

# CROW CAMS



VALVE TRAIN  
**2016 CATALOGUE**

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ORDERS May be faxed direct to dispatch on our order hotline (03)9357 0001 or email to sales@crowcams.com.au Emergency orders received by 2.30pm will be shipped the same day (if in stock). Payment may be made by Mastercard, Visa, EFT or PayPal

## FREIGHT

Competitive freight rates are available on overnight air or road freight.





High Performance Camshafts and Valve Train Components

## Terms & Conditions

- In these conditions "the Company" shall mean Crow Cams Australia Pty Ltd, "the Customer" shall mean the person, firm or corporation from whom an order is accepted by the Company and "the Goods" shall mean the products, materials, equipment and services supplied by the Company. Unless the context requires otherwise, words purporting the singular shall be deemed to include the plural and words purporting gender shall be deemed to include all other genders.
- Acknowledgement and acceptance of terms and conditions:**  
By accessing, browsing or using the Company website, or reading the Company catalogue, you agree to these conditions as amended from time to time, and acknowledge that you have read and understood these conditions. By purchasing a product, you agree to be bound by these conditions.
- Quotations:**
  - A quotation constitutes an invitation to the Customer to make an offer to contract. An agreement shall not be constituted until an official order from the Customer requesting goods upon these terms and conditions is accepted by the Company.
  - All prices quoted are subject to market fluctuations in accordance with Crow Cams Australia's pricing policies, its supplier's recommended prices or Government levied increase without reference to the Customer.
  - If acceptance of a quotation by a Customer exceeds thirty (30) days, quoted prices will need to be reconfirmed with the Company.
  - Prices offered are quoted on the availability of the total range of product being offered. Any product deletion or amendment may require re quoting.
  - Any date of completion/delivery specified in the quotation is an estimate only.
- Reservation/Retention of Title:**
  - You acknowledge that the ownership of goods delivered is only transferred to you when you have paid all sums owing, and until that time we have the right to call for or recover the goods at our option (for which purpose our employees or agents may enter any of your premises) and you are obliged to deliver up the goods if so directed by this Company.
  - You agree to keep the goods in a fiduciary capacity for us until such time as ownership is transferred to you.
  - Notwithstanding the foregoing, you may sell the goods to a third party in the ordinary course of business, but title remains with us pursuant to these provisions.
- Supply/Delivery of Goods:**
  - The Customer acknowledges that the manner and conditions upon which the Company is able to supply Goods may be dependant upon factors beyond the Company's reasonable control including and, without limitation, changes to the terms and nature upon which Goods are supplied to the Company for resale to the Customer.
  - The Company reserves the right to make reasonable alterations or modifications to design or specification of the Goods without notice to the Customer unless this right is specifically waived by the Company in writing.
  - Cartage will be charged on all deliveries, unless quoted FIS.
  - Storage of any Goods for a period of time may incur holding costs charged to the Customer. During any period of storage all Goods remain at the risk of the Customer.
  - It is the Customer's responsibility to check the colour, type, condition and quantities of all orders upon receipt.
- Pricing and Payments Terms:**
  - All prices are subject to market fluctuation and prices charged will be those applicable at the date of delivery, unless firm quote provided.
  - Unless otherwise expressly provided in the quotation, the terms of payment of the contract price shall be:
    - Payment in full within thirty (30) days of invoice provided the Customer is currently approved for credit by the Company.
    - Where the Customer is not approved for credit, payment in full on or prior to delivery will be required.
    - Payment in full on all custom grinds must be made prior to job commencement.
  - Interest payable on outstanding accounts shall be charged at a rate of 2% above the overdraft rate charged to the Company by its bankers.
  - If payment is not received within our trading terms, the Company may suspend existing work, and/or trading facilities until such payment is received.
- Returns & Credits:**
  - No return of Goods will be accepted or credit issued for return of Goods unless the return has first been approved by an authorised representative of the Company.
  - Credits will not be issued for Goods returned unless an Invoice Number is quoted.
  - A limit of thirty (30) days applies to all returns and credits.
  - No credits will be issued for custom Goods.
  - All Goods returned will be subject to a minimum 15% restocking charge.
- Warranties:**
  - All Goods sold are subject to manufacturer's warranty and trading terms.
  - No warranty will come into effect until Goods have been paid for in full.
  - The Company will honour manufacturer's warranties to the extent provided by relevant law and to the extent the Company has the benefit of such warranty.
  - The Company does not provide any warranty beyond that required by relevant law.
- Limitation of Liability:**
  - Nothing in these terms shall exclude, restrict or modify any term, warranty, condition as contained in the Trade Practices Act 1974 or similar state or territory legislation.
  - The Company's liability will be limited to the maximum extent permitted by law to replacement of any defective goods, the supply of equivalent goods, the repair of such goods or the refund of the sale price.
  - The Company shall not be liable for any:
    - consequential or incidental damages;
    - damages or loss of any nature whatsoever relating to lost profits, business interruption, loss of data or privacy or confidentiality, personal injury or any failure to meet any duty; or
    - indirect, special or punitive damages arising in any manner.
- The failure by the Company at any time to insist upon the strict observance by the Customer of any term, condition or warranty shall not be deemed a waiver thereof or amount to a waiver of any subsequent breach of any such term, condition or warranty.

Acceptance of Goods constitutes acceptance of the above terms. No other conditions as implied by Customer order, course of negotiations, correspondence or otherwise will be applicable unless accepted in writing by the Company.

# FITTING A NEW CAMSHAFT

## REMEMBER THE FOLLOWING POINTS

- Thoroughly clean camshaft including oil passages before fitting.
- New Crow Cams lifters should always be fitted with a new camshaft. (Does not apply to roller cams) Warranty may be void if they are not Crow Cams lifters.
- Coat the camshaft with a Crow Cams heavy duty anti-scuff lubricant (**Part no. LUB2**) Engine oil is not good enough. (Does not apply to roller cams)  
**NOTE: For roller lifter soak in engine oil for at least 30 min before assembly.**
- Check timing gears for wear and replace timing chain.
- New high performance valve springs should be fitted with a high performance camshaft. When Double Springs are fitted inner Spring is to be removed during run-in. (Except Rollers). Springs should be inspected carefully and tested in a valve spring testing machine if they are to be used again, even with a stock replacement cam. Make sure there is no coil bind or interference of valve train at full valve lift.
- For the best results high performance cams should be fitted in accordance with the settings listed on the cam data card.
- Prime oil filter and carburettor so that the engine will start instantly. Do not crank engine over to get oil pressure before starting, as it wipes off pre-lube.
- Run engine above 1800rpm for 20 minutes. Check for leaks. Take car for test drive to load engine.
- Do not allow engine to idle for any longer than necessary.  
**WARNING:** We strongly advise against the use of high volume oil pumps in street engines as the excessive load they provide causes premature failure of the oil pump drive gear.

## CHECKING CAM POSITION

- Find top dead centre on the number 1 cylinder using a dial indicator. Mark this position with a pointer mounted on the flywheel or degree wheel bolted to the front of the crankshaft.
- After setting the dial indicator to zero on the back of the cam inlet lobe, rotate the crank until the pointer indicates the piston has reached top dead centre.
- Read off the figure on the dial indicator and compare it to the figure shown for inlet lobe lift at T.D.C. on the cam data card supplied with the new cam. The figure shown on the cam data is a minimum and may be up to .005" more. Advance the camshaft to increase the lift at TDC retard the cam to decrease the lift.

## THE TIME SPENT DIALLING THE CAM WILL BE REWARDED WITH OPTIMUM PERFORMANCE AND FUEL EFFICIENCY.

## ENGINE OIL vs CROW DURA CAM ZDDP OIL ADDITIVE

Modern engine oil has a low percentage of ZDDP wear additives to avoid damage to catalytic converters.

For vehicles not fitted with catalytic converters we advise the use of Crow Cams Dura Cam oil additive **Part Number ZDDP100** which brings the ZDDP levels in the oil to acceptable levels for high performance flat tappet camshafts.



## SPECIFICATIONS & APPLICATIONS

At the time of writing we believe the specifications and applications in the catalogue to be correct, however we are engaged in a continuous program of research and development. We therefore reserve the right to upgrade the specifications without notice. The fitter should take reasonable care to ensure the replacement parts are suitable for the application suggested as our catalogue is a guide only.

**NOTE:** In some applications fitting a performance camshaft to emission control vehicles used on public roads may contravene local pollution control regulations. If in doubt please consult your government environment protection or pollution control authorities.

# INSTALLING AND ADJUSTING HYDRAULIC LIFTERS

## FOLLOW THE FOLLOWING POINTS

1. Do not wash in any solvent. Wipe the parts off with a lint free towel.
2. Use 10W30 oil and lube the O.D of the body and wheel.
3. Make sure the lifter-to-bore clearance on cast iron blocks is .0015" to .0017".  
On Aluminium blocks that oil the lifter (LS Series), the clearance is .0012" to .0014". Both of these measurements are at 21 Deg C. The Aluminium block will have a higher rate of expansion, that is why the clearance is tighter.
- b) If your adjuster nut is 7/16" x 20 threads per inch, then divide 1 inch by 20 threads per inch. One complete turn down on a 7/16" by adjuster nut will move .050"
- c) Next, Divide .050" by 4 to calculate the distance for a quarter-turn of the adjuster nut (  $.05" / 4 = .0125"$  ).
- d) For a 3/8" x 24 adjuster nut, the calculations are:  
 $1" / 24 \text{ TPI} = .042"$  per full turn and  $.042" / 4 = .0105"$  per quarter turn.

## ADJUSTING THE ZERO-LASH SETTING OF THE LIFTER:

1. We like using the firing order to set the valves. Put the engine on #1 Cylinder.
2. What we want is the Intake and Exhaust to be on the base circle of the camshaft
3. Adjust the rocker until the pushrod just starts to get tight while taking the pushrod and rolling it between your thumb and finger. Once you feel drag, this is what we call Zero-Lash
4. You are now ready to tighten down on the adjuster using the following method:
  - a) It's important to know the thread pitch, in threads per inch, of the adjuster nut because one complete turn of the nut will move a distance of one complete thread. Therefore, verify the thread pitch of the adjuster nut as racing rocker manufacturers use different nut sizes and thread pitches.
5. Repeat these adjustments for each cylinder running through the firing order.

Block and Head Type	Sizes
Cast Iron block and Cast Iron Head	.020" to .025"
Cast Iron Block and Aluminium Head	.030" to .035"
Aluminium Block and Aluminium Head	.045" to .050"



# CUSTOM CAMSHAFT GRINDING

## 4WD

The increased popularity of heavy recreational vehicles and four wheel drives has greatly increased demand for cam profiles specifically designed to enhance low end and mid range torque. Crow Cams have a range of part numbers for most popular vehicles including towing cams for popular passenger cars and commercials. Most of these profiles are also well suited to LPG which is popular in many of these applications we have grinds to provide increased torque at low revs or increased power at higher rpm for highway and touring applications.

## TURBO & SUPERCHARGED APPLICATIONS

Special grinds have been developed to reduce turbo lag and provide maximum efficiency from turbocharged engines. Mechanical and chemical supercharging also requires special considerations from the cam designer.

## DRAG RACING

Many of Australia's fastest and most successful drag racers rely on Crow Cams technology to win championships and break records. Our R&D staff work closely with engine builders and racers to develop cam profiles specifically suited to engine combinations in both normally aspirated and supercharged applications.

For years Crow Cams have dominated the supercharged Top Door slammer class in Australia and smashed several world ET and speed records in the process. John Zappia used Crow camshaft technology to multiple world ET records and 8 Australian Top door slammer championships. Top fuel racer Darren Morgan has won multiple Australian championships using Crow Cams.

The same technology that powers these winners is available to all racers from off street to top fuel competition.

## BURNOUT CAMS

Since the very beginning of Burnout competitions, Crow Cams have developed successful and highly reliable camshaft and valve train packages for top champions including Gary Myers, Peter and Debbie Gray, George Separovich, Clint Ogilvie and John Taverna Jnr.

Whether your application is 6 cylinder, V8, flat tappet or roller, normally aspirated or blown, Crow will custom grind a cam that is kind on springs and other valve train components.

Talk to our technical staff today about a burnout cam to suit your specific application.

## CIRCUIT RACING

Crow Cams involvement in circuit racing continues at every level from control classes such as Commodore Cup Saloon Car Series.

Crow engineers welcome new challenges from all classes of racing from the legendary 427 C5R Holden Monaro 24 hour race cars to more modest V6 and OHC saloon car applications.

## SPEEDWAY

Crow Cams have a long history of successes in speedway racing with State and National Champions in classes as diverse as Street Stock, AMCA, Late Model, 360 Modified and 410 Sprint Car. Crow have a huge selection of special grinds for all classes of speedway racing and matching valve train components to ensure reliable, race winning performance.

## POWER BOATS

Individual grinds are available to suit the diverse range of hull designs and power units used in today's high performance boats. Crow have had a long association with world class race boat teams from blown alcohol displacement to world championship jet sprint racing





# FREE COMPUTER CAMSHAFT RECOMMENDATION

Fill out the following questionnaire and send to **CROW CAMS 16 Colbert Road, Campbellfield, 3061**  
**Fax: (03) 9357 0001 for free computer selection. Further copies are available from CROW CAMS**

NAME:..... ADDRESS:.....

SUBURB:..... STATE:..... POSTCODE:.....

PHONE:..... FAX:..... AREA CODE:.....

**VEHICLE TYPE MAKE:**..... **YEAR:**..... **WEIGHT LBS/KG**.....

**BOAT**..... **LENGTH:**..... (FEET)

**TYPE OF HULL** (TICK ONE OF THE FOLLOWING)

FLAT BOTTOM  VEE  CAT  LEG

**TYPE OF USE** (TICK ONE OF THE FOLLOWING)

## CAR

TOWING  STREET/RACE  
 TORQUE & ECONOMY  DRAG RACING  
 MILD STREET  CIRCUIT RACING  
 HOT STREET PERFORMANCE  SPEEDWAY

## 4WD

OFF ROAD  
 HIGHWAY TOURING  
 TOWING

## BOAT

PLEASURE  
 SOCIAL SKI  
 HIGH PERFORMANCE SKI  
 SKI RACING  
 CIRCUIT RACING

## ENGINE

MAKE / TYPE:..... YEAR:..... NO. OF CYLINDERS:.....

CUBIC CAPACITY:..... C. 1/ LITRES:..... COMPRESSION RATIO:.....

BORE:..... INCHES/MM STROKE:..... INCHES/MM

ROLLER ROCKERS: YES / NO:..... ROCKER RATIO: STANDARD / OTHER SPECIFY:.....

MAXIMUM OPERATING RPM:.....(BE HONEST NOW) RPM @100km/h:..... IDLE SPEED:.....

NORMAL OPERATING RPM RANGE:..... RPM to .....

## FUEL SYSTEM

CARBURETTOR:..... CFM OF CARBURETTOR:..... VENTURIES (BARRELS):.....

HOW MANY CARBURETTORS?:..... TYPE OF FUEL:.....

INJECTION:..... HOW MANY INJECTORS?:.....

TURBO CHARGED:.....  Single  Twin S/CHARGED..... BOOST..... (PSI)

SUPERCHARGER TYPE: SCREW..... ROOTS..... CENTRIFUGAL.....

CFM OF CARBURETTORS.....

IS NITROUS OXIDE TO BE USED?  NO:  YES

Plate  Fogger  Single  Multi Stage

**TRANSMISSION** **CAR**  AUTOMATIC  MANUAL **BOAT**  VEE DRIVE  MID MOUNT

TRANSMISSION SPEEDS:  2  3  4  5  6 % STEP UP.....

CONVERTOR STALL SPEED..... DIFF. RATIO.....

## HEAD

MODIFICATION: STOCK..... MILD PORT JOB:..... BIG VALVES:..... RACE PREPARED:.....

## EXHAUST SYSTEM

STOCK:..... BIG PIPES:..... EXTRACTORS:..... OPEN SYSTEM:.....

## TYPE OF CAM REQUIRED

HYDRAULIC:  HYDRAULIC ROLLER:  MECHANICAL:  MECHANICAL ROLLER:  OVERHEAD CAM:

# STANDARD REPLACEMENT CAMS & VALVE SPRINGS

Make / Capacity	Cylinder	Year	Application	Engine	Part Number	Valve Spring
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**NOTE: If the model you require is not listed here check custom grind listing.**

## CHEVROLET

<b>283-400 ci</b>	V8	1957-86		Small Block.	<b>1613</b>	4931-16
<b>350 ci</b>	V8	1999-on	Corvette (300kw)	LS1, Gen III engine	<b>871001</b>	

## CHRYSLER

<b>225 ci</b>	6	1962-70		Slant 6	<b>7000</b>	5077-12
<b>215-265 ci</b>	6	1970-80		Hemi, 3 bolt gear	<b>6000 *</b>	5091-12
<b>265 ci</b>	6	1976-78	E38 Charger	Hemi 6	<b>6603 *</b>	7736-12
<b>265 ci</b>	6	1978-80	E49 Charger	Hemi 6 6 Pack	<b>6703 *</b>	7736-12
<b>273-360 ci</b>	V8	1968-80		Small Block	<b>18000</b>	5091-16

## DAEWOO

<b>1498cc</b>	4			G15ME,G15MS	<b>259000</b>	
<b>1598cc</b>	4		Lanos, Cielo	A15SMS Coil Pack	<b>261001</b>	

## DODGE

<b>361ci - 440ci</b>	V8	1972-77	Chain drive	3 Bolt gear	<b>45000</b>	
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## FORD

<b>997-1598cc</b>	4	1959-78	Cortina	Pushrod engine	<b>51000</b>	
<b>1597cc</b>	4	1985-90	Laser, Capri SA	B6, SOHC Mech	<b>224000</b>	
<b>1993cc</b>	4	1971-on	Cortina,Escort	OHC	<b>26000</b>	
<b>170-200</b>	6	1960-64	Falcon	Solid Lifter	<b>63001</b>	
<b>188-221ci</b>	6	1964-70	Falcon	Hydraulic Lifter	<b>63002</b>	
<b>200-250ci</b>	6	1970-76	Falcon	Hydraulic Lifter	<b>63000</b>	
<b>200-250ci</b>	6	1976-85	Falcon	Cross flow	<b>14000 *</b>	5014-12
<b>200-250ci</b>	6	1986-88	Falcon	Unleaded	<b>14002 *</b>	5014-12
<b>250ci</b>	6	1984-87	Falcon	EFI engine	<b>14678 *</b>	5014-12
<b>289-302ci</b>	V8	1964-68	Falcon	Windsor	<b>15613</b>	
<b>302ci</b>	V8	1991-on	Falcon EB	Roller cam	<b>62951</b>	
<b>302ci</b>	V8	1993-on	Falcon EB GT	Roller Cam	<b>62050</b>	
<b>302ci</b>	V8	1996-on	Falcon XR8	200kw Roller Cam	<b>621338</b>	
<b>302ci</b>	V8	1998-on	Falcon XR8	220kw T Series	<b>621339</b>	
<b>302ci</b>	V8	1998-on	Falcon XR8	250kw T Series	<b>621368</b>	
<b>5400cc</b>	V8	2002-08	Falcon BA XR8	DOHC RHI	<b>270-000</b>	
				DOHC LHI	<b>271-000</b>	
				DOHC RHE	<b>272-000</b>	
				DOHC LHE	<b>273-000</b>	
<b>5400cc</b>	V8	2002-08	Falcon BA GT	DOHC RHI	<b>270-001</b>	
				DOHC LHI	<b>271-001</b>	
				DOHC RHE	<b>272-001</b>	
				DOHC LHE	<b>273-001</b>	
<b>5400cc</b>	V8	2008-on	Falcon FG GT	DOHC RHI	<b>270-002</b>	
				DOHC LHI	<b>271-002</b>	
				DOHC RHE	<b>272-002</b>	
				DOHC LHE	<b>273-002</b>	

**Note:** Part Numbers marked with \* require Distributor Gear (Part No DG2 or DG2A) Factory gear not suitable

## STANDARD REPLACEMENT CAMS & VALVE SPRINGS

Make / Capacity	Cylinder	Year	Application	Engine	Part Number	Valve Spring
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**NOTE: If the model you require is not listed here check custom grind listing.**

FORD						
<b>302-351ci</b>	V8	1968-84	Falcon	Cleveland	<b>21000</b>	5094-16
<b>351ci</b>	V8	1970-71	Falcon GT	HO Solid Cam	<b>21726</b>	7738-16
<b>351ci</b>	V8	1969-70	Falcon	Windsor	<b>62000</b>	5062-16
<b>390-428ci</b>	V8	1963-71	Galaxie	FE Engine	<b>19000</b>	

FORD COMMERCIAL						
<b>200-250ci</b>	6	1976-85	Falcon Ute, P'Van		<b>14000 *</b>	
<b>200-250ci</b>	6	1986-88	Falcon Ute, P'Van	Unleaded	<b>14002 *</b>	
<b>200-250ci</b>	6	1979-88	Falcon Ute, P'Van	EFI	<b>14678 *</b>	
<b>302ci</b>	V8	1985-86	F Series	EFI 302 firing order	<b>15001</b>	
<b>302ci</b>	V8	1986-90	F Series	EFI 351 firing order	<b>62001</b>	
<b>351ci</b>	V8	1990-93	F Series	EFI 351 firing order	<b>62002</b>	

HOLDEN						
<b>1196cc</b>	4	1994-97	Barina	C12NZ	<b>276000</b>	
<b>1396cc</b>	4	1994-97	Barina	C14NZ	<b>276000</b>	
<b>1396cc</b>	4	1998-on	Barina	C14SE	<b>373000</b>	
<b>1471 cc</b>	4	1985-87	Gemini RB	FWD 4XC1	<b>242000</b>	
<b>1584 cc</b>	4	1976-82	Gemini	G 161Z	<b>78000</b>	5078-8
<b>1598cc</b>	4	1996-98	Astra	C16SE	<b>261001</b>	
<b>1598-1796cc</b>	4	1987-90	Astra	Family II EFI	<b>92004</b>	
<b>1598cc</b>	4	1980-86	Camira	Family II Carb.	<b>92000</b>	
<b>1798cc</b>	4	1980-86	Camira	Family II Throttle Body	<b>92003</b>	
<b>1798cc</b>	4	1980-86	Camira	Family II Multi Point EFI	<b>92002</b>	
<b>1998 cc</b>	4	1984-87	Camira	Family II FI	<b>92001</b>	
<b>149-202ci</b>	6	1964-80	Red engine		<b>35002</b>	
<b>202 ci</b>	6		Red engine	XU1	<b>35604</b>	4823-12
<b>202 ci</b>	6		Red engine	Bathurst XU1	<b>35616</b>	4823-12
<b>202 ci</b>	6	1980-87	Commodore	Blue,Carby	<b>35002</b>	
<b>202 ci</b>	6	1986-87	Commodore	EFI engine	<b>35678</b>	
<b>253-308ci</b>	V8	1970-86		Red and Blue eng.	<b>5613</b>	4931-16
<b>4987cc</b>	V8	1988	Commodore	Walkinshaw	<b>4000</b>	4833-16
<b>4987cc</b>	V8	1989-97	Commodore VN-VS EFI engine		<b>4000</b>	4931-16
<b>4987cc</b>	V8	1999	Commodore VT	Holden Eng Hyd Roll	<b>4002</b>	4843-16
<b>5700cc</b>	V8	1999	Commodore VT Holden Eng Hyd Roll		<b>4003</b>	4843-16
<b>5700cc</b>	V8	1993-1994	Commodore	HSV 215	<b>4001</b>	4833-16

## STANDARD REPLACEMENT CAMS & VALVE SPRINGS

Make / Capacity	Cylinder	Year	Application	Engine	Part Number	Valve Spring
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**NOTE: If the model you require is not listed here check custom grind listing.**

HOLDEN							
<b>307-350ci</b>	V8	1968-78	Chev.	Small Block	<b>1613</b>	4931-16	
<b>3800cc</b>	V6	1989-91	Commodore VN	Roller Hydraulic	<b>607000</b>	7328-12	
			For engines with single spring and damper use				4835-12
<b>3800cc</b>	V6	1991-93	Series 2 VN-VR	Roller Hydraulic	<b>774000</b>	4936-12	
<b>3800cc</b>	V6	1993-on	VS,VT,VY, VX	Roller Hydraulic	<b>853000</b>	4021-12	
<b>5700cc</b>	V8	1999-on	VT-VZ	LS1 Engine	<b>871000</b>	4231-16	
<b>5700cc</b>	V8	2004-on	VZ	300kw Engine	<b>871001</b>		
<b>6000-6200cc</b>	V8	2010-present	VE	Single Bolt (Non AFM)	<b>872000</b>		

HOLDEN COMMERCIAL						
<b>1389cc</b>	4	1994-97	Combo	C14SE	<b>373000</b>	
<b>1584cc</b>	4	1980-83	Rodeo	G161Z	<b>78000</b>	5078-8
<b>1817cc</b>	4	1983-84	Rodeo	G180Z	<b>78000</b>	5078-8
<b>1949cc</b>	4	1983-85	Rodeo	G200Z	<b>78200</b>	5078-8
<b>2200-2400cc</b>	4	1999-on	Rodeo TF, RA	C22NE, C24NE	<b>92004</b>	

KIA						
<b>1498 cc</b>	4	1996-98	Mentor		<b>224001</b>	5080-8

LEYLAND						
<b>1800cc</b>	4	1962-78	MGB	Suit Slot Drive Only	<b>38000</b>	5840-8
<b>3500cc</b>	V8	1978-80	P76		<b>37000</b>	

MAZDA						
<b>1600cc</b>	4	1985-89	323	B6 Belt drive	<b>224000</b>	5080-8
<b>1600cc</b>	4	1985-89	323	B6 Belt drive hyd tappet	<b>224001</b>	5080-8
<b>2188cc</b>	4	1987-97	B2200	F2 12 Valve EFI	<b>304000</b>	
<b>2605cc</b>	4	1989-on		G6 12 Valve	<b>42100</b>	

NISSAN						
<b>1598-1796cc</b>	4	1987-92	Pulsar	LE18, Family II eng.	<b>92004</b>	
<b>4169cc</b>	6	1988-2000	Patrol	TB42 & TB45	<b>442000</b>	5840-12
<b>4759cc</b>	6	2001-on	Patrol	TB48 In	<b>538000</b>	4164-24
				Ex	<b>539000</b>	

ROVER, RANGE ROVER						
<b>3500-4500 cc</b>	V8	1966-81	Rover		<b>37000</b>	

TOYOTA COMMERCIAL						
<b>1998-2237cc</b>	4	1983-on	Torago,Hilux	3Y,4Y	<b>288000</b>	
<b>2887-4230cc</b>	6	1961-89	Landcruiser	F,2F,3F	<b>99000</b>	4828-12
<b>4476cc</b>	6	1992-03	Landcruiser	1Z-FE In	<b>528000</b>	
				Ex	<b>529000</b>	

# TUFF SOUNDS FOR HOT RODS

Hot Rod and Street Machine builders often ask for cam combinations that will produce a tough idle and engine note without sacrificing street driveability or engine reliability. The range of Crow Hot Rod hydraulic grinds are designed with increased overlap to produce a lumpy idle that will stand out in the crowd.

Two options are available for popular US small block V8s one suitable for standard torque converters with good power and torque from 1600 rpm and the second to suit 2400 stall converters with stronger mid range and top end power from 2500 rpm.



## CROW CAMS TUFF CAM

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>CHEVROLET SMALL BLOCK HYDRAULIC</b> ROCKER RATIO 1.50 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Medium idle, strong mid range (See Fitting notes 1)	1600 - 4600	1603-8	280	280	214	214	.442"	.442"	108			HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937	CRCSB153
Lumpy idle, strong mid / high range performance (See Fitting notes 1)	2500 - 5500	1686	292	292	224	224	.507"	.507"	108			HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937	CRCSB153
<b>FORD WINDSOR 289W-302W</b> ROCKER RATIO 1.62 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Medium idle, strong mid range (See Fitting notes 1 & 7)	1600 - 4600	15890-8	272	280	212	217	.467"	.475"	108			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163
Lumpy idle, strong mid / high range performance (See Fitting notes 1 & 7)	2500 - 5500	15689	282	289	222	230	.480"	.486"	106			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163
<b>FORD CLEVELAND 302C - 351C RPM</b> ROCKER RATIO 1.73 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Medium idle, strong mid range (See Fitting notes 1 & 2)	1600 - 4600	21666-8	268	288	204	214	.481"	.512"	108			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414	CRFCL177
Lumpy idle, strong mid / high range performance. (See Fitting notes 1 & 2)	2500 - 5500	21689	282	289	222	230	.512"	.519"	106			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414	CRFCL177
<b>FORD FLAT HEAD (1949 &amp; Onward)</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild cam good bottom end power, for street engine	1500 - 4800	63582	273	289	210	215	.314"	.327"	111											
Medium cam lumpy idle good mid range power	2200 - 5200	635290	285	290	228	228	.363"	.364"	110											
Hot cam, lumpy idle, good upper RPM range need well prepared engine	2500 - 5500	635289	298	292	244	244	.406"	.406"	109											
For all pre 1949 SV engines use this part number, ask about the many grinds available for Flat Head Fords		633900																		

**Note:** Springs marked with xxxx-xx<sup>2</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# CHEVROLET BIG BLOCK V8 ROCKER RATIO 1.73

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers	
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust													
<b>HYDRAULIC CAMS</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																					
Mild street cam, good bottom end torque, smooth idle.	1100 - 4000	2602	270	270	208	208	.484"	.484"	110			HT817C-16	7737-16	1.880"	12700-16	12708-16	KG819-16	CS8454T	See notes	CRCBB177	
Stock / Mild engine, economy and performance, dual patten suit LGP (See Fitting notes 1 & 2)	1200 - 4200	2666	268	288	204	214	.481"	.512"	112			HT817C-16	7737-16	1.880"	12700-16	12708-16	KG819-16	CS8454T	See notes	CRCBB177	
Sporty idle, strong mid-range (See Fitting notes 1 & 2)	2000 - 4800	2605	280	290	220	235	.508"	.512"	108			HT817C-16	7737-16	1.880"	12700-16	12708-16	KG819-16	CS8454T	See notes	CRCBB177	
Good idle good mid range power, suit strong street engine needs Hi-Stall (See Fitting notes 1, 2 & 3)	2200 - 5500	2778	290	290	230	230	.524"	.524"	110			HT817C-16	9731-16	1.950"	12710-16	12708-16	KG819-16	CS8454T	See notes	CRCBB177	
Good idle great mid range for mild engine needs comp, rockers & Hi-Stall (See Fitting notes 1, 2 & 3)	2200 - 6000	21424	287	295	231	238	.561"	.565"	110			HT817R-16	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Rough idle for street/race engine needs comp rockers, hi -stall & diff gears (See Fitting notes 1, 2 & 3)	2800 - 6000	2700	304	316	242	250	.570"	.570"	108			HT817R-16	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
<b>SOLID CAMS</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																					
Choppy idle, great mid range power needs engine mods & hi stall (See Fitting notes 5)	2200 - 5700	2773	280	290	232	242	.510"	.532"	110		.020"	.020"	AT992-16	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177
Hot street application, very strong mid range serious engine mods needed (See Fitting notes 5)	2600 - 5800	2626	278	288	238	244	.561"	.571"	109		.024"	.024"	AT992-16	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177
Street/strip application, very strong mid range serious engine mods needed (See Fitting notes 5)	3000 - 6000	2639	290	300	248	255	.574"	.598"	109		.025"	.025"	AT992L-16	7437-16 <sup>D</sup>	1.950"	12700-16	12708-16		CS8454T	See notes	CRCBB177
Street/strip, needs good cyl heads headers etc comp, diff gears & hi stall (See Fitting notes 5)	3500 - 7000	2746	292	295	252	258	.587"	.614"	109		.018"	.018"	AT992L-16	7437-16 <sup>D</sup>	1.950"	12700-16	12708-16		CS8454T	See notes	CRCBB177
<b>HYDRAULIC ROLLER CAMS</b>																					
Hyd roller cam, great torque with minimal engine modifications, needs comp & headers (See Fitting notes 1, 2 & 3)	1800 - 4800	21330	278	283	220	227	.568"	.578"	110			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Performance hyd roller, great mid range choppy idle needs heads, comp etc (See Fitting notes 1, 2 & 3)	2200 - 5800	21433	297	303	228	238	.636"	.632"	110			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 1, 2 & 3)	3200 - 6400	21315	303	307	238	244	.596"	.596"	109			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Performance cam strong idle excellent bottom & mid range needs comp heads manifold etc & hi stall. (See Fitting notes 1, 2 & 3)	3500 - 6200	21719	295	315	238	243	.615"	.652"	110			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Performance cam good mid to upper RPM range, aggressive idle needs comp manifold & headers etc + hi stall. (See Fitting notes 1, 2 & 3)	3500 - 6800	21725	290	296	242	246	.653"	.654"	109			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	
Performance cam great upper RPM range, choppy idle needs manifold & headers comp etc, + hi stall. (See Fitting notes 1, 2 & 3)	3800 - 7000	21435	317	326	249	258	.596"	.596"	108			5210H	9936-16 <sup>D</sup>	1.980"	12710-16	12708-16		CS8454T	See notes	CRCBB177	

**FITTING NOTES:** Pre 1967 engines must have cam or rear bearing grooved for correct oiling.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# CHEVROLET BIG BLOCK V8 ROCKER RATIO 1.73

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SOLID ROLLER CAMS</b>																				
Street roller, street /strip application small cube engine (See Fitting notes 1 - 7)	3500 - 6800	21301	286	295	252	260	.625"	.625"	108					2.000"	13102-16	11101-16		CS8454T	See Notes	
Street /strip suit 396 - 427ci engine needs comp and after market heads (See Fitting notes 1 - 7)	3600 - 6800	21387	298	303	259	265	.678"	.675"	108					2.000"	13102-16	11101-16		CS8454T	See Notes	
Race roller, for max mid & upper RPM Big cubes, comp and after market heads (See Fitting notes 1 - 7)	4000 - 7000	2739	310	319	277	284	.740"	.740"	109					2.000"	13102-16	11101-16		CS8454T	See Notes	
Race roller, prep engine needed. Blown or Nos engine application (See Fitting notes 1 - 7)	4500 - 7500	21356	322	332	278	289	.740"	.750"	112					2.000"	13102-16	11101-16		CS8454T	See Notes	

# CHEVROLET SMALL BLOCK V8 ROCKER RATIO 1.50

<b>HYDRAULIC CAMS USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																					
Use for STD cam, Hi Torque/towing	1000 - 3800	1613	260	267	194	202	.390"	.408"	112				HT817C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-34B-16	CRCSB153
Power & economy cam suits LPG	1000 - 3800	1631	269	269	202	207	.395"	.395"	112				HT817C-16	4830-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Mild cam better throttle response suit highway usage	1500 - 4500	1602	270	270	208	208	.420"	.420"	110				HT817C-16	4830-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Great mid range, STD idle, good fuel economy & LPG suit 327ci & up (See Fitting notes 1)	1700 - 4700	1666	268	288	204	214	.417"	.444"	112				HT817C-16	4830-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Mild street cam, good driveability auto /manual (See Fitting notes 1)	1800 - 4800	1892	275	275	215	215	.441"	.441"	112				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Mild cam dual pattern suit small forced induction engine (See Fitting notes 1)	1900 - 4900	1665	280	290	214	224	.440"	.465"	112				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Mild street cam, moderate idle needs pipes & carbie (See Fitting notes 1)	2200 - 5200	1651	282	282	222	222	.448"	.448"	114				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Performance street cam, require better breathing (See Fitting notes 1 & 2)	2500 - 5500	1801	280	280	224	224	.450"	.450"	114				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Broad power band suited for S/C or NOS engine need hi stall (See Fitting notes 1 & 2)	2600 - 5800	11367	293	299	226	236	.464"	.485"	112				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Moderate idle good mid range power. Needs heads, mods & exhaust (See Fitting notes 1 & 2)	2700 - 5500	1650	292	292	230	230	.450"	.450"	113				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB153
Hyd cam strong mid range, needs headers, diff gear & 2500 stall (See Fitting notes 1 & 2)	2800 - 5600	1622	282	282	230	230	.480"	.480"	110				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB157
Good mid range, needs good heads to perform to max suit speedway (See Fitting notes 1 & 2)	3000 - 6000	1672	280	280	231	231	.480"	.480"	108				HT817C-16	4843-16	1.700"	11707-16	11701-16	KG819-16	CS8350	PR-937-16	CRCSB157
Hyd cam for max mid range & top end (See Fitting notes 1, 2 & 3)	3200 - 6200	1802	295	295	246	246	.508"	.508"	109				HT817R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8350	PR-937-16	CRCSB157
Hyd cam, rough idle high RPM range needs heads, comp, headers & stall (See Fitting notes 1, 2 & 3)	2700 - 6200	1747	294	307	236	246	.525"	.532"	107				HT817R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8350	PR-937-16	CRCSB157

**FITTING NOTES:** Pre 1967 engines must have cam or rear bearing grooved for correct oiling.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# CHEVROLET SMALL BLOCK V8 ROCKER RATIO 1.50

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SOLID CAMS</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Choppy idle, great mid range power needs engine mods & hi stall (See Fitting notes 5)	3000 - 6000	1626	278	288	238	244	.485"	.494"	109	.024"	.026"	AT992-16	7333-16 <sup>D</sup>	1.800"	11700-16	4134-16	VSV530-16	CS8350	PR-977-16	CRCSB157
Street/strip application, very strong mid range serious engine mods needed (See Fitting notes 5)	3500 - 6500	1806	281	294	245	255	.490"	.507"	108	.018"	.022"	AT992-16	7333-16 <sup>D</sup>	1.800"	11700-16	4134-16	VSV530-16	CS8350	PR-977-16	CRCSB157
Race application, needs good breathing comp, diff gears & hi stall (See Fitting notes 5)	3800 - 6800	1746	292	295	252	258	.508"	.532"	109	.018"	.018"	AT992-16	7331-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8350	PR-977-16	CRCSB157
Performance solid cam serious race use only need premium valve train parts (See Fitting notes 5)	3800 - 7200	1731	292	297	253	260	.531"	.543"	108	.026"	.026"	AT992-16	7331-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8350	PR-977-16	CRCSB157
<b>HYDRAULIC ROLLER CAMS</b>																				
Mild performance cam great bottom end & mid range, needs manifold & headers (See Fitting notes 5)	1700 - 4800	11330	275	282	220	227	.492"	.501"	108			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	2700 - 6200	11433	297	303	228	238	.552"	.548"	110			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	3200 - 6400	11315	303	307	238	244	.516"	.516"	108			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Performance cam aggressive idle excellent bottom & mid range needs comp heads manifold etc 3500 hi stall (See Fitting notes 5)	3500 - 6200	11719	295	315	238	243	.532"	.565"	107			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Performance cam good mid to upper RPM range, aggressive idle need comp manifold & headers etc 3500 +hi stall (See Fitting notes 5)	3500 - 6800	11725	290	296	242	246	.567"	.567"	107			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Performance cam good mid to upper RPM range, choppy idle need manifold & headers comp etc, 3500+ hi stall (See Fitting notes 5)	3500 - 6500	11571	310	310	246	246	.570"	.570"	108			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153
Performance cam 350+cubes great upper RPM range, choppy idle need manifold & headers comp etc, 3500+ hi stall (See Fitting notes 5)	3800 - 6500	11435	317	326	249	258	.518"	.518"	108			5200H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8350	See Notes	CRCSB153

Some custom grinds are also available with Needle Roller Bearings, 4 x 7 Timing Swap and Cast Distributor Gears

\* Chev, LS1,LS2, Roller Hydraulic cams see Holden LS1 V8 section.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# CHEVROLET SMALL BLOCK V8 ROCKER RATIO 1.50

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SOLID ROLLER CAMS</b>																				
Small street roller, low lift, heap of bottom end torque, soft on valve springs (See Fitting notes 1 - 7)	2800 - 5800	1969	270	280	233	242	.495"	.495"	110				7342-16 <sup>D</sup>	1.850"	13102-16	11101-16	VSV530-16	CS8350	See Notes	
Small street roller, needs heads, comp, exhaust & hi stall. (See Fitting notes 1 - 7)	3200 - 6400	11551	278	284	245	251	.565"	.565"	107				4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8350T	See Notes	
Street/strip application bracket engine cam needs comp, heads & hi stall (See Fitting notes 1 - 7)	3500 - 6800	11301	286	295	252	260	.542"	.542"	108				4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8350T	See Notes	
Street/strip application bracket engine needs comp and after market heads etc (See Fitting notes 1 - 7)	3600 - 7000	11482	290	294	252	257	.605"	.605"	109				4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8350T	See Notes	
Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1 - 7)	3800 - 7200	1754	295	298	257	262	.600"	.616"	106				4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8350T	See Notes	
Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1 - 7)	4000- 7200	11492	300	306	262	268	.566"	.566"	107				4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8350T	See Notes	



# CHRYSLER 5.7 & 6.1 HEMI V8 2004 ON ROCKER RATIO 1.65

<b>HYDRAULIC ROLLER</b>																				
Mild performance cam, great low down torque & mid range needs springs & computer calibration (See Fitting notes 1)	1800 - 6200	291208	275	281	216	220	.578"	.578"	114				4435-16 <sup>D</sup>	1.800"					PR-HEMI-16	
Street cam, good mid range power needs valve springs & computer calibration (See Fitting notes 1)	2100 - 6300	291247	286	286	219	227	.563"	.570"	114				4435-16 <sup>D</sup>	1.800"					PR-HEMI-16	

# JEEP/CHRYSLER 6.4 SRT HEMI V8 DROP IN SPRINGS

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Spring Retainer	Valve Locks
4232-16	2.050"	175 @ 2.050"	450 @ 1.400"	.650"	Standard	Standard

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# CHRYSLER HEMI 6 ROCKER RATIO 1.73

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Oil Pump Gear
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY (Suit 3 bolt cam gear, must use 15 Tooth oil pump gear Part Number 60062)																				
Standard replacement cam. (See Fitting notes 1)	1000 - 3800	6000	266	269	194	194	.399"	.399"	109			HT2011-12	5091-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
High torque, fuel efficient cam with smooth idle. Excellent for towing. (See Fitting notes 1)	1000 - 3800	6613	254	264	194	202	.450"	.470"	112			HT2011-12	5091-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
L.P.G cam for good power and fuel economy in standard motor.	1200 - 4200	6771	258	266	201	205	.457"	.470"	111			HT2011-12	5091-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
Improves throttle response, good highway cam for mild or stock engines. (See Fitting notes 1)	1500 - 4500	6602	270	270	208	208	.485"	.485"	110			HT2011-12	7736-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
Increased mid range power with minimum effect on fuel economy and idle quality. (See Fitting notes 1)	1700 - 4700	6776	266	279	204	215	.469"	.481"	112			HT2011-12	7736-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
Dual pattern profile for hot street modified engines. (See Fitting notes 1)	2000 - 5000	6770	280	290	214	226	.510"	.510"	111			HT2011-12	7736-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
High performance street cam for modified engine with improved carburation. (See Fitting notes 1)	2500 - 5300	6686	292	292	224	224	.507"	.507"	108			HT2011-12	7736-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062
E49 reproduction cam for hot street engines. (See Fitting notes 1)	2800 - 5800	6703	312	312	232	232	.479"	.479"	110			HT2011-12	7736-12	1.687"	12700-12	12102-12	KG303-12	CS6265		60062

# CHRYSLER SMALL BLOCK V8 273-360 ROCKER RATIO 1.5

<b>HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Standard replacement cam.	850 - 4000	18000	253	257	182	192	.365"	.395"	112			HT2011-16	5091-16	1.687"	12700-16		KG303-16	CS8318		
Mild cam , smooth idle, for improved performance from stock engines.	1200 - 4200	18602	270	270	208	208	.420"	.420"	110			HT2011-16	5091-16	1.687"	12700-16		KG303-16	CS8318		
Dual pattern cam giving excellent mid range power band. (See Fitting notes 1)	1400 - 4500	18666	268	288	204	214	.417"	.444"	112			HT2011-16	5091-16	1.687"	12700-16		KG303-16	CS8318		
Mild performance street cam, needs improved carburation. (See Fitting notes 1 & 2)	2000 - 5000	18665	280	290	214	224	.440"	.465"	112			HT2011-16	7736-16	1.687"	12700-16		KG303-16	CS8318		
High performance street applications. (See Fitting notes 1 & 2)	2500 - 5500	18619	286	290	226	232	.459"	.475"	110			HT2011R-16	7736-16	1.687"	12700-16		KG303-16	CS8318		

Chrysler Solid Lifter Cams: For solid cam lifter recommendations use the form on page 8 or contact our technical department.

## CHRYSLER HEMI KB FOR ALL INQUIRIES ON KB CAMS PLEASE CONTACT CROW TECHNICAL DEPARTMENT

## CHRYSLER SLANT 6 FOR ALL INQUIRIES ON SLANT 6 CAMS PLEASE CONTACT CROW TECHNICAL DEPARTMENT

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:**  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# FORD 6 CYLINDER

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>PRE-CROSS FLOW HYDRAULIC</b> ROCKER RATIO 1.5 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Standard replacement cam	900 - 3600	63000	255	255	194	194	.355"	.355"	112			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
Hi torque cam, improved performance, suit stock engine	1000 - 3800	63613	260	267	194	202	.390"	.408"	112			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
Highway cam, stock to mild engine improves throttle response (See Fitting notes 1)	1400 - 4200	63602	270	270	208	208	.420"	.420"	110			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
Great mid range, STD idle, good fuel economy suits LPG (See Fitting notes 1)	1500 - 4500	63666	268	288	204	214	.417"	.444"	112			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
Good performance & driveability suits modified engine (See Fitting notes 1)	1800 - 4800	63603	280	280	214	214	.442"	.442"	110			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
Moderate cam, suit modified engines needs headers & carbie (See Fitting notes 1)	2100 - 5500	63651	282	282	222	222	.448"	.448"	114			HT950-12	1025-12	1.550"	11700-12	11703-12	KG317-12	CS6250		
<b>CROSS FLOW HYDRAULIC</b> ROCKER RATIO 1.73 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY <b>DG2 OR DG2A DISTRIBUTOR GEAR MUST BE USED</b>																				
Standard replacement suit carbie	850 - 3200	14002	256	256	188	188	.405"	.405"	107			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Standard replacement suit EFI	900 - 3400	14678	260	260	197	197	.439"	.439"	109			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Hi torque cam, improved performance excellent for towing, suit petrol / LGP (See Fitting notes 1 & 2)	1000 - 3800	14613	260	267	194	202	.450"	.472"	112			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Good power & economy, split duration suit LPG & std unleaded (See Fitting notes 1 & 2)	1200 - 4000	14771	258	266	201	205	.457"	.471"	111			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Highway cam, stock to mild engine improves throttle response (See Fitting notes 1 & 2)	1400 - 4200	14221	265	271	205	209	.473"	.487"	109			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Great mid range performance, good idle quality and fuel economy (See Fitting notes 1 & 2)	1500 - 4500	14776	266	279	204	215	.469"	.481"	112			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Mild hyd cam, improved performance suit mild street engine (See Fitting notes 1 & 2)	1800 - 4500	14892	275	275	215	215	.510"	.510"	112			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Designed for maximum mid range suit good street engine (See Fitting notes 1 & 2)	2000 - 5000	14770	280	290	214	224	.510"	.514"	111			HT900-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Performance cam heaps of bottom end & mid range, Street /Stock speedway (See Fitting notes 1 & 2)	2200 - 5200	141550S	290	295	219	224	.510"	.510"	106			HT900R-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Street/race cam, needs good head & compression, choppy idle (See Fitting notes 1 & 2)	2400 - 5400	14686	292	292	224	224	.507"	.507"	108			HT900R-12	7738-12	1.820"	12700-12	11704-12	KG317-12	CS6250	PR-917-12	CRFX177
Rough idle for street/race engine needs diff gears, rockers & hi -stall (See Fitting notes 1, 2 & 3)	2600 - 5500	14619	286	290	226	232	.529"	.548"	110			HT900R-12	7333-12 <sup>D</sup>	1.820"	12700-12	11704-12	VSV530-12	CS6250	PR-917-12	CRFX177
Mild idle good mid to upper RPM range, need to improve breathing (See Fitting notes 1, 2 & 3)	2800 - 6000	14650	292	292	230	230	.519"	.519"	113			HT900R-12	7333-12 <sup>D</sup>	1.820"	12700-12	11704-12	VSV530-12	CS6250	PR-917-12	CRFX177
Speedway cam works well in the higher RPM range, needs good valve train (See Fitting notes 1, 2 & 3)	3000 - 6200	14672	280	280	231	231	.550"	.550"	108			HT900R-12	7333-12 <sup>D</sup>	1.820"	12700-12	11704-12	VSV530-12	CS6250	PR-917-12	CRFX177

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD 6 CYLINDER ROCKER RATIO 1.73

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>CROSS FLOW SOLID</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY <b>DG2 OR DG2A DISTRIBUTOR GEAR MUST BE USED</b>																				
Mechanical cam good mid range & high RPM power needs headers, rollers (See Fitting notes 5)	2800 - 6000	14872	262	262	231	231	.554"	.554"	108					1.820"	12700-12	11704-12	VSV530-12	CS6250	PR5980	CRFX177
Performance street/race application needs head work, headers, rollers (See Fitting notes 5)	3000 - 6200	14626	278	288	238	244	.560"	.570"	109					1.820"	12700-12	11704-12	VSV530-12	CS6250	PR5980	CRFX177
High performance race application (See Fitting notes 5)	3500 - 6500	14806	281	294	245	255	.564"	.585"	108					1.820"	12700-12	11704-12	VSV530-12	CS6250	PR5980	CRFX177

# FORD CLEVELAND V8 302c - 351c ROCKER RATIO 1.73

**Note:** Single Groove Valve use 11700-12 Retainers and 4133-12 Collets

<b>HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Standard replacement	900 - 3500	21000	285	272	191	191	.405"	.400"	112			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Hi torque, fuel efficient, dual patten stock idle	1000 - 3800	21613	260	267	194	202	.450"	.470"	112			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Torque & economy cam for towing dual patten, suits LPG needs valve springs (See Fitting notes 1 & 2)	1200 - 4200	21771	258	262	200	205	.457"	.471"	111			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Mild street application, good low down torque, stock idle needs valve springs (See Fitting notes 1 & 2)	1500 - 4200	21602	270	270	208	208	.484"	.484"	110			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Maximum low end torque, dual pattern suit LPG needs valve springs & exhaust (See Fitting notes 1 & 2)	1600 - 4600	21666	268	288	204	214	.481"	.512"	112			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Medium idle, must use improved carbie & headers (See Fitting notes 1 & 2)	2000 - 5500	21603	280	280	214	214	.510"	.510"	110			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Mild street applicaton, medium idle good mid range, needs valve springs etc (See Fitting notes 1 & 2)	2200 - 5600	21665	280	290	214	224	.512"	.539"	112			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Choppy idle, good low to mid range power, need valve springs & headers (See Fitting notes 1 & 2)	2500 - 5700	21686	292	292	224	224	.507"	.507"	108			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Choppy idle, hot street cam, max power needs carbie, heads, headers & hi stall (See Fitting notes 1 & 2)	2600 - 5700	21689	282	289	222	230	.512"	.519"	109			HT900-16	7738-16	1.820"	12700-16	11702-16	KG317-16	CS8351C	PR-414-16	CRFCL177
Hot street cam, strong mid range needs headers, carbie, hi- stall & roller rockers suit NOs S/C (See Fitting notes 5)	2700 - 5900	211367	293	299	226	236	.535"	.560"	112			HT900R-16	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-950-16	CRFCL177
Choppy idle, excellent mid range power needs headers, carbie & hi stall etc (See Fitting notes 5)	2800 - 6000	21649	282	295	234	244	.525"	.525"	108			HT900R-16	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-950-16	CRFCL177
Street /strip cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 5)	2800 - 6500	21787	284	295	238	246	.561"	.566"	109			HT900R-16	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-950-16	CRFCL177
Street/strip application rough idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 5)	3500 - 6500	21700	307	313	241	248	.570"	.570"	108			HT900R-16	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-950-16	CRFCL177
Max performance street/strip hyd cam need serious engine mods 4000 stall & roller rockers (See Fitting notes 5)	3800 - 6800	21648	320	322	248	252	.567"	.585"	108			HT900R-16	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-950-16	CRFCL177

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot.
- The use of high volume oil pumps may cause premature wear of the distributor gear.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.



**FORD CLEVELAND V8 302c - 351c** ROCKER RATIO 1.73  
RPM RANGE TO SUIT 351, FOR 302 RPM RANGE ADD +500 RPM.

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SOLID USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
GT HO solid (See Fitting notes 1, 2, 3 & 4 )	2800 - 5800	21726	295	295	242	242	.510"	.510"	111					1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-978-16	CRFCL177
Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 1, 2, 3 & 4 )	3000 - 6000	21626	278	288	238	244	.560"	.570"	109					1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-978-16	CRFCL177
Street/strip application, very strong mid range serious engine mods needed (See Fitting notes 1, 2, 3 & 4 )	3500 - 6500	21806	281	294	245	255	.564"	.585"	108					1.820"	11700-16	4133-16	VSV530-16	CS8351C	PR-978-16	CRFCL177
Race application, needs good breathing comp, diff gears & hi stall (See Fitting notes 1, 2, 3 & 4 )	3800 - 6800	21746	292	295	252	258	.586"	.614"	109					1.800"	11700-16	4133-16	VSV530-16	CS8351C	PR5850	CRFCL177
Performance solid cam, need premium valve train parts (See Fitting notes 1, 2, 3 & 4 )	3800 - 7200	21731	292	297	253	260	.612"	.625"	108					1.800"	11700-16	4133-16	VSV530-16	CS8351C	PR5850	CRFCL177
<b>HYDRAULIC ROLLER</b>																				
Mild performance cam great bottom end & mid range, needs manifold & headers (See Fitting notes 5)	1700 - 5500	211414	277	287	213	223	.530"	.550"	108			5351H	7333-16 <sup>D</sup>	1.820"	11710-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	1800 - 5800	21757	280	280	214	218	.540"	.540"	111			5351H	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
Mild Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	2200 - 6000	211330	276	283	220	227	.568"	.578"	110			5351H	7333-16 <sup>D</sup>	1.820"	11700-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
Performance cam mid range, choppy idle need manifold & headers (See Fitting notes 5)	2500 - 6200	211515	294	298	228	234	.621"	.618"	107			5351H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
Hi performance cam mid range & top end power, choppy idle need manifold & headers (See Fitting notes 5)	3000 - 6000	21669	304	314	234	240	.573"	.573"	108			5351H	7333-16 <sup>D</sup>	1.820"	11710-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
Hi performance cam mid range & top end power, choppy idle need manifold & headers (See Fitting notes 5)	3200 - 6400	211315	303	307	238	244	.596"	.596"	108			5351H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8351C	See Notes	CRFCL177
<b>SOLID ROLLERS</b>																				
Street/ strip roller, med lift, heap of bottom end torque, soft on valve springs (See Fitting notes 1- 7)	3800 - 6800	211301	286	295	252	260	.625"	.625"	107			5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8351C	See Notes	
Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1- 7)	4000 - 7000	211387	298	303	259	265	.678"	.676"	108			5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8351C	See Notes	
Race roller, for max mid & upper RPM needs, comp and after market heads etc (See Fitting notes 1- 7)	4200 - 7200	21819	291	298	259	266	.623"	.623"	108			5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8351C	See Notes	
Race Roller/strip roller, suit stroker engines, soft on valve springs (See Fitting notes 1- 7)	4200 - 7500	211576	307	310	276	278	.649"	.649"	108			5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8351C	See Notes	

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
• Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
• All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD WINDSOR V8 ROCKER RATIO 1.62

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers	
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust													
<b>260/289/302 HYDRAULIC USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																					
Hi torque, fuel efficient cam can be used a STD cam	1100 - 3900	15613	260	267	194	202	.421"	.442"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
LPG cam, dual pattern, good power and economy	1200 - 4000	15631	269	269	202	207	.426"	.426"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Mild idle, improved throttle response use in STD to Mild engine	1100 - 3900	15602	270	270	208	208	.454"	.454"	110			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Maximum low end torque, dual pattern suit LPG needs valve springs & exhaust (See Fitting notes 1, 2 & 4 )	1700 - 4700	15666	268	288	204	214	.450"	.480"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Mild street applicaton, medium idle good mid range, needs valve springs etc (See Fitting notes 1, 2 & 4 )	2100 - 5200	15665	280	290	214	224	.475"	.502"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Performance cam for street application needs heads, carbie headers & hi stall (See Fitting notes 1, 2 & 4 )	2200 - 5600	151550	287	294	219	224	.478"	.478"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Performance cam for street application needs heads, carbie headers & hi stall (See Fitting notes 1, 2 & 4 )	2200 - 5600	151365	288	290	219	224	.463"	.471"	110			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Hot Street cam , good mid range needs heads, carbie headers & hi stall (See Fitting notes 1, 2 & 4 )	2800 - 5800	151367	293	299	226	236	.502"	.526"	112			HT900-16	7736-16	1.700"	11700-16	11701-16	KG317-16	CS8302W	See Notes	CRFW163	
Street /strip hyd cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 5)	3000 - 6200	15787	284	295	238	246	.525"	.530"	109			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Performance street/strip hyd cam need engine mods + 3200 stall (See Fitting notes 5)	3000 - 6200	15747	294	307	236	246	.567"	.575"	107			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Max performance street/strip hyd cam need serious engine mods + 3500 stall (See Fitting notes 5)	3500 - 6500	15802	295	295	246	246	.547"	.547"	109			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
<b>260/289/302 SOLID USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																					
Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 1- 7)	3000 - 6000	15626	278	288	238	244	.525"	.535"	109		.024"	.026"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 1- 7)	3400 - 6500	151374	281	281	246	246	.552"	.552"	108		.016"	.016"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Race application, needs good breathing comp, diff gears & hi stall (See Fitting notes 1- 7)	3600 - 6500	15746	292	295	252	258	.550"	.575"	109		.018"	.018"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Performance soild cam, need premium valve train parts (See Fitting notes 1- 7)	3800 - 7200	15731	292	297	253	260	.575"	.585"	108		.026"	.026"	AT2000L-16	7437-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Performance soild cam serious race use only need premium valve train parts (See Fitting notes 1- 7)	3600 - 7400	15794	306	311	265	268	.612"	.612"	107		.014"	.018"	AT2000L-16	7437-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold seperately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# FORD WINDSOR V8 ROCKER RATIO 1.62

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers	
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust													
<b>351W HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																					
Hot Street cam , good mid range needs heads, carbie headers & hi stall (See Fitting notes 5)	2700 - 6500	62620	294	294	234	234	.512"	.512"	108			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Street /strip hyd cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 5)	2800 - 6200	62787	284	295	238	246	.525"	.530"	109			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Performance street/strip hyd cam need engine mods + 3200 stall (See Fitting notes 5)	3200 - 6300	62747	294	307	236	246	.567"	.575"	107			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Street/strip application rough idle needs heads, carbie headers & hi stall (See Fitting notes 5)	3500 - 6500	62700	304	316	242	250	.535"	.535"	108			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
Max performance street/strip hyd cam need serious engine mods + 3500 stall (See Fitting notes 5)	3500 - 6500	62802	294	294	246	246	.547"	.547"	109			HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167	
<b>351W SOLID</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																					
Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 5)	3000 - 6000	62626	278	282	238	244	.525"	.535"	109		.024"	.026"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 5)	3400 - 6500	621374	281	281	246	246	.552"	.552"	108		.016"	.016"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Race application, needs good breathing comp, diff gears & hi stall (See Fitting notes 5)	3600 - 6500	62746	292	295	252	258	.550"	.575"	109		.018"	.018"	AT2000-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Performance solid cam (See Fitting notes 5)	3800 - 7200	62731	292	297	253	260	.575"	.585"	108		.026"	.026"	AT2000L-16	7437-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
Performance solid cam (See Fitting notes 5)	3600 - 7400	62794	306	311	265	268	.612"	.612"	107		.014"	.018"	AT2000L-16	7437-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8302W	See Notes	CRFW167
<b>351W HYDRAULIC ROLLER - FIRING ORDER 1, 3, 7, 2, 6, 5, 4, 8</b>																					
289W-302W we use 351W roller billet																					
Mild performance cam great low down torque to mid range, need manifold and headers (See Fitting notes 5)	1700 - 5700	621414	277	287	213	223	.499"	.515"	108			5351H	7333-16 <sup>D</sup>	1.800"	11700-16	11701-16	VSV530-16	CS8302W	See Notes	CRFW167	
Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	1800 - 6000	621371C	290	290	216	216	.505"	.505"	108			5351H	7333-16 <sup>D</sup>	1.800"	11700-16	11701-16	VSV530-16	CS8302W	See Notes	CRFW167	
Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	2200 - 6200	621330	276	283	220	227	.532"	.542"	110			5351H	7333-16 <sup>D</sup>	1.800"	11700-16	11701-16	VSV530-16	CS8302W	See Notes	CRFW167	
Performance cam great mid range & top end power, choppy idle need manifold & headers (See Fitting notes 5)	2600 - 6200	621515	294	298	228	234	.582"	.578"	107			5351H	7342-16 <sup>D</sup>	1.800"	11700-16	4134-16	VSV530-16	CS8302W	See Notes	CRFW167	

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD WINDSOR V8 ROCKER RATIO 1.62

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers			
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust															
<b>351W SOLID ROLLERS</b>																							
260, 289 & 302 use 351W roller billet																							
Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1 - 7)	4000 - 7000	621301	286	295	252	260	.585"	.585"	107				.016"	.016"	5300	4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8302W	See Notes	
Street/ strip roller med lift, heap of bottom end torque, soft on valve springs (See Fitting notes 1 - 7)	3800 - 6800	621387	298	302	259	265	.635"	.633"	107				.016"	.016"	5300	4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8302W	See Notes	
Race roller, for max mid & upper RPM needs, comp and after market heads etc (See Fitting notes 1 - 7)	4200 - 7200	62819	291	298	259	266	.583"	.583"	108				.016"	.016"	5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8302W	See Notes	
Street/strip roller, suit stroker good bottom end torque, soft on valve springs (See Fitting notes 1 - 7)	4200 - 7500	621576	307	310	276	278	.608"	.608"	108				.016"	.016"	5300	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8302W	See Notes	
<b>EFI HYDRAULIC ROLLER 5Lt 302 V8 - FIRING ORDER 1, 3, 7, 2, 6, 5, 4, 8</b>											<b>NOTE: MUST REMOVE FACTORY FITTED SLOW ROTOR FROM EXHAUST WHEN USING 11700-XR8</b>												
STD replacement	1000 - 4600	62952	262	262	186	196	.428"	.453"	117						5300H	7738-16	1.800"	11700-XR8	11701-16		CS8302WEFI	See Notes	CRFW163
Mild street applicaton, stock idle good torque & mid range 220k (See Fitting notes 1 & 2)	1500 - 5000	621339	268	275	203	209	.455"	.455"	118						5300H	7738-16	1.800"	11700-XR8	11701-16		CS8302WEFI	See Notes	CRFW163
STD idle, improved throttle response use in STD to Mild engine 200k (See Fitting notes 1 & 2)	1600 - 5300	621338	272	272	210	210	.458"	.458"	118						5300H	7738-16	1.800"	11700-XR8	11701-16		CS8302WEFI	See Notes	CRFW163
Mild street engine suits genuine 250kw 347ci (See Fitting notes 1 & 2)	1600- 5300	621368	275	275	211	211	.447"	.447"	116						5300H	7738-16	1.800"	11700-XR8	11701-16		CS8302WEFI	See Notes	CRFW163
Medium performance cam, basic idle improved bottom & mid range suit auto (See Fitting notes 1 & 2)	1800 - 5800	621371E	290	290	216	216	.505"	.505"	115						5300H	7738-16	1.800"	11700-XR8	4133-16		CS8302WEFI	See Notes	CRFW163
Medium performance cam, grumpy idle improved bottom & mid range needs hi stall (See Fitting notes 5)	2500 - 6500	621317	309	296	222	217	.539"	.539"	112						5300H	7333-16 <sup>D</sup>	1.800"	11700-XR8	4133-16		CS8302WEFI	See Notes	CRFW163
Good mid range performance needs hi stall (See Fitting notes 1 & 2)	2700 - 6700	621354	293	299	225	224	.510"	.510"	115						5300H	7738-16	1.800"	11700-XR8	4133-16		CS8302WEFI	See Notes	CRFW163
<b>429, 460 HYDRAULIC <small>ROCKER RATIO 1.73 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</small></b>																							
Maximum low end torque, dual pattern suit LPG needs valve springs & exhaust (See Fitting notes 1 & 2)	1600 - 4500	31666	268	288	204	214	.481"	.512"	112						HT900-16	7738-16	1.800"	11700-16	11701-16	KG317-16	CS8460	PR-978-12	CRFCL177
Mild street applicaton, medium idle good mid range, needs valve springs etc (See Fitting notes 5)	2000 - 5000	31665	280	290	214	224	.512"	.539"	112						HT900-16	7738-16	1.800"	11700-16	117010-16	KG317-16	CS8460	PR-978-12	CRFCL177
Hot street cam, strong mid range needs headers, carbie, hi- stall etc (See Fitting notes 5)	2200 - 5700	311367	293	299	226	236	.535"	.560"	112						HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8460	PR-978-12	CRFCL177
Street /strip cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 5)	2600 - 6300	31787	284	295	238	246	.561"	.566"	109						HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8460	PR-978-12	CRFCL177
Street/strip application rough idle needs heads, carbie headers & hi stall (See Fitting notes 5)	3200 - 6300	31700	304	316	242	250	.570"	.570"	108						HT900R-16	7333-16 <sup>D</sup>	1.800"	11700-16	4133-16	VSV530-16	CS8460	PR-978-12	CRFCL177

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold seperately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD BIG BLOCK V8 ROCKER RATIO 1.76

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>FE, 332, 352, 390, 406, 427, 428 HYDRAULIC</b> <small>USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</small>																				
Maximum low end torque, dual pattern suit LPG needs valve springs & exhaust (See Fitting notes 1, 2 & 3)	1500 - 4500	19666	268	288	204	214	.490"	.521"	112			HT950-16	7738-16	1.820"	12700-16	12708-16		CS8FE428		
Mild street applicaton, medium idle good mid range, needs valve springs etc (See Fitting notes 1, 2 & 3)	2000 - 5000	19665	280	290	214	224	.520"	.549"	112			HT950-16	7738-16	1.820"	12700-16	12708-16		CS8FE428		
Hot street cam, strong mid range needs headers, carbie, hi- stall etc & rockers (See Fitting notes 1, 2 & 3)	2200 - 5700	191367	293	299	226	236	.545"	.574"	112			HT950-16	7333-16 <sup>D</sup>	1.820"	12700-16	12708-16		CS8FE428		
Street /strip cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 1, 2 & 3)	2600 - 6300	19787	284	295	238	246	.570"	.576"	109			HT950-16	7333-16 <sup>D</sup>	1.820"	12700-16	12708-16		CS8FE428		
Street/strip application rough idle needs heads, carbie, headers, hi stall & rockers (See Fitting notes 1, 2 & 3)	3200 - 6300	19700	304	316	242	250	.581"	.581"	108			HT950-16	7333-16 <sup>D</sup>	1.820"	12700-16	12708-16		CS8FE428		

# FORD OHC 6 EA-AU CAMS MAY REQUIRE VERNIER GEAR

<b>EA, EB, ED, EF, EL 1989 - JAN 98 MULTIPOINT EFI</b>																				
High torque cam to suit EA-ED multi point can use as STD replacement	900 - 3500	222002	242	240	192	187	.470"	.454"	114				7739-12	1.820"	12700-12	11704-12		CS6EA-VS		
Mild performance cam, EA-ED multi point suit STD computer needs headers	1000 - 4200	222825	265	265	196	196	.489"	.489"	113				7739-12	1.820"	12700-12	11704-12		CS6EA-VS		
Mild performance cam, EF-EL suit STD computer needs headers & valve springs	1200 - 4700	2222519	262	258	198	194	.494"	.472"	113				7739-12	1.820"	12700-12	11704-12		CS6EA-VS		
Medium performance cam needs computer mods headers & valve springs	1500 - 5200	2222549	268	260	210	200	.530"	.500"	112				7739-12	1.820"	12700-12	11704-12		CS6EA-VS		
<b>EL-AU FEB 98-02</b>																				
High torque cam to suit AU can use with LPG - NON VCT	900 - 4500	2232526	265	265	197	192	.476"	.454"	115				7739-12	1.820"	11750-12	Standard		CS6EA-VS		
High torque cam to suit AU series can use with LPG - NON VCT	900 - 4500	2232522	265	260	201	194	.484"	.459"	115				7739-12	1.820"	11750-12	Standard		CS6EA-VS		
Medium performance cam needs computer mods headers & valve springs	1500 - 5200	2232549	268	260	210	200	.476"	.450"	112				7739-12	1.820"	11750-12	Standard		CS6EA-VS		
Performance street/strip cam lopey idle needs valve springs headers & computer	2500 - 5800	2231514	275	275	219	219	.504"	.504"	112				7739-12	1.820"	11750-12	Standard		CS6EA-VS		

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# FORD OHC 6

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>DOHC 6 CYLINDER BA - FG</b>																				
<b>NOTE: PARTS KIT VTKBA6T-24 INCLUDES 1809-24 SPRINGS AND 10703-24 LOCKS</b>																				
Mild cam, good mid range, smooth idle suit standard springs, needs computer mods <b>BA-BF ONLY</b>	2500 - 5800	323-1394 324-1394	243	243	185	185	.450"	.450"	112 112			BA-ADJ-24	1808-24	1.480"						
Mild cam, good mid range, choppy idle suit standard springs, needs computer mods & headers <b>BA-BF ONLY</b>	2700 - 6200	323-1393 324-1393	259	259	195	195	.452"	.452"	112 112			BA-ADJ-24	1808-24	1.480"						
Mild cam for <b>TURBO</b> application, needs valve springs, headers and computer. <b>BA-BF ONLY</b>	2800 - 6500	323-1393T 324-1393	259	259	195	195	.452"	.452"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
Performance street cams, great mid range and upper RPM, needs valve springs, headers, computer & high stall	2700 - 6200	323-2591 324-2591	260	260	204	204	.470"	.470"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
Mild performance street cams, great mid range and upper RPM, Standard valve springs, headers, computer & high stall	2800 - 6500	323-2590 324-2590	262	262	208	208	.471"	.471"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
High performance street cams, great mid range and upper RPM, needs valve springs, headers, computer & high stall. Check valve to piston	3200 - 6500	323-2592 324-2592	268	268	214	214	.475"	.475"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
High performance street /strips cams, great upper RPM range,needs valve springs, high stall, headers and computer	3500 - 6800	323-2593 324-2593	275	275	218	218	.495"	.495"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
Street /strip application, serious engine only, needs head work, valve springs, high stall headers, computer & vernier gears	3700 - 7000	323-2562 324-2562	282	282	223	223	.500"	.500"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
Street /strip application, <b>TURBO</b> engine needs head work, valve springs, high stall headers, computer & vernier gears	3800 - 7000	323-2562T 324-2562	282	282	223	223	.500"	.500"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						
Race application only not for street use	4000 - 7800	323-2565 324-2565	309	309	237	237	.516"	.516"	112 112			BA-ADJ-24	VTKBA6T-24	1.520"						



**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD MODULAR V8

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>BA/BF QUAD CAM 260KW</b>																				
Mild performance cams - Standard valve springs needs headers, performance cats and computer mods/tune - cams suit 260kw only May require vernier gear set	2300- 6000	270XR8 271XR8 272XR8 273XR8	250	255	196	196	.435"	.435"	115				1808-32 VTKBAXR8-32	1.490" 1.520"						
Mild performance camshafts, 260kw eng choppy idle suit blower 8 - 10psi needs valve springs, header/cat, computer mods/tune. May require vernier gear set	2300- 6000	270XR8 271XR8 272XR82 273XR82	250	254	196	202	.435"	.435"	115				1808-32 VTKBAXR8-32	1.490" 1.520"						
Performance cam - standard valve springs needs headers, performance cats etc computer mods/tune - cams suit 260kw only May require vernier gear set	2500 - 6500	270XR82 271XR82 272XR82 273XR82	254	254	202	202	.435"	.435"	115				1808-32 VTKBAXR8-32	1.490" 1.520"						
<b>BA/BF QUAD CAM 290KW</b>																				
Performance cams suit 290kw engines great bottom end,good mid range,choopy idle, standard valve springs, needs headers /cats, computer mods/tune. May require vernier gear set	2500 - 6600	270GTP 271GTP 272GTP 273GTP	260	248	200	198	.508"	.466"	114				1809-32	1.590"	10705-32					
Performance camshafts, mid to upper RPM, lumpy idle suit 290kw needs valve springs, header/cat, computer mods/tune. May require vernier gear set	2900 - 6900	270GTPX 271GTPX 272GTPX 273GTPX	263	260	214	214	.525"	.475"	114				1809-32	1.590"	10705-32					
Performance camshafts, mid to upper RPM, choppy idle suit blower 8 - 10psi needs valve springs, header/cat computer mods/tune. May require vernier gear set	2900 - 6900	270GTP 271GTP 272GTPX 273GTPX	260	260	200	214	.508"	.475"	114				1809-32	1.590"	10705-32					
Performance cams, max RPM range, Non street application. Upper RPM power. Needs valve springs, header, cats, computer mods/ tune. May require vernier gear set	3500 - 7200	270GTHO 271GTHO 272GTHO 273GTHO	280	280	230	230	.540"	.504"	115				1809-32	1.590"	10705-32					
<b>FG QUAD CAM 315KW</b>																				
Mild cams suit 315kw engine, choppy idle, great bottom end suit standard valve springs needs headers, cats & computer mods/tune. May require vernier gear set	2500 - 6200	270-2567 271-2567 272-2567 273-2567	272	266	214	210	.561"	.517"	114				1804-32	1.590"						
Medium cams suit 315kw engine, choppy idle, great bottom good med range needs springs headers/cats, computer mods/tune. May require vernier gear set	2700 - 6500	270-2568 271-2568 272-2568 273-2568	278	278	216	216	.545"	.510"	114				1804-32	1.590"						
Performance cams suit 315kw, lumpy idle great upper RPM range, needs valve springs retainers, headers/cats, computer mods/tune. May require vernier gear set	3000 - 7000	270-2569 271-2569 272-2569 273-2569	280	280	224	223	.548"	.512"	114				1804-32	1.590"						

## FORD 5.0 LTR COYOTE MUSTANG 2016-ON

SEE PAGE 73 FOR SPRING KITS

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# FORD 4 CYLINDER

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												

## KENT ROCKER RATIO 1.50 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY

STD replacement cam	900 - 4000	51000	255	265	194	202	.350"	.340"	111		.012"	.012"	VT2014	2021-8	1.289"	Standard	Standard		CS41500		
Mild cam, suit slighty mod engine, sporty idle quilty, needs valve springs headers	2000 - 5000	51606	260	260	222	222	.397"	.397"	110		.016"	.016"	VT2014	2021-8	1.289"	Standard	Standard		CS41500		
Performance cams, great mid range, needs valve springs headers carbies & ignition	2500 - 6000	51740	263	268	228	234	.400"	.400"	107		.016"	.014"	VT2014	2834-8 <sup>D</sup>	1.280"	Standard	Standard		CS41500		
Performance street/track, needs mod eng. head, comp, headers carbies & ignition	3500 - 7500	51623	270	270	240	240	.410"	.410"	106		.014"	.014"	VT2014	2834-8 <sup>D</sup>	1.280"	Standard	Standard		CS41500		

## CORTINA/ESCORT/PINTO 2000 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY

STD replacement cam	1200 - 5000	26000	265	265	205	205	.390"	.390"	108		.017"	.017"		4250-8 <sup>D</sup>	1.417"	Standard	Standard		CS42000-V cam gear only		
Mild cam, suit slighty mod engine, Sporty idle quality, needs valve springs headers	2500 - 6500	26874	275	275	221	221	.416"	.416"	114		.012"	.012"		4250-8 <sup>D</sup>	1.417"	Standard	Standard		CS42000-V cam gear only		
Performance street/strip, needs mod eng. head, comp, headers carbies & ignition	3000 - 7000	26661	280	290	233	242	.474"	.466"	112		.011"	.011"		4250-8 <sup>D</sup>	1.417"	Standard	Standard		CS42000-V cam gear only		

# LEYLAND/ROVER V8 ROCKER RATIO 1.50

## 3.5/4.4 1961- 86 HYDRAULIC USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY

STD replacement cam	800 - 3600	37000	254	254	196	196	.374"	.374"	107				HT969-16			Standard	Standard		CS8P76		
Hi torque cam, street & 4wd, towing application	1000 - 3900	37613	260	267	194	202	.390"	.408"	112				HT969-16			Standard	Standard		CS8P76		
Hi torque cam, street & 4wd, towing application, max for EFI without computer Ideal for stroker engines	1400 - 4200	37771	258	266	201	205	.397"	.408"	111				HT969-16			Standard	Standard		CS8P76		
Dual pattern cam, ideal for LPG application, max for auto without stall	1800 - 4200	37776	266	279	204	215	.406"	.417"	112				HT969-16			Standard	Standard		CS8P76		

# ROVER V8 ROCKER RATIO 1.50

## 4.0/4.6 EFI 1995-ON HYDRAULIC No Distributor USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY

Hi torque cam, street & 4wd, towing	900 - 3800	371613	260	267	194	202	.390"	.408"	112				HT969-16			Standard	Standard				
Hi torque cam, street & 4wd, towing application, max for EFI without computer	1250 - 4200	371771	258	266	201	205	.397"	.408"	111				HT969-16			Standard	Standard				

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# HOLDEN GEMINI

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>1600 1800 2000</b> NOTE: 1800cc and 2000cc engines use timing kit CS41800 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild cam to suit standard engine	2000 - 6000	782507	276	276	212	212	.425"	.425"	107				5840-8 <sup>Ⓟ</sup>	1.550"	Standard	Standard		CS41600		
Medium performance suit modified engine needs extractors	2500 - 6500	782508	284	284	218	218	.425"	.425"	105				5840-8 <sup>Ⓟ</sup>	1.550"	Standard	Standard		CS41600		
Hot street engine needs comp, carbies and good exhaust system	3000 - 7000	782509	288	288	225	226	.466"	.466"	109				5833-8 <sup>Ⓟ</sup>	1.550"	Standard	Standard		CS41600		
Race cam needs cyl.head mods, comp, carbies & good exhaust	3500 - 7800	782510	297	297	235	235	.490"	.490"	107				5833-8 <sup>Ⓟ</sup>	1.550"	Standard	Standard		CS41600		

# HOLDEN 6 CYLINDER

ROCKER RATIO 1.50

<b>RED/BLUE &amp; BLACK HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																						
STD replacement cam, suit carbie	800 - 3200	35002	258	269	187	199	.350"	.385"	108				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
STD replacement cam, suit EFI	850 - 3500	35678	260	260	197	197	.381"	.381"	109				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Hi torque cam, suit towing good economy	1200 - 3900	35613	260	267	194	202	.390"	.408"	112				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Mild cam for LPG, good power suit STD motor minium mods.	1400 - 4200	35631	269	269	202	207	.395"	.395"	112				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Mild cam, improves throttle response good hyway cam suit STD to mild engine	1700 - 4500	35602	270	270	208	208	.420"	.420"	110				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Mild cam, increased mid range, good economy suits LPG. smooth idle (See Fitting notes 1)	1900 - 4800	35666	270	280	204	214	.420"	.442"	112				Red Black/Blue	HT969C-12 HT969C-12	4719-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Mild cam, good performance & driveability needs headers, carbies, ignition mods (See Fitting notes 1)	2000 - 5000	35603	280	280	214	214	.442"	.442"	110				Red Black/Blue	HT969C-12 HT969C-12	4823-12 4028-12	1.625" 1.470"	11707-12 11707-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Performance street cam good driveability needs headers carbies, ignition & hi stall (See Fitting notes 1 & 2)	2200 - 5200	35665	280	290	214	224	.440"	.465"	112				Red Black/Blue	HT969C-12 HT969C-12	4823-12 4823-12	1.625" 1.605"	11707-12 11717-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6153 CRHL6153
Performance street cam good driveability needs headers carbies, ignition & hi stall (See Fitting notes 1 & 2)	2500 - 5800	35667	286	286	224	224	.467"	.467"	111				Red Black/Blue	HT969C-12 HT969C-12	4823-12 4823-12	1.625" 1.605"	11707-12 11717-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6157 CRHL6157
Performance street cam good mid range & upper RPM needs carbies headers etc similar (See Fitting notes 1 & 2)	2500 - 5800	35604	304	304	228	228	.423"	.423"	110				Red Black/Blue	HT969C-12 HT969C-12	4823-12 4823-12	1.625" 1.605"	11707-12 11717-12	11703-12 11703-12	KG819-12 KG819-12	44HP 44HP	PR-105-12 PR-422-12	CRHL6157 CRHL6157
Hot street cam, wide power range, choppy idle, needs headers carbies, ignition & hi stall (See Fitting notes 5)	2800 - 6200	35619	286	290	226	232	.459"	.475"	109				Red Black/Blue	HT969R-12 HT969R-12	4327-12 <sup>Ⓟ</sup> 4327-12 <sup>Ⓟ</sup>	1.660" 1.660"	11707-12 11717-12	11703-12 11703-12	VSV530-12 VSV530-12	44HP 44HP	PR-926-12 PR-990-12	CRHL6157 CRHL6157
Performance street/strip cam needs head headers carbies, ignition & hi stall (See Fitting notes 5)	3200 - 6500	35672	280	280	231	231	.480"	.480"	108				Red Black/Blue	HT969R-12 HT969R-12	4327-12 <sup>Ⓟ</sup> 4327-12 <sup>Ⓟ</sup>	1.660" 1.660"	11707-12 11717-12	11703-12 11703-12	VSV530-12 VSV530-12	44HP 44HP	PR-926-12 PR-990-12	CRHL6157 CRHL6157
Performance street/strip cam, great mid range Bathurst XU-1 grind (See Fitting notes 5)	3500 - 6800	35616	300	300	240	240	.450"	.450"	110				Red Black/Blue	HT969R-12 HT969R-12	4823-12 4327-12 <sup>Ⓟ</sup>	1.625" 1.660"	11707-12 11717-12	11703-12 11703-12	VSV530-12 VSV530-12	44HP 44HP	PR-926-12 PR-990-12	CRHL6157 CRHL6157
Aggressive hyd cam great upper RPM need good breathing & engine combo (See Fitting notes 5)	3700 - 6800	35802	295	295	246	246	.507"	.507"	108				Red Black/Blue	HT969R-12 HT969R-12	4327-12 <sup>Ⓟ</sup> 4327-12 <sup>Ⓟ</sup>	1.660" 1.660"	11707-12 11717-12	11703-12 11703-12	VSV530-12 VSV530-12	44HP 44HP	PR-926-12 PR-990-12	CRHL6157 CRHL6157

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

• Converter stall speed should be equal to or greater than the minimum rpm of the cam power range. • The use of high volume oil pumps may cause premature wear of the distributor gear.

**Note:** Springs marked with xxxx-xx<sup>Ⓟ</sup> denotes that it is a double spring.

# HOLDEN 6 CYLINDER ROCKER RATIO 1.50

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust													
<b>RED/ BLUE &amp; BLACK SOLID</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																					
Small solid cam for street application (See Fitting notes 5)	2500 - 5000	35609	265	265	229	229	.442"	.442"	109												
Solid cam, great mid to upper RPM range suit speedway or hot street (See Fitting notes 5)	2500 - 6000	35872	272	272	231	231	.480"	.480"	108												
Solid cam, great mid range power, lumpy idle, needs head mods, headers, ignition & carbies (See Fitting notes 5)	2800 - 6200	35626	278	282	238	244	.486"	.495"	109												
Solid cam, high lift, max upper RPM needs head mods, headers, ignition & carbies etc (See Fitting notes 5)	3000 - 6400	35803	295	295	248	248	.495"	.495"	108												
Race/competition, serious engine combo (See Fitting notes 5)	3600 - 6600	35647	308	308	254	254	.517"	.517"	107												

## VN SERIES 1 V6 1989-91 3 BOLT FLANGED CAM ROCKER RATIO 1.60

(VN series 1 cyl. heads may have a single or double v/spring)

Hi torque for STD engine. (See Fitting notes 1)	1500 - 5500	6071561	262	264	193	202	.440"	.440"	112					3800R-12	7328-12 <sup>D</sup>	1.700"	Standard	11703-12		CS6VN	PR-384
Mild performance cam for STD engine needs headers & exhaust & ECU (See Fitting notes 1)	1800 - 5800	6071562	275	285	202	207	.440"	.440"	113					3800R-12	7328-12 <sup>D</sup>	1.700"	Standard	11703-12		CS6VN	PR-987
Street cam for mod engines, needs ECU mods, headers & exhaust (See Fitting notes 1)	2000 - 6000	6071563	276	281	207	210	.472"	.472"	112					3800R-12	7328-12 <sup>D</sup>	1.700"	Standard	11703-12		CS6VN	PR-987

## VN SERIES 2 V6 TO VR 1991-93 ROCKER RATIO 1.60

Hi torque for STD engine. (See Fitting notes 1)	1500 - 5500	7741561	262	264	193	202	.440"	.440"	112					3800R-12	4836-12	1.700"	Standard	11703-12		CS6VP	PR-384
Mild performance cam for STD engine needs headers & exhaust & ECU etc (See Fitting notes 1)	1800 - 5800	7741562	275	285	202	207	.440"	.440"	113					3800R-12	4836-12	1.700"	Standard	11703-12		CS6VP	PR-987
Street cam for mod engines, needs ECU mods, headers & exhaust (See Fitting notes 1)	2000 - 6000	7741563	276	281	207	210	.472"	.472"	112					3800R-12	4835-12	1.700"	11707-12	11703-12		CS6VP	PR-987
Hot street cam for modified engines needs headers & exhaust & ECU etc (See Fitting notes 1 & 2)	2200 - 6300	774757	280	280	214	218	.499"	.501"	110					3800R-12	4835-12	1.700"	11707-12	11703-12		CS6VP	PR-987

## ECOTEC V6 VS-VY ROCKER RATIO 1.60

Mild performance cam for STD engine needs headers & exhaust & ECU etc (See Fitting notes 1)	1800 - 5800	8531562	275	285	202	207	.440"	.440"	113					3800R-12	4231-12	1.780"	Standard	10701-12		CS6VS	PR-905
Street cam for mod engines, needs ECU mods, headers & exhaust (See Fitting notes 1)	2000 - 6000	8531563	276	281	207	210	.472"	.472"	112					3800R-12	4231-12	1.780"	10707-12	10701-12		CS6VS	PR-905
Hot street cam for S/C & Turbo mod engines needs headers & exhaust & ECU etc (See Fitting notes 1 & 2)	2000 - 6200	8531563T	276	281	207	210	.472"	.472"	114					3800R-12	4231-12	1.780"	10707-12	10701-12		CS6VS	PR-905
Hot street cam for S/C mod engines needs headers & exhaust & ECU etc (See Fitting notes 1 & 2)	2000 - 6200	8531430	262	274	207	218	.505"	.505"	114					3800R-12	4231-12	1.780"	10707-12	10701-12		CS6VS	PR-905
Hot street cam for modified engines needs headers & exhaust & ECU etc (See Fitting notes 1 & 2)	2200 - 6300	853757	280	280	214	218	.499"	.501"	110					3800R-12	4231-12	1.780"	10707-12	10701-12		CS6VS	PR-905

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

### FITTING NOTES:

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot.
- The use of high volume oil pumps may cause premature wear of the distributor gear.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

# HOLDEN 253, 308 V8

ROCKER RATIO 1.65 RPM RANGE TO SUIT 308, FOR 253 RPM RANGE ADD +500 RPM.

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>RED/BLUE &amp; BLACK HYDRAULIC</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Hi torque, smooth idle, fuel efficient can use as STD cam	1100 - 3900	5613	260	267	194	202	.430"	.450"	112			HT969C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167
Cam to suit LPG, good power, great torque in STD engine, can use petrol	1200 - 4000	5631	269	269	202	207	.434"	.434"	112			HT969C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167
Hyd cam, for improved throttle response (See Fitting notes 1 & 2)	1500 - 4500	5602	270	270	208	208	.462"	.462"	110			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Cam for increased mid range, smooth idle good economy, dual pattern for LPG (See Fitting notes 1 & 2)	1700 - 4700	5666	270	280	204	214	.462"	.486"	112			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Designed for increased performance suit street, needs headers carbie & ignition (See Fitting notes 1 & 2)	2000 - 4800	5603	280	280	214	214	.486"	.486"	110			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Medium performance cam, great torque & mid range,needs headers carbie & ignition (See Fitting notes 1 & 2)	2100- 5000	5770	280	290	214	226	.483"	.490"	111			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Medium performance cam, good med range,needs headers carbie,ignition, hi stall (See Fitting notes 1 & 2)	2100- 5000	5665	280	290	214	224	.484"	.511"	112			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Med performance cam, good RPM range fair idle, headers carbie,ignition, hi stall (See Fitting notes 1 & 2)	2400 - 5400	5651	282	282	222	222	.493"	.493"	114			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Hot street cam, wide power range,choppy idle, needs headers carbies, ignition & hi stall (See Fitting notes 1 & 2)	2500- 5500	5619	286	290	226	232	.505"	.522"	110			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Aggressive street cam, great RPM range Lumpy idle needs headers carbie, ignition (See Fitting notes 1 & 2)	2700 - 6000	5761	292	292	230	230	.495"	.495"	109			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Aggressive hyd cam great upper RPM need good breathing & engine combo etc (See Fitting notes 1 & 2)	2700 - 6200	5620	294	294	234	234	.521"	.521"	110			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 1 & 2)	2800 - 6000	5649	282	295	234	244	.501"	.501"	108			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 1 & 2)	2800 - 6000	5787	284	295	238	246	.535"	.540"	108			HT969R-16	4845-16	1.850"	11717-16	4134-16	VSV530-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 5)	3000 - 6200	5747	294	307	236	246	.577"	.586"	107			HT969R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street / strip hyd cam, will need engine mods, comp,pipes,heads, ignition & hi stall (See Fitting notes 1 & 2)	3000 - 6200	5616	300	300	240	240	.495"	.495"	110			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Strong mid range & top end power needs comp, pipes, heads ignition, hi stall & roller (See Fitting notes 1 & 2)	3000 - 6200	5690	300	310	238	243	.525"	.525"	108			HT969R-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street/strip cam all out performance needs heads,carbie headers,ignition, hi stall & roller rockers (See Fitting notes 5)	3500 - 6500	5802	295	295	246	246	.558"	.558"	108			HT969R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-964-16	CRHL8167

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** **Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# HOLDEN 253, 308 V8 ROCKER RATIO 1.65

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>RED/BLUE/BLACK SOLID USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Solid cam, great mid range power, lumpy idle, needs heads, headers & carbies etc (See Fitting notes 5)	2700 - 5700	5626	278	288	238	244	.534"	.544"	109	.024"	.026"	AT992-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-974-16	CRHL8167
Solid cam, high lift, needs head mods, headers,carbie, ignition (See Fitting notes 5)	3100 - 6200	5803	295	295	248	248	.545"	.545"	108	.022"	.024"	AT992-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-974-16	CRHL8167
Solid cam, high lift, max upper RPM needs head mods, headers,carbies ignition (See Fitting notes 5)	3300 - 6500	5806	281	294	245	255	.538"	.558"	109	.018"	.022"	AT992-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-974-16	CRHL8167
Serious street engine combo needed (See Fitting notes 5)	3500 - 6500	5731	292	297	253	260	.584"	.597"	108	.026"	.026"	AT992L-16	7342-16 <sup>D</sup>	1.850"	11710-16	4134-16	VSV530-16	CS8308	PR5885-110	CRHL8167
Competition, serious engine combo needed (See Fitting notes 5)	3800 - 6800	5794	306	311	265	268	.623"	.623"	107	.014"	.016"	AT992L-16	7342-16 <sup>D</sup>	1.850"	11710-16	4134-16	VSV530-16	CS8308	PR5885-110	CRHL8167
<b>RED/BLUE/BLACK HYDRAULIC ROLLER</b>																				
Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	1800 - 5400	51330	275	282	220	227	.541"	.551"	110			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4134-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	2800 - 6200	51433	297	303	228	238	.607"	.603"	110			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4134-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	3200 - 6400	51315	303	307	238	244	.568"	.568"	108			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4134-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam aggressive idle excellent mid range needs comp heads manifold etc 3500 hi stall (See Fitting notes 5)	3500 - 6200	51719	295	315	238	243	.585"	.621"	107			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam good mid to upper RPM range, aggressive idle need comp manifold & headers etc 3500 +hi stall (See Fitting notes 5)	3500 - 6800	51725	301	312	242	246	.624"	.624"	109			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam good mid to upper RPM range, choppy idle need manifold & headers comp etc, 3500+ hi stall (See Fitting notes 5)	3700 - 7000	51571	310	310	246	246	.627"	.627"	110			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam 355+cubes great upper RPM range, choppy idle need manifold & headers comp etc, 3500+ hi stall (See Fitting notes 5)	3800 - 7000	51435	317	326	249	258	.570"	.570"	108			5208H	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
<b>RED/BLUE/BLACK SOLID ROLLER</b>																				
Small street roller, low lift, heap of bottom end torque, soft on valve springs (See Fitting notes 5)	2800 - 5800	5969	304	315	233	242	.545"	.545"	110	.016"	.016"	5208	7342-16 <sup>D</sup>	1.850"	11710-16	4133-16	VSV530-16	CS8308	See Notes	
Street roller. Great mid range torque (See Fitting notes 5)	3200 - 6400	51551	281	287	245	251	.621"	.621"	107	.016"	.016"	5208	4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8308	See Notes	
Street/strip application bracket engine cam needs comp A/F heads & hi stall (See Fitting notes 5)	3500 - 6800	51301	286	295	252	260	.596"	.596"	108	.018"	.018"	5208	4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8308	See Notes	
Street/strip application bracket engine needs comp and after market heads etc (See Fitting notes 5)	3600 - 7000	51482	290	294	252	257	.666"	.666"	113	.016"	.016"	5208	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8308	See Notes	
Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 5)	3800 - 7200	5754	295	298	255	258	.660"	.677"	106	.016"	.016"	5208	4920-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8308	See Notes	
Performance cam 355+cubes great upper RPM range, choppy idle need manifold & headers comp etc, 3500+ hi stall (See Fitting notes 5)	4000- 7200	51492	300	306	262	268	.623"	.623"	107	.018"	.020"	5208	4910-16 <sup>D</sup>	2.000"	13101-16	11101-16	VSV530-16	CS8308	See Notes	

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# HOLDEN 304/355 V8 VN STYLE HEADS ROCKER RATIO 1.65

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>HYDRAULIC USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Standard replacement cam	900 - 3800	4000	255	252	200	198	.422"	.422"	117			HT969C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167
High torque fuel efficient cam suit LPG (See Fitting notes 1)	1200 - 4200	4631	269	269	202	207	.434"	.434"	112			HT969C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167
Genuine holden V8 VN 215Kw (See Fitting notes 1)	1400 - 4200	4001	260	260	206	206	.463"	.463"	112			HT969C-16	4931-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167
Cam for increased mid range, smooth idle good economy, dual pattern for LPG needs computer mods (See Fitting notes 1)	1700 - 4700	4666	270	280	204	214	.462"	.486"	112			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Mild cam suit standard engine needs computer mods (See Fitting notes 1)	1800 - 4800	4892	275	275	215	215	.487"	.487"	111			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Medium performance cam, great torque & mid range, needs computer mods (See Fitting notes 1)	2100 - 5000	4770	280	290	214	224	.483"	.490"	111			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Medium performance cam, STD idle needs exhaust & computer mods (See Fitting notes 1)	1900 - 5000	4502	282	276	218	214	.485"	.485"	113			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Performance cam, good driveability and mid range needs exhaust & computer (See Fitting notes 1)	2250 - 5350	4651	282	282	222	222	.493"	.493"	114			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Performance cam, good mid range needs exhaust & computer mods (See Fitting notes 1)	2400 - 5500	4503	289	282	227	220	.486"	.486"	113			HT969C-16	4833-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Hot street cam, wide power range, choppy idle, needs headers computer & hi stall (See Fitting notes 1 & 2)	2500 - 5500	4619	286	290	226	232	.505"	.522"	112			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Aggressive street cam, idle needs headers, computer & hi stall (See Fitting notes 1 & 2)	2600 - 5600	4761	292	292	230	230	.495"	.495"	109			HT969C-16	4830-16	1.700"	11707-16	11701-16	KG819-16	CS8308	PR-964-16	CRHL8167
Aggressive hyd cam, need good breathing & engine combo etc (See Fitting notes 1 & 2)	2700 - 6200	4620	294	294	234	234	.521"	.521"	110			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs head work, headers computer & hi stall (See Fitting notes 1 & 2)	2900 - 6000	4649	282	295	234	244	.501"	.501"	108			HT969C-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 1 & 2)	2800 - 6000	4787	284	295	238	246	.535"	.540"	112			HT969R-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street /strip hyd cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 5)	3000 - 6200	4747	294	307	236	246	.577"	.586"	107			HT969R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-964-16	CRHL8167
Strong mid range & top end power needs comp, pipes, heads ignition, hi stall & roller (See Fitting notes 1 & 2)	3000 - 6200	4690	300	310	238	243	.525"	.525"	108			HT969R-16	4845-16	1.850"	11717-16	4134-16	KG819-16	CS8308	PR-964-16	CRHL8167
Street/strip cam all out performance needs heads, carbie headers, ignition, hi stall & roller (See Fitting notes 1 & 2)	3500 - 6500	4802	295	295	246	246	.558"	.558"	108			HT969R-16	7333-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	PR-964-16	CRHL8167
<b>HOLDEN EFI HYDRAULIC ROLLER</b>																				
Improved top end power. Head needs machining to fit double springs. Must be used in conjunction with Twin Cat exhaust and Blueprinted Cylinder heads for maximum performance. Standard torque converter can be used on auto, 1800 hi stall will enhance acceleration. Wide power band	2000 - 6500	4903	285	279	222	217	.548"	.548"	112			5208H	4845-16	1.800"	11707-16	11701-16	KG819-16	CS8308	PR-387-16	CRHL8167

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# HOLDEN 304/355 V8 VN STYLE HEADS ROCKER RATIO 1.65

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SOLID USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Solid cam, great mid range power, lumpy idle, needs heads, headers & computer (See Fitting notes 5)	2700 - 5700	4626	278	288	238	244	.534"	.544"	109											
Solid cam, high lift, good upper RPM needs comp, head mods, headers, computer etc (See Fitting notes 5)	3300 - 6500	4806	281	294	245	255	.538"	.558"	109											
Aggressive street /strip cam, needs serious engine mods (See Fitting notes 5)	3100- 6500	4746	290	295	252	258	.560"	.585"	109											
Street/strip, needs serious engine mods (See Fitting notes 5)	3200 - 6500	4731	292	297	253	260	.584"	.597"	108											
Competition, serious engine combo needed (See Fitting notes 5)	3600 - 7200	4794	306	311	265	268	.623"	.623"	107											
<b>HYDRAULIC ROLLER</b>																				
Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5)	1800 - 5400	41330	275	282	220	227	.541"	.551"	110			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	2800 - 6200	41433	297	303	228	238	.607"	.603"	110			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam great mid range, choppy idle need manifold & headers (See Fitting notes 5)	3200 - 6400	41315	303	307	238	244	.568"	.568"	108			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam aggressive idle excellent mid range needs comp heads manifold etc 3500 hi stall (See Fitting notes 5)	3500 - 6200	41719	295	315	238	243	.585"	.621"	107			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam good mid to upper RPM range, choppy idle need comp carby & headers 3500+hi stall (See Fitting notes 5)	3500 - 6800	41725	307	312	242	246	.623"	.623"	109			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Performance cam good mid to upper RPM range, choppy idle need carby & headers comp etc, 3500+ hi stall (See Fitting notes 5)	3700 - 7000	41571	310	310	246	246	.627"	.627"	110			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
Suits 355+cubes great upper RPM range, choppy idle need manifold & headers comp 3500+ hi stall (See Fitting notes 5)	3800 - 7000	41435	317	326	249	258	.570"	.570"	108			5208H	7342-16 <sup>D</sup>	1.800"	11710-16	4133-16	VSV530-16	CS8308	See Notes	CRHL8167
<b>SOLID ROLLER</b>																				
Small street roller, heap of bottom end torque, soft on valve springs (See Fitting notes 5)	2800 - 5800	4969	270	280	233	240	.544"	.544"	110											
Street roller, low lift. Great mid range torque (See Fitting notes 5)	3200 - 6400	41551	278	284	245	251	.621"	.621"	107											
Street/strip application bracket engine cam needs comp A/F heads & hi stall (See Fitting notes 5)	3500 - 6800	41301	286	295	252	260	.596"	.596"	108											
Street/strip application bracket engine needs comp and after market heads etc (See Fitting notes 5)	3600 - 7000	41482	290	294	252	257	.666"	.666"	113											
Street/strip application, bracket engine needs comp, good heads (See Fitting notes 5)	3800 - 7200	4754	295	298	257	262	.660"	.677"	106											
Suits 355+cubes great upper RPM range, choppy idle need manifold & headers comp 3500+ hi stall (See Fitting notes 5)	4000- 7200	41492	300	306	262	268	.623"	.623"	107											

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:** Push Rods sold separately. Check length before ordering from page 78.  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# HOLDEN/CHEV LS1, LS2, LS6 ROCKER RATIO 1.70

**Parts kit includes items marked in black (Order as Kit or Individually)  
Camshaft not included in Parts Kit.**

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Installed Height	Parts Kit	Valve Spring	Retainer	Locks	Stem Seal	Spring Seat	Lifters (See Notes)	Timing Kit	Pushrods (See Notes)	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>GEN3 LS 1999-ON 3 BOLT CATHEDRAL PORT HEADS</b>																				
Increased mid range min effect on economy STD idle (See Fitting note 1)	1500 - 6000	871265	268	275	212	219	.519"	.528"	114	1.780"	VTKLS1	4231-16	10707-16	10701-16	S9-16	Not Included	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Street cam, Good mid range power needs valve springs & computer calibration. (See Fitting note 1)	1800 - 6200	871275	300	292	217	224	.528"	.527"	114	1.780"	VTKLS1	4231-16	10707-16	10701-16	S9-16	Not Included	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Mild performance cam, Great low down torque & mid range. Needs springs & computer calibration. (See Fitting note 1)	2100 - 6300	871202	282	292	220	225	.556"	.562"	114	1.780"	VTKLS5	4511X-16	10707-16	10701-16	S9-16	Not Included	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Performance cam, High acceleration rate great power gains need v/spring/computer. (See Fitting note 1 & 2)	2300 - 6500	871248	278	303	226	234	.578"	.591"	112	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Lumpy street cam, High acceleration rate great power gains need valve springs exhaust & computer calibration (See Fitting note 1 & 2)	2400 - 6500	871223	293	304	229	235	.584"	.585"	112	1.780"	VTKLS5	4511X-16	10707-16	10701-16	S9-16	Not Included	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Tuff street cam, Big power gains needs valve springs, pipes & computer calibration. (See Fitting note 1 & 2)	2400 - 6400	871249	277	284	226	232	.608"	.602"	112	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Aggressive street cam, Great mid to upper power gains. Needs pipes, valve springs, cold intake and ECU calibration (See Fitting note 1 & 2)	2800 - 6800	871250	294	302	234	241	.608"	.609"	113	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Street / strip cam, Very strong mid range & top end. Needs pipes, springs and ECU remap (See Fitting note 1 & 2)	2500 - 6700	871285	291	296	233	238	.595"	.595"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Lumpy street cam, Great mid to upper RPM gains. Needs pipes, valve springs, cold air intake, heads mods and ECU calibration (See Fitting note 1 & 2)	2600 - 6900	871251	292	296	235	243	.593"	.610"	113	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Street/strip cam, Aggressive idle. Needs pipes, cold air and ECU calibration (See Fitting note 1 & 2)	2800 - 7000	871232	293	294	239	242	.585"	.590"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Race cam, Strong top end performance. Works best with mod heads and Intake (See Fitting note 1 & 2)	2900 - 7200	871252	301	302	239	244	.614"	.614"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	
Race cam, Strong top end performance. Works best in stroker engines (See Fitting note 1 & 2)	3000 - 7400	871253	307	325	245	262	.615"	.615"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																	5251		PR5735-110*	

**NOTES:**  
Valve lift calculated using standard 1.70 rocker ratio.  
Advertised duration shown at .006".  
Spring installed height should be checked before ordering.  
See Spring Specs for installed height pressure ratings.

**LIFTER NOTES:**  
5250 is OEM style drop in lifter using original buckets.  
5251 is tie bar style lifter.  
Performance lifters available. See pg 83.

**PUSHROD NOTES:**  
Standard pushrod length listed for reference only.  
Pushrod length needs to be checked on assembly prior to ordering.

**NOTE:** GM LS Chain sets not supplied in Parts Kit. Order by engine type below.

Engine	Single Row	Double Row	Triggers
<b>LS1,LS6 5.7L 3 bolt cam</b>	CS8LS1-SR	CS8LS1	0
<b>LS2 6.0L 3 bolt cam</b>	CS8LS2-SR	CS8LS2	1
<b>LS7 7 litre 3 bolt cam</b>	CS8LS7-SR	CS8LS7	4
<b>LS3,L76, L98 6.0 L Single bolt cam Not AFM</b>	CS8LS-VE-SR	CS8L98	4
<b>L76, L98 3 bolt cam conversion</b>	CS8LS7-SR	CS8LS7	4
<b>VE 3 Bolt Gear Genuine GM</b>	CS12586481		4
<b>3 bolt Heavy Duty Steel cam gear</b>	CS8LS-VE3		4

## SPECIAL GRINDS AVAILABLE ON REQUEST

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

Titanium Parts Kit Available					
<b>VTKLST</b>	Titanium Retainers	Dual Valve Springs	Locks	Stem Seals	Spring Seats



### FITTING NOTES:

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot.
- The use of high volume oil pumps may cause premature wear of the distributor gear.

LS Heavy Duty Lifter and Guide Kit	
<b>LS7LIFTERKIT</b>	Genuine OEM LS7 Roller Lifter (5250) & Lifter Guide Kit (LS7GUIDE)



**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

# HOLDEN/CHEV L98/LS3 ROCKER RATIO 1.70

**Parts kit includes items marked in black (Order as Kit or Individually)  
Camshaft not included in Parts Kit.**

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Installed Height	Parts Kit	Valve Spring	Retainer	Locks	Stem Seal	Spring Seat	Lifters (See Notes)	Timing Kit	Pushrods (See Notes)	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>SINGLE BOLT CAM 2006 - ON</b>																				
Increased mid range min effect on economy STD idle (See Fitting note 1)	1500 - 6000	872265	268	275	212	219	.519"	.527"	114	1.780"	VTKLS1	4231-16	10707-16	10701-16	S9-16	Not Included	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Street cam, Good mid range power. Needs valve springs and computer calibration (See Fitting note 1)	1800 - 6200	872275	300	292	217	224	.527"	.525"	114	1.780"	VTKLS1	4231-16	10707-16	10701-16	S9-16	Not Included	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Mild performance cam, Great low down torque. Mid range needs springs and ECU calibration (See Fitting note 1 & 2)	2100 - 6200	872202	282	292	220	225	.556"	.561"	113	1.780"	VTKLS5	4511X-16	10707-16	10701-16	S9-16	Not Included	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Performance street cam, Great mid range torque. Needs valve springs and ECU calibration (See Fitting note 1 & 2)	2200 - 6300	872203	291	301	227	232	.551"	.555"	113	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Great street cam, Excellent torque. Mild range needs valve springs & ECU calibration (See Fitting note 1 & 2)	1500 - 6000	872286	275	292	221	238	.580"	.581"	115	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Tuff street cam, Big power gain mid range. needs valve springs, pipes and ECU calibration (See Fitting note 1 & 2)	2000 - 6200	872223	293	304	229	235	.583"	.585"	112	1.780"	VTKLS5	4511X-16	10707-16	10701-16	S9-16	Not Included	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Max lift cam, High acceleration. Gives max performance without losing bottom end. Needs valve springs and ECU calibration (See Fitting note 1 & 2)	2200 - 6500	872287	278	296	227	244	.607"	.610"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
High lift street cam, Wide power band. Needs valve springs, intake and ECU calibration (See Fitting note 1 & 2)	2500 - 6500	872288	287	302	234	250	.610"	.610"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Street/strip cam, Wide power range. Needs valve springs, intake and ECU calibration (See Fitting note 1 & 2)	2700 - 6500	872289	295	319	238	254	.614"	.614"	113	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A
Aggressive street cam, Great mid to upper power gains. Needs pipes, valve springs, cold intake and ECU calibration (See Fitting note 1)	2500 - 6700	872285	291	296	234	238	.595"	.595"	114	1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250 5251	See Notes	PR-957-16* PR5735-110*	N/A

## SINGLE BOLT AFM V8 CAM 2009 - ON PART NO. 871AFM3BG CONVERTS TO 3 BOLT CAM STYLE

Performance Cam for V8 AFM (Active Fuel Management) Engines. Expected performance increase of 15%. For use with Factory Valve Springs only.		871AFM3BG	This cam is a performance replacement cam for AFM engines. It retains AFM lifters and AFM program but requires tuning to match performance specification. Supplied with 3 Bolt Conversion Gear. Uses factory Valve Springs								1.780"							5263AFM	Standard	Standard	N/A
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### NOTES:

Valve lift calculated using standard 1.70 rocker ratio.  
Advertised duration shown at .006".  
Spring installed height should be checked before ordering.  
See Spring Specs for installed height pressure ratings.

### LIFTER NOTES:

5250 is OEM style drop in lifter using original buckets.  
5251 is tie bar style lifter.  
Performance lifters available. See pg 83.

### PUSHROD NOTES:

Standard pushrod length listed for reference only.  
Pushrod length needs to be checked on assembly prior to ordering.

**NOTE:** GM LS Chain sets not supplied in Parts Kit. Order by engine type below.

Engine	Single Row	Double Row	Triggers
<b>LS1,LS6 5.7L 3 bolt cam</b>	CS8LS1-SR	CS8LS1	0
<b>LS2 6.0L 3 bolt cam</b>	CS8LS2-SR	CS8LS2	1
<b>LS7 7 litre 3 bolt cam</b>	CS8LS7-SR	CS8LS7	4
<b>LS3,L76, L98 6.0 L Single bolt cam Not AFM</b>	CS8LS-VE-SR	CS8L98	4
<b>L76, L98 3 bolt cam conversion</b>	CS8LS7-SR	CS8LS7	4
<b>VE 3 Bolt Gear Genuine GM</b>	CS12586481		4
<b>3 bolt Heavy Duty Steel cam gear</b>	CS8LS-VE3		4

### SPECIAL GRINDS AVAILABLE ON REQUEST

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

Titanium Parts Kit Available					
VTKLST	Titanium Retainers	Dual Valve Springs	Locks	Stem Seals	Spring Seats



### FITTING NOTES:

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

LS Heavy Duty Lifter and Guide Kit	
LS7LIFTERKIT	Genuine OEM LS7 Roller Lifter (5250) & Lifter Guide Kit (LS7GUIDE)



**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.



# HOLDEN/CHEV LS V8 3 BOLT ROCKER RATIO 1.70

Parts kit includes items marked in black (Order as Kit or Individually)  
Camshaft not included in Parts Kit.

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Installed Height	Parts Kit	Valve Spring	Retainer	Locks	Stem Seal	Spring Seat	Lifters (See Notes)	Timing Kit	Pushrods (See Notes)	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												

## 3 BOLT CAM RECTANGULAR PORT HEADS TO CONVERT SINGLE BOLT TO 3 BOLT CAM USE CS12586481 GEAR

Great street cam, Excellent torque and mild range. Needs valve springs and ECU calibration (See Fitting note 1 & 2)	1500 - 6000	871286	275	292	221	238	.580"	.581"	115		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	
Max lift cam, High acceleration gives max performance without losing bottom end. Needs valve spring and ECU calibration (See Fitting note 1 & 2)	1800 - 6300	871287	278	296	227	244	.607"	.610"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	
High lift street cam, Wide power band. Needs valve springs & ECU calibration (See Fitting note 1 & 2)	2000 - 6300	871288	287	302	234	250	.610"	.610"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	
Street/strip cam, Wide power range. Needs valve springs & ECU calibration (See Fitting note 1 & 2)	2200 - 6300	871289	295	319	238	254	.614"	.614"	113		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	
Big lift street / strip cam, Needs heads ported, valve springs, intake and ECU calibration (See Fitting note 1 & 2)	2300 - 6600	871290	301	321	239	256	.614"	.610"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	
Race cam, For big cube stroker engine. Needs aftermarket heads, manifold, valve springs, intake and ECU calibration (See Fitting note 1 & 2)	2700 - 7200	871291	311	340	244	261	.621"	.616"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
																		5251		PR5735-110*	

## SUPERCHARGED & TURBO

Supercharged street cam, Great power and torque through wide RPM range (See Fitting notes 1, 2 & 4)	2200 - 6500	871292	276	296	225	244	.607"	.607"	115		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
Supercharged street cam, Great mid range power (See Fitting notes 1, 2 & 4)	2600 - 6900	871293	294	303	239	250	.598"	.612"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
Streetable supercharged cam, Wide torque and power range (See Fitting notes 1, 2 & 4)	2800 - 7000	871294	292	294	240	243	.581"	.585"	115		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
Street/strip turbo cam, Wide power and torque range (See Fitting notes 1, 2 & 4)	2700 - 6900	871295	280	285	227	231	.609"	.602"	114		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A
Street / Race turbo cam, Very strong mid range and top end power (See Fitting notes 1, 2 & 4)	2600 - 7000	871296R	290	286	237	232	.604"	.612"	115		1.780"	VTKLS8	4438-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	See Notes	PR-957-16*	N/A

### NOTES:

Valve lift calculated using standard 1.70 rocker ratio.  
Advertised duration shown at .006".  
Spring installed height should be checked before ordering.  
See Spring Specs for installed height pressure ratings.

### LIFTER NOTES:

5250 is OEM style drop in lifter using original buckets.  
5251 is tie bar style lifter.  
Performance lifters available. See pg 83.

### PUSHROD NOTES:

Standard pushrod length listed for reference only.  
Pushrod length needs to be checked on assembly prior to ordering.

**NOTE:** GM LS Chain sets not supplied in Parts Kit. Order by engine type below.

Engine	Single Row	Double Row	Triggers
<b>LS1,LS6 5.7L 3 bolt cam</b>	CS8LS1-SR	CS8LS1	0
<b>LS2 6.0L 3 bolt cam</b>	CS8LS2-SR	CS8LS2	1
<b>LS7 7 litre 3 bolt cam</b>	CS8LS7-SR	CS8LS7	4
<b>LS3,L76, L98 6.0 L Single bolt cam Not AFM</b>	CS8LS-VE-SR	CS8L98	4
<b>L76, L98 3 bolt cam conversion</b>	CS8LS7-SR	CS8LS7	4
<b>VE 3 Bolt Gear Genuine GM</b>	CS12586481		4
<b>3 bolt Heavy Duty Steel cam gear</b>	CS8LS-VE3		4

### SPECIAL GRINDS AVAILABLE ON REQUEST

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components.  
4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod.  
7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

Titanium Parts Kit Available					
VTKLST	Titanium Retainers	Dual Valve Springs	Locks	Stem Seals	Spring Seats



### FITTING NOTES:

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

LS Heavy Duty Lifter and Guide Kit	
LS7LIFTERKIT	Genuine OEM LS7 Roller Lifter (5250) & Lifter Guide Kit (LS7GUIDE)



**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.



# HOLDEN/CHEV LSA ENGINE ROCKER RATIO 1.70

Parts kit includes items marked in black (Order as Kit or Individually)  
Camshaft not included in Parts Kit.

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Installed Height	Parts Kit	Valve Spring	Retainer	Locks	Stem Seal	Spring Seat	Lifters	Timing Kit	Pushrods (See Notes)	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
Smooth idle, Good for daily driver Standard auto	1500-6000	871230	261	281	209	229	.553"	.545"	120	1.780"	VTKLS9	4439-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	CS8LS7-SR	PR5740-110	N/A
Smooth idle, Strong lower/mid range torque. Standard auto	1800-6300	871279	267	302	215	249	.631"	.631"	121	1.780"	VTKLS9	4439-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	CS8LS7-SR	PR5740-110	N/A
Mild idle, Strong mid range. Standard auto	2000-6500	871744	271	286	219	236	.608"	.620"	118	1.780"	VTKLS9	4439-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	CS8LS7-SR	PR5740-110	N/A
Mild idle, Strong mid/upper torque. Standard auto	2500-6700	871298	275	292	221	238	.581"	.583"	119	1.780"	VTKLS9	4439-16 <sup>D</sup>	10708-16	10701-16	S9-16	VSS1251	5250	CS8LS7-SR	PR5740-110	N/A

## SUPERCHARGED LSA ENGINE NOTE: PART NUMBERS ARE FOR 3 BOLT CAM. SINGLE BOLT AVAILABLE UPON REQUEST

### NOTES:

Valve lift calculated using standard 1.70 rocker ratio.  
Advertised duration shown at .006".  
Spring installed height should be checked before ordering.  
See Spring Specs for installed height pressure ratings.

### PUSHROD NOTES:

Standard pushrod length listed for reference only.  
Pushrod length needs to be checked on assembly prior to ordering.

# CROW CAMS LS FAMILY PARTS LIST

## HIGH PERFORMANCE TIMING SETS

### HIGH PERFORMANCE TIMING CHAIN SETS

Featuring hardened teeth for durability and multi keyway for precise cam timing.

Part Number	Application	Triggers	Type	Chain Part Number
<b>CS8LS1</b>	Holden LS1 3 bolt	<b>No Triggers</b>	Double	<b>3DR 60-IWIS</b>
<b>CS8LS1-SR</b>	Holden LS1 3 bolt. Single row chain	<b>No Triggers</b>	Single	<b>3SR 60-IWIS</b>
<b>CS8LS2</b>	Holden LS2 3 bolt with position trigger	<b>Half Circle Single Trigger</b>	Double	<b>3DR 60-IWIS</b>
<b>CS8LS2-SR</b>	Holden LS2 3 bolt with position trigger	<b>Half Circle Single Trigger</b>	Single	<b>3SR 60-IWIS</b>
<b>CS8LS7</b>	Holden LS7 3 bolt. Double row chain	<b>4 Triggers</b>	Double	<b>3DR 60-IWIS</b>
<b>CS8LS7-SR</b>	Holden LS7 3 bolt. Single row chain	<b>4 Triggers</b>	Single	<b>3SR 60-IWIS</b>
<b>CS8LS-VE-SR</b>	Holden L98 1 bolt. Single row chain	<b>4 Triggers</b>	Single	<b>3SR 60-IWIS</b>
<b>CS8LS-VE3</b>	Holden LS 3 bolt. <b>Cam Gear Only</b> L98 conversion	<b>4 Triggers</b>	Single	<b>Cam Gear Only</b>
<b>CS8L98</b>	Holden L98 1 bolt. Double row chain	<b>4 Triggers</b>	Double	<b>3DR 60-IWIS</b>
<b>CS12586481</b>	Holden VE 3 Bolt <b>Cam Gear Only</b> Genuine GM	<b>4 Triggers</b>	Single	<b>Cam Gear Only</b>



4 Triggers



No Trigger



Single Trigger

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

# CROW CAMS LS FAMILY PARTS LIST

## HIGH PERFORMANCE LS LIFTERS

### HIGH PERFORMANCE LS LIFTERS



















Part Number	Application	Type	Body Diameter
<b>5250</b>	GM LS V8 LS7 Style Roller Hydraulic Lifter	Geniune Replacement	.840"
<b>5251</b>	GM LS V8 Street Performance Roller Hydraulic Lifter	Tie Bar. Standard replacement. <b>Naturally Aspirated Only</b>	.840"
<b>5294</b>	GM LS V8 High RPM .750" Hydraulic Roller Diameter	Tie Bar	.840"
<b>5261</b>	GM LS V8 Street Race .750" Solid Roller Diameter	Tie Bar	.840"
<b>6177BUSH</b>	GM LS V8 Solid Roller Lifter BUSH Bearing Pressure Fed	Tie Bar	.840"
<b>5263AFM</b>	Holden L76 AFM Hydraulic Roller Lifter	Genuine Replacement (8 x 5250, 8 x 5250AFM-1)	.840"

### FITTING NOTES:

• Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
• All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# CROW CAMS

## LS FAMILY PARTS LIST



VTKLS1 LS SINGLE CONICAL SPRING KIT INCLUDES:				
Retainers (10707-16)	Connical Valve Springs (4231-16)	Locks (10701-16)	Stem Seals (S9-16)	
				
VTKLS5 LS SINGLE CONICAL SPRING KIT INCLUDES:				
Retainers (10707-16)	Connical Valve Springs (4511X-16)	Locks (10701-16)	Stem Seals (S9-16)	
				
VTKLS8 LS DUAL SPRING KIT INCLUDES:				
Retainers (10708-16)	Dual Valve Springs (4438-16)	Locks (10701-16)	Stem Seals (S9-16)	Spring Seats (VSS1251-16)
				
VTKLS9 LS DUAL SPRING KIT INCLUDES:				
Retainers (10708-16)	Dual Valve Springs (4439-16)	Locks (10701-16)	Stem Seals (S9-16)	Spring Seats (VSS1251-16)
				
VTKLST LS DUAL SPRING TITANIUM RETAINER KIT INCLUDES:				
Titanium Retainers	Dual Valve Springs (4439-16)	Locks	Stem Seals	Spring Seats
				






# CROW CAMS

## LS FAMILY PARTS LIST

HIGH PERFORMANCE HOLDEN V8 LS SPRINGS							
Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>4231-16</b>	1.780"	115	250	.550"	1.090"	10707-16	10701-16
<b>4511X-16</b>	1.780"	140	330	.600"	1.100"	10707-16	10701-16
<b>4438-16<sup>D</sup></b>	1.780"	145	335	.650"	1.025"	10708-16	10701-16
<b>4439-16<sup>D</sup></b>	1.800"	160	350	.650"	1.020"	10708-16	10701-16

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

LS Heavy Duty Lifter and Guide Kit. (LS7LIFTERKIT) Includes:	BUSH LS Trunnion Kit
Genuine OEM LS7 Roller Lifter (5250) & Lifter Guide Kit (LS7GUIDE) x 4	(CRCLSBUSH)
	
Severe duty replacement for factory rocker needle roller bearings. Bronze bushes have 300x greater load capacity than needle rollers. Simple to install.	

L76DODDELETE AFM conversion kit to remove Displacement on Demand lifters.				
Genuine LS7 Lifters (5250) & Guides (LS7GUIDE) x 4	Genuine Guide Bolts (12551163) x 4	Genuine Valley Cover & Gasket (12570471) x 1	Genuine GM 6.0/6.2 Head Gaskets (12610046) x 2	Genuine LS Head Bolt Kit (17800568) x 2
				

LS ENGINE PUSHRODS	
<b>PR-956-16</b>	7.350 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel
<b>PR-959-16</b>	7.375 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel
<b>PR-957-16</b>	7.400 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel
<b>PR-958-16</b>	7.450 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel
<b>PR5730-110</b>	7.300 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5732-110</b>	7.325 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5735-110</b>	7.350 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5737-110</b>	7.375 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5740-110</b>	7.400 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5742-110</b>	7.425 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod
<b>PR5745-110</b>	7.450 Inch 5/16" .110 Wall 210 Chrome Moly Pushrod

For complete Pushrod listing, see page 78

# NISSAN

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>L SERIES 6 CYLINDER 2400, 2600, 2800, 1969-1983</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY ROCKER RATIO 1.47																				
Mild cam can use in near stock engine	2200 - 6200	58640	296	298	214	216	.485"	.495"	108				5840-12 <sup>D</sup>		Standard	Standard				
Medium performance cam choppy idle needs headers carbies, ignition (See Fitting notes 1)	3000 - 6500	58721	292	292	225	232	.495"	.495"	108				5840-12 <sup>D</sup>		Standard	Standard				
<b>SR20 1998 1992-2003</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild performance cams VCT & non VCT	2200 - 6200	5302559 5022559	288	285	192	192	.370"	.370"							Standard	Standard				
High performance cams VCT & non VCT	3500 - 7500	5302553 5022553	295	295	220	220	.410"	.410"							Standard	Standard				
<b>TB42/TB45 6 CYLINDER</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
High torque for stock & LPG engines suit towing,EFI engine may require tuning	2200 - 4000	442867	250	268	210	217	.420"	.425"	113						Standard	Standard				
Mild cam for towing, manual transmission NOT suitable for EFI	1600 - 4500	442846	267	281	218	225	.425"	.430"	109						Standard	Standard				
<b>TB48 DOHC 24 VALVE</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Stock replacement inlet Stock replacement exhaust	1000 - 4000	538000 539000	260	260	210	210	.373"	.373"												
Mild street inlet cam no tuning required Mild street exhaust cam no tuning needed	1500 - 4500	5381441 5391441	267	255	224	220	.397"	.380"												
Medium performance inlet cam Medium performance exhaust cam	2200 - 5200	5381461 5391461	275	275	234	231	.426"	.406"												

FURTHER NISSAN TB48 GRINDS AVAILABLE ON PAGE 116

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.



# NISSAN

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>RB30 SOHC 1986-1997 USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Stock replacement cam for normally aspirated	1500 - 5000	503000	256	255	195	191	.375"	.375"	110				5840-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		
Stock replacement for TURBO engine (See Fitting notes 1)	1500 - 5000	503001	256	255	195	191	.375"	.375"	117				5833-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		
Mild cam for normally aspirated engine (See Fitting notes 1)	2000 - 5800	503NA	250	250	194	194	.426"	.426"	110				5833-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		
Mild performance cam for stock or near stock boost (See Fitting notes 1)	2200 - 6200	503TX1	265	271	205	209	.437"	.450"	117				5833-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		
Medium street performance turbo cam (See Fitting notes 1)	2500 - 6500	503TXM	280	280	214	214	.470"	.470"	117				5833-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		
Street / strip TURBO cam (See Fitting notes 1)	3000 - 7000	503TX2	292	292	230	230	.483"	.483"	117				5833-12 <sup>D</sup>	1.570"	Standard	Standard		CS6RB30-V		

# TOYOTA

<b>20R, 21R, 22R USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Hi torque for stock engines	2000 - 5800	32643	295	292	212	210	.480"	.495"	108		.008"	.010"				Standard	Standard			
Mild performance cam for stock or near to stock engines	2100 - 6100	32640	296	298	214	216	.485"	.495"	108		.014"	.014"				Standard	Standard			
<b>1FZ-FE 6 CYLINDER DOHC LANDCRUISER USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY</b>																				
Mild performance cams good torque & mid range power (See Fitting notes 1)	2000 - 5000	5281841 5291841	292 292	292 292	223 223	223 223	.401" .401"	.401" .401"	114 114		.012" .012"	.012" .012"		4163-12	1.487"	10715				
Medium performance cams good torque & mid range power (See Fitting notes 1)	2400 - 5400	5281842 5291842	302 302	302 302	231 231	231 231	.425" .425"	.425" .425"	114 114		.012" .012"	.012" .012"		4163-12	1.487"	10715				
Performance cams good torque maximum power, upper RPM range (See Fitting notes 1)	2800 - 5800	5281847 5291847	307 307	307 307	240 240	240 240	.405" .405"	.405" .405"	114 114		.012" .012"	.012" .012"		4163-12	1.487"	10715				

FURTHER TOYOTA 1FZ-FE GRINDS AVAILABLE ON PAGE 117

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**FITTING NOTES:**

- Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.
- All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

# TOYOTA

Application	RPM Range	Part No.	Adv. Duration		.050" Duration		Valve Lift		LSA	Lash Intake	Lash Exhaust	Lifters	Valve Spring	Installed Height	Retainer	Locks	Stem Seal	Timing Kit	Pushrods	Rockers
			Intake	Exhaust	Intake	Exhaust	Intake	Exhaust												
<b>3SGE, 3SGTE TWIN CAM</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild performance cams	2200 - 5800	3481416 3481416	264	264	207	207	.345"	.345"												
Mild performance cams	2700 - 6700	3481587 3481587	268	268	219	219	.360"	.360"												
Hot street/race cams	2800 - 6800	3481407 3481407	270	270	227	227	.368"	.368"												
<b>4A-GE 1600 TWIN CAM</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild performance cams	2200 - 6200	271215 272215	277	277	218	218	.315"	.315"												
Mild performance cams	2700 - 6700	271152 272152	280	280	234	234	.334"	.334"												
Hot street/race cams	3200 - 7200	2711323 2721323	285	285	240	240	.330"	.330"												
<b>4A-GE 20 VALVE TWIN CAM</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild performance cams	2000 - 5600	274215 275215	277	277	218	218	.315"	.315"												
Mild performance cams	2500 - 5800	274152 275152	280	280	234	234	.334"	.334"												
Mild street performance cams	2800 - 6000	2741323 2751323	285	285	240	240	.330"	.330"												
Hot street/race cams	3500 - 7200	274859 275859	307	307	257	257	.388"	.388"												
<b>2JZ-GTE</b> USE ZDDP100 OIL ADDITIVE AND QUALITY MINERAL ENGINE OIL ONLY																				
Mild performance cams	2300 - 6200	5411587 5421587	268	268	219	219	.360"	.360"												
Mild street performance cams	2800 - 6800	5411407 5421407	270	270	227	227	.368"	.368"												

**FITTING NOTES:** 1. Must use performance springs. 2. Must use performance retainers. 3. Machining required to fit these components. 4. Must use performance seal. 5. Notes 1 to 4 all apply to this part number. 6. Check valve train geometry before ordering pushrod. 7. Pushrod length varied in this model. Check length before ordering. 8. Spring height varies in models, check spring pressure before installation.

**FITTING NOTES:**  
 • Converter stall speed should be equal to or greater than the minimum rpm of the cam power range.  
 • All lash settings quoted are measured hot. • The use of high volume oil pumps may cause premature wear of the distributor gear.

## CONICAL VALVE SPRING KITS

Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>FORD BA 6 CYLINDER</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>							
<b>VTKBA6T-24</b>	1.520"	110	210	.600"	.900"	10703	Std
<b>FORD BA V8 XR8 TO MAY 2008</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>							
<b>VTKBAXR8-32</b>	1.520"	102	210	.600"	.900"	10704	Std
<b>HOLDEN ECOTEC V6</b> INCLUDES SPRINGS, RETAINERS AND LOCKS							
<b>VTK-ECOTEC</b>	1.780"	115	270	.660"	1.070"	10707	10701
<b>VTK-ECOTEC/R</b>	1.780"	145	300	.660"	1.070"	10707	10701
<b>HOLDEN 304-308 RETRO FIT CONICAL SINGLE SPRING KIT</b> INCLUDES SPRINGS AND RETAINERS							
<b>VTKCS81</b>	1.800"	110	260	.710"	1.090"	11708	Std
<b>FORD CLEVELAND V8 302-351 CONICAL SPRING KIT</b> <b>SINGLE GROOVE VALVE ONLY</b> INCLUDES SPRINGS, RETAINERS AND LOCKS							
<b>VTKCS84</b>	1.920"	140	310	.600"	1.220"	11709	4134
<b>HOLDEN 6 VP-VR</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>							
<b>VTKCS61</b>	1.725"	125	275	.550"	1.120"	11709	Stock
<b>HOLDEN V8 304-308 CONICAL SPRING KIT</b> NOTE: ENGINE NEEDS TO BE FITTED WITH POSITIVE STEM SEALS. SPECIAL FITTING REQUIRED. PLEASE CONTACT CROW CAMS TECHNICAL DEPARTMENT BEFORE FITTING. INCLUDES SPRINGS, RETAINERS AND LOCKS							
<b>VTKCS83</b>	1.800"	135	305	.600"	1.125"	11708	4133-16
<b>VTKCS83A</b>	1.850"	115	300	.600"	1.125"	11708	4134
<b>VTKCS81</b>	1.800"	110	250	.520"	1.125"	11708	4133-16

## VALVE SPRING & RETAINER KITS

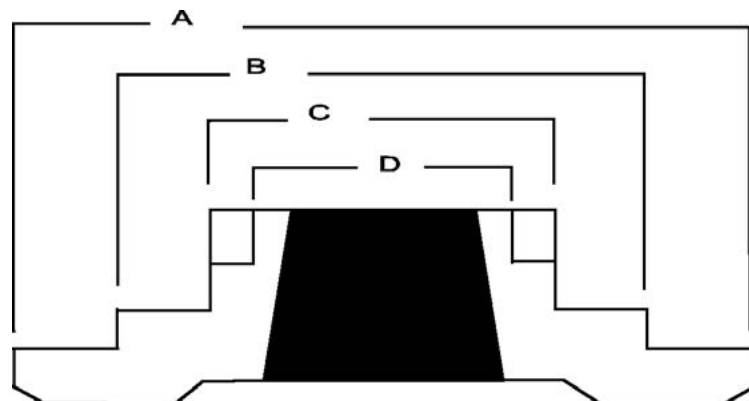
Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Spring Seat	Spring	Spring Retainer	Valve Locks
<b>FORD 6 CYL AU DOUBLE SPRING KIT</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>								
<b>VTKAU<sup>3</sup></b>	1.820"	105	255	.600"	Std	7332-12 <sup>D</sup>	11740-12	Stock
<b>VTKAU-S<sup>3</sup></b>	1.820"	105	255	.600"	Std	7335-12 <sup>D</sup>	11740-12	Stock
<b>VTKAU-R<sup>3</sup></b>	1.820"	140	300	.600"	VSS1456	7333-12 <sup>D</sup>	11740-12	Stock
<b>FORD COYOTE V8 MUSTANG SPRING KIT</b> INCLUDES SPRINGS AND TITANIUM RETAINERS. <b>LOCKS NOT INCLUDED</b>								
Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Coil Bind	Spring	Spring Retainer	Valve Locks
<b>VTKCOYOTE</b>	1.575"	92 @ 1.550"	218 @ 1.050"	.575"	0.941"		Titanium Retainers	Standard
<b>TOYOTA LANDCRUISER 1FZ-FE SINGLE SPRING KIT</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>								
<b>VTK4163</b>	1.487"	105	230	.500"	0.93"	4163	10715	Stock
<b>NISSAN PATROL TB48 SINGLE SPRING KIT</b> INCLUDES SPRINGS AND RETAINERS. <b>LOCKS NOT INCLUDED</b>								
<b>VTK4162</b>	1.550"	90	230	0.550"	0.94"	4163	10716	Std
<b>HOLDEN V8 LS1, LS2, LS7 SINGLE SPRING KITS</b> INCLUDES SPRINGS, RETAINERS, LOCKS, STEM SEALS AND SHIMS.								
<b>VTKLS1</b>	1.780"	115	250	.550"	1.120"	4231-16	10707-16	10701
<b>VTKLS5</b>	1.780"	140	330	.600"	1.100"	4511X-16	10707-16	10701
<b>HOLDEN V8 LS1, LS2, LS7 DOUBLE SPRING KIT</b> INCLUDES SPRINGS, RETAINERS, LOCKS, STEM SEALS AND SHIMS.								
<b>VTKLS8</b>	1.780"	145	335	.650"	0.950"	4438-16 <sup>D</sup>	10708-16	10701
<b>VTKLST</b>	1.800"	160	355	.675"	1.020"	4439-16 <sup>D</sup>	Included Titanium	Included
<b>VTKLS9</b>	1.800"	160	355	.675"	1.020"	4439-16 <sup>D</sup>	10708-16	10701
<b>CROW MT VALVE SPRING KITS</b> SUITABLE FOR MILD FORD AND HOLDEN HYDRAULIC APPLICATIONS.								
<b>MT173K</b>	1.625"	90	190	0.645"	0.930"	MT173	MTR186	11703
<b>MT186K</b>	1.625"	120	250	0.615"	0.960"	MT186	MTR186	11703
<b>MT192K</b>	1.660"	85	185	0.670"	0.940"	MT192 <sup>D</sup>	MTR186	11703
<b>MT202K</b>	1.500"	110	205	0.540"	0.880"	MT202	MTR186	11703
<b>MT250K</b>	1.880"	100	255	0.600"	1.180"	MT250	MTR250Z	11704
<b>MT250KR</b>	1.820"	100	255	0.600"	1.180"	MT357	MTR250	11704
<b>MT302K</b>	1.700"	110	275	0.535"	1.100"	MT302	MTR302	11701
<b>MT308K</b>	1.700"	115	285	0.570"	1.080"	MT308	MTR308	11701
<b>MT350K</b>	1.700"	120	320	0.490"	1.160"	MT350	MTR308	11701
<b>MT357K</b>	1.820"	110	280	0.600"	1.180"	MT357	MTR351	11702
<b>MT6005K</b>	1.800"	125	285	0.700"	1.050"	MT6005 <sup>D</sup>	MTR333	11701

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.



## VALVE SPRING RETAINERS

Part Number	Material	Diam A	Diam B	Diam C	Diam D	Valve Stem	Spring Height	Locks
<b>HIGH PERFORMANCE &amp; RACE VALVE SPRING RETAINERS</b>								
<b>10703</b>	Chromoly	0.920"	0.630"	0.475"		6mm	Standard	Standard
<b>10704</b>	Chromoly	0.950"	0.620"			7mm	Standard	Standard
<b>10705</b>	Chromoly	0.950"	0.620"			7mm	Standard	Standard
<b>10707</b>	Chromoly	1.048"	0.630"			8mm	Standard	10701
<b>10708</b>	Chromoly	1.205"	0.915"	0.634"		8mm	Standard	10701
<b>10709</b>	Chromoly	1.378	1.063	0.709		8mm	Standard	10701
<b>11700</b>	Chromoly	1.398"	1.036"	0.730"		.343"	Standard	7 degree
<b>11707</b>	Chromoly	1.250"	0.850"	0.670"		.343"	Standard	7 degree
<b>11708</b>	Chromoly	1.017"	0.620"			.343"	Standard	7 degree
<b>11709</b>	Chromoly	1.015"	0.655"			.343"	Standard	7 degree
<b>11710</b>	Chromoly	1.400"	1.024"	0.710"		.343"	+0.100"	7 degree
<b>11717</b>	Chromoly	1.245"	0.870"	0.670"		.343"	+0.100"	7 degree
<b>11740</b>	Chromoly	1.375"	1.045"	0.675"		7mm	Standard	7 degree
<b>11750</b>	Chromoly	1.375"	1.020"	0.675"		7mm	Standard	7 degree
<b>12700</b>	Chromoly	1.395"	1.030"	0.735"		.343"-.375"	Standard	7 degree
<b>12710</b>	Chromoly	1.395"	1.028"	0.730"		.343"-.375"	+0.100"	7 degree
<b>13101</b>	Chromoly	1.377"	1.072"	0.715"		.312"-.375"	+0.100"	10 degree
<b>13102</b>	Chromoly	1.488"	1.113"	0.719"		.312"-.375"	+0.100"	10 degree
<b>12706-12C</b>	Zinc Plated Steel	1.396"	1.030"	0.740"		.343"-375"	+0.060"	7 degree
<b>TR405</b>	Titanium	1.448"	1.090"	0.781"		.312"-.375"	+0.100"	10 degree
<b>TR535</b>	Titanium	1.500"	1.180"	0.830"	0.640"	.312"-.375"	+0.100"	10 degree
<b>TR565</b>	Titanium	1.480"	1.180"	0.865"	0.635"	.312"-.375"	+0.100"	10 degree



## VALVE LOCKS (COLLETS)

Part Number	Type	Description	Sales Unit	Valve Stem	Spring Height	Taper
<b>VALVE LOCKS / COLLETS</b>						
<b>4133-12</b> <b>4133-16</b>	Machined	Single Groove	Single, 6/8 Cyl Set	.343"	Standard	7 degree
<b>4134-12</b> <b>4134-16</b>	Machined	Single Groove	Single, 6/8 Cyl Set	.343"	+0.050"	7 degree
<b>4135-12</b> <b>4135-16</b>	Machined	Single Groove	Single, 6/8 Cyl Set	.343"	-0.050"	7 degree
<b>10701-12</b> <b>10701-16</b>	Hardened	Single Radius Groove	Single, 6/8 Cyl Set	8mm	Standard	7 degree
<b>11101-12</b> <b>11101-16</b>	Machined	Single groove	Single, 6/8 Cyl Set	.343"	Standard	10 degree
<b>11102-12</b> <b>11102-16</b>	Machined	Single Groove	Per Pair, 6/8 Cyl Set	.343"	-0.050"	10 degree
<b>11701-16</b>	Hardened	Single groove	8 Cyl Set	.343"	Standard	7 degree
<b>11702-16</b>	Hardened	Multi Groove	8 Cyl Set	.343"	Standard	7 degree
<b>11703-12</b>	Hardened	Single Groove	6 Cyl Set	.343"	Standard	7 degree
<b>11704-12</b>	Hardened	Multi Groove	6 Cyl Set	.343"	Standard	7 degree
<b>12102-12</b>	Hardened	Chrysler Hemi 6 cylinder Set	6 Cyl Set	.375"	Standard	7 degree
<b>12701</b>	Hardened	Single Groove Chev, Ford B/B Chrysler	Per Pair	.375"	Standard	7 degree
<b>12704</b>	Hardened	Chrysler exhaust Multi Groove	Per Pair	.375"	Standard	7 degree
<b>12708-16</b>	Hardened	Single Groove, Chev, Ford, Chrysler	8 Cyl Set	.375"	Standard	7 degree

## VALVE TRAIN ACCESSORIES

### VALVE SPRING SEATS

Part Number	O/D	Spigot Diam.	Bore	Part Number	O/D	Spigot Diam.	Bore
<b>VSS1251</b>	1.28"	.670"	0.50"	<b>VSS1258</b>	1.28"	.880"	0.50"
<b>VSS1451</b>	1.44"	1.085"	0.50"	<b>VSS1452</b>	1.44"	.792"	0.51"
<b>VSS1456</b>	1.44"	.792"	0.56"				

### VALVE SPRING SHIMS Marked Shims Available In .060"(A) .030"(B) And .015"(C) Thick.

Part Number	O.D.	I.D.	Part Number	O.D.	I.D.	Part Number	O.D.	I.D.
<b>VS250 (A,B,C)</b>	1.250"	0.500"	<b>VS306 (B)</b>	1.440"	0.640"	<b>VS510 (A,B,C)</b>	1.510"	0.570"
<b>VS203 (A,B)</b>	1.250"	0.805"	<b>VS305 (B,C)</b>	1.440"	0.780"	<b>VS740 (A,B,C)</b>	1.640"	0.630"
<b>VS438 (B)</b>	1.435"	0.562"	<b>VS303 (A,B,C)</b>	1.480"	0.700"			
<b>VS437 (A,B)</b>	1.437"	0.500"	<b>VS103 (A)</b>	1.500"	1.020"			

### VALVE STEM SEALS

Part Number	Valve Stem	Guide Diam.	Part Number	Valve Stem	Guide Diam.	Part Number	Valve Stem	Guide Diam.
<b>VSV108</b>	.342" (11/32")	.502"	<b>VSV530</b>	.342" (11/32")	.530"	<b>S9</b>	8mm	.500"
<b>KG303</b>	.342" (11/32")	.765"	<b>KG317</b>	.342" (11/32")	.700"	<b>VSV802</b>	.311" (5/16")	.531"
<b>KG819</b>	.342" (11/32")	.280"						

### PUSHROD GUIDE PLATES

Part Number	Diameter.	Application	Part Number	Diameter	Application
<b>GP186</b>	5/16"	Holden 6. 186,202	<b>GP308</b>	5/16"	Holden 308
<b>GP350</b>	5/16"	Chev 350 Stepped	<b>GP351</b>	5/16"	Ford 351C Stepped
<b>GP302</b>	5/16"	Ford 302W	<b>GP304</b>	5/16"	Holden EFI V8
<b>GP455</b>	7/16"	Chev Big Block			

### VALVE STEM LASH CAPS (0.080" Thick)

Part Number	Dimensions	Application
<b>34301</b>	11/32" valve 0.343"	Holden, Chev SB, Ford 302-351

### TREATED CAST IRON OIL PUMP / DISTRIBUTOR GEARS

Part Number	Application	Part Number	Application
<b>DG2</b>	Falcon 6 XD on with 0.490" dist. shaft.	<b>60062</b>	Valiant 265 15 tooth oil pump gear
<b>DG2A</b>	Falcon 6 points dist. with 0.530" shaft	<b>DG4</b>	Holden V8 oil pump gear suit roller cams

# CROW CAMS *NEXT GEN*

## STAINLESS STEEL ROLLER ROCKERS

**NOTE: REQUIRES STUDS AND GUIDE PLATES WHEN FITTING. NOT SUITABLE FOR SOLID ROLLER APPLICATIONS**

An unbeatable combination of strength, rigidity and value for money

With more aggressive cam profiles and heavier valve springs now common in street and race applications the limitations of extruded alloy as a rocker material are clearly evident. The flex alloy rockers exhibit reduces valve lift and horsepower potential and the stresses can lead to arm failure

These problems have lead to a move to steel rocker arms in the upper levels of motor sport and now the strength and stiffness of steel is within the budget of every performance engine builder.

Crow Cams new stainless steel stud type roller rockers offer virtually zero arm deflection for maximum valve lift and unrivalled resistance to arm breakage. The oversize rocker shafts allow for 7/16 studs to be used without comprising shaft strength. The larger shafts and needle roller bearings also offer greater load capacity for high valve springs pressures.

Every set come complete with poly locks for added value and simple, secure valve lash adjustments.

Application	Part Number	Max Spring Pressure (lb)	Guide Plates
<b>Chev SB 1.5 3/8 stud</b>	CRCSB153	500	GP350
<b>Chev SB 1.5 7/16 stud</b>	CRCSB157	600	GP350
<b>Chev SB 1.6 3/8 stud</b>	CRCSB163	500	GP350
<b>Chev SB 1.6 7/16 stud</b>	CRCSB167	600	GP350
<b>Chev BB 1.72 7/16 stud</b>	CRCBB177	600	N/A
<b>Ford Xflow 6 Cyl 1.73 7/16 Stud</b>	CRFX177	600	N/A
<b>Ford Windsor 1.6 3/8 stud</b>	CRFW163	500	GP302
<b>Ford Windsor 1.6 7/16 stud</b>	CRFW167	600	GP302
<b>Ford Cleveland 1.72 7/16 stud</b>	CRFCL177	600	GP351
<b>Holden V8 308 1.65 7/16 stud</b>	CRHL8167	600	GP304/308
<b>Holden 6 1.5 3/8 stud</b>	CRHL6153	500	GP186
<b>Holden 6 1.5 7/16 stud</b>	CRHL6157	600	GP186



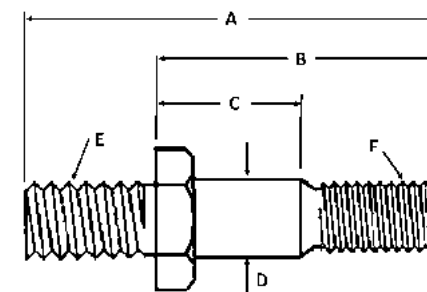
## CROW CAMS

### CRYO TREATED ROCKER STUDS

The best stud rockers deserve the best screw in rocker studs and Crow Cams now offer unique cryogenically treated rocker studs to suit 3/8" and 7/16" rockers.

Cryogenic treatment stabilises the material for great strength and maximises surface harness for wear resistance

Application	Part Number	Length (Refer to diagram)					
		A	B	C	D	E	F
<b>Ford V8 Stud</b>	CST100940	2.670"	1.910"	.810"	7/16	7/16 (UNC)	7/16 (UNF)
<b>GM V8 Stud</b>	CST100941	2.560"	1.765"	.875"	7/16	7/16 (UNC)	7/16 (UNF)
<b>GM V8 Stud</b>	CST102920	2.325"	1.725"	.850"	3/8	7/16 (UNC)	3/8 (UNF)
<b>GM 6 Stud</b>	CST102920-12	2.325"	1.725"	.850"	3/8	7/16 (UNC)	3/8 (UNF)
<b>GM 6 Stud</b>	CST100941-12	2.560"	1.765"	.875"	7/16	7/16 (UNC)	7/16 (UNF)



# CROW CAMS *next gen*

**PUSHRODS** – The next generation in Heavy Wall, One Piece Chrome Moly pushrods exclusive to Crow Cams

- Made in the USA by the leading OEM supplier for Crow Cams
- All popular sizes available ex-stock

## PART NUMBER LISTING

5/16" .110 WALL 210 RADIUS

Length (inches)	Part Number	Length (inches)	Part Number
6.250	PR5625-110	7.650	PR5765-110
6.300	PR5630-110	7.700	PR5770-110
6.350	PR5635-110	7.750	PR5775-110
6.500	PR5650-110	7.800	PR5780-110
6.700	PR5670-110	7.850	PR5785-110
6.800	PR5680-110	7.900	PR5790-110
6.850	PR5685-110	7.950	PR5795-110
6.900	PR5690-110	8.000	PR5800-110
6.950	PR5695-110	8.050	PR5805-110
7.000	PR5700-110	8.100	PR5810-110
7.025	PR5702-110	8.150	PR5815-110
7.050	PR5705-110	8.200	PR5820-110
7.100	PR5710-110	8.250	PR5825-110
7.150	PR5715-110	8.300	PR5830-110
7.200	PR5720-110	8.350	PR5835-110
7.250	PR5725-110	8.400	PR5840-110
7.300	PR5730-110	8.450	PR5845-110
7.325	PR5732-110	8.500	PR5850-110
7.350	PR5735-110	8.550	PR5855-110
7.375	PR5737-110	8.600	PR5860-110
7.400	PR5740-110	8.650	PR5865-110
7.425	PR5742-110	8.700	PR5870-110
7.450	PR5745-110	8.750	PR5875-110
7.500	PR5750-110	8.800	PR5880-110
7.525	PR5752-110	8.850	PR5885-110
7.550	PR5755-110	8.900	PR5890-110
7.600	PR5760-110	8.950	PR5895-110

## PART NUMBER LISTING

3/8" .138 WALL 210 RADIUS

Length (inches)	Part Number	Length (inches)	Part Number
6.300	PR8630-138	8.200	PR8820-138
6.500	PR8650-138	8.250	PR8825-138
7.000	PR8700-138	8.300	PR8830-138
7.100	PR8710-138	8.350	PR8835-138
7.250	PR8725-138	8.400	PR8840-138
7.325	PR8732-138	8.450	PR8845-138
7.375	PR8737-138	8.500	PR8850-138
7.500	PR8750-138	8.550	PR8855-138
7.550	PR8755-138	8.600	PR8860-138
7.600	PR8760-138	8.700	PR8870-138
7.650	PR8765-138	8.800	PR8880-138
7.800	PR8780-138	8.850	PR8885-138
7.850	PR8785-138	8.900	PR8890-138
7.900	PR8790-138	8.950	PR8895-138
7.950	PR8795-138	9.250	PR8925-138
8.000	PR8800-138	9.300	PR8930-138
8.050	PR8805-138	9.350	PR8935-138
8.100	PR8810-138	9.400	PR8940-138
8.150	PR8815-138		

Severe duty 4130 seamless chrome moly tubing

Heavy wall material for maximum rigidity and end strength - 5/16" .110" wall and 3/8" .138" wall

Every pushrod is fully CNC machined for perfect straightness and concentricity of ends.

Precision machined 210" radius at both ends for maximum rocker clearance and ultra smooth surface finish.

# CROW CAMS

ONE PIECE 180° CHROME MOLY PUSHRODS 0.80" WALL

## PART NUMBER LISTING

5/16" .080 WALL

Length (inches)	Part Number	Length (inches)	Part Number
6.20	PR5620	9.50	PR5950
6.40	PR5640	9.55	PR5955
6.45	PR5645	9.60	PR5960
6.75	PR5675	9.65	PR5965
9.00	PR5900	9.70	PR5970
9.05	PR5905	9.75	PR5975
9.10	PR5910	10.45	PR5045
9.15	PR5915	10.55	PR5055
9.20	PR5920	10.60	PR5060
9.25	PR5925	10.70	PR5070
9.30	PR5930	10.75	PR5075
9.35	PR5935	10.80	PR5080
9.40	PR5940	10.85	PR5085
9.45	PR5945	10.95	PR5095

## PART NUMBER LISTING

3/8" .080 WALL

Length (inches)	Part Number	Length (inches)	Part Number
8.65	PR8865-210	9.50	PR8950
8.75	PR8875-210	9.55	PR8955
8.95	PR8895-210	9.60	PR8960
9.00	PR8900-210	9.65	PR8965
9.05	PR8905-210	9.75	PR8975
9.10	PR8910-210	9.80	PR8980
9.15	PR8915-210	9.90	PR8990
9.20	PR8920-210	9.95	PR8995
9.45	PR8945-210		

## PR-HEMI-16

HEMI PUSHROD SET

Length (inches)	Part Number	Quantity
6.60	PR5660	8
7.85	PR5785-110	8





# PUSHRODS

## SUPERDUTY PUSHRODS 1 PIECE, 0.080" WALL HEAT TREATED HIGH CARBON STEEL

Part Number	Length	Application	Part Number	Length	Application
<b>PR-966</b>	6.30"	Ford XR8 + 0.050"	<b>PR-988</b>	8.10"	Holden VT 304 V8 roller lifter
<b>PR-963</b>	6.80"	Ford 289W V8 68-69	<b>PR-947</b>	8.15"	Ford 351W
<b>PR-948</b>	6.90"	Ford 302W '69-85	<b>PR-995</b>	8.30"	Holden V8 Hyd. roller Lifters
<b>PR-905</b>	7.05"	Holden Ecotec V6	<b>PR-950</b>	8.40"	Ford 351C
<b>PR-956</b>	7.35"	LS1 - 0.050"	<b>PR-955</b>	8.50"	Ford 351C + 0.100"
<b>PR-959</b>	7.375"	LS1 - 0.025"	<b>PR-978</b>	8.55"	Ford 351. solid lifter. 429,460
<b>PR-957</b>	7.40"	Holden/Chev V8 LS1	<b>PR-964</b>	8.70"	Holden 253-308
<b>PR-958</b>	7.45"	LS1 + 0.050"	<b>PR-974</b>	8.80"	Holden 253-308 + 0.100"
<b>PR-937</b>	7.80"	Chev 350	<b>PR-990</b>	9.00"	Holden 202, 308 Group A
<b>PR-977</b>	7.90"	Chev 350 + 0.100"	<b>PR-926</b>	9.13"	Holden 186
<b>PR-987</b>	7.95"	Holden VN-VR V6	<b>PR-962</b>	9.65"	Ford XF - 0.030"
<b>PR-983</b>	8.00"	Chev 350 + 0.200"	<b>PR-917</b>	9.70"	Falcon Crossflow

## STANDARD REPLACEMENT PUSHRODS HARDENED WHERE MARKED\*

Part Number	Length	Application	Part Number	Length	Application
<b>PR-105*</b>	9.136"	Holden 186	<b>PR-387*</b>	8.721"	Holden 308 +.030"
<b>PR-281*1</b>	6.876"	Ford Windsor	<b>PR-414*</b>	8.423"	Ford Cleveland +.015"
<b>PR-309</b>	8.408"	Ford Clev.Std	<b>PR-422*</b>	9.016"	Holden 202
<b>PR-317</b>	9.682"	Ford XF Std	<b>PR-433</b>	7.290"	
<b>PR-34B*</b>	7.794"	Chev 350	<b>PR-605</b>	7.050"	Holden Ecotec V6 Std
<b>PR-384</b>	7.944"	Holden VP-VR V6			

NOTES: 1. Check length before ordering as length varies between models.

## CROW CAMS MICROMETER CHECKING PUSHRODS

These precision crafted checking pushrods allow precise measurement of pushrod length without the need for callipers or micrometers. Available individually or in sets.

Part Number	Individual Range	Part Number	Sets
<b>PR-CHECK-6</b>	5.800 - 6.800	<b>PR-CHECK-10</b>	9.800 - 10.800
<b>PR-CHECK-7</b>	6.800 - 7.800	<b>PR-CHECK-11</b>	10.800 - 11.800
<b>PR-CHECK-8</b>	7.800 - 8.800	<b>PR-CHECK-S2</b>	2 piece boxed set covering 7.80 -9.80
<b>PR-CHECK-9</b>	8.800 - 9.800	<b>PR-CHECK-S4</b>	4 piece boxed set covering 5.80 - 9.80



# CROW CAMS BILLET PERFORMANCE CHAIN SETS

Crow single and double row billet steel timing chain sets are the ultimate in strength, timing accuracy and long term durability.

The new Crow Timing sets now feature a German IWIS brand timing chain for much greater resistance to chain stretch and breakage.

- Precision CNC Machined billet steel top and bottom gears
- Induction hardened crank gear for exceptional wear resistance on gear teeth
- Nine keyways broached on crank gear in one pass with one tool to insure timing accuracy 6 cylinder gear have 7 keyways
- German quality IWIS true roller timing chain



## HIGH PERFORMANCE TIMING CHAIN SETS

Featuring hardened teeth for durability and multi keyway for precise cam timing.

Part Number	Application	Sensor Triggers	Type	Chain Part Number
<b>CS8350</b>	Chev Small Block 283-400	N/A	Double	<b>3DR 58-IWIS</b>
<b>CS8350T</b>	Chev Small Block with Torrington thrust	N/A	Double	<b>3DR 58-IWIS</b>
<b>CS8350TPI</b>	Chev Small Block late LT1 TPI injection	N/A	Double	<b>3DR 58-IWIS</b>
<b>CS8350+005</b>	Chev S/B +005L/Bore Timing Set	N/A	Double	<b>3DR 58-IWIS + 005"</b>
<b>CS8350+010</b>	Chev S/B +010L/Bore Timing Set	N/A	Double	<b>3DR 58-IWIS + 010"</b>
<b>CS8454T</b>	Chev Big Block with Torrington thrust	N/A	Double	<b>3DR 66-IWIS</b>
<b>CS8LS1</b>	Chev/Holden LS1 3 bolt	No Triggers	Double	<b>3DR 60-IWIS</b>
<b>CS8LS1-SR</b>	Chev/Holden LS1 3 bolt. Single row chain	No Triggers	Single	<b>3SR 60-IWIS</b>
<b>CS8LS2</b>	Chev/Holden LS2 3 bolt with position trigger	Half Circle Single Trigger	Double	<b>3DR 60-IWIS</b>
<b>CS8LS2-SR</b>	Chev/Holden LS2 3 bolt with position trigger	Half Circle Single Trigger	Single	<b>3SR 60-IWIS</b>
<b>CS8L98</b>	Chev/Holden L98 1 bolt. Double row chain	4 Triggers	Double	<b>3DR 60-IWIS</b>
<b>CS8LS-98-SR</b>	Chev/Holden L98 1 bolt. Single row chain	4 Triggers	Single	<b>3SR 60-IWIS</b>
<b>CS8LS7</b>	Chev/Holden LS7 3 bolt. Double row chain	4 Triggers	Double	<b>3DR 60-IWIS</b>
<b>CS8LS7-SR</b>	Chev/Holden LS7 3 bolt. Single row chain	4 Triggers	Single	<b>3SR 60-IWIS</b>
<b>CS8LS7+005</b>	Chev/Holden LS7+5 Double Row Set	4 Triggers	Double	<b>3DR 60-IWIS + 005"</b>
<b>CS6225</b>	Chrysler Slant 6 engine	N/A	Double	<b>3DR 66-IWIS</b>
<b>CS6265</b>	Chrysler 245-265 3 Bolt	N/A	Double	<b>3DR 56-IWIS</b>
<b>CS8318</b>	Chrysler 273-360	N/A	Double	<b>3DR 68-IWIS</b>
<b>CS8440</b>	Chrysler Big Block 1 Bolt	N/A	Double	<b>3DR 66-IWIS</b>
<b>CS8440B</b>	Chrysler Big Block 3 Bolt	N/A	Double	<b>3DR 66-IWIS</b>
<b>CS41500</b>	Ford Kent 4 cyl Double Row race set	N/A	Double	<b>3DR 46-IWIS</b>



4 Triggers



No Trigger



Single Trigger

## HIGH PERFORMANCE TIMING CHAIN SETS

Featuring hardened teeth for durability and multi keyway for precise cam timing.

Part Number	Application	Sensor Triggers	Type	Chain Part Number
<b>CS6250</b>	Ford Falcon 6 200-250	N/A	Double	<b>3DR 52-IWIS</b>
<b>CS6250+010</b>	Falcon 6 Chain Set LB 0.010"	N/A	Double	<b>3DR 60-IWIS + 010"</b>
<b>CS6EA-VS</b>	Ford Vernier Set suit EA-AU Falcon	N/A	Double	<b>3DR 114-IWIS</b>
<b>CS6170</b>	Ford 144,170,200 XM-XP Timing Set	N/A	Double	<b>3DR 50-IWIS</b>
<b>CS8302W</b>	Ford 289, 302, 351 Windsor	N/A	Double	<b>3DR 58-IWIS</b>
<b>CS8302WEFI</b>	Ford Falcon V8 EB on EFI engines and 351 Windsor	N/A	Double	<b>3DR 58-IWIS</b>
<b>CS8302WEFI+005</b>	Ford EB-EF V8 Chain Set + 0.005	N/A	Double	<b>3DR 58-IWIS + 005"</b>
<b>CS8302WEFI+010</b>	Ford EB-EF V8 Chain Set +0.010	N/A	Double	<b>3DR 58-IWIS + 010"</b>
<b>CS8351C</b>	Ford 302-351 Cleveland	N/A	Double	<b>3DR 64-IWIS</b>
<b>CS8351C-SVO</b>	Ford Cleveland stroker engine	N/A	Double	<b>3DR 64-IWIS</b>
<b>CS8351C+005</b>	Ford CS8351C +005" Line Bore Set	N/A	Double	<b>3DR 64-IWIS + 005"</b>
<b>CS8351C+010</b>	Ford CS8351C +010" Line Bore Set	N/A	Double	<b>3DR 64-IWIS + 010"</b>
<b>CS8FE428</b>	Ford FE V8 352-428,	N/A	Double	<b>3DR 64-IWIS</b>
<b>CS8460</b>	Ford 429-460	N/A	Double	<b>3DR 66-IWIS</b>
<b>CS41600</b>	Holden Gemini 1600 Single Row	N/A	Single	<b>3SR 92-IWIS</b>
<b>CS41800</b>	Holden Gemini 1800-2000 Single Row	N/A	Single	<b>3SR 94-IWIS</b>
<b>CS6VN</b>	Holden VN V6 Single Row to Nov'90	N/A	Single	<b>3SR 54-IWIS</b>
<b>CS6VP</b>	Holden VN,VP Nov'90 on 2 spline oil pump	N/A	Single	<b>3SR 54-IWIS</b>
<b>CS6VS</b>	Holden Oct-94 onVR,VS,VT 6 spline oil pump	N/A	Single	<b>3SR 54-IWIS</b>
<b>CS6VNHP</b>	Holden VN V6 Double Row Timing Set. Race Only	N/A	Double	<b>3DR 54-IWIS</b>
<b>CS6VSVTHP</b>	Holden Ecotec Double Row Timing Set	N/A	Double	<b>3DR 54-IWIS</b>
<b>CS8308</b>	Holden V8 Suit 308 Carby and 304/355 EFI	N/A	Double	<b>3DR 62-IWIS</b>
<b>CS8308+005</b>	Holden 308 Linebore Timing Set 0.005"	N/A	Double	<b>3DR 62-IWIS + 005"</b>
<b>CS8308+010</b>	Holden 308 Linebore Timing Set 0.010"	N/A	Double	<b>3DR 62-IWIS + 010"</b>
<b>CS8P76</b>	Leyland Rover, P76 V8	N/A	Double	<b>3DR 54-IWIS</b>

## HOLDEN 6CYL TIMING SETS

Featuring Multiple keyways for precise cam timing

Part Number	Description
<b>CS6202</b>	Straight cut hardened steel gears for maximum durability.
<b>44HP</b>	Helical gears for silent running, alloy cam gear, multi keyway iron crank gear & thrust plate.

## VERNIER CAM GEARS

For infinite and simple adjustment of valve timing

Part Number	Description
<b>CS42000-V</b>	Ford 2000 steel vernier gear. <b>CS8LS1-SRV</b> GM LS1 Vernier Single Row Gear Set
<b>CS6EA-V</b>	Ford EA- AU vernier cam gear. Not VCT motor <b>CS8LS7-SRV</b> GM LS7, L98 Three Bolt Vernier Single Row Set
<b>CS6RB30-V</b>	Nissan RB30 vernier gear. Aluminium.

## HOLDEN LS CAM GEARS

(See LS Grinds Page) Cam gear only.

Part Number	Description
<b>CS12586481</b>	VE 3 Bolt Gear Genuine GM Single Row <b>4 Triggers</b>
<b>CS8LS-VE3</b>	3 Bolt Heavy Duty Steel Cam Gear Single Row <b>4 Triggers</b>

## CAM FOLLOWERS

### HYDRAULIC LIFTERS

NOTE\* C SUFFIX DENOTES LIFTER WITH HEAVY DUTY CHILLED IRON BASE

Part Number	Application	Model	Body Diameter	Oil Thru Pushrod
<b>HT817C</b>	GM	Chevrolet	.840"	Yes
<b>HT900</b>	Ford	Falcon Xflow 6, Cleveland, Windsor V8 & 429-460	.872"	Yes
<b>HT950</b>	Ford Falcon 6, FE V8	Pre Xflow 6, FE V8	.872"	No
<b>BA-ADJ-1</b>	Ford	BA 6 Cyl Hyd Lifter	.550	No
<b>HT951</b>	Pontiac, Olds	Most V8	.840"	Yes
<b>HT969C</b>	Holden	Red, Blue, Black 6, V8	.840"	Yes
<b>HT2011</b>	Chrysler	Hemi 6 and V8	.902"	Yes

### HIGH RPM HYDRAULIC LIFTERS

<b>HT817R</b>	GM	Chev	.840"	Yes
<b>HT900R</b>	Ford	Falcon Xflow 6, Cleveland, Windsor V8 & 429-460	.872"	Yes
<b>HT969R</b>	Holden	Red, Blue, Black 6, V8	.840"	Yes
<b>HT2011R</b>	Chrysler	Hemi 6 and V8	.902"	Yes

### SOLID LIFTERS

<b>AT31</b>	Chrysler	Slant 6	.902"	No
<b>VT101</b>	Ford	Cortina 1500 1967-69	.435"	No
<b>AT282</b>	Ford Falcon 6, FE V8	Pre Xflow 6, FE V8	.872"	No
<b>AT992</b>	GM	Chevrolet & Holden	.840"	Yes
<b>AT2000</b>	Ford	Falcon Xflow 6, Cleveland, Windsor V8 & 429-460	.872"	Yes
<b>AT2014</b>	Ford	Cortina 1600 1970-81	.514"	No

### SOLID LIFTERS WITH POSITIVE EDM OILING TO LIFTER FACE

<b>AT2000L-16</b>	Ford	Falcon Xflow 6, Cleveland, Windsor V8 & 429-460	.872"	Yes
<b>AT992L-16</b>	GM	Chevrolet and Holden	.840"	Yes

### ULTRA LIGHT EXTREME DUTY SOLID LIFTERS EDM OILING TO LIFTER FACE

<b>AT992UL-16</b>	GM	Chev/Holden Ultralight EDM	.840"	Yes
<b>AT2000UL-16</b>	Ford	Xflow 6, Cleveland and Windsor v8	.872"	Yes

### HYDRAULIC ROLLER LIFTERS STREET PERFORMANCE. .700" ROLLER DIAMETER

Part Number	Application	Model	Body Diameter	Type
<b>3800R</b>	GM 3800 V6	VN to VT Heavy Duty	.840"	Standard Replacement
<b>5200H</b>	Chevrolet	Small Block V8 Retro Fit to 1986	.840"	Tie Bar
<b>5201H</b>	Chevrolet	Small Block V8 1986-on	.840"	Standard Replacement
<b>5208H</b>	Holden	Red, Blue, Black V8 & EFI	.840"	Tie Bar
<b>5210H</b>	GM	Chev/Holden Ultralight EDM	.840"	Tie Bar
<b>5250</b>	GM	LS V8 LS7 Style	.840"	Genuine HD Standard Replacement
<b>5251</b>	GM	LS V8 Street Performance	.840"	Tie Bar
<b>5263AFM</b>	GM	LS V8 L76 AFM Engine	.840"	Standard Replacement (8 x 5250, 8 x 5250AFM-1)
<b>5250AFM</b>	GM	LS V8 L76 AFM Engine	.840"	Standard Replacement Set of 8 AFM Lifters
<b>5300H</b>	Ford	Windsor EFI V8 Factory	.872"	Standard Replacement
<b>5318H</b>	Chrysler	Small Block V8 Retro Fit	.902"	Tie Bar
<b>5325</b>	Ford	Big Block V8 460 and FE	.875"	Tie Bar

## CAM FOLLOWERS

### HYDRAULIC ROLLER LIFTERS HIGH RPM STREET RACE BILLET BODY .750" ROLLER DIAMETER NOTE\* USE 5W40 OR LIGHTER WEIGHT OILS IN HIGH RPM HYDRAULIC ROLLER LIFTERS

Part Number	Application	Model	Body Diameter	Type
<b>5044</b>	Chevrolet	Small Block V8 Retro fit to 1986	.840"	Tie Bar
<b>5294</b>	GM	LS V8	.840"	Tie Bar
<b>5879</b>	Ford	Cleveland & Windsor V8 - High RPM Lifter	.872"	Tie Bar

### SOLID ROLLER LIFTERS STREET RACE .750" ROLLER DIAMETER

<b>5200C</b>	Chevrolet	Small Block V8 Retro fit to 1986	.840"	Tie Bar
<b>5208</b>	Holden	Red, Blue, Black V8	.840"	Tie Bar
<b>5210</b>	Chevrolet	Big Block V8	.840"	Vertical Tie Bar
<b>5211</b>	Chevrolet	Big Block V8	.840"	Horizontal Tie Bar
<b>5261</b>	GM	LS V8	.840"	Tie Bar
<b>5300</b>	Ford	Windsor V8	.872"	Tie Bar
<b>5351</b>	Ford	Cleveland V8	.872"	Tie Bar

### SEVERE DUTY SOLID ROLLER LIFTERS WITH PRIORITY OILING

<b>4838PF</b>	Chevrolet	Small Block .180" Int Offset L&R	.840"	Tie Bar
<b>5200PF</b>	Chevrolet	Small Block V8 Severe Duty	.840"	Tie Bar
<b>5212PF</b>	Chevrolet	Big Block V8 Severe Duty	.840"	Tie Bar
<b>5300PF</b>	Ford	Windsor V8 Severe Duty	.872"	Tie Bar
<b>5351PF</b>	Ford	Cleveland V8 Severe Duty	.872"	Tie Bar

### ULTIMATE RACE SOLID ROLLER LIFTERS

BUSH BEARING PRESSURE FED LUBRICATION FOR MAXIMUM LOAD RATING

<b>4838BUSH</b>	Chevrolet	Small Block V8 .180" Offset L&R	.840"	Tie Bar
<b>5200BUSH</b>	Chevrolet	Small Block V8 Extreme Duty	.840"	Tie Bar
<b>5212BUSH</b>	Chevrolet	Big Block V8 Extreme Duty	.840"	Tie Bar
<b>6177BUSH</b>	Holden	LS Engines V8 Super Duty	.840"	Tie Bar
<b>5300BUSH</b>	Ford	Small Block V8 Extreme Duty	.872"	Tie Bar

### CAM FOLLOWER ARMS

Part Number	Application	Model
<b>RR368</b>	GM, Daewoo	All Family 1, 4 Cylinder Engines
<b>RR811</b>	Ford	Cortina 2000cc OHC Engine

### LIFTER GUIDES HEAVY DUTY GM PERFORMANCE LS7 STYLE. SUIT ALL LS FACTORY LIFTERS

<b>LS7GUIDE</b>	GM	All LS Engines (4 Required Per Engine)
<b>LS7LIFTERKIT</b>	GM	All LS Engines. OEM Lifter & Lifter Guides Kit

## PERFORMANCE VALVE SPRING APPLICATION

Crow Cams valve springs are made from aircraft quality alloy steels to give the best performance and reliability at a reasonable price. They are specially designed to suit our high lift, high acceleration profiles. The following is a guide to popular applications, if yours is not here see the spring specification chart on page 40 or call our technical staff. **Making correct measurements before assembly is critical as many variables are present to catch the unwary.**

Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>CHEV. BIG BLOCK 396 - 454</b> Standard retainers have large step which may bind on damper.							
<b>7737-16</b>	1.880"	90	265	.520"	1.310"	12700	12708-16
<b>7437-16<sup>D</sup></b>	1.880"	108	293	.780"	1.050"	12700	12708-16
<b>4910-16<sup>D</sup></b>	1.900"/2.000"	240 / 190	520 / 450	.700"	1.100"	12710 / TR405	12708-16
<b>8937-16<sup>D</sup></b>	1.900"	120	305	.650"	1.180"	12710	12708-16
<b>9731-16</b>	1.950"	130	295	.720"	1.180"	12700	12708-16
<b>8337-16<sup>2D</sup></b>	1.980"	105	275	.725"	1.114"	12710	12708-16
<b>9936-16<sup>5D</sup></b>	1.980"	125	330	.800"	1.180"	12710	12708-16
<b>9950-16<sup>5D</sup></b>	1.980"	150	380	.820"	1.110"	12710	12708-16
<b>9945-16<sup>5D</sup></b>	1.980"	125	350	.760"	1.170"	12710	12708-16
<b>4920-16<sup>D</sup></b>	2.000"	250	565	.770"	1.180"	12710 / TR405	12708-16

### CHEV. SMALL BLOCK V8

<b>4931-16</b>	1.700"	80	230	.550"	1.100"	11707	11701-16
<b>4828-16</b>	1.700"	115	285	.570"	1.080"	11707	11701-16
<b>4830-16</b>	1.700"	120	275	.550"	1.100"	11707	11701-16
<b>4833-16</b>	1.700"	110	320	.570"	1.080"	11707	11701-16
<b>4328-16<sup>D</sup></b>	1.700"	90	230	.700"	.940"	11707	11701-16
<b>4843-16</b>	1.700"	120	320	.490"	1.160"	11707	11701-16
<b>7328-16<sup>2,3D</sup></b>	1.700"	140	285	.690"	.960"	11700	11701-16
<b>4438-16<sup>D</sup></b>	1.800"	120	310	.725"	1.025"	11717	4133-16
<b>7333-16<sup>2,3D</sup></b>	1.800"	130	265	.700"	1.050"	13101/11710	11101-16 / 4134-16
<b>7331-16<sup>2,3D</sup></b>	1.800"	155	310	.700"	1.050"	13101/11710	11101-16 / 4134-16
<b>8945-16<sup>2,3D</sup></b>	1.800"	180	435	.720"	1.040"	13102	11101-16
<b>4845-16</b>	1.850"	90	290	.660"	1.140"	11717	4134-16
<b>4235-16</b>	1.850"	115	310	.720"	1.08	11717	4134-16
<b>7342-16<sup>2,3D</sup></b>	1.850"	125	320	.760"	1.040"	13101/11710	11101-16 / 4134-16
<b>7437-16<sup>3D</sup></b>	1.850"	115	305	.750"	1.050"	13101/11710	11101-16 / 4134-16
<b>4910-16<sup>D</sup></b>	1.900"/2.000"	240 / 190	520 / 450	.700"	1.100"	13101 / TR405	11101-16
<b>4920-16<sup>D</sup></b>	2.000"	250	565	.770"	1.180"	13101 / TR405	11101-16

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.



## PERFORMANCE VALVE SPRING APPLICATION

Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>CHRYSLER 300C V8 5.7 - 6.1</b>							
<b>4435-16</b>	1.800"	135	305	.600"	1.110"	Stock	Stock
<b>CHRYSLER SLANT 6 225</b>							
<b>5091-12</b>	1.650"	100	285	.505"	1.095"	Std.	Std.
<b>CHRYSLER HEMI 6</b>							
<b>5091-12</b>	1.687"	90	275	.542"	1.095"	12700	12102-12
<b>7736-12</b>	1.687"	110	280	.535"	1.100"	12700	12102-12
<b>7328-12<sup>3,4,D</sup></b>	1.787"	115	250	.777"	0.960"	12710	12102-12
<b>CHRYSLER SMALL BLOCK 273 - 360 V8</b>							
<b>5091-16</b>	1.687"	90	275	.542"	1.095"	12700	Note 7
<b>7736-16</b>	1.687"	110	280	.537"	1.100"	12700	Note 7
<b>7331-16<sup>3,4,D</sup></b>	1.687"	185	340	.587"	1.050"	12700	Note 7
<b>7328-16<sup>3,4,D</sup></b>	1.787"	115	250	.777"	0.960"	12710	Note 7
<b>DATSUN L SERIES ENGINES, 1600-2000 4CYL / 2400-2800 6CYL</b>							
<b>5840-8<sup>D</sup></b>	1.580"	85	250	.670"	0.860"	Std.	Std.
<b>FORD BA 6 CYLINDER</b>							
<b>1808-24</b>	1.480"	90	195	.550"	.880"	Std	Std
<b>1809-24</b>	1.520"	110	210	.570"	.900"	Std	Std
<b>FORD BA V8 290KW / XR8 FROM MAY 2008</b>							
<b>1808-32</b>	1.490"	85	190	.560"	.880"	Std	Std
<b>1809-32</b>	1.590"	95	190	.640"	.900"	10703	Std
<b>1804-32</b>	1.590"	120	265	.520"	1.020"	Std	Std
<b>FORD FALCON CROSSFLOW</b>							
<b>7739-12<sup>2</sup></b>	1.820"	110	275	.620"	1.150"	12700-12	11704-12
<b>7738-12<sup>2</sup></b>	1.820"	110	280	.590"	1.180"	12700-12	11704-12
<b>7328-12<sup>2,4,D</sup></b>	1.820"	100	235	.810"	0.960"	12700-12	11704-12
<b>7333-12<sup>2,4,D</sup></b>	1.820"	120	280	.720"	1.050"	12700-12	11704-12
<b>FORD FALCON AU</b>							
<b>7739-12</b>	1.820"	110	275	.620"	1.150"	11750	Standard
<b>7332-12<sup>D</sup></b>	1.820"	120	280	.720"	1.050"	11740	Standard
<b>FORD FALCON PRE-CROSSFLOW</b>							
<b>1025-12</b>	1.550"	125	230	.520"	1.030"	11700-12	11703-12
<b>FORD 4.6 V8 4 VALVE</b>							
<b>1832-16</b>	1.470"	90	250	.500"	.900"	N/A	Standard

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## PERFORMANCE VALVE SPRING APPLICATION

Part Number	Installed Height	Installed Pressure	Pressure @ .5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>FORD FALCON 6 OHC TO EL</b>							
<b>7739-12</b>	1.820"	110	275	.620"	1.150"	12700-12	11704-12
<b>7332-12<sup>D</sup></b>	1.820"	100	250	.720"	1.050"	12700-12	11704-12
<b>7333-12<sup>D</sup></b>	1.820"	120	280	.720"	1.050"	12700-12	11704-12
<b>FORD 998 - 1600 PUSHROD ENGINE</b>							
NB. Step to be M/C off head for double springs							
<b>2834-8<sup>D</sup></b>	1.280"	100	305	.430"	.800"	Standard	Standard
<b>2836-8<sup>D</sup></b>	1.280"	110	305	.460"	.770"	Standard	Standard
<b>2021-8</b>	1.289"	65	165	.489"	.750"	Standard	Standard
<b>FORD 2000 OHC</b>							
<b>4250-8<sup>4,D</sup></b>	1.417"	70	195	.550"	.817"	Standard	Standard
<b>FORD CLEVELAND &amp; BIG BLOCK 370-460 SINGLE OR MULTI GROOVE VALVES</b>							
NB. Step to be M/C off head for double springs							
<b>7342-16<sup>D</sup></b>	1.800"	140	340	.760"	1.040"	11700	4133-16
<b>7737-16<sup>2</sup></b>	1.820"	110	295	.460"	1.310"	12700	11702-16
<b>7738-16<sup>2</sup></b>	1.820"	110	280	.590"	1.180"	12700	11702-16
<b>7328-16<sup>5,D</sup></b>	1.820"	100	235	.810"	0.960"	11700	4133-16
<b>7333-16<sup>5,D</sup></b>	1.820"	120	280	.720"	1.050"	11700	4133-16
<b>7437-16<sup>5,D</sup></b>	1.820"	125	315	.720"	1.050"	11700	4133-16
<b>4910-16<sup>D</sup></b>	1.900"/2.000"	240 / 190	520 / 450	.700"	1.100"	12710 / TR405	12708-16
<b>7331-16<sup>5,D</sup></b>	1.920"	115	265	.820"	1.050"	13101	11101-16
<b>9950-16<sup>5,D</sup></b>	1.920"	175	420	.760"	1.110"	13102	11101-16
<b>4920-16<sup>D</sup></b>	2.000"	250	565	.800"	1.180"	13101 / TR405	11101-16
<b>FORD WINDSOR</b> Check installed height before selecting springs as models vary							
<b>7736-16</b>	1.700"	110	275	.550"	1.100"	11700	11701-16
<b>7738-16</b>	1.800"	115	290	.570"	1.180"	11710	11701-16
<b>7333-16<sup>5,D</sup></b>	1.800"	125	285	.700"	1.050"	11710	11701-16 / 4134-16
<b>7437-16<sup>5,D</sup></b>	1.800"	130	325	.700"	1.050"	11710	4133-16
<b>8945-16<sup>5,D</sup></b>	1.800"	180	435	.710"	1.040"	13102	11101-16
<b>7342-16<sup>D</sup></b>	1.800"	140	340	.760"	1.040"	11710	4134-16
<b>4910-16<sup>D</sup></b>	1.900"/2.000"	240 / 190	520 / 450	.700"	1.100"	12710 / TR405	12708-16
<b>4920-16<sup>D</sup></b>	2.000"	250	565	.800"	1.180"	13101 / TR405	11101-16
<b>TOYOTA 1FZ-FE</b>							
<b>4163-12</b>	1.487"	105	230	.462"	0.975"	10715	Std

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## PERFORMANCE VALVE SPRING APPLICATION

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>HOLDEN VN-VP V6</b>							
<b>4936-12</b>	1.700"	80	230	.550"	1.100"	11707-12	11703-12
<b>4836-12</b>	1.700"	115	310	.550"	1.100"	11707-12	11703-12
<b>4327-12<sup>D</sup></b>	1.700"	100	230	.710"	0.940"	11707-12	4133-12
<b>4835-12</b>	1.700"	120	273	.560"	1.090"	11707-12	11703-12
<b>7328-12<sup>D</sup></b>	1.700"	125	265	.690"	0.960"	11700-12	11703-12 / 4133-12
<b>7332-12<sup>2,3D</sup></b>	1.700"	125	280	.600"	1.050"	11700-12	4133-12
<b>4231-12</b>	1.780"	115	250	.550"	1.090"	11708-12	11703-12
<b>HOLDEN ECOTEC V6</b>							
<b>4231-12</b>	1.780"	115	250	.550"	1.090"	10707-12	10701-12
<b>4438-12<sup>D</sup></b>	1.780"	145	335	.650"	1.025"	10708-12	10701-12
<b>4511X-12</b>	1.780"	140	330	.600"	1.100"	10707-12	10701-12
<b>4919-12</b>	1.780"	160	310	.640"	1.090"	10707-12	10701-12
<b>4918-12</b>	1.780"	135	290	.640"	1.090"	10707-12	10701-12
<b>4021-12</b>	1.780"	55	225	.630"	1.150"	11707-12	11701-12
<b>HOLDEN 6 CYLINDER RED MOTOR</b>							
<b>4719-12</b>	1.625"	90	190	.645"	.930"	11707-12	11703-12
<b>4326-12<sup>3D</sup></b>	1.625"	125	245	.625"	.950"	11707-12	11703-12
<b>4823-12</b>	1.625"	120	250	.615"	.960"	11707-12	11703-12
<b>4327-12<sup>D</sup></b>	1.660"	110	250	.670"	.940"	11707-12	11703-12
<b>7328-12<sup>5D</sup></b>	1.755"	130	255	.745"	.960"	11700-12	4134-12
<b>7333-12<sup>5D</sup></b>	1.810"	115	265	.710"	1.050"	11710-12	4134-12
<b>7331-12<sup>5D</sup></b>	1.810"	155	305	.710"	1.050"	11710-12	4134-12
<b>8945-12<sup>5D</sup></b>	1.810"	180	430	.720"	1.040"	11710-12	4134-12
<b>HOLDEN 6 CYLINDER BLUE &amp; BLACK MOTOR</b>							
<b>4028-12</b>	1.470"	115	210	.540"	0.880"	11707	11703-12
<b>4038-12</b>	1.470"	90	270	.500"	0.920"	11707	11703-12
<b>4336-12<sup>2D</sup></b>	1.505"	140	300	.605	0.850"	11707-12	4133-12
<b>4823-12<sup>2</sup></b>	1.605"	125	255	.595"	0.960"	11717-12	4134-12
<b>4327-12<sup>2D</sup></b>	1.655"	110	245	.665"	0.940"	11717-12	4134-12
<b>HOLDEN GEMINI</b>							
<b>5840-8<sup>D</sup></b>	1.550"	95	265	.640"	.860"	Standard	Standard
<b>5833-8<sup>D</sup></b>	1.550"	100	260	.600"	.900"	Standard	Standard

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## PERFORMANCE VALVE SPRING APPLICATION

Part Number	Installed Height	Installed Pressure	Pressure @.5 Lift	Max. Lift	Solid Height	Spring Retainer	Valve Locks
<b>HOLDEN 253, 308</b>							
<b>4931-16</b>	1.700"	80	230	.550"	1.100"	11707	11701-16
<b>7328-16<sup>2,3D</sup></b>	1.700"	140	285	.690"	.960"	11700	11701-16
<b>4828-16</b>	1.700"	115	285	.570"	1.080"	11707	11701-16
<b>4830-16</b>	1.700"	120	275	.550"	1.100"	11707	11701-16
<b>4833-16</b>	1.700"	115	325	.570"	1.080"	11707	11701-16
<b>4328-16<sup>3D</sup></b>	1.700"	90	230	.710"	.940"	11707	11701-16
<b>4843-16</b>	1.700"	120	320	.490"	1.160"	11707	11701-16
<b>4438-16<sup>D</sup></b>	1.800"	140	325	.726"	1.025"	11717	4133-16
<b>7333-16<sup>2,3D</sup></b>	1.800"	125	285	.700"	1.050"	11710	4133-16
<b>7331-16<sup>2,3D</sup></b>	1.800"	155	310	.700"	1.050"	13101/11710	11101-16 / 4134-16
<b>8945-16<sup>2,3D</sup></b>	1.800"	180	435	.710"	1.040"	13102	11101-16
<b>4845-16</b>	1.850"	90	290	.660"	1.140"	11717	4134-16
<b>4235-16</b>	1.850	115	310	.720"	1.080	11717	4134-16
<b>7342-16<sup>3D</sup></b>	1.850"	125	315	.760"	1.040"	13101/11710	11101-16 / 4134-16
<b>7437-16<sup>3D</sup></b>	1.850"	115	305	.750"	1.050"	13101/11710	11101-16 / 4134-16
<b>4910-16<sup>D</sup></b>	1.900"/2.000"	240 / 190	520 / 450	.700"	1.100"	12710 / TR405	12708-16
<b>4920-16<sup>D</sup></b>	2.000"	250	565	.770"	1.180"	13101 / TR405	11101-16
<b>HOLDEN V8 LS ENGINE FAMILY</b>							
<b>4231-16</b>	1.780"	115	250	.550"	1.090"	10707-16	10701-16
<b>4511X-16</b>	1.780"	140	330	.600"	1.100"	10707-16	10701-16
<b>4438-16<sup>D</sup></b>	1.780"	145	335	.650"	1.025"	10708-16	10701-16
<b>4439-16<sup>D</sup></b>	1.800"	160	350	.650"	1.020"	10708-16	10701-16
<b>MITSUBISHI SIGMA</b>							
<b>5840-8<sup>D</sup></b>	1.560"	90	260	.650"	0.860"	Standard	Standard
<b>NISSAN RB30</b>							
<b>5840-12<sup>D</sup></b>	1.570"	85	255	.660"	0.860"	Standard	Standard
<b>5833-12<sup>D</sup></b>	1.570"	95	255	.600"	0.900"	Standard	Standard
<b>5835-12<sup>D</sup></b>	1.570"	100	275	.570"	0.950"	Standard	Standard
<b>5838-12<sup>8D</sup></b>	1.600"	120	300	.570"	0.950"	Standard	Standard

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

**NOTES:** 2. Must use performance retainers 3. Machining required to fit these components 4. Must use performance seal 5. Notes 2 to 4 all apply to this part number. 7. Hardened valve locks, Inlet 12703, Exhaust 12704. 8. Step on head needs to be machined to 0.040", 1mm high.

# STANDARD REPLACEMENT VALVE SPRING APPLICATION

These part numbers and dimensions are listings of applications we have used. Due to variations in models, dimensions & pressures should be checked before fitting. In some cases we may have used shims to adjust installed height.

**Springs marked with \* are a double spring.**

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
<b>CHRYSLER</b>									
5091-12	Slant 6	225	1.65	1.500		0.990	100	285	1.095
<b>FORD 4</b>									
2021-8	Pushrod Engine	998-1600	1.28	1.134		0.612	65	165	0.750
2834-8*	Cortina	1600	1.28	1.134	0.84	0.612	100	305	0.750
4028-8	Laser E3,E5	1300-1600	1.44	1.255		0.920	120	220	0.930
4250-8*	Laser	B6 1600	1.40	1.214	0.93	0.870	70	200	0.817
0607-8	Laser KF	1800 16V	1.47	0.910	0.70	.684	40	95	0.780
4250-8*	Escort, Cortina	2000 OHC	1.42	1.214	0.93	0.870	70	195	0.817
5840-8*	Telstar FE	Std Replace.	1.635	1.330	0.98	0.720	70	210	0.880
5833-8*	Telstar FE	Performance	1.635	1.330	0.98	0.760	80	240	0.900
<b>FORD 6</b>									
7739-12	Falcon EA-EL	XR6	1.82	1.420		0.916	110	275	1.150
4028-12	Capri	V6	1.54	1.255		0.920	95	205	0.930
4336-12*	Capri	V6	1.54	1.255	0.920	0.700	120	270	0.930
5825-12	Zephyr	MK11	1.65	1.330		0.960	60	180	0.950
Note: Ford 6 Spring Retainer may need machining to suit double spring									
<b>FORD 8</b>									
0515-16	239 S/V	V8	1.89	1.15		0.73	40	115	1.05
7737-16	390	V8	1.82	1.510		0.965	110	295	1.310
7738-16	460		1.82	1.475		0.960	110	280	1.180
<b>GM 4</b>									
5833-8*	Gemini	G161-G200Z	1.55	1.330	0.98	0.760	100	260	0.900
<b>GM 6</b>									
5088-12	Chev 6	235 Blue Flame	1.86	1.375		0.960	50	220	1.200
5092-12	Bedford	300	1.69	1.390		1.000	70	190	1.120

# STANDARD REPLACEMENT VALVE SPRING APPLICATION

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
<b>GM 6</b>									
5088-12	Holden	138 Grey	1.79	1.375		0.960	75	250	1.200
4028-12	Holden	Blue/Black	1.62	1.255		0.920	95	200	0.930
4021-12	Holden	Ecotec	1.78	1.04TOP 1.24BOT		0.67TOP 0.87BOT			1.190
4719-12	Holden	Red	1.62	1.255		0.920	95	200	0.930
5840-12*	Commodore	RB30	1.57	1.330	0.98	0.720	85	255	0.860
5835-12	Commodore	RB30	1.57	1.325	0.97	0.710	110	250	0.950
7328-12*	Commodore	VN V6	1.70	1.430	1.08	0.810	140	285	0.960
4836-12	Commodore	VP V6	1.70	1.255		0.780	115	310	1.100
<b>GM V8</b>									
4931-16	Holden VN-VS		1.70	1.240	.086	0.780	80	230	1.100
4843-16	Holden VT	V8 roller	1.75	1.260	0.86	0.780	120	320	1.160
<b>INTERNATIONAL</b>									
7739-16	345	V8	1.82	1.420		0.916	110	275	1.150
<b>ISUZU</b>									
5828-4*	4JB1	Diesel	1.50	1.330		0.660	80	270	0.840
<b>LEYLAND, BMC</b>									
2834-8*	Mini		1.47	1.134	0.84	0.612	35	210	0.750
5840-8*	MGB		1.55	1.330	0.98	0.720	95	265	0.860
<b>MAZDA</b>									
4250-8*		TC	1.21	1.214	0.93	0.870	120	220 @.400	0.817
4250-8*	NA,MA	UC,VC	1.38	1.214	0.93	0.870	80	205	0.817
5080-8	single spring	B3/B6	1.41	1.283		0.930	75	165	0.930
4250-8*		B6	1.41	1.214	0.93	0.870	70	195	0.817
<b>MITSUBISHI</b>									
5080-8	Galant	4G63	1.46	1.283		0.930	60	180	0.930
5827-8	Cordia	4G62 Sirius	1.50	1.330		0.980	80	210	0.840
5840-8*1	Sigma	4G54	1.56	1.330	0.98	0.720	90	260	0.860
5825-8	Sigma	4G54	1.56	1.330		0.960	80	200	0.950
5840-8*1		4G63BT	1.66	1.330	0.98	0.720	75	225	0.860

Note 1: Mitsubishi 5840 Spring Retainer needs machining to suit double spring.



# STANDARD REPLACEMENT VALVE SPRING APPLICATION

Part Number	Model	Engine	I/H	Od	Int.	Id	Seat Press	.5 Lift	Solid Height
<b>NISSAN</b>									
4038-8	Datsun	A12	1.52	1.197		0.840	80	250	0.920
4220-8*	Datsun	A12,A14,A15	1.55	1.210	0.93	0.700	80	180	0.820
5840*	Datsun	L Series	1.58	1.330	0.98	0.720	85	255	0.860
5840-8*	Datsun	CA20	1.55	1.330	0.98	0.720	95	255	0.860
4320-8	Pulsar	E15	1.58	1.255		0.920	100	190	0.930
<b>NISSAN 6</b>									
0612-12	300ZX	VG30DETT	1.45	1.07	0.81		65	130	0.82
5840-12*	Patrol	TB42,TB47T	1.58	1.330	0.98	0.720	95	265	0.860
5835-12	Patrol	TD42 Diesel	1.61	1.325	0.97	0.710	70	190	0.950
<b>TOYOTA</b>									
4038-8	Corolla	3K/4K	1.55	1.197		0.840	70	240	0.920
4220-8*	Corolla	3K/4K	1.55	1.210	0.93	0.700	80	180	0.820
4320-8	Hi Ace	2RZ 2400	1.59	1.255		0.920	95	195	0.930
4320-8	Celica	2T	1.46	1.255		0.920	115	210	0.930
4320-8	Corona	2S	1.54	1.255		0.920	100	195	0.930
4719-8		12R	1.55	1.255		0.920	100	200	0.930
5840-8*	Corona	18R	1.55	1.330	0.98	0.720	95	265	0.860
5827-8	Corona	18RG	1.5	1.330		0.720	80	210	0.840
5825-8	Corona	22R	1.58	1.330		0.960	75	195	0.950
4719-8	Corona	5R	1.55	1.255		0.920	100	200	0.930
5825-8		2RZ OHC	1.59	1.330		0.960	80	195	0.950
5827-8	Diesel	3L, 1HZ	1.46	1.330		0.980	85	225	0.840
4828-12	Landcruiser	2F	1.79	1.275		0.920	80	250	1.080
5840*	Diesel	3B	1.54	1.330	0.98	0.720	105	270	0.860

These part numbers and dimensions are listings of applications we have used. Due to variations in models, dimensions & pressures should be checked before fitting. In some cases we may have used shims to adjust installed height. **Springs marked \* are double spring.**

# VALVE SPRINGS

## VALVE SPRINGS PART NUMBER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
507	1.000"	0.760"		1	L	2.050"	75	0.750"
511	0.937"	0.697"		1	L	1.490"	123	0.740"
513	0.953"	0.697"		1	L	1.937"	132	0.930"
514	0.838"	0.612"		1	L	1.500"	145	0.710"
515	1.015"	0.725"		1	L	2.165"	155	1.060"
607	0.910"	0.684"		1	L	1.970"	80	0.780"
612	1.090"	0.810"		1	R	2.055"	120	0.880"
613	1.080"	0.796"		1	R	2.230"	130	1.000"
615	1.015"	0.740"		1	L	2.000"	135	0.870"
1025	1.370"	1.005"		1	L	2.200"	220	1.030"
1804	0.980" TOP 1.065" BOT	0.995" TOP 0.635" BOT		1 Conical	R	2.085"	280	1.020"
1808	0.970" TOP 1.060" BOT	0.645" TOP 0.727" BOT		1 Conical	R	2.035"	215	0.880"
1809	0.985" TOP 1.060" BOT	0.640" TOP 0.730" BOT		1 Conical	R	2.180"	200	0.900"
1832	0.945" TOP 1.101" BOT	0.580" TOP 0.735" BOT		1 Conical	R	1.795"	310	0.900"
2021	1.134"	0.838"		1	R	1.622"	210	0.750"
2834 <sup>D</sup>	1.134"	0.838"	0.612"	2	RH	1.622"	400	0.750"
2836 <sup>D</sup>	1.134"	0.838"	0.612"	2	R	1.622"	380	0.770"
4021	1.045" TOP 1.245" BOT	0.670" TOP 0.870" BOT		1 Conical	R	1.970"	350	1.190"
4028	1.255"	0.920"		1	L	2.100"	190	0.930"
4038	1.197"	0.840"		1	R	1.830"	360	0.920"
4162	1.100"	0.765"		1	R	1.895"	260	0.980"
4163	1.165"	0.825"		1	R	1.980"	250	0.975"
4164	1.050"	0.735"		1	R	1.740"	265	0.840"
4177 <sup>D</sup>	1.113"	0.805"	0.636"	2	R	1.660"	230	0.730"
4220 <sup>D</sup>	1.210"	0.926"	0.700"	2	R	1.900"	200	0.820"
4231	1.060" TOP 1.290" BOT	0.650" TOP 0.875" BOT		1 Conical	R	2.200"	280	1.090"
4235	1.270"	0.885"	0.752"	1 + Damper	R	2.200"	390	1.080"
4250 <sup>D</sup>	1.214"	0.926"	0.870"	2	R	1.950"	250	0.817"
4320	1.255"	0.920"		1	L	2.100"	230	0.930"
4326 <sup>D</sup>	1.255"	0.920"	0.710"	2	L	2.100"	250	0.950"
4327 <sup>D</sup>	1.255"	0.920"	0.684"	2	L	2.100"	270	0.940"
4328 <sup>D</sup>	1.255"	0.920"	0.665"	2	L	2.100"	260	0.940"
4330 <sup>D</sup>	1.280"	0.926"	0.700"	2	R	1.960"	315	0.925"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## VALVE SPRINGS PART NUMBER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>4334</b> <sup>D</sup>	1.280"	0.950"	0.710"	2	L	2.130"	340	0.950"
<b>4335</b> <sup>D</sup>	1.280"	0.950"	0.684"	2	L	2.170"	355	0.950"
<b>4336</b> <sup>D</sup>	1.255"	0.920"	0.700"	2	L	2.100"	310	0.850"
<b>4403</b>	1.000"	0.700"		1	R	1.900"	260	0.945"
<b>4420</b>	1.110" TOP 1.440" BOT	0.660" TOP 0.990" BOT		1 Conical	R	2.445"	360	1.200"
<b>4429</b> <sup>D</sup>	1.167"	0.860"	0.660"	2	R	1.820"	240	0.810"
<b>4435</b>	1.030" TOP 1.200" BOT	0.625" TOP 0.780" BOT		1 Conical	R	2.220"	350	1.110"
<b>4437</b> <sup>D</sup>	1.255"	0.920"	0.684"	2	L	2.100"	305	0.875"
<b>4438</b> <sup>D</sup>	1.295"	0.948"	0.675"	2	R	2.245"	380	1.025"
<b>4439</b> <sup>D</sup>	1.305"	0.950"	0.694"	2	R	2.330"	392	1.020"
<b>4511X</b>	1.055" TOP 1.290" BOT	0.650" TOP 0.885" BOT		1 Conical	R	2.200"	380	1.100"
<b>4718</b>	1.255"	0.920"	0.835"	1 + Damper	L	2.100"	230	0.930"
<b>4719</b>	1.255"	0.920"	0.835"	1 + Damper	L	2.100"	220	0.930"
<b>4823</b>	1.275"	0.930"	0.825"	1 + Damper	L	2.160"	260	0.960"
<b>4828</b>	1.275"	0.920"		1	R	2.140"	340	1.080"
<b>4830</b>	1.220"	0.860"	0.755"	1 + Damper	R	2.080"	310	1.100"
<b>4833</b>	1.255"	0.880"	0.780"	1 + Damper	R	2.040"	415	1.080"
<b>4835</b>	1.225"	0.875"	0.750"	1 + Damper	R	2.165"	290	1.090"
<b>4836</b>	1.255"	0.880"	0.780"	1 + Damper	R	2.040"	395	1.080"
<b>4843</b>	1.260"	0.875"	0.780"	1 + Damper	R	2.030"	400	1.160"
<b>4845</b>	1.270"	0.875"	0.800"	1 + Damper	R	2.130"	390	1.140"
<b>4910</b> <sup>D</sup>	1.550"	1.150"	0.815"	2	L	2.466"	540	1.110"
<b>4918</b>	1.050" TOP 1.295" BOT	0.645" TOP 0.880" BOT		1 Conical	R	2.325"	300	1.090"
<b>4920</b> <sup>D</sup>	1.560"	1.090"	0.775"	2	R	2.475"	620	1.180"
<b>4931</b>	1.240"	0.880"	0.780"	1 + Damper	R	2.020"	300	1.100"
<b>4936</b>	1.240"	0.880"	0.780"	1 + Damper	R	2.020"	300	1.100"
<b>5002</b>	1.510"	1.090"	0.970"	1 + Damper	L	2.200"	345	1.300"
<b>5014</b>	1.420"	1.010"		1	L	2.145"	310	1.250"
<b>5037</b>	1.230"	0.875"		1	R	2.060"	265	1.230"
<b>5038</b>	1.211"	0.857"	0.750"	1	R	1.780"	340	1.010"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## VALVE SPRINGS PART NUMBER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>5077</b>	1.500"	1.080"	0.990	1 + Damper	R	1.960"	355	1.095"
<b>5078</b> <sup>D</sup>	1.332"	0.990"	0.715	2	L	1.835"	330	1.070"
<b>5080</b>	1.283"	0.930"		1	R	1.750"	240	0.930"
<b>5088</b>	1.375"	0.960"		1	R	2.050"	335	1.200"
<b>5091</b>	1.500"	1.080"	0.990	1 + Damper	R	1.960"	360	1.095"
<b>5092</b>	1.390"	1.000"		1	R	2.035"	245	1.120"
<b>5094</b>	1.420"	1.000"		1	L	2.120"	350	1.265"
<b>5107</b>	1.330"	0.960"		1	R	1.920"	230	0.930"
<b>5825</b>	1.330"	0.960"		1	R	1.935"	230	0.950"
<b>5827</b>	1.330"	0.980"		1	R	1.860"	228	0.840"
<b>5828</b> <sup>D</sup>	1.330"	0.980"	0.660"	2	R	1.860"	350	0.840"
<b>5833</b> <sup>D</sup>	1.330"	0.980"	0.760"	2	R	2.100"	320	0.900"
<b>5835</b> <sup>D</sup>	1.325"	0.971"	0.710"	2	R	1.900"	340	0.950"
<b>5838</b> <sup>D</sup>	1.330"	0.970"	0.690"	2	R	1.940"	370	0.950"
<b>5840</b> <sup>D</sup>	1.330"	0.980"	0.720"	2	R	1.930"	335	0.860"
<b>5844-IRH</b>	0.950"	0.710"		1	R	1.955"	95	0.750"
<b>5854</b> <sup>D</sup>	1.335"	0.980"	0.690"	2	R	1.960"	410	0.900"
<b>6038</b>	1.255"	0.900"		1	R	2.050"	340	1.170"
<b>7328</b> <sup>D</sup>	1.430"	1.080"	0.810"	2	L	2.290"	280	0.960"
<b>7329</b> <sup>D</sup>	1.435"	1.075"	0.800"	2	L	2.400"	285	0.945"
<b>7331</b> <sup>D</sup>	1.455"	1.090"	0.800"	2	L	2.380"	310	1.050"
<b>7332</b> <sup>D</sup>	1.455"	1.090"	0.810"	2	L	2.380"	315	1.050"
<b>7333</b> <sup>D</sup>	1.455"	1.090"	0.810"	2	L	2.380"	310	1.050"
<b>7334</b> <sup>D</sup>	1.455"	1.080"	0.810"	2	L	2.440"	320	1.050"
<b>7335</b>	1.465"	1.070"		1	L	2.410"	285	1.040"
<b>7341</b> <sup>D</sup>	1.470"	1.080"	0.800"	2	L	2.280"	430	1.050"
<b>7342</b> <sup>D</sup>	1.470"	1.080"	0.810"	2	L	2.240"	390	1.040"
<b>7733</b> <sup>D</sup>	1.465"	1.085"	0.790"	2	L	2.470"	320	1.030"
<b>7734</b> <sup>D</sup>	1.425"	1.080"	0.800"	2	L	2.400"	280	1.000"
<b>7736</b>	1.437"	1.030"	0.940"	1 + Damper	L	2.040"	330	1.100"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## VALVE SPRINGS PART NUMBER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>7737</b>	1.510"	1.086"	0.965"	1 + Damper	L	2.220"	360	1.310"
<b>7738</b>	1.475"	1.055"	0.960"	1 + Damper	L	2.210"	350	1.180"
<b>7739</b>	1.420"	1.015"	0.916"	1 + Damper	R	2.160"	330	1.150"
<b>7930</b> <sup>Ⓚ</sup>	1.460"	1.000"	.690"	2 + Damper	L	2.360"	350	1.070"
<b>7937</b> <sup>Ⓚ</sup>	1.465"	1.000"	0.720"	2 + Damper	L	2.360"	350	1.080"
<b>8333</b> <sup>Ⓚ</sup>	1.515"	1.120"	0.800"	2	L	2.480"	350	1.210"
<b>8335</b> <sup>Ⓚ</sup>	1.515"	1.120"	0.795"	2	L	2.480"	322	1.210"
<b>8337</b> <sup>Ⓚ</sup>	1.515"	1.130"	0.795"	2	L	2.350"	360	1.114"
<b>8937</b> <sup>Ⓚ</sup>	1.530"	0.980"	0.760"	2 + Damper	L	2.335"	370	1.180"
<b>8945</b> <sup>Ⓚ</sup>	1.510"	1.115"	0.760"	2	L	2.510"	500	1.040"
<b>9731</b>	1.550"	1.125"	1.000"	1 + Damper	L	2.460"	320	1.180"
<b>9936</b> <sup>Ⓚ</sup>	1.539"	0.990"	0.765"	2 + Damper	L	2.450"	390	1.180"
<b>9941</b> <sup>Ⓚ</sup>	1.540"	1.025"	0.740"	2 + Damper	R	2.380"	440	1.140"
<b>9945</b> <sup>Ⓚ</sup>	1.540"	1.000"	0.690"	2 + Damper	L	2.475"	460	1.110"
<b>9950</b> <sup>Ⓚ</sup>	1.540"	1.000"	0.725"	2 + Damper	L	2.475"	470	1.110"

**Note:** Springs marked with xxxx-xx<sup>Ⓚ</sup> denotes that it is a double spring.

## VALVE SPRINGS

### VALVE SPRINGS OUTSIDE DIAMETER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>514</b>	0.838"	0.612"		1	L	1.500"	145	0.710"
<b>607</b>	0.910"	0.684"		1	L	1.970"	80	0.780"
<b>511</b>	0.937"	0.697"		1	L	1.490"	123	0.740"
<b>1832</b>	0.945" TOP 1.101" BOT	0.580" TOP 0.735" BOT		1 Conical	R	1.795"	310	0.900"
<b>5844-IRH</b>	0.950"	0.710"		1	R	1.955"	95	0.750"
<b>513</b>	0.953"	0.697"		1	L	1.937"	132	0.930"
<b>1808</b>	0.970" TOP 1.060" BOT	0.645" TOP 0.727" BOT		1 Conical	R	2.035"	215	0.880"
<b>1804</b>	0.980" TOP 1.065" BOT	0.995" TOP 0.635" BOT		1 Conical	R	2.085"	280	1.020"
<b>1809</b>	0.985" TOP 1.060" BOT	0.640" TOP 0.730" BOT		1 Conical	R	2.180"	200	0.900"
<b>507</b>	1.000"	0.760"		1	L	2.050"	75	0.750"
<b>4403</b>	1.000"	0.700"		1	R	1.900"	260	0.945"
<b>615</b>	1.015"	0.740"		1	L	2.000"	135	0.870"
<b>515</b>	1.015"	0.725"		1	L	2.165"	155	1.060"
<b>4435</b>	1.030" TOP 1.200" BOT	0.625" TOP 0.780" BOT		1 Conical	R	2.220"	350	1.110"
<b>4021</b>	1.045" TOP 1.245" BOT	0.670" TOP 0.870" BOT		1 Conical	R	1.970"	350	1.190"
<b>4164</b>	1.050"	0.735"		1	R	1.740"	265	0.840"
<b>4918</b>	1.050" TOP 1.295" BOT	0.645" TOP 0.880" BOT		1 Conical	R	2.325"	300	1.100"
<b>4511X</b>	1.055" TOP 1.290" BOT	0.650" TOP 0.885" BOT		1 Conical	R	2.200"	380	1.100"
<b>4231</b>	1.060" TOP 1.290" BOT	0.650" TOP 0.875" BOT		1 Conical	R	2.200"	280	1.090"
<b>613</b>	1.080"	0.796"		1	R	2.230"	130	1.000"
<b>612</b>	1.090"	0.810"		1	R	2.055"	120	0.880"
<b>4162</b>	1.100"	0.765"		1	R	1.895"	260	0.980"
<b>4420</b>	1.110" TOP 1.440" BOT	0.660" TOP 0.990" BOT		1 Conical	R	2.445"	360	1.200"
<b>4177</b> <sup>Ⓚ</sup>	1.113"	0.805"	0.636"	2	R	1.660"	230	0.730"
<b>2021</b>	1.134"	0.838"		1	R	1.622"	210	0.750"
<b>2834</b> <sup>Ⓚ</sup>	1.134"	0.838"	0.612"	2	R	1.622"	400	0.750"
<b>2836</b> <sup>Ⓚ</sup>	1.134"	0.838"	0.612"	2	R	1.622"	380	0.770"
<b>4163</b>	1.165"	0.825"		1	R	1.980"	250	0.975"
<b>4429</b> <sup>Ⓚ</sup>	1.167"	0.860"	0.660"	2	R	1.820"	240	0.810"

**Note:** Springs marked with xxxx-xx<sup>Ⓚ</sup> denotes that it is a double spring.



## VALVE SPRINGS OUTSIDE DIAMETER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>4038</b>	1.197"	0.840"		1	R	1.830"	360	0.920"
<b>4220</b> <sup>D</sup>	1.210"	0.926"	0.700"	2	R	1.900"	200	0.820"
<b>5038</b>	1.211"	0.857"	0.750"	1	R	1.780"	340	1.010"
<b>4250</b> <sup>D</sup>	1.214"	0.926"	0.870"	2	R	1.950"	250	0.817"
<b>4830</b>	1.220"	0.860"	0.755"	1 + Damper	R	2.080"	310	1.100"
<b>4835</b>	1.225"	0.875"	0.750"	1 + Damper	R	2.165"	290	1.090"
<b>5037</b>	1.230"	0.875"		1	R	2.060"	265	1.230"
<b>4931</b>	1.240"	0.880"	0.780"	1 + Damper	R	2.020"	300	1.100"
<b>4936</b>	1.240"	0.880"	0.780"	1 + Damper	R	2.020"	300	1.100"
<b>4833</b>	1.255"	0.880"	0.780"	1 + Damper	R	2.025"	415	1.100"
<b>4328</b> <sup>D</sup>	1.255"	0.920"	0.665"	2	L	2.100"	260	0.940"
<b>4320</b>	1.255"	0.920"		1	L	2.100"	230	0.930"
<b>4326</b> <sup>D</sup>	1.255"	0.920"	0.710"	2	L	2.100"	250	0.950"
<b>4327</b> <sup>D</sup>	1.255"	0.920"	0.684"	2	L	2.100"	270	0.940"
<b>4719</b>	1.255"	0.920"	0.835"	1 + Damper	L	2.100"	220	0.930"
<b>4718</b>	1.255"	0.920"	0.835"	1 + Damper	L	2.100"	230	0.930"
<b>4836</b>	1.255"	0.880"	0.780"	1 + Damper	R	2.025"	395	1.100"
<b>6038</b>	1.255"	0.900"		1	R	2.050"	340	1.170"
<b>4843</b>	1.260"	0.875"	0.780"	1 + Damper	R	2.030"	400	1.160"
<b>4845</b>	1.270"	0.875"	0.800"	1 + Damper	R	2.130"	390	1.140"
<b>4235</b>	1.270"	0.885"	0.752"	1 + Damper	R	2.200"	390	1.080"
<b>4028</b>	1.255"	0.920"		1	L	2.100"	190	0.930"
<b>4336</b> <sup>D</sup>	1.255"	0.920"	0.700"	2	L	2.100"	310	0.850"
<b>4437</b> <sup>D</sup>	1.255"	0.920"	0.684"	2	L	2.100"	305	0.875"
<b>4823</b>	1.275"	0.930"	0.825"	1 + Damper	L	2.160"	260	0.960"
<b>4828</b>	1.275"	0.920"		1	R	2.140"	340	1.080"
<b>4330</b> <sup>D</sup>	1.280"	0.926"	0.700"	2	R	1.960"	315	0.925"
<b>4334</b> <sup>D</sup>	1.280"	0.950"	0.710"	2	L	2.130"	340	0.950"
<b>4335</b> <sup>D</sup>	1.280"	0.950"	0.684"	2	L	2.170"	355	0.950"
<b>5080</b>	1.283"	0.930"		1	R	1.750"	240	0.930"
<b>4438</b> <sup>D</sup>	1.295"	0.948"	0.675"	2	R	2.245"	380	1.025"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## VALVE SPRINGS OUTSIDE DIAMETER ORDER

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>4439</b> <sup>D</sup>	1.305"	0.950"	0.694"	2	R	2.330"	392	1.020"
<b>5835</b> <sup>D</sup>	1.325"	0.971"	0.710"	2	R	1.900"	340	0.950"
<b>5827</b>	1.330"	0.980"		1	R	1.860"	228	0.840"
<b>5828</b> <sup>D</sup>	1.330"	0.980"	0.660"	2	R	1.860"	350	0.840"
<b>5833</b> <sup>D</sup>	1.330"	0.980"	0.760"	2	R	2.100"	320	0.900"
<b>5840</b> <sup>D</sup>	1.330"	0.980"	0.720"	2	R	1.930"	335	0.860"
<b>5107</b>	1.330"	0.960"		1	R	1.920"	230	0.930"
<b>5825</b>	1.330"	0.960"		1	R	1.935"	230	0.950"
<b>5838</b> <sup>D</sup>	1.330"	0.970"	0.690"	2	R	1.940"	370	0.950"
<b>5078</b> <sup>D</sup>	1.332"	0.990"	0.715	2	L	1.835"	330	1.070"
<b>5854</b> <sup>D</sup>	1.335"	0.980"	0.690"	2	R	1.960"	410	0.900"
<b>1025</b>	1.370"	1.005"		1	L	2.200"	220	1.030"
<b>5088</b>	1.375"	0.960"		1	R	2.050"	335	1.200"
<b>5092</b>	1.390"	1.000"		1	R	2.035"	245	1.120"
<b>7739</b>	1.420"	1.015"	0.916"	1 + Damper	R	2.160"	330	1.150"
<b>5014</b>	1.420"	1.010"		1	L	2.145"	310	1.250"
<b>5094</b>	1.420"	1.000"		1	L	2.120"	350	1.265"
<b>7734</b> <sup>D</sup>	1.425"	1.080"	0.800"	2	L	2.400"	280	1.000"
<b>7328</b> <sup>D</sup>	1.430"	1.080"	0.810"	2	L	2.290"	280	0.960"
<b>7329</b> <sup>D</sup>	1.435"	1.075"	0.800"	2	L	2.400"	285	0.945"
<b>7736</b>	1.437"	1.030"	0.940"	1 + Damper	L	2.040"	330	1.100"
<b>7331</b> <sup>D</sup>	1.455"	1.090"	0.800"	2	L	2.380"	310	1.050"
<b>7332</b> <sup>D</sup>	1.455"	1.090"	0.810"	2	L	2.380"	315	1.050"
<b>7333</b> <sup>D</sup>	1.455"	1.090"	0.810"	2	L	2.380"	310	1.050"
<b>7334</b> <sup>D</sup>	1.455"	1.080"	0.810"	2	L	2.440"	320	1.050"
<b>7930</b> <sup>D</sup>	1.460"	1.000"	.690"	2 + Damper	L	2.360"	350	1.070"
<b>7937</b> <sup>D</sup>	1.465"	1.000"	0.720"	2 + Damper	L	2.360"	350	1.080"
<b>7733</b> <sup>D</sup>	1.465"	1.085"	0.790"	2	L	2.470"	320	1.030"
<b>7335</b>	1.465"	1.070"		1	L	2.410"	285	1.040"
<b>7437</b> <sup>D</sup>	1.470"	1.080"	0.800"	2	L	2.200"	380	1.050"
<b>7341</b> <sup>D</sup>	1.470"	1.080"	0.800"	2	L	2.280"	430	1.050"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## VALVE SPRINGS **OUTSIDE DIAMETER ORDER**

Part Number	O/D	ID of Outer	ID of Inner	Spring Type	RH or LH (Outer)	Free Length	Spring Rate (lb/in)	Solid Height
<b>7342</b> <sup>D</sup>	1.470"	1.080"	0.810"	2	L	2.240"	390	1.040"
<b>7738</b>	1.475"	1.055"	0.960"	1 + Damper	L	2.210"	350	1.180"
<b>5077</b>	1.500"	1.080"	0.99	1 + Damper	R	1.960"	355	1.095"
<b>5091</b>	1.500"	1.080"	0.99	1 + Damper	R	1.960"	360	1.095"
<b>7737</b>	1.510"	1.086"	0.965"	1 + Damper	L	2.220"	360	1.310"
<b>8945</b> <sup>D</sup>	1.510"	1.115"	0.760"	2	L	2.510"	500	1.040"
<b>5002</b>	1.510"	1.090"	0.970"	1 + Damper	L	2.200"	345	1.300"
<b>8333</b> <sup>D</sup>	1.515"	1.120"	0.800"	2	L	2.480"	350	1.210"
<b>8335</b> <sup>D</sup>	1.515"	1.120"	0.795"	2	L	2.480"	322	1.210"
<b>8337</b> <sup>D</sup>	1.515"	1.130"	0.795"	2	L	2.350"	360	1.114"
<b>8937</b> <sup>D</sup>	1.530"	0.980"	0.760"	2 + Damper	L	2.335"	370	1.180"
<b>9936</b> <sup>D</sup>	1.539"	0.990"	0.765"	2 + Damper	L	2.450"	390	1.180"
<b>9941</b> <sup>D</sup>	1.540"	1.025"	0.740"	2 + Damper	R	2.380"	440	1.140"
<b>9945</b> <sup>D</sup>	1.540"	1.000"	0.690"	2 + Damper	L	2.475"	460	1.110"
<b>9950</b> <sup>D</sup>	1.540"	1.000"	0.725"	2 + Damper	L	2.475"	470	1.110"
<b>9731</b>	1.550"	1.125"	1.000"	1 + Damper	L	2.460"	320	1.180"
<b>4910</b> <sup>D</sup>	1.550"	1.150"	0.815"	2	L	2.466"	540	1.110"
<b>4920</b> <sup>D</sup>	1.560"	1.090"	0.775"	2	R	2.475"	620	1.180"

**Note:** Springs marked with xxxx-xx<sup>D</sup> denotes that it is a double spring.

## CUSTOM GRINDING SERVICE

Many engine builders know precisely the specifications of the camshaft they wish to run and Crow Cams custom grinding service gives access to Australia's largest choice of masters listed on the following pages. All custom ground cams are produced on our CNC cam grinding machines and cam specs are read directly from each camshaft

Roller Camshafts are priced according to the type of billet used.

These profiles will vary slightly with changes in base circle diameter. For the LS family engines, see separate listing.

## HYDRAULIC ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.006"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
<b>1561</b>	193	202	98	101	262	264	0.275	0.275	112
<b>26</b>	195	196	101	101	270	277	0.273	0.273	112
<b>1524</b>	200	207	102	107	262	270	0.274	0.274	109
<b>759</b>	200	210	110	121	267	277	0.289	0.307	112
<b>1562</b>	202	207	106	110	275	285	0.275	0.275	113
<b>1339</b>	203	209	109	113	268	275	0.281	0.281	118
<b>1440</b>	205	214	105	111	274	283	0.268	0.271	111
<b>1563</b>	207	210	115	118	276	281	0.295	0.295	112
<b>1335</b>	206	212	111	116	256	265	0.283	0.283	114
<b>160</b>	207	207	113	113	267	267	0.281	0.281	112
<b>50</b>	207	209	110	112	265	268	0.28	0.28	117
<b>1430</b>	207	218	126	135	262	274	0.315	0.315	114
<b>160</b>	207	207	113	113	267	267	0.281	0.281	112
<b>1309</b>	209	214	119	122	275	282	0.3	0.3	114
<b>1338</b>	210	210	115	115	272	272	0.282	0.282	118
<b>757</b>	214	218	123	124	280	280	.311	.311	110
<b>1368</b>	211	211	114	114	275	275	0.277	0.277	116
<b>1331</b>	213	209	123	118	277	280	0.288	0.288	115
<b>913</b>	213	226	132	145	267	283	0.324	0.334	116
<b>1370</b>	213	213	123	123	288	288	0.311	0.311	114
<b>1414</b>	213	223	124	134	277	287	0.307	0.318	112
<b>1738</b>	215	223	128	132	274	283	0.333	0.333	114
<b>1371</b>	216	216	125	125	290	290	0.312	0.312	115
<b>799</b>	218	224	127	134	288	291	0.322	0.323	110
<b>1333</b>	218	212	126	122	289	276	0.305	0.304	116
<b>1318</b>	218	214	133	129	281	275	0.332	0.332	111

## HYDRAULIC ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.006"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
1565	219	219	130	130	284	284	0.337	0.336	111
1534	219	219	127	127	282	282	0.322	0.322	111
1330	220	227	139	145	276	283	0.328	0.334	110
1395	221	221	126	126	292	292	0.3	0.3	111
1317	222	217	135	130	309	296	0.333	0.333	112
1354	225	224	134	134	293	299	0.319	0.319	116
1528	226	230	135	139	290	290	0.32	0.32	107
1433	228	237	148	155	297	303	0.368	0.365	110
1515	228	234	138	147	294	298	0.359	0.357	110
1734	228	233	141	144	288	290	0.346	0.344	108
1735	232	236	144	146	296	301	0.345	0.346	108
1478	232	236	142	146	296	299	0.323	0.322	108
669	234	240	142	147	304	314	0.331	0.331	110
1574	236	242	144	147	288	295	0.32	0.32	108
1719	238	243	156	157	295	315	0.356	0.378	107
1477	237	241	146	148	307	314	0.325	0.324	107
1315	238	244	150	155	304	308	0.345	0.345	112
1725	241	246	155	158	298	306	0.377	0.378	108
1571	246	246	156	156	310	310	0.380	0.380	110
900	246	253	166	174	301	313	0.359	0.376	110
790	247	246	148	147	323	317	0.322	0.322	110
1435	249	258	158	166	317	326	0.344	0.344	111
905	249	256	169	178	300	311	0.359	0.376	110
1520	258	256	164	164	320	322	0.338	0.339	107
1707	258	263	164	167	324	336	0.355	0.356	103
1708	263	266	170	171	331	334	0.37	0.37	117

## SOLID ROLLER PROFILES

Specification of these cams will vary slightly with changes in base circle diameter. Lobe centre is easily changed when machining but lift and duration can only be changed by changing master. We can mix and match profiles, using an inlet lobe of one profile and exhaust of another. Any of the lobes can be used on inlet or exhaust. Availability of billets is an important consideration as it is desirable to use a semi finished billet as close to the finished lobe as possible to minimize the amount of material ground of the lobes.

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
750	222	220	124	124	262	260	0.334	0.332	109
1328	230	230	124	124	272	272	0.294	0.294	110
752	230	245	140	151	269	286	0.326	0.326	108
1599	232	230	147	146	265	265	0.381	0.380	115
969	233	242	142	147	304	315	0.332	0.332	110
1583	239	240	154	154	272	274	0.378	0.378	116
1471	239	247	150	158	280	288	0.350	0.360	109
618	242	247	155	160	280	284	0.392	0.388	107
691	244	252	145	154	284	291	0.325	0.338	107
1551	245	251	160	165	278	284	0.376	0.376	108
1476	248	250	157	162	288	292	0.383	0.383	106
1548	248	251	162	166	284	284	0.401	0.399	106
1573	248	253	162	166	282	287	0.403	0.402	106
809	249	250	159	163	290	290	0.414	0.410	105
751	250	248	161	161	294	298	0.333	0.333	106
1321	250	250	160	160	284	284	0.350	0.350	107
812	250	259	152	162	284	291	0.340	0.340	106
687	250	260	164	175	288	300	0.397	0.416	106
1532	252	252	166	166	284	284	0.405	0.405	108
816	252	254	156	158	298	303	0.325	0.328	113
1482	252	257	167	172	290	294	0.404	0.404	113
1301	252	260	165	170	286	295	0.360	0.360	108
1601	253	261	164	169	284	290	0.361	0.362	107
1304	253	253	108	108	285	285	0.233	233	108
621	253	264	163	174	289	299	0.373	0.373	104
1305	254	254	163	163	285	285	0.335	0.333	104
1504	254	254	155	155	284	284	0.309	0.309	108
1423	254	262	179	184	284	291	0.429	0.419	110
813	255	255	170	170	288	288	0.381	0.382	110
1417	255	265	175	183	286	296	0.409	0.412	108
1590	257	257	160	160	287	287	0.312	0.312	102



## SOLID ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
<b>884</b>	257	257	170	160	296	310	0.374	0.359	106
<b>754</b>	257	262	172	178	294	298	0.398	0.407	106
<b>1518</b>	258	250	178	165	290	282	0.430	0.409	106
<b>856</b>	258	268	172	170	297	308	0.415	0.340	108
<b>612</b>	258	274	170	181	297	315	0.387	0.397	110
<b>819</b>	259	266	169	175	291	298	0.360	0.360	108
<b>1594</b>	259	256	176	173	292	288	0.441	0.414	107
<b>1579</b>	259	259	170	170	292	292	0.366	0.366	108
<b>1538</b>	259	259	172	172	292	292	0.403	0.403	108
<b>1387</b>	259	265	168	174	298	303	0.392	0.390	108
<b>1526</b>	260	260	171	171	290	290	0.358	0.358	111
<b>1348</b>	260	267	170	175	304	311	0.429	0.406	107
<b>1592</b>	260	277	174	188	294	312	0.438	0.418	108
<b>1516</b>	261	250	181	166	290	286	0.431	0.409	109
<b>1543</b>	261	261	174	174	294	294	0.414	0.414	108
<b>894</b>	261	271	182	184	293	309	0.445	0.410	107
<b>1358</b>	262	263	180	179	296	297	0.424	0.398	107
<b>662</b>	262	264	173	174	309	314	0.377	0.380	105
<b>1512</b>	262	265	180	183	294	298	0.430	0.430	105
<b>1475</b>	262	267	165	170	303	307	0.350	0.350	107
<b>1492</b>	262	268	165	171	301	306	0.378	.0378	107
<b>732</b>	262	271	177	187	300	310	0.415	0.415	108
<b>818</b>	263	263	173	173	312	312	0.380	0.380	105
<b>1347</b>	263	268	173	175	305	312	0.405	0.407	106
<b>868</b>	259	270	179	189	295	306	0.423	0.426	106
<b>1313</b>	264	264	180	180	310	310	0.415	0.415	101
<b>1327</b>	264	264	178	178	295	295	0.391	0.391	108
<b>1355</b>	264	264	182	182	297	297	0.414	0.415	101
<b>638</b>	265	264	181	178	305	305	0.419	0.417	106
<b>1578</b>	265	268	177	181	297	300	0.365	0.365	110
<b>1359</b>	265	269	184	185	299	302	0.426	0.399	110
<b>1546</b>	265	273	186	189	298	310	0.448	0.420	107
<b>1320</b>	266	266	185	185	300	300	0.432	0.432	104
<b>763</b>	266	271	183	185	300	308	0.416	0.412	106
<b>1357</b>	267	271	186	189	310	315	0.459	0.438	109
<b>1376</b>	266	271	182	187	303	308	0.463	0.463	107

## SOLID ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
<b>758</b>	267	277	165	166	306	315	0.366	0.355	110
<b>1332</b>	268	266	184	184	305	302	0.418	0.421	100
<b>735</b>	268	271	184	186	306	310	0.440	0.411	106
<b>1508</b>	270	270	190	190	300	300	0.437	0.437	108
<b>659</b>	270	273	183	186	311	313	0.417	0.415	105
<b>1361</b>	270	274	188	189	302	308	0.415	0.415	103
<b>811</b>	270	280	185	194	306	316	0.413	0.414	106
<b>1545</b>	272	274	185	186	307	309	0.411	0.398	108
<b>1312</b>	272	275	188	191	305	308	0.431	0.432	105
<b>1378</b>	272	277	183	187	306	312	0.410	0.408	103
<b>1525</b>	273	271	186	186	305	305	0.409	0.409	107
<b>1536</b>	274	281	184	190	309	314	0.406	0.390	108
<b>1511</b>	275	257	194	176	305	285	0.431	0.412	110
<b>1373</b>	275	270	191	185	309	304	0.427	0.402	104
<b>1502</b>	275	272	195	193	309	307	0.410	0.408	111
<b>668</b>	275	276	191	192	312	312	0.420	0.419	104
<b>663</b>	275	280	184	188	310	316	0.435	0.415	106
<b>1576</b>	276	278	186	191	307	310	0.375	0.375	108
<b>1580</b>	277	282	196	199	314	320	0.444	0.435	107
<b>1535</b>	277	283	194	196	316	318	0.460	0.450	109
<b>739</b>	277	285	194	198	310	319	0.428	0.428	105
<b>855</b>	278	285	191	198	314	320	0.422	0.426	112
<b>1356</b>	278	289	187	197	322	332	0.428	0.433	112
<b>1351</b>	279	282	187	190	321	324	0.428	0.408	108
<b>807</b>	280	290	183	189	337	347	0.390	0.390	104
<b>808</b>	281	291	187	198	322	336	0.428	0.446	105
<b>646</b>	282	280	191	188	327	330	0.437	0.389	107
<b>869</b>	283	295	203	208	316	339	0.469	0.450	113
<b>1549</b>	287	282	185	177	337	328	0.422	0.403	114
<b>1343</b>	284	284	192	192	325	325	0.420	0.440	112
<b>1342</b>	284	285	202	199	316	320	0.460	0.427	106
<b>1519</b>	284	285	190	188	318	321	0.376	0.371	110
<b>1349</b>	284	291	195	202	330	337	0.453	0.455	107
<b>1564</b>	284	291	197	200	320	327	0.472	0.460	107
<b>897</b>	284	292	201	202	316	326	0.477	0.468	114
<b>764</b>	284	294	190	199	330	344	0.402	0.412	95

## SOLID ROLLER PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
1570	284	297	196	200	324	341	0.473	0.443	112
1507	285	285	200	200	319	319	0.465	0.465	112
1517	285	288	194	197	319	322	0.408	0.410	106
858	286	291	197	200	320	325	0.454	0.418	110
652	286	295	191	198	329	345	0.435	0.450	108
1549	287	282	185	177	337	328	0.422	0.403	114
1345	287	289	195	196	327	328	0.438	0.419	112
1542	287	292	195	197	324	330	0.428	0.419	107
810	288	287	196	192	328	329	0.466	0.417	113
1310	288	288	202	202	327	327	0.480	0.480	116
1530	288	290	203	203	320	322	0.473	0.433	110
865	288	296	199	206	323	331	0.470	0.435	108
707	289	294	200	204	324	329	0.470	0.434	108
1501	289	295	206	212	321	330	0.474	0.474	115
1541	290	290	205	205	323	323	0.478	0.477	115
845	290	295	200	209	333	333	0.473	0.478	114
1509	291	287	203	196	325	321	0.457	0.445	115
772	291	292	202	203	325	327	0.467	0.456	108
1319	291	291	205	204	328	326	0.426	0.424	108
1505	292	292	200	193	328	330	0.421	0.410	114
1567	292	292	207	207	325	325	0.506	0.506	116
1353	293	293	208	209	332	330	0.506	0.506	115
1307	294	293	209	206	332	330	0.492	0.446	114
760	293	294	203	193	331	333	0.457	0.414	111
657	294	297	203	206	334	332	0.446	0.432	110
1523	295	297	207	209	329	331	0.470	0.472	114
844	295	297	209	211	332	335	0.478	0.508	113
891	295	301	206	215	333	340	0.477	0.511	114
1598	295	295	207	207	332	332	0.477	0.478	112
1539	296	290	208	206	335	327	0.475	0.448	112
1577	298	300	212	214	335	337	0.472	0.473	114
1584	300	294	213	210	338	328	0.473	0.447	112

## SOLID FLAT TAPPET PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
645	206	206	115	115	236	236	0.279	0.280	110
867	209	217	116	121	240	255	0.280	0.283	113
779	213	223	101	115	245	260	0.255	0.263	108
165	214	214	107	109	247	247	0.263	0.265	107
860	214	216	120	121	243	247	0.283	0.281	110
846	218	225	121	127	257	267	0.283	0.286	109
328	220	224	122	126	258	265	0.284	0.287	109
606	222	222	115	115	260	260	0.264	0.264	110
402	223	225	114	117	260	265	0.263	0.265	108
740	228	234	117	120	263	268	0.267	0.267	107
609	229	229	130	130	264	264	0.295	0.295	109
872	231	231	140	140	258	258	0.320	0.320	108
1326	233	233	126	126	274	274	0.298	0.298	110
1306	234	243	142	147	272	280	0.330	0.329	108
696	236	236	144	144	267	267	0.314	0.317	108
773	232	242	132	140	276	280	0.294	0.310	110
664	237	237	140	140	280	280	0.324	0.324	108
785	238	242	152	156	268	272	0.351	0.357	108
626	238	244	140	146	278	288	0.321	0.328	110
608	240	240	130	130	275	275	0.274	0.272	107
623	240	240	132	132	270	270	0.273	0.273	106
660	241	241	140	140	278	278	0.325	0.325	110
628	242	249	147	154	274	282	0.332	0.331	105
699	242	242	142	142	284	284	0.306	0.306	110
726	242	242	136	136	285	285	0.295	0.295	111
611	244	244	145	145	305	305	0.329	0.329	109
736	244	244	150	150	278	278	0.322	0.322	106
838	244	245	148	148	275	275	0.323	0.327	103
167	245	245	152	152	278	278	0.325	0.327	103
806	245	255	147	157	282	293	0.325	0.338	108
1374	246	246	153	153	281	281	0.341	0.341	108
803	248	248	150	150	295	295	0.330	0.330	108

## SOLID FLAT TAPPET PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
824	246	256	146	158	285	295	0.322	0.338	108
639	247	255	152	163	293	303	0.331	0.345	107
630	248	252	127	131	285	299	0.270	0.270	105
1591	249	245	159	154	290	282	0.334	0.328	102
1302	250	255	152	153	291	296	0.335	0.325	108
642	252	260	158	167	288	298	0.352	0.363	112
684	252	252	153	153	310	310	0.322	0.322	114
746	252	258	154	162	292	295	0.339	0.355	109
1597	252	252	150	149	296	296	0.322	0.320	103
731	253	260	160	166	292	297	0.355	0.365	108
647	254	254	156	156	308	308	0.345	0.345	107
692	255	252	145	145	292	292	0.293	0.296	106
734	255	255	159	159	296	296	0.325	0.325	105
1362	255	255	166	166	285	285	0.365	0.365	106
693	257	269	158	172	299	316	0.328	0.341	112
820	257	263	168	175	290	296	0.360	0.389	108
1316	257	257	160	160	300	300	0.342	0.341	107
166	260	260	161	161	292	294	0.324	0.325	102
712	261	262	161	162	299	302	0.357	0.360	107
644	262	270	162	172	300	310	0.356	0.371	112
698	262	268	168	176	299	303	0.367	0.377	106
658	263	263	173	173	295	295	0.339	0.339	108
715	263	275	165	176	310	324	0.342	0.356	112
676	264	264	164	164	302	302	0.332	0.332	108
694	264	272	172	180	301	308	0.373	0.387	112
681	265	265	175	175	302	302	0.378	0.378	106
794	265	268	169	170	306	311	0.377	0.377	107
742	265	275	172	182	296	315	0.394	0.398	106
1566	265	273	175	185	295	303	0.386	0.402	108
713	266	276	169	179	303	314	0.351	0.364	110
679	267	265	176	172	307	302	0.380	0.375	106
610	269	269	170	170	311	311	0.356	0.357	108

## SOLID FLAT TAPPET PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.020"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
680	270	270	175	175	308	308	0.370	0.370	100
697	270	278	168	175	312	318	0.351	0.365	108
708	272	276	178	178	315	322	0.387	0.386	107
738	272	272	178	178	302	302	0.365	0.365	107
1379	272	275	182	182	307	311	0.395	0.395	108
1553	272	280	173	178	312	321	0.368	0.369	107
720	273	273	174	174	322	322	0.366	0.366	99
633	274	285	176	186	323	340	0.371	0.368	108
705	274	274	181	181	310	310	0.384	0.384	107
804	274	274	180	180	312	312	0.386	0.386	110
1582	274	282	175	183	318	324	0.379	0.380	106
1506	277		179		320		0.379		
717	278	278	181	183	316	316	0.344	0.344	100
741	279	290	188	196	315	326	0.400	0.410	107
706	280	280	186	186	314	314	0.384	0.384	108
632	281	287	191	198	312	318	0.405	0.405	106
727	280	290	187	196	265	275	0.395	0.410	108
714	284	290	186	189	321	323	0.388	0.384	108
716	289	289	187	189	326	331	0.395	0.395	108
725	290	290	191	191	330	330	0.400	0.400	108
<b>SUIT FORD LIFTER (0.875" Minimum Diameter)</b>									
785	238	242	152	156	268	271	0.351	0.357	108
823	249	258	159	169	288	288	0.357	0.363	105
866	256	266	165	173	287	298	0.388	0.395	106
814	268	272	180	184	299	305	0.402	0.408	106
1552	272	282	175	183	315	328	0.380	0.379	107
<b>SUIT CHRYSLER LIFTER (0.905" Minimum Diameter)</b>									
887	244	254	152	163	275	283	0.353	0.381	106
677	246	260	158	171	270	280	0.355	0.379	104
841	250	257	155	162	289	298	0.359	0.374	107
888	252	252	160	160	295	295	0.374	0.374	106



## HYDRAULIC FLAT TAPPET PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.006"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
<b>1537</b>	194	194	102	102	250	250	.266	.266	109
<b>613</b>	194	202	96	105	260	267	.261	.272	112
<b>766</b>	194	202	98	110	257	267	.264	.279	110
<b>615</b>	196	196	74	76	264	264	.230	.230	108
<b>678</b>	197	197	94	94	260	260	.254	.254	108
<b>771</b>	201	205	102	108	259	266	.265	.272	111
<b>631</b>	202	207	100	105	269	269	.263	.263	112
<b>805</b>	203	208	107	112	255	270	.275	.275	112
<b>666</b>	204	214	108	121	267	281	.278	.295	112
<b>776</b>	204	215	105	114	266	279	.271	.277	112
<b>695</b>	205	205	112	112	251	254	.280	.280	109
<b>221</b>	205	209	110	115	265	271	.273	.281	109
<b>1364</b>	206	206	113	113	260	260	.281	.281	112
<b>220</b>	206	211	103	105	270	280	.262	.264	109
<b>624</b>	206	222	110	118	268	300	.278	.284	116
<b>602</b>	208	208	116	116	270	270	.280	.280	110
<b>745</b>	212	212	113	114	280	280	.270	.270	108
<b>890</b>	212	218	117	124	273	278	.289	.293	110
<b>603</b>	214	214	120	120	280	280	.295	.295	110
<b>665</b>	214	224	120	133	280	290	.296	.312	112
<b>892</b>	215	215	121	121	275	275	.294	.294	112
<b>770</b>	214	226	120	130	280	290	.293	.297	111
<b>1365</b>	219	224	122	127	288	290	.286	.290	110
<b>1540</b>	218	214	123	119	282	276	.294	.294	113
<b>170</b>	219	219	121	121	280	280	.286	.284	111
<b>843</b>	219	219	116	116	286	286	.282	.282	110
<b>1550</b>	219	224	124	127	290	295	.295	.295	112
<b>651</b>	222	222	128	128	282	282	.298	.298	113
<b>689</b>	222	229	127	132	282	289	.298	.300	106
<b>685</b>	224	220	128	115	277	279	.282	.267	110
<b>667</b>	224	224	130	130	286	286	.306	.306	111
<b>801</b>	224	224	130	130	280	280	.300	.300	114
<b>686</b>	224	224	126	126	292	292	.293	.293	108

## HYDRAULIC FLAT TAPPET PROFILES

Master Number	0.050" Dur		0.200" Dur		Adv. Dur 0.006"		Lobe Lift		Lobe Sep.
	In	Ex	In	Ex	In	Ex	In.	Ex	
<b>619</b>	226	232	130	137	286	290	.306	.316	109
<b>817</b>	226	230	137	138	280	282	.318	.320	109
<b>1367</b>	226	236	133	134	293	299	.310	.326	112
<b>1510</b>	227	226	132	132	294	291	.317	.316	106
<b>1589</b>	227	220	129	124	289	282	.294	.294	113
<b>604</b>	228	228	128	128	304	304	.280	.280	110
<b>617</b>	228	228	130	130	290	290	.294	.296	110
<b>605</b>	222	236	125	133	297	305	.291	.294	114
<b>622</b>	230	230	140	140	282	282	.320	.320	110
<b>650</b>	230	230	133	133	292	292	.300	.300	113
<b>761</b>	230	230	133	133	292	292	.300	.300	109
<b>778</b>	230	230	134	134	290	290	.303	.302	110
<b>672</b>	230	230	137	137	280	280	.318	.317	108
<b>880</b>	231	231	138	138	285	285	.310	.310	110
<b>1424</b>	230	238	139	146	288	295	.324	.324	110
<b>703</b>	232	232	124	124	312	312	.276	.276	110
<b>620</b>	234	234	140	140	294	294	.315	.315	110
<b>649</b>	234	244	134	143	282	295	.303	.303	108
<b>730</b>	236	244	149	159	284	292	.340	.340	112
<b>747</b>	236	246	149	157	294	307	.349	.354	107
<b>690</b>	238	243	144	148	300	310	.320	.320	108
<b>787</b>	238	246	147	151	284	295	.324	.327	112
<b>616</b>	240	240	140	140	300	300	.299	.299	110
<b>700</b>	241	248	147	153	307	313	.332	.328	108
<b>682</b>	244	244	136	136	303	303	.288	.288	106
<b>802</b>	246	246	156	156	295	295	.338	.338	108
<b>648</b>	248	252	151	158	320	322	.326	.336	108
<b>1520</b>	258	256	164	164	338	338	0.320	0.322	107
<b>675</b>	258	258	161	161	326	326	0.310	0.310	108
<b>671</b>	259	259	164	164	345	345	0.308	0.308	108
<b>1503</b>	263	263	162	162	324	324	0.314	0.314	107
<b>769</b>	269	275	156	164	326	328	0.318	0.325	106

# DIRECT OPERATING OHC (Bucket) Profiles

Use of these profiles in any engine is subject to cam follower diameter \*\*For engines with shims on top of bucket, this is shim diameter.

Master Number	0.050" Dur.		Adv Dur.		Lobe Lift		Min Lifter **	
	In	Ex	In	Ex	In	Ex	Diameter Inch	Diameter mm
<b>SOLID</b>								
189	200	200	252	252	0.293	0.293	0.89	23
208	202	202	263	263	0.338	0.338	1.1	28
161	204	204	279	279	0.297	0.297	0.92	24
895	204	208	269	289	0.323	0.33	0.95	25
216	204	210	286	292	0.325	0.341	1.08	28
27	206	207	270	277	0.385	0.388	1.28	33
854	208	208	272	272	0.359	0.359	1.06	27
113	208	208	272	276	0.386	0.386	1.185	30
839	213	214	267	273	0.395	0.395	1.115	29
307	215	215	265	265	0.38	0.38	1.125	29
1587	219	219	268	268	0.361	0.361	1.02	26
627	221	222	304	308	0.392	0.394	1.2	30
60	222	226	262	285	0.402	0.402	1.08	28
97	224	225	262	267	0.328	0.331	1.0	26
1407	227	227	265	265	0.368	0.368	1.06	27
1377	227	228	277	282	0.379	0.38	1.09	28
1405	233	233	298	298	0.337	0.337	1.125	29
152	234	234	280	280	0.334	0.334	0.875	23
66	234	234	314	298	0.439	0.436	1.16	30
848	236	257	310	350	0.428	0.436	1.2	30
885	237	251	271	288	0.455	0.492	1.25	32
2	240	240	285	285	0.33	0.33	0.95	25
329	240	236	284	291	0.469	0.451	1.25	32
1376	241	241	275	275	0.463	0.463	1.3	33
1308	242	242	292	292	0.383	0.383	0.975	25
849	247	258	328	337	0.393	0.409	1.05	27
876	248	248	279	279	0.441	0.441	1.2	30
886	249	251	287	296	0.449	0.454	1.25	32
1581	256	256	322	322	0.453	0.453	1.1	28
859	257	257	306	306	0.388	0.388	1.06	27
837	258	258	327	327	0.435	0.435	1.25	32
1324	260	260	292	292	0.53	0.53	1.3	33
1303	262	266	321	326	0.398	0.41	0.925	24
1596	264	264	319	319	0.453	0.453	1.1	28
1568	270	270	311	311	0.479	0.479	1.125	29
1391	273	273	337	337	0.542		1.35	35
871	276	285	309	318	0.475	0.495	1.15	30
1556	276	276	308	308	0.598	0.598	1.395	36
873	281	283	321	311	0.48	0.46	1.11	29
728	281	281	304	304	0.527	0.527	1.25	32
737	282	283	316	318	0.434	0.432	1.02	26
<b>HYDRAULIC</b>								
89	211	211	250	250	0.4	0.4	1.22	31
575	216	216	265	265	0.347	0.347	1.2	30
1322	218	218	256	256	0.33	0.33	1.02	26
191	246	246	295	295	0.43	0.43	1.06	27

# CHEV/HOLDEN V8 LS GRINDS

These are profiles we have already ground on LS cams. We have many more masters available but the specs may vary slightly with the larger base circle of the LS cam. Lobe centres can be modified within the range of the lobe profiles and cam billets available.

Part Number	0.050" Dur In / Ex	0.200" Dur In / Ex	Adv Dur 0.006" In / Ex	Lobe Lift In / Ex	Valve Lift @ 1.7 Ratio	Lobe Centre
<b>HYDRAULIC ROLLER</b>						
1245	199/205	114/118	262/264	.300/.300	.510/.511	112
1346	199/211	114/119	275/279	.292/.293	.496/.499	120
780	203/219	124/134	264/285	.324/.326	.551/.555	117
1255	206/209	118/120	267/269	.300/.299	.510/.509	111
1259	207/213	119/125	262/267	.302/.306	.513/.520	112
1230	209/229	128/143	262/281	.325/.321	.553/.545	120
1265	212/219	125/131	268/275	.305/.311	.519/.528	114
1276	215/247	142/172	267/298	.371/.387	.631/.657	121
1384	216/223	136/142	278/285	.329/.329	.559/.559	117
1737	216/224	132/140	271/281	.349/.348	.593/.592	116
1208	217/222	135/139	275/281	.350/.351	.596/.596	111
1275	217/224	123/130	300/292	.310/.310	.528/.527	114
1228	218/220	130/131	282/284	.341/.341	.579/.579	112
1744	219/236	144/159	271/286	.358/.365	.608/.620	118
1202	220/225	133/137	282/292	.327/.330	.556/.562	114
1732	221/221	138/138	278/279	.350/.350	.595/.596	114
1749	221/228	144/151	276/282	.369/.368	.627/.625	116
1247	221/228	133/146	287/286	.342/.345	.581/.587	112
1256	221/229	131/144	293/290	.344/.348	.585/.591	116
1286	221/238	140/155	275/292	.342/.343	.580/.581	115
1730	222/230	141/148	281/287	.360/.360	.613/.612	114
1233	223/224	140/141	276/278	.331/.332	.562/.565	111
1270	223/228	144/149	278/282	.341/.346	.580/.589	114
1229	224/230	142/147	280/286	.359/.359	.610/.610	114
1262	224/232	146/153	278/284	.358/.359	.608/.611	114
1745	224/236	147/159	278/289	.360/.365	.612/.620	115
1263	225/232	141/148	285/291	.359/.358	.610/.609	114
1292	225/244	149/164	276/296	.357/.357	.607/.607	115
1528	226/231	133/138	290/298	.320/.321	.544/.546	110
1249	226/232	149/153	277/284	.358/.354	.608/.602	112
1248	226/234	147/151	278/303	.340/.348	.578/.591	111
1280	227/228	136/136	291/294	.322/.322	.547/.549	110
1295	227/231	150/152	280/285	.358/.354	.609/.602	114
1203	227/232	136/140	291/301	.324/.326	.551/.555	113
1298	227/233	149/153	282/290	.358/.353	.609/.601	112
1244	227/238	137/144	284/299	.309/.310	.525/.527	110
1281	227/244	143/158	294/310	.355/.354	.603/.601	114
1287	227/244	150/165	278/296	.358/.359	.607/.610	114
1234	228/231	145/147	281/284	.335/.337	.570/.572	112
1729	228/235	146/152	284/292	.359/.359	.610/.610	114
1243	228/238	138/144	286/296	.308/.307	.523/.522	110
1204	229/231	145/147	284/287	.334/.335	.568/.570	112
1223	229/235	145/148	293/304	.344/.344	.584/.585	112
1742	229/244	133/142	292/301	.295/.293	.501/.499	115
1212	229/232	151/155	281/282	.359/.361	.611/.614	112
1206	230/235	148/154	289/294	.335/.347	.571/.591	110
1214	231/239	153/155	282/291	.352/.342	.598/.581	112
1266	232/233	155/154	285/288	.359/.355	.610/.603	112
1215	232/234	144/146	297/302	.344/.342	.584/.582	112
1239	232/235	153/153	286/291	.361/.366	.613/.622	115
1296	232/237	155/157	286/290	.360/.356	.612/.604	112
1221	233/234	150/150	295/292	.343/.325	.583/.553	111

# CHEV/HOLDEN V8 LS GRINDS

Part Number	0.050"Dur In / Ex	0.200"Dur In / Ex	Adv Dur 0.006" In / Ex	Lobe Lift In / Ex	Valve Lift @ 1.7 Ratio	Lobe Centre
<b>HYDRAULIC ROLLER</b>						
1236	233/239	142/148	309/317	.363/.369	.617/.627	114
1211	233/242	145/152	304/318	.322/.328	.548/.558	112
1260	233/245	155/167	283/298	.362/.367	.616/.623	115
1205	234/234	150/150	293/292	.329/.329	.559/.559	110
1285	234/238	148/152	291/296	.349/.350	.595/.595	114
1288	234/250	154/168	287/302	.359/.360	.610/.610	114
1210	235/243	146/151	299/317	.321/.323	.546/.549	115
1251	235/243	155/164	292/296	.349/.359	.593/.610	113
1238	236/241	154/159	291/297	.367/.367	.625/.624	112
1250	236/242	152/155	294/302	.357/.358	.608/.609	113
1237	236/249	154/169	291/302	.367/.372	.624/.632	113
1241	237/245	159/162	293/298	.365/.346	.620/.588	114
1283	238/242	159/162	293/296	.368/.368	.626/.625	114
1719	238/244	155/157	295/315	.357/.379	.606/.644	107
1289	238/254	156/169	295/319	.362/.362	.614/.614	113
1294	240/243	155/159	292/294	.342/.344	.581/.585	116
1252	239/244	154/158	301/302	.362/.361	.614/.614	114
1299	239/244	160/164	292/299	.360/.360	.613/.611	112
1723	239/249	156/169	301/303	.362/.361	.615/.614	114
1242	239/250	158/169	294/303	.352/.360	.598/.612	112
1290	239/256	154/164	301/321	.362/.359	.614/.610	115
1232	239/242	155/158	294/295	.345/.347	.585/.590	114
1235	241/243	162/163	293/296	.357/.359	.607/.610	112
1240	242/248	159/163	299/305	.352/.352	.598/.599	112
1246	242/249	166/169	298/314	.382/.383	.650/.651	110
1741	242/245	159/163	309/306	.367/.367	.623/.623	112
1231	243/246	158/161	296/298	.348/.350	.592/.595	114
1282	245/251	166/172	304/307	.383/.383	.651/.651	115
1253	245/262	159/170	307/325	.363/.361	.615/.615	114
1291	244/261	158/169	311/340	.365/.362	.621/.616	114
1268	248/253	170/174	299/304	.367/.366	.623/.622	114
1264	249/252	172/175	301/304	.386/.388	.656/.659	108
1271	250/258	150/161	325/337	.361/.364	.614/.618	114
1224	254/259	166/171	322/327	.374/.374	.636/.636	109
1254	257/272	177/190	309/323	.366/.366	.622/.621	115
1216	266/274	175/182	325/332	.355/.353	.603/.600	114
1297	266/276	184/192	321/329	.364/.362	.619/.615	106
1213	267/271	182/186	331/332	.394/.393	.670/.668	110
1728	268/278	180/189	335/339	.370/.367	.629/.625	114
1217	274/274	191/191	327/328	.367/.366	.624/.622	114
<b>SOLID ROLLER</b>						
1599	232/231	146/146	266/264	.382"/.380"		115
1551	245/251	160/165	278/284	.377"/.376"		107
1573	248/253	161/166	281/287	.403"/.407"		106
1538	259/259	172/172	292/292	.404"/.404"		110
1387	259/265	168/174	298/303	.393"/.391"		108
1347	263/268	173/175	305/312	.405"/.409"		106
1359	265/269	184/185	300/302	.427"/.399"		110
1222	273/277	189/192	307/311	.436"/.435"		108

# FORD OHC CUSTOM PROFILES

## ROLLER CAM PROFILES FOR FALCON 6 OHC ENGINES

These are measurements of cam lobes not valve timing.

Use the standard specification for an approximate comparison. Where two figures are given, first is inlet.

EA-EF uses 2:1 Rocker Ratio. AU uses 1.8:1 Rocker Ratio

Part Number	0.050"Dur	Adv Dur	Lobe Lift	Lobe Centre
<b>HYDRAULIC ROLLER</b>				
STD EB	193/187	241/239	.235/.227	114
STD AU	181/197	233/246	.247/.268	119
825	195	262	.245	113
2557	198	260	.245	113
2519	199/194	262/251	.246/.236	113
2522	201/194	263/257	.269/.255	111
2526	197/192	249/246	.265/.252	115
2549	210/199	271/261	.264/.250	111
1514	219	275	.280	112
1560	224/220	282/277	.280	115
896	193/187	240/230	.236/.227	114
1300	220	282/289	.250	110
2543	209/207	271/269	.250/.239	114
2546	233	295	.264	110
2550 *	235	295	.308	106

\* Warning: This cam may have piston to valve clearance problems.

<b>SOLID ROLLER</b>				
2527	230	272	.300"	106
2518	237	295	.260"	107
2539	247	302/307	.305	106



# NISSAN TB48 GRINDS

Part Number	Adv. Duration		.050" Duration		Valve Lift		LSA
	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
<b>538797</b> <b>539797</b>	287	287	258	258	.500"	.500"	110
<b>538876</b> <b>539876</b>	302	303	250	250	.500"	.500"	110
<b>5381472</b> <b>5391472</b>	265	265	248	248	.440"	.440"	115
<b>5381840</b> <b>5391840</b>	248	248	223	223	.401"	.401"	114
<b>5381841</b> <b>5391841</b>	248	248	231	223	.425"	.401"	114
<b>5381842</b> <b>5391842</b>	248	248	231	231	.406"	.406"	114
<b>5381843</b> <b>5391843</b>	254	254	231	231	.406"	.406"	118
<b>5381844</b> <b>5391844</b>	255	254	234	231	.426"	.426"	118
<b>5381845</b> <b>5391845</b>	255	255	234	234	.405"	.405"	113
<b>5381847</b> <b>5391847</b>	271	270	240	239	.405"	.405"	113
<b>5381848</b> <b>5391848</b>	255	255	238	238	.429"	.429"	115
<b>5381849</b> <b>5391849</b>	272	273	244	244	.468"	.467"	120
<b>5381850</b> <b>5391850</b>	265	256	248	238	.440"	.429"	115
<b>5381851</b> <b>5391851</b>	265	265	248	248	.440"	.440"	115
<b>5381852</b> <b>5391852</b>	282	282	247	247	.472"	.472"	115

# TOYOTA 1FZ-FE GRINDS

Part Number	Adv. Duration		.050" Duration		Valve Lift		LSA
	Intake	Exhaust	Intake	Exhaust	Intake	Exhaust	
<b>528000</b> <b>528000</b>	277	277	194	194	.340"	.340"	115
<b>5281840</b> <b>5291840</b>	248	248	223	223	.401"	.401"	114
<b>5281843</b> <b>5291843</b>	254	254	231	231	.406"	.406"	118
<b>5281844</b> <b>5291844</b>	255	255	234	231	.426"	.426"	118
<b>5281845</b> <b>5291845</b>	255	255	234	234	.426"	.426"	117
<b>5281848</b> <b>5291848</b>	255	255	238	238	.429"	.429"	115
<b>5281849</b> <b>5291849</b>	272	273	244	244	.468"	.467"	120
<b>5281850</b> <b>5291850</b>	265	265	248	238	.440"	.429"	115
<b>5281851</b> <b>5291851</b>	265	265	248	248	.440"	.440"	115
<b>5281852</b> <b>5291852</b>	282	282	247	247	.472"	.472"	110



# CROW CAMS MERCHANDISE



## CROW CAMS HOODIE

Cotton T shirt in black with unique Crow Cams hot rod garage theme printed on front. **Part Number: H1**

## CROW CAMS STUBBY HOLDER

Cool Black Neoprene with printed Bird logo. **Part Number: SH1**



## CROW CAMS BIRD T-SHIRT

Heavy weight cotton T Shirt in Black with Crow Cams logo printed on back and small bird logo printed on front. **Part Number: TS2**



## CROW CAMS KEY RING

Distinctive Crow Bird key ring in flexible and indestructible PU compound. **Part Number: KR1**



## CROW CAMS FORD T-SHIRT

Heavy weight cotton T Shirt in white with Crow Cams Ford car printed on back and small bird logo printed on front. **Part Number: TSF**



## CROW CAMS HOLDEN T-SHIRT

Heavy weight cotton T Shirt in white with Crow Cams Holden car printed on back and small bird logo printed on front. **Part Number: TSH**



## CROW BLACK CAP

Comfortable durable cloth peaked cap with embroidered Crow Bird Logo. **Part Number: CP2**



## CROW CAMS HOT ROD BANNER

Large Fabric Banner with corner eyelets, size 1500mmx1100mm **Part Number: BANNER**



## CROW CAMS HOLDEN BANNER

Large Fabric Banner with corner eyelets, size 1500mmx1100mm **Part Number: BANNER-HOLDEN**



## CROW CAMS FORD BANNER

Large Fabric Banner with corner eyelets, size 1500mmx1100mm **Part Number: BANNER-FORD**





# ***CROW CAMS***

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Part number: CAT16

