installed Height</b>	1.350	1.350	1.600	1.700	1.750	1.650
<b>Rate</b>	<b>New</b> 309	330	300	187	<b>New</b> 349	285
<b>Part #</b>	<b>68188</b>	<b>68411</b>	<b>68146</b>	<b>68141</b>	<b>68155</b>	<b>68106X208</b>
<b>Type</b>	Dual	Dual	Single	Single	Single Conical	Dual
<b>Color Code</b>	Red/White	Blue	None	None	None	None
<b>Damper</b>	No	No	Yes	Yes	No	No
<b>Free Length</b>	1.580	1.600	2.075	1.950	2.069	2.225
<b>Wire Diameter</b>	.154/.099	.154/.110	0.168	.155	.167/.202 (ovate)	.155/.112
<b>Material</b>	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	-	-	-	-	-	-
<b>1.950</b>	-	-	-	-	-	-
<b>1.900</b>	-	-	-	-	-	-
<b>1.850</b>	-	-	-	-	-	-
<b>1.800</b>	-	-	-	22	-	-
<b>1.750</b>	-	-	-	29	113	102
<b>1.700</b>	-	-	82	36	128	118
<b>1.650</b>	-	-	93	44	142	130
<b>1.600</b>	-	-	107	52	159	145
<b>1.550</b>	-	-	120	60	174	158
<b>1.500</b>	-	-	134	68	193	172
<b>1.450</b>	-	-	149	76	210	186
<b>1.400</b>	68	60	162	86	228	199
<b>1.350</b>	82	76	176	95	247	213
<b>1.300</b>	97	92	192	104	266	226
<b>1.250</b>	111	107	208	113	285	240
<b>1.200</b>	125	123	223	121	302	253
<b>1.150</b>	140	139	239	131	-	269
<b>1.100</b>	155	154	257	141	-	286
<b>1.050</b>	170	167	275	151	-	302
<b>1.000</b>	183	180	303	164	-	317
<b>0.950</b>	202	200	-	-	-	-
<b>Coil Bind</b>	0.765	.740	0.975	.850	1.100	0.910
<b>7° Titanium Ret 5/16</b>	<b>87093</b> (5.5mm)	<b>86046</b>	<b>86037T</b>	<b>86046</b>	<b>87028T</b>	<b>86046</b>
<b>7° Titanium Ret 11/32</b>	-	-	<b>86031</b>	-	<b>87029T</b>	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	-	-	-	-	-	-
<b>Titanium Super 7°</b>	-	-	-	-	-	-
<b>7° Steel Retainer 5/16</b>	-	<b>87046</b>	<b>86037</b>	<b>87045</b>	<b>87028</b>	<b>87046</b>
<b>7° Steel Retainer 11/32</b>	-	<b>87011</b> (5°)	<b>86032</b>	-	<b>87029</b>	<b>86032</b>
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	-	-	-	-	-
<b>Seat Cup</b>	-	-	-	-	-	-
<b>Seat Disc</b>	Stock .080 step inner	-	-	-	-	<b>68939 or 68941</b>

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

	1.250/.890	1.255/.865	1.255/.890	1.260/.945	1.260/.880	1.265/.895
<b>O.D./I.D. Outer</b>	1.250/.890	1.255/.865	1.255/.890	1.260/.945	1.260/.880	1.265/.895
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	-	-	-	-	-	-
<b>Installed Height</b>	1.700	1.750	1.700	1.700	1.800	1.750
<b>Rate</b>	330	<b>New</b> 522	378	236	390	407
<b>Part #</b>	<b>68301X3</b>	<b>68311X1</b>	<b>68301X1</b>	<b>68142</b>	<b>68304</b>	<b>68301</b>
<b>Type</b>	Single	Single	Single	Single	Single	Single
<b>Color Code</b>	None	None	None	2-Blue	None	None
<b>Damper</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Free Length</b>	2.050	1.995	1.980	2.050	2.100	2.020
<b>Wire Diameter</b>	.182	0.198	0.185	0.161	0.190	0.192
<b>Material</b>	Silicone	Super Clean Silicone	Silicone	Silicone	Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	-	-	-	-	-	-
<b>1.950</b>	-	-	-	-	-	-
<b>1.900</b>	-	-	-	-	-	-
<b>1.850</b>	-	73	-	-	88	-
<b>1.800</b>	76	97	70	55	106	-
<b>1.750</b>	90	120	88	64	124	96
<b>1.700</b>	104	146	105	77	141	114
<b>1.650</b>	117	169	123	86	159	130
<b>1.600</b>	131	194	140	95	176	149
<b>1.550</b>	146	220	157	106	195	169
<b>1.500</b>	160	246	174	118	210	188
<b>1.450</b>	174	274	192	130	231	207
<b>1.400</b>	196	302	210	141	250	229
<b>1.350</b>	210	331	230	154	271	252
<b>1.300</b>	230	359	252	165	295	274
<b>1.250</b>	247	389	274	178	317	299
<b>1.200</b>	269	424	297	192	345	-
<b>1.150</b>	-	459	-	206	-	-
<b>1.100</b>	-	-	-	220	-	-
<b>1.050</b>	-	-	-	239	-	-
<b>1.000</b>	-	-	-	257	-	-
<b>0.950</b>	-	-	-	277	-	-
<b>Coil Bind</b>	1.125	1.070	1.130	0.865	1.090	1.170
<b>7° Titanium Ret 5/16</b>	<b>86037T</b>	<b>86037T</b>	<b>86037T</b>	<b>86046</b>	<b>86037T</b>	<b>86037T</b>
<b>7° Titanium Ret 11/32</b>	<b>86031</b>	<b>86031</b>	<b>86031</b>	-	<b>86031</b>	<b>86031</b>
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	-	-	-	-	-	-
<b>Titanium Super 7°</b>	-	-	-	-	-	-
<b>7° Steel Retainer 5/16</b>	<b>86037</b>	<b>86037</b>	<b>86037</b>	<b>87045</b>	<b>86037</b>	<b>86037</b>
<b>7° Steel Retainer 11/32</b>	<b>86032</b>	<b>86032</b>	<b>86032</b>	-	<b>86032</b>	<b>86032</b>
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	-	-	-	-	-
<b>Seat Cup</b>	-	-	-	-	-	-
<b>Seat Disc</b>	-	-	-	-	-	-

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<i>O.D./I.D. Outer</i>	1.275/.925	1.360/1.000	1.385/1.060	1.400/1.045	1.405/1.055	1.430/1.040
<i>O.D./I.D. Middle</i>	-	-	-	-	-	-
<i>O.D./I.D. Inner</i>	.913/.685	-	1.050/.800	1.040/.770	1.045/.780	-
<i>Installed Height</i>	1.600	1.550	1.650	1.700	1.600	1.650
<i>Rate</i>	388	228	258	382	338	367
<i>Part #</i>	<b>68109X1</b>	<b>68147</b>	<b>68324</b>	<b>68405</b>	<b>68404</b>	<b>68305X1</b>
<i>Type</i>	Dual	Single	Dual	Dual	Dual	Single
<i>Color Code</i>	Orange/Yellow	None	Orange/Green	Orange/White	Blue/Grey	Grey
<i>Damper</i>	No	No	No	No	No	Yes
<i>Free Length</i>	1.830	1.925	2.150	1.975	1.920	1.900
<i>Wire Diameter</i>	.175/.118	0.177	.160/.127	.176/.133	.175/.134	0.200
<i>Material</i>	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
<i>2.350</i>	-	-	-	-	-	-
<i>2.300</i>	-	-	-	-	-	-
<i>2.250</i>	-	-	-	-	-	-
<i>2.200</i>	-	-	-	-	-	-
<i>2.150</i>	-	-	-	-	-	-
<i>2.100</i>	-	-	-	-	-	-
<i>2.050</i>	-	-	-	-	-	-
<i>2.000</i>	-	-	-	-	-	-
<i>1.950</i>	-	-	-	-	-	-
<i>1.900</i>	-	-	-	-	-	-
<i>1.850</i>	-	-	-	-	-	-
<i>1.800</i>	-	-	-	76	-	-
<i>1.750</i>	-	-	86	92	-	51
<i>1.700</i>	58	-	96	110	82	68
<i>1.650</i>	77	57	108	129	96	84
<i>1.600</i>	95	67	118	146	113	101
<i>1.550</i>	113	78	129	165	128	116
<i>1.500</i>	130	89	146	184	143	138
<i>1.450</i>	148	100	161	204	157	156
<i>1.400</i>	166	110	172	221	177	174
<i>1.350</i>	183	120	186	240	192	191
<i>1.300</i>	202	130	197	258	208	210
<i>1.250</i>	222	141	211	278	225	229
<i>1.200</i>	240	153	227	297	244	250
<i>1.150</i>	261	165	240	316	263	268
<i>1.100</i>	281	177	254	338	282	-
<i>1.050</i>	302	-	269	360	302	-
<i>1.000</i>	323	-	283	380	319	-
<i>0.950</i>	-	-	-	-	-	-
<i>Coil Bind</i>	0.955	1.000	0.910	0.980	0.950	1.050
<i>7° Titanium Ret 5/16</i>	<b>86046</b>	-	<b>86033</b>	<b>87040</b>	<b>87040</b>	<b>87040</b>
<i>7° Titanium Ret 11/32</i>	-	-	<b>87041</b>	-	-	-
<i>7° Titanium Ret 3/8</i>	-	-	<b>87042</b>	<b>87042</b>	<b>87042</b>	<b>87042</b>
<i>Titanium Ret 10°</i>	-	-	<b>86067M</b>	-	-	<b>86067C</b>
<i>Titanium Super 7°</i>	-	-	-	-	<b>86771</b>	-
<i>7° Steel Retainer 5/16</i>	<b>87046</b>	<b>87044</b>	<b>87044</b>	<b>87044</b>	<b>87044</b>	<b>87044</b>
<i>7° Steel Retainer 11/32</i>	-	-	<b>87050</b>	<b>87050</b>	<b>87050</b>	<b>87050</b>
<i>7° Steel Retainer 3/8</i>	-	-	<b>87049</b>	<b>87049</b>	<b>87049</b>	<b>87049</b>
<i>Steel Retainer 10°</i>	-	-	<b>87060M</b>	-	<b>87060M</b>	-
<i>Seat Cup</i>	-	-	-	<b>68930</b>	<b>68930</b>	<b>68931 or 68951</b>
<i>Seat Disc</i>	<b>68939 or 68941</b>	-	<b>68943</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	-



# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

	1.440/1.050	1.440/1.070	1.440/1.085	1.450/1.065	1.455/1.050	1.460/1.070
<b>O.D./I.D. Outer</b>	1.440/1.050	1.440/1.070	1.440/1.085	1.450/1.065	1.455/1.050	1.460/1.070
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	.975/.700	1.085/.811	1.075/.795	.975/.705	-	.975/.710
<b>Installed Height</b>	1.800	1.800	1.850	1.900	1.850	1.800
<b>Rate</b>	450	324	340	463	360	483
<b>Part #</b>	<b>68390X3</b>	<b>68100X200</b>	<b>68100X209</b>	<b>68382</b>	<b>68315</b>	<b>68390X2</b>
<b>Type</b>	Dual	Dual	Dual	Dual	Single	Dual
<b>Color Code</b>	Yellow/White	None	None	Purple/Orange	Lavender/Yellow	2 Yellow
<b>Damper</b>	Yes	No	No	Yes	Yes	Yes
<b>Free Length</b>	2.100	2.370	2.360	2.220	2.160	2.100
<b>Wire Diameter</b>	.190/.133	.179/.133	.178/.140	.198/.133	0.205	.198/.133
<b>Material</b>	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	-	-	-	91	-	-
<b>1.950</b>	-	-	135	110	68	48
<b>1.900</b>	76	83	150	137	87	69
<b>1.850</b>	96	94	166	159	105	90
<b>1.800</b>	116	107	182	179	120	113
<b>1.750</b>	136	121	197	201	136	134
<b>1.700</b>	156	134	212	221	153	156
<b>1.650</b>	175	147	229	246	169	187
<b>1.600</b>	194	161	245	269	185	208
<b>1.550</b>	215	175	262	292	203	231
<b>1.500</b>	238	190	279	315	221	254
<b>1.450</b>	261	205	296	341	241	278
<b>1.400</b>	284	221	314	364	260	302
<b>1.350</b>	307	238	331	391	282	325
<b>1.300</b>	331	255	349	415	303	349
<b>1.250</b>	355	274	368	443	322	377
<b>1.200</b>	389	291	388	477	-	408
<b>1.150</b>	-	309	-	-	-	439
<b>1.100</b>	-	330	-	-	-	-
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.110	1.030	1.110	1.115	1.150	1.070
<b>7° Titanium Ret 5/16</b>	<b>86033</b>	<b>86033</b>	<b>86033</b>	<b>86033</b>	<b>87040</b>	<b>86033</b>
<b>7° Titanium Ret 11/32</b>	<b>87041</b>	<b>87041</b>	<b>87041</b>	<b>87041</b>	-	<b>87041</b>
<b>7° Titanium Ret 3/8</b>	<b>87042</b>	<b>87042</b>	<b>87042</b>	<b>87042</b>	<b>87042</b>	<b>87042</b>
<b>Titanium Ret 10°</b>	<b>86067M</b>	<b>87065</b>	<b>87065</b>	<b>86067M</b>	<b>86067C</b>	<b>86067M</b>
<b>Titanium Super 7°</b>	<b>86767M</b>	<b>86767M</b>	<b>86767M</b>	<b>86767M</b>	-	<b>86767M</b>
<b>7° Steel Retainer 5/16</b>	<b>87047</b>	<b>87047</b>	<b>87047</b>	<b>87047</b>	<b>87044</b>	<b>87047</b>
<b>7° Steel Retainer 11/32</b>	<b>87048</b>	<b>87062</b>	<b>87062</b>	<b>87048</b>	<b>87050</b>	<b>87050</b>
<b>7° Steel Retainer 3/8</b>	<b>87049</b>	<b>87063</b>	<b>87063</b>	<b>87049</b>	<b>87049</b>	<b>87049</b>
<b>Steel Retainer 10°</b>	<b>87060M</b>	<b>87060</b>	<b>87060</b>	<b>87060M</b>	-	<b>87060M</b>
<b>Seat Cup</b>	<b>68931</b>	<b>68931</b>	<b>68931</b>	<b>68957</b>	<b>68931</b>	<b>68931</b>
<b>Seat Disc</b>	<b>68939 or 68941</b>	<b>68943</b>	<b>68938 or 68940</b>	<b>68939 or 68941</b>	-	<b>68939 or 68941</b>

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.460/1.060	1.475/1.075	1.490/1.120	1.500/1.120	1.505/1.090	1.505/1.120
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	.975/.710	1.070/.750	-	1.030/.755	-	1.035/.755
<b>Installed Height</b>	1.800	1.800	1.850	1.900	1.850	1.900
<b>Rate</b>	456	538	250	452	342	416
<b>Part #</b>	<b>68380X2</b>	<b>68501</b>	<b>68140</b>	<b>68340</b>	<b>68302X1</b>	<b>68389</b>
<b>Type</b>	Dual	Dual	Single	Dual	Single	Dual
<b>Color Code</b>	Blue/Yellow	Lavender/Yellow	Green	Green	Green/White	Green/Purple
<b>Damper</b>	Yes	No	Yes	Yes	Yes	Yes
<b>Free Length</b>	2.220	2.225	2.300	2.270	2.170	2.280
<b>Wire Diameter</b>	.200/.130	.200/.155	0.190	.191/.141	0.204	.190/.141
<b>Material</b>	Silicone	H11 Vasco	Silicone	Silicone	Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	-	-	-	-	-	98
<b>1.950</b>	-	-	79	100	61	116
<b>1.900</b>	152	171	90	118	77	132
<b>1.850</b>	173	204	102	143	91	150
<b>1.800</b>	197	230	113	165	107	168
<b>1.750</b>	218	254	126	184	121	187
<b>1.700</b>	241	280	139	206	136	205
<b>1.650</b>	263	308	151	228	150	227
<b>1.600</b>	283	334	162	249	164	252
<b>1.550</b>	308	362	175	271	179	273
<b>1.500</b>	328	390	187	293	194	289
<b>1.450</b>	353	417	199	313	211	312
<b>1.400</b>	377	443	212	336	229	335
<b>1.350</b>	399	472	227	359	250	357
<b>1.300</b>	424	499	242	384	270	383
<b>1.250</b>	446	525	257	407	292	411
<b>1.200</b>	470	-	274	437	-	-
<b>1.150</b>	-	-	-	477	-	-
<b>1.100</b>	-	-	-	-	-	-
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.110	1.180	1.100	1.080	1.150	1.140
<b>7° Titanium Ret 5/16</b>	<b>86033</b>	<b>86033</b>	-	<b>87043</b>	<b>86033</b>	<b>87043</b>
<b>7° Titanium Ret 11/32</b>	<b>87041</b>	<b>87041</b>	-	-	<b>87041</b>	-
<b>7° Titanium Ret 3/8</b>	<b>87042</b>	-	-	-	-	-
<b>Titanium Ret 10°</b>	<b>86067M</b>	<b>86067M</b>	<b>86067</b>	<b>86067</b>	<b>86067M</b>	<b>86067</b>
<b>Titanium Super 7°</b>	<b>86767M</b>	<b>86767M</b>	<b>86754</b>	<b>86767</b>	<b>86767M</b>	<b>86767</b>
<b>7° Steel Retainer 5/16</b>	<b>87047</b>	<b>87044</b>	-	<b>87044</b>	<b>87047</b>	<b>87044</b>
<b>7° Steel Retainer 11/32</b>	<b>87050</b>	<b>87062</b>	<b>87054</b>	<b>87062</b>	<b>87062</b>	<b>87062</b>
<b>7° Steel Retainer 3/8</b>	<b>87049</b>	<b>87049</b>	<b>87053</b>	<b>87053</b>	<b>87063</b>	<b>87053</b>
<b>Steel Retainer 10°</b>	<b>87060M</b>	<b>87060M</b>	<b>87055</b>	<b>87055</b>	<b>87060</b>	<b>87055</b>
<b>Seat Cup</b>	<b>68931</b>	<b>68957</b>	<b>68933</b>	<b>68933</b>	<b>68933</b>	<b>68933</b>
<b>Seat Disc</b>	<b>68939 or 68941</b>	<b>68938 • 940 • 942</b>	-	<b>68938 or 68940</b>	-	<b>68938 or 68940</b>

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.505/1.130	1.510/1.115	1.515/1.090	1.525/1.125	1.540/1.150	1.540/1.100
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	1.085/.805	1.115/.830	-	1.030/.750	1.045/.760	.990/.720
<b>Installed Height</b>	1.900	1.800	1.850	1.900	1.900	1.900
<b>Rate</b>	353	419	338	432	464	671
<b>Part #</b>	<b>68101X202</b>	<b>68398</b>	<b>68302X2</b>	<b>68385X2</b>	<b>68385X4</b>	<b>68670S</b>
<b>Type</b>	Dual	Dual	Single	Dual	Dual	Dual
<b>Color Code</b>	None	None	2-White	Purple	Purple	Lt. Purple
<b>Damper</b>	No	No	Yes	Yes	Yes	Yes
<b>Free Length</b>	2.390	2.280	2.210	2.330	2.270	2.180
<b>Wire Diameter</b>	.192/.148	.198/.146	0.205	.198/.141	.195/.142	.220/.136
<b>Material</b>	Silicone	Silicone	Silicone	Silicone	Silicone	H11 Vasco
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	-	-	-
<b>2.050</b>	-	-	-	-	-	-
<b>2.000</b>	116	-	-	123	116	129
<b>1.950</b>	131	106	76	144	137	164
<b>1.900</b>	146	124	91	166	159	196
<b>1.850</b>	162	140	107	187	178	227
<b>1.800</b>	178	158	121	207	199	262
<b>1.750</b>	194	176	136	228	221	292
<b>1.700</b>	211	194	150	249	241	324
<b>1.650</b>	229	212	166	269	263	354
<b>1.600</b>	249	234	181	291	284	385
<b>1.550</b>	268	256	197	310	307	418
<b>1.500</b>	287	279	215	333	329	451
<b>1.450</b>	304	300	235	353	353	482
<b>1.400</b>	323	323	256	375	378	517
<b>1.350</b>	342	347	280	398	406	549
<b>1.300</b>	363	370	-	422	431	582
<b>1.250</b>	383	393	-	445	458	617
<b>1.200</b>	-	417	-	469	484	654
<b>1.150</b>	-	-	-	-	-	694
<b>1.100</b>	-	-	-	-	-	734
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.140	1.080	1.300	1.100	1.100	1.010
<b>7° Titanium Ret 5/16</b>	-	-	86033	-	-	-
<b>7° Titanium Ret 11/32</b>	-	-	87041	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	<b>86067B</b>	<b>86067</b>	<b>86067M</b>	<b>86067B</b>	<b>86067B</b>	<b>86067</b>
<b>Titanium Super 7°</b>	<b>86781</b>	<b>86767</b>	<b>86767M</b>	<b>86781</b>	<b>86781</b>	<b>86767</b>
<b>7° Steel Retainer 5/16</b>	-	-	<b>87047</b>	-	-	-
<b>7° Steel Retainer 11/32</b>	-	<b>87054</b>	<b>87062</b>	-	-	-
<b>7° Steel Retainer 3/8</b>	<b>87053</b>	<b>87053</b>	<b>87063</b>	<b>87053</b>	<b>87053</b>	-
<b>Steel Retainer 10°</b>	<b>87055</b>	<b>87055</b>	<b>87060</b>	<b>87055</b>	<b>87055</b>	<b>87055</b>
<b>Seat Cup</b>	<b>68933</b>	<b>68933</b>	<b>68933</b>	<b>68933</b>	<b>68933</b>	<b>68953X1</b>
<b>Seat Disc</b>	<b>68938 or 68940</b>	<b>68943</b>	-	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68939 or 68941</b>

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.550/1.140	1.555/1.155	1.560/1.155	1.560/1.120	1.565/1.140	1.580/1.150
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	1.035/.755	1.050/.780	1.055/.765	1.115/.780	1.035/.740	1.140/.830
<b>Installed Height</b>	1.950	1.900	1.850	2.000	2.000	2.000
<b>Rate</b>	473	459	451	678	640	537
<b>Part #</b>	<b>68369</b>	<b>68363</b>	<b>68346</b>	<b>68367</b>	<b>68671</b>	<b>68843</b>
<b>Type</b>	Dual	Dual	Dual	Dual	Dual	Dual
<b>Color Code</b>	Yellow/Purple	Blue/Purple	Yellow/Green	Green/Purple	None	White
<b>Damper</b>	Yes	Yes	Yes	No	Yes	No
<b>Free Length</b>	2.460	2.430	2.300	2.430	2.440	2.500
<b>Wire Diameter</b>	.207/.140	.206/.133	.205/.146	.224/.169	.219/.148	.214/.154
<b>Material</b>	Silicone	Silicone	Silicone	Silicone	H11 Vasco	Super Clean Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	-	-	-	167	174	185
<b>2.050</b>	173	-	-	197	205	209
<b>2.000</b>	192	172	-	232	233	234
<b>1.950</b>	215	194	127	265	263	260
<b>1.900</b>	236	212	148	301	291	285
<b>1.850</b>	260	233	167	336	322	312
<b>1.800</b>	281	254	186	370	351	337
<b>1.750</b>	301	273	207	403	379	363
<b>1.700</b>	322	294	235	439	411	387
<b>1.650</b>	345	315	259	471	441	413
<b>1.600</b>	366	335	282	506	475	438
<b>1.550</b>	390	356	305	535	507	462
<b>1.500</b>	413	380	328	570	537	487
<b>1.450</b>	437	403	353	605	577	515
<b>1.400</b>	462	429	370	640	610	541
<b>1.350</b>	489	457	393	678	648	576
<b>1.300</b>	515	484	416	714	678	610
<b>1.250</b>	546	515	441	-	718	647
<b>1.200</b>	584	560	-	-	752	689
<b>1.150</b>	-	-	-	-	-	-
<b>1.100</b>	-	-	-	-	-	-
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.100	1.100	1.150	1.205	1.110	1.090
<b>7° Titanium Ret 5/16</b>	-	-	-	-	-	-
<b>7° Titanium Ret 11/32</b>	-	-	-	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	<b>86067B</b>	<b>86067B</b>	<b>86067B</b>	<b>86067</b>	<b>86067</b>	-
<b>Titanium Super 7°</b>	<b>86781</b>	<b>86781</b>	<b>86781</b>	<b>86767</b>	<b>86781</b>	<b>86781</b>
<b>7° Steel Retainer 5/16</b>	-	-	<b>87044</b>	-	-	-
<b>7° Steel Retainer 11/32</b>	-	-	<b>87062</b>	-	-	-
<b>7° Steel Retainer 3/8</b>	<b>87053</b>	<b>87053</b>	<b>87053</b>	<b>87053</b>	-	-
<b>Steel Retainer 10°</b>	<b>87055M</b>	<b>87055M</b>	<b>87064</b>	<b>87055</b>	<b>87055</b>	-
<b>Seat Cup</b>	<b>68953X1</b>	<b>68953X1</b>	<b>68953X1</b>	-	-	<b>68955</b>
<b>Seat Disc</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68938 • 940 • 942</b>	<b>68938 • 940 • 942</b>	<b>68938 • 940 • 942</b>	<b>68943</b>

# valve springs

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.600/1.175	1.610/1.215	1.630/1.190	1.630/1.180	1.635/1.190	1.670/1.240
<b>O.D./I.D. Middle</b>	-	1.205/.890	-	-	-	1.245/.910
<b>O.D./I.D. Inner</b>	1.160/.850	.890/.665	1.050/.760	1.050/.750	1.185/.874	.900/.640
<b>Installed Height</b>	2.100	1.850	1.900	2.000	2.050	1.950
<b>Rate</b>	552	514	704	666	646	624
<b>Part #</b>	<b>68844</b>	<b>68694</b>	<b>S68555X2</b>	<b>68555X1</b>	<b>68860</b>	<b>68365</b>
<b>Type</b>	Dual	Triple	Dual	Dual	Dual	Triple
<b>Color Code</b>	Yellow	None	Pink/Red	Red	Blue	Yellow/Red
<b>Damper</b>	No	No	Yes	Yes	No	No
<b>Free Length</b>	2.554	2.440	2.240	2.400	2.470	2.390
<b>Wire Diameter</b>	.221/.155	.199/.155/.112	.227/.147	.226/.149	.223/.162	.217/.170/.126
<b>Material</b>	Super Clean Silicone	Silicone	H11 Vasco	H11 Vasco	Super Clean Silicone	Silicone
<b>2.350</b>	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-
<b>2.150</b>	-	-	-	-	-	-
<b>2.100</b>	229	-	-	176	206	-
<b>2.050</b>	253	-	-	206	236	188
<b>2.000</b>	276	-	155	239	257	216
<b>1.950</b>	305	161	188	273	287	244
<b>1.900</b>	331	181	219	305	316	275
<b>1.850</b>	357	203	254	336	350	306
<b>1.800</b>	384	226	285	371	381	335
<b>1.750</b>	409	250	318	409	411	368
<b>1.700</b>	435	273	348	441	442	397
<b>1.650</b>	462	305	380	474	472	428
<b>1.600</b>	489	329	410	510	504	458
<b>1.550</b>	516	355	442	542	537	489
<b>1.500</b>	544	380	477	571	567	519
<b>1.450</b>	572	404	513	605	599	553
<b>1.400</b>	601	431	551	640	633	584
<b>1.350</b>	626	456	590	674	667	620
<b>1.300</b>	660	494	630	705	702	654
<b>1.250</b>	-	519	670	745	741	-
<b>1.200</b>	-	545	712	770	771	-
<b>1.150</b>	-	572	765	817	818	-
<b>1.100</b>	-	-	807	870	864	-
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.210	1.050	1.020	1.020	1.010	1.230
<b>7° Titanium Ret 5/16</b>	-	-	-	-	-	-
<b>7° Titanium Ret 11/32</b>	-	-	-	-	<b>86044</b>	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	<b>86068</b>	<b>86069</b>	<b>86068</b>	-	<b>86068</b>	<b>86069</b>
<b>Titanium Super 7°</b>	<b>86780</b>	-	<b>86780</b>	<b>86780</b>	<b>86780</b>	-
<b>7° Steel Retainer 5/16</b>	-	-	-	-	-	-
<b>7° Steel Retainer 11/32</b>	-	-	-	-	-	-
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	<b>87056</b>	<b>87056</b>	<b>87056</b>	<b>87056</b>	<b>87056</b>
<b>Seat Cup</b>	<b>68955</b>	<b>68955</b>	<b>68955</b>	<b>68955</b>	<b>68959</b>	<b>68956</b>
<b>Seat Disc</b>	<b>68943</b>	<b>68939 or 68941</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	-	<b>68939 or 68941</b>

# valve springs - premium crower



Cycle tested and race proven to be the absolute best springs available. Features unparalleled processing and materials.

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.255/.865	1.550/1.115	1.550/1.135	1.600/1.170	1.600/1.170	1.655/1.200
<b>O.D./I.D. Middle</b>	-	-	-	-	-	1.195/.880
<b>O.D./I.D. Inner</b>	-	1.015/.705	1.026/.740	1.060/.765	1.055/.760	.885/.645
<b>Installed Height</b>	1.750	2.000	1.950	2.050	2.050	2.100
<b>Rate</b>	<i>New</i> 522	<i>New</i> 660	505	547	604	<i>New</i> 799
<b>Part #</b>	<b>68311X1</b>	<b>68803</b>	<b>68804</b>	<b>68805</b>	<b>68806</b>	<b>68848</b>
<b>Type</b>	Single	Dual	Dual	Dual	Dual	Triple
<b>Color Code</b>	None	Green/Yellow	None	Red/Blue	Red/Purple	None
<b>Damper</b>	Yes	Yes	Yes	Yes	Yes	No
<b>Free Length</b>	1.995	2.352	2.550	2.630	2.552	2.540
<b>Wire Diameter</b>	0.198	.225/.142	.205/.141	.218/.148	.225/.147	.234/.161/.117
<b>Material</b>	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone
<b>2.350</b>	-	-	-	-	-	172
<b>2.300</b>	-	-	-	-	-	205
<b>2.250</b>	-	-	-	-	-	241
<b>2.200</b>	-	-	-	-	-	276
<b>2.150</b>	-	141	-	-	-	315
<b>2.100</b>	-	174	-	233	227	351
<b>2.050</b>	-	207	-	258	255	383
<b>2.000</b>	-	240	212	280	279	420
<b>1.950</b>	-	273	235	305	306	455
<b>1.900</b>	-	306	257	329	331	492
<b>1.850</b>	73	339	279	353	356	531
<b>1.800</b>	97	372	301	379	382	567
<b>1.750</b>	120	405	327	406	410	606
<b>1.700</b>	146	438	349	431	440	643
<b>1.650</b>	169	471	373	461	469	682
<b>1.600</b>	194	504	398	489	498	719
<b>1.550</b>	220	537	422	516	529	758
<b>1.500</b>	246	570	448	544	559	800
<b>1.450</b>	274	603	473	574	593	839
<b>1.400</b>	302	636	499	603	626	883
<b>1.350</b>	331	669	526	633	661	926
<b>1.300</b>	359	702	555	663	696	969
<b>1.250</b>	389	735	582	695	733	1014
<b>1.200</b>	424	-	620	-	-	1059
<b>1.150</b>	459	-	-	-	-	-
<b>1.100</b>	-	-	-	-	-	-
<b>1.050</b>	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-
<b>Coil Bind</b>	1.070	1.180	1.100	1.180	1.160	1.080
<b>7° Titanium Ret 5/16</b>	<b>86037T</b>	-	-	-	-	-
<b>7° Titanium Ret 11/32</b>	<b>86031</b>	-	-	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	<b>87063M</b>	-	-	-
<b>Titanium Ret 10°</b>	-	<b>86067</b>	<b>86067D</b>	<b>86068</b>	<b>86068</b>	<b>86069</b>
<b>Titanium Super 7°</b>	-	<b>86767</b>	<b>86781</b>	<b>86780</b>	<b>86780</b>	-
<b>7° Steel Retainer 5/16</b>	<b>86037</b>	-	-	-	-	-
<b>7° Steel Retainer 11/32</b>	<b>86032</b>	-	-	-	-	-
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	-	<b>87055</b>	<b>87064</b>	<b>87056</b>	<b>87056</b>	-
<b>Seat Cup</b>	-	<b>68953X1</b>	<b>68953X1</b>	<b>68955</b>	<b>68955</b>	<b>68956</b>
<b>Seat Disc</b>	-	<b>68939/68941</b>	<b>68938/68940</b>	<b>68938/68940</b>	<b>68938/68940</b>	-

# valve springs - p.s.i. brand

## VALVE SPRING SPECIFICATIONS – Listed According to O.D.

<b>O.D./I.D. Outer</b>	1.525/1.120	1.530/1.125	1.560/1.140	1.560/1.150	1.560/1.145	1.560/1.145	1.560/1.145	1.615/1.175	1.625/1.175
<b>O.D./I.D. Middle</b>	-	-	-	-	-	-	-	-	-
<b>O.D./I.D. Inner</b>	1.015/.745	1.000/.745	1.140/.830	1.040/.745	1.040/.745	1.040/.745	1.040/.745	1.060/.775	1.075/.770
<b>Installed Height</b>	1.950	1.950	2.000	2.000	2.000	2.000	2.000	2.100	2.000
<b>Rate</b>	500	501	489	516	508	521	546	530	595
<b>Part #</b>	<b>68725</b>	<b>68705</b>	<b>68735</b>	<b>68765</b>	<b>68775</b>	<b>68785</b>	<b>68795</b>	<b>68755</b>	<b>68745</b>
<b>Type</b>	Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual	Dual
<b>Color Code</b>	Gold/White	Gold/Pink	Gold	Gold/Green	Gold/Orange	Gold/Lt. Blue	Gold/Yellow	Gold	Gold/White
<b>Damper</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Free Length</b>	2.370	2.360	2.540	2.550	2.520	2.620	2.620	2.665	2.520
<b>Wire Diameter</b>	.205/.133	.205/.134	.205/.162	.206/.148	.206/.147	.206/.147	.210/.147	.225/.147	.225/.147
<b>Material</b>	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone	Super Clean Silicone
<b>2.350</b>	-	-	-	-	-	-	-	-	-
<b>2.300</b>	-	-	-	-	-	-	-	-	-
<b>2.250</b>	-	-	-	-	-	-	-	-	-
<b>2.200</b>	-	-	-	-	-	-	-	234	-
<b>2.150</b>	-	-	-	-	-	-	-	261	-
<b>2.100</b>	129	95	178	182	196	203	237	287	203
<b>2.050</b>	151	115	199	208	217	226	262	312	227
<b>2.000</b>	168	134	220	229	237	244	284	336	253
<b>1.950</b>	194	160	244	253	262	274	310	361	282
<b>1.900</b>	215	183	267	277	284	298	335	388	307
<b>1.850</b>	242	205	291	302	310	322	359	414	333
<b>1.800</b>	264	227	314	326	333	352	381	442	361
<b>1.750</b>	287	250	337	352	359	376	408	466	389
<b>1.700</b>	311	273	361	375	381	399	431	491	423
<b>1.650</b>	334	297	384	400	406	423	457	521	452
<b>1.600</b>	359	320	407	426	431	448	485	548	481
<b>1.550</b>	385	345	438	453	456	469	510	578	510
<b>1.500</b>	408	370	464	481	481	494	538	610	542
<b>1.450</b>	444	396	490	508	508	532	567	640	575
<b>1.400</b>	463	422	516	535	536	560	595	671	609
<b>1.350</b>	498	451	543	568	565	589	627	706	643
<b>1.300</b>	525	479	568	595	593	621	660	738	680
<b>1.250</b>	556	511	595	634	628	654	699	-	713
<b>1.200</b>	-	548	-	-	-	-	-	-	-
<b>1.150</b>	-	-	-	-	-	-	-	-	-
<b>1.100</b>	-	-	-	-	-	-	-	-	-
<b>1.050</b>	-	-	-	-	-	-	-	-	-
<b>1.000</b>	-	-	-	-	-	-	-	-	-
<b>0.950</b>	-	-	-	-	-	-	-	-	-
<b>Coil Bind</b>	1.150	1.125	1.150	1.150	1.160	1.160	1.160	1.190	1.150
<b>7° Titanium Ret 5/16</b>	-	-	-	-	-	-	-	-	-
<b>7° Titanium Ret 11/32</b>	-	-	-	-	-	-	-	-	-
<b>7° Titanium Ret 3/8</b>	-	-	-	-	-	-	-	-	-
<b>Titanium Ret 10°</b>	<b>86067D</b>	<b>86067D</b>	-	<b>86067D</b>	<b>86067D</b>	<b>86067D</b>	<b>86067D</b>	<b>86068</b>	<b>86068</b>
<b>Titanium Super 7°</b>	<b>86767</b>	<b>86767</b>	<b>86781</b>	<b>86781</b>	<b>86781</b>	<b>86781</b>	<b>86781</b>	<b>86780</b>	<b>86780</b>
<b>7° Steel Retainer 5/16</b>	-	-	-	-	-	-	-	-	-
<b>7° Steel Retainer 11/32</b>	-	-	-	-	-	-	-	-	-
<b>7° Steel Retainer 3/8</b>	-	-	-	-	-	-	-	-	-
<b>Steel Retainer 10°</b>	<b>87055M</b>	<b>87055M</b>	-	<b>87064</b>	<b>87064</b>	<b>87064</b>	<b>87064</b>	-	<b>87056</b>
<b>Seat Cup</b>	<b>68933</b>	<b>68933</b>	<b>68953-1</b>	<b>68953-1</b>	<b>68953-1</b>	<b>68953-1</b>	<b>68953-1</b>	<b>68955</b>	<b>68955</b>
<b>Seat Disc</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68943</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>	<b>68938 or 68940</b>





# valve spring accessories



## STAMPED STEEL 7° VALVE STEM KEEPERS

Crower valve stem keepers are stamped from the finest grade steel alloy and heat-treated for added strength and wear resistance. Out performs stock keepers.

Part No.	Stem Dia.	Inst. Height
86104-16	5/16	Standard
86100-16	11/32	Standard
86102-16	3/8	Standard

Also available in pairs by replacing -16 with -PR.



## JUMBO SPLIT-LOCK 10° VALVE STEM KEEPERS

Crower Jumbo valve stem keepers are designed with a 10° taper (twice the strength of the conventional 7° taper). Jumbo keepers are machined from premium chromoly steel and heat-treated for maximum strength. Crower Jumbo keepers are available in standard height, .050" higher or .050" lower positions for added flexibility in achieving the correct installed spring height. Each variation is color coded for easy identification.

Part No.	Stem Dia.	Inst. Height
86109-16	5/16	Standard
86110-16	11/32	Standard
86110X1-16	11/32	+ .050"
86110X2-16	11/32	- .050"
86111-16	3/8	Standard
86111X1-16	3/8	+ .050"
86111X2-16	3/8	- .050"

Also available in pairs by replacing -16 with -PR.



## BILLET PERFORMANCE 7° VALVE STEM KEEPERS

Crower billet performance valve stem keepers are precision machined from premium billet bar stock chromoly steel. Heat-treated for maximum strength to insure against shoulder shearing (common with stock and lesser quality keepers). In addition to our standard height, we also offer .050" higher and .050" lower to achieve the correct installed spring height. Each variation is color coded for identification. Serious engine builders should have a complete selection on hand at all times.

Part No.	Stem Dia.	Inst. Height
86106-16	5/16	Standard
86107-16	11/32	Standard
86107X1-16	11/32	+ .050"
86107X2-16	11/32	- .050"
86108-16	3/8	Standard
86108X1-16	3/8	+ .050"
86108X2-16	3/8	- .050"
86115-16	5.5mm	Standard
86115X1-16	5.5mm	+ .050"



## LASH CAPS

Crower lash caps protect the ends of your valves from excessive wear and help to correct rocker geometry by increasing rocker arm to retainer clearance. Machined from high grade chromoly steel and heat-treated for added strength, Crower lash caps give your valves an added .060" margin of protection. Highly recommended for performance applications, and a must for costly stainless steel or titanium valves.

Part No.	Description	Depth
86120-16	5/16 valve stem (Set/16)	.090"
86120S-16	5/16 valve stem (Set/16)	.060"
86121-16	11/32 valve stem (Set/16)	.090"
86121D-16	11/32 valve stem (Set/16)	.120"
86121S-16	11/32 valve stem (Set/16)	.060"
86122-16	3/8 valve stem (Set/16)	.090"
86122D-16	3/8 valve stem (Set/16)	.120"
86122S-16	3/8 valve stem (Set/16)	.060"
86123-8	5/16 valve stem VW (Set/8)	.090"
86125-24	6mm valve stem Toyota (Set/24)	.050"
86126-8	8mm 2000cc (Set/8)	.055"
86127-8	11/32 2300cc (Set/8)	.100"
86128-16	7mm Ford 4.6/5.4L (Set/16)	.120"

Also available in eaches by replacing -16 with -1.



## VALVE STEM SEALS

Crower valve stem seals provide correct oil control at the valve guide. The spring loaded wiper design prevents unwanted oil contamination on the cylinder. Heavy-duty steel and teflon construction.

Part No.	Description	Stem Dia.	I.D.
86070-16	Standard	5/16	.530"
86070T-16	Smaller O.D. (triple spring)	5/16	.500"
86071-16	Standard	3/8	.530"
86071T-16	Smaller O.D. (triple spring)	3/8	.500"
86072-16	Standard	11/32	.530"
86072T-16	Smaller O.D. (triple spring)	11/32	.500"

Also available in eaches by replacing -16 with -1.

## SUPER 7° KEEPERS

Part No.	Stem Dia.	Inst. Height
86709-16	5/16	Standard
86709X1-16	5/16	+ .050"
86709X2-16	5/16	- .050"
86710-16	11/32	Standard
86710X1-16	11/32	+ .050"
86710X2-16	11/32	- .050"

Also available in pairs by replacing -16 with -PR.

## TITANIUM KEEPERS

For the ultimate in lightweight performance, Crower billet titanium keepers are CNC machined to insure the best possible keeper. Available in Super 7° (4g weight)

Part No.	Stem Dia.	Inst. Height
86115T-16	5.5mm (.216")	Standard
86117T-16	7mm (.274")	Standard
86117X1T-16	7mm (.274")	+ .050"
86117X2T-16	7mm (.274")	- .050"
86709T-16	5/16	Standard
86709X1T-16	5/16	+ .050"
86709X2T-16	5/16	- .050"
86710T-16	11/32	Standard
86710X1T-16	11/32	+ .050"
86710X2T-16	11/32	- .050"

To order bead-lock keeper design, specify "B" after part no.

# valve spring accessories



## SPRING SEAT CUTTERS

Designed to accurately machine cylinder heads for aftermarket spring applications using a drill press or hand drill. Cutter blades are carbide tipped and valve guide pilots are interchangeable. Special spring seat cutters in custom sizes are available. Call for pricing and availability.

Part No.	O.D. x I.D.	Part No.	O.D. x I.D.
68974	1.050 x 0.740	68979	1.555 x 0.630
68978	1.255 x 0.620	68992	1.560 x 0.720
68982	1.365 x 0.760	68977	1.570 x 0.545
68983	1.410 x 0.765	68981	1.575 x 0.610
68997	1.450 x 0.690	68998	1.630 x 0.630
68990	1.450 x 0.800	68984	1.630 x 0.670
68985	1.460 x 0.685	68995X1	1.630 x 0.700
68999	1.485 x 0.675	68995	1.630 x 0.770
68975	1.510 x 0.800	68980	1.635 x 0.630
68986	1.515 x 0.750	68989	1.705 x 0.630
68976	1.520 x 0.690	68996	1.750 x 0.630
68987	1.530 x 0.730	68988	1.800 x 0.630

Note: Must order pilot separately. See pilots listed at right.



## VALVE SEAL CUTTERS

Crower valve seal/valve guide cutter includes cutting tool. Must order pilot separately when ordering.

Part No.	I.D.
86079	.530"
86079T	.500"

Note: Must order pilot separately. See pilots listed at right.



## COPPER PLATED SPRING SHIMS

Crower copper plated spring shims are case hardened .005" to .010" deep to a surface hardness of 45RC. Available in single or assorted thickness sets and bulk.

Part No.	Description	O.D. x I.D.	Size
85060-16	Set/16 pcs	1.525 x 0.735	.015
85060B	Bulk/80 pcs (1 size)	1.525 x 0.735	.015
85061-16	Set/16 pcs	1.525 x 0.735	.030
85061B	Bulk/80 pcs (1 size)	1.525 x 0.735	.030
85062-16	Set/16 pcs	1.525 x 0.735	.060
85062B	Bulk/80 pcs (1 size)	1.525 x 0.735	.060
85063A	Asst/16 ea (015,030,060)	1.525 x 0.735	Asst
85065-16	Set/16 pcs	1.625 x 0.635	.015
85065B	Bulk/80 pcs (1 size)	1.625 x 0.635	.015
85066-16	Set/16 pcs	1.625 x 0.635	.030
85066B	Bulk/80 pcs (1 size)	1.625 x 0.635	.030
85067-16	Set/16 pcs	1.625 x 0.635	.060
85067B	Bulk/80 pcs (1 size)	1.625 x 0.635	.060
85068A	Asst/16 ea (015,030,060)	1.625 x 0.635	Asst

## CUTTER PILOTS

Pilots available for spring seat and valve seal cutters.

Part No.	Stem Dia.
68970	5/16
68971	11/32
68972	3/8



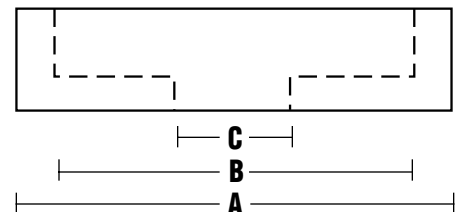
## SPRING SEAT CUPS & SEAT DISCS

Crower valve spring seat cups eliminate the need for seat cutting in some instances and shimming in others. Designed to keep springs from wandering, seat cups also protect aluminum heads from "galling." Spring seat discs also available.

### SEAT CUPS

Part No.	"A"	"B"	"C"	Cutter
68934-16	1.550	1.450	0.575	68981
68930-16	1.550	1.440	0.635	68979
68951-16	1.550	1.455	1.000	-
68931-16	1.550	1.475	0.635	68979
68957-16	1.590	1.490	0.675	68984
68936-16	1.625	1.515	0.635	68988
68933-16	1.685	1.540	0.635	68989
68953X1-16	1.695	1.565	0.635	68989
68955-16	1.745	1.630	0.635	68996
68959-16	1.740	1.650	0.635	68996
68956-16	1.795	1.700	0.635	68988
68958-16	Rotation Eliminators (396-454 Chevy)			

Diagram 1.  
Spring Seat Cup

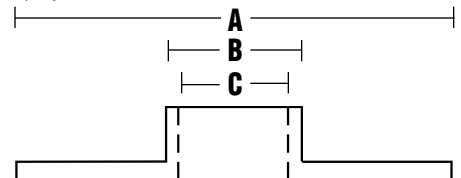


### SEAT DISCS

Part No.	"A"	"B"	"C"	Cutter
68938-16	1.560	0.740	0.505	68981
68939-16	1.565	0.660	0.505	68981
68940-16	1.560	0.740	0.562	68981
68941-16	1.565	0.660	0.562	68981
68942-16	1.535	0.730	0.635	68981
68943-16	1.545	0.805	0.565	68981

Note: All cups/discs average approximately .060" thick.

Diagram 2.  
Spring Seat Disc



# connecting rods

## **CROWERODS**

In independent tests and under actual racing conditions Crower connecting rods have proven to be the strongest, most reliable competition connecting rods available on the market today. Crowerods were the first to survive the 10 million cycle General Motors torture test, with GM engineers reporting that the Crower billet connecting rod was the absolute strongest rod they've ever tested.

## **THE CROWEROD DIFFERENCE**

An extensive effort in Computer Assisted Design (CAD), as well as rigorous dyno and track testing have been expended to perfect these failure free designs. When you employ a set of genuine Crowerods you do so with the knowledge and peace of mind that each rod will perform flawlessly, without fatigue or failure. That's why they're the hands down favorite of the majority of professional and amateur engine builders throughout the world.

## **IT'S THE MATERIAL...**

While other manufacturers are cutting corners, using imported or low grade materials, Crower has kept costs down without lowering our standards. Every rod we make is hand crafted from American made, 4340 chromoly (chromium-molybdenum) steel or 6AL4V titanium to insure the best quality and reliability possible.

## **AND THE DESIGN**

Take a close look at a Crowerod and you'll notice that it is shaped like no other rod in the industry. Every contour is designed to enhance overall strength and reliability at high engine rpm. Crower connecting rods incorporate an "I-beam" design that eliminates pockets of excess material and delivers exceptional longitudinal and horizontal strength. For those who prefer an "H-beam" design, Crower also offers this style of rod on a custom order basis. The cap screw design assures true roundness and a positive bearing seat under severe load factors, a key factor in eliminating rod bearing failure. Tolerances are to an exacting  $\pm 0.0001$ " of an inch to insure trouble free installation.

## **THE BOTTOM LINE**

When you install a set of genuine Crower connecting rods in your high performance engine, you can rest assured that the design expertise, material and craftsmanship used during production are working hard to maximize your racing effort. It's the kind of dependability and confidence factor that can put you in the winner's circle. Crowerods are available for most domestic and foreign applications, as well as motorcycle, industrial, vintage and one only prototypes. Crower's enviable reputation and proven success has led to imitations from competing manufacturers. Keep in mind that copied parts cannot maintain Crower's sophisticated design and production methods. Protect your investment by insisting on only genuine Crowerods for your high performance needs.



# connecting rods

## SPORTSMAN® CAP SCREW

Part No	Description	Length	B.E. Bore	Page
SP93200B-8	262-350 V8	5.700"	2.125"	151
SP93202B-8	262-350 V8	6.000"	2.125"	151
SP93203B-8	262-350 V8	6.125"	2.125"	151
SP93205B-8	262-350 V8	5.700"	2.225"	151
SP93206B-8	262-350 V8	6.000"	2.225"	151
SP93207B-8	262-350 V8	6.125"	2.225"	151
SP93270B-8	LS1 V8	6.100"	.927" PE	151
SP93271B-8	LS1 V8	6.100"	.944" PE	151
SP93273B-8	LS1 V8	6.125"	.927" PE	151
SP93272B-8	LS1 V8	6.125"	.944" PE	151
SP93208B-4	Chevy II 4 cyl	5.700"	2.125"	151
SP93209B-4	Chevy II 4 cyl	6.000"	2.125"	151
SP93210B-6	Chevy 6 cyl	5.700"	2.125"	151
SP93211B-6	Chevy 6 cyl	6.000"	2.125"	151
SP93410B-8	396-454 V8	6.136"	2.325"	152
SP93411B-8	396-454 V8	6.386"	2.325"	152
SP93415B-8	396-454 V8	6.536"	2.325"	152
SP93416B-8	396-454 V8	6.625"	2.325"	152
SP93417B-8	396-454 V8	6.700"	2.325"	152
SP93418B-8	396-454 V8	6.800"	2.325"	152
SP93419B-8	400-455 Pontiac	6.625"	2.374"	152
SP93420B-8	400-455 Pontiac	6.700"	2.374"	152
SP93421B-8	400-455 Pontiac	6.800"	2.374"	152

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP93200PF-8).

## SPORTSMAN® THRU-BOLT

Part No	Description	Length	B.E. Bore	Page
SP91200B-8	262-350 V8	5.700"	2.125"	151
SP91202B-8	262-350 V8	6.000"	2.125"	151
SP91203B-8	262-350 V8	6.125"	2.125"	151
SP91205B-8	262-350 V8	5.700"	2.225"	151
SP91206B-8	262-350 V8	6.000"	2.225"	151
SP91207B-8	262-350 V8	6.125"	2.225"	151
SP91208B-4	Chevy II 4 cyl	5.700"	2.125"	151
SP91209B-4	Chevy II 4 cyl	6.000"	2.125"	151
SP91210B-6	Chevy 6 cyl	5.700"	2.125"	151
SP91211B-6	Chevy 6 cyl	6.000"	2.125"	151

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP91200PF-8).

## STROKER SPORTSMAN®

Part No	Description	Length	B.E. Bore	Page
SSP93300B-8	262-350 V8	5.700"	2.125"	151
SSP93302B-8	262-350 V8	6.000"	2.125"	151
SSP93303B-8	262-350 V8	6.125"	2.125"	151
SSP93305B-8	262-350 V8	5.700"	2.225"	151
SSP93306B-8	262-350 V8	6.000"	2.225"	151
SSP93307B-8	262-350 V8	6.125"	2.225"	151

If Pressed Fit Pin desired, replace "B" after p/n (ex. SSP93300PF-8).

## BILLET

Part No	Description	Length	B.E. Bore	Page
B93000B-8	262-350 V8	5.700"	2.125"	154
B93003B-8	262-350 V8	5.850"	2.125"	154
B93002B-8	262-350 V8	6.000"	2.125"	154
B93040B-8	262-350 V8	6.200"	2.125"	154
B93900B-8	262-350 V8	Custom	2.125"	154
B93005B-8	262-350 V8	5.700"	2.225"	154
B93008B-8	262-350 V8	5.850"	2.225"	154
B93006B-8	262-350 V8	6.000"	2.225"	154
B93009B-8	262-350 V8	6.125"	2.225"	154
B93041B-8	262-350 V8	6.200"	2.225"	154
B93007B-8	262-350 V8	6.250"	2.225"	154
B93905B-8	262-350 V8	Custom	2.225"	154
B93010B-8	396-454 V8	6.136"	2.325"	157
B93011B-8	396-454 V8	6.386"	2.325"	157
B93014B-8	396-454 V8	6.405"	2.325"	157
B93012B-8	396-454 V8	6.536"	2.325"	157
B93015B-8	396-454 V8	6.625"	2.325"	157
B93016B-8	396-454 V8	6.700"	2.325"	157
B93017B-8	396-454 V8	6.800"	2.325"	157
B93909B-8	396-454 V8	Custom (7.250" & over)	2.325"	157
B93911B-8	396-454 V8	Custom (under 7.250")	2.325"	157
B93906B-6	Chevy 6 cyl	Custom	-	158

If Pressed Fit Pin desired, replace "B" after p/n (ex. B93000PF-8).

## STROKER BILLET

Part No	Description	Length	B.E. Bore	Page
SB93000B-8	262-350 V8	5.700"	2.125"	154
SB93003B-8	262-350 V8	5.850"	2.125"	154
SB93002B-8	262-350 V8	6.000"	2.125"	154
SB93040B-8	262-350 V8	6.200"	2.125"	154
SB93900B-8	262-350 V8	Custom	2.125"	154
SB93005B-8	262-350 V8	5.700"	2.225"	154
SB93008B-8	262-350 V8	5.850"	2.225"	154
SB93006B-8	262-350 V8	6.000"	2.225"	154
SB93009B-8	262-350 V8	6.125"	2.225"	154
SB93041B-8	262-350 V8	6.200"	2.225"	154
SB93007B-8	262-350 V8	6.250"	2.225"	154
SB93905B-8	262-350 V8	Custom	2.225"	154

If Pressed Fit Pin desired, replace "B" after p/n (ex. SB93000PF-8).

## MIDWEIGHT BILLET

Part No	Description	Length	B.E. Bore	Page
M93000B-8	262-350 V8	5.700"	2.125"	154
M93003B-8	262-350 V8	5.850"	2.125"	154
M93002B-8	262-350 V8	6.000"	2.125"	154
M93040B-8	262-350 V8	6.200"	2.125"	154
M93900B-8	262-350 V8	Custom	2.125"	154
M93005B-8	262-350 V8	5.700"	2.225"	154
M93008B-8	262-350 V8	5.850"	2.225"	154
M93006B-8	262-350 V8	6.000"	2.225"	154
M93009B-8	262-350 V8	6.125"	2.225"	154
M93041B-8	262-350 V8	6.200"	2.225"	154
M93007B-8	262-350 V8	6.250"	2.225"	154
M93905B-8	262-350 V8	Custom	2.225"	154
M93010B-8	396-454 V8	6.136"	2.325"	157
M93011B-8	396-454 V8	6.386"	2.325"	157
M93014B-8	396-454 V8	6.405"	2.325"	157
M93012B-8	396-454 V8	6.536"	2.325"	157
M93015B-8	396-454 V8	6.625"	2.325"	157
M93016B-8	396-454 V8	6.700"	2.325"	157
M93017B-8	396-454 V8	6.800"	2.325"	157
M93909B-8	396-454 V8	Custom (7.250" & over)	2.325"	157
M93911B-8	396-454 V8	Custom (under 7.250")	2.325"	157

If Pressed Fit Pin desired, replace "B" after p/n (ex. M93000PF-8).

## STROKER MIDWEIGHT BILLET

Part No	Description	Length	B.E. Bore	Page
SM93000B-8	262-350 V8	5.700"	2.125"	155
SM93003B-8	262-350 V8	5.850"	2.125"	155
SM93002B-8	262-350 V8	6.000"	2.125"	155
SM93040B-8	262-350 V8	6.200"	2.125"	155
SM93900B-8	262-350 V8	Custom	2.125"	155
SM93005B-8	262-350 V8	5.700"	2.225"	155
SM93008B-8	262-350 V8	5.850"	2.225"	155
SM93006B-8	262-350 V8	6.000"	2.225"	155
SM93009B-8	262-350 V8	6.125"	2.225"	155
SM93041B-8	262-350 V8	6.200"	2.225"	155
SM93007B-8	262-350 V8	6.250"	2.225"	155
SM93905B-8	262-350 V8	Custom	2.225"	155

If Pressed Fit Pin desired, replace "B" after p/n (ex. SM93000PF-8).



**SP93411B-8  
BB CHEVY 6.386"**

The Crower Sportsman® connecting rod was the first aftermarket stock replacement, fitting a wide variety of performance needs. 100% made in the USA from 4340 forged material, the Crower Sportsman® connecting rod is the perfect choice for the budget minded builder.



# sportsman connecting rods

**SP93206B-8  
SB CHEVY 6.000"  
CAP SCREW**

**SSP93306B-8  
SB CHEVY 6.000"  
STROKER**

**SP91206B-8  
SB CHEVY 6.000"  
THRU-BOLT**

3/8 cap screw bolt delivers a lighter big end rotating weight.

Premium grade 3/8 cap screw bolts are rated at 180,000 p.s.i. (#90828)

Drilled and chamfered pin oil hole puts additional oil at the wrist pin to prevent galling.

Single ribbed cap delivers distortion free performance and removes excess weight at a noncritical area.

3/8 thru-bolt (#90805) and nut (#90814) are rated at 180,000 p.s.i.

The "Crower" in the beam assures quality and reliability...don't settle for second best.

Extra strength at this critical web area reduces the big end pinch found in other aftermarket brands.

Separate forging dies for each length (5.7" and 6.0") to establish better grain flow. Lesser designs try and get by with just one die for several lengths, then cut to size.

3/8 aircraft quality, 8740 chromoly steel thru-bolt and nut adheres to O.E.M. stock specs, making it stock legal for all major sanctioning bodies.

Stroker design offers more cam-to-rod clearance and is intended for strokes of 3.750" and up. Can also be used in shorter stroke engines if 7/16 bolt is desired.

Properly engineered small end guarantees long, reliable pin alignment. Available in bushed (AMPKO 18) or pressed fit pin.

Stroker design utilizes a larger 7/16 cap screw bolt for ultimate clamping ability (#90846).

Ribbed cap delivers distortion free performance at high horsepower and rpm.

Experienced engine builders know that heavy rods are notoriously hard on the wrist pin area. Crower reduces unwanted loads by minimizing overall weight.



# sportsman connecting rods



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## SPORTSMAN® THRU-BOLT

First introduced back in 1987, the Crower Sportsman rod was the original high performance stock replacement rod. Features traditional thru-bolt and nut fasteners for stock legal classes. All Sportsman rods are forged from two separate dies, each dedicated to a specific length (5.7"/6.0"). This forms a more uniform molecular grain flow for a stronger, more reliable rod than other brands using one die for several lengths, then cutting to size. Includes 3/8 8740 bolts and nuts (180,000 p.s.i.).

**WEIGHT:** 5.7" @ 595g • 6.0" @ 635g

**HORSEPOWER RANGE:** 500

**RPM RANGE:** 8200

**TORQUE SPECS:** 50 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SP91200B-8	SB Chevy, 5.700" / 2.125" / 0.927" / 0.941"	
SP91202B-8	SB Chevy, 6.000" / 2.125" / 0.927" / 0.941"	
SP91203B-8	SB Chevy, 6.125" / 2.125" / 0.927" / 0.941"	
SP91205B-8	SB Chevy, 5.700" / 2.225" / 0.927" / 0.941"	
SP91206B-8	SB Chevy, 6.000" / 2.225" / 0.927" / 0.941"	
SP91207B-8	SB Chevy, 6.125" / 2.225" / 0.927" / 0.941"	
SP91208B-4	Chevy II 4 cyl, 5.700" / 2.125" / 0.927" (set/4)	
SP91209B-4	Chevy II 4 cyl, 6.000" / 2.125" / 0.927" (set/4)	
SP91210B-6	Chevy 6 cyl, 5.700" / 2.125" / 0.927" (set/6)	
SP91211B-6	Chevy 6 cyl, 6.000" / 2.125" / 0.927" (set/6)	

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP91200PF-8). All weights are approximate.



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## SPORTSMAN® CAP SCREW

Features a 3/8 cap screw design for easier cap removal and placement. The new fastening system features 8740 steel alloy bolts (180,000 p.s.i.) that thread directly into the rod fork. Fully CNC machined from USA milled, 4340 chromoly steel. Crower Sportsman rods are the lighter, yet stronger alternative to factory "pinks." Installs without the need of an expensive balance job.

**WEIGHT:** 5.7" @ 585g • 6.0" @ 625g

**HORSEPOWER RANGE:** 500

**RPM RANGE:** 8200

**TORQUE SPECS:** 50 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SP93200B-8	SB Chevy, 5.700" / 2.125" / 0.927" / 0.941"	
SP93202B-8	SB Chevy, 6.000" / 2.125" / 0.927" / 0.941"	
SP93203B-8	SB Chevy, 6.125" / 2.125" / 0.927" / 0.941"	
SP93205B-8	SB Chevy, 5.700" / 2.225" / 0.927" / 0.941"	
SP93206B-8	SB Chevy, 6.000" / 2.225" / 0.927" / 0.941"	
SP93207B-8	SB Chevy, 6.125" / 2.225" / 0.927" / 0.941"	
SP93270B-8	Chevy LS1, 6.100" / 2.225" / 0.927" / 0.941"	
SP93271B-8	Chevy LS1, 6.100" / 2.225" / 0.944" / 0.941"	
SP93273B-8	Chevy LS1, 6.125" / 2.225" / 0.927" / 0.941"	
SP93272B-8	Chevy LS1, 6.125" / 2.225" / 0.944" / 0.941"	
SP93208B-4	Chevy II 4 cyl, 5.700" / 2.125" / 0.927" (set/4)	
SP93209B-4	Chevy II 4 cyl, 6.000" / 2.125" / 0.927" (set/4)	
SP93210B-6	Chevy 6 cyl, 5.700" / 2.125" / 0.927" (set/6)	
SP93211B-6	Chevy 6 cyl, 6.000" / 2.125" / 0.927" (set/6)	

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP93200PF-8). For Cosworth Vega, use #SP93208B-4



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## STROKER SPORTSMAN®

The cap screw designed Stroker Sportsman incorporates all of the strength and value of our inexpensive Sportsman model with the clearance advantages of a stroker design. The stroker design allows additional cam-to-rod clearance for strokes above 3.750". Crower Stroker Sportsman's are made exclusively from USA made, 4340 chromoly steel and feature extremely reliable 7/16 8740 steel alloy cap screw bolts (180,000 p.s.i.). Proven lightweight design (under 600g).

**WEIGHT:** 5.7" @ 585g • 6.0" @ 625g

**HORSEPOWER RANGE:** 550

**RPM RANGE:** 8200

**TORQUE SPECS:** 70 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SSP93300B-8	SB Chevy, 5.700" / 2.125" / 0.927" / 0.941"	
SSP93302B-8	SB Chevy, 6.000" / 2.125" / 0.927" / 0.941"	
SSP93305B-8	SB Chevy, 5.700" / 2.225" / 0.927" / 0.941"	
SSP93306B-8	SB Chevy, 6.000" / 2.225" / 0.927" / 0.941"	

If Pressed Fit Pin desired, replace "B" after p/n (ex. SSP93300PF-8). All weights are approximate.

# sportsman connecting rods



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## BIG BLOCK SPORTSMAN®

The big block version of our popular small block design, the Sportsman offers a USA made, 4340 chromoly steel forged rod at an economical price. Available for both Big Block Chevrolet and Pontiac applications. Features 7/16 high strength steel alloy cap screw bolts rated at 180,000 p.s.i. for unrivaled strength.

**WEIGHT:** 6.536" @ 830g • 6.800" @ 860g

**HORSEPOWER RANGE:** 850+

**RPM RANGE:** 8500

**TORQUE SPECS:** 70 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore
SP93410B-8	396-454 Chevy, 6.136" / 2.325" / 0.990"	
SP93411B-8	396-454 Chevy, 6.386" / 2.325" / 0.990"	
SP93415B-8	396-454 Chevy, 6.536" / 2.325" / 0.990"	
SP93416B-8	396-454 Chevy, 6.625" / 2.325" / 0.990"	
SP93417B-8	396-454 Chevy, 6.700" / 2.325" / 0.990"	
SP93418B-8	396-454 Chevy, 6.800" / 2.325" / 0.990"	
SP93419B-8	400-455 Pontiac, 6.625" / 2.374" / 0.980"	
SP93420B-8	400-455 Pontiac, 6.700" / 2.374" / 0.980"	
SP93421B-8	400-455 Pontiac, 6.800" / 2.374" / 0.980"	

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP93410PF-8). All weights are approximate.



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## FORD SPORTSMAN®

A Ford version of our extremely popular 4340 Sportsman high performance rod. Forged from USA made 4340 chromoly steel, these rods come standard with aircraft quality, 3/8 bolts (8740 material) and nuts rated to 180,000 p.s.i.

**WEIGHT:** 5.090" @ 560g • 5.155" @ 580g

**HORSEPOWER RANGE:** 500

**RPM RANGE:** 8200

**TORQUE SPECS:** 50 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SP91224B-8	302	5.090" / 2.239" / 0.912" / 0.832"
SP91225B-8	302	5.155" / 2.239" / 0.912" / 0.832"
SP91226B-8	302	5.315" / 2.239" / 0.912" / 0.832"
SP91227B-8	302	5.090" / 2.225" / 0.927" / 0.941"
SP91228B-8	302	5.155" / 2.225" / 0.927" / 0.941"
SP91229B-8	302	5.315" / 2.225" / 0.927" / 0.941"
SP91230B-4	2.0L	5.000" / 2.165" / 0.944" / 1.010"
SP91235B-4	2.0L	5.700" / 2.165" / 0.927" / 1.010"
SP91236B-4	2.0L	5.700" / 2.125" / 0.927" / 1.010"
SP91231B-4	2.3L	5.200" / 2.172" / 0.912" / 0.990"
SP91232B-4	2.3L	5.400" / 2.172" / 0.912" / 0.990"
SP91233B-4	2.3L	5.500" / 2.172" / 0.912" / 0.990"
SP91234B-4	2.3L	5.700" / 2.172" / 0.927" / 0.990"
SP91237B-4	2.3L	5.700" / 2.125" / 0.927" / 0.990"
SP91220B-8	Custom 8 cylinder application (set/8)	
SP91221B-4	Custom 4 cylinder application (set/4)	

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP91224PF-8).

All weights are approximate.

SP91224 - Lt Model Stock / SP91225 - Early Model Stock

SP91231 - Stock 2300cc

.832" - Ford width, .941" - Chevy width



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## FORD SPORTSMAN®

Crower offers the Ford Sportsman for the Pinto in a cap screw design. Forged from USA made, SAE certified 4340 chromoly steel. Ford Sportsman's come standard with aircraft quality 3/8 8740 steel alloy cap screw bolts rated at 180,000 p.s.i.

**WEIGHT:** 5.7" @ 625g • 6.0" @ 647g

**HORSEPOWER RANGE:** 500

**RPM RANGE:** 8200

**TORQUE SPECS:** 50 foot lbs.

Part No.	Engine	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SP93230B-4	2.0L	5.000" / 2.165" / .944" / 1.010"
SP93231B-4	2.3L	5.200" / 2.172" / .912" / .990"
SP93232B-4	2.3L	5.400" / 2.172" / .912" / .990"
SP93233B-4	2.3L	5.500" / 2.172" / .912" / .990"
SP93234B-4	2.3L	5.700" / 2.172" / .927" / .990"
SP93235B-4	2.0L	5.700" / 2.165" / .927" / 1.010"
SP93236B-4	2.0L	5.700" / 2.125" / .927" / 1.010"
SP93237B-4	2.3L	5.700" / 2.125" / .927" / .990"
SP93238B-4	2.3L	6.000" / 2.172" / .927" / .990"

If Pressed Fit Pin desired, replace "B" after p/n (ex. SP93230PF-4). All weights are approximate.



# steel billet connecting rods

## STEEL BILLET ROD WITH 12 POINT CAP SCREW BOLT

Unquestionably the most critical part of a high performance, internal combustion engine is the connecting rod. Connecting rods support the primary tension loads caused by engine operation in each revolution or cycle of the crankshaft. Therefore, it is of utmost importance that the rods you choose to put in your engine are made from only the highest quality materials, manufacturing methods and fastening systems available on the market. For over 25 years, Crower has been meeting this challenge. Only the finest, USA made 4340 chromoly (chromium-molybdenum) steel is used in the production of Crower steel billet connecting rods. Every rod is fully CNC machined to remove all surface imperfections, 100% magnaflux inspected and checked for surface hardness, then machined to final size to exacting tolerances within 1/1000" of an inch. Each set of rods is fully balanced and then shot peened to achieve the ultimate in strength and reliability. The last, yet probably most important aspect of Crower's connecting rod production cycle is the fastening system employed. Choose from premium H-11 tool steel rod bolts or AMS5844 bolts available as an upgrade.

Drilled and chamfered pin oil hole on all Crowerods provides additional oil at pin end to prevent galling. Available in aluminum/bronze bushed or pressed fit pin.

Pin boss dynamics are critical when designing a high performance connecting rod. To maintain trouble-free operation, Crower beefs up the pin eye area.

Special "pressure fed" oiling hole from big end to pin end is available on "H-Beam" billet Crowerods. Specify #90798 option when ordering.

An assortment of computer designed beams are available for different horsepower and weight requirements.

Integrally threaded beam can be made to accept bolt diameters of 5/16, 3/8 and 7/16.

Hollow dowel alignment fastening system provides positive cap alignment and "no hassle" removal.

**MIDWEIGHT BILLET 6.000"**

Deep, double-ribbed cap guarantees superior strength and reliability at high engine rpm.

**CROWER H-BEAM DESIGN**

Only Crower offers you, the engine builder, the choice of "I-Beam or H-Beam" design.

Extremely reliable H-11 tool steel bolts, rated at 220,000 p.s.i. or aircraft quality, AMS5844 alloy bolts that are corrosion resistant and rated at 280,000 p.s.i. Both feature 12-point heads.

## AMS5844 ROD BOLT UPGRADE

Crower's AMS5844 rod bolt upgrade is available for all steel billet and titanium rods. Highly recommended for extreme duty rpm and endurance applications. Rated at 285,000 p.s.i., these bolts are corrosion resistant, nonmagnetic and deliver ultimate clamping capabilities for the highest cycle life. Specify "UPG" after part number when ordering.



## CROWER "H-BEAM" CONNECTING RODS

Although Crower is known mostly for its "I-Beam" rods, we also build a variety of European influenced "H-Beam" designs as well. The thicker cross sections of the H-Beam are better suited for the EDM oil hole that runs the length of the beam delivering added oil to the pin. Weights are equivalent to Crower's standard "I-Beam" billet rod. To order specify "H" before desired part number. For Pressure Fed Pin option specify #90798 after rod part number.

# steel billet connecting rods

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



## BILLET

The industry standard by which all other rods are measured. Manufactured exclusively from USA made, 4340 billet chromoly steel. The standard Billet rod is our strongest, most durable steel rod, and is intended for high horsepower applications. Incorporates the latest Crower cap screw design. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 5.7" @ 710g • 6.0" @ 720g

**HORSEPOWER RANGE:** 800

**RPM RANGE:** 8500

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>B93000B-8</b>	5.700" / 2.125" / 0.927" / 0.941"
<b>B93003B-8</b>	5.850" / 2.125" / 0.927" / 0.941"
<b>B93002B-8</b>	6.000" / 2.125" / 0.927" / 0.941"
<b>B93040B-8</b>	6.200" / 2.125" / 0.927" / 0.941"
<b>B93900B-8</b>	Custom / 2.125" / 0.927" / 0.941"
<b>B93005B-8</b>	5.700" / 2.225" / 0.927" / 0.941"
<b>B93008B-8</b>	5.850" / 2.225" / 0.927" / 0.941"
<b>B93006B-8</b>	6.000" / 2.225" / 0.927" / 0.941"
<b>B93009B-8</b>	6.125" / 2.225" / 0.927" / 0.941"
<b>B93041B-8</b>	6.200" / 2.225" / 0.927" / 0.941"
<b>B93007B-8</b>	6.250" / 2.225" / 0.927" / 0.941"
<b>B93905B-8</b>	Custom / 2.225" / 0.927" / 0.941"

If Pressed Fit Pin desired, replace "B" after p/n (ex. B93000PF-8).  
283/327 = 2.125" housing bore for 2.000" crank pin.  
350/400 = 2.225" housing bore for 2.100" crank pin.



## STROKER BILLET

Most stroker rods are machined down versions of standard rods. Crower starts off with a separate design. Designed for strokes above 3.750". The stroker design provides additional cam-to-rod clearance over standard rods. CNC machined from USA made, 4340 chromoly steel. Incorporates Crower's cap screw design and includes 7/16 H-11 tool steel bolts rated at 220,000 p.s.i.

**WEIGHT:** 5.7" @ 700g • 6.0" @ 710g

**HORSEPOWER RANGE:** 800

**RPM RANGE:** 8500

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>SB93000B-8</b>	5.700" / 2.125" / 0.927" / 0.941"
<b>SB93003B-8</b>	5.850" / 2.125" / 0.927" / 0.941"
<b>SB93002B-8</b>	6.000" / 2.125" / 0.927" / 0.941"
<b>SB93040B-8</b>	6.200" / 2.125" / 0.927" / 0.941"
<b>SB93900B-8</b>	Custom / 2.125" / 0.927" / 0.941"
<b>SB93005B-8</b>	5.700" / 2.225" / 0.927" / 0.941"
<b>SB93008B-8</b>	5.850" / 2.225" / 0.927" / 0.941"
<b>SB93006B-8</b>	6.000" / 2.225" / 0.927" / 0.941"
<b>SB93009B-8</b>	6.125" / 2.225" / 0.927" / 0.941"
<b>SB93041B-8</b>	6.200" / 2.225" / 0.927" / 0.941"
<b>SB93007B-8</b>	6.250" / 2.225" / 0.927" / 0.941"
<b>SB93905B-8</b>	Custom / 2.225" / 0.927" / 0.941"

If Pressed Fit Pin desired, replace "B" after p/n (ex. SB93000PF-8).  
All weights are approximate.  
Specify "B" (bushed) or "PF" (press fit) after rod part number.



## MIDWEIGHT

The Crower MidWeight design is 40 to 50 grams lighter than our standard Billet rod, yet it's durable enough to run in mid to high horsepower applications. Fully machined from USA made, 4340 chromoly steel, the MidWeight incorporates the latest Crower cap screw design. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 5.7" @ 660g • 6.0" @ 675g

**HORSEPOWER RANGE:** 750

**RPM RANGE:** 8200

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>M93000B-8</b>	5.700" / 2.125" / 0.927" / 0.941"
<b>M93003B-8</b>	5.850" / 2.125" / 0.927" / 0.941"
<b>M93002B-8</b>	6.000" / 2.125" / 0.927" / 0.941"
<b>M93040B-8</b>	6.200" / 2.125" / 0.927" / 0.941"
<b>M93900B-8</b>	Custom / 2.125" / 0.927" / 0.941"
<b>M93005B-8</b>	5.700" / 2.225" / 0.927" / 0.941"
<b>M93008B-8</b>	5.850" / 2.225" / 0.927" / 0.941"
<b>M93006B-8</b>	6.000" / 2.225" / 0.927" / 0.941"
<b>M93009B-8</b>	6.125" / 2.225" / 0.927" / 0.941"
<b>M93041B-8</b>	6.200" / 2.225" / 0.927" / 0.941"
<b>M93007B-8</b>	6.250" / 2.225" / 0.927" / 0.941"
<b>M93905B-8</b>	Custom / 2.225" / 0.927" / 0.941"

If Pressed Fit Pin desired, replace "B" after p/n (ex. M93000PF-8).  
All weights are approximate.  
Specify "B" (bushed) or "PF" (press fit) after rod part number.

# steel billet connecting rods

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



## STROKER MIDWEIGHT

Designed for strokes above 3.750", the Stroker MidWeight design provides additional cam-to-rod clearance over standard designs. Machined from USA made, 4340 chromoly steel, the Stroker MidWeight is 40 to 50 grams lighter than our standard Stroker Billet rod, yet it's durable enough to run in mid to high horsepower applications. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 5.7" @ 650g • 6.0" @ 665g

**HORSEPOWER RANGE:** 750

**RPM RANGE:** 8200

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
SM93000B-8	5.700" / 2.125" / 0.927" / 0.941"
SM93003B-8	5.850" / 2.125" / 0.927" / 0.941"
SM93002B-8	6.000" / 2.125" / 0.927" / 0.941"
SM93040B-8	6.200" / 2.125" / 0.927" / 0.941"
SM93900B-8	Custom / 2.125" / 0.927" / 0.941"
SM93005B-8	5.700" / 2.225" / 0.927" / 0.941"
SM93008B-8	5.850" / 2.225" / 0.927" / 0.941"
SM93006B-8	6.000" / 2.225" / 0.927" / 0.941"
SM93009B-8	6.125" / 2.225" / 0.927" / 0.941"
SM93041B-8	6.200" / 2.225" / 0.927" / 0.941"
SM93007B-8	6.250" / 2.225" / 0.927" / 0.941"
SM93905B-8	Custom / 2.225" / 0.927" / 0.941"

All weights are approximate.

Crower also offers a "light" stroker MidWeight rod with 3/8 bolt. Place "LSM" in front of part number (40g less than std SM rod).

## LIGHTWEIGHT

Extremely light yet unbelievably strong, the LightWeight rod is intended for use in moderate horsepower applications where light rotating mass is a must. Incorporates Crower's traditional straight "I-beam" design. Machined exclusively from USA made, 4340 chromoly steel. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 5.7" @ 605g • 6.0" @ 615g

**HORSEPOWER RANGE:** 550

**RPM RANGE:** 8000

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
LW93000B-8	5.700" / 2.125" / 0.927" / 0.941"
LW93003B-8	5.850" / 2.125" / 0.927" / 0.941"
LW93002B-8	6.000" / 2.125" / 0.927" / 0.941"
LW93040B-8	6.200" / 2.125" / 0.927" / 0.941"
LW93900B-8	Custom / 2.125" / 0.927" / 0.941"
LW93005B-8	5.700" / 2.225" / 0.927" / 0.941"
LW93008B-8	5.850" / 2.225" / 0.927" / 0.941"
LW93006B-8	6.000" / 2.225" / 0.927" / 0.941"
LW93009B-8	6.125" / 2.225" / 0.927" / 0.941"
LW93041B-8	6.200" / 2.225" / 0.927" / 0.941"
LW93007B-8	6.250" / 2.225" / 0.927" / 0.941"
LW93905B-8	Custom / 2.225" / 0.927" / 0.941"

If Pressed Fit Pin desired, replace "B" after p/n (ex. LW93000PF-8).

All weights are approximate.

Specify "B" (bushed) or "PF" (press fit) after rod part number.

## ULTRA-LIGHT

Note the design of this rod. Every gram of excess material has been judiciously removed from noncritical stress areas for a truly "ultra-lightweight" 4340 steel billet rod. Incorporates the latest Crower cap screw design, the Ultra-Light is perfect for low horsepower applications where quick acceleration and deceleration is critical. The 3/8 H-11 tool steel cap screw bolts rated at 220,000 p.s.i. come standard. Optional AMS5844 rod bolt upgrade is also available (280,000 p.s.i.).

**WEIGHT:** 5.7" @ 570g • 6.0" @ 580g

**HORSEPOWER RANGE:** 400

**RPM RANGE:** 7500

**TORQUE SPECS:** 55 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
UL93000B-8	5.700" / 2.125" / 0.927" / 0.941"
UL93003B-8	5.850" / 2.125" / 0.927" / 0.941"
UL93002B-8	6.000" / 2.125" / 0.927" / 0.941"
UL93040B-8	6.200" / 2.125" / 0.927" / 0.941"
UL93900B-8	Custom / 2.125" / 0.927" / 0.941"
UL93005B-8	5.700" / 2.225" / 0.927" / 0.941"
UL93008B-8	5.850" / 2.225" / 0.927" / 0.941"
UL93006B-8	6.000" / 2.225" / 0.927" / 0.941"
UL93009B-8	6.125" / 2.225" / 0.927" / 0.941"
UL93041B-8	6.200" / 2.225" / 0.927" / 0.941"
UL93007B-8	6.250" / 2.225" / 0.927" / 0.941"
UL93905B-8	Custom / 2.225" / 0.927" / 0.941"

# steel billet connecting rods

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



**Upgrades:** 280,000 p.s.i. rod bolts, specify "UPG" after p/n  
EDM oil hole through beam, specify "PFP" after p/n

*The Crower Maxi-Light is a proven performer on the race track. Tapered beam design delivers the strength you need in a lightweight, yet reliable profile.*

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## MAXI-LIGHT® 93 SERIES

The original tapered beam rod. The Maxi-Light combines lightweight design with proven reliability. Made exclusively from USA made 4340 chromoly steel rated at 170,000 p.s.i. The Maxi-Light 93 Series rods are available in five unique designs. Refer to the column at the right for weights and hp/rpm ratings. Crower pioneered the use of small journal diameters, including the popular Honda bearing size (2.008") and the Quad 4 bearing size (2.015") for reduced friction and increased horsepower. 3/8 H-11 tool steel bolts available up to X3 and 7/16 bolts on X4 and X5. Optional AMS5844 bolt upgrade also available (280,000 p.s.i.). Specify "UPG".

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
ML93000B?-8	5.700" / 2.125" / 0.927" / 0.941"
ML93003B?-8	5.850" / 2.125" / 0.927" / 0.941"
ML93002B?-8	6.000" / 2.125" / 0.927" / 0.941"
ML93040B?-8	6.200" / 2.125" / 0.927" / 0.941"
ML93900B?-8	Custom / 2.125" / 0.927" / 0.941"
ML93005B?-8	5.700" / 2.225" / 0.927" / 0.941"
ML93008B?-8	5.850" / 2.225" / 0.927" / 0.941"
ML93006B?-8	6.000" / 2.225" / 0.927" / 0.941"
ML93009B?-8	6.125" / 2.225" / 0.927" / 0.941"
ML93041B?-8	6.200" / 2.225" / 0.927" / 0.941"
ML93007B?-8	6.250" / 2.225" / 0.927" / 0.941"
ML93905B?-8	Custom / 2.225" / 0.927" / 0.941"

Replace "?" with desired Series number (1, 2, 3, 4 or 5).

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## MAXI-LIGHT® 94 SERIES

The ultimate steel billet rod that competes with titanium for weight and strength, while still maintaining steel status. The Maxi-Light 94 Series is made from 33% stronger base material than conventional 4340 chromoly steel. Crower utilizes a special heat-treating process that enhances the strength even further. The Maxi-Light 94 Series is the perfect connecting rod for high horsepower, high rpm applications where the lightest rotating mass is a must. Includes 3/8 H-11 tool steel bolts rated at 220,000 p.s.i. For 7/16 bolt, use X4 or X5 series. Also available with the AMS5844 rod bolt upgrade rated at 280,000 p.s.i. Specify "UPG".

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
ML94000B?-8	5.700" / 2.125" / 0.927" / 0.941"
ML94003B?-8	5.850" / 2.125" / 0.927" / 0.941"
ML94002B?-8	6.000" / 2.125" / 0.927" / 0.941"
ML94040B?-8	6.200" / 2.125" / 0.927" / 0.941"
ML94900B?-8	Custom / 2.125" / 0.927" / 0.941"
ML94005B?-8	5.700" / 2.225" / 0.927" / 0.941"
ML94008B?-8	5.850" / 2.225" / 0.927" / 0.941"
ML94006B?-8	6.000" / 2.225" / 0.927" / 0.941"
ML94009B?-8	6.125" / 2.225" / 0.927" / 0.941"
ML94041B?-8	6.200" / 2.225" / 0.927" / 0.941"
ML94007B?-8	6.250" / 2.225" / 0.927" / 0.941"
ML94905B?-8	Custom / 2.225" / 0.927" / 0.941"

Replace "?" with desired Series number (1, 2, 3, 4 or 5).

## MAXI-LIGHT® 93 SERIES 1

**WEIGHT:** 5.7" @ 460g • 6.0" @ 475g  
**HORSEPOWER RANGE:** 350-425 (oval)  
**HORSEPOWER RANGE:** 400-475 (drag)

## MAXI-LIGHT® 93 SERIES 2

**WEIGHT:** 5.7" @ 525g • 6.0" @ 535g  
**HORSEPOWER RANGE:** 425-525 (oval)  
**HORSEPOWER RANGE:** 475-575 (drag)

## MAXI-LIGHT® 93 SERIES 3

**WEIGHT:** 5.7" @ 550g • 6.0" @ 560g  
**HORSEPOWER RANGE:** 525-600 (oval)  
**HORSEPOWER RANGE:** 575-650 (drag)

## MAXI-LIGHT® 93 SERIES 4

**WEIGHT:** 5.7" @ 595g • 6.0" @ 605g  
**HORSEPOWER RANGE:** 600-700 (oval)  
**HORSEPOWER RANGE:** 650-750 (drag)

## MAXI-LIGHT® 93 SERIES 5

**WEIGHT:** 5.7" @ 620g • 6.0" @ 630g  
**HORSEPOWER RANGE:** 650-750 (oval)  
**HORSEPOWER RANGE:** 750-850 (drag)

## MAXI-LIGHT® 94 SERIES 1

**WEIGHT:** 5.7" @ 460g • 6.0" @ 475g  
**HORSEPOWER RANGE:** 350-500 (oval)  
**HORSEPOWER RANGE:** 400-550 (drag)

## MAXI-LIGHT® 94 SERIES 2

**WEIGHT:** 5.7" @ 525g • 6.0" @ 535g  
**HORSEPOWER RANGE:** 500-625 (oval)  
**HORSEPOWER RANGE:** 550-675 (drag)

## MAXI-LIGHT® 94 SERIES 3

**WEIGHT:** 5.7" @ 550g • 6.0" @ 560g  
**HORSEPOWER RANGE:** 625-800 (oval)  
**HORSEPOWER RANGE:** 675-850 (drag)

## MAXI-LIGHT® 94 SERIES 4

**WEIGHT:** 5.7" @ 595g • 6.0" @ 605g  
**HORSEPOWER RANGE:** 800+ (oval)  
**HORSEPOWER RANGE:** 850+ (drag)

## MAXI-LIGHT® 94 SERIES 5

**WEIGHT:** 5.7" @ 620g • 6.0" @ 630g  
**HORSEPOWER RANGE:** 850+ (oval)  
**HORSEPOWER RANGE:** 900+ (drag)

# steel billet connecting rods

Big Block Chevrolet V8 - 366 396 402 427 454 502



## BILLET

Crower's Billet big block Chevrolet rod features built-in stroker design for added cam-to-rod clearance. This is our strongest, most reliable BB Chevy steel billet rod available. Machined exclusively from USA made, 4340 chromoly steel on state-of-the-art CNC machining centers. Incorporates the latest Crower cap screw design and includes 7/16 H-11 tool steel bolts rated at 220,000 p.s.i.

**WEIGHT:** 6.136" @ 850g • 6.386" @ 870g

**HORSEPOWER RANGE:** 1000

**RPM RANGE:** 8500

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>B93010B-8</b>	6.136" / 2.325" / 0.990" / 0.991"
<b>B93011B-8</b>	6.386" / 2.325" / 0.990" / 0.991"
<b>B93014B-8</b>	6.405" / 2.325" / 0.990" / 0.991"
<b>B93012B-8</b>	6.536" / 2.325" / 0.990" / 0.991"
<b>B93015B-8</b>	6.625" / 2.325" / 0.990" / 0.991"
<b>B93016B-8</b>	6.700" / 2.325" / 0.990" / 0.991"
<b>B93017B-8</b>	6.800" / 2.325" / 0.990" / 0.991"
<b>B93911B-8</b>	Custom / under 7.250" / 2.325" / .990" / .991"
<b>B93909B-8</b>	Custom / over 7.250" / 2.325" / .990" / .991"

If Pressed Fit Pin desired, replace "B" after p/n (ex. B93010PF-8). All weights are approximate.

## MIDWEIGHT

The Crower MidWeight design is 40 to 50 grams lighter than our standard Billet rod, yet it's durable enough to run in mid to high horsepower applications. Fully machined from USA made, 4340 chromoly steel, the MidWeight features the latest Crower cap screw design. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 6.136" @ 800g • 6.386" @ 820g

**HORSEPOWER RANGE:** 800

**RPM RANGE:** 8000

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>M93010B-8</b>	6.136" / 2.325" / 0.990" / 0.991"
<b>M93011B-8</b>	6.386" / 2.325" / 0.990" / 0.991"
<b>M93014B-8</b>	6.405" / 2.325" / 0.990" / 0.991"
<b>M93012B-8</b>	6.536" / 2.325" / 0.990" / 0.991"
<b>M93015B-8</b>	6.625" / 2.325" / 0.990" / 0.991"
<b>M93016B-8</b>	6.700" / 2.325" / 0.990" / 0.991"
<b>M93017B-8</b>	6.800" / 2.325" / 0.990" / 0.991"
<b>M93911B-8</b>	Custom / under 7.250" / 2.325" / .990" / .991"
<b>M93909B-8</b>	Custom / over 7.250" / 2.325" / .990" / .991"

If Pressed Fit Pin desired, replace "B" after p/n (ex. M93010PF-8). All weights are approximate.

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## MAXI-LIGHT®

Extremely light, yet unbelievably strong, the Maxi-Light is intended for use in moderate horsepower applications where light rotating mass is a must. Currently the lightest steel billet rod available on the market for big block Chevrolet. Machined exclusively from USA made, 4340 chromoly steel. Includes 7/16 H-11 tool steel cap screw bolts rated at 220,000 p.s.i.

**WEIGHT:** 6.136" @ 730g • 6.386" @ 750g

**HORSEPOWER RANGE:** 750

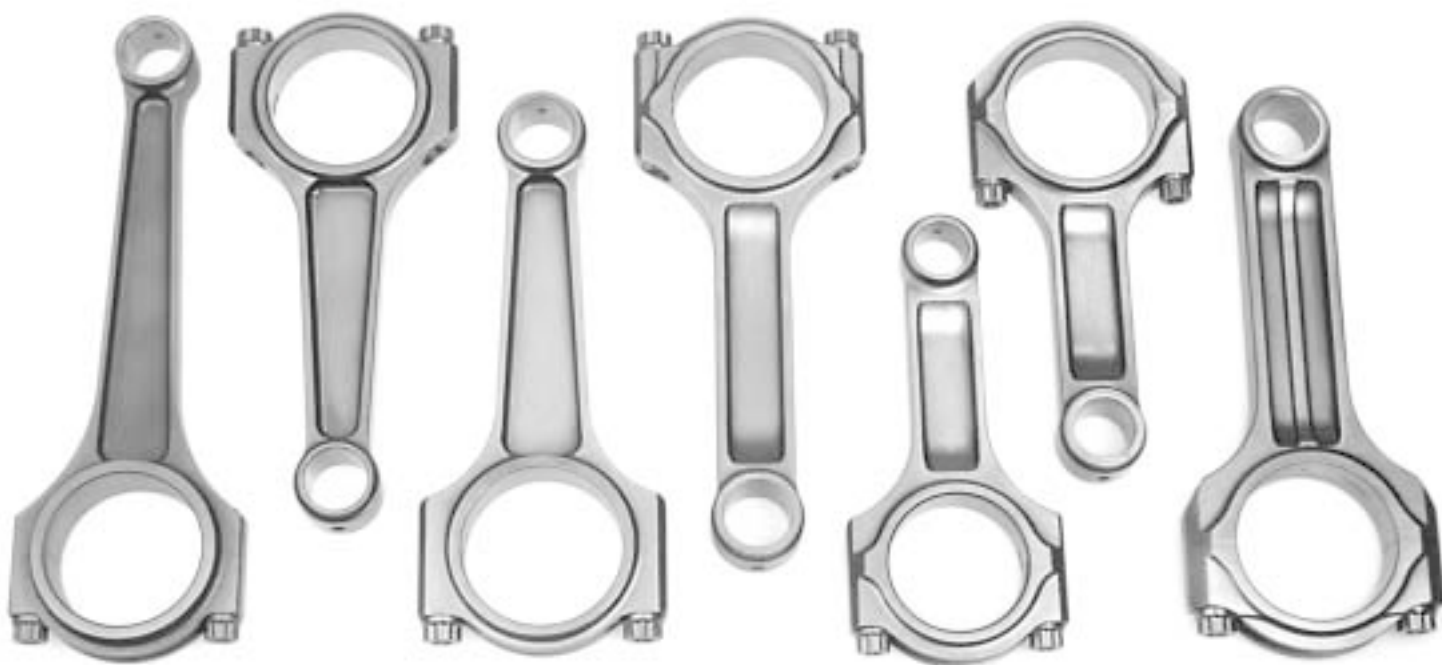
**RPM RANGE:** 7500

**TORQUE SPECS:** 75 ft. lbs.

Part No.	C-to-C / B.E. Bore / P.E. Bore / B.E. Width
<b>ML93010B4-8</b>	6.136" / 2.325" / 0.990" / 0.991"
<b>ML93011B4-8</b>	6.386" / 2.325" / 0.990" / 0.991"
<b>ML93014B4-8</b>	6.405" / 2.325" / 0.990" / 0.991"
<b>ML93012B4-8</b>	6.536" / 2.325" / 0.990" / 0.991"
<b>ML93015B4-8</b>	6.625" / 2.325" / 0.990" / 0.991"
<b>ML93016B4-8</b>	6.700" / 2.325" / 0.990" / 0.991"
<b>ML93017B4-8</b>	6.800" / 2.325" / 0.990" / 0.991"
<b>ML93911B4-8</b>	Custom / under 7.250" / 2.325" / .990" / .991"
<b>ML93909B4-8</b>	Custom / over 7.250" / 2.325" / .990" / .991"

If Pressed Fit Pin desired, replace "B" after p/n (ex. ML93010PF4-8). All weights are approximate. Note: BBC Maxi-Light rods are available in "X4" series only.

# steel billet connecting rods



## CHEVROLET/GM

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93900B-8</b>	262-400 V8	Custom	2.125"	.927"
<b>B93905B-8</b>	262-400 V8	Custom	2.225"	.927"
<b>B93909B-8</b>	396-454 V8	Custom (7.250" & over)	.990"	
<b>B93911B-8</b>	396-454 V8	Custom (under 7.250")	.990"	
<b>B93906B-6</b>	Chevy 6 cyl	Custom	Specify	Specify
<b>B93731B-4</b>	GM L850 (2.2L)	5.767"	2.047"	.787"
<b>B93732B-4</b>	GM 2.4L	5.715"	2.015"	.866"
<b>B93736B-4</b>	Saturn 1.9L	5.712"	1.975"	.768"
<b>B93051B-8</b>	LS1 V8	6.100"	2.225"	.944"

If press fit pin is desired, specify "PF" after part number.

## BUICK

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93907B-6</b>	Buick 6 cyl	Custom	Specify	Specify
<b>B93908B-8</b>	Buick V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

## OLDSMOBILE

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93956B-8</b>	Olds V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

## PONTIAC

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93960B-8</b>	Pontiac V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

## FORD

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93074B-4</b>	2.0L 4 cyl	5.000"	Stock	0.944"
<b>B93075B-4</b>	2.3L 4 cyl	5.200"	Stock	0.912"
<b>B93974B-4</b>	2.0L-2.3L 4 cyl	Custom	Specify	Specify
<b>B93788B-4</b>	Focus ZX3	5.482"	1.965"	0.785"
<b>B93926B-6</b>	Ford 6 cyl	Custom	Specify	Specify
<b>B93024B-8</b>	289-302 V8	5.090"	2.239"	0.912"
<b>B93025B-8</b>	289-302 V8	5.155"	2.239"	0.912"
<b>B93026B-8</b>	289-302 V8	5.315"	2.239"	0.912"
<b>B93925B-8</b>	289-302 V8	Custom	Specify	Specify
<b>B93020B-8</b>	351C V8	5.780"	2.436"	0.912"
<b>B93921B-8</b>	351C V8	Custom	Specify	Specify
<b>B93023B-8</b>	351W V8	5.956"	2.426"	0.912"
<b>B93923B-8</b>	351W V8	Custom	Specify	Specify
<b>B93018B-8</b>	390-427 V8	6.489"	2.590"	0.975"
<b>B93918B-8</b>	390-427 V8	Custom	Specify	Specify
<b>B93027B-8</b>	428-460 V8	6.605"	2.652"	1.040"
<b>B93919B-8</b>	428-460 V8	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

## MOPAR

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93031B-8</b>	273-360 "A" V8	6.120"	2.250"	0.984"
<b>B93931B-8</b>	273-360 "A" V8	Custom	Specify	Specify
<b>B93935B-8</b>	361-400 "B" V8	Custom	Specify	Specify
<b>B93033B-8</b>	413-440 "RB" V8	6.766"	2.500"	1.094"
<b>B93934B-8</b>	426 Hemi V8	Custom	Specify	Specify
<b>B93785B-4</b>	Neon/Eclipse 2.0L	5.472"	2.008"	.827"
<b>B93786B-4</b>	PT Cruiser 2.4L	5.945"	2.086"	.866"

If press fit pin is desired, specify "PF" after part number.

## MOTORCYCLE (4 Cycle)

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93088B-4</b>	Suzuki GSX	4.606"	1.614"	0.788"
<b>B93089B-4</b>	Suzuki Hayabusa	4.702"	1.614"	0.788"
<b>B93975B-2</b>	2 cylinder	Custom	Specify	Specify
<b>B93976B-4</b>	4 cylinder	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

## CUSTOM APPLICATIONS

Part No	Description	Length	B.E. Bore	Pin Dia
<b>B93970B-4</b>	4 cylinder	Custom	Specify	Specify
<b>B93971B-6</b>	6 cylinder	Custom	Specify	Specify
<b>B93972B-8</b>	8 cylinder	Custom	Specify	Specify
<b>B93973B-12</b>	12 cylinder	Custom	Specify	Specify

If press fit pin is desired, specify "PF" after part number.

**Note: All non standard orders require a minimum 50% deposit.**



## ECONO BILLETS - FAST TIME SERIES

Crower has released a budget conscious 4340 steel billet rod that is manufactured offshore like the other inexpensive brands, however these rods are finished in-house at Crower by experienced connecting rod personnel. Available only for popular Honda's and limited to 15 lbs boost.

A93828B-4 (B18A/B) • A93829B-4 (B18C) • A93844B-4 (B16A) • A93845B-4 (D16) • A93848B-4 (H22)

# steel billet connecting rods



Crower premium, 100% American made, steel billet connecting rods are the smart choice if turning excessive rpm, high boost and/or a sizeable nitrous shot in your high performance Sport Compact application.

## ROD BUSHINGS



Part No	Application	Dimension
<b>90926-1</b>	B16A, B Series, 4G63 (2g)	.827"
<b>90947-1</b>	D16, D15	.748"
<b>90966-1</b>	H22, H23, 4G63 (1g), Toyota	.866"
<b>90987-1</b>	VW, Toyota	.787"
<b>90922-1</b>	Custom application	Specify

## ROD BOLTS



Part No	Torque	Dimension
<b>90827-1</b>	45 ft lbs	3/8 x 1.600
<b>90824-1</b>	25 ft lbs	5/16 x 1.500

Crower can rebuild your existing Crower connecting rods for extended use by rebushing the pin end, resizing, magna-flux inspection and new rod bolt installation. Send the rods to Crower (attn: Rod Dept) along with contact and payment information.

## HONDA/ACURA

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93726B-4</b>	Acura	D16A (ZC)	5.394"	1.890"	0.892"	0.748"	19.0 0.710"
<b>B93727B-4</b>	Acura	B17A VTEC	5.208"	1.890"	0.935"	0.827"	21.0 0.900**
<b>B93728B-4</b>	Acura	B18A-B/B20B	5.394"	1.890"	0.935"	0.827"	21.0 0.900**
<b>B93729B-4</b>	Acura	B18C VTEC	5.433"	1.890"	0.858"	0.827"	21.0 0.900**
<b>B93738B-4</b>	Acura	K20A (RSX)	5.473"	2.008"	0.780"	0.866"	22.0 0.900**
<b>B93739B-4</b>	Honda	F20C (S2000)	6.023"	2.008"	0.940"	0.905"	23.0 0.940"
<b>B93740B-4</b>	Honda	D17A Civic	5.394"	1.890"	0.780"	0.748"	19.0 0.900**
<b>B93741B-4</b>	Honda	1.5L Civic	5.279"	1.772"	0.897"	0.748"	19.0 0.710"
<b>B93742B-4</b>	Honda	1342cc	5.436"	1.693"	0.897"	0.748"	19.0 0.710"
<b>B93743B-4</b>	Honda	1237cc	5.065"	1.693"	0.858"	0.669"	17.0 0.710"
<b>B93744B-4</b>	Honda	B16A VTEC	5.290"	1.890"	0.935"	0.827"	21.0 0.900**
<b>B93745B-4</b>	Honda	D16 Series	5.394"	1.890"	0.892"	0.748"	19.0 0.716"
<b>B93746B-4</b>	Honda	KA24 (CRV)	5.985"	2.008"	0.780"	0.866"	22.0 0.900**
<b>B93747B-4</b>	Honda	H23/F22	5.580"	2.008"	0.935"	0.866"	22.0 0.940**
<b>B93748B-4</b>	Honda	H22 VTEC	5.636"	2.008"	0.935"	0.866"	22.0 0.940**
<b>B93749B-4</b>	Honda	F23	5.551"	1.890"	0.780"	0.866"	22.0 0.780"
<b>B93720B-4</b>	Honda	B16 Stroker	5.276"	1.890"	0.935"	0.787"	20.0 0.900"
<b>B93721B-4</b>	Honda	B16 Stroker	5.356"	1.890"	0.935"	0.787"	20.0 0.900"
<b>B93722B-4</b>	Honda	B18/20 Stroker	5.512"	1.890"	0.935"	0.787"	20.0 0.900"
<b>B93723B-4</b>	Honda	B18/20 Stroker	5.564"	1.890"	0.935"	0.787"	20.0 0.900"

\*Indicates that this spec will not fit factory piston pin boss.  
All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## MITSUBISHI

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93761B-4</b>	DSM	4G63 (1 gen)	5.906"	1.890"	1.115"	0.827"	21.0 1.115"
<b>B93762B-4</b>	DSM	4G63 (2 gen)	5.906"	1.890"	1.038"	0.866"	22.0 1.038"
<b>B93763B-6</b>	DSM	3000GT	5.548"	2.086"	0.820"	0.866"	22.0 0.822"
<b>B93785B-4</b>	DSM	420A	5.472"	2.008"	1.031"	0.827"	21.0 1.031"

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## NISSAN

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93773B-4</b>	Nissan	SR20	5.366"	2.008"	0.896"	0.866"	22.0 0.858"
<b>B93774B-4</b>	Nissan	KA24 (240sx)	6.495"	2.086"	0.973"	0.827"	21.0 1.000"
<b>B93776B-6</b>	Nissan	VG30 (300zx)	6.069"	2.086"	0.818"	0.866"	22.0 0.858"
<b>B93777B-6</b>	Nissan	RB26DETT	4.783"	2.008"	0.858"	0.827"	21.0 0.858"

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## TOYOTA

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93750B-4</b>	Toyota	2RZ (Tacoma)	5.787"	2.205"	1.015"	0.905"	23.0 1.015"
<b>B93752B-4</b>	Toyota	4AGE	4.803"	1.772"	0.859"	0.787"	20.0 0.860"
<b>B93753B-4</b>	Toyota	3SGTE (MR2)	5.410"	2.008"	1.053"	0.866"	22.0 1.053"
<b>B93754B-4</b>	Toyota	5SFE (MR2)	5.433"	2.166"	1.053"	0.866"	22.0 1.053"
<b>B93755B-4</b>	Toyota	3TC	4.850"	2.008"	1.053"	0.866"	22.0 1.053"
<b>B93756B-6</b>	Toyota	Supra 2JZ	5.590"	2.166"	1.020"	0.866"	22.0 1.000"
<b>B93757B-6</b>	Toyota	Supra 7M/5M	5.980"	2.166"	0.977"	0.866"	22.0 1.010"
<b>B93751B-4</b>	Toyota	1ZZ (Corolla)	5.770"	1.850"	0.780"	0.787"	20.0 0.780"
<b>B93759B-4</b>	Toyota	2ZZ (Celica)	5.433"	1.890"	0.780"	0.787"	20.0 0.780"
<b>B93758B-6</b>	Toyota	Land Cruiser	6.062"	2.383"	1.095"	1.023"	26.0 1.095"

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## SUBARU

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93765B-4</b>	Subaru	EJ25 Phase II	5.162"	2.166"	0.843"	0.905"	23.0 0.843"
<b>B93767B-4</b>	Subaru	EJ25 Phase I	5.187"	2.008"	0.843"	0.905"	23.0 0.843"
<b>B93766B-4</b>	Subaru	EJ20 WRX	5.135"	2.166"	0.843"	0.905"	23.0 0.843"

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## VOLKSWAGEN

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93780B-4</b>	VW	1.8L Golf	5.670"	1.992"	0.983"	0.787"	20.0 0.983"
<b>B93781B-4</b>	VW	2.0L Golf	6.256"	1.992"	0.983"	0.787"	20.0 0.983"
<b>B93782B-6</b>	VW	VR6	6.460"	2.237"	0.784"	0.787"	20.0 0.784"

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

## CUSTOM APPLICATIONS

Part No	Make	Engine	C-to-C	B.E. Bore	B.E. Thick	P.E. Bore (mm)	P.E. Thick
<b>B93970B-4</b>	Custom	4 cyl	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.
<b>B93971B-6</b>	Custom	6 cyl	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.
<b>B93972B-8</b>	Custom	8 cyl	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.
<b>B93973B-12</b>	Custom	12 cyl	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.	Specify all specs.

All rods come bushed for floating pin. If press fit pin is desired, specify "PF" after part number.

**Note: All non standard orders require a minimum 50% deposit.**

# custom steel billet connecting rods



## CUSTOM BILLET CONNECTING RODS

Crower is the industry leader in high performance connecting rods. Choose from the largest selection of makes available including Honda/Acura, BMW, Porsche, Ferrari, Nissan, Toyota, Audi, Volkswagen and more. CNC machined from premium quality 4340 chromoly steel, Crower billet rods are the only choice when running nitrous oxide, high boost or high rpm in your vehicle. Contact Crower Tech for more information, including availability.

## MANUFACTURING

Crower has the manufacturing capability to produce connecting rods for any type of performance requirement. As you can see by the Crowerod availability list, we make a wide variety of rods. All are equipped with cap screw style rod bolts and hollow dowel alignment sleeves in order to guarantee ultimate clamping.

## MATERIALS

Only the choicest American made materials are used in the production of these premium rods.

- 4340 Chromoly Steel made in the USA.
- Uniform hardness developed by heat treatment.
- High fatigue strength is ideal for stressed parts.
- H-11 (220,000 psi) or AMS5844 (280,000 psi) bolts.

## CROWEROD AVAILABILITY

### DOMESTICS

Buick  
Cadillac  
Chevrolet  
Chrysler  
Dodge  
Ford  
GMC  
Mopar  
Oldsmobile  
Plymouth  
Pontiac

### IMPORT

BMW  
Nissan/Datsun  
Fiat  
Honda/Acura  
Jaguar  
Mercedes Benz  
Mitsubishi  
Porsche  
Renault  
Toyota/Lexus  
VW/Audi

### MOTORCYCLES

BSA  
Ducati  
Harley Davidson  
Honda  
Indian  
Kawasaki  
Norton  
Royal Infield  
Suzuki  
Triumph  
Yamaha

### TRUCKS

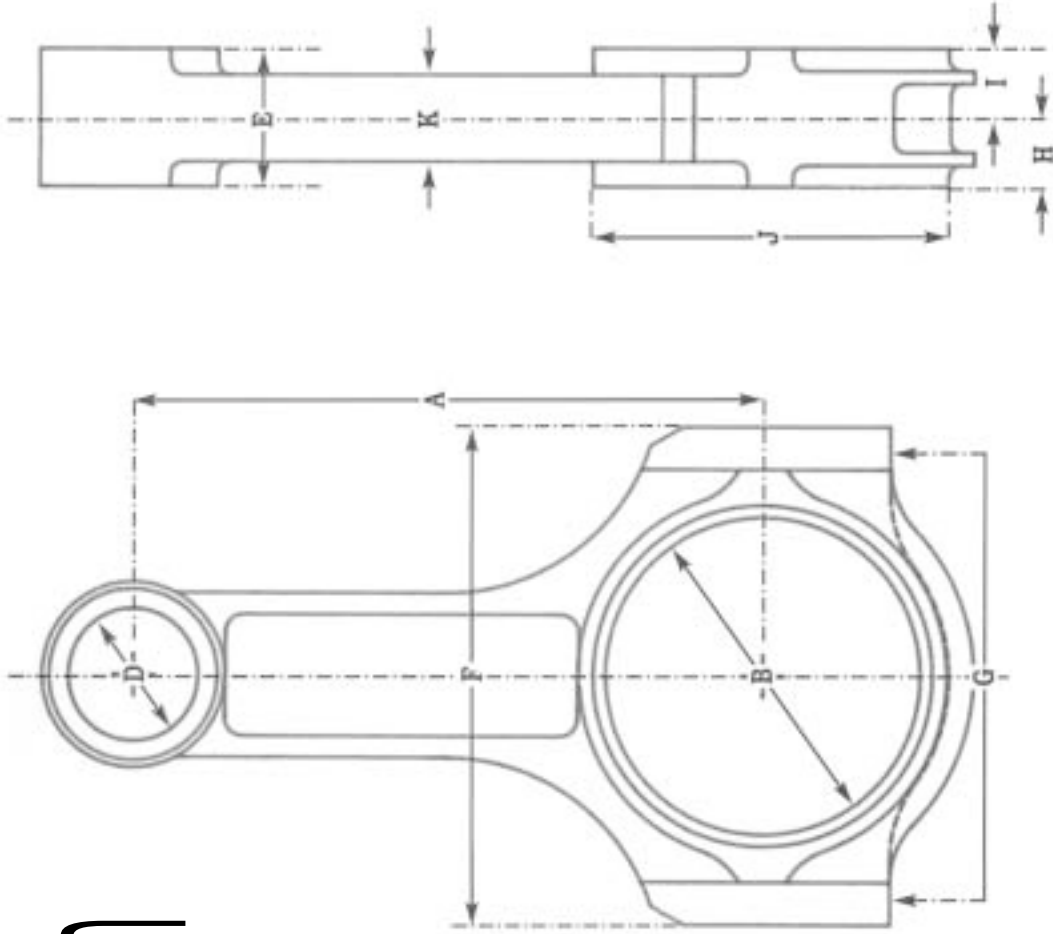
Chevrolet  
Caterpillar  
Cummings  
Dodge  
Ford  
GMC  
Jeep  
John Deere  
Mack  
Peterbuilt  
White





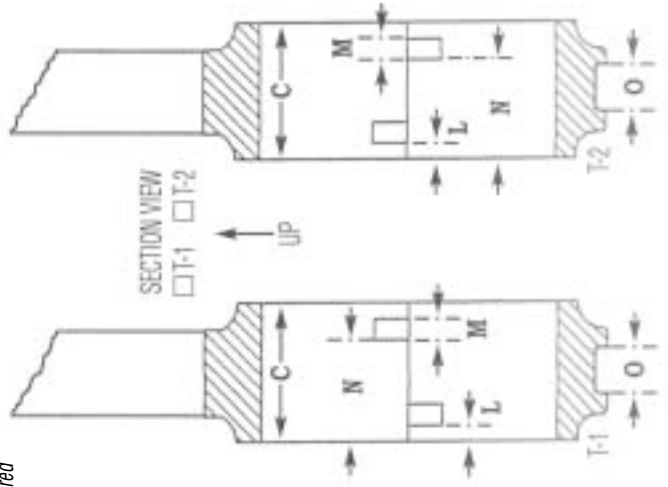
# Crowder form

Quantity Desired: \_\_\_\_\_  
 I-Beam    H-Beam  
 4340 Steel    94 Series    Titanium  
**FAX COMPLETED FORM TO 619-422-9067**  
**EMAIL: engr@crowder.com**



- A.\* \_\_\_\_\_ Center to Center Length
- B.\* \_\_\_\_\_ Big End Housing Bore
- C.\* \_\_\_\_\_ Big End Width
- D.\* \_\_\_\_\_ Pin End Bore
- E.\* \_\_\_\_\_ Pin End Width
- F. \_\_\_\_\_ Overall BE Width
- G. \_\_\_\_\_ Bolt to Bolt Width
- H. \_\_\_\_\_ BE Offset
- I. \_\_\_\_\_ BE Offset
- J. \_\_\_\_\_ Big End Ring Diameter
- K. \_\_\_\_\_ Beam Width
- L. \_\_\_\_\_ Tang Positioning
- M. \_\_\_\_\_ Tang Width
- N. \_\_\_\_\_ Tang Dimension
- O. \_\_\_\_\_ Rib to Rib Width

\*Required



Engine Make: \_\_\_\_\_  
 No. of Cylinders: \_\_\_\_\_  
 Cylinder Bore Size: \_\_\_\_\_  
 Target Weight: \_\_\_\_\_  
 Max RPM: \_\_\_\_\_  
 Max Horsepower: \_\_\_\_\_  
 Turbo/Boost: \_\_\_\_\_ p.s.i./bar  
 Nitrous Oxide: \_\_\_\_\_ HP Shot

Previous W.O. No.: \_\_\_\_\_  
 Customer: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_

Measurement in inches or millimeters

# titanium connecting rods

## 6AL4V TITANIUM RODS

The demands made on a connecting rod, especially in a racing engine, are hard to visualize. Titanium allows stresses to approach the breaking point for considerably longer periods than an equivalent steel or aluminum rod. Crower uses only aerospace quality, 6AL4V titanium in the manufacturing of our billet titanium Crowerods. Titanium has a lower thermal expansion rate than steel and much less than aluminum, which allows the racer to hold closer tolerances within the engine. Crower offers a wide variety of applications available to choose from. Everything from a 4 cycle motorcycle to a 7.650" long big block Chevrolet for Pro Modified. All Crower titanium connecting rods are equipped with cap screw bolts and stroker design to insure plenty of camshaft and case clearance, also reducing weight in noncritical areas.

Special "pressure fed" oiling hole from big end to pin end is available on all titanium and steel billet Crowerods. Specify this option when ordering.

Additional oiling hole insures more than an adequate amount of lubrication at the critical pin end.

All titanium rods come standard with aluminum/bronze bushings.

Crower uses only 6AL4V titanium, with a composition of 6% aluminum and 4% vanadium.

Crower is a complete production facility. Every step of manufacture is performed under rigid quality control standards

Custom rods available in any length center to center, pin end size and big end I.D.

Hollow dowel alignment fastening system provides positive cap alignment and "no hassle" removal.

Extremely reliable H-11 tool steel bolts, rated at 220,000 p.s.i. or new aircraft quality, AMS5844 alloy bolts that are corrosion resistant and rated at 285,000 p.s.i. Both feature 12-point heads.

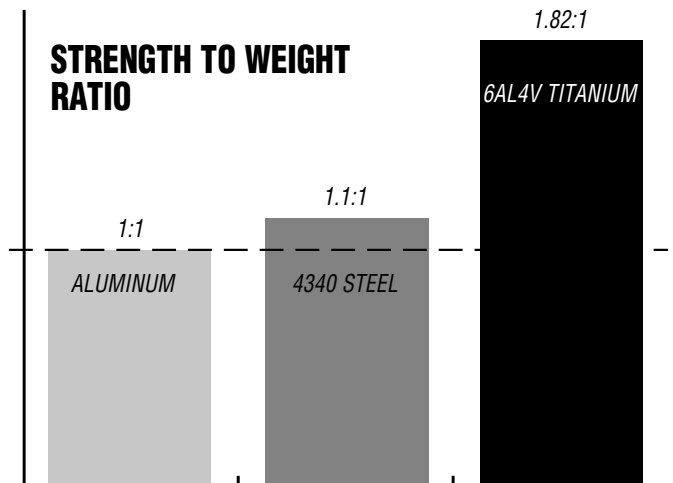
Special plasma sprayed sides prevents galling that occurs when titanium rubs with steel.

**TITANIUM  
PRO MOD  
7.650"**

## AMS5844 ROD BOLT UPGRADE

Crower now offers a new AMS5844 rod bolt upgrade option available for all steel billet and titanium rods. Highly recommended for extreme duty rpm and endurance applications. Rated at 285,000 p.s.i., these bolts are corrosion resistant, nonmagnetic and deliver ultimate clamping capabilities for the highest cycle life. Be sure and specify upgrade option when ordering.

## STRENGTH TO WEIGHT RATIO



# titanium connecting rods



## CHEVROLET

Part No	Description	Length	B.E. Bore	Pin Dia
ST93000B-8	262-400 V8	5.700"	2.125"	.927"
ST93003B-8	262-400 V8	5.850"	2.125"	.927"
ST93002B-8	262-400 V8	6.000"	2.125"	.927"
ST93900B-8	262-400 V8	Custom	2.125"	.927"
ST93005B-8	262-400 V8	5.700"	2.225"	.927"
ST93008B-8	262-400 V8	5.850"	2.225"	.927"
ST93006B-8	262-400 V8	6.000"	2.225"	.927"
ST93009B-8	262-400 V8	6.125"	2.225"	.927"
ST93007B-8	262-400 V8	6.250"	2.225"	.927"
ST93905B-8	262-400 V8	Custom	2.225"	.927"
ST93010B-8	396-454 V8	6.136"	2.325"	.990"
ST93011B-8	396-454 V8	6.386"	2.325"	.990"
ST93014B-8	396-454 V8	6.405"	2.325"	.990"
ST93012B-8	396-454 V8	6.536"	2.325"	.990"
ST93015B-8	396-454 V8	6.625"	2.325"	.990"
ST93016B-8	396-454 V8	6.700"	2.325"	.990"
ST93017B-8	396-454 V8	6.800"	2.325"	.990"
ST93909B-8	396-454 V8	Custom (7.250" & over)	.990"	
ST93911B-8	396-454 V8	Custom (under 7.250")	.990"	
ST93906B-6	Chevy 6 cyl	Custom	Specify	Specify

All Crower small & big block titanium rods are stroker design.  
Crower Moly lube #90897 is supplied with all sets of titanium rods.

### Approximate Chevrolet V8 Weights

Small Block: 5.700" @ 480g • 6.000" @ 495g • 6.250" @ 548g  
Big Block: 6.136" @ 540g • 6.536" @ 625g • 7.650" @ 724g

## BUICK

Part No	Description	Length	B.E. Bore	Pin Dia
T93907B-6	Buick 6 cyl	Custom	Specify	Specify
T93908B-8	Buick V8	Custom	Specify	Specify

Crower Moly lube #90897 is supplied with all sets of titanium rods.

## FORD

Part No	Description	Length	B.E. Bore	Pin Dia
T93974B-4	2.0L / 2.3L 4 cyl	Custom	Specify	Specify

Crower Moly lube #90897 is supplied with all sets of titanium rods.

## MOPAR

Part No	Description	Length	B.E. Bore	Pin Dia
T93934B-8	426 Hemi V8	Custom	Specify	Specify

Specify (B) Bushed or (PF) Pressed Fit after part number.  
Crower Moly lube #90897 is supplied with all sets of titanium rods.

## IMPORT APPLICATIONS

Part No	Description	Length	B.E. Bore	Pin Dia
T93970B-4	4 cyl	Custom	Specify	Specify
T93971B-6	6 cyl	Custom	Specify	Specify
T93972B-8	8 cyl	Custom	Specify	Specify
T93973B-12	12 cyl	Custom	Specify	Specify

## MOTORCYCLE (4 Cycle)

Part No	Description	Length	B.E. Bore	Pin Dia
T93088B-4	Suzuki GSX	4.606"	1.614"	0.788"
T93089B-4	Suzuki Hayabusa	4.702"	1.614"	0.788"
T93975B-2	2 cylinder	Custom	Specify	Specify
T93976B-4	4 cylinder	Custom	Specify	Specify

## CUSTOM APPLICATIONS

Part No	Description	Length	B.E. Bore	Pin Dia
T93912B-4	Custom 4 cyl	Custom	Specify	Specify
T93913B-6	Custom 6 cyl	Custom	Specify	Specify
T93914B-8	Custom 8 cyl	Custom	Specify	Specify

**Note: All non standard orders require a minimum 50% deposit.**



Crower has the capability of manufacturing just about any type of titanium connecting rod. From a 7.650" ProMod to a 5.433" Acura (shown above).

# rod bolts, nuts & bushings



## ROD BOLTS

Available in three unique styles, depending on your rod design and horsepower requirement. All Crower Sportsman and forged rods feature high strength steel alloy bolts (180,000 p.s.i.), while all Crower steel billet and titanium rods come standard with H-11 tool steel bolts (220,000 p.s.i.). But for extreme rpm and endurance applications, Crower offers the new AMS5844 bolt (285,000 p.s.i.) available as an upgrade option. Both feature a 12-point head and rolled fillets, thread rolled after heat-treat. To determine which bolts are required for a particular rod, contact Crower. Sold by the piece. Bolts are measured from under the head to the end of the threaded portion.

Part No.	Description	Torque Specs*	Dimension
<b>8740 STEEL ALLOY (180,000 p.s.i.)</b>			
90802-1	Thru-bolt (SB, F)	65 ft lbs	7/16 x 1.715"
90803-1	Thru-bolt (F)	65 ft lbs	7/16 x 1.940"
90804-1	Thru-bolt (F)	65 ft lbs	7/16 x 2.320"
90805-1	Thru-bolt (B, SP <sup>SB</sup> )	50 ft lbs	3/8 x 1.920"
90807-1	Thru-bolt (SB)	65 ft lbs	7/16 x 2.070"
90821-1	Cap Screw bolt 12-pt	70 ft lbs	7/16 x 1.800"
90828-1	Cap Screw bolt 12-pt (SP <sup>SB</sup> )	50 ft lbs	3/8 x 1.600"
90829-1	Cap Screw bolt 12-pt (SP <sup>SB</sup> )	70 ft lbs	7/16 x 1.800"
90846-1	Cap Screw (SSP)	70 ft lbs	7/16 x 1.440"
<b>H-11 TOOL STEEL ALLOY (220,000 p.s.i.)</b>			
90820-1	Cap Screw bolt 12-pt	75 ft lbs	7/16 x 1.800"
90824-1	Cap Screw bolt 12-pt	25 ft lbs	5/16 x 1.500"
90825-1	Cap Screw bolt 12-pt	75 ft lbs	7/16 x 1.700"
90826-1	Cap Screw bolt 12-pt	75 ft lbs	7/16 x 1.540"
90827-1	Cap Screw bolt 12-pt	45 ft lbs	3/8 x 1.600"
<b>AMS5844 STEEL ALLOY (280,000 p.s.i.)</b>			
90830-1	Cap Screw bolt 12-pt	90 ft lbs	7/16 x 1.540"
90831-1	Cap Screw bolt 12-pt	90 ft lbs	7/16 x 1.700"
90832-1	Cap Screw bolt 12-pt	90 ft lbs	7/16 x 1.800"
90842-1	Cap Screw bolt 12-pt	60 ft lbs	3/8 x 1.600"

\* Thru-bolt torque specs based on steel rods using motor oil.  
 \* Cap Screw 8740 torque specs based on steel rods using oil or anti-seize.  
 \* Cap Screw H-11 torque specs based on steel rods using oil or anti-seize.  
 \* AMS5844 torque specs based on steel rods using anti-seize.  
 \* Bolts for titanium rods require special coating available from Crower.  
 Specify -8 after part number if four cylinder, -12 if six or -16 in eight cyl.

Note: If using stretch method, Crower recommends .005" to .007".



## ROD NUTS

Crower offers two grades of quality rod nuts. The H-11 tool steel nuts are rated at 220,000 p.s.i., while the high strength steel alloy nuts are rated at 180,000 p.s.i. Sold separately, by the piece.

Part No.	Description	Dimension
90810-1	Billet Rods	7/16
90811-1	Forged Rods	7/16
90813-1	Billet Rods	11/32
90814-1	Billet and Sportsman Rods, 12-point	3/8



## ROD BOLT LUBRICANT

In order to achieve proper preload during rod bolt installation, it is important to use the lubricant that is recommended for that particular bolt and rod combination.

- Steel rods with 8740 bolts must use straight motor oil as lubricant.
- Steel rods with H-11 or upgraded AMS5844 bolts must use Anti-Seize (#90898).
- Titanium rods with H-11 or AMS5844 bolts must use Crower Moly (#90897).

Part No.	Description
90897	Crower Moly (Titanium rods w/H-11 or AMS5844)
90898	Heavy-Duty Anti-Seize (Steel rods w/H-11 or AMS5844)

Note: For steel rods with 8740 or H-11 bolts use straight motor oil.

Note: Crower #90898 is same as Loctite #51609



## ROD BUSHINGS

Crower uses premium aluminum-bronze one piece billet bushings in all of the rods we manufacture. These high quality bushings are sold separately, by the piece.

Part No.	Description	Dimension
90912-1	Ford, Aluminum-Bronze	.912"
90922-1	Custom, Aluminum-Bronze	-
90926-1	Import, Aluminum-Bronze	.826"
90927-1	SB Chevrolet, Aluminum-Bronze	.927"
90927N-1	SB Chevrolet, Alum-Bronze (small O.D.)	.927"
90940-1	Ford, Aluminum-Bronze	1.040"
90944-1	Ford, Aluminum-Bronze	.944"
90947-1	Import, Aluminum-Bronze	.748"
90966-1	VW, Chrysler, Honda, Alum-Bronze	.866"
90975-1	Ford, Aluminum-Bronze	.975"
90980-1	Pontiac, Aluminum-Bronze	.980"
90984-1	Mopar, Aluminum-Bronze	.984"
90990-1	BB Chevrolet, Aluminum-Bronze	.990"
90994-1	Mopar, Aluminum-Bronze	1.094"

Note: Custom orders available, specify bore, pin dia and length. Also available in sets.

## ALIGNMENT SLEEVES

Crower hollow dowel connecting rod alignment sleeves are precision ground from high grade alloy. Sold by the piece.

Part No.	Description	Dimension
90850-1	Rod alignment sleeve (1 only)	516
90851-1	Rod alignment sleeve (1 only)	38
90852-1	Rod alignment sleeve (1 only)	716



## STRETCH GAUGE

Crower highly recommends using a stretch gauge to tighten rod bolts to their recommended stretch figures. This tool will provide accurate and repeatable results every time if used correctly. Includes dial indicator, fixture and instructions.

Part No.	Description
90700	Rod bolt stretch gauge indicator

# crankshafts

## **CROWER CRANKSHAFTS**

Choose a Crower crankshaft and you'll get the finest high performance crankshaft made. The Crower crankshaft facility is like no other in the industry, utilizing massive, state-of-the-art CNC machining centers that work in unison, alongside seasoned master craftsmen. Crower crankshafts incorporate the unique combination of precision and attention to detail with high production capabilities, in a wide variety of designs and applications.

## **THE MATERIAL**

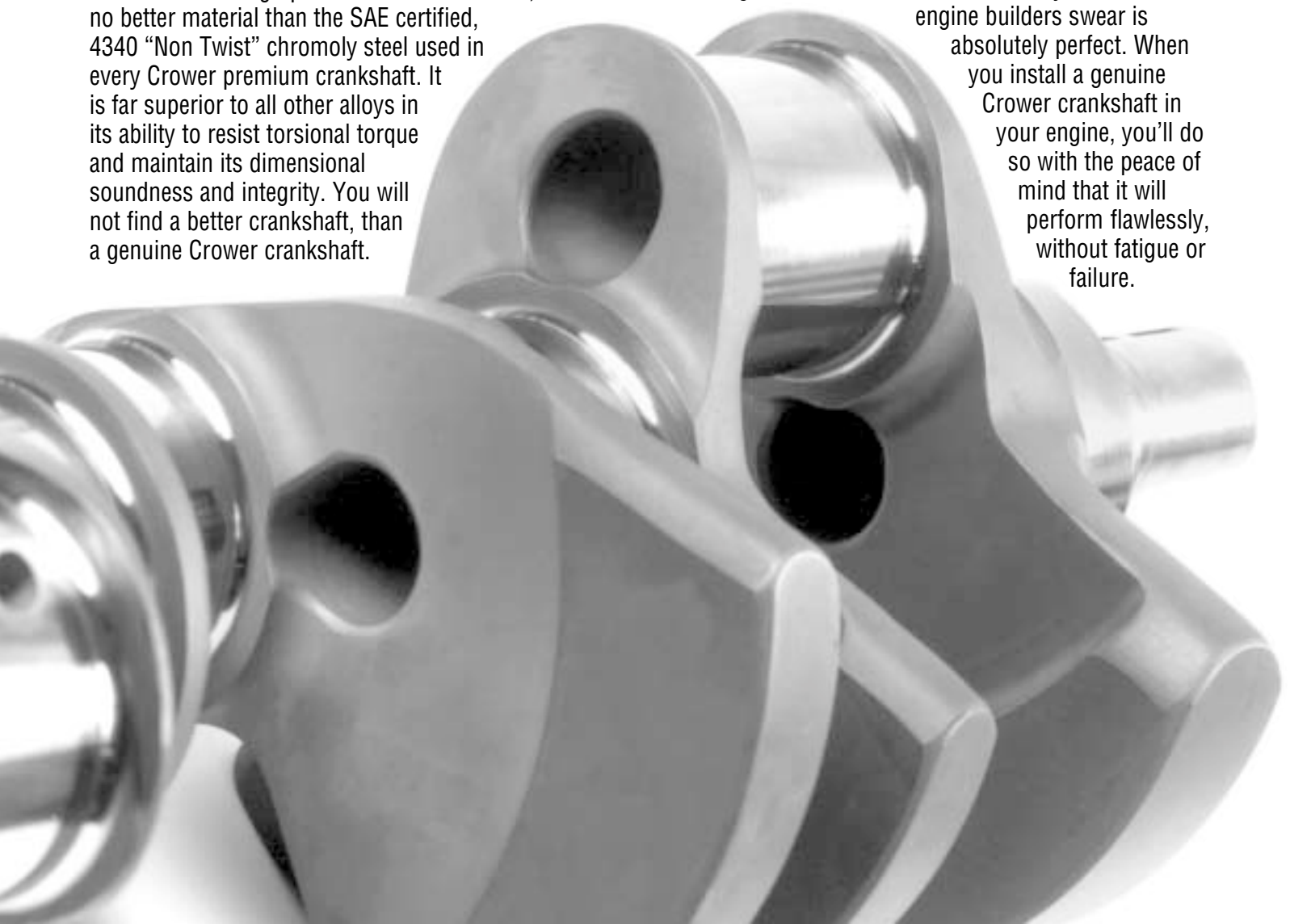
100% made in the USA, aerospace quality, vacuum degassed, 4340 chromoly steel is drop forged to form the strongest, most durable crankshaft money can buy. Some manufacturers put fancy, high tech names on the materials they use in their crankshafts. A good marketing tactic, but nothing more. The truth is, for the manufacture of high performance crankshafts, there is no better material than the SAE certified, 4340 "Non Twist" chromoly steel used in every Crower premium crankshaft. It is far superior to all other alloys in its ability to resist torsional torque and maintain its dimensional soundness and integrity. You will not find a better crankshaft, than a genuine Crower crankshaft.

## **MANUFACTURING**

Crower is the world's largest manufacturer of high performance crankshafts. We have created a very effective combination of streamlined production capabilities and quality engineering that produces better crankshafts, quicker and more accurately than any competing crankshaft manufacturer. It's called Crower "science," and it emphasizes creativity rather than dull routine. This gives Crower an unfair advantage and allows us to develop such innovative designs as the "Ultra-Light" crankshaft and the exclusive Crower "straight-shot" oiling system.

## **GUARANTEED**

When you purchase a Crower crankshaft you'll get a quality piece, manufactured from the finest materials to exacting tolerances, that goes unmatched in the high performance industry. You are guaranteed precision indexing and throw-to-throw consistency that some engine builders swear is absolutely perfect. When you install a genuine Crower crankshaft in your engine, you'll do so with the peace of mind that it will perform flawlessly, without fatigue or failure.



# crankshafts

## A TYPICAL SCENARIO

For years you've been running a stock crank and have never experienced rod bearing failure. You decide to "step-up" and replace your stock crank with an aftermarket brand. Immediately you encounter bearing scuff or total bearing failure. This scenario happens often, much to the dismay of the engine builder.



Looking from the rod, back up through the main, you can see daylight, indicating it's a genuine Crower crankshaft with the "straight-shot" oiling system.



The unique teardrop scoop and exclusive Crower "straight-shot" oiling system increases critical oil flow from the main bearings to the rod bearings.



Entry holes for the rod feed are located at the O.D. of the main, allowing oil to flow equally and unrestricted to the bearings. This is key to prolonging bearing life.

## THE SOLUTION – STRAIGHT-SHOT OILING

After extensive research and design, Crower engineers developed the straight-shot oiling system and virtually eliminated bearing burnout and customer complaints. It features two Crower exclusives, off-center drilling and the teardrop design oil hole, which scoops oil at the main and forces it into the rod feed hole. Although it's time consuming, we feel it's worth it.

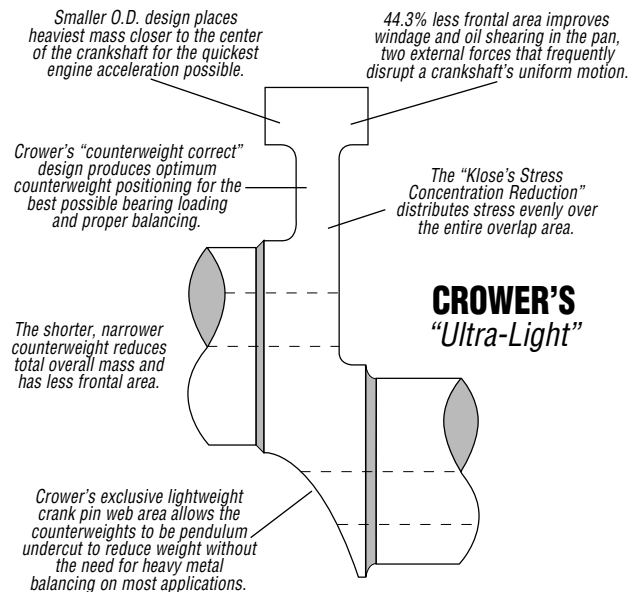
## THE REASON

On most aftermarket brands the rod feed hole is only drilled to the centerline of the main. This method of drilling doesn't deliver enough oil to the rod. This creates a high centrifuge, high pressure zone at the main, restricting critical oil flow intended for your rods. As engine rpm increases this centrifuge effect gets worse, possibly resulting in severe crankshaft damage or even total engine destruction. Not the performance characteristics you expected when you switched to an aftermarket brand crankshaft.

## THE PROVEN FACTS

It has been proven time and time again, "the lighter the parts, the quicker the throttle response." This is no more evident than in the components that make up the bottom end of an engine. Reducing a crankshaft's counterweight mass is critical in getting quicker acceleration and deceleration. It also alleviates stress and engine wear and improves oil shearing in the pan.

## PENDULUM UNDERCUTTING AND LIGHTWEIGHT PIN WEB AREA



## REVOLUTIONARY DESIGN

The Crower Ultra-Light crankshaft redefines the term "light rotating mass" by attaining just the right ratio of smaller O.D. counterweight with an exclusive lightweight crank pin web area. By lightening the crank pin web area we are able to CNC excess material from the center of the counterweights without adversely effecting balancing. This is Crower's patented pendulum undercutting. Lighter than any other crankshaft on the market, the Ultra-Light is structurally just as strong, and no more difficult to balance. Although competing manufacturer's claim to have comparable designs similar to the Crower Ultra-Light, consider the fact that it takes much more than just scalloping out the center of the counterweight to achieve the correct combination of light rotating mass and proper balance. Crower pioneered pendulum undercutting the counterweights back in 1989.

# crankshafts

## PURE-STOCK®

Part No	Description	Stroke	Page
<b>P95121</b>	262-350 V8 (No holes)	3.480"	168

Above crank is GM S38 Micro alloy forgings. 2.448" main size.

## STOCK-PLUS®

Part No	Description	Stroke	Page
<b>SP95121</b>	262-350 V8 (4 holes)	3.480"	168

Above crank is GM S38 Micro alloy forgings. 2.448" main size.

## ENDURO™

Part No	Description	Stroke	Page
<b>E95121</b>	262-350 V8 (2 or 4 holes)	3.480"	169
<b>E95122</b>	262-350 V8	3.500"	169
<b>E95124</b>	262-350 V8	3.625"	169
<b>E95125</b>	262-350 V8	3.750"	169
<b>E95127</b>	262-350 V8	3.875"	169
<b>E95128</b>	262-350 V8	4.000"	169
<b>E95129</b>	262-350 V8	4.125"	169
<b>E95110</b>	262-350 V8	4.250"	169
<b>E95132</b>	396-454 V8	3.760"	172
<b>E95133</b>	396-454 V8	4.000"	172
<b>E95135</b>	396-454 V8	4.250"	172
<b>E95136</b>	396-454 V8	4.375"	172
<b>E95137</b>	396-454 V8	4.500"	172
<b>E95140</b>	396-454 V8	4.750"	172

Specify "X2" or "X4" after part number to indicate 2 or 4 holes.

## STANDARD

Part No	Description	Stroke	Page
<b>95120</b>	262-350 V8	Custom	169
<b>95121</b>	262-350 V8	3.480"	169
<b>95122</b>	262-350 V8	3.500"	169
<b>95123</b>	262-350 V8	3.562"	169
<b>95124</b>	262-350 V8	3.625"	169
<b>95126</b>	262-350 V8	3.800"	169
<b>95127</b>	262-350 V8	3.875"	169
<b>95128</b>	262-350 V8	4.000"	169
<b>95129</b>	262-350 V8	4.125"	169
<b>95110</b>	262-350 V8	4.250"	169
<b>95130</b>	396-454 V8	Custom	172
<b>95132</b>	396-454 V8	3.760"	172
<b>95133</b>	396-454 V8	4.000"	172
<b>95134</b>	396-454 V8	4.125"	172
<b>95135</b>	396-454 V8	4.250"	172
<b>95136</b>	396-454 V8	4.375"	172
<b>95137</b>	396-454 V8	4.500"	172
<b>95138</b>	396-454 V8	4.562"	172
<b>95139</b>	396-454 V8	4.625"	172
<b>95140</b>	396-454 V8	4.750"	172
<b>95141</b>	396-454 V8	4.875"	172
<b>95142</b>	396-454 V8	5.000"	172

## OPTIONAL FEATURES

Part No	Description
<b>95300</b>	Knife Edge Counterweights
<b>95303</b>	Double Knife Edge Counterweights
<b>95301</b>	Lightening Hole
<b>95302</b>	Semi-UltraLight Profiling
<b>95304</b>	Blower Keyway
<b>95306</b>	Dihedral Profiling
<b>95307</b>	Ultra Super Polishing
<b>95308</b>	EN30B Material

Specify above the above options when ordering your Crower crank.

## LIGHTWEIGHT

Part No	Description	Stroke	Page
<b>LW95120</b>	262-350 V8	Custom	170
<b>LW95115</b>	262-350 V8	3.000"	170
<b>LW95118</b>	262-350 V8	3.125"	170
<b>LW95119</b>	262-350 V8	3.250"	170
<b>LW95111</b>	262-350 V8	3.320"	170
<b>LW95112</b>	262-350 V8	3.330"	170
<b>LW95113</b>	262-350 V8	3.335"	170
<b>LW95114</b>	262-350 V8	3.340"	170
<b>LW95121</b>	262-350 V8	3.480"	170
<b>LW95122</b>	262-350 V8	3.500"	170
<b>LW95123</b>	262-350 V8	3.562"	170
<b>LW95124</b>	262-350 V8	3.625"	170
<b>LW95125</b>	262-350 V8	3.750"	170
<b>LW95126</b>	262-350 V8	3.800"	170
<b>LW95127</b>	262-350 V8	3.875"	170
<b>LW95128</b>	262-350 V8	4.000"	170
<b>LW95129</b>	262-350 V8	4.125"	170
<b>LW95110</b>	262-350 V8	4.250"	170
<b>LW95130</b>	396-454 V8	Custom	173
<b>LW95132</b>	396-454 V8	3.760"	173
<b>LW95133</b>	396-454 V8	4.000"	173
<b>LW95134</b>	396-454 V8	4.125"	173
<b>LW95135</b>	396-454 V8	4.250"	173
<b>LW95136</b>	396-454 V8	4.375"	173
<b>LW95137</b>	396-454 V8	4.500"	173
<b>LW95138</b>	396-454 V8	4.562"	173
<b>LW95139</b>	396-454 V8	4.625"	173
<b>LW95140</b>	396-454 V8	4.750"	173
<b>LW95141</b>	396-454 V8	4.875"	173
<b>LW95142</b>	396-454 V8	5.000"	173
<b>LW95143</b>	396-454 V8	5.125"	173
<b>LW95144</b>	396-454 V8	5.200"	173

Above cranks are USA made, 4340 chromoly steel forgings.

For Semi Ultra-Light option specify when ordering.

## SEMI ULTRA-LIGHT®

Description	Page
Refer to LightWeight for part numbers and strokes.	170
Add #95302 Semi Ultra-Light option when ordering.	

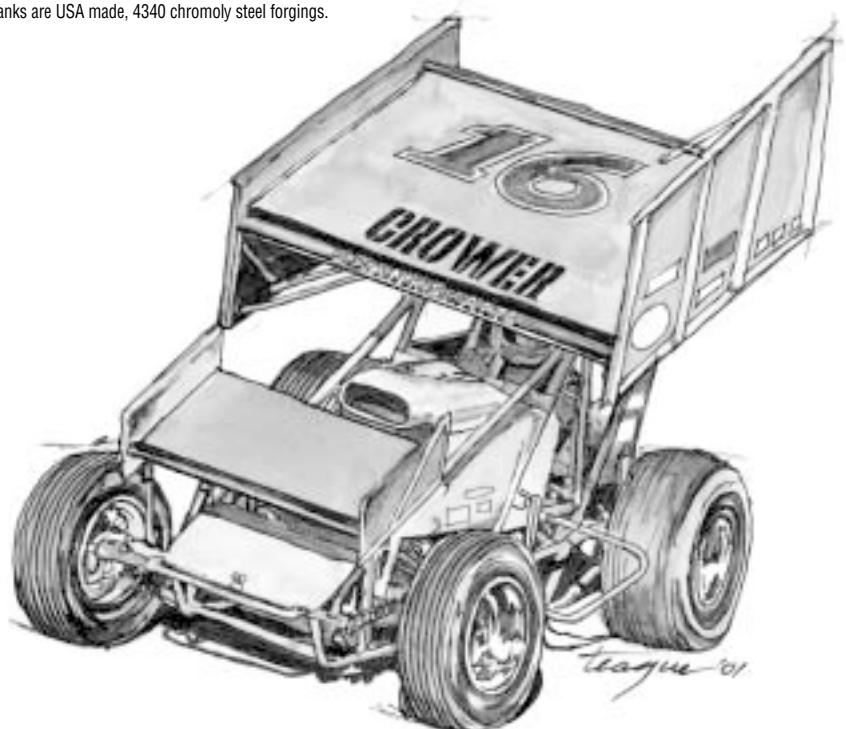
Above cranks are USA made, 4340 chromoly steel forgings.

## ULTRA-LIGHT®

Part No	Description	Stroke	Page
<b>UL95120</b>	262-350 V8	Custom	171
<b>UL95115</b>	262-350 V8	3.000"	171
<b>UL95118</b>	262-350 V8	3.125"	171
<b>UL95119</b>	262-350 V8	3.250"	171
<b>UL95111</b>	262-350 V8	3.320"	171
<b>UL95112</b>	262-350 V8	3.330"	171
<b>UL95113</b>	262-350 V8	3.335"	171
<b>UL95114</b>	262-350 V8	3.340"	171
<b>UL95121</b>	262-350 V8	3.480"	171
<b>UL95122</b>	262-350 V8	3.500"	171
<b>UL95123</b>	262-350 V8	3.562"	171
<b>UL95124</b>	262-350 V8	3.625"	171
<b>UL95125</b>	262-350 V8	3.750"	171
<b>UL95126</b>	262-350 V8	3.800"	171
<b>UL95127</b>	262-350 V8	3.875"	171
<b>UL95128</b>	262-350 V8	4.000"	171
<b>UL95130</b>	396-454 V8	Custom	173
<b>UL95132</b>	396-454 V8	3.760"	173
<b>UL95133</b>	396-454 V8	4.000"	173
<b>UL95134</b>	396-454 V8	4.125"	173
<b>UL95135</b>	396-454 V8	4.250"	173

## DIHEDRAL™ ULTRA-LIGHT®

Part No	Description	Stroke	Page
<b>UL95120X95306</b>	262-350 V8	Custom	171
<b>UL95119X95306</b>	262-350 V8	3.250"	171
<b>UL95111X95306</b>	262-350 V8	3.320"	171
<b>UL95112X95306</b>	262-350 V8	3.330"	171
<b>UL95113X95306</b>	262-350 V8	3.335"	171
<b>UL95114X95306</b>	262-350 V8	3.340"	171
<b>UL95121X95306</b>	262-350 V8	3.480"	171
<b>UL95122X95306</b>	262-350 V8	3.500"	171
<b>UL95123X95306</b>	262-350 V8	3.562"	171
<b>UL95124X95306</b>	262-350 V8	3.625"	171
<b>UL95125X95306</b>	262-350 V8	3.750"	171
<b>UL95126X95306</b>	262-350 V8	3.800"	171



# crankshafts

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



© Pure-Stock is a Registered Trademark of Crower, Inc.

## PURE-STOCK®

When the rules call for a “bone stock” crankshaft, go with Crower’s Pure-Stock. Factory GM forging made from S38 micro alloy. Pure-Stock means just that. No lightening holes, O.D. trimming, or any other lightening features that would jeopardize “stock” status. Crower race-prepping includes 1/8 radii, cross-drilled mains and Crower heat-treat for added strength (same heat-treat used on our 4340 cranks). Other Crower features include magna-flux inspection, chamfered oil holes, end-to-end index check and polish.

**WEIGHT:** Stock Weight (55-56 lbs)

Part No.	Description	Stroke	Main
<b>P95121</b>	Chevrolet V8 Small Block	3.480"	2.448"

All weights are approximate.

Note: Only available in the above stroke and main size. No custom orders available.

Note: You must use Crower narrowed and chamfered engine bearings.



The forging I.D. number on the Crower Stock-Plus and Pure-Stock is GM part number “1182” indicating stock.



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## STOCK-PLUS®

Raw GM crank forgings are shipped directly from GM’s foundry to Crower. Stock GM part number is forged into the counterweight. Features include lightening holes and O.D. trimming that reduces weight by 4 to 5 lbs under stock. Crower race-prep includes 1/8 radii, cross-drilled mains and Crower heat-treat. Magna-flux inspection, chamfered oil holes, end-to-end index check and polishing come standard. Crower even straightens them so you don’t have to. Complete stock legal engine kits also available.

**WEIGHT:** 51 lbs (4 to 5 lbs under stock GM weight)

Part No.	Description	Stroke	Main
<b>SP95121</b>	Chevrolet V8 Small Block	3.480"	2.448"

All weights are approximate.

Note: Only available in the above stroke and main size. No custom orders available.

Note: You must use Crower narrowed and chamfered engine bearings.



# crankshafts

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



## ENDURO™

Formerly known as the Sportsman, the Enduro is the smarter alternative to 5140 designs. USA made, 4340 “non-twist” forgings are the same NT forging used to make our premium Ultra-Light. The only difference is the amount of machining time and no debur. 1/8 radii, heat-treat, “counterweight correct” design and straight-shot oiling come standard. Available in choice of two or four lightening holes.

**WEIGHT:** 57-59 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
E95121	Chevy Small Block (specify 2 or 4 holes)	3.480"	Specify
E95122	Chevy Small Block (specify 2 or 4 holes)	3.500"	Specify
E95124	Chevy Small Block (specify 2 or 4 holes)	3.625"	Specify
E95125	Chevy Small Block (specify 2 or 4 holes)	3.750"	Specify
E95127	Chevy Small Block (specify 2 or 4 holes)	3.875"	Specify
E95128	Chevy Small Block (specify 2 or 4 holes)	4.000"	Specify
E95129	Chevy Small Block (specify 2 or 4 holes)	4.125"	Specify
E95110	Chevy Small Block (specify 2 or 4 holes)	4.250"	Specify

Specify “X2” or “X4” after crank p/n to indicate 2 or 4 lightening holes.

All weights are approximate.

Note: Specify 350 (2.448") or 400 (2.648") main.

Note: Specify rod length to insure proper piston to counterweight clearance.



## STANDARD

Precision machined from premium 4340 NT forgings, Crowder’s standard crankshaft features straight-shot oiling, jumbo 1/8 radii, heat-treating, teardrop oil holes, “counterweight-correct” design and CNC detailing for a smoother overall finish. Four lightening holes come standard.

**WEIGHT:** 55-58 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
95120	Chevrolet V8 Small Block	Custom	Specify
95121	Chevrolet V8 Small Block	3.480"	Specify
95122	Chevrolet V8 Small Block	3.500"	Specify
95123	Chevrolet V8 Small Block	3.562"	Specify
95124	Chevrolet V8 Small Block	3.625"	Specify
95125	Chevrolet V8 Small Block	3.750"	Specify
95126	Chevrolet V8 Small Block	3.800"	Specify
95127	Chevrolet V8 Small Block	3.875"	Specify
95128	Chevrolet V8 Small Block	4.000"	Specify
95129	Chevrolet V8 Small Block	4.125"	Specify
95110	Chevrolet V8 Small Block	4.250"	Specify

All weights are approximate.

Note: Specify 350 (2.448") or 400 (2.648") main.

Note: Specify rod length to insure proper piston to counterweight clearance.

Note: If you prefer a machined billet 4340 crank, specify “C” after crank part number.

# crankshafts

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



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## LIGHTWEIGHT

The 4340 LightWeight includes standard features like straight-shot oiling, 1/8 radii, heat-treat, etc., plus lightweight profiling, center counterweight removal, four lightening holes and radius edges. Smaller O.D. reduces rotating mass for quicker response, less drag.  
**WEIGHT:** 48-51 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
LW95120	Chevrolet V8 Small Block	Custom	Specify
LW95115	Chevrolet V8 Small Block	3.000"	Specify
LW95118	Chevrolet V8 Small Block	3.125"	Specify
LW95119	Chevrolet V8 Small Block	3.250"	Specify
LW95111	Chevrolet V8 Small Block	3.320"	Specify
LW95112	Chevrolet V8 Small Block	3.330"	Specify
LW95113	Chevrolet V8 Small Block	3.335"	Specify
LW95114	Chevrolet V8 Small Block	3.340"	Specify
LW95121	Chevrolet V8 Small Block	3.480"	Specify
LW95122	Chevrolet V8 Small Block	3.500"	Specify
LW95123	Chevrolet V8 Small Block	3.562"	Specify
LW95124	Chevrolet V8 Small Block	3.625"	Specify
LW95125	Chevrolet V8 Small Block	3.750"	Specify
LW95126	Chevrolet V8 Small Block	3.800"	Specify
LW95127	Chevrolet V8 Small Block	3.875"	Specify
LW95128	Chevrolet V8 Small Block	4.000"	Specify
LW95129	Chevrolet V8 Small Block	4.125"	Specify
LW95110	Chevrolet V8 Small Block	4.250"	Specify

Note: If you prefer a machined billet 4340 crank, specify "C" after crank part number. Dihedral counterweight option also available, specify when ordering.

## SEMI ULTRA-LIGHT®

Developed for Sprint Car and various Late Model applications. Combines our proven Ultra-Light and standard LightWeight designs. Made from USA made 4340 NT chromoly steel that is drop forged to form the strongest, most reliable crankshaft money can buy. Delivers very small rotating mass for less stress on engine. Improved throttle response.

**WEIGHT:** 45-47 lbs (depends on stroke and main)

### Description

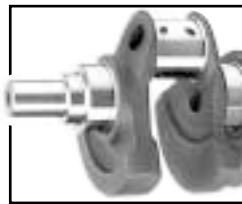
Refer to LightWeight part numbers and add #95302 Semi Ultra-Light option.

Note: If you prefer a machined billet 4340 crank, specify "C" after crank part number. 1.888" journal diameter is available. Requires special rods and bearings from Crower. For EN30B material option, specify when ordering. Dihedral counterweight option also available. Specify #95306 after part number. Big radius rod and main journals available. 125" is standard, jumbo is .171"



# crankshafts

Small Block Chevrolet V8 - 262 267 283 302 305 307 327 350 400



*The smaller O.D. and reduced weight improves throttle response and creates less oil drag. By pendulum undercutting the counterweights, Crower does not compromise overall strength.*

© Ultra-Light is a Registered Trademark of Crower, Inc.

## ULTRA-LIGHT®

The Ultra-Light is Crower's premium crank. Includes standard 4340 NT features, plus ultra-lightweight profiling, pendulum undercutting, center counterweight removal, four lightening holes and radius edges. Less drag in oil increases horsepower and torque.

**WEIGHT:** 38-43 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
UL95120	Chevrolet V8 Small Block	Custom	Specify
UL95115	Chevrolet V8 Small Block	3.000"	Specify
UL95118	Chevrolet V8 Small Block	3.125"	Specify
UL95119	Chevrolet V8 Small Block	3.250"	Specify
UL95111	Chevrolet V8 Small Block	3.320"	Specify
UL95112	Chevrolet V8 Small Block	3.330"	Specify
UL95113	Chevrolet V8 Small Block	3.335"	Specify
UL95114	Chevrolet V8 Small Block	3.340"	Specify
UL95121	Chevrolet V8 Small Block	3.480"	Specify
UL95122	Chevrolet V8 Small Block	3.500"	Specify
UL95123	Chevrolet V8 Small Block	3.562"	Specify
UL95124	Chevrolet V8 Small Block	3.625"	Specify
UL95125	Chevrolet V8 Small Block	3.750"	Specify
UL95126	Chevrolet V8 Small Block	3.800"	Specify
UL95127	Chevrolet V8 Small Block	3.875"	Specify
UL95128	Chevrolet V8 Small Block	4.000"	Specify

Note: If you prefer a machined billet 4340 crank, specify "C" after crank part number. 1.888" journal diameter is available. Requires special rods and bearings from Crower.

For EN30B material option, specify when ordering.

Light bob-weight on large strokes required to run the UL cranks (max 1800 grams approx).



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## DIHEDRAL™ ULTRA-LIGHT®

Designed for the ultimate racing application. Features include tapered "airplane wing" counterweights for less windage and pendulum undercutting of the counterweights for equal stress distribution over the entire overlap area. Available in standard or big block nose, star flange and high rpm oil drilling. Specify rod journal size when ordering.

**WEIGHT:** 34-42 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
UL95120X95306	Chevrolet V8 Small Block	Custom	Specify
UL95119X95306	Chevrolet V8 Small Block	3.250"	Specify
UL95111X95306	Chevrolet V8 Small Block	3.320"	Specify
UL95112X95306	Chevrolet V8 Small Block	3.330"	Specify
UL95113X95306	Chevrolet V8 Small Block	3.335"	Specify
UL95114X95306	Chevrolet V8 Small Block	3.340"	Specify
UL95121X95306	Chevrolet V8 Small Block	3.480"	Specify
UL95122X95306	Chevrolet V8 Small Block	3.500"	Specify
UL95123X95306	Chevrolet V8 Small Block	3.562"	Specify
UL95124X95306	Chevrolet V8 Small Block	3.625"	Specify
UL95125X95306	Chevrolet V8 Small Block	3.750"	Specify
UL95126X95306	Chevrolet V8 Small Block	3.800"	Specify

Note: If you prefer a machined billet 4340 crank, specify "C" after crank part number. 1.888" journal diameter is available. Requires special rods and bearings from Crower.

For EN30B material option, specify when ordering.

Jumbo radius rod (.156") and main journals (.171") are available. 125" is standard.

*Photo shown is a EN30B billet crank with center counterweights.*

# crankshafts

Big Block Chevrolet V8 - 366 396 402 427 454 502



## ENDURO™

The former Sportsman, Crowder's Enduro crank features a 4340 NT forging, straight-shot oiling, jumbo 1/8 radii, heat-treat and "counterweight-correct" design. Minimal detailing or debur. Available in choice of two or four lightening holes.

**WEIGHT:** 82-85 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
<b>E95132</b>	Chevy Big Block (specify 2 or 4 holes)	3.760"	Specify
<b>E95133</b>	Chevy Big Block (specify 2 or 4 holes)	4.000"	Specify
<b>E95135</b>	Chevy Big Block (specify 2 or 4 holes)	4.250"	Specify
<b>E95136</b>	Chevy Big Block (specify 2 or 4 holes)	4.375"	Specify
<b>E95137</b>	Chevy Big Block (specify 2 or 4 holes)	4.500"	Specify
<b>E95140</b>	Chevy Big Block (specify 2 or 4 holes)	4.750"	Specify

Specify "X2" or "X4" after crank p/n to indicate 2 or 4 lightening holes.

All weights are approximate.

Note: Specify rod length to insure proper piston to counterweight clearance.



## STANDARD

Precision machined from premium 4340 NT forgings, Crowder's standard crankshaft features straight-shot oiling, jumbo 1/8 radii, heat-treating, teardrop oil holes, "counterweight-correct" design and CNC detailing for a smoother overall finish. Four lightening holes come standard.

**WEIGHT:** 77-80 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
<b>95130</b>	Chevrolet V8 Big Block	Custom	Specify
<b>95132</b>	Chevrolet V8 Big Block	3.760"	Specify
<b>95133</b>	Chevrolet V8 Big Block	4.000"	Specify
<b>95134</b>	Chevrolet V8 Big Block	4.125"	Specify
<b>95135</b>	Chevrolet V8 Big Block	4.250"	Specify
<b>95136</b>	Chevrolet V8 Big Block	4.375"	Specify
<b>95137</b>	Chevrolet V8 Big Block	4.500"	Specify
<b>95138</b>	Chevrolet V8 Big Block	4.562"	Specify
<b>95139</b>	Chevrolet V8 Big Block	4.625"	Specify
<b>95140</b>	Chevrolet V8 Big Block	4.750"	Specify
<b>95141</b>	Chevrolet V8 Big Block	4.875"	Specify
<b>95142</b>	Chevrolet V8 Big Block	5.000"	Specify
<b>95143C</b>	Chevrolet V8 Big Block (Billet)	5.125"	Specify
<b>95144C</b>	Chevrolet V8 Big Block (Billet)	5.200"	Specify

All weights are approximate.

Note: Specify rod length to insure proper piston to counterweight clearance.

Note: If you prefer a machined billet crankshaft, specify "C" after crank part number.

# crankshafts

Big Block Chevrolet V8 - 366 396 402 427 454 502



## LIGHTWEIGHT

The 4340 NT LightWeight includes standard features like straight-shot oiling, 1/8 radii, heat-treat, teardrop oil holes and "counterweight-correct," plus lightweight profiling, center counterweight removal, four lightening holes and radius edges. Less drag, more power. **WEIGHT:** 65-70 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
LW95130	Chevrolet V8 Big Block	Custom	Specify
LW95132	Chevrolet V8 Big Block	3.760"	Specify
LW95133	Chevrolet V8 Big Block	4.000"	Specify
LW95134	Chevrolet V8 Big Block	4.125"	Specify
LW95135	Chevrolet V8 Big Block	4.250"	Specify
LW95136	Chevrolet V8 Big Block	4.375"	Specify
LW95137	Chevrolet V8 Big Block	4.500"	Specify
LW95138	Chevrolet V8 Big Block	4.562"	Specify
LW95139	Chevrolet V8 Big Block	4.625"	Specify
LW95140	Chevrolet V8 Big Block	4.750"	Specify
LW95141	Chevrolet V8 Big Block	4.875"	Specify
LW95142	Chevrolet V8 Big Block	5.000"	Specify
LW95143C	Chevrolet V8 Big Block (Billet)	5.125"	Specify
LW95144C	Chevrolet V8 Big Block (Billet)	5.200"	Specify

All weights are approximate.

Note: Specify rod length to insure proper piston to counterweight clearance.

Note: If you prefer a machined billet crankshaft, specify "C" after crank part number.



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## ULTRA-LIGHT®

The Ultra-Light is Crower's premium crank. Includes standard 4340 NT features, plus ultra-lightweight profiling, pendulum undercutting, center counterweight removal, four lightening holes and radius edges. Smaller O.D. quickens throttle response, reduces stress and wear, creates less drag in oil and increases horsepower and torque. Crower's Ultra-Light delivers all of this without compromising overall strength. **WEIGHT:** 55-60 lbs (depends on stroke and main)

Part No.	Description	Stroke	Main
UL95130	Chevrolet V8 Big Block	Custom	Specify
UL95132	Chevrolet V8 Big Block	3.760"	Specify
UL95133	Chevrolet V8 Big Block	4.000"	Specify
UL95134	Chevrolet V8 Big Block	4.125"	Specify
UL95135	Chevrolet V8 Big Block	4.250"	Specify

All weights are approximate.

Note: Due to bob-weight considerations some BB Chevrolet Ultra-Light crankshafts must be custom ordered. Have desired stroke and main sizes ready.

Note: Specify rod length to insure proper piston to counterweight clearance.

Note: If you prefer a machined billet crankshaft, specify "C" after crank part number.

# crankshafts

Ford • Mopar • V6 Chevrolet & Buick • Imports • Vintage • Custom



## FORD FORGED - 4340 "Non-Twist" Chromoly Steel

Part No.	Description	Stroke	Main
<b>95185</b>	Ford 302 V8 or SVO Forging	Custom	Specify
"	Ford 302 V8 or SVO Forging	3.000"	2.2486"
"	Ford 302 V8 or SVO Forging	3.125"	2.2486"
"	Ford 302 V8 or SVO Forging	Custom	Specify
<b>95186</b>	Ford 351C V8 or SVO Forging	3.500"	Specify
"	Ford 351C V8 or SVO Forging	3.625"	Specify
"	Ford 351C V8 or SVO Forging	3.750"	Specify
"	Ford 351C V8 or SVO Forging	3.850"	Specify
"	Ford 351C V8 or SVO Forging	4.000"	Specify
"	Ford 351C V8 or SVO Forging	4.125"	Specify
"	Ford 351C V8 or SVO Forging	Custom	Specify

Note: Specify desired stroke after part number when ordering.

Note: Specify rod journal diameter and width when ordering.

For LightWeight or Ultra-Light profiling, place "LW" or "UL" in front of part number.

## FORD BILLET - 4340 Round Chromoly Steel

Part No.	Description	Stroke	Main
<b>95179C</b>	Ford 2000cc / 4 cyl.	Custom	Specify
<b>95180C</b>	Ford 2300cc / 4 cyl.	Custom	Specify
<b>95181C</b>	Ford 6 cyl.	Custom	Specify
<b>95185C</b>	Ford 289 V8	2.870"	2.2486"
"	Ford 289 V8	Custom	Specify
"	Ford 302 V8	3.000"	2.2486"
"	Ford 302 V8	3.125"	2.2486"
"	Ford 302 V8	Custom	Specify
<b>95186C</b>	Ford 351 V8	3.500"	Specify
"	Ford 351 V8	3.625"	Specify
"	Ford 351 V8	3.750"	Specify
"	Ford 351 V8	3.850"	Specify
"	Ford 351 V8	4.000"	Specify
"	Ford 351 V8	4.125"	Specify
"	Ford 351 V8	Custom	Specify
<b>95187C</b>	Ford 429-460 V8	3.850"	3.000"
"	Ford 429-460 V8	4.000"	3.000"
"	Ford 429-460 V8	4.150"	3.000"
"	Ford 429-460 V8	4.250"	3.000"
"	Ford 429-460 V8	4.500"	3.000"
"	Ford 429-460 V8	Custom	Specify
<b>95190C</b>	Ford 351W V8	Custom	Specify
<b>95191C</b>	Ford 427-428 V8	Custom	Specify

Note: Specify desired stroke after part number when ordering.

Note: Specify rod journal diameter and width when ordering.

For LightWeight or Ultra-Light profiling, place "LW" or "UL" in front of part number.



A billet 426 Hemi begins as a 380 pound piece of 4340 round steel. After extensive CNC machining, these cranks will have a finished weight of approximately 70 pounds. Custom billet cranks are available for most applications, including foreign. Call for pricing and availability.



## MOPAR FORGED - 4340 "Non-Twist" Chromoly Steel

Part No.	Description	Stroke	Main
<b>95160</b>	Mopar 426 Hemi V8	Custom	Specify
<b>95161</b>	Mopar 426 Hemi V8	3.600"	Specify
<b>95162</b>	Mopar 426 Hemi V8	3.750"	Specify
<b>95163</b>	Mopar 426 Hemi V8	3.875"	Specify
<b>95164</b>	Mopar 426 Hemi V8	4.000"	Specify
<b>95165</b>	Mopar 426 Hemi V8	4.125"	Specify
<b>95166</b>	Mopar 426 Hemi V8	4.250"	Specify
<b>95167</b>	Mopar 426 Hemi V8	4.375"	Specify
<b>95168</b>	Mopar 426 Hemi V8	4.500"	Specify
<b>95169</b>	Mopar 426 Hemi V8	4.625"	Specify
<b>95170</b>	Mopar 426 Hemi V8	4.750"	Specify

Note: Specify rod length for proper piston/counterweight clearance.

Specify "EN" after part number for EN30B forging.

## MOPAR BILLET - EN30B Round Chromoly Steel

Part No.	Description	Stroke	Main
<b>95160C</b>	Mopar 426 Hemi V8	Custom	Specify
<b>95161C</b>	Mopar 426 Hemi V8	3.600"	Specify
<b>95162C</b>	Mopar 426 Hemi V8	3.750"	Specify
<b>95163C</b>	Mopar 426 Hemi V8	3.875"	Specify
<b>95164C</b>	Mopar 426 Hemi V8	4.000"	Specify
<b>95165C</b>	Mopar 426 Hemi V8	4.125"	Specify
<b>95166C</b>	Mopar 426 Hemi V8	4.250"	Specify
<b>95167C</b>	Mopar 426 Hemi V8	4.375"	Specify
<b>95168C</b>	Mopar 426 Hemi V8	4.500"	Specify
<b>95169C</b>	Mopar 426 Hemi V8	4.625"	Specify
<b>95170C</b>	Mopar 426 Hemi V8	4.750"	Specify
<b>95171C</b>	Mopar 273-340-360 V8	Custom	Specify

Note: Specify rod length for proper piston/counterweight clearance.

For LightWeight or Ultra-Light profiling, place "LW" or "UL" in front of part number.

Specify type of balance when ordering. 95341 (std) or 95342 (special) after crank p/n.

## V6 CHEVY & BUICK

Premium billet 4340 chromoly crankshafts are available for Chevrolet and Buick V6 applications on a custom order basis. Any desired stroke available.

Part No.	Description	Stroke	Main
<b>95151C</b>	Chevy V6 (Billet)	Specify	Specify
<b>95156C</b>	Buick V6 (Billet)	Specify	Specify

Note: Specify rod length to insure proper piston to counterweight clearance.

## IMPORT/CUSTOM BILLETS & FORGINGS

Crower can machine custom 4340 crankshafts for any application. Call for pricing and availability.

Part No.	Description
<b>95261</b>	Honda/Acura B series 4340 forged crankshaft (84.5mm stroke)
<b>95264</b>	Honda/Acura B series 4340 forged crankshaft (89mm stroke)
<b>95265</b>	Honda/Acura B series 4340 forged crankshaft (92mm stroke)
<b>95266</b>	Honda/Acura B series 4340 forged crankshaft (95mm stroke)
<b>95204</b>	Custom 4 cylinder crankshaft (most applications)
<b>95206</b>	Custom 6 cylinder crankshaft (most applications)
<b>95208</b>	Custom 8 cylinder crankshaft (most applications)
<b>95212</b>	Custom 12 cylinder crankshaft (most applications)

Note: A 50% down payment may be required prior to production.

# GROWER

CUBIC INCH CHART

# STROKE

	3.000	3.125	3.250	3.375	3.480	3.500	3.562	3.625	3.750	3.760	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	5.000	5.125
3.8750	283.0	294.8	306.6	318.4	323.0	330.2	336.1	342.0	353.8	354.7	365.6	377.4	389.2	401.0	412.8	424.6	-	-	-	-
3.9375	292.2	304.4	316.6	328.8	339.0	340.9	347.0	353.1	365.3	366.2	377.5	389.7	401.8	414.0	426.2	438.4	-	-	-	-
4.0000	301.6	314.2	<b>326.7</b>	339.3	<b>349.8</b>	351.9	358.1	364.4	377.0	377.9	389.6	402.1	414.7	427.3	439.8	452.4	-	-	-	-
4.0300	306.4	318.8	331.9	344.7	355.1	357.4	363.5	370.2	<b>383.0</b>	383.6	395.7	408.5	421.3	434.0	446.4	459.2	-	-	-	-
4.0625	311.1	324.1	337.0	350.0	360.8	362.9	369.4	375.9	388.9	389.8	401.8	414.8	427.8	440.7	453.7	466.6	-	-	-	-
4.1250	320.7	334.1	347.5	360.8	372.0	374.2	380.9	387.6	400.9	401.9	414.3	427.6	441.0	454.4	467.7	481.1	-	-	-	-
4.1550	325.6	339.2	352.8	366.3	<b>377.5</b>	379.9	386.4	393.5	407.1	<b>407.8</b>	420.6	<b>434.2</b>	447.8	461.4	474.6	488.1	-	-	-	-
4.1875	330.5	344.3	358.1	371.8	383.4	385.6	392.5	399.4	413.2	414.2	426.9	440.7	454.5	468.3	482.0	495.8	-	-	-	-
4.2500	340.5	354.7	368.8	383.0	394.9	397.2	404.3	411.4	425.6	426.6	439.8	<b>454.0</b>	468.1	482.3	496.5	510.7	524.8	539.1	567.5	581.6
4.3125	350.6	365.2	379.8	394.4	406.6	409.0	416.3	423.6	438.2	439.3	452.8	467.4	482.0	496.6	511.2	525.8	540.4	555.0	584.3	598.8
4.3750	360.8	375.8	390.9	405.9	418.5	420.9	428.4	436.0	451.0	452.1	466.0	481.1	496.1	511.1	526.2	541.2	556.0	571.0	601.3	616.3
4.4375	371.2	386.6	402.1	417.6	430.5	433.0	440.8	448.5	464.0	465.2	479.4	494.9	510.4	525.8	541.3	556.8	572.0	587.7	618.6	634.1
4.5000	381.7	397.6	413.5	429.4	442.7	445.3	453.3	461.2	477.1	478.4	493.0	508.9	524.8	540.7	556.7	572.6	588.5	604.4	636.1	652.1
4.5625	392.4	408.7	425.1	441.4	455.1	457.8	466.0	474.1	490.5	491.7	506.8	523.2	539.5	555.9	572.2	588.6	604.9	621.3	653.9	679.5
4.6250	403.2	420.0	436.8	453.6	467.6	470.4	478.8	487.2	504.0	505.3	520.8	537.6	554.4	571.2	588.0	604.8	621.6	638.0	671.9	688.7
4.6875	414.2	431.4	448.7	465.9	480.4	483.2	491.8	500.5	517.7	519.1	535.0	552.2	569.5	586.7	604.0	621.3	638.5	655.7	690.2	707.5
4.7500	425.3	443.0	460.7	478.5	493.3	496.2	505.0	513.9	531.6	533.0	549.3	567.1	584.8	602.5	620.2	637.9	655.6	673.4	708.8	726.5

# BORE DIA METER

INDICATES APPLICABLE SMALL BLOCK CHEVROLET C.I.D.

CUBIC INCH FORMULA: BORE X BORE X STROKE X .7854 X NO. of CYLINDERS

# rod & main bearings



## ROD BEARINGS

Crower high performance rod bearings are quality engine bearings designed to withstand the extreme loads of professionally tuned racing engines. Features high strength copper-lead in the load area for superior strength and embedding. Lead overplate provides excellent fatigue strength and superior conformability to compensate for distortion and/or misalignment. Superlative bearing-to-bearing size consistency enables you to “build-in” the exact oil clearance you require, while narrowed and chamfered versions are available for large fillet journals where additional clearance is necessary. If running aluminum rods, Crower has chamfered rod bearings with dowel pin holes.

### STANDARD

Part No.	Description
<b>85300</b>	CHEVROLET 283-327 V8
<b>85301</b>	CHEVROLET 302-305-327-350-400 V8
<b>85310</b>	CHEVROLET 396-402-427-454 V8

### CHAMFERED

Part No.	Description
<b>85300C</b>	CHEVROLET 283-327 V8
<b>85301C</b>	CHEVROLET 302-305-327-350-400 V8
<b>85310C</b>	CHEVROLET 396-402-427-454 V8

### CHAMFERED w/DOWEL PIN HOLE

Part No.	Description
<b>85300CD</b>	CHEVROLET 283-327 V8
<b>85301CD</b>	CHEVROLET 302-305-327-350-400 V8
<b>85310CD</b>	CHEVROLET 396-402-427-454 V8
<b>85330CD</b>	CHRYSLER 426 Hemi V8

Note: Specify standard, .010", .020" or .030" undersized when ordering.



## MAIN BEARINGS

Crower high performance main bearings offer professional racers and engine builders the extreme accuracy and bearing-to-bearing consistency required to build an engine that can handle the extreme loads associated with high performance racing. Features high strength copper-lead in the load area for superior strength and embedding. Lead overplate provides excellent fatigue strength and superior conformability to compensate for distortion and/or misalignment. Crower high performance main bearings are designed to deliver improved bearing-to-bore contact for better heat transfer and a reduction in high rpm bearing chatter and/or failure. Available in narrowed and chamfered, for use with large fillet journals. A must when running any Crower crank.

### STANDARD

Part No.	Description
<b>85400</b>	CHEVROLET 283-327 V8
<b>85401</b>	CHEVROLET 302-305-327-350-400 V8
<b>85402</b>	CHEVROLET 400 V8
<b>85410</b>	CHEVROLET 396-402-427-454 V8

### CHAMFERED

Part No.	Description
<b>85400C</b>	CHEVROLET 283-327 V8
<b>85401C</b>	CHEVROLET 302-305-327-350-400 V8
<b>85402C</b>	CHEVROLET 400 V8
<b>85410C</b>	CHEVROLET 396-402-427-454 V8
<b>85430C</b>	CHRYSLER 426 Hemi V8

### BEARING SPACER KIT

Part No.	Description
<b>85200</b>	Adapts Chevrolet 350 crank to 400 block (incl. 85401C)

Note: Specify standard, .010", .020" or .030" undersized when ordering.



# engine kits

## INSTANT HORSEPOWER AND TORQUE

Get your hands on one of Crower's complete bottom end assemblies and you'll instantly discover just how much potential your motor really has to offer. After an extensive "research & development" program, which included hours of rigorous dyno and track testing, Crower has developed a vast selection of correct crank, rod and piston combinations that will satisfy any performance requirement. You benefit from our research, field testing and ability to supply matched and balanced components that function in harmony to provide you the torque and horsepower you need, when you need it. Our "one-stop-shopping" format makes it easy to obtain a Crower rotating assembly that will arrive at your door totally system balanced, matched and ready to install without wasted time, back orders or costly mistakes. The kits listed on the following pages are among our most popular crank, rod and piston combinations. However, if you need a combination that is not shown, feel free to "mix & match" the components to create your own kit design. Call Crower's tech line for pricing and availability.

## EACH KIT CONSISTS OF:

- Crower crankshaft
- Crower connecting rods
- Choice of pistons
- Rod and main bearings
- Plasma-moly rings
- H-11 wrist pins
- System balanced (extra charge)

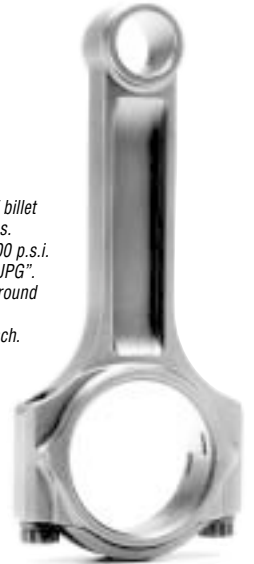
### 1 CRANKSHAFT

- Forged or billet, USA milled, premium 4340 chromoly steel material.
- Choice of Enduro, Standard, LightWeight or Ultra-Light design.
- Available for any application in your choice of stroke and journal diameter.
- Maximum radii journals provide even load distribution for extended crank, connecting rod and bearing life.
- Crower heat-treat produces unrivaled structural integrity and core strength.
- Nitriding increases surface hardness.
- Exclusive Crower "straight-shot" oiling enhances journal lubrication at every degree of the crankshaft's rotation.
- Lightweight profiling, lightening holes, and center counterweight removal available upon request.
- Minimum "heavy-metal" balancing.
- Precision end-to-end indexing and stroke accuracy guarantees true to blueprint specifications.



### 2 CONNECTING RODS

- Forged or billet 4340 chromoly steel or 6AL4V billet titanium. Choose from a variety of beam widths.
- H-11 tool steel cap screw bolts rated at 220,000 p.s.i. For AMS5844 bolts (280,000 p.s.i.), specify "UPG".
- Clover leaf journal pads assure constant, true round tracking and even bearing seating.
- Reinforced pin end eliminates pin bind and pinch.
- Double ribbed cap for non-flex performance.
- Excellent combination of tensile and shear strength properties and unrivaled Crower craftsmanship that cannot be duplicated.



### 3 PISTONS

- Your choice of brand (JE, Ross, Arias, Wiseco, CP, SRP, etc...).
- Your choice of compression ratio, bore diameter and pin boss location.
- Choice of valve pocket dimension.
- Maximum possible pin boss/pin seat area prevents pin flex and hole elongation.
- Lightweight design for quick acceleration and deceleration.
- Your choice of dome or flat top design.



### 4 BEARINGS

- Premium quality rod and main bearings.
- Features high strength copper-lead in the load area for superior embedding.
- Lead overplate provides exceptional fatigue strength and conformability to compensate for distortion and misalignment at high engine rpm.
- High strength steel back.



### 5 PINS

- Premium H-11 tool steel.
- Precision ground with or without tapered wall cross section.
- Lightweight design.



### 6 RINGS

- Speed-Pro or Total Seal brand plasma-moly top rings provide proper lubrication.
- Offers maximum assurance against galling and scuffing.
- Gap-less rings available.

### 7 TOTAL SYSTEM BALANCED

Total System Balancing is done in-house at the Crower crankshaft facility. State-of-the-art Hines balancing equipment provides the most accurately matched assembly possible.

This service allows for immediate engine assembly, trouble-free of oversights and costly coordination errors. You'll save both time and money, while receiving the finest rotating assembly available on the market. Balancing is an extra charge and not included in the price.



# engine kits

Small Block Chevrolet V8



*Pictured is an Ultra-Light kit (96011) with an Ultra-Light crank and Titanium rods. All kits include pistons, pins, rings, bearings and total system balancing.*

## 1 PURE-STOCK®

### PURE-STOCK CRANK • SPORTSMAN RODS

When the rules call for a “bone stock” crank and rods, this is the kit you need. GM crank, Crower rods.

Part No.	Description
95510	SB Chevy, Pure-Stock Crank w/Sportsman Rods (SP)
95511	SB Chevy, Pure-Stock Crank w/Stroker Sportsman Rods (SSP)

Note: Pure-Stock crank only available in 3.480" stroke. Specify 5.7" or 6.0" rod length.

## 2 STOCK-PLUS®

### STOCK-PLUS CRANK • SPORTSMAN RODS

Most economical. Lightened stock GM crank, system balanced, perfect for stock restricted applications.

Part No.	Description
95500	SB Chevy, Stock-Plus Crank w/Sportsman Rods (SP)
95501	SB Chevy, Stock-Plus Crank w/Stroker Sportsman Rods (SSP)

Note: Stock-Plus crank only available in 3.480" stroke. Specify 5.7" or 6.0" rod length.

## 3 ENDURO™

### ENDURO CRANK • SPORTSMAN or BILLET RODS

Forged 4340 Enduro crank w/choice of Sportsman or billet rods. Inexpensive, very reliable. Race or street.

Part No.	Description
95502	SB Chevy, Enduro Crank w/Sportsman Rods (SP)
95503	SB Chevy, Enduro Crank w/Stroker Sportsman Rods (SSP)
95506	SB Chevy, Enduro Crank w/Billet Rods (B, SB M, SM, LW, UL, ML)

## 4 STANDARD

### STANDARD CRANK • SPORTSMAN or BILLET RODS

Forged 4340 Standard crank w/choice of Sportsman or billet rods. The original Crower system balanced kit.

Part No.	Description
96000	SB Chevy, Standard Crank w/Sportsman Rods (SP)
96002	SB Chevy, Standard Crank w/Billet Rods (B, SB M, SM, LW, UL, ML)

## 5 LIGHTWEIGHT

### LIGHTWEIGHT CRANK • SPORTSMAN or BILLET RODS

Forged 4340 LightWeight crank w/choice of Sportsman or billet rods (steel or titanium). Very reliable package.

Part No.	Description
96006	SB Chevy, LightWeight Crank w/Sportsman Rods (SP)
96008	SB Chevy, LightWeight Crank w/Billet Rods (B, SB M, SM, LW, UL, ML)
96009	SB Chevy, LightWeight Crank w/Billet Titanium Rods (T, ST)

## 6 ULTRA-LIGHT®

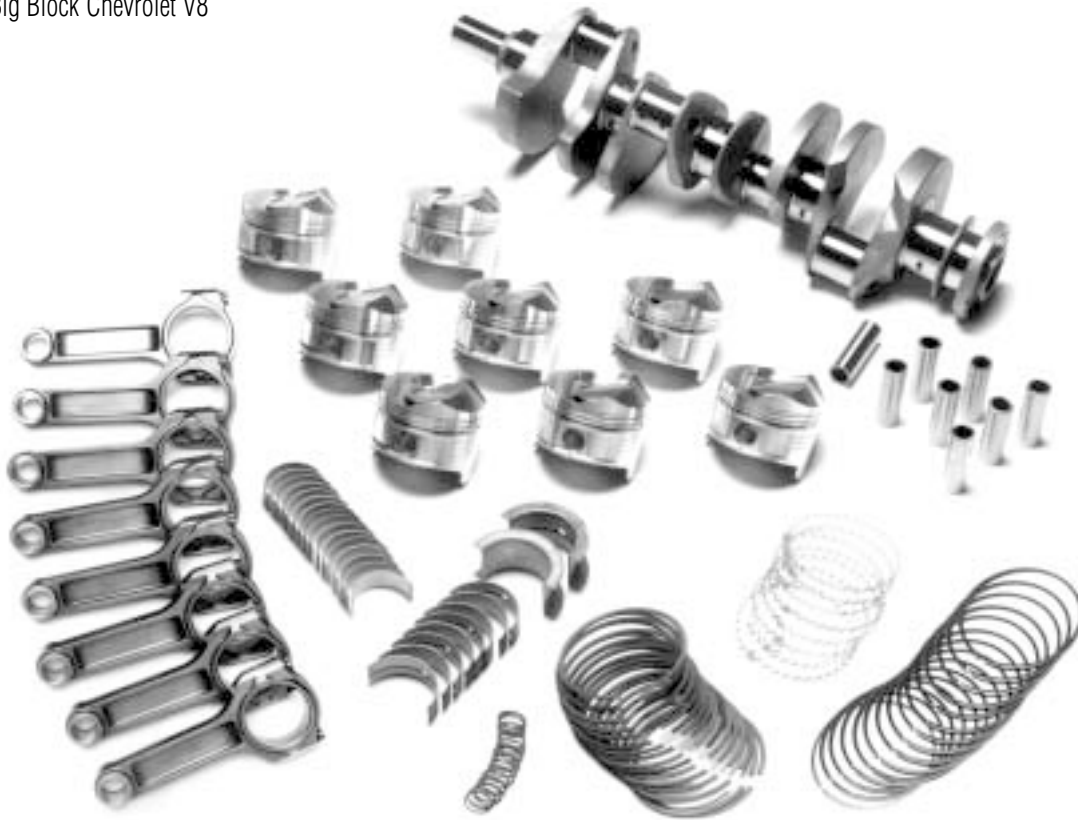
### ULTRA-LIGHT CRANK • BILLET RODS

Forged 4340 Ultra-Light crank w/choice of billet rods (steel or titanium). Best possible acceleration, low drag.

Part No.	Description
96010	SB Chevy, Ultra-Light Crank w/Billet Rods (B, SB M, SM, LW, UL, ML)
96011	SB Chevy, Ultra-Light Crank w/Billet Titanium Rods (T, ST)

# engine kits

Big Block Chevrolet V8



*Pictured is a Standard kit (96106) with a Standard crank and steel billet rods. All kits include pistons, pins, rings, bearings and total system balancing.*

- 1 ENDURO™**  
**ENDURO CRANK • SPORTSMAN or BILLET RODS**  
 Forged 4340 Enduro crank w/choice of forged or billet rods. Inexpensive, very reliable. Race, street, tow.

Part No.	Description
95520	BB Chevy, Enduro Crank w/Sportsman Rods (SP)
96101	BB Chevy, Enduro Crank w/Billet Rods (B, SB, M, LW, ML)

- 2 STANDARD**  
**STANDARD CRANK • FORGED or BILLET RODS**  
 Forged 4340 Standard crank (extra debur) w/choice of forged or billet rods. The original Crower engine kit.

Part No.	Description
95521	BB Chevy, Standard Crank w/Sportsman Rods (SP)
96106	BB Chevy, Standard Crank w/Billet Rods (B, SB, M, LW, ML)
96107	BB Chevy, Standard Crank w/Billet Rods (B, SB, M, LW) 4.375" & up
96108	BB Chevy, Standard Crank w/Titanium Rods (T, ST)

- 3 LIGHTWEIGHT**  
**LIGHTWEIGHT CRANK • BILLET RODS**  
 Forged 4340 LightWeight crank w/choice of billet rods (steel or titanium). Very light, very reliable package.

Part No.	Description
96111	BB Chevy, LightWeight Crank w/Billet Rods (B, SB, M, LW, ML)
96112	BB Chevy, LightWeight Crank w/Billet Rods (B, SB, M, LW) 4.375" & up
96113	BB Chevy, LightWeight Crank w/Titanium Rods (T, ST)

- 4 ULTRA-LIGHT®**  
**ULTRA-LIGHT CRANK • FORGED or BILLET RODS**  
 Forged 4340 Ultra-Light crank w/choice of forged or billet rods (steel or titanium). Best possible acceleration.

Part No.	Description
96116	BB Chevy, Ultra-Light Crank w/Billet Rods (B, SB, M, LW, ML)
96117	BB Chevy, Ultra-Light Crank w/Billet Rods (B, SB, M, LW) 4.375" & up
96118	BB Chevy, Ultra-Light Crank w/Titanium Rods (T, ST)

# engine kits

Ford • Mopar • Honda/Acura • Custom



## FORD

### FORGED or BILLET CRANK • BILLET RODS

Forged or billet 4340 chromoly crank with billet rods. Forged Sportsman or billet titanium rods also available.

Part No.	Description
<b>96200</b>	Ford 289-302 Crank w/Sportsman Rods (SP) or Billet Rods (B)
<b>96201</b>	Ford 351C or 351W Crank w/Billet Rods (B)
<b>96202</b>	Ford 429-460 Crank w/Billet Rods (B)

Note: Four and six cylinder Ford kits available. See custom applications below.



## MOPAR

### FORGED or BILLET CRANK • BILLET RODS

Forged or billet 4340 chromoly crank with billet rods. Ultra-Light crank option and titanium rods available.

Part No.	Description
<b>96204</b>	Mopar 426 Hemi or 440 Crank w/Billet Rods (B)

Note: Kits available for any cubic inch displacement. Specify when ordering.



## HONDA/ACURA

### FORGED or BILLET CRANK • BILLET RODS

Crower offers stroker kits for the B series and H22 VTEC engine platforms. Turn your 1.6L into a 1.97L or your 1.8L into a 2.1L. Kit includes choice of billet or forged crank, custom billet rods, choice of piston brands (JE, CP, Arias, Ross), pins, rings, locks and bearings. You spec stroke, bore size and compression. 4340 forged cranks are available in 84.5mm, 89mm, 92mm and 95mm strokes for B series blocks only.

Part No.	Description
<b>96222</b>	Forged Crank w/Custom Rods and Pistons made to spec (B series only)
<b>96221</b>	Billet Crank w/Custom Rods and Pistons made to your specs (All makes)



## CUSTOM

### BILLET CRANK • BILLET RODS

Create a custom kit for just about any application whether it's a 4 cylinder Mitsubishi or a V10 Dodge Viper. Features a custom billet crank, custom billet rods and choice of pistons, pins, rings and locks. You specify engine application, stroke, bore size and compression. Stock samples may be required.

Part No.	Description
<b>96205</b>	Custom Crank w/Custom Rods made to your specs

Note: 50% deposit is required on any custom engine kit.

# clutches

Centrifugal CrowerGlides

## CROWER CLUTCHES

Since their inception in 1966, Crower clutches have been regarded as the ultimate solution to high horsepower, high torque, power to ground control. There is no other clutch available on the market that can harness the extreme power output of a competition engine and control it as accurately and consistently as a genuine Crower clutch. Our ongoing trackside research and development program insures you of the latest and most innovative components available.

## THE "CROWERGLIDE"

The most copied clutch in racing, the original "Crowerglide" incorporates a completely centrifugal design and is totally adjustable. It was the industries first real slipper clutch, which is why it is so prevalent in racing today. Available in two through five disc setups, in your choice of six or twelve stand configurations to fit most engine/transmission combinations. Features include fully CNC machined 7075T6 billet aluminum pressure plate assembly, including stall speed springs and counterweights. Adjustable stands come standard on all units except the 8" mini "Crowerglide." Available in 8", 10", 10.7", 11" and 12" models to compliment just about any application. All units are shipped complete with flywheel bolts, washers, one pilot bearing, feeler gauges, additional counterweights and instructions. All "Crowerglide" clutches and related components are fully S.F.I. certified.

## POPULAR APPLICATIONS

- Truck and Tractor Pulling
- Drag Racing
- Sand Drags
- Monster Trucks
- Mud Racing

## HOW TO ORDER A "CROWERGLIDE"

Due to the variety of applications and amount of variables involved in building a clutch that will function properly in a given vehicle, call Crower's Clutch Department at **619-424-6758** for personalized support or fax the following information to 619-424-7129.

- Engine make
- Application or class of competition
- Estimated rpm power range
- Transmission spline info (O.D. and number of teeth)



11"  
DIESEL GLIDE



11"  
12 STAND GLIDE



10.7"  
TITANIUM GLIDE

# clutches

Pedal Clutches

## CROWER PEDAL CLUTCHES

Unlike the completely centrifugal "Crowerglide," the Crower pedal clutch offers the conventional style foot control launch combined with centrifugal assistance and static spring adjustment. This highly versatile Crower clutch is available in a vast assortment of centrifugal lever and static spring combinations to cover a wide variety of applications and is available without a starter gear for blower start engines. Standard features include full 7075T6 construction, titanium adjusting stands and dial indicator for setting the pressure plate height. All units are fully S.F.I. certified and shipped complete with flywheel bolts and washers, one pilot bearing, additional counterweights and instructions that include static spring charts and installation procedures using the dial indicator.

## POPULAR APPLICATIONS

- Alcohol Dragster & Funny Car
- Pro Stock & Pro Modified
- Comp Eliminator
- Sand Dragsters
- 2 & 4 Wheel Truck Pullers

## HOW TO ORDER A PEDAL CLUTCH

Due to the variety of applications and amount of variables involved in building a clutch that will function properly in a given vehicle, Crower recommends that you call our Clutch Department at **619-424-6758** for personalized service or you can fax the following information to 619-424-7129.

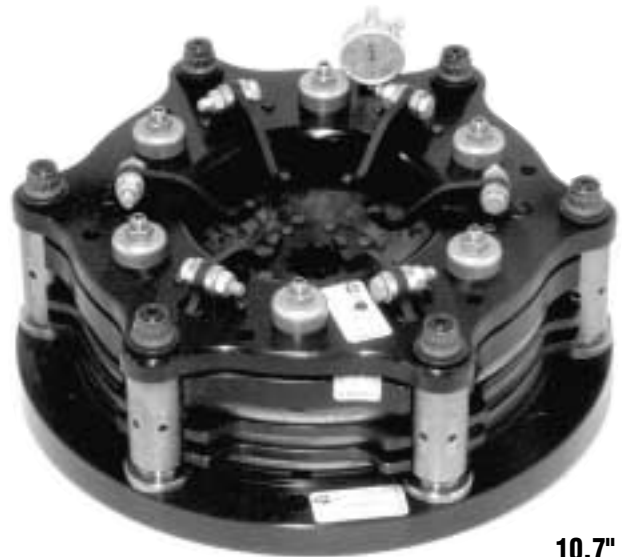
- Engine make
- Application or class of competition
- Estimated rpm power range
- Transmission spline info (O.D. and number of teeth)

## PARTS & SERVICE

Crower offers complete service and repair on all Crower clutches and Crower products, as well as technical support. All clutches and components returned for service and repair will be subject to a \$60.00 minimum tear-down and inspection charge. Used parts requiring machine work will be subject to a machining charge based on prevailing rate. All used parts not meeting Crower's specifications will be replaced at the customer's expense.



9"  
PRO COMP



10.7"  
TOP SPORTSMAN



10"  
PRO SPORTSMAN