

CROW CAMMS



VALVE TRAIN
2020 CATALOGUE

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 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 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.

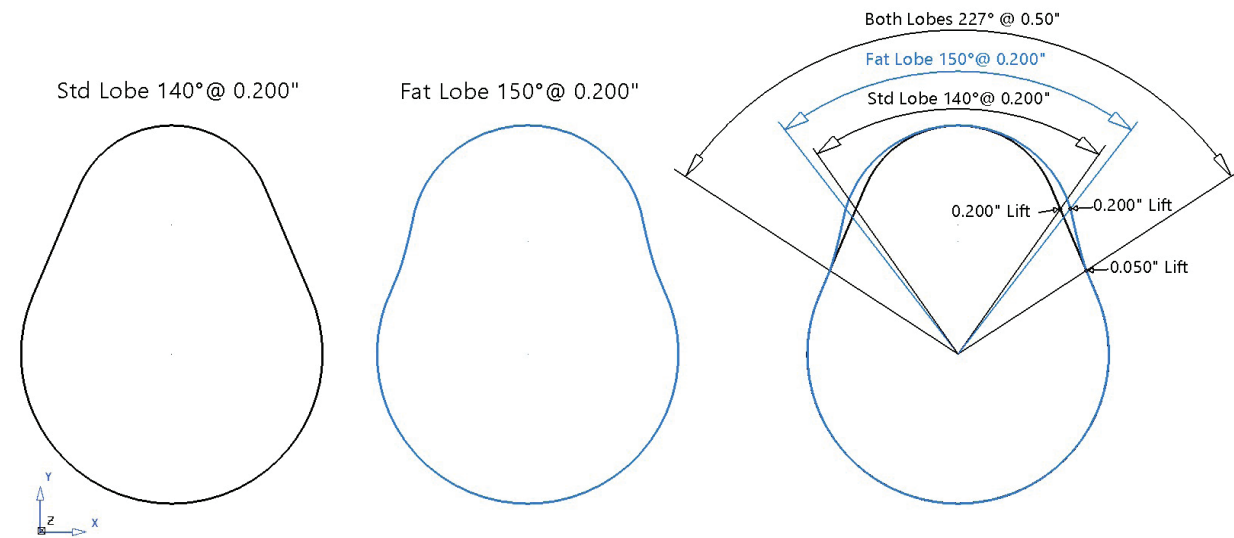
CROW CAMS FAT LOBE PROFILES

Crow Cams have unique in house cam development facilities and have produced powerful, high torque and efficient profiles for a large number of hydraulic roller engine combinations.

Over the past two years, we have uncovered the benefits of designing cam lobes with bigger .200" lift duration figures to increase the total area under the curve without resorting to excessive valve lift which can affect long term reliability.

Known as Crow Cams "Fat Lobes" these profiles generate exceptional mid range power and torque over a broader RPM range. Crow "Fat Lobe" cams are easy to tune and deliver excellent driveability throughout the RPM range.

Look for the "Fat Lobe" mascot throughout the catalogue.



FITTING A NEW CAMSHAFT

REMEMBER THE FOLLOWING POINTS

1. Thoroughly clean camshaft including oil passages before fitting.
2. 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.
3. 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.**
4. Check timing gears for wear and replace timing chain.
5. 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. If high performance valve springs aren't required it is still advised to purchase a new set of valve springs.
6. For the best results high performance cams should be fitted in accordance with the settings listed on the cam data card.
7. 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.
8. Run engine above 1800rpm for 20 minutes. Check for leaks. Take car for test drive to load engine.
9. 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

1. 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.
2. 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.
3. 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

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.

CUSTOM CAMSHAFT GRINDING

FOR CUSTOM CAMSHAFT RECOMMENDATIONS FILL OUT OUR ONLINE FORM AT
WWW.CROWCAMS.COM.AU ALTERNATIVELY CONTACT OUR TECHNICAL DEPARTMENT

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 & Jake 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

STANDARD REPLACEMENT CAMS & VALVE SPRINGS

| Make / Capacity | Cylinder | Year | Application | Engine | Part Number | Valve Spring |
|-----------------|----------|------|-------------|--------|-------------|--------------|
|-----------------|----------|------|-------------|--------|-------------|--------------|

NOTE: If the model you require is not listed here check custom grind listing.

| CHEVROLET | | | | | | |
|----------------------|----|-----------|------------------|---------------------|----------------|---------|
| 283-400 ci | V8 | 1957-86 | | Small Block. | 1613 | 4931-16 |
| 350 ci | V8 | 1999-on | Corvette (300kw) | LS1, Gen III engine | 871001 | |
| CHRYSLER | | | | | | |
| 225 ci | 6 | 1962-70 | | Slant 6 | 7000 | 5077-12 |
| 215-265 ci | 6 | 1970-80 | | Hemi, 3 bolt gear | 6000 * | 5091-12 |
| 265 ci | 6 | 1976-78 | E38 Charger | Hemi 6 | 6603 * | 7736-12 |
| 265 ci | 6 | 1978-80 | E49 Charger | Hemi 6 6 Pack | 6703 * | 7736-12 |
| 273-360 ci | V8 | 1968-80 | | Small Block | 18000 | 5091-16 |
| DAEWOO | | | | | | |
| 1498cc | 4 | | | G15ME,G15MS | 259000 | |
| 1598cc | 4 | | Lanos, Cielo | A15SMS Coil Pack | 261001 | |
| DODGE | | | | | | |
| 361ci - 440ci | V8 | 1972-77 | Chain drive | 3 Bolt gear | 45000 | |
| FORD | | | | | | |
| 997-1598cc | 4 | 1959-78 | Cortina | Pushrod engine | 51000 | |
| 1597cc | 4 | 1985-90 | Laser, Capri SA | B6, SOHC Mech | 224000 | |
| 1993cc | 4 | 1971-on | Cortina,Escort | OHC | 26000 | |
| 170-200 | 6 | 1960-64 | Falcon | Solid Lifter | 63001 | |
| 188-221ci | 6 | 1964-70 | Falcon | Hydraulic Lifter | 63002 | |
| 200-250ci | 6 | 1970-76 | Falcon | Hydraulic Lifter | 63000 | |
| 200-250ci | 6 | 1976-85 | Falcon | Cross flow | 14000 * | 5014-12 |
| 200-250ci | 6 | 1986-88 | Falcon | Unleaded | 14002 * | 5014-12 |
| 250ci | 6 | 1984-87 | Falcon | EFI engine | 14678 * | 5014-12 |
| 289-302ci | V8 | 1964-68 | Falcon | Windsor | 15613 | |
| 302ci | V8 | 1991-on | Falcon EB | Roller cam | 62951 | |
| 302ci | V8 | 1993-on | Falcon EB GT | Roller Cam | 62050 | |
| 302ci | V8 | 1996-on | Falcon XR8 | 200kw Roller Cam | 621338 | |
| 302ci | V8 | 1998-on | Falcon XR8 | 220kw T Series | 621339 | |
| 302ci | V8 | 1998-on | Falcon XR8 | 250kw T Series | 621368 | |
| 4000cc | 6 | 2002-2005 | Falcon BA-BF | Barra DOHC IN | 323000 | |
| | | | | Barra DOHC EX | 324000 | |
| 5400cc | V8 | 2002-08 | Falcon BA GT | DOHC RHI | 270-001 | |
| | | | | DOHC LHI | 271-001 | |
| | | | | DOHC RHE | 272-001 | |
| | | | | DOHC LHE | 273-001 | |
| 5400cc | V8 | 2008-on | Falcon FG GT | DOHC RHI | 270-002 | |
| | | | | DOHC LHI | 271-002 | |
| | | | | DOHC RHE | 272-002 | |
| | | | | DOHC LHE | 273-002 | |



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 |
|-----------------|----------|------|-------------|--------|-------------|--------------|
|-----------------|----------|------|-------------|--------|-------------|--------------|

NOTE: If the model you require is not listed here check custom grind listing.

| FORD | | | | | | |
|------------------|----|---------|-----------|--------------|--------------|---------|
| 302-351ci | V8 | 1968-84 | Falcon | Cleveland | 21000 | 5094-16 |
| 351ci | V8 | 1970-71 | Falcon GT | HO Solid Cam | 21726 | 7739-16 |
| 351ci | V8 | 1969-70 | Falcon | Windsor | 62000 | 5062-16 |
| 390-428ci | V8 | 1963-71 | Galaxie | FE Engine | 19000 | |

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

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

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 |
|-----------------|----------|------|-------------|--------|-------------|--------------|
|-----------------|----------|------|-------------|--------|-------------|--------------|

NOTE: If the model you require is not listed here check custom grind listing.

| HOLDEN | | | | | | |
|--------------------|----|--------------|---|-----------------------|---------------|---------|
| 307-350ci | V8 | 1968-78 | Chev. | Small Block | 1613 | 4931-16 |
| 3800cc | V6 | 1989-91 | Commodore VN | Roller Hydraulic | 607000 | 7328-12 |
| | | | For engines with single spring and damper use | | | 4835-12 |
| 3800cc | V6 | 1991-93 | Series 2 VN-VR | Roller Hydraulic | 774000 | 4936-12 |
| 3800cc | V6 | 1993-on | VS,VT,VY, VX | Roller Hydraulic | 853000 | 4021-12 |
| 5700cc | V8 | 1999-on | VT-VZ | LS1 Engine | 871000 | 4231-16 |
| 5700cc | V8 | 2004-on | VZ | 300kw Engine | 871001 | |
| 6000-6200cc | V8 | 2010-present | VE-VF | Single Bolt (Non AFM) | 872000 | |
| | | | | 3 Bolt Cam (Non AFM) | 871002 | |

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

| KIA | | | | | | |
|----------------|---|---------|--------|--|---------------|--------|
| 1498 cc | 4 | 1996-98 | Mentor | | 224001 | 5080-8 |

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

| MAZDA | | | | | | |
|---------------|---|---------|-----|--------------------------|---------------|--------|
| 1600cc | 4 | 1985-89 | 323 | B6 Belt drive | 224000 | 5080-8 |
| 1600cc | 4 | 1985-89 | 323 | B6 Belt drive hyd tappet | 224001 | 5080-8 |
| 2605cc | 4 | 1989-on | | G6 12 Valve | 42100 | |

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

| ROVER, RANGE ROVER | | | | | | |
|---------------------|----|---------|-------|--|--------------|--|
| 3500-4500 cc | V8 | 1966-81 | Rover | | 37000 | |

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

TOUGH IDLE CAMS

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 tough hydraulic grinds are designed with increased overlap to produce a lumpy idle that will stand out in the crowd.

Options are available for standard or hi stall converters with good power and strong torque through the RPM range. Please note tough cams will have low vacuum due to the tight lobe center.



CROW CAMS TOUGH CAM

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|---|--------------|-----------|--------------|------------------|----------|----------|-----------|------------|-----------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| CHEVROLET SMALL BLOCK HYDRAULIC ROCKER RATIO 1.50 | | | | | | | | | | NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1) | 1600 - 4600 | 1603-8 | 280 | 280 | 214 | 214 | .442" | .442" | 108 | | ZDDP-100 | HT817C-16 | 4843-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8350 | PR-937-16 | CRCSB153 |
| Lumpy idle, strong mid / high range performance (See Fitting notes 1) | 2500 - 5500 | 1686-8 | 292 | 292 | 224 | 224 | .440" | .440" | 108 | | ZDDP-100 | HT817C-16 | 4843-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8350 | PR-937-16 | CRCSB153 |
| FORD WINDSOR 289W-302W ROCKER RATIO 1.62 | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1 & 7) | 1600 - 4600 | 15890-8 | 272 | 280 | 212 | 217 | .467" | .475" | 108 | | ZDDP-100 | 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 | 15689-6 | 282 | 289 | 222 | 230 | .480" | .486" | 106 | | ZDDP-100 | HT900-16 | 7736-16 | 1.700" | 11700-16 | 11701-16 | KG317-16 | CS8302W | See Notes | CRFW163 |
| FORD CLEVELAND 302C - 351C ROCKER RATIO 1.73 | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range (See Fitting notes 1 & 2) | 1600 - 4600 | 21666-8 | 268 | 288 | 204 | 214 | .481" | .512" | 108 | | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 11702-16 | KG317-16 | CS8351C | PR-414-16 | CRFCL177 |
| Lumpy idle, strong mid / high range performance. (See Fitting notes 1 & 2) | 2500 - 5500 | 21689-6 | 282 | 289 | 222 | 230 | .512" | .519" | 106 | | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 11702-16 | KG317-16 | CS8351C | PR-414-16 | CRFCL177 |
| HOLDEN 304/355 V8 WITH VN-VT EFI HEADS | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range. (See Fitting notes 1 & 2) | 1800 - 4800 | 4890-8 | 272 | 283 | 212 | 217 | .475" | .483" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Medium idle, strong mid range. (See Fitting notes 1 & 2) | 2000 - 5000 | 4770-8 | 280 | 290 | 214 | 224 | .483" | .490" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Lumpy idle, strong mid / high range performance. (See Fitting notes 1 & 2) | 2200 - 5000 | 4689-6 | 280 | 289 | 222 | 230 | .489" | .495" | 106 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| HOLDEN 253-308 V8 HYDRAULIC | | | | | | | | | | | | | | | | | | | | |
| Lumpy cam, increased mid range performance. (See Fitting Notes 1 & 2) | 1500 - 4800 | 5666-8 | 268 | 288 | 204 | 214 | .481" | .512" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Lumpy street cam. (See Fitting Notes 1 & 2) | 2600 - 5500 | 5689-6 | 280 | 289 | 222 | 230 | .489" | .495" | 106 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | 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.

Note: Springs marked with xxxx-xx^D 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.

CHEVROLET BIG BLOCK V8 ROCKER RATIO 1.70

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|----------------------|--------------|-----------|----------------------|------------------|----------|----------|-----------|------------|-----------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| HYDRAULIC CAMS | | | | | | | | | | | | | | | | | | | | |
| Mild street cam, good bottom end torque, smooth idle. | 1100 - 4000 | 2666 | 268 | 288 | 204 | 214 | .481" | .512" | 112 | | ZDDP-100 | 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 | 2602 | 270 | 270 | 208 | 208 | .484" | .484" | 110 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | HT817R-16 | 9731-16 | 1.950" | 12710-16 | 12708-16 | KG819-16 | 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 | | ZDDP-100 | HT817R-16 | 9731-16 | 1.950" | 12710-16 | 12708-16 | KG819-16 | CS8454T | See notes | CRCBB177 |
| SOLID CAMS | | | | | | | | | | | | | | | | | | | | |
| 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 | IN .020" EX .020" | ZDDP-100 | AT992-16 | 9936-16 ^D | 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 | IN .024" EX .024" | ZDDP-100 | AT992-16 | 9936-16 ^D | 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 | IN .025" EX .025" | ZDDP-100 | AT992L-16 | 9936-16 ^D | 1.980" | 12710-16 | 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 | IN .018" EX .018" | ZDDP-100 | AT992L-16 | 9936-16 ^D | 1.980" | 12710-16 | 12708-16 | | CS8454T | See notes | CRCBB177 |
| HYDRAULIC ROLLER CAMS | | | | | | | | | | | | | | | | | | | | |
| NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | | | | | | | | | | | |
| 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 ^D | 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 ^D | 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 | 21315-9 | 303 | 307 | 238 | 244 | .596" | .596" | 109 | | | 5210H | 9936-16 ^D | 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 | 21719-10 | 295 | 315 | 238 | 243 | .615" | .652" | 110 | | | 5210H | 9936-16 ^D | 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 ^D | 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 | 21435-8 | 317 | 326 | 249 | 258 | .596" | .596" | 108 | | | 5210H | 9936-16 ^D | 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^D denotes that it is a double spring.

FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.

- 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 1.70

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|----------------------|------------------|----------|----------|-----------|------------|-----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| SOLID ROLLER CAMS | | | | | | | | | | | | | | | | | | | | |
| NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | | | | | | | | | | | |
| Street roller, street /strip application small cube engine (See Fitting notes 1 - 7) | 3500 - 6800 | 21301 | 286 | 295 | 252 | 260 | .625" | .625" | 108 | | | 5212PF | 4910-16 ^o | 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 | | | 5212PF | 4910-16 ^o | 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 | 2739-9 | 310 | 319 | 277 | 284 | .740" | .740" | 109 | | | 5212PF | 4920-16 ^o | 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 | | | 5212PF | 4920-16 ^o | 2.000" | 13102-16 | 11101-16 | | CS8454T | See Notes | |

CHEVROLET SMALL BLOCK V8 ROCKER RATIO 1.50

| HYDRAULIC CAMS | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-------|-----|-----|-----|-----|-------|-------|-----|--|--|----------|-----------|----------------------|--------|----------|----------|-----------|--------|-----------|----------|
| Use for STD cam, Hi Torque/towing | 1000 - 3800 | 1613 | 260 | 267 | 194 | 202 | .390" | .408" | 112 | | | ZDDP-100 | 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 | | | ZDDP-100 | HT817C-16 | 4833-16 | 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 | | | ZDDP-100 | HT817C-16 | 4833-16 | 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 | | | ZDDP-100 | HT817C-16 | 4833-16 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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) | 2900 - 6000 | 1672 | 280 | 280 | 231 | 231 | .480" | .480" | 108 | | | ZDDP-100 | HT817C-16 | 4843-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8350 | PR-937-16 | CRCSB157 |
| Hyd cam, rough idle high RPM range needs heads, comp, headers & stall (See Fitting notes 1, 2 & 3) | 3000 - 6200 | 1747 | 294 | 307 | 236 | 246 | .525" | .532" | 107 | | | ZDDP-100 | HT817R-16 | 7333-16 ^o | 1.800" | 11710-16 | 4133-16 | VSV530-16 | 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 | | | ZDDP-100 | HT817R-16 | 7333-16 ^o | 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^o denotes that it is a double spring.

FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.

- 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|--------------|------------------|----------|-------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| SOLID CAMS | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| Race application, needs good breathing comp, diff gears & hi stall (See Fitting notes 5) | 3800 - 6800 | 1746 | 292 | 295 | 252 | 258 | .508" | .532" | 109 | | | | | | | | | | | |
| Performance solid cam serious race use only need premium valve train parts (See Fitting notes 5) | 3800 - 7000 | 1731 | 292 | 297 | 253 | 260 | .531" | .543" | 108 | | | | | | | | | | | |

HYDRAULIC ROLLER CAMS

NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS

| | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|-------|----------------------|--------|----------|---------|-----------|--------|-----------|----------|
| Factory 375HP Grind (See Fitting notes 5) | 1500 - 4600 | 1940 | 283 | 283 | 218 | 226 | .475" | .475" | 108 | | | 5200H | 7342-16 ^D | 1.850" | 11710-16 | 4133-16 | VSV530-16 | CS8350 | See Notes | CRCSB153 |
| Mild performance cam great bottom end & mid range, needs manifold & headers (See Fitting notes 5) | 2000 - 5000 | 11330-8 | 275 | 282 | 220 | 227 | .492" | .501" | 108 | | | 5200H | 7342-16 ^D | 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) | 2500 - 6200 | 11433 | 297 | 303 | 228 | 238 | .552" | .548" | 110 | | | 5200H | 7342-16 ^D | 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 - 6200 | 11315-8 | 303 | 307 | 238 | 244 | .516" | .516" | 108 | | | 5200H | 7342-16 ^D | 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) | 3200 - 6400 | 11719 | 295 | 315 | 238 | 243 | .532" | .565" | 107 | | | 5200H | 7342-16 ^D | 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 - 6500 | 11725 | 290 | 296 | 242 | 246 | .567" | .567" | 109 | | | 5200H | 7342-16 ^D | 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 - 6800 | 11571-8 | 310 | 310 | 246 | 246 | .570" | .570" | 108 | | | 5200H | 7342-16 ^D | 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. Please talk to our technical department regarding custom camshaft grinds.

*** Chev LS Roller Hydraulic cams see Holden LS 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^D denotes that it is a double spring.

FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.

- 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|----------------------|------------------|----------|----------|-----------|------------|-----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| SOLID ROLLER CAMS | | | | | | | | | | | | | | | | | | | | |
| NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | | | | | | | | | | | |
| 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 | | | 5200PF | 7342-16 ^D | 1.850" | 13101-16 | 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 | | | 5200PF | 4910-16 ^D | 2.000" | 13102-16 | 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 | | | 5200PF | 4910-16 ^D | 2.000" | 13102-16 | 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 | 11482-9 | 290 | 294 | 252 | 257 | .605" | .605" | 109 | | | 5200PF | 4920-16 ^D | 2.000" | 13102-16 | 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 | | | 5200PF | 4920-16 ^D | 2.000" | 13102-16 | 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 | | | 5200PF | 4920-16 ^D | 2.000" | 13102-16 | 11101-16 | VSV530-16 | CS8350T | See Notes | |

SPECIAL SOLID ROLLER CUSTOM GRINDS AVAILABLE ON THE FOLLOWING BILLETS:

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

- STANDARD JOURNAL, 1050 INDUCTION HARDENED STEEL WITH STANDARD FIRING ORDER
- 50MM JOURNAL, CARBURISED 8620 STEEL, STANDARD, 4X7 AND 3X2 SWAP FIRING ORDERS
- 50MM JOURNAL, CARBURISED 8620 STEEL STROKER BILLETS

CHRYSLER 5.7 & 6.1 HEMI V8 2004 ON ROCKER RATIO 1.65

| HYDRAULIC ROLLER | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-----------|-----|-----|-----|-----|-------|-------|-----|--|--|--|----------------------|--------|--|--|--|--|------------|--|
| Mild performance cam, great low down torque & mid range needs springs & computer calibration (See Fitting notes 1) | 1800 - 5500 | 291208-14 | 275 | 281 | 216 | 220 | .578" | .578" | 114 | | | | 4435-16 ^D | 1.800" | | | | | PR-HEMI-16 | |
| Street cam, good mid range power needs valve springs & computer calibration (See Fitting notes 1) | 2100 - 6000 | 291247-14 | 286 | 286 | 219 | 227 | .563" | .570" | 114 | | | | 4435-16 ^D | 1.800" | | | | | PR-HEMI-16 | |

CHRYSLER 6.4 HEMI CAMSHAFTS AVAILABLE

PLEASE CONTACT CROW CAMS SALES TO ARRANGE YOUR CUSTOM CAMSHAFT

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 |

CHRYSLER HEMI KB & CHRYSLER SOLID LIFTER CAMS AVAILABLE
CONTACT OUR 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.

FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.
 • 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Oil Pump Gear |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|-----------|--------------|------------------|----------|----------|-----------|------------|----------|---------------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| HYDRAULIC (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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | HT2011-12 | 7736-12 | 1.687" | 12700-12 | 12102-12 | KG303-12 | CS6265 | | 60062 |
| Increased mid to top range performance (See Fitting notes 1) | 1900 - 4900 | 6603 | 280 | 280 | 214 | 214 | .510" | .510" | 110 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | HT2011-12 | 7736-12 | 1.687" | 12700-12 | 12102-12 | KG303-12 | CS6265 | | 60062 |

CHRYSLER SMALL BLOCK V8 273-360 ROCKER RATIO 1.5

| | | | | | | | | | | | | | | | | | | | | |
|--|-------------|-------|-----|-----|-----|-----|-------|-------|-----|--|----------|------------|---------|--------|----------|----------|----------|--------|--|--|
| HYDRAULIC | | | | | | | | | | | | | | | | | | | | |
| Standard replacement cam. | 850 - 4000 | 18000 | 253 | 257 | 182 | 192 | .365" | .395" | 112 | | ZDDP-100 | HT2011-16 | 5091-16 | 1.687" | 12700-16 | 12108-16 | KG303-16 | CS8318 | | |
| Mild cam , smooth idle, for improved performance from stock engines. | 1200 - 4200 | 18602 | 270 | 270 | 208 | 208 | .420" | .420" | 110 | | ZDDP-100 | HT2011-16 | 5091-16 | 1.687" | 12700-16 | 12108-16 | 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 | | ZDDP-100 | HT2011-16 | 5091-16 | 1.687" | 12700-16 | 12108-16 | 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 | | ZDDP-100 | HT2011-16 | 7736-16 | 1.687" | 12700-16 | 12108-16 | KG303-16 | CS8318 | | |
| High performance street applications. (See Fitting notes 1 & 2) | 2500 - 5500 | 18619 | 286 | 290 | 226 | 232 | .459" | .475" | 110 | | ZDDP-100 | HT2011R-16 | 7736-16 | 1.687" | 12700-16 | 12108-16 | KG303-16 | CS8318 | | |

CHRYSLER SLANT 6 ROCKER RATIO 1.5

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------|------------|------|-----|-----|-----|-----|-------|-------|-----|--|----------------------|----------|---------|---------|--------|--|----------|--|--------|--|
| SOLID | | | | | | | | | | | | | | | | | | | | |
| Standard replacement cam. | 800 - 3800 | 7000 | 267 | 270 | 194 | 198 | .396" | .402" | 110 | | IN .018" EX .018" | ZDDP-100 | AT31-12 | 5091-12 | 1.650" | | 12108-12 | | CS6225 | |
| Mild street cam | 2000-5000 | 7606 | 270 | 270 | 222 | 222 | .397" | .397" | 110 | | IN .016" EX .016" | ZDDP-100 | AT31-12 | 5091-12 | 1.650" | | 12108-12 | | CS6225 | |

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^D denotes that it is a double spring.

FORD 6 CYLINDER

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|---|----------|--------------|----------------------|----------|----------|-----------|------------|----------|-----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| PRE-CROSS FLOW HYDRAULIC ROCKER RATIO 1.5 THESE GRINDS TO SUIT 250 ENGINE. SPECIAL GRINDS AVAILABLE FOR 220 & 200 ENGINES. 170 & 144 REGRIND ONLY. | | | | | | | | | | | | | | | | | | | | | |
| Standard replacement cam | 900 - 3600 | 63000 | 255 | 255 | 194 | 194 | .355" | .355" | 112 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | HT950-12 | 1025-12 | 1.550" | 11700-12 | 11703-12 | KG317-12 | CS6250 | | |
| CROSS FLOW HYDRAULIC ROCKER RATIO 1.73 DG2 OR DG2A DISTRIBUTOR GEAR MUST BE USED. GRINDS TO SUIT 250 & 200 ENGINES. | | | | | | | | | | | NOTE: 12706-12 RETAINER & 11704-12 LOCKS ARE MULTI GROOVE. FOR SINGLE GROOVE, USE 11700-12 & 4135-12 | | | | | | | | | | |
| Standard replacement suit carbie | 850 - 3200 | 14002 | 256 | 256 | 188 | 188 | .405" | .405" | 107 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 11704-12 | KG317-12 | CS6250 | PR-917-12 | CRFX177 |
| Standard replacement suit EFI | 900 - 3400 | 14678 | 260 | 260 | 197 | 197 | .439" | .439" | 109 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900R-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900R-12 | 7739-12 | 1.760" | 12706-12 | 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 | | | ZDDP-100 | HT900R-12 | 7333-12 ^D | 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 | | | ZDDP-100 | HT900-12 | 7739-12 | 1.760" | 12706-12 | 11704-12 | KG317-12 | 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 | | | ZDDP-100 | HT900R-12 | 7333-12 ^D | 1.820" | 12700-12 | 11704-12 | VSV530-12 | CS6250 | PR-917-12 | CRFX177 |

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^D denotes that it is a double spring.

FORD 6 CYLINDER ROCKER RATIO 1.73

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|-------------------|----------|--------------|----------------------|----------|----------|-----------|------------|----------|---------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| CROSS FLOW SOLID DG2 OR DG2A DISTRIBUTOR GEAR MUST BE USED. GRINDS TO SUIT 250 & 200 ENGINES. | | | | | | | | | | | | | | | | | | | | | |
| 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 | | IN .012" EX .014" | ZDDP-100 | AT2000-12 | 7333-12 ^D | 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 | | IN .024" EX .026" | ZDDP-100 | AT2000-12 | 7333-12 ^D | 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 | | IN .018" EX .022" | ZDDP-100 | AT2000-12 | 7333-12 ^D | 1.820" | 12700-12 | 11704-12 | VSV530-12 | CS6250 | PR5980 | CRFX177 |

FORD CLEVELAND V8 302c - 351c ROCKER RATIO 1.73

RPM RANGE TO SUIT 351, FOR 302 RPM RANGE ADD +500 RPM.

| HYDRAULIC | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|---------------|----------|-----------|----------------------|--------|----------|----------|-----------|---------|-----------|----------|
| NOTE: 12706-16 RETAINER & 11702-16 LOCKS ARE MULTI GROOVE. FOR SINGLE GROOVE, USE 11700-16 & 4135-16 | | | | | | | | | | | | | | | | | | | | | |
| Standard replacement | 900 - 3500 | 21000 | 285 | 272 | 191 | 191 | .405" | .400" | 112 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 11702-16 | KG317-16 | CS8351C | PR-414-16 | CRFCL177 |
| Hi torque, fuel efficient, dual pattern stock idle | 1000 - 3800 | 21613 | 260 | 267 | 194 | 202 | .450" | .470" | 112 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 11702-16 | KG317-16 | CS8351C | PR-414-16 | CRFCL177 |
| Medium idle, must use improved carbie & headers (See Fitting notes 1 & 2) | 1800 - 5000 | 21890 | 272 | 283 | 212 | 217 | .498" | .507" | 110 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | 21689-9 | 282 | 289 | 222 | 230 | .512" | .519" | 109 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 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 | | Single Groove | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | | Multi Groove | ZDDP-100 | HT900-16 | 7739-16 | 1.760" | 12706-16 | 11702-16 | KG317-16 | CS8351C | PR-414-16 | CRFCL177 |
| Street /strip cam, aggressive idle needs heads, carbie headers, hi stall & roller rockers (See Fitting notes 5) | 3000 - 6200 | 21787-9 | 284 | 295 | 238 | 246 | .561" | .566" | 109 | | Single Groove | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 - 6400 | 21700 | 307 | 313 | 241 | 248 | .570" | .570" | 108 | | Single Groove | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | | Single Groove | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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.

Note: Springs marked with xxxx-xx^D 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 CLEVELAND V8 302c - 351c

RPM RANGE TO SUIT 351, FOR 302 RPM RANGE ADD +500 RPM.

ROCKER RATIO 1.73

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|--------------|------------------|----------|-------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| SOLID | | | | | | | | | | | | | | | | | | | | |
| Choppy idle, great mid range power needs serious engine mods & hi stall (See Fitting notes 1, 2, 3 & 4) | 2800 - 6000 | 21626 | 278 | 288 | 238 | 244 | .560" | .570" | 109 | | | | | | | | | | | |
| GT HO solid (See Fitting notes 1, 2, 3 & 4) | 3200 - 6000 | 21726 | 295 | 295 | 242 | 242 | .510" | .510" | 111 | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| HYDRAULIC ROLLER | | | | | | | | | | | | | | | | | | | | |
| NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | | | | | | | | | | | |
| Mild performance cam great bottom end & mid range, needs manifold & headers (See Fitting notes 5) | 1700 - 5500 | 211414-8 | 277 | 287 | 213 | 223 | .530" | .550" | 108 | | | | | | | | | | | |
| Mild performance cam great bottom end & mid range, choppy idle need manifold & headers (See Fitting notes 5) | 1800 - 5800 | 21940 | 283 | 283 | 218 | 226 | .547" | .548" | 108 | | | | | | | | | | | |
| 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 | | | | | | | | | | | |
| Performance cam mid range, choppy idle need manifold & headers (See Fitting notes 5) | 2500 - 6000 | 211515 | 294 | 298 | 228 | 234 | .621" | .618" | 107 | | | | | | | | | | | |
| Hi performance cam mid range & top end power, choppy idle need manifold & headers (See Fitting notes 5) | 3000 - 6200 | 211477 | 304 | 314 | 234 | 240 | .573" | .573" | 108 | | | | | | | | | | | |
| Hi performance cam mid range & top end power, choppy idle need manifold & headers (See Fitting notes 5) | 3200 - 6200 | 211315-8 | 303 | 307 | 238 | 244 | .596" | .596" | 108 | | | | | | | | | | | |
| SOLID ROLLERS | | | | | | | | | | | | | | | | | | | | |
| NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS | | | | | | | | | | | | | | | | | | | | |
| Street/ strip roller, med lift, heap of bottom end torque, soft on valve springs (See Fitting notes 1- 7) | 3800 - 6500 | 211301 | 286 | 295 | 252 | 260 | .625" | .625" | 107 | | | | | | | | | | | |
| Race roller, for max mid & upper RPM needs, comp and after market heads etc (See Fitting notes 1- 7) | 4000 - 7000 | 21819 | 291 | 298 | 259 | 266 | .623" | .623" | 108 | | | | | | | | | | | |
| Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1- 7) | 4000 - 7100 | 211387 | 298 | 303 | 259 | 265 | .678" | .676" | 108 | | | | | | | | | | | |

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^D denotes that it is a double spring.
FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.
 • 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|----------------------|-----------|----------------------|----------------------|----------|----------|-----------|------------|-----------|-----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| 260/289/302 HYDRAULIC | | | | | | | | | | | | | | | | | | | | | |
| Hi torque, fuel efficient cam can be used a STD cam | 1100 - 3900 | 15613 | 260 | 267 | 194 | 202 | .421" | .442" | 112 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | 1400 - 4000 | 15602 | 270 | 270 | 208 | 208 | .454" | .454" | 110 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | HT900-16 | 7333-16 ^D | 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 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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) | 3100 - 6200 | 15787-9 | 284 | 295 | 238 | 246 | .525" | .530" | 109 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8302W | See Notes | CRFW167 | |
| 260/289/302 SOLID | | | | | | | | | | | | | | | | | | | | | |
| 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 | | IN .024" EX .026" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | 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 | | IN .016" EX .016" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | 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 | | IN .018" EX .018" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | 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 | | IN .026" EX .026" | ZDDP-100 | AT2000L-16 | 7437-16 ^D | 1.800" | 11700-16 | 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 | | IN .014" EX .018" | ZDDP-100 | AT2000L-16 | 7437-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |

Note: Springs marked with xxxx-xx^D 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 99-101.

- 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|--------------|----------------------|----------|----------|-----------|------------|----------|-----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| 351W HYDRAULIC | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | 62787-9 | 284 | 295 | 238 | 246 | .525" | .530" | 109 | | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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 | | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 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) | 3700 - 6500 | 62802 | 294 | 294 | 246 | 246 | .547" | .547" | 109 | | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|--------|-----|-----|-----|-----|-------|-------|-----|--|----------------------|----------|------------|----------------------|--------|----------|---------|-----------|---------|-----------|---------|
| 351W SOLID | | | | | | | | | | | | | | | | | | | | | |
| 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 | | IN .024" EX .026" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | 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 | | IN .016" EX .016" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | 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 | | IN .018" EX .018" | ZDDP-100 | AT2000-16 | 7333-16 ^D | 1.750" | 11700-16 | 4135-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |
| Performance solid cam (See Fitting notes 5) | 3600 - 7200 | 62731 | 292 | 297 | 253 | 260 | .575" | .585" | 108 | | IN .026" EX .016" | ZDDP-100 | AT2000L-16 | 7437-16 ^D | 1.800" | 11700-16 | 4135-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |
| Performance solid cam (See Fitting notes 5) | 3800 - 7400 | 62794 | 306 | 311 | 265 | 268 | .612" | .612" | 107 | | IN .014" EX .018" | ZDDP-100 | AT2000L-16 | 7437-16 ^D | 1.800" | 11700-16 | 4135-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |

351W HYDRAULIC ROLLER - FIRING ORDER 1, 3, 7, 2, 6, 5, 4, 8 **NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS**

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 | 621414-8 | 277 | 287 | 213 | 223 | .499" | .515" | 108 | | | | 5351H | 7333-16 ^D | 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 ^D | 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 ^D | 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 ^D | 1.800" | 11700-16 | 11701-16 | VSV530-16 | CS8302W | See Notes | CRFW167 |

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^D denotes that it is a double spring.
FITTING NOTES: Push Rods sold separately. Check length before ordering from page 99-101.
 • 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

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

351W SOLID ROLLERS

NOTE: MUST USE CROW CAMS MELONISED DISTRIBUTOR GEAR. SEE PG 97 FOR DISTRIBUTOR GEARS

260, 289 & 302 use 351W roller billet

| | | | | | | | | | | | | | | | | | | | | |
|---|-------------|--------|-----|-----|-----|-----|-------|-------|-----|--|--|--------|----------------------|--------|----------|----------|-----------|---------|-----------|--|
| Street/strip application, bracket engine needs comp, good heads etc (See Fitting notes 1 - 7) | 3600 - 6600 | 621301 | 286 | 295 | 252 | 260 | .585" | .585" | 107 | | | 5300PF | 4910-16 ^D | 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 | | | 5300PF | 4910-16 ^D | 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 | | | 5300PF | 4920-16 ^D | 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) | 4500 - 7500 | 621576 | 307 | 310 | 276 | 278 | .608" | .608" | 108 | | | 5300PF | 4920-16 ^D | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8302W | See Notes | |

EFI HYDRAULIC ROLLER EB-AUII 5L 302 V8 FIRING ORDER 1,3,7,2,6,5,4,8

***NOTE: MUST REMOVE FACTORY FITTED SLOW ROTOR FROM EXHAUST WHEN USING 11700-XR8**

| | | | | | | | | | | | | | | | | | | | | |
|--|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|-------|----------------------|--------|------------|---------|--|------------|-----------|---------|
| STD replacement | 1000 - 4600 | 62952 | 262 | 262 | 186 | 196 | .428" | .453" | 117 | | | 5300H | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | 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 | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | 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 | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | 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 | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | 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 | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | 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 ^D | 1.800" | 11700-XR8* | 4133-16 | | CS8302WEFI | See Notes | CRFW163 |
| Good mid range performance needs hi stall (See Fitting notes 1 & 2) | 2700 - 6700 | 621354E | 293 | 299 | 225 | 224 | .510" | .510" | 115 | | | 5300H | 7739-16 | 1.750" | 11700-XR8* | 4135-16 | | CS8302WEFI | See Notes | CRFW163 |

429, 460 HYDRAULIC ROCKER RATIO 1.73

***NOTE: SINGLE GROOVE VALVE LOCKS USE 11701-16, MULTI GROOVE VALVE USE 11702-16 & 12700-16**

| | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|----------|-----------|----------------------|--------|----------|---------|-----------|--------|-----------|----------|
| 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 | | ZDDP-100 | HT900-16 | 7739-16 | 1.750" | 11700-16 | 4135-16 | KG317-16 | CS8460 | PR-978-16 | 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 | | ZDDP-100 | HT900-16 | 7739-16 | 1.750" | 11700-16 | 4135-16 | KG317-16 | CS8460 | PR-978-16 | 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 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8460 | PR-978-16 | CRFCL177 |
| Street /strip cam, aggressive idle needs heads, carbie headers & hi stall (See Fitting notes 5) | 2600 - 6300 | 31787-9 | 284 | 295 | 238 | 246 | .561" | .566" | 109 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8460 | PR-978-16 | 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 | | ZDDP-100 | HT900R-16 | 7333-16 ^D | 1.800" | 11700-16 | 4133-16 | VSV530-16 | CS8460 | PR-978-16 | CRFCL177 |

Note: Springs marked with xxxx-xx^D 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 99-101.

- 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|----------------------|------------------|----------|----------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| FE, 332, 352, 390, 406, 427, 428 HYDRAULIC | | | | | | | | | | | | | | | | | | | | |
| 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 | | ZDDP-100 | HT950-16 | 7739-16 | 1.760" | 12706-16 | 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 | | ZDDP-100 | HT950-16 | 7739-16 | 1.760" | 12706-16 | 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 | | ZDDP-100 | HT950-16 | 7333-16 ^D | 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 | 19787-9 | 284 | 295 | 238 | 246 | .570" | .576" | 109 | | ZDDP-100 | HT950-16 | 7333-16 ^D | 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 | | ZDDP-100 | HT950-16 | 7333-16 ^D | 1.820" | 12700-16 | 12708-16 | | CS8FE428 | | |

FORD OHC 6 EA-AU CAMS MAY REQUIRE VERNIER GEAR

| EA, EB, ED, EF, EL 1989 - JAN 98 MULTIPOINT EFI <small>ROCKER RATIO 2.0</small> | | | | | | | | | | | NOTE: FOR SINGLE GROOVE VALVES, USE 11700-12 RETAINERS & 11703-12 LOCKS | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|--|---------|--------|----------|----------|--|----------|--|--|
| 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 ECU tuning, headers & valve springs | 1500 - 5200 | 2222549 | 268 | 260 | 210 | 200 | .530" | .500" | 112 | | | | 7739-12 | 1.820" | 12700-12 | 11704-12 | | CS6EA-VS | | |
| Aggressive street cam. Strong top end power. Needs ECU tuning, headers & valve springs. | 2500 - 5800 | 2221300 | 282 | 288 | 220 | 220 | .500" | .500" | 110 | | | | 7739-12 | 1.820" | 12700-12 | 11704-12 | | CS6EA-VS | | |

| EL-AU FEB 98-02 NON VCT <small>ROCKER RATIO 1.8</small> | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|--|---------|--------|----------|----------|--|----------|--|--|
| High torque cam to suit AU can use with LPG | 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 | 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 | | |
| Aggressive street cam. Very strong top end performance. Lopey idle. Requires ECU tuning, headers & valve springs. | 2800 - 6200 | 2232596 | 283 | 283 | 226 | 226 | .534" | .537" | 110 | | | | 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.



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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|--------------------------------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|-----------|--------------|------------------|----------|-------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| DOHC 6 CYLINDER BA - FG FOR TURBO APPLICATIONS, USE 323XXXT INLET CAMS | | | | | | | | | | | | | | | | | | | | |
| NOTE: PARTS KIT VTKBA6T-24 INCLUDES 1809-24 SPRINGS AND 10703-24 RETAINERS | | | | | | | | | | | | | | | | | | | | |
| Mild cam, good mid range, choppy idle suit standard springs, needs computer mods & headers. Not suitable for FG. N/A Use 3231393 & 3241393 Turbo applications use 3231393T & 3241393 | 2700 - 6200 | 3231393 3231393T 3241393 | 259 | | 195 | | .452" | | 112 | | | BA-ADJ-24 | 1808-24 | 1.480" | | | | | | |
| Performance street cams, great mid range and upper RPM, needs valve springs, headers, computer & high stall N/A Use 3232591 & 3242591 Turbo applications use 3232591T & 3242591T | 2700 - 6200 | 3232591 3232591T 3242591 | 260 | | 204 | | .470" | | 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. N/A Use 3232590 & 3242590 Turbo applications use 3232590T & 3242590T | 2800 - 6500 | 3232590 3232590T 3242590 | 262 | | 208 | | .471" | | 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 clearance. N/A Use 3232592 & 3242592 Turbo applications use 3232592T & 3242592T | 3200 - 6500 | 3232592 3232592T 3242592 | 268 | | 214 | | .475" | | 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 N/A Use 3232593 & 3242593 Turbo applications use 3232593T & 3242593T | 3500 - 6800 | 3232593 3232593T 3242593 | 275 | | 218 | | .495" | | 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 N/A Use 3232562 & 3242562 Turbo applications use 3232562T & 3242562T | 3700 - 7000 | 3232562 3232562T 3242562 | 282 | | 223 | | .500" | | 112 | | | BA-ADJ-24 | VTKBA6T-24 | 1.520" | | | | | | |
| Race application only not for street use N/A Use 3232565 & 3242565 Turbo applications use 3232565T & 3242565T | 4000 - 7800 | 3232565 3232565T 3242565 | 309 | | 237 | | .516" | | 112 | | | BA-ADJ-24 | VTKBA6T-24 | 1.520" | | | | | | |

FORD DOHC 4.0L BARRA BA-FG SPRING TOOL & VERNIER GEAR

| Part Number | Description | |
|------------------|--|---|
| SRT-BARRA | Ford DOHC 4L Barra Spring Compressor/Removal Tool. With this tool you do not need to remove the cylinder head. Made in Australia |  |
| VG-BARRA | Ford DOHC 4L Barra Vernier camshaft gear set. |  |

STANDARD BA-BF CAMSHAFTS 172/180 @ .050 .430" VALVE LIFT.

PART NO: **3230000** INTAKE. **3240000** EXHAUST.

STANDARD FG CAMSHAFTS 185/185 @ .050 .440" VALVE LIFT

PART NO: **3230001** INTAKE. **3240001** EXHAUST.

VTKBA6T-24 INCLUDES 1809-24 SPRINGS AND 10703-24 RETAINERS. **LOCKS NOT INCLUDED**

10703-24 RETAINER HAS A + .040" OFFSET TO INSTALL AT 1.520"

| Part Number | Installed Height | Installed Pressure | Pressure @ .5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks |
|----------------|------------------|--------------------|--------------------|-----------|--------------|-----------------|-------------|
| 1808-24 | 1.480" | 90 | 200 | .550" | .880" | Std | Std |
| 1809-24 | 1.520" | 105 | 205 | .570" | .900" | 10703 | Std |

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.

- 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.

FORD MODULAR V8

RH CAM ORIENTATION IS DRIVER SIDE, LH IS PASSENGER SIDE.

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

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

BA/BF QUAD CAM 260KW

NOTE: PARTS KIT VTKBAXR8-32 INCLUDES 1809-24 SPRINGS AND 10704-32 RETAINERS

| | | | | | | | | | | | | | | | | | | | |
|---|-------------|--|-----|-----|-----|-----|-------|-------|-----|--|--|------------------------|------------------|-----|-----|--|--|--|--|
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1808-32 VTKBAXR8-32 | 1.490" 1.520" | Std | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1808-32 VTKBAXR8-32 | 1.490" 1.520" | Std | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1808-32 VTKBAXR8-32 | 1.490" 1.520" | Std | Std | | | | |

BA/BF QUAD CAM 290KW

| | | | | | | | | | | | | | | | | | | | |
|--|-------------|--|-----|-----|-----|-----|-------|-------|-----|--|--|---------|--------|----------|-----|--|--|--|--|
| Performance cams suit 290kw engines great bottom end, good mid range, choppy 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1809-32 | 1.590" | 10705-32 | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1809-32 | 1.590" | 10705-32 | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1809-32 | 1.590" | 10705-32 | Std | | | | |
| Performance cams, max RPM range, Non street application. Upper RPM power. Needs valve springs, header, cats, high end ECU & tune. May require vernier gear set | 3500 - 7200 | 270GTHO 271GTHO 272GTHO 273GTHO | 280 | 280 | 230 | 230 | .540" | .504" | 115 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1809-32 | 1.590" | 10705-32 | Std | | | | |

FG QUAD CAM 315KW

| | | | | | | | | | | | | | | | | | | | |
|---|-------------|--|-----|-----|-----|-----|-------|-------|-----|--|--|---------|--------|-----|-----|--|--|--|--|
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1804-32 | 1.590" | Std | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1804-32 | 1.590" | Std | Std | | | | |
| 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 | RH Inlet LH Inlet RH Exhaust LH Exhaust | | 1804-32 | 1.590" | Std | Std | | | | |

FORD 5.0 LTR COYOTE MUSTANG 2016-ON

SEE PAGE 93 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 FLAT HEAD V8

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|----------------------|----------|--------------|------------------|----------|-------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| FORD FLAT HEAD SOLID (1949 Onward) | | | | | | | | | | | | | | | | | | | | |
| Factory 1949-50 Mercury Grind | 1500 - 4600 | 635950 | 243 | 254 | 210 | 210 | .329" | .335" | 110 | | IN .010" EX .012" | ZDDP-100 | | | | | | | | |
| Mild cam good bottom end power, for street engine | 1500 - 4800 | 63582 | 273 | 289 | 210 | 215 | .314" | .327" | 111 | | IN .014" EX .016" | ZDDP-100 | | | | | | | | |
| Medium cam lumpy idle good mid range power | 2200 - 5200 | 635290 | 285 | 290 | 228 | 228 | .363" | .364" | 110 | | IN .012" EX .012" | ZDDP-100 | | | | | | | | |
| Hot cam, lumpy idle, good upper RPM range need well prepared engine | 2500 - 5500 | 635289 | 298 | 292 | 244 | 244 | .406" | .406" | 109 | | IN .012" EX .012" | ZDDP-100 | | | | | | | | |
| Aggressive cam, strong top end performance. | 2600 - 5500 | 635930 | 270 | 265 | 247 | 240 | .365" | .371" | 111 | | IN .012" EX .012" | ZDDP-100 | | | | | | | | |
| For all pre 1949 SV engines use this part number, ask about the many grinds available for Flat Head Fords | | 633900 | | | | | | | | | | ZDDP-100 | | | | | | | | |

FORD 4 CYLINDER .790" FACE DIAMETER LIFTERS ARE REFACE ONLY

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Lifter Diam. (VT2014) | Valve Spring | Installed Height | Retainer | Locks | Timing Kit | Pushrods | Rockers |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|----------------------|----------|-----------------------|--------------------------|---------------------|----------|----------|-------------------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| KENT <small>ROCKER RATIO 1.50</small> <small>.790" FACE DIAMETER LIFTERS ARE REFACE ONLY</small> | | | | | | | | | | | | | | | | | | | | |
| STD replacement cam | 900 - 4000 | 51000 | 255 | 265 | 194 | 202 | .350" | .340" | 111 | | IN .012" EX .012" | ZDDP-100 | VT2014 | | 2021-8 | 1.289" | Standard | Standard | CS41500 | RR811 |
| Mild cam, suit slighty mod engine, sporty idle quilty, needs valve springs headers | 2000 - 5000 | 51606 | 260 | 260 | 222 | 222 | .397" | .397" | 110 | | IN .016" EX .016" | ZDDP-100 | VT2014 | .916" Face .512" Stem | 2021-8 | 1.289" | Standard | Standard | CS41500 | RR811 |
| Performance cams, great mid range, needs valve springs headers carbies & ignition | 2500 - 6000 | 51740 | 263 | 268 | 228 | 234 | .400" | .400" | 107 | | IN .016" EX .014" | ZDDP-100 | VT2014 | | 2834-8 ^D | 1.280" | Standard | Standard | CS41500 | RR811 |
| Performance street/track, needs mod eng. head, comp, headers carbies & ignition | 3500 - 7500 | 51623 | 270 | 270 | 240 | 240 | .410" | .410" | 106 | | IN .014" EX .014" | ZDDP-100 | VT2014 | | 2834-8 ^D | 1.280" | Standard | Standard | CS41500 | RR811 |
| CORTINA/ESCORT/PINTO 2000 | | | | | | | | | | | | | | | | | | | | |
| STD replacement cam | 1200 - 5000 | 26000 | 265 | 265 | 205 | 205 | .390" | .390" | 108 | | IN .017" EX .017" | ZDDP-100 | | 4250-8 ^D | 1.417" | Standard | Standard | CS42000-V cam gear only | RR811 | |
| Mild cam, suit slighty mod engine, Sporty idle quality, needs valve springs headers | 2500 - 6500 | 26874 | 275 | 275 | 221 | 221 | .416" | .416" | 114 | | IN .012" EX .012" | ZDDP-100 | | 4250-8 ^D | 1.417" | Standard | Standard | CS42000-V cam gear only | RR811 | |
| Performance street/strip, needs mod eng. head, comp, headers carbies & ignition | 3000 - 7000 | 26661 | 280 | 290 | 233 | 242 | .474" | .466" | 112 | | IN .011" EX .011" | ZDDP-100 | | 4250-8 ^D | 1.417" | Standard | Standard | CS42000-V cam gear only | RR811 | |

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^D 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.

HOLDEN GEMINI

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|---------------------|------------------|----------|----------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| 1600 NOTE: 1800cc and 2000cc engines use timing kit CS41800. 1800 & 2000cc engine camshafts are available as a custom grind. | | | | | | | | | | | | | | | | | | | | |
| Mild cam to suit standard engine | 2000 - 6000 | 782507 | 276 | 276 | 212 | 212 | .425" | .425" | 107 | | | | 5840-8 ^D | 1.550" | Standard | Standard | | | | |
| Medium performance suit modified engine needs extractors | 2500 - 6500 | 782508 | 284 | 284 | 218 | 218 | .425" | .425" | 105 | | | | 5840-8 ^D | 1.550" | Standard | Standard | | | | |
| Hot street engine needs comp, carbies and good exhaust system | 3000 - 7000 | 782509 | 288 | 288 | 225 | 226 | .466" | .466" | 109 | | | | 5833-8 ^D | 1.550" | Standard | Standard | | | | |
| Race cam needs cyl.head mods, comp, carbies & good exhaust | 3500 - 7800 | 782510 | 297 | 297 | 235 | 235 | .490" | .490" | 107 | | | | 5833-8 ^D | 1.550" | Standard | Standard | | | | |

HOLDEN 6 CYLINDER ROCKER RATIO 1.50

| RED/BLUE & BLACK HYDRAULIC | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------|-----|-----|-----|-----|-------|-------|-----|--|--|----------|----------------|-----------|----------------------|--------|----------|----------|-----------|------|-----------|----------|
| STD replacement cam, suit carbie | 800 - 3200 | 35002 | 258 | 269 | 187 | 199 | .350" | .385" | 108 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | CRHL6153 |
| STD replacement cam, suit EFI | 850 - 3500 | 35678 | 260 | 260 | 197 | 197 | .381" | .381" | 109 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | CRHL6153 |
| Hi torque cam, suit towing good economy | 1200 - 3900 | 35613 | 260 | 267 | 194 | 202 | .390" | .408" | 112 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | CRHL6153 |
| Mild cam for LPG, good power suit STD motor minimum mods. | 1400 - 4200 | 35631 | 269 | 269 | 202 | 207 | .395" | .395" | 112 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | CRHL6153 |
| Mild cam, improves throttle response good hyway cam suit STD to mild engine | 1700 - 4500 | 35602 | 270 | 270 | 208 | 208 | .420" | .420" | 110 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4719-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4823-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4823-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4823-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-105-12 | CRHL6157 |
| Hot street cam, wide power range, choppy idle, needs headers carbies, ignition & hi stall (See Fitting notes 5) | 2600 - 6100 | 35619 | 286 | 290 | 226 | 232 | .459" | .475" | 109 | | | ZDDP-100 | Red Black/Blue | HT969R-12 | 4823-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-926-12 | CRHL6157 |
| Performance street cam good mid range & upper RPM needs carbies headers etc similar. Factory XU1 Grind. (See Fitting notes 1 & 2) | 2800 - 6200 | 35604 | 304 | 304 | 228 | 228 | .423" | .423" | 110 | | | ZDDP-100 | Red Black/Blue | HT969C-12 | 4823-12 | 1.625" | 11707-12 | 11703-12 | KG819-12 | 44HP | PR-926-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969R-12 | 4823-12 | 1.625" | 11707-12 | 4134-12 | KG819-12 | 44HP | PR-926-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969R-12 | 4823-12 | 1.625" | 11707-12 | 4134-12 | KG819-12 | 44HP | PR-926-12 | 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 | | | ZDDP-100 | Red Black/Blue | HT969R-12 | 4334-12 ^D | 1.700" | 11707-12 | 4134-12 | VSV530-12 | 44HP | PR-926-12 | 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.

Note: Springs marked with xxxx-xx^D 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.

HOLDEN 6 CYLINDER ROCKER RATIO 1.50

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | | | | |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|--|---------|----------------------|------------------|----------------|----------------------|--|------------------|----------------------|---------------------|------------------------|------------------|------------------------|----------------------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | | | | | |
| RED/ BLUE & BLACK SOLID | | | | | | | | | | | | | | | | | | | | | | | | | |
| Small solid cam for street application (See Fitting notes 5) | 2400 - 5800 | 35609 | 265 | 265 | 229 | 229 | .442" | .442" | 109 | | | | | IN .016" EX .016" | ZDDP-100 | Red Black/Blue | AT992-12 AT992-12 | 4823-12 4334-12 ^D | 1.625" 1.700" | 11707-12 11717-12 | 11703-12 4134-12 | VSV530-12 VSV530-12 | 44HP 44HP | PR-926-12 PR-990-12 | CRHL6157 CRHL6157 |
| 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 | | | | | IN .012" EX .014" | ZDDP-100 | Red Black/Blue | AT992-12 AT992-12 | 4823-12 4334-12 ^D | 1.625" 1.700" | 11707-12 11717-12 | 11703-12 4134-12 | VSV530-12 VSV530-12 | CS6202 CS6202 | PR-926-12 PR-990-12 | CRHL6157 CRHL6157 |
| 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 | | | | | IN .024" EX .026" | ZDDP-100 | Red Black/Blue | AT992-12 AT992-12 | 4334-12 ^D 4334-12 ^D | 1.700" 1.700" | 11707-12 11717-12 | 4134-12 4134-12 | VSV530-12 VSV530-12 | CS6202 CS6202 | PR-926-12 PR-990-12 | CRHL6157 CRHL6157 |
| 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 | | | | | IN .022" EX .024" | ZDDP-100 | Red Black/Blue | AT992-12 AT992-12 | 4334-12 ^D 4334-12 ^D | 1.700" 1.700" | 11707-12 11717-12 | 4134-12 4134-12 | VSV530-12 VSV530-12 | CS6202 CS6202 | PR-926-12 PR-990-12 | CRHL6157 CRHL6157 |
| Race/competition, serious engine combo (See Fitting notes 5) | 3600 - 6600 | 35647 | 308 | 308 | 254 | 254 | .517" | .517" | 107 | | | | | IN .024" EX .024" | ZDDP-100 | Red Black/Blue | AT992-12 AT992-12 | 4334-12 ^D 4334-12 ^D | 1.700" 1.700" | 11707-12 11717-12 | 4134-12 4134-12 | VSV530-12 VSV530-12 | CS6202 CS6202 | PR-926-12 PR-990-12 | CRHL6157 CRHL6157 |

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

(VN series 1 Cylinder heads may have single or double valve springs)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|--|--|--|--|--|--|----------|----------------------|--------|----------|----------|--|-------|-----------|--|
| Hi torque for STD engine. (See Fitting notes 1) | 1500 - 5500 | 6071561 | 262 | 264 | 193 | 202 | .440" | .440" | 112 | | | | | | | | | 3800R-12 | 7332-12 ^D | 1.700" | Standard | 11703-12 | | CS6VN | PR-987-12 | |
| 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 | 7332-12 ^D | 1.700" | Standard | 11703-12 | | CS6VN | PR-987-12 | |
| 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 | 7332-12 ^D | 1.700" | Standard | 11703-12 | | CS6VN | PR-987-12 | |

VN SERIES 2 V6 TO VR 1991-93 ROCKER RATIO 1.60 **CUSTOM PROFILES AVAILABLE**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|---------|-----|-----|-----|-----|-------|-------|-----|--|--|--|--|--|--|--|--|----------|---------|--------|----------|----------|--|-------|-----------|--|
| 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-987-12 | |
| 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-987-12 | |
| 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-987-12 | |
| 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-987-12 | |

ECOTEC V6 VS-VY ROCKER RATIO 1.60 **CUSTOM PROFILES AVAILABLE**

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------|----------|-----|-----|-----|-----|-------|-------|-----|--|--|--|--|--|--|--|--|----------|---------|--------|----------|----------|--|-------|-----------|--|
| 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-905-12 | |
| 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-905-12 | |
| 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-905-12 | |
| 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-905-12 | |
| 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-905-12 | |

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^D 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.

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|--------------|----------------------|----------|----------|-----------|------------|----------|-----------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| RED/BLUE & BLACK HYDRAULIC | | | | | | | | | | | | | | | | | | | | | |
| Hi torque, smooth idle, fuel efficient can use as STD cam | 1100 - 3900 | 5613 | 260 | 267 | 194 | 202 | .430" | .450" | 112 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 | | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | 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 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | 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 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Hot street cam, choppy idle. Wide power band. Needs headers, carbie, ignition & high stall. (See Fitting notes 1 & 2) | 2400 - 5500 | 5689-9 | 280 | 289 | 222 | 230 | .489" | .495" | 109 | | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | 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 - 5600 | 5619 | 286 | 290 | 226 | 232 | .505" | .522" | 110 | | | ZDDP-100 | 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 - 5800 | 5761 | 292 | 292 | 230 | 230 | .495" | .495" | 109 | | | ZDDP-100 | 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 - 6000 | 5620 | 294 | 294 | 234 | 234 | .521" | .521" | 110 | | | ZDDP-100 | 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 | | | ZDDP-100 | 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 5) | 2800 - 6200 | 5747 | 294 | 307 | 236 | 246 | .577" | .586" | 107 | | | ZDDP-100 | HT969R-16 | 7333-16 ^D | 1.800" | 11710-16 | 4133-16 | 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 | | | ZDDP-100 | HT969R-16 | 4845-16 | 1.800" | 11717-16 | 4133-16 | 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) | 3000 - 6200 | 5787-8 | 284 | 295 | 238 | 246 | .535" | .540" | 108 | | | ZDDP-100 | HT969R-16 | 4845-16 | 1.800" | 11717-16 | 4133-16 | VSV530-16 | CS8308 | PR-964-16 | CRHL8167 |
| Street / strip hyd cam, will need engine mods, comp,pipes,heads, ignition & hi stall (See Fitting notes 1 & 2) | 3200 - 6200 | 5616 | 300 | 300 | 240 | 240 | .495" | .495" | 110 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | 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 | | | ZDDP-100 | HT969R-16 | 7333-16 ^D | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR-964-16 | CRHL8167 |

Note: Springs marked with xxxx-xx^D 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 253, 308 V8

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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | | | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|-------------------|------------------|-----------|----------------------|-----------|------------|----------|-----------|--------|------------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | | | |
| RED/BLUE/BLACK SOLID | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | IN .024" EX .026" | ZDDP-100 | AT992-16 | 7333-16 ^D | 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 | | | | IN .022" EX .024" | ZDDP-100 | AT992-16 | 7333-16 ^D | 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 | | | | IN .018" EX .022" | ZDDP-100 | AT992-16 | 7333-16 ^D | 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 | | | | IN .026" EX .026" | ZDDP-100 | AT992L-16 | 7342-16 ^D | 1.800" | 11710-16 | 4133-16 | 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 | | | | IN .014" EX .016" | ZDDP-100 | AT992L-16 | 7342-16 ^D | 1.850" | 11710-16 | 4134-16 | VSV530-16 | CS8308 | PR5885-110 | CRHL8167 |
| RED/BLUE/BLACK HYDRAULIC ROLLER | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | 7333-16 ^D | 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 | 51433 | 297 | 303 | 228 | 238 | .607" | .603" | 110 | | | | | | 5208H | 7342-16 ^D | 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 | 51315-8 | 303 | 307 | 238 | 244 | .568" | .568" | 108 | | | | | | 5208H | 7342-16 ^D | 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) | 3300 - 6200 | 51719 | 295 | 315 | 238 | 243 | .585" | .621" | 107 | | | | | | 5208H | 7342-16 ^D | 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 ^D | 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 ^D | 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 | 51435-8 | 317 | 326 | 249 | 258 | .570" | .570" | 108 | | | | | | 5208H | 7342-16 ^D | 1.850" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| RED/BLUE/BLACK SOLID ROLLER | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | IN .016" EX .016" | | 5208 | 7342-16 ^D | 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 | | | | IN .016" EX .016" | | 5208 | 4910-16 ^D | 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 | | | | IN .018" EX .018" | | 5208 | 4910-16 ^D | 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 | | | | IN .016" EX .016" | | 5208 | 4920-16 ^D | 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 | | | | IN .016" EX .016" | | 5208 | 4920-16 ^D | 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 | | | | IN .018" EX .020" | | 5208 | 4920-16 ^D | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes | |

Note: Springs marked with xxxx-xx^D 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 99-101.

- 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 WITH VN-VT HEADS.ROCKER RATIO 1.65

CAMS ALSO SUIT 253-308 BLOCKS WITH VN-VT HEADS

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|--------------|----------------------|----------|----------|-----------|------------|----------|-----------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| HYDRAULIC EFI ALL CAMS EXCEPT 4000 (304 ENGINE ONLY) & 4001 (215KW ENGINE ONLY) WILL REQUIRE TUNING | | | | | | | | | | | | | | | | | | | | | |
| Standard replacement cam. 304 No tune req'd | 900 - 3800 | 4000 | 255 | 252 | 200 | 198 | .422" | .422" | 117 | | | ZDDP-100 | 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) Requires tuning. | 1200 - 4200 | 4631 | 269 | 269 | 202 | 207 | .434" | .434" | 112 | | | ZDDP-100 | HT969C-16 | 4931-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-387-16 | CRHL8167 |
| Genuine holden V8 5.7 215Kw No tune req'd for 215kW engine. (See Fitting notes 1) | 1400 - 4200 | 4001 | 260 | 260 | 206 | 206 | .463" | .463" | 112 | | | ZDDP-100 | HT969C-16 | 4931-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-387-16 | CRHL8167 |
| Cam for increased mid range, smooth idle, dual pattern for LPG. No stall req'd Requires tuning. (See Fitting notes 1) | 1700 - 4700 | 4666 | 270 | 280 | 204 | 214 | .462" | .486" | 112 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Mild cam suit standard engine. No stall req'd Requires tuning. (See Fitting notes 1) | 1800 - 4800 | 4892 | 275 | 275 | 215 | 215 | .487" | .487" | 111 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Medium performance cam, great torque & mid range, Requires tuning. Benefits with stall. (See Fitting notes 1) | 2100 - 5000 | 4770 | 280 | 290 | 214 | 224 | .483" | .490" | 111 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Medium performance cam, STD idle needs exhaust & requires tuning. No Stall (See Fitting notes 1) | 2200 - 5000 | 4502 | 282 | 276 | 218 | 214 | .485" | .485" | 113 | | | ZDDP-100 | 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 & requires tuning. Benefits with stall. See Fitting notes 1) | 2250 - 5350 | 4651 | 282 | 282 | 222 | 222 | .493" | .493" | 114 | | | ZDDP-100 | 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, hi stall and tuning. (See Fitting notes 1 & 2) | 2500 - 5500 | 4619-12 | 286 | 290 | 226 | 232 | .505" | .522" | 112 | | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Performance cam, good mid range needs exhaust & requires tuning. Benefits with stall. (See Fitting notes 1) | 2400 - 5500 | 4503 | 289 | 282 | 227 | 220 | .486" | .486" | 113 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Aggressive street cam, idle needs headers, comp hi stall and tuning (See Fitting notes 1 & 2) | 2600 - 5600 | 4761 | 292 | 292 | 230 | 230 | .495" | .495" | 109 | | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Aggressive hyd cam, need good breathing & engine combo etc. Requires tuning & hi stall (See Fitting notes 1 & 2) | 2700 - 6200 | 4620 | 294 | 294 | 234 | 234 | .521" | .521" | 110 | | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Street /strip hyd cam, medium idle needs heads, headers, hi stall, roller rockers and tuning. (See Fitting notes 1 & 2) | 2800 - 6000 | 4787 | 284 | 295 | 238 | 246 | .535" | .540" | 112 | | | ZDDP-100 | HT969R-16 | 4845-16 | 1.800" | 11717-16 | 4133-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| HYDRAULIC ROLLER EFI (ALL CAMS WILL REQUIRE TUNING) | | | | | | | | | | | | | | | | | | | | | |
| Standard 355 Roller Camshaft. Can be used for mild performance 304ci applications. | 1700 - 5500 | 4003 | 267 | 267 | 207 | 207 | .463" | .463" | 112 | | | | 5208H | 4845-16 | 1.800" | 11717-16 | 4133-16 | KG819-16 | CS8308 | PR-988-16 | CRHL8167 |
| Performance cam great mid range, std stall (See Fitting notes 1,2) | 1900 - 6300 | 41318 | 281 | 275 | 218 | 214 | .548" | .548" | 111 | | | | 5208H | 4845-16 | 1.800" | 11717-16 | 4133-16 | KG819-16 | CS8308 | PR-988-16 | CRHL8167 |
| Improved mid/top end power. Twin Cat exhaust for maximum performance. Standard torque converter or 2000 hi stall can be used. (See Fitting notes 1,2) | 2000 - 6500 | 4903 | 285 | 279 | 222 | 217 | .548" | .548" | 112 | | | | 5208H | 4845-16 | 1.800" | 11717-16 | 4133-16 | KG819-16 | CS8308 | PR-988-16 | CRHL8167 |
| Improved top end power. Twin Cat exhaust for maximum performance. requires hi stall | 2600 - 6500 | 41753 | 276 | 270 | 229 | 224 | .552" | .544" | 112 | | | | 5208H | 7333-16 ^D | 1.800" | 11700-16 | 4134-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Improved top end power. Twin Cat exhaust for maximum performance. Hi stall req'd, head work | 3200 - 6500 | 41754 | 288 | 284 | 237 | 230 | .559" | .554" | 111 | | | | 5208H | 7333-16 ^D | 1.800" | 11700-16 | 4134-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |

Note: Springs marked with xxxx-xx^D 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-VT HEADS. ROCKER RATIO 1.65

CAMS ALSO SUIT 253-308 BLOCKS WITH VN-VT HEADS

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|-------------------|-----------|----------------------|----------------------|----------|----------|-----------|------------|-----------|------------|----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | | |
| HYDRAULIC CARBY | | | | | | | | | | | | | | | | | | | | | |
| Medium idle, strong mid range needs comp, std auto (See Fitting notes 1 & 2) | 1800 - 4800 | 4890-8 | 272 | 283 | 212 | 217 | .475" | .483" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Hot street cam, choppy idle. Wide power band. Needs headers, carbie, ignition, comp & high stall. (See Fitting notes 1 & 2) | 2500 - 5500 | 4689-8 | 280 | 289 | 222 | 230 | .489" | .495" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Hot street cam, mildn idle. Wide power band. Needs headers, carbie, ignition, comp & high stall. (See Fitting notes 1 & 2) | 2700 - 5800 | 4921-8 | 276 | 284 | 227 | 234 | .536" | .556" | 108 | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Aggressive street cam, choppy idle. Wide power band. Needs headers, carbie, ignition, comp & high stall. (See Fitting notes 1 & 2) | 2800 - 5800 | 4761 | 292 | 292 | 230 | 230 | .495" | .495" | 109 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 11701-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Aggressive street cam, choppy idle. Wide power band. Needs headers, carbie, ignition, comp & high stall. (See Fitting notes 1 & 2) | 2800 - 6200 | 41424 | 287 | 295 | 231 | 238 | .535" | .538" | 110 | | ZDDP-100 | HT969C-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Aggressive street/strip cam, choppy idle. Needs headers, porting, carbie, ignition, comp & high stall. (See Fitting notes 1 & 2) | 2900 - 6200 | 4649 | 282 | 295 | 234 | 244 | .501" | .501" | 108 | | ZDDP-100 | HT969C-16 | 4833-16 | 1.700" | 11707-16 | 4133-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Street/strip cam, aggressive idle. Needs headers, porting, carbie, ignition, comp, roller rockers & high stall. (See Fitting notes 1 & 2) | 3000 - 6500 | 4747 | 294 | 307 | 236 | 246 | .577" | .586" | 107 | | ZDDP-100 | HT969R-16 | 7333-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Strong mid/top end. Needs headers, porting, carbie, ignition, roller rockers, comp & high stall. (See Fitting notes 1 & 2) | 3000 - 6500 | 4690 | 300 | 310 | 238 | 243 | .525" | .525" | 108 | | ZDDP-100 | HT969R-16 | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 | |
| Big performance cam, Needs headers, porting, carbie, ignition, roller rockers, comp & high stall. (See Fitting notes 1 & 2) | 3500 - 6500 | 4802 | 295 | 295 | 246 | 246 | .558" | .558" | 108 | | ZDDP-100 | HT969R-16 | 7333-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR-964-16 | CRHL8167 | |
| SOLID CARBY | | | | | | | | | | | | | | | | | | | | | |
| Great mid range power, lumpy idle, needs porting, comp, headers carby and hi stall (See Fitting notes 5) | 2700 - 6000 | 4626 | 278 | 288 | 238 | 244 | .534" | .544" | 109 | | IN .024" EX .026" | ZDDP-100 | AT992-16 | 7333-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR-974-16 | CRHL8167 |
| Great top end power. lumpy idle, needs porting, comp, headers, carby and hi stall (See Fitting notes 5) | 3300 - 6500 | 4806 | 281 | 294 | 245 | 255 | .538" | .558" | 109 | | IN .018" EX .026" | ZDDP-100 | AT992-16 | 7342-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR-974-16 | CRHL8167 |
| Aggressive street/strip cam. Needs all serious engine mods to work (See Fitting notes 5) | 3500 - 6700 | 4746 | 290 | 295 | 252 | 258 | .560" | .585" | 109 | | IN .018" EX .018" | ZDDP-100 | AT992L-16 | 7342-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR5885-110 | CRHL8167 |
| Aggressive street/strip cam. Needs all serious engine mods to work (See Fitting notes 5) | 3500 - 6700 | 4731 | 292 | 297 | 253 | 260 | .584" | .597" | 108 | | IN .026" EX .026" | ZDDP-100 | AT992L-16 | 7342-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR5885-110 | CRHL8167 |
| Aggressive street/strip cam. Needs all serious engine mods to work (See Fitting notes 5) | 4000 - 7200 | 4794 | 306 | 311 | 265 | 268 | .623" | .623" | 107 | | IN .014" EX .016" | ZDDP-100 | AT992L-16 | 7342-16 [®] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | PR5885-110 | 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:

- 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 WITH VN-VT EFI HEADS

ROCKER RATIO 1.65

TIGHT LOBE CENTERS SUIT CARBY ENGINES. FOR EFI, REFER TO YOUR TUNER. CAMS ALSO SUIT 253-308 BLOCKS WITH VN-VT EFI HEADS

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------------------|----------------------|----------------------|----------|----------|-----------|------------|-----------|-----------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| HYDRAULIC ROLLER CARBY | | | | | | | | | | | | | | | | | | | | |
| Mild street application, std stall converter. Works better with increased compression | 1700 - 5300 | 4757 | 280 | 280 | 214 | 218 | .513" | .513" | 110 | | | 5208H | 4845-16 | 1.850" | 11717-16 | 4134-16 | KG819-16 | CS8308 | PR-964-16 | CRHL8167 |
| Mild performance cam. Great bottom end & mid range. Choppy idle, needs manifold, headers, comp and hi stall. (See Fitting notes 5) | 2000 - 5700 | 41330 | 275 | 282 | 220 | 227 | .541" | .551" | 110 | | | 5208H | 7333-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Performance cam great mid range, choppy idle need manifold, headers, comp and hi stall (See Fitting notes 5) | 2800 - 6200 | 41433 | 297 | 303 | 228 | 238 | .607" | .603" | 110 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Performance cam great mid range, choppy idle need manifold, headers, hi stall and comp. (See Fitting notes 5) | 3200 - 6400 | 41315-8 | 303 | 307 | 238 | 244 | .568" | .568" | 108 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Performance cam aggressive idle excellent mid range needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 3300 - 6200 | 41719 | 295 | 315 | 238 | 243 | .585" | .621" | 107 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Performance cam good mid to upper RPM range, Choppy idle needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 3500 - 6800 | 41725 | 307 | 312 | 242 | 246 | .623" | .623" | 109 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Performance cam good mid to upper RPM range, choppy idle needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 3700 - 7000 | 41571 | 310 | 310 | 246 | 246 | .627" | .627" | 110 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| Suits 355+cubes great upper RPM range, choppy idle. needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 3800 - 7000 | 41435-8 | 317 | 326 | 249 | 258 | .570" | .570" | 108 | | | 5208H | 7342-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes | CRHL8167 |
| SOLID ROLLER CARBY | | | | | | | | | | | | | | | | | | | | |
| Small street roller, heaps of bottom end torque, Low lift, soft on valve springs. Needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 2800 - 5800 | 4969 | 270 | 280 | 233 | 240 | .544" | .544" | 110 | | | IN .016" EX .016" | 5208 | 7333-16 [Ⓟ] | 1.800" | 11710-16 | 4133-16 | VSV530-16 | CS8308 | See Notes |
| Street roller, Great mid range torque. needs comp, heads, manifold, headers and hi stall (See Fitting notes 5) | 3200 - 6400 | 41551 | 278 | 284 | 245 | 251 | .621" | .621" | 107 | | | IN .016" EX .016" | 5208 | 4910-16 [Ⓟ] | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes |
| Street/strip application needs comp, heads, manifold, headers & hi stall (See Fitting notes 5) | 3500 - 6800 | 41301 | 286 | 295 | 252 | 260 | .596" | .596" | 108 | | | IN .018" EX .018" | 5208 | 4910-16 [Ⓟ] | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes |
| Street/strip application Needs all serious engine mods to work well. (See Fitting notes 5) | 3600 - 7000 | 41482 | 290 | 294 | 252 | 257 | .666" | .666" | 113 | | | IN .016" EX .016" | 5208 | 4920-16 [Ⓟ] | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes |
| Street/strip application, Needs all serious engine mods to work well. (See Fitting notes 5) | 3800 - 7200 | 4754 | 295 | 298 | 257 | 262 | .660" | .677" | 106 | | | IN .016" EX .016" | 5208 | 4920-16 [Ⓟ] | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes |
| Suits 355+cubes great upper RPM range, Needs all serious engine mods to work well (See Fitting notes 5) | 4000 - 7200 | 41492 | 300 | 306 | 262 | 268 | .623" | .623" | 107 | | | IN .018" EX .020" | 5208 | 4920-16 [Ⓟ] | 2.000" | 13101-16 | 11101-16 | VSV530-16 | CS8308 | See Notes |

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/CHEV LS V8 3 BOLT CAMSHAFTS ROCKER RATIO 1.70

Spring kit includes items marked in black
(Order as Kit or Individually)

| Application | RPM Range | Part No. | Adv. Duration | | .050" Dur | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|---|-------------|-----------|---------------|-----|-----------|-----|------------|-------|-----|------------------|-----------|----------------------|----------|----------|----------------------|---------------------|------------|----------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| EFI GRINDS ALL CAMSHAFTS IN THIS SECTION REQUIRE ECU TUNING & VALVE SPRING UPGRADES CROW CAMS *FAT LOBE* CAMSHAFTS PRODUCE GREATER AMOUNTS OF TORQUE OVER A WIDE POWER BAND. | | | | | | | | | | | | | | | | | | | |
| Small Street cam. Increased low-mid range torque & power. Minimum effect on fuel economy. Mild idle. No high stall req'd. Suit Rectangular port heads. (See Fitting note 1) | 1500 - 6000 | 871780-14 | 264 | 285 | 203 | 219 | .551" | .555" | 114 | 1.780" | VTKLS1 | 4231-16 | 10707-16 | 10701-16 | VSV900-8 VSV901-8 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Increased low - mid range min effect on economy. Mild idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1) | 1500 - 6000 | 871265 | 268 | 275 | 212 | 219 | .519" | .528" | 114 | 1.780" | VTKLS1 | 4231-16 | 10707-16 | 10701-16 | VSV900-8 VSV901-8 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Street cam, Good mid range power, Mild idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 1800 - 6000 | 871208 | 271 | 276 | 216 | 222 | .595" | .595" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Street cam, Good mid range power, Mild idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 1800 - 6200 | 871384-14 | 278 | 285 | 216 | 223 | .559" | .559" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Strong low-mid range cam, Tough idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 1900 - 6200 | 871247 | 272 | 286 | 219 | 227 | .580" | .587" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Mild performance cam, Great low down torque & mid range. Mild idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 1900 - 6200 | 871202 | 282 | 292 | 220 | 225 | .556" | .562" | 114 | 1.780" | VTKLS1 | 4231-16 | 10707-16 | 10701-16 | VSV900-8 VSV901-8 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Mild performance cam, Great low down torque & mid range. Mild idle. No high stall req'd. Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2000 - 6200 | 871732 | 278 | 279 | 221 | 221 | .595" | .596" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Great street cam. Can be used for boosted applications Great low down torque & mid range. Mild idle. No high stall req'd. Large split cam designed for rectangular heads. (See Fitting note 1 & 2) 6.0/6.2 engine only | 2000 - 6200 | 871286 | 275 | 292 | 221 | 238 | .580" | .581" | 115 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Big lift street cam, Good mid range torque. Tough idle. May require stall converter, Check with tuner Suits cathedral for rectangular heads. (See Fitting note 1 & 2) | 2100 - 6200 | 871730 | 281 | 287 | 222 | 230 | .613" | .612" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Moderate lift street cam, Good mid range power and torque. Tough idle. May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2200 - 6200 | 871270 | 277 | 281 | 223 | 228 | .580" | .584" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Big lift street cam, Good mid range power and torque. Tough idle. May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2300 - 6200 | 871229 | 280 | 286 | 224 | 230 | .610" | .610" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Performance cam, High acceleration rate great power gains. Aggressive idle. Requires stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2300 - 6200 | 871248 | 278 | 303 | 226 | 234 | .578" | .591" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |

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^D 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.

HOLDEN/CHEV LS V8 3 BOLT CAMSHAFTS ROCKER RATIO 1.70

Spring kit includes items marked in black
(Order as Kit or Individually)

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|--|-------------|----------|---------------|-----|----------------|-----|------------|-------|-----|------------------|-----------|----------------------|----------|----------|---------------|---------------------|------------|----------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| Tough street cam, Big power and torque gains. Aggressive idle. Most popular LS1 grind. May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2400 - 6300 | 871249 | 277 | 284 | 226 | 232 | .608" | .602" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Tough street cam, Big power and torque gains. Tough idle May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2400 - 6300 | 871777 | 277 | 284 | 226 | 236 | .607" | .617" | 113 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Performance street cam, Great mid range torque. Aggressive idle May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2500 - 6300 | 871298 | 269 | 275 | 227 | 233 | .609" | .601" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16 | CRCLSBUSH |
| Big lift cam, High acceleration. Gives max performance without losing bottom end. Tough idle Requires stall converter, Large split cam designed for rectangular heads. (See Fitting note 1 & 2) | 2500 - 6400 | 871287 | 278 | 296 | 227 | 244 | .607" | .610" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Aggressive high lift performance cam. Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2500 - 6300 | 871729 | 284 | 292 | 228 | 235 | .610" | .610" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Lumpy street cam. High acceleration rate, great power gains. Aggressive idle. Easy on valve springs for sustained high rpm. Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2600 - 6300 | 871223 | 293 | 304 | 229 | 235 | .584" | .585" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Big lift street cam Great acceleration rate with big top end power Aggressive idle Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2600 - 6300 | 871212 | 281 | 282 | 229 | 232 | .611" | .614" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Lumpy street cam, High acceleration rate with big top end power Aggressive idle Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6300 | 871266 | 285 | 288 | 232 | 233 | .610" | .603" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Lumpy low lift street cam, Strong mid and top end power. Aggressive idle. Easy on valve springs for sustained high rpm Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6300 | 871215 | 297 | 302 | 232 | 234 | .584" | .582" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Lumpy street cam, High acceleration rate. Strong mid to top end power range. Aggressive idle Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6400 | 871296 | 286 | 290 | 232 | 237 | .612" | .604" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street / strip cam, Very strong mid range and top end. Aggressive idle . Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6400 | 871285 | 291 | 296 | 234 | 238 | .595" | .595" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Aggressive street cam, Great mid to upper power gains. Aggressive idle Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6400 | 871250 | 294 | 302 | 234 | 241 | .608" | .609" | 113 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |

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^D 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.

HOLDEN/CHEV LS V8 3 BOLT CAMSHAFTS ROCKER RATIO 1.70

Spring kit includes items marked in black
(Order as Kit or Individually)

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|--|-------------|----------|---------------|-----|----------------|-----|------------|-------|-----|------------------|-----------|----------------------|----------|----------|---------------|---------------------|------------|----------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| Wide power range. Aggressive idle Requires stall converter, Works best with ported heads and CAI/OTR Large split cam designed for rectangular heads (See Fitting note 1 & 2)  | 2700 - 6500 | 871288 | 287 | 392 | 234 | 250 | .610" | .610" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Great mid to upper RPM gains. Aggressive idle Requires stall converter, Works best with ported heads and CAI/OTR Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2700 - 6400 | 871251 | 292 | 296 | 235 | 243 | .593" | .610" | 113 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street/strip cam, Wide power range. Aggressive idle, Works best with ported heads and CAI/OTR Requires stall converter, Large split cam designed for rectangular heads (See Fitting note 1 & 2)  | 2800 - 6500 | 871289 | 295 | 319 | 238 | 254 | .614" | .614" | 113 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Aggressive idle. Requires stall converter, Works best with ported heads and CAI/OTR Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2900 - 6400 | 871232 | 293 | 294 | 239 | 242 | .585" | .590" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Strong top end performance. Aggressive idle Works best with ported heads and CAI/OTR. Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2900 - 6600 | 871252 | 301 | 302 | 239 | 244 | .614" | .614" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Big lift. Large split aggressive duration cam. Requires stall converter, Works best with ported heads and CAI/OTR Large split cam designed for rectangular heads. (See Fitting note 1 & 2) | 2900 - 6600 | 871290 | 301 | 321 | 239 | 256 | .614" | .610" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Big lift. Small split aggressive duration cam Strong top end performance Works best with ported heads and CAI/OTR Requires stall converter, Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 3000 - 6600 | 871741 | 309 | 306 | 242 | 245 | .623" | .623" | 112 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Race cam, For big cube stroker engine. Works best with ported heads and CAI/OTR Large split cam designed for rectangular heads Requires stall converter, (See Fitting note 1 & 2) | 3000 - 7200 | 871291 | 311 | 340 | 244 | 261 | .621" | .616" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Race cam, Strong top end performance. Works best with stroker engines, ported heads and CAI/OTR Large split cam designed for rectangular heads Requires stall converter, (See Fitting note 1 & 2) | 3000 - 7200 | 871253 | 307 | 325 | 245 | 262 | .615" | .615" | 114 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |

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/CHEV LS V8 3 BOLT CAMSHAFTS ROCKER RATIO 1.70

Spring kit includes items marked in black
(Order as Kit or Individually)

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|--|-------------|-----------|---------------|-----|----------------|-----|------------|-------|-----|------------------|-----------|----------------------|----------|----------|---------------|---------------------|------------|----------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| SUPERCHARGER / TURBO GRINDS | | | | | | | | | | | | | | | | | | | |
| Street cam, Good low mid range power, Smooth idle No high stall req'd Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 1800 - 6500 | 871384SC | 278 | 285 | 216 | 223 | .580" | .584" | 117 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street cam, Good mid range power, Mild idle No high stall req'd Suits cathedral or rectangular heads. (See Fitting note 1 & 2) | 2000 - 6500 | 871730SC | 281 | 287 | 222 | 230 | .613" | .612" | 116 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street/Strip twin turbo cam for medium to high boost engines. Excellent mid range power and torque. May require stall converter, Check with tuner Suits cathedral or rectangular heads. (See Fitting notes 1, 2) | 3000 - 6800 | 871745 | 278 | 289 | 224 | 236 | .612" | .620" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street cam for medium boost engines. Great power and torque through wide RPM range May require stall converter, Check with tuner Large split cam designed for rectangular heads (See Fitting notes 1, 2) | 2200 - 6500 | 871292 | 276 | 296 | 225 | 244 | .607" | .607" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street twin turbo cam for mild boost applications. Wide power and torque range (See Fitting notes 1, 2) | 2700 - 6900 | 871295 | 280 | 285 | 227 | 231 | .609" | .602" | 114 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street/Strip twin turbo cam for medium to high boost engines. Excellent mid range power and torque. Suits cathedral or rectangular heads. (See Fitting notes 1, 2) | 2800 - 6900 | 871239 | 286 | 291 | 232 | 235 | .613" | .622" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street / Race cam suits high boost twin turbo engines. Great mid to high end Power and torque, Large split cam designed for rectangular heads (See Fitting notes 1, 2) | 3000 - 7000 | 871260 | 271 | 284 | 233 | 245 | .615" | .623" | 116 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Twin turbo Street Race cam for high boost engines. Great top end power and torque Large split cam designed for rectangular heads (See Fitting notes 1, 2 & 4) | 2800 - 7000 | 871242T | 294 | 303 | 238 | 250 | .598" | .612" | 116 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Supercharged street / strip cam. Great mid range and top end power Large split cam designed for rectangular heads (See Fitting notes 1, 2 & 4) | 3000 - 7000 | 871293 | 294 | 303 | 238 | 250 | .598" | .612" | 114 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Streetable supercharged camshaft. Wide torque band, big top end power. Moderate lift, Easy on valve train. (See Fitting notes 1, 2 & 4) | 3000 - 6800 | 871294 | 292 | 294 | 240 | 243 | .581" | .585" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| REVERSE SPLIT SUPERCHARGER / TURBO GRINDS | | | | | | | | | | | | | | | | | | | |
| Reverse split cam suitable for mild street single turbo applications. (See Fitting notes 1, 2 & 4) | 2000 - 6000 | 871753 | 276 | 270 | 229 | 224 | .570" | .561" | 116 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Reverse split cam for high boost single turbo applications. (See Fitting notes 1, 2 & 4) | 2500 - 6500 | 871754-15 | 284 | 276 | 237 | 230 | .578" | .571" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |
| Street / Race reverse split single turbo cam suit high boost. Strong top end power. (See Fitting notes 1, 2 & 4) | 2600 - 7000 | 871296R | 290 | 286 | 237 | 232 | .604" | .612" | 115 | 1.780" | VTKLS9 | 4439-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR5740-110 | CRCLSBUSH |

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/CHEV LSA ENGINE ROCKER RATIO 1.70

**Spring kit includes items marked in black
(Order as Kit or Individually)**

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|---|-------------|----------|---------------|-----|----------------|-----|------------|-------|-------|------------------|-----------|----------------------|----------|----------|---------------|---------------------|---------------------|----------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| SUPERCHARGED LSA ENGINE | | | | | | | | | | | | | | | | | | | |
| Smooth idle, Strong lower/mid range torque. Suit standard auto or manual. (See Fitting notes 1 & 2) | 1800 - 6300 | 871279SC | 267 | 302 | 215 | 249 | .631" | .631" | 121 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Mild idle, Very strong low/ mid range torque and top end power. Suit standard auto or manual. (See Fitting notes 1 & 2) | 2000 - 6500 | 871744SC | 271 | 286 | 219 | 236 | .608" | .620" | 118 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Mild idle, Strong mid/upper torque. Suit standard auto or manual. (See Fitting notes 1 & 2) | 2200 - 6500 | 871286SC | 275 | 292 | 221 | 238 | .581" | .583" | 119 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Mild idle, Broad Torque curve with good top end power. Suit standard auto or manual. (See Fitting notes 1 & 2) | 2400 - 6500 | 871777SC | 277 | 284 | 226 | 236 | .607" | .617" | 116.5 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Great cam for low to medium boost engines. Power and torque through wide RPM range. Suit standard auto or manual. (See Fitting notes 1, 2) | 2500 - 6500 | 871292SC | 276 | 296 | 227 | 244 | .607" | .607" | 118 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Large duration cam for medium to high end performance. Will require hi stall in automatic. (See Fitting notes 1, 2) | 2800 - 7000 | 871765SC | 286 | 302 | 232 | 246 | .614" | .601" | 120 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |
| Large duration cam for Medium to high boost engines. Excellent mid range to high RPM power and torque. Will require hi stall in automatic. (See Fitting notes 1, 2) | 3000 - 7000 | 871288SC | 289 | 298 | 234 | 249 | .610" | .610" | 118 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | CS8LSA-SR CS8LSA | PR5740-110 | CRCLSBUSH |

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/CHEV LS V8 3 BOLT CAMSHAFTS ROCKER RATIO 1.70

Spring kit includes items marked in black
(Order as Kit or Individually)

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Installed Height | Parts Kit | Valve Spring | Retainer | Locks | Stem Seal | Lifters (See Notes) | Timing Kit | Pushrods (See Notes) | Rocker Upgrade |
|--|-------------|-----------|---|-----|----------------|-----|------------|-------|-----|------------------|-----------|----------------------|----------|----------|---------------|---------------------|------------|--------------------------|----------------|
| | | | In | Ex | In | Ex | In | Ex | | | | | | | | | | | |
| AFM PERFORMANCE 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. Will have a noticeable idle. | 1800 - 6000 | 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 & ARP Cam Bolts(134-1003). Uses factory Valve Springs Camshaft specifications at .050" Duration: Intake Mid 220, Exhaust Low 230. 115LSA. We recommend repalcing lifter guides when fitting this camshaft. | | | | | | | | | | | | | | | | |
| LS CARBY CONVERSION GRINDS PISTON TO VALVE CLEARANCE MUST BE CHECKED. | | | | | | | | | | | | | | | | | | | |
| Mild performance cam, Great low down torque & mid range. Needs springs (See Fitting note 1 & 2) Suits Carby conversions | 2000 - 6200 | 871202C | 282 | 292 | 220 | 225 | .556" | .563" | 108 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16* PR5740-110 | CRCLSBUSH |
| Good street cam, Solid mid range torque. Needs valve springs (See Fitting note 1 & 2) Suits Carby conversions | 2000 - 6400 | 871730C | 281 | 287 | 222 | 230 | .613" | .612" | 109 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16* PR5740-110 | CRCLSBUSH |
| Lumpy street cam, High acceleration rate great power gains need valve springs and exhaust. (See Fitting note 1 & 2) Suits Carby conversions | 2400 - 6500 | 871223C | 286 | 295 | 228 | 234 | .586" | .586" | 108 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16* PR5740-110 | CRCLSBUSH |
| Aggressive street cam, Great mid to upper power gains. Needs pipes & valve springs. (See Fitting note 1 & 2) Suits Carby conversions | 2500 - 6700 | 871285C | 289 | 297 | 233 | 237 | .595" | .595" | 108 | 1.780" | VTKLS8 | 4438-16 ^D | 10708-16 | 10701-16 | VSV900VTEX-16 | 5250 | See Pg 68 | PR-957-16* PR5740-110 | CRCLSBUSH |
| LS CUSTOM SOLID ROLLER CAMS AVAILABLE SEE PG 126 FOR AVAILABLE LS GRINDS. | | | | | | | | | | | | | | | | | | | |
| Durations from 231 - 277 @ .050" Big lift profiles from .641" to .741" @ 1.7 RR. Your choice of lobe separation angle. | | 871950 | This cam is a performance camshaft to suit solid roller LS conversions. Talk to our technical department about your requirements. | | | | | | | | | | | | | | | | |

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.

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 |
|--------------------|---|--------------------|--------|------------------------------|
| CS8LS1 | Holden LS1 3 bolt. Double row | No Triggers | Double | 3DR 60-IWIS |
| CS8LS1-SR | Holden LS1 3 bolt. Single row | No Triggers | Single | 3SR 60-IWIS |
| CS8LS2 | Holden LS2 3 bolt. Double Row Single Trigger | 1 Trigger | Double | 3DR 60-IWIS |
| CS8LS2-SR | Holden LS2 3 bolt. Single row Single Trigger | 1 Trigger | Single | 3SR 60-IWIS |
| CS8LS7 | Holden LS7 3 bolt. Double row 4 Trigger | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LS7-SR | Holden LS7 3 bolt. Single row 4 Trigger | 4 Triggers | Single | 3SR 60-IWIS |
| CS8LS7-SRV | Holden LS7 3 bolt. Single row Vernier Gear. | 4 Triggers | Single | Vernier Gear Only |
| CS8LSA | Holden LSA 3 bolt. Double row 4 Trigger | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LSA-SR | Holden LSA 3 bolt. Single row 4 Trigger | 4 Triggers | Single | 3SR 60-IWIS |
| CS8L98 | Holden L98 1 bolt. Double row 4 Trigger | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LS-VE-SR | Holden 1 bolt LS3, L76, L77, L98, 6.0/6.2L Single row 4 Trigger | 4 Triggers | Single | 3SR 60-IWIS |
| CS8LS-VE3 | Holden LS 3 bolt. Cam Gear Only Single row 4 Trigger | 4 Triggers | Single | Gear Only |
| CS8LS-3BK | Holden LS 3 bolt Gear & ARP Cam Bolts. Single row 4 Trigger | 4 Triggers | Single | Gear & Bolts Only |
| CS8LS2-3BK | Holden LS2 3 bolt Gear & ARP Cam Bolts. Double row 1 Trigger | 1 Trigger | Double | Gear & Bolts Only |
| 12586481 | Holden VE 3 bolt Cam Gear Only Genuine GM. | 4 Triggers | Single | Gear Only |

LS Line Bore Kits are available. Please contact sales for more information



No Trigger



1 Trigger



4 Trigger

LS GEAR DRIVE TIMING SETS

HIGH PERFORMANCE GEAR DRIVE SETS

| Part Number | Application | Triggers | Type |
|--------------------|--|------------------|------|
| GD8LS-3B1T | Holden LS 3 bolt Single trigger Gear Set | 1 Trigger | Gear |
| CS8LS1-3B4T | Holden LS 3 bolt 4 Trigger Gear Set | 4 Trigger | Gear |



HIGH PERFORMANCE LS LIFTERS

HIGH PERFORMANCE LS LIFTERS

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



5250



5251

ARP LS BOLT / STUD KITS

134-1003
ARP LS CAMSHAFT BOLTS
(3x BOLTS)



234-2503
ARP LS BALANCER
BOLT



134-3609
ARP LS HEAD BOLT KIT
PRE 2004



234-4316
ARP LS HEAD STUD KIT
PRE 2004



134-3610
ARP LS HEAD BOLT KIT
2004 ONWARDS



234-4317
ARP LS HEAD STUD KIT
2004 ONWARDS



LS FAMILY SPRING KITS

VTKLS1 LS SINGLE CONICAL SPRING KIT INCLUDES:

(NOTE SPRING PRESSURE 120LBS @ 1.780" 270LBS @ .500" LIFT)

| | | | |
|---|---|---|--|
| Retainers (10707-16) | Conical Valve Springs (4231-16) | Locks (10701-16) | Spring Seat & Seals (VSV900-8 & VSV901-8) |
|  |  |  |  |

VTKLS5 LS SINGLE CONICAL SPRING KIT INCLUDES:

(NOTE SPRING PRESSURE 140LBS @ 1.780" 330LBS @ .500" LIFT)

| | | | |
|---|---|---|--|
| Retainers (10707-16) | PSI Conical Valve Springs (1511ML-16) | Locks (10701-16) | Spring Seat & Seals (VSV900-8 & VSV901-8) |
|  |  |  |  |

VTKLS8 LS DUAL SPRING KIT INCLUDES:

(NOTE SPRING PRESSURE 165LBS @ 1.780" 340LBS @ .500" LIFT)

| | | | |
|--|--|--|---|
| Retainers (10708-16) | Dual Valve Springs (4438-16) | Locks (10701-16) | Spring Seat & Seals (VSV900VTEX-16) |
|  |  |  |  |

VTKLS9 LS DUAL SPRING KIT INCLUDES:

(NOTE SPRING PRESSURE 165 @ 1.800" 360 @ .500" LIFT)

| | | | |
|---|---|---|--|
| Retainers (10708-16) | Dual Valve Springs (4439-16) | Locks (10701-16) | Spring Seat & Seals (VSV900VTEX-16) |
|  |  |  |  |

VTKLST LS DUAL SPRING TITANIUM RETAINER KIT INCLUDES:

(NOTE SPRING PRESSURE 165LBS @ 1.800" 360LBS @ .500" LIFT)

| | | | |
|---|---|---|--|
| Titanium Retainers (TR435-16) | Dual Valve Springs (4439-16) | Locks (10701-16) | Spring Seat & Seals (VSV900VTEX-16) |
|  |  |  |  |

LS FAMILY SPRING KITS

VTKLST1 LS DUAL SPRING TITANIUM RETAINER KIT INCLUDES:

(NOTE SPRING PRESSURE 155 @ 1.800" 385LBS @ .500" LIFT)


| | | | |
|---|---|---|---|
| Retainers (TR435-16) | Dual Valve Springs (4207X-16) | Locks (10701-16) | Spring Seat & Seals (VSV900VTEX-16) |
|  |  |  |  |

VTKLST2 LS DUAL SPRING TITANIUM RETAINER KIT INCLUDES:

(NOTE SPRING PRESSURE 160 @ 1.800" 415LBS @ .500" LIFT)

| | | | |
|---|---|---|---|
| Retainers (TR435-16) | Dual Valve Springs (4209X-16) | Locks (10701-16) | Spring Seat & Seals (VSV900VTEX-16) |
|  |  |  |  |

LS ULTRA LIGHTWEIGHT HIGH RPM RETAINERS

| Part Number | Description | |
|-------------|--|--|
| TR435-16 | LS Titanium Retainer Set. Ultra lightweight High RPM Retainers Suits all Dual LS Springs Best suited for Race/Track Engines |  |

***High Quality Chrome Moly retainers are general purpose retainers suited for street/ race applications. Use of Titanium Retainers in street cars may cause longevity issues.**

***Ultra Lightweight High RPM Titanium Retainers are suited for high revving engines with maximum power. Can be used for street applications but will not have the life expectancy of a Chrome Moly Retainer.**

***VTKLS1 Spring Kits are suited for stock or mild street LS Roller Camshafts. It will take a maximum lift of .560"**

***VTKLS5 Spring Kits are suited for mild-hot street LS Roller Camshafts if you prefer single Beehive Valve Springs. It will take a maximum lift of .600"**

***VTKLS8 Spring Kits are suited for hot street LS Camshafts. Can support up to .650" lift and give the added security of dual springs. The VTKLS8 is our most popular spring kit for street applications.**

***VTKLS9, VTKLST, VTKLST1, VTKLST2 Spring kits are recommended for use with High RPM engines that require higher seat pressure. Maximum lift ranging from .650" to .750". Talk to the Crow Cams technical department to match a spring kit with a camshaft.**


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 |
|-----------------------------|------------------|--------------------|--------------------|-----------|--------------|-----------------|-------------|
| 4231-16 | 1.780" | 120 | 270 | .550" | 1.100" | 10707-16 | 10701-16 |
| 1511ML-16 | 1.780" | 140 | 330 | .600" | 1.100" | 10707-16 | 10701-16 |
| 4438-16^D | 1.780" | 165 | 345 | .650" | 1.000" | 10708-16 | 10701-16 |
| 4439-16^D | 1.800" | 165 | 360 | .650" | 1.020" | 10708-16 | 10701-16 |
| 4207X-16^D | 1.800" | 170 | 390 | .700" | 1.000" | TR435-16 | 10701-16 |
| 4209X-16^D | 1.800" | 180 | 425 | .750" | 1.000" | TR435-16 | 10701-16 |
| 4238X-16^D | 1.800" | 265 | 735 @ .750" | .800" | 0.950" | TR435-16 | 10701-16 |
| 1335-16^D | 1.800" | 270 | 880 @ .750" | .800" | 0.985" | TR435-16 | 10701-16 |

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

Note: All dual valve springs are measured with a .100" step in the inner spring.

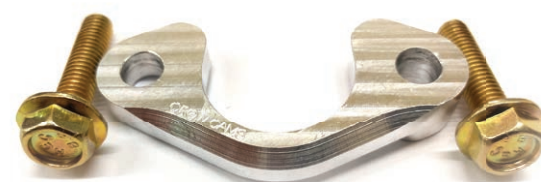
| LS Rocker BUSH Trunnion Kit (CRCLSBUSH) | LS Rocker BUSH Trunnion Installation Kit (LSINST-KIT) |
|---|---|
| Factory Rocker LS Trunnion Upgrade Kit | LS Rocker Trunnion Installation Kit |
|  <p>Severe duty replacement for factory rocker needle roller bearings. Bronze bushes have 300x greater load capacity than needle rollers. Simple to install.</p> |  <p>Tools included in installation kit: 2x Installation Washers 1x Removal Washer 1x 7/16" Diameter Press/Drive Pin</p> |

LS ENGINE PUSHRODS

| | |
|-------------------|--|
| PR-956-16 | 7.350 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel |
| PR-959-16 | 7.375 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel |
| PR-957-16 | 7.400 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel |
| PR-958-16 | 7.450 Inch 1 Piece, 0.080" Wall Heat Treated High Carbon Steel |
| PR5730-110 | 7.300 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5732-110 | 7.325 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5735-110 | 7.350 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5737-110 | 7.375 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5740-110 | 7.400 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5742-110 | 7.425 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |
| PR5745-110 | 7.450 Inch 5/16" 0.110" Wall 210 Radius Chrome Moly Pushrod |



Crow Cams LS Oil Pick Up Tube 2 Bolt Girdle (PUG001)



LS ROCKER BUSH TRUNNION KIT (CRCLSBUSH)



These new bushing LS trunnion kits for factory LS rockers are designed to increase durability and load capacity without the failure prone needle bearings. Engineered to provide maximum lubrication to the trunnion while also providing maximum load capabilities, the NEW bushing LS trunnion Upgrade kits give the LS world peace of mind.

The proprietary bushing material is fed with an oil channel at the 11 and 1 O'Clock positions of the trunnion. This channel constantly feeds oil to the bushing surface ensuring proper lubrication unlike needle bearing trunnions that have to rely on oil "finding" it's way to the needles.

The greater surface area of the bushing will support 300X the load of a needle roller bearing due to the fact that there are only three needles on the bottom of the bearing that are carrying the load. There is also no chance of needle bearings destroying the engine when using much more aggressive cam profiles.

Kit includes the trunnion, bushings and C-Clips and can be used with the stock rocker bolt. Fits all OEM LS Rockers, LS1, LS2, L76, L77, L98, LS3, LS6, LSA and LS7.



POWERBOND LS HARMONIC BALANCERS & KITS

LS1/LS6 5.7, LS2 6.0 CATHEDRAL PORT

| Part Number | Application |
|----------------------|--|
| PB1480-ST | LS1 5.7, LS2 6.0 Street, Std Diameter 6 Rib |
| PB1480-SS | LS1 5.7, LS2 6.0 Race, Std Diameter 6 Rib. Has keyway |
| PBU1480-SS10 | LS1 5.7, LS2 6.0 Race 10% Underdrive Balancer |
| PBU1480-SS25 | LS1 5.7, LS2 6.0 Race 25% Underdrive Balancer |
| PB081480-SC10 | LS1, LS2 Supercharger Balancer 10% Overdrive 8 Rib |
| PBK001 | LS1 5.7, LS2 6.0 25% Underdrive Balancer kit with Pulleys and Belts |
| OAP019 | 6 Rib LS1 alternator overrun pulley for retrofit to factory alternator |
| PK8030 | 8 Rib drive kit with std diameter balancer suit LS1. Does not suit VZ LS1, LS2 |
| PK8031 | 8 Rib drive kit with 10% OD diameter balancer suit LS1. Does not suit VZ LS1, LS2. |

L76, L77, L98 6.0, LS3 6.2 VE-ON RECTANGULAR

| Part Number | Application |
|----------------------|---|
| PB1117-SS | L76, L77, L98, LS3 6.0, 6.2 Race Std Diameter 6 Rib |
| PBU1117-SS10 | L76, L77, L98, LS3 6.0, 6.2 VE Commodore 10% Underdrive Balancer |
| PBU1117-SS25 | L76, L77, L98, LS3 6.0, 6.2 VE Commodore 25% Underdrive Balancer |
| PB081117-SC10 | L76, L77, L98, LS3 Supercharger Balancer 10% Overdrive 8 Rib |
| PBK002 | L76, LS3 VE to 8/2010 25% Underdrive Balancer kit with Pulleys & Belts. |
| PBK016 | L77, LS3 9/2010 Onwards 25% Underdrive Balancer kit with Pulleys & Belts |
| PBK021 | L77, LS3 VF 25% Underdrive Balancer kit with Pulleys & Belts. |
| OAP027 | 6 Rib L98 alternator overrun pulley for retrofit to factory alternator |
| PK8032 | VE L76, L77, L98, LS3 8 Rib drive kit with std diameter balancer |
| PK8033 | VE L76, L77, L98 LS3 8 Rib drive kit with 10% OD diameter supercharger balancer |

LS7 7.0, LSA S/C 6.2 & INSTALLATION TOOL KITS

| Part Number | Application |
|----------------------|--|
| PB081503-SC10 | LS7 Supercharger Balancer 10% Overdrive 8 Rib |
| PBK024 | LSA 5% Overdrive Balancer and Drive Belt |
| PBK025 | LSA 10% Overdrive Balancer and Drive Belt |
| PBK026 | LSA 18% Overdrive Balancer and Drive Belt |
| PBK027 | LSA 22% Overdrive Balancer, Drive Belt & Idler Bracket |
| PBK028 | LSA 28% Overdrive Balancer, Drive Belt & Idler Bracket |
| PB01662-SS5 | LSA Supercharger Balancer 5% Overdrive |
| PB01662-SS10 | LSA Supercharger Balancer 10% Overdrive |
| PB01662-SS18 | LSA Supercharger Balancer 18% Overdrive |
| PB01662-SS22 | LSA Supercharger Balancer 22% Overdrive |
| PB01662-SS28 | LSA Supercharger Balancer 28% Overdrive |
| BOP016625 | 5% Overdrive Pulley suit PB01662-SS |
| BOP0166210 | 10% Overdrive Pulley suit PB01662-SS |
| BOP0166218 | 18% Overdrive Pulley suit PB01662-SS |
| BOP0166222 | 22% Overdrive Pulley suit BOP01662-SS |
| BOP0166228 | 28% Overdrive Pulley suit BOP01662-SS |
| OAPTK001 | Overrun pulley complete installation tool kit |
| IPB001 | Idler Relocation bracket for 22% and 28% Overdrives |



ICE IGNITION LEADS & COILS

ICE PRO LS IGNITION LEADS

| Part Number | Application |
|---------------|---|
| 9GM808 | LS1, LS2 9mm Pro 100 Lead Set |
| 9GM878 | LS1, LS2 9mm Pro 100 Lead Set. Black with right angle plug leads. |
| 9GM829 | L76, L77, L98, LS3 9mm Pro 100 Lead Set Black |
| 9GM868 | LS1, LS2 9mm Pro 25mm longer lead set. 45 Degree plus ends. |
| 9GM888 | LS1, LS2 9mm Pro 50mm longer lead set for high covers. 45 Degree plus ends. |
| 9GM000 | Custom made LS Leads. Your choice of plugs & length. POA. |

ICE PRO LS1 IGNITION COILS

| Part Number | Application |
|----------------|----------------------------------|
| ICE4300 | LS1 direct bolt on Ignition Coil |



Twice the energy of factory coils with supplied dwell table

Advanced design to withstand vibration and deliver constant, maximum output

Current limiting set at 20Amps, as opposed to factory 8.25Amps



9GM829
9GM868
9GM888



9GM878



9GM808

PARTS TO SUIT EARLY LS1 TO 2004

LS1 LIFTER OVERHAUL

GM LS OEM LS LIFTER OVERHAUL KIT (Inc 5250 & 12595365-4, 12498544, 12498545-2)



12552542

GM LS1 THROTTLE BODY SEAL



LS7 LIFTER KIT

GM LS OEM LS LIFTER & GUIDE KIT (Inc 5250 & 12595365-4)



12558178

GM LS1 ONLY, VALLEY COVER GASKET



5250

GM LS LIFTER (SET OF 16)



12561243

GM LS1 TIMING COVER & SEALS



12595365-4

GM LS LIFTER GUIDE (SET OF 4)



12585673

GM LS TIMING COVER SEAL



12551163

GM LS LIFTER GUIDE BOLT (4 REQ'D)



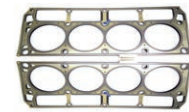
12602541

GM COOLANT AIR BLEED O-RING



12498544

GM LS1 5.7 HEAD GASKET (PAIR)



12612350

GM LS OIL PAN GASKET



12498545-2

GM LS LONG HEAD BOLT KIT TO 2004 (SET OF 2)



12633904

GM LS TIMING COVER GASKET



12557840

GM LS HARMONIC BALANCER BOLT



12639249

GM LS REAR COVER GASKET



12533587

GM CATH PORT INTAKE GASKET SET



12639250

GM LS REAR ENG COVER & SEALS



12551933

GM LS COOLANT AIR BLEED GASKET (4 REQ'D)



89060436

GM LS REAR MAIN SEAL



LSTIMINGGASKKIT

GM LS TIMING COVER GASKET KIT (Inc 12633904, 12630223-2, 12585673)



LSCAMPLATEKIT

GM LS CAM RETAINING PLATE KIT (Inc 12589016 & 11561455-4)



12552203

GM LS1 ROCKER ARM PIVOT BAR (2 REQ'D)



12560228

GM LS1,LS2 CRANK POS SENSOR



12557752

GM LS1 OIL PICK UP O-RING BLUE



12560961

GM LS ROCKER ARM BOLT



12589016

GM LS CAM RETAINING PLATE



12602540

GM LS COOLANT AIR BLEED PLUG



12696357

GM LS HIGH PRESSURE OIL PUMP



12617944

GM LS EXHAUST MAINFOLD GASKET



12681275

GM LS1,LS2,L98(EXH) ROCKER ARM (16 REQ'D)



12557520

GM LS DIPSTICK BLOCK OFF PLUG



11561455-4

GM LS CAM RETAINING PLATE BOLTS (SET OF 4)



LSOILPUMPKIT

GM LS HIGH PRESSURE OIL PUMP KIT (Inc 12696357, 12557752, 12584922, PUG001)



PARTS TO SUIT LS1 2004 ON:

Same parts as pre 2004 LS1 except for head bolts. Use part no 17800568-2.

17800568-2

GM LS SHORT HEAD BOLT KIT 2004 ON (SET OF 2)



PARTS TO SUIT LS2

L98LIFTEROHAUL

GM L98 LIFTER OVERHAUL KIT
(Inc 5250 & 12595365-4, 12610046, 17800568-2)



12576549

GM L98 THROTTLE BODY SEAL



LS7LIFTERKIT

GM LS OEM LS LIFTER & GUIDE KIT
(Inc 5250 & 12595365-4)



12570471

GM LS2, LS3, L98 VALLEY COVER



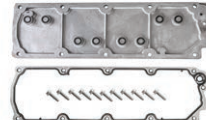
12595365-4

GM LS LIFTER GUIDE (SET OF 4)



12598832

GM LS VALLEY COVER NO EGR



5250

GM LS LIFTER (SET OF 16)



12610141

GM LS2, LS3, L98 VALLEY COVER GASKET



12551163

GM LS LIFTER GUIDE BOLT (4 REQ'D)



12585673

GM LS TIMING COVER SEAL



12610046

GM 6.0, 6.2 HEAD GASKET (2 REQ'D)



12602541

GM COOLANT AIR BLEED O-RING



17800568-2

GM LS SHORT HEAD BOLT KIT 2004 ON (SET OF 2)



12612350

GM LS OIL PAN GASKET



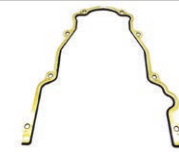
12557840

GM LS HARMONIC BALANCER BOLT



12633904

GM LS TIMING COVER GASKET



12533587

GM CATH PORT INTAKE GASKET SET



12633906

GM LS2, L98 TIMING COVER & SENSOR



12551933

GM LS COOLANT AIR BLEED GASKET (4 REQ'D)



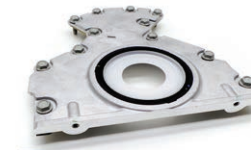
12639249

GM LS REAR COVER GASKET



12639250

GM LS REAR ENG COVER & SEALS



12591720

GM LS2, L98, L77, L76, LSA CAM POS SENSOR



89060436

GM LS REAR MAIN SEAL



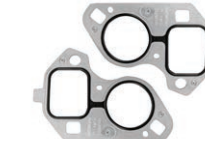
12696357

GM LS HIGH PRESSURE OIL PUMP



12630223-2

GM WATER PUMP GASKET KIT (SET OF 2)



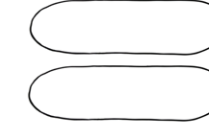
12681275

GM LS1, LS2, L98(EXH) ROCKER ARM (16 REQ'D)



12637683-2

GM LS ROCKER COVER GASKET SET (SET OF 2)



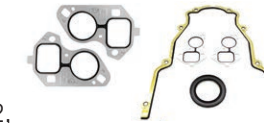
11561455-4

GM LS CAM RETAINER PLATE BOLTS (SET OF 4)



LSTIMINGGASKKIT

GM LS TIMING COVER GASKET KIT
(Inc 12633904, 12630223-2, 12585673)



LSCAMPLATEKIT

GM LS CAM RETAINING PLATE KIT
(Inc 12589016 & 11561455-4)



12552203

GM LS1 ROCKER ARM PIVOT BAR (2 REQ'D)



LSOILPUMPKIT

GM LS HIGH PRESSURE OIL PUMP KIT
(Inc 12696357, 12557752, 12584922, PUG001)



12576407

GM LS2 CAM GEAR (3 BOLT)



12560228

GM LS1, LS2 CRANK POS SENSOR



12584922

GM L98 VE OIL PICK UP ORING RED



12560961

GM LS ROCKER ARM BOLT



12588670

GM LS2, LS7 TIMING CHAIN DAMPER



12602540

GM LS COOLANT AIR BLEED PLUG



12589016

GM LS CAM RETAINING PLATE



12617944

GM LS EXHAUST MAINFOLD GASKET



12610160

GM LS VALLEY COVER PORT SEAL



12557520

GM LS DIPSTICK BLOCK OFF PLUG



PARTS TO SUIT LS3 AND L98

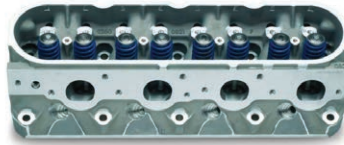
L98LIFTEROHAUL

GM L98 LIFTER OVERHAUL KIT
(Inc 5250 & 12595365-4, 12610046, 17800568-2)



12675871

GM LS3 COMPLETE CYL HEAD. INC VALVES LOCKS, RETAINERS AND 0.550" LIFT SPRINGS. 68cc



LS7LIFTERKIT

GM LS OEM LS LIFTER & GUIDE KIT
(Inc 5250 & 12595365-4)



12617944

GM LS EXHAUST MAINFOLD GASKET



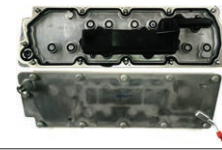
12595365-4

GM LS LIFTER GUIDE (SET OF 4)



12570471

GM LS2, LS3, L98 VALLEY COVER



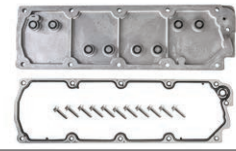
5250

GM LS LIFTER (SET OF 16)



12598832

GM LS VALLEY COVER NO EGR



12551163

GM LS LIFTER GUIDE BOLT (4 REQ'D)



12610141

GM LS2, LS3, L98 VALLEY COVER GASKET



12610046

GM 6.0, 6.2 HEAD GASKET (2 REQ'D)



12633906

GM LS2, L98 TIMING COVER & SENSOR



17800568-2

GM LS SHORT HEAD BOLT KIT 2004 ON (SET OF 2)



12585673

GM LS TIMING COVER SEAL



12557840

GM LS HARMONIC BALANCER BOLT



12602541

GM COOLANT AIR BLEED O'RING



12576549

GM L98 THROTTLE BODY SEAL



12612350

GM LS OIL PAN GASKET



12551933

GM LS COOLANT AIR BLEED GASKET (4 REQ'D)



12633904

GM LS TIMING COVER GASKET



12639249

GM LS REAR COVER GASKET



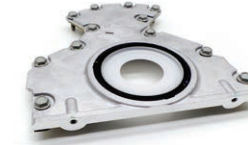
12591720

GM LS2, L98, L77, L76, LSA CAM POS SENSOR



12639250

GM LS REAR ENG COVER & SEALS



12626407

GM LS3, L98 CHAIN TENSIONER



89060436

GM LS REAR MAIN SEAL



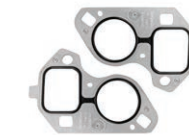
12696357

GM LS HIGH PRESSURE OIL PUMP



12630223-2

GM WATER PUMP GASKET KIT (SET OF 2)



12669995

GM L98 ROCKER ARM INTAKE (8 REQ'D)



12637683-2

GM LS ROCKER COVER GASKET SET (SET OF 2)



12681275

GM LS1,LS2,L98(EXH) ROCKER ARM (8 REQ'D)



L98INTGASKET

GM L98 INTAKE GASKET SET (SET OF 8)



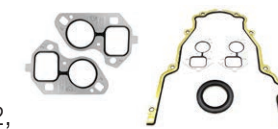
11561455-4

GM LS CAM RETAINER PLATE BOLTS (SET OF 4)



LSTIMINGGASKKIT

GM LS TIMING COVER GASKET KIT (Inc 12633904, 12630223-2, 12585673)



LSCAMPLATEKIT

GM LS CAM RETAINING PLATE KIT (Inc 12589016 & 11561455-4)



12600936

GM LS3 ROCKER ARM PIVOT STAND (2 REQ'D)



LSOILPUMPKIT

GM LS HIGH PRESSURE OIL PUMP KIT (Inc 12696357, 12557752, 12584922, PUG001)



12584922

GM L98 VE OIL PICK UP O'RING RED



12560961

GM LS ROCKER ARM BOLT



12589016

GM LS CAM RETAINING PLATE



12585546

GM LS2, L98, L77, LS3, LSA CRANK SENSOR



12610160

GM LS VALLEY COVER PORT SEAL



12557520

GM LS DIPSTICK BLOCK OFF PLUG



PARTS TO SUIT L76 AND L77

L76DODDELETE

GM AFM L76 DOD DELETE KIT
(Inc 5250 & 12595365-4,
12610046, 17800568-2,
12551163, 12598832)



12675871

GM LS3 COMPLETE
CYL HEAD. INC VALVES,
LOCKS,
RETAINERS AND 0.550"
LIFT SPRINGS. 68cc



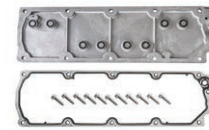
L76LIFTERKIT

GM L76/L77 LIFTER
& GUIDE KIT
(Inc 5263AFM, 12571596 &
12571608)



12598832

GM LS VALLEY COVER
NO EGR



5263AFM

GM LS AFM LIFTER (SET OF
16)



12610141

GM LS2, LS3, L98
VALLEY COVER
GASKET



12571596

GM AFM REAR LIFTER GUIDE
(2 REQ'D)



12633906

GM LS2, L98 TIMING
COVER & SENSOR



12571608

GM AFM FRONT LIFTER
GUIDE (2 REQ'D)



12585673

GM LS TIMING COVER
SEAL



12551163

GM LS LIFTER GUIDE BOLT
(4 REQ'D)



12602541

GM COOLANT AIR
BLEED O'RING



12610046

GM 6.0, 6.2 HEAD GASKET
(2 REQ'D)



12612350

GM LS OIL PAN GASKET



12551933

GM LS COOLANT AIR BLEED
GASKET (4 REQ'D)



12633904

GM LS TIMING COVER
GASKET



17800568-2

GM LS SHORT HEAD BOLT
KIT 2004 ON (SET OF 2)



12639249

GM LS REAR COVER
GASKET



12557840

GM LS HARMONIC BALANCER
BOLT



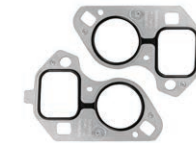
12639250

GM LS REAR ENG
COVER & SEALS



12630223-2

GM WATER PUMP GASKET
KIT (SET OF 2)



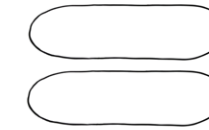
11561455-4

GM LS CAM RETAINER
PLATE BOLTS
(SET OF 4)



12637683-2

GM LS ROCKER COVER
GASKET SET (SET OF 2)



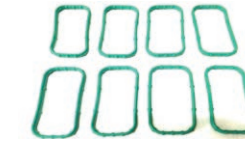
LSCAMPLATEKIT

GM LS CAM
RETAINING PLATE KIT
(Inc 12589016 &
11561455-4)



L98INTGASKET

GM L98 INTAKE GASKET SET
(SET OF 8)



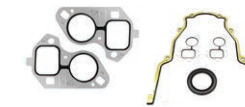
12560961

GM LS ROCKER ARM
BOLT



LSTIMINGGASKKIT

GM LS TIMING
COVER GASKET KIT
(Inc 12633904, 12630223-2,
12585673)



12585546

GM L98, L77, LS3, LSA
CRANK SENSOR



12584922

GM L98 VE OIL PICK UP
O'RING RED



12602540

GM LS COOLANT AIR
BLEED PLUG



12589016

GM LS CAM RETAINING PLATE



12617944

GM LS EXHAUST
MAINFOLD GASKET



12591720

GM LS2, L98, L77, L76, LSA
CAM POSITION SENSOR



12612289

GM L76, LSA HIGH
VOLUME



12626407

GM LS3, L98 CHAIN
TENSIONER



89060436

GM LS REAR MAIN
SEAL



12669995

GM L98 ROCKER ARM INTAKE
(8 REQ'D)



12610160

GM LS VALLEY COVER
PORT SEAL



12681275

GM LS1, LS2, L98(EXH)
ROCKER ARM (8 REQ'D)



12600936

GM LS3 ROCKER ARM
PIVOT STAND (2 REQ'D)



12557520

GM LS DIPSTICK BLOCK OFF
PLUG



12588670

GM LS2, LS7 TIMING
CHAIN DAMPER



PARTS TO SUIT LSA

LS7LIFTERKIT

GM LS OEM LS
LIFTER & GUIDE KIT
(Inc 5250 & 12595365-4)



12585673

GM LS TIMING COVER
SEAL



12595365-4

GM LS LIFTER GUIDE
(SET OF 4)



12602541

GM COOLANT AIR
BLEED O'RING



5250

GM LS LIFTER (SET OF 16)



12612350

GM LS OIL PAN GASKET



12551163

GM LS LIFTER GUIDE BOLT
(4 REQ'D)



12633904

GM LS TIMING COVER
GASKET



12622033

GM 6.2 LSA/LS9 HEAD
GASKET (2 REQ'D)



12639249

GM LS REAR COVER
GASKET



17800568-2

GM LS SHORT HEAD BOLT
KIT 2004 ON (SET OF 2)



12639250

GM LS REAR ENG
COVER & SEALS



12557840

GM LS HARMONIC BALANCER
BOLT



89060436

GM LS REAR MAIN
SEAL



12576549

GM L98 THROTTLE BODY
SEAL



12630223-2

GM WATER PUMP
GASKET KIT (SET OF 2)



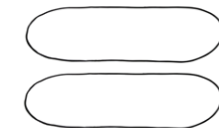
12610141

GM LS2, LS3, L98 VALLEY
COVER GASKET



12637683-2

GM LS ROCKER COVER
GASKET SET (SET OF 2)



12633906

GM LS2, L98 TIMING COVER &
SENSOR



LSTIMINGGASKKIT

GM LS TIMING
COVER GASKET KIT
(Inc 12633904,
12630223-2, 12585673)



12600936

GM LS3 ROCKER ARM PIVOT
STAND (2 REQ'D)



12585546

GM L98,L77,LS3,LSA
CRANK SENSOR



12584922

GM L98 VE OIL PICK UP
O'RING RED



12620947

GM LSA EXHAUST
MANIFOLD GASKET



12589016

GM LS CAM RETAINING PLATE



12612289

GM L76,LSA HIGH
VOLUME



12591720

GM LS2, L98, L77, L76, LSA
CAM POSITION SENSOR



12602540

GM LS COOLANT AIR
BLEED PLUG



12626407

GM LS3, L98 CHAIN
TENSIONER



12557520

GM LS DIPSTICK
BLOCK OFF PLUG



12669995

GM L98 ROCKER ARM INTAKE
(8 REQ'D)



12617944

GM LSA AIR CHARGE
INSULATOR



12681275

GM LS1,LS2,L98(EXH)
ROCKER ARM (8 REQ'D)



12612289

GM LSA S/C HOUSING
GASKET



11561455-4

GM LS CAM RETAINER PLATE
BOLTS (SET OF 4)



19180613

GM LSA INTAKE
MANIFOLD GASKET



LSCAMPLATEKIT

GM LS CAM
RETAINING PLATE KIT
(Inc 12589016 & 11561455-4)



12560961

GM LS ROCKER ARM
BOLT



PARTS TO SUIT LS7

12579615

GM LS7 1.8 RATIO INTAKE
ROCKER



12579617

GM LS7 1.8 RATIO
EXHAUST ROCKER



11588791

GM LS7 ROCKER ARM BOLT



LEYLAND/ROVER V8 ROCKER RATIO 1.50

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|--------------|------------------|----------|----------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| 3.5/4.4 1961- 86 HYDRAULIC | | | | | | | | | | | | | | | | | | | | |
| STD replacement cam | 800 - 3600 | 37000 | 254 | 254 | 196 | 196 | .374" | .374" | 107 | | ZDDP-100 | HT969-16 | | | Standard | Standard | | CS8P76 | | |
| Hi torque cam, street & 4wd, towing application | 1000 - 3900 | 37613 | 260 | 267 | 194 | 202 | .390" | .408" | 112 | | ZDDP-100 | 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 | | ZDDP-100 | 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 | | ZDDP-100 | HT969-16 | | | Standard | Standard | | CS8P76 | | |

ROVER V8 ROCKER RATIO 1.50

| 4.0/4.6 EFI 1995-ON HYDRAULIC No Distributor | | | | | | | | | | | | | | | | | | | | |
|---|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|----------|--------------|------------------|----------|----------|-----------|------------|----------|---------|
| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| Hi torque cam, street & 4wd, towing | 900 - 3800 | 371613 | 260 | 267 | 194 | 202 | .390" | .408" | 112 | | ZDDP-100 | 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 | | ZDDP-100 | HT969-16 | | | Standard | Standard | | | | |

NISSAN

| RB30 SOHC 1986-1997 | | | | | | | | | | | | | | | | | | | | |
|--|-------------|----------|---------------|---------|----------------|---------|------------|---------|-----|------|--------------|---------|----------------------|------------------|----------|----------|-----------|------------|----------|---------|
| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| Stock replacement cam for normally aspirated | 1500 - 5000 | 503000 | 256 | 255 | 195 | 191 | .375" | .375" | 110 | | ZDDP-100 | | 5840-12 ^D | 1.570" | 10720-12 | Standard | | CS6RB30-V | | |
| Stock replacement for TURBO engine (See Fitting notes 1) | 1500 - 5000 | 503001 | 256 | 255 | 195 | 191 | .375" | .375" | 117 | | ZDDP-100 | | 5833-12 ^D | 1.570" | 10720-12 | Standard | | CS6RB30-V | | |
| Mild cam for normally aspirated engine (See Fitting notes 1) | 2000 - 5800 | 503NA | 250 | 250 | 194 | 194 | .426" | .426" | 110 | | ZDDP-100 | | 5833-12 ^D | 1.570" | 10720-12 | 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 | | ZDDP-100 | | 5833-12 ^D | 1.570" | 10720-12 | Standard | | CS6RB30-V | | |
| Meduim street performance turbo cam (See Fitting notes 1) | 2500 - 6500 | 503TXM | 280 | 280 | 214 | 214 | .470" | .470" | 117 | | ZDDP-100 | | 5833-12 ^D | 1.570" | 10720-12 | Standard | | CS6RB30-V | | |
| Street / strip TURBO cam (See Fitting notes 1) | 3000 - 7000 | 503TX2 | 292 | 292 | 230 | 230 | .483" | .483" | 117 | | ZDDP-100 | | 5833-12 ^D | 1.570" | 10720-12 | Standard | | CS6RB30-V | | |

Note: Springs marked with xxxx-xx^D 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.

NISSAN

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|--------------------|---------------|---------|----------------|-------------|------------|---------|-----|------|----------------------|--|---------------------|----------------------|----------|----------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| L SERIES 4 CYLINDER ROCKER RATIO 1.47 | | | | | | | | | | | | | | | | | | | | |
| High Torque cams for stock engines. | 2000-5800 | 30643 | 295 | 292 | 212 @ .075" | 210 @ .075" | .480" | .495" | 108 | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Mild Performance cam for stock/near stock engines. | 2200-6000 | 30640 | 296 | 298 | 214 @ .075" | 216 @ .075" | .485" | .495" | 108 | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Medium Street performance cam. (See Fitting notes 1) | 3000-6500 | 30721 | 292 | 292 | 225 @ .075" | 225 @ .075" | .495" | .495" | 108 | | ZDDP-100 | | 5840-8 ^D | | Standard | Standard | | | | |
| L SERIES 6 CYLINDER 2400, 2600, 2800, 1969-1983 ROCKER RATIO 1.47 | | | | | | | | | | | | | | | | | | | | |
| Mild cam can use in near stock engine | 2200 - 6200 | 58640 | 296 | 298 | 214 @ .075" | 216 @ .075" | .485" | .495" | 108 | | IN .014" EX .014" | ZDDP-100 | | 5840-12 ^D | | Standard | Standard | | | |
| Medium performance cam choppy idle needs headers, carbies & ignition (See Fitting notes 1) | 3000 - 6500 | 58721 | 292 | 292 | 225 @ .075" | 225 @ .075" | .495" | .495" | 108 | | IN .010" EX .012" | ZDDP-100 | | 5840-12 ^D | | Standard | Standard | | | |
| SR20 1998 1992-2003 | | | | | | | | | | | | | | | | | | | | |
| Mild performance cams VCT & non VCT | 2200 - 6200 | 5302559 5022559 | 288 | 285 | 192 | 192 | .370" | .370" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| High performance cams VCT & non VCT | 3500 - 7500 | 5302553 5022553 | 295 | 295 | 220 | 220 | .410" | .410" | | | ZDDP-100 | | | | Standard | Standard | | | | |
| TB42/TB45 6 CYLINDER | | | | | | | | | | | | | | | | | | | | |
| High torque for stock & LPG engines suit towing,EFI engine may require tuning | 2200 - 4000 | 442867 | 250 | 268 | 210 | 217 | .420" | .425" | 113 | | IN .016" EX .016" | ZDDP-100 | | 5840-12 ^D | | Standard | Standard | | | |
| Mild cam for towing, manual transmission NOT suitable for EFI | 1600 - 4500 | 442846 | 267 | 281 | 218 | 225 | .425" | .430" | 109 | | IN .016" EX .016" | ZDDP-100 | | 5840-12 ^D | | Standard | Standard | | | |
| TB48 DOHC 24 VALVE | | | | | | | | | | | | NOTE: PARTS KIT VTK4162 INCLUDES 4162-24 SPRINGS AND 10716-24 RETAINERS | | | | | | | | |
| Stock replacement inlet Stock replacement exhaust | 1000 - 4000 | 538000 539000 | 260 | 260 | 210 | 210 | .373" | .373" | | | ZDDP-100 | | 4162-24 VTK4162 | | 10716-24 | | | | | |
| Mild street inlet cam no tuning required Mild street exhaust cam no tuning needed | 1500 - 4500 | 5381441 5391441 | 267 | 255 | 224 | 220 | .397" | .380" | | | ZDDP-100 | | 4162-24 VTK4162 | | 10716-24 | | | | | |
| Medium performance inlet cam Medium performance exhaust cam | 2200 - 5200 | 5381461 5391461 | 275 | 275 | 234 | 231 | .426" | .406" | | | ZDDP-100 | | 4162-24 VTK4162 | | 10716-24 | | | | | |

FURTHER NISSAN TB48 GRINDS AVAILABLE ON PAGE 144

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^D 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

Note: Installed heights may vary in every engine. Please check actual height before ordering spring, retainer and lock combinations

| Application | RPM Range | Part No. | Adv. Duration | | .050" Duration | | Valve Lift | | LSA | Lash | Oil Additive | Lifters | Valve Spring | Installed Height | Retainer | Locks | Stem Seal | Timing Kit | Pushrods | Rockers |
|---|-------------|--------------------|---------------|------------|----------------|------------|----------------|----------------|-----|------|--|----------|--------------|--------------------|----------|----------|-----------|------------|----------|---------|
| | | | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | | | | | | | | | | | | |
| 3SGE, 3SGTE TWIN CAM | | | | | | | | | | | | | | | | | | | | |
| Mild performance cams | 2200 - 5800 | 3481416 3481416 | 264 | 264 | 207 | 207 | .345" | .345" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Mild performance cams | 2700 - 6700 | 3481587 3481587 | 268 | 268 | 219 | 219 | .360" | .360" | | | ZDDP-100 | | | | | | | | | |
| Hot street/race cams | 2800 - 6800 | 3481407 3481407 | 270 | 270 | 227 | 227 | .368" | .368" | | | ZDDP-100 | | | | | | | | | |
| 4A-GE 1600 TWIN CAM | | | | | | | | | | | | | | | | | | | | |
| Mild performance cams | 2200 - 6200 | 271215 272215 | 277 | 277 | 218 | 218 | .315" | .315" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Mild performance cams | 2700 - 6700 | 271152 272152 | 280 | 280 | 234 | 234 | .334" | .334" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Hot street/race cams | 3200 - 7200 | 2711323 2721323 | 285 | 285 | 240 | 240 | .330" | .330" | | | ZDDP-100 | | | | | | | | | |
| 4A-GE 20 VALVE TWIN CAM | | | | | | | | | | | | | | | | | | | | |
| Mild performance cams | 2000 - 5600 | 274215 275215 | 277 | 277 | 218 | 218 | .315" | .315" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Mild performance cams | 2500 - 5800 | 274152 275152 | 280 | 280 | 234 | 234 | .334" | .334" | | | ZDDP-100 | | Standard | | Standard | Standard | | | | |
| Mild street performance cams | 2800 - 6000 | 2741323 2751323 | 285 | 285 | 240 | 240 | .330" | .330" | | | ZDDP-100 | | | | | | | | | |
| Hot street/race cams | 3500 - 7200 | 274859 275859 | 307 | 307 | 257 | 257 | .388" | .388" | | | ZDDP-100 | | | | | | | | | |
| 2JZ-GTE | | | | | | | | | | | | | | | | | | | | |
| Mild performance cams | 2300 - 6200 | 5411587 5421587 | 268 | 268 | 219 | 219 | .360" | .360" | | | ZDDP-100 | | | | | | | | | |
| Mild street performance cams | 2800 - 6800 | 5411407 5421407 | 270 | 270 | 227 | 227 | .368" | .368" | | | ZDDP-100 | | | | | | | | | |
| 20R, 21R, 22R | | | | | | | | | | | | | | | | | | | | |
| Hi torque for stock engines | 2000 - 5800 | 32643 | 295 | 292 | 212 | 210 | .480" | .495" | 108 | | IN .008" EX .010" | ZDDP-100 | | Standard | | Standard | Standard | | | |
| Mild performance cam for stock or near to stock engines | 2100 - 6100 | 32640 | 296 | 298 | 214 | 216 | .485" | .495" | 108 | | IN .014" EX .014" | ZDDP-100 | | Standard | | Standard | Standard | | | |
| 1FZ-FE 6 CYLINDER DOHC LANDCRUISER | | | | | | | | | | | NOTE: PARTS KIT VTK4163 INCLUDES 4163-24 SPRINGS AND 10715-24 RETAINERS | | | | | | | | | |
| 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" | | | IN .012" EX .012" | ZDDP-100 | | 4163-24 VTK6163 | 1.487" | 10715-24 | | | | |
| 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" | | | IN .012" EX .012" | ZDDP-100 | | 4163-24 VTK4163 | 1.487" | 10715-24 | | | | |
| 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" | | | IN .012" EX .012" | ZDDP-100 | | 4163-24 VTK4163 | 1.487" | 10715-24 | | | | |

FURTHER TOYOTA 1FZ-FE GRINDS AVAILABLE ON PAGE 145

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 |
|---|------------------|--------------------|-------------------|-----------|--------------|-----------------|-------------|
| FORD BA 6 CYLINDER INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED | | | | | | | |
| VTKBA6T-24 | 1.520" | 105 | 205 | .570" | .900" | 10703-24 | Std |
| FORD BA V8 XR8 TO MAY 2008 INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED | | | | | | | |
| VTKBAXR8-32 | 1.520" | 105 | 205 | .570" | .900" | 10704-32 | Std |
| FORD CLEVELAND V8 302-351 CONICAL SPRING KIT SINGLE GROOVE VALVE ONLY INCLUDES SPRINGS, RETAINERS AND LOCKS | | | | | | | |
| VTKCS84 | 1.920" | 140 | 310 | .600" | 1.220" | 11709-16 | 4134-16 |
| HOLDEN 6 VP-VR INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED | | | | | | | |
| VTKCS61 | 1.725" | 125 | 275 | .550" | 1.100" | 11708-12 | Stock |
| HOLDEN ECOTEC V6 INCLUDES SPRINGS, RETAINERS AND LOCKS | | | | | | | |
| VTK-ECOTEC | 1.780" | 120 | 270 | .550" | 1.100" | 10707-12 | 10701-12 |
| VTK-ECOTEC-R | 1.780" | 150 | 310 | .580" | 1.100" | 10707-12 | 10701-12 |
| HOLDEN V8 304-308 CONICAL SPRING KIT 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 | | | | | | | |
| VTKCS83 | 1.800" | 135 | 305 | .600" | 1.125" | 11708-16 | 4133-16 |
| VTKCS83A | 1.850" | 115 | 300 | .600" | 1.125" | 11708-16 | 4134-16 |

VALVE SPRING & RETAINER KITS

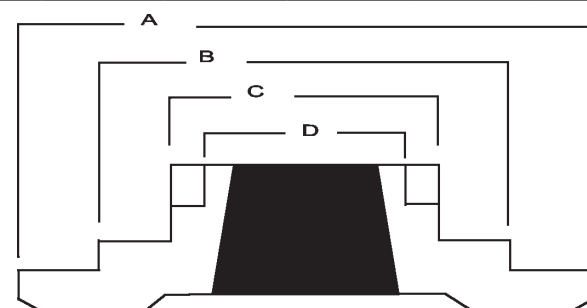
| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Coil Bind | Spring | Spring Retainer | Valve Locks |
|---|------------------|--------------------|-------------------|-----------|-----------|---------|-----------------|-------------|
| CROW VALVE SPRING KITS DUAL SPRINGS MEASURED WITH 0.100" SPACER ON INNER SPRING SUITABLE FOR MILD FORD AND HOLDEN HYDRAULIC APPLICATIONS. | | | | | | | | |
| VTK173K <i>HOLDEN 6CYL</i> | 1.625" | 90 | 210 | 0.645" | 0.930" | 4719-12 | 11707-12 | 11703-12 |
| VTK186K <i>HOLDEN 6CYL</i> | 1.625" | 115 | 250 | 0.615" | 0.960" | 4823-12 | 11707-12 | 11703-12 |
| VTK202K <i>HOLDEN 6CYL</i> | 1.470" | 120 | 215 | 0.470" | 0.950" | 4028-12 | 11707-12 | 11703-12 |
| VTK250K <i>FORD 6CYL MULTI GROOVE VALVE</i> | 1.760" | 115 | 290 | 0.600" | 1.120" | 7739-12 | 12706-12 | 11704-12 |
| VTK302K <i>WINDSOR V8</i> | 1.700" | 115 | 290 | 0.510" | 1.150" | 7736-12 | 11700-16 | 11701-16 |
| VTK308K <i>HOLDEN V8</i> | 1.700" | 110 | 320 | 0.570" | 1.080" | 4833-16 | 11707-16 | 11701-16 |
| VTK350K <i>SBC V8</i> | 1.700" | 120 | 320 | 0.490" | 1.160" | 4843-16 | 11707-16 | 11701-16 |
| VTK351K <i>CLEVO V8 MULTI GROOVE VALVE</i> | 1.760" | 115 | 290 | 0.600" | 1.120" | 7739-16 | 12706-16 | 11702-16 |
| VTKXR8 <i>(FORD EB-AU11 EFI 5L)</i> | 1.750" | 120 | 300 | 0.600" | 1.120" | 7739-16 | 11700-XR8 | 4135-16 |

VALVE SPRING & RETAINER KITS

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Spring Seat | Spring | Spring Retainer | Valve Locks |
|--|------------------|--------------------|-------------------|-----------|-------------|-----------------------|--------------------|-------------|
| FORD 6 CYL AU SPRING KITS DUAL SPRINGS MEASURED WITH RETAINER INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED. DUAL SPRINGS REQUIRE HEAD MACHINING TO FIT. | | | | | | | | |
| VTKAU³ | 1.820" | 98 | 255 | .650" | VSS1456 | 7332-12 ^D | 11740-12 | Stock |
| VTKAU-S³ | 1.820" | 100 | 270 | .600" | Std | 7739-12 | 11750-12 | Stock |
| VTKAU-R³ | 1.820" | 124 | 285 | .650" | VSS1456 | 7333-12 ^D | 11740-12 | Stock |
| FORD COYOTE V8 MUSTANG SPRING KIT INCLUDES SPRINGS AND TITANIUM RETAINERS. LOCKS NOT INCLUDED | | | | | | | | |
| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Coil Bind | Spring | Spring Retainer | Valve Locks |
| VTKCOYOTE | 1.575" | 92 @ 1.550" | 218 @ 1.050" | .575" | 0.941" | | Titanium Retainers | Standard |
| HOLDEN V8 LS1, LS2, LS7 SINGLE SPRING KITS INCLUDES SPRINGS, RETAINERS, LOCKS, STEM SEALS AND SHIMS. | | | | | | | | |
| VTKLS1 | 1.780" | 120 | 270 | .550" | 1.100" | 4231-16 | 10707-16 | 10701 |
| VTKLS5 | 1.780" | 140 | 330 | .600" | 1.100" | 1511ML-16 | 10707-16 | 10701 |
| HOLDEN V8 LS1, LS2, LS7 DOUBLE SPRING KIT INCLUDES SPRINGS, RETAINERS, LOCKS, STEM SEALS AND SHIMS. DUAL SPRINGS MEASURED WITH 0.100" SPACER ON INNER SPRING | | | | | | | | |
| VTKLS8 | 1.780" | 165 | 340 | .650" | 1.000" | 4438-16 ^D | 10708-16 | 10701 |
| VTKLST | 1.800" | 165 | 360 | .650" | 1.020" | 4439-16 ^D | Included Titanium | 10701 |
| VTKLS9 | 1.800" | 165 | 360 | .650" | 1.020" | 4439-16 ^D | 10708-16 | 10701 |
| VTKLST1 | 1.800" | 170 | 390 | .700" | 1.000" | 4207X-16 ^D | Included Titanium | 10701 |
| VTKLST2 | 1.800" | 180 | 425 | .750" | 1.000" | 4209X-16 ^D | Included Titanium | 10701 |
| NISSAN PATROL TB48 SINGLE SPRING KIT INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED | | | | | | | | |
| VTK4162 | 1.550" | 90 | 230 | 0.550" | 0.94" | 4162 | 10716 | Std |
| TOYOTA LANDCRUISER 1FZ-FE SINGLE SPRING KIT INCLUDES SPRINGS AND RETAINERS. LOCKS NOT INCLUDED | | | | | | | | |
| VTK4163 | 1.487" | 105 | 235 | .462" | 0.93" | 4163 | 10715 | Stock |

VALVE SPRING RETAINERS

| Part Number | Material | Diam A | Diam B | Diam C | Diam D | Valve Stem | Spring Height | Locks |
|---|----------|--------|--------|--------|--------|-------------|---------------|-----------|
| HIGH PERFORMANCE & RACE VALVE SPRING RETAINERS | | | | | | | | |
| 10703 | Chromoly | 0.920" | 0.630" | 0.475" | | 6mm | Standard | 7 degree |
| 10704 | Chromoly | 0.950" | 0.620" | | | 7mm | Standard | 7 degree |
| 10705 | Chromoly | 0.950" | 0.620" | | | 7mm | Standard | 7 degree |
| 10706 | Chromoly | 1.030" | 0.645" | | | 8mm | +0.50" | 7 degree |
| 10707 | Chromoly | 1.045" | 0.630" | | | 8mm | Standard | 7 degree |
| 10708 | Chromoly | 1.205" | 0.940" | 0.675" | | 8mm | Standard | 7 degree |
| 10709 | Chromoly | 1.378" | 1.063" | 0.709" | | 8mm | Standard | 7 degree |
| 10710 | Chromoly | 0.925" | 0.627" | 0.469" | | 6mm | +0.100" | 7 degree |
| 10714 | Chromoly | 1.043" | 0.740" | 0.520" | | 6mm | Standard | 7 degree |
| 10715 | Chromoly | 1.150" | 0.830" | 0.640" | | 7mm | Standard | 7 degree |
| 10716 | Chromoly | 1.060" | 0.770" | 0.485" | | 7mm | Standard | 7 degree |
| 10720 | Chromoly | 1.300" | 0.970" | 0.690" | | RB30 Std | RB30 Std | 7 degree |
| 11700 | Chromoly | 1.398" | 1.025" | 0.730" | | .343" | Standard | 7 degree |
| 11706 | Chromoly | 1.205" | 0.940" | 0.675" | | .343" | +0.040" | 7 degree |
| 11707 | Chromoly | 1.245" | 0.850" | 0.670" | | .343" | Standard | 7 degree |
| 11708 | Chromoly | 1.015" | 0.620" | | | .343" | Standard | 7 degree |
| 11709 | Chromoly | 1.015" | 0.655" | | | .343" | Standard | 7 degree |
| 11710 | Chromoly | 1.400" | 1.025" | 0.710" | | .343" | +0.100" | 7 degree |
| 11717 | Chromoly | 1.245" | 0.865" | 0.670" | | .343" | +0.100" | 7 degree |
| 11740 | Chromoly | 1.375" | 1.045" | 0.675" | | 7mm | Standard | 7 degree |
| 11750 | Chromoly | 1.375" | 1.020" | 0.675" | | 7mm | Standard | 7 degree |
| 12700 | Chromoly | 1.395" | 1.030" | 0.730" | | .343"-.375" | Standard | 7 degree |
| 12706 | Chromoly | 1.395" | 1.030" | 0.730" | | .343"-.375" | -0.060" | 7 degree |
| 12710 | Chromoly | 1.395" | 1.025" | 0.730" | | .343"-.375" | +0.100" | 7 degree |
| 13101 | Chromoly | 1.380" | 1.060" | 0.715" | | .312"-.375" | +0.100" | 10 degree |
| 13102 | Chromoly | 1.490" | 1.105" | 0.710" | | .312"-.375" | +0.100" | 10 degree |
| TR405 | Titanium | 1.448" | 1.090" | 0.780" | | .312"-.375" | +0.100" | 10 degree |
| TR435 | Titanium | 1.250" | 0.940" | .680" | | 8mm | Standard | 7 Degree |
| TR535 | Titanium | 1.500" | 1.180" | 0.830" | 0.640" | .312"-.375" | +0.100" | 10 degree |
| TR565 | 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 |
|------------------------------------|----------|---------------------------------------|-----------------------|------------|---------------|-----------|
| VALVE LOCKS / COLLETS | | | | | | |
| 4133-12 4133-16 | Machined | Single Groove | Per Pair, 6/8 Cyl Set | .343" | Standard | 7 degree |
| 4134-12 4134-16 | Machined | Single Groove | Per Pair, 6/8 Cyl Set | .343" | +0.050" | 7 degree |
| 4135-12 4135-16 | Machined | Single Groove | Per Pair, 6/8 Cyl Set | .343" | -0.050" | 7 degree |
| 10701-12 10701-16 | Hardened | Single Radius Groove | Per Pair, 6/8 Cyl Set | 8mm | Standard | 7 degree |
| 11101-12 11101-16 | Machined | Single groove | Per Pair, 6/8 Cyl Set | .343" | Standard | 10 degree |
| 11102-12 11102-16 | Machined | Single Groove | Per Pair, 6/8 Cyl Set | .343" | -0.050" | 10 degree |
| 11701-16 | Hardened | Single groove | 8 Cyl Set | .343" | Standard | 7 degree |
| 11702-16 | Hardened | Multi Groove | 8 Cyl Set | .343" | Standard | 7 degree |
| 11703-12 | Hardened | Single Groove | 6 Cyl Set | .343" | Standard | 7 degree |
| 11704-12 | Hardened | Multi Groove | 6 Cyl Set | .343" | Standard | 7 degree |
| 12102-12 | Hardened | Chrysler Hemi 6 cylinder Set | 6 Cyl Set | .375" | Standard | 7 degree |
| 12701-1 | Hardened | Single Groove Chev, Ford B/B Chrysler | Per Pair | .375" | Standard | 7 degree |
| 12704-1 | Hardened | Chrysler exhaust Multi Groove | Per Pair | .375" | Standard | 7 degree |
| 12708-16 | Hardened | Single Groove, Chev, Ford, Chrysler | 8 Cyl Set | .375" | Standard | 7 degree |
| 12108-12 12108-16 | Hardened | In 2 Groove, Ex 4 Groove. Chrysler | 6/8 Cyl Set | .375" | Standard | 7 degree |



VALVE TRAIN ACCESSORIES

VALVE SPRING SEATS

| Part Number | O/D | Spigot Diam. | Bore | Thickness | Part Number | O/D | Spigot Diam. | Bore | Thickness |
|-------------|--------|--------------|--------|-----------|-------------|--------|--------------|--------|-----------|
| VSS1251 | 1.280" | 0.670" | 0.510" | .050" | VSS1451 | 1.440" | 1.080" | 0.500" | .095" |
| VSS1252 | 1.270" | 0.680" | 0.560" | .045" | VSS1452 | 1.440" | 0.790" | 0.510" | .060" |
| VSS1258 | 1.280" | 0.880" | 0.500" | .060" | VSS1456 | 1.440" | 0.790" | 0.560" | .050" |

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. |
|---------------|--------|--------|---------------|--------|--------|---------------|--------|--------|
| VS250 (A,B,C) | 1.250" | 0.500" | VS306 (B) | 1.440" | 0.640" | VS510 (A,B,C) | 1.510" | 0.570" |
| VS203 (A,B) | 1.250" | 0.805" | VS305 (B,C) | 1.440" | 0.780" | VS740 (A,B,C) | 1.640" | 0.630" |
| VS438 (B) | 1.435" | 0.562" | VS303 (A,B,C) | 1.480" | 0.700" | | | |
| VS437 (A,B) | 1.437" | 0.500" | VS103 (A) | 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. |
|-------------|----------------|-------------|-------------|----------------|-------------|-------------|---------------|-------------|
| VSV108 | .342" (11/32") | .502" | VSV530 | .342" (11/32") | .530" | S9 | 8mm | .500" |
| KG303 | .342" (11/32") | .765" | KG317 | .342" (11/32") | .700" | VSV802 | .311" (5/16") | .531" |
| KG819 | .342" (11/32") | .280" | | | | | | |



PUSHROD GUIDE PLATES

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

VALVE STEM LASH CAPS (0.080" Thick)

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

CROW CAMS DEGREE WHEELS

| Part Number | | Part Number | |
|--|---|---|---|
| DW1 8" Black Degree Wheel Center Hole Diameter: 19.5mm |  | DW2 11" Racer Degree Wheel Center Hole Diameter: 10mm |  |

CROW CAMS DISTRIBUTOR GEARS

TREATED CAST IRON OIL PUMP / DISTRIBUTOR GEARS

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

BRONZE & MELONITE COATED DISTRIBUTOR GEARS

| Part Number | Application | Part Number | Application |
|-------------|---|-------------|---|
| BG3 | Chev Bronze Gear .501" Shaft Size | MG3 | Chev Melonite Gear .501" Shaft Size |
| BG4 | Chev Bronze Gear .491" Shaft Size | MG4 | Chev Melonite Gear .491" Shaft Size |
| BG5 | Ford Windsor Bronze Gear .531" Shaft Size | MG5 | Ford Windsor Melonite Gear .531" Shaft Size |
| BG6 | Ford Cleveland Bronze Gear .531" Shaft Size | MG6 | Ford Cleveland Melonite Gear .531" Shaft Size |
| BG8 | Ford Windsor Bronze Gear .502" Shaft Size | MG8 | Ford Windsor Melonite Gear .502" Shaft Size |
| BG9 | Ford Cleveland Bronze Gear .502" Shaft Size | MG9 | Ford Cleveland Melonite Gear .502" Shaft Size |
| BG10 | Ford Windsor Bronze Gear .467" Shaft Size | MG10 | Ford Windsor Melonite Gear .467" Shaft Size |
| BG13 | Chrysler SB Bronze Gear .501" Shaft Size | MG11 | Ford Cleveland Melonite Gear .491" Shaft Size |
| | | MG12 | Ford Windsor Melonite Gear .491" Shaft Size |

BRONZE GEARS

Crow Bronze Distributor Gears are made in the US from premium IMPCO 45 B600C Bronze stock. They are suitable for all steel roller camshafts including severe duty Carburised 8620, 9310 and tool steel billets.

IMPCO 45 is known for its wear resistance compared to other bronze less expensive materials typically used.



MELONITE GEARS

Crow Melonite Distributor Gears are US made and have a melonite surface treatment to improve wear resistance on cast flat tappet and hydraulic roller cams. They are also suitable for all Crow 1050 Induction Hardened Steel Solid Roller Camshafts.

Melonite gears are not suitable for custom race cams using Carburised 8620, 9310 or Tool Steel.



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

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.

These are stud mount rockers so heads will require machining to fit studs and guide plates.

| Application | Part Number | Max Spring Pressure | Guide Plates (5/16 Only) | Studs |
|-----------------------------------|-------------|---------------------|--------------------------|--------------|
| Chev SB 1.5RR 3/8 stud | CRCSB153 | 500lb | GP350 | CST102920 |
| Chev SB 1.5RR 7/16 stud | CRCSB157 | 600lb | GP350 | CST100941 |
| Chev SB 1.6RR 3/8 stud | CRCSB163 | 500lb | GP350 | CST102920 |
| Chev SB 1.6RR 7/16 stud | CRCSB167 | 600lb | GP350 | CST100941 |
| Chev BB 1.73RR 7/16 stud | CRCBB177 | 600lb | N/A | CST100941 |
| Ford Xflow 6 Cyl 1.73RR 7/16 stud | CRFX177 | 600lb | N/A | CST100941-12 |
| Ford Windsor 1.6RR 3/8 stud | CRFW163 | 500lb | GP302 | CST102920 |
| Ford Windsor 1.6RR 7/16 stud | CRFW167 | 600lb | GP302 | CST100940 |
| Ford Cleveland 1.73RR 7/16 stud | CRFCL177 | 600lb | GP351 | CST100940 |
| Holden 6 1.5RR 3/8 stud | CRHL6153 | 500lb | GP186 | CST102920-12 |
| Holden 6 1.5RR 7/16 stud | CRHL6157 | 600lb | GP186 | CST100941-12 |
| Holden V8 1.65RR 7/16 stud | CRHL8167 | 600lb | GP308/GP304 | CST100941 |



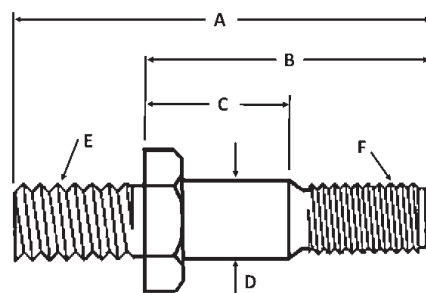
CROW CAMS

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 |
| Ford V8 Stud | CST100940 | 2.670" | 1.910" | .810" | 7/16 | 7/16 (UNC) | 7/16 (UNF) |
| GM V8 Stud | CST100941 | 2.560" | 1.765" | .875" | 7/16 | 7/16 (UNC) | 7/16 (UNF) |
| GM V8 Stud | CST102920 | 2.325" | 1.725" | .850" | 3/8 | 7/16 (UNC) | 3/8 (UNF) |
| GM 6 Stud | CST102920-12 | 2.325" | 1.725" | .850" | 3/8 | 7/16 (UNC) | 3/8 (UNF) |
| GM 6 Stud | CST100941-12 | 2.560" | 1.765" | .875" | 7/16 | 7/16 (UNC) | 7/16 (UNF) |



CROW CAMS NEXT GEN

ONE PIECE THICK WALL PUSHRODS

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

5/16" 0.110" WALL 210 RADIUS

| Length (inches) | Part Number | Length (inches) | Part Number | Length (inches) | Part Number |
|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| 6.200 | PR5620-110 | 7.550 | PR5755-110 | 9.050 | PR5905-110 |
| 6.250 | PR5625-110 | 7.600 | PR5760-110 | 9.100 | PR5910-110 |
| 6.300 | PR5630-110 | 7.650 | PR5765-110 | 9.150 | PR5915-110 |
| 6.350 | PR5635-110 | 7.700 | PR5770-110 | 9.200 | PR5920-110 |
| 6.400 | PR5640-110 | 7.750 | PR5775-110 | 9.250 | PR5925-110 |
| 6.450 | PR5645-110 | 7.800 | PR5780-110 | 9.300 | PR5930-110 |
| 6.500 | PR5650-110 | 7.850 | PR5785-110 | 9.350 | PR5935-110 |
| 6.600 | PR5660-110 | 7.900 | PR5790-110 | 9.400 | PR5940-110 |
| 6.700 | PR5670-110 | 7.950 | PR5795-110 | 9.450 | PR5945-110 |
| 6.750 | PR5675-110 | 8.000 | PR5800-110 | 9.500 | PR5950-110 |
| 6.800 | PR5680-110 | 8.050 | PR5805-110 | 9.550 | PR5955-110 |
| 6.850 | PR5685-110 | 8.100 | PR5810-110 | 9.600 | PR5960-110 |
| 6.900 | PR5690-110 | 8.150 | PR5815-110 | 9.650 | PR5965-110 |
| 6.950 | PR5695-110 | 8.200 | PR5820-110 | 9.700 | PR5970-110 |
| 7.000 | PR5700-110 | 8.250 | PR5825-110 | 9.750 | PR5975-110 |
| 7.025 | PR5702-110 | 8.300 | PR5830-110 | 9.800 | PR5980-110 |
| 7.050 | PR5705-110 | 8.350 | PR5835-110 | 10.45 | PR5045-110 |
| 7.100 | PR5710-110 | 8.400 | PR5840-110 | 10.55 | PR5055-110 |
| 7.150 | PR5715-110 | 8.450 | PR5845-110 | 10.60 | PR5060-110 |
| 7.200 | PR5720-110 | 8.500 | PR5850-110 | 10.70 | PR5070-110 |
| 7.250 | PR5725-110 | 8.550 | PR5855-110 | 10.75 | PR5075-110 |
| 7.300 | PR5730-110 | 8.600 | PR5860-110 | 10.80 | PR5080-110 |
| 7.325 | PR5732-110 | 8.650 | PR5865-110 | 10.85 | PR5085-110 |
| 7.350 | PR5735-110 | 8.700 | PR5870-110 | 10.95 | PR5095-110 |
| 7.375 | PR5737-110 | 8.750 | PR5875-110 | | |
| 7.400 | PR5740-110 | 8.800 | PR5880-110 | | |
| 7.425 | PR5742-110 | 8.850 | PR5885-110 | | |
| 7.450 | PR5745-110 | 8.900 | PR5890-110 | | |
| 7.500 | PR5750-110 | 8.950 | PR5895-110 | | |
| 7.525 | PR5752-110 | 9.000 | PR5900-110 | | |

3/8" 0.138" WALL 210 RADIUS

| Length (inches) | Part Number | Length (inches) | Part Number |
|-----------------|-------------|-----------------|-------------|
| 6.300 | PR8630-138 | 9.000 | PR8900-138 |
| 6.500 | PR8650-138 | 9.050 | PR8905-138 |
| 7.000 | PR8700-138 | 9.100 | PR8910-138 |
| 7.100 | PR8710-138 | 9.150 | PR8915-138 |
| 7.250 | PR8725-138 | 9.200 | PR8920-138 |
| 7.325 | PR8732-138 | 9.250 | PR8925-138 |
| 7.375 | PR8737-138 | 9.300 | PR8930-138 |
| 7.500 | PR8750-138 | 9.350 | PR8935-138 |
| 7.550 | PR8755-138 | 9.400 | PR8940-138 |
| 7.600 | PR8760-138 | 9.450 | PR8945-138 |
| 7.650 | PR8765-138 | 9.500 | PR8950-138 |
| 7.700 | PR8770-138 | 9.550 | PR8955-138 |
| 7.750 | PR8775-138 | 9.600 | PR8960-138 |
| 7.800 | PR8780-138 | 9.650 | PR8965-138 |
| 7.850 | PR8785-138 | 9.750 | PR8975-138 |
| 7.900 | PR8790-138 | 9.800 | PR8980-138 |
| 7.950 | PR8795-138 | 9.900 | PR8990-138 |
| 8.000 | PR8800-138 | 9.950 | PR8995-138 |
| 8.050 | PR8805-138 | | |
| 8.100 | PR8810-138 | | |
| 8.150 | PR8815-138 | | |
| 8.200 | PR8820-138 | | |
| 8.250 | PR8825-138 | | |
| 8.300 | PR8830-138 | | |
| 8.350 | PR8835-138 | | |
| 8.400 | PR8840-138 | | |
| 8.450 | PR8845-138 | | |
| 8.500 | PR8850-138 | | |
| 8.550 | PR8855-138 | | |
| 8.600 | PR8860-138 | | |
| 8.650 | PR8865-138 | | |
| 8.700 | PR8870-138 | | |
| 8.750 | PR8875-138 | | |
| 8.800 | PR8880-138 | | |
| 8.850 | PR8885-138 | | |
| 8.900 | PR8890-138 | | |
| 8.950 | PR8895-138 | | |



CROW CAMS

ONE PIECE 180° CHROME MOLY PUSHRODS 0.80" WALL

PART NUMBER 5/16" .080 WALL

PART NUMBER 3/8" .080 WALL

| Length (inches) | Part Number | Length (inches) | Part Number | Length (inches) | Part Number | Length (inches) | Part Number |
|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| 6.20 | PR5620 | 9.50 | PR5950 | 8.65 | PR8865-210 | 9.50 | PR8950-210 |
| 6.40 | PR5640 | 9.55 | PR5955 | 8.75 | PR8875-210 | 9.55 | PR8955-210 |
| 6.45 | PR5645 | 9.60 | PR5960 | 8.95 | PR8895-210 | 9.60 | PR8960-210 |
| 6.75 | PR5675 | 9.65 | PR5965 | 9.00 | PR8900-210 | 9.65 | PR8965-210 |
| 9.00 | PR5900 | 9.70 | PR5970 | 9.05 | PR8905-210 | 9.75 | PR8975-210 |
| 9.05 | PR5905 | 9.75 | PR5975 | 9.10 | PR8910-210 | 9.80 | PR8980-210 |
| 9.10 | PR5910 | 10.45 | PR5045 | 9.15 | PR8915-210 | 9.90 | PR8990-210 |
| 9.15 | PR5915 | 10.55 | PR5055 | 9.20 | PR8920-210 | 9.95 | PR8995-210 |
| 9.20 | PR5920 | 10.60 | PR5060 | 9.45 | PR8945-210 | | |
| 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 | | | | |

PR-HEMI-16 HEMI 5.7 PUSHROD SET. INCLUDES:

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

CROW CAMS NEXT GEN

ONE PIECE OIL RESTRICTOR PUSHRODS .083

- Pushrods designed to restrict excessive oil flow to cylinder heads.
Top Oil Hole .040" Bottom Oil Hole .080". Wall Thickness .083"

PART NUMBER LISTING 5/16" .083" WALL

| Length (inches) | Part Number | Length (inches) | Part Number | Length (inches) | Part Number |
|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| 7.35 | PR5735R | 8.15 | PR5815R | 8.65 | PR5865R |
| 7.40 | PR5740R | 8.20 | PR5820R | 8.70 | PR5870R |
| 7.45 | PR5745R | 8.25 | PR5825R | 8.75 | PR5875R |
| 7.80 | PR5780R | 8.30 | PR5830R | 8.80 | PR5880R |
| 7.85 | PR5785R | 8.35 | PR5835R | 8.85 | PR5885R |
| 7.90 | PR5790R | 8.40 | PR5840R | 8.90 | PR5890R |
| 7.95 | PR5795R | 8.45 | PR5845R | 8.95 | PR5895R |
| 8.00 | PR5800R | 8.50 | PR5850R | 9.00 | PR5900R |
| 8.05 | PR5805R | 8.55 | PR5855R | 9.05 | PR5905R |
| 8.10 | PR5810R | 8.60 | PR5860R | | |

PUSHRODS

SUPERDUTY PUSHRODS 1 PIECE, 0.080" WALL HEAT TREATED HIGH CARBON STEEL 5/16"

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

STANDARD REPLACEMENT PUSHRODS 5/16" HARDENED WHERE MARKED*

| Part Number | Length | Application | Part Number | Length | Application |
|-------------|--------|-----------------|-------------|--------|-----------------------|
| PR-105* | 9.136" | Holden 186 | PR-387* | 8.721" | Holden 308 +.030" |
| PR-281*1 | 6.876" | Ford Windsor | PR-414* | 8.423" | Ford Cleveland +.015" |
| PR-309 | 8.408" | Ford Clev.Std | PR-422* | 9.016" | Holden 202 |
| PR-317 | 9.682" | Ford XF Std | PR-433 | 7.290" | |
| PR-34B* | 7.794" | Chev 350 | PR-605 | 7.050" | Holden Ecotec V6 Std |
| PR-384 | 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 |
|-------------|------------------|-------------|----------------------------------|
| PR-CHECK-6 | 5.800 - 6.800 | PR-CHECK-10 | 9.800 - 10.800 |
| PR-CHECK-7 | 6.800 - 7.800 | PR-CHECK-11 | 10.800 - 11.800 |
| PR-CHECK-8 | 7.800 - 8.800 | PR-CHECK-S2 | 2 piece set covering 7.80 - 9.80 |
| PR-CHECK-9 | 8.800 - 9.800 | PR-CHECK-S4 | 4 piece 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 |
|--------------------|--|--------------------------|--------|---------------------------|
| CS8350 | Chev Small Block 283-400 | N/A | Double | 3DR 58-IWIS |
| CS8350T | Chev Small Block with Torrington thrust | N/A | Double | 3DR 58-IWIS |
| CS8350TPI | Chev Small Block late LT1 TPI injection | N/A | Double | 3DR 58-IWIS |
| CS8350+005 | Chev S/B +005L/Bore Timing Set | N/A | Double | 3DR 58-IWIS + 005" |
| CS8350+010 | Chev S/B +010L/Bore Timing Set | N/A | Double | 3DR 58-IWIS + 010" |
| CS8454T | Chev Big Block with Torrington thrust | N/A | Double | 3DR 66-IWIS |
| CS8LSA | Chev/Holden LSA 3 bolt | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LSA-SR | Chev/Holden LSA 3 bolt. Single Row Chain | 4 Triggers | Single | 3SR 60-IWIS |
| CS8LS1 | Chev/Holden LS1 3 bolt | No Triggers | Double | 3DR 60-IWIS |
| CS8LS1-SR | Chev/Holden LS1 3 bolt. Single Row Chain | No Triggers | Single | 3SR 60-IWIS |
| CS8LS2 | Chev/Holden LS2 3 bolt with position trigger | Half Moon Single Trigger | Double | 3DR 60-IWIS |
| CS8LS2-SR | Chev/Holden LS2 3 bolt with position trigger | Half Moon Single Trigger | Single | 3SR 60-IWIS |
| CS8L98 | Chev/Holden L98 1 bolt. Double Row Chain | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LS-VE-SR | Chev/Holden LS3, L76, L77, L98, 6.0/6.2L. | 4 Triggers | Single | 3SR 60-IWIS |
| CS8LS7 | Chev/Holden LS7 3 bolt. Double Row Chain | 4 Triggers | Double | 3DR 60-IWIS |
| CS8LS7-SR | Chev/Holden LS7 3 bolt. Single Row Chain | 4 Triggers | Single | 3SR 60-IWIS |
| CS8LS7+005 | Chev/Holden LS7+5 Double Row Set | 4 Triggers | Double | 3DR 60-IWIS + 005" |
| CS6225 | Chrysler Slant 6 engine | N/A | Double | 3DR 66-IWIS |
| CS6265 | Chrysler 245-265 3 Bolt | N/A | Double | 3DR 56-IWIS |
| CS8318 | Chrysler 273-360 | N/A | Double | 3DR 68-IWIS |
| CS8440 | Chrysler Big Block 1 Bolt | N/A | Double | 3DR 66-IWIS |
| CS8440B | Chrysler Big Block 3 Bolt | N/A | Double | 3DR 66-IWIS |
| CS41500 | Ford Kent 4 cyl Double Row race set | N/A | Double | 3DR 46-IWIS |



No Trigger



Single Trigger



4 Triggers

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 |
|-----------------------|--|-----------------|--------|---------------------------|
| CS6250 | Ford Falcon 6 200-250 | N/A | Double | 3DR 52-IWIS |
| CS6250+010 | Falcon 6 Chain Set LB 0.cacalc010" | N/A | Double | 3DR 60-IWIS + 010" |
| CS6EA-VS | Ford Vernier Set suit EA-AU Falcon | N/A | Double | 3DR 114-IWIS |
| CS6170 | Ford 144,170,200 XM-XP Timing Set | N/A | Double | 3DR 50-IWIS |
| CS8302W | Ford 289, 302, 351 Windsor | N/A | Double | 3DR 58-IWIS |
| CS8302WEFI | Ford Falcon V8 EB on EFI engines and 351 Windsor | N/A | Double | 3DR 58-IWIS |
| CS8302WEFI+005 | Ford EB-EF V8 Chain Set + 0.005 | N/A | Double | 3DR 58-IWIS + 005" |
| CS8302WEFI+010 | Ford EB-EF V8 Chain Set +0.010 | N/A | Double | 3DR 58-IWIS + 010" |
| CS8351C | Ford 302-351 Cleveland | N/A | Double | 3DR 64-IWIS |
| CS8351C-SVO | Ford Cleveland stroker engine | N/A | Double | 3DR 64-IWIS |
| CS8351C+005 | Ford CS8351C +005" Line Bore Set | N/A | Double | 3DR 64-IWIS + 005" |
| CS8351C+010 | Ford CS8351C +010" Line Bore Set | N/A | Double | 3DR 64-IWIS + 010" |
| CS8FE428 | Ford FE V8 352-428 | N/A | Double | 3DR 64-IWIS |
| CS8460 | Ford 429-460 | N/A | Double | 3DR 66-IWIS |
| CS6VN | Holden VN V6 Single Row to Nov'90 | N/A | Single | 3SR 54-IWIS |
| CS6VP | Holden VN,VP Nov'90 on 2 spline oil pump | N/A | Single | 3SR 54-IWIS |
| CS6VS | Holden Oct-94 onVR,VS,VT 6 spline oil pump | N/A | Single | 3SR 54-IWIS |
| CS6VSVTHP | Holden Ecotec Double Row Timing Set | N/A | Double | 3DR 54-IWIS |
| CS8308 | Holden V8 Suit 308 Carby and 304/355 EFI | N/A | Double | 3DR 62-IWIS |
| CS8308+005 | Holden 308 Linebore Timing Set 0.005" | N/A | Double | 3DR 62-IWIS + 005" |
| CS8308+010 | Holden 308 Linebore Timing Set 0.010" | N/A | Double | 3DR 62-IWIS + 010" |
| CS8P76 | Leyland Rover, P76 V8 | N/A | Double | 3DR 54-IWIS |

HOLDEN 6CYL TIMING SETS

Featuring Multiple keyways for precise cam timing

| Part Number | Description |
|---------------|--|
| CS6202 | Straight cut hardened steel gears. Not recommended for street use. |
| 44HP | 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 |
|-------------------|---|
| CS42000-V | Ford 2000 steel vernier gear. |
| CS6EA-V | Ford EA- AU vernier cam gear. Not VCT motor |
| CS6RB30-V | Nissan RB30 vernier gear. Aluminium. |
| CS8LS1-SRV | GM LS1 Vernier Single Row Gear Set |
| CS8LS7-SRV | GM LS7, L98 Three Bolt Vernier Single Row Set |
| VG-BARRA | Vernier Cam Gears suit 4.0L BA-FG Barra DOHC. |

HOLDEN LS CAM GEARS

(See LS Grinds Page) Cam gear only.

| Part Number | Description |
|------------------|--|
| 12586481 | VE 3 Bolt Gear Genuine GM Single Row 4 Triggers |
| 12576407 | LS2 3 Bolt Gear Genuine GM Single Row 1 Trigger (Half Moon style) |
| CS8LS-VE3 | 3 Bolt Heavy Duty Steel Cam Gear Single Row 4 Triggers |

CAM FOLLOWERS

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

| Part Number | Application | Model | Body Dia. | Roller Dia. | Oil Through Pushrod | Max Pressure |
|-----------------|----------------------|---|-----------|-------------|---------------------|--------------|
| HT817C | GM | Chevrolet | .840" | Flat Tappet | Yes | 320 |
| HT900 | Ford | Falcon Xflow 6, Cleveland, Windsor V8 & 429-460 | .872" | Flat Tappet | Yes | 320 |
| HT950 | Ford Falcon 6, FE V8 | Pre Xflow 6, FE V8 | .872" | Flat Tappet | No | 320 |
| BA-ADJ-1 | Ford | BA 6 Cyl Hyd Lifter | .550 | Flat Tappet | No | 320 |
| HT951 | Pontiac, Olds | Most V8 | .840" | Flat Tappet | Yes | 320 |
| HT969C | Holden | Red, Blue, Black 6, V8 | .840" | Flat Tappet | Yes | 320 |
| HT2011 | Chrysler | Hemi 6 and V8 | .902" | Flat Tappet | Yes | 320 |

HIGH RPM HYDRAULIC LIFTERS

| | | | | | | |
|----------------|----------|---|-------|-------------|-----|-----|
| HT817R | GM | Chev | .840" | Flat Tappet | Yes | 320 |
| HT900R | Ford | Falcon Xflow 6, Cleveland, Windsor V8 & 429-460 | .872" | Flat Tappet | Yes | 320 |
| HT969R | Holden | Red, Blue, Black 6, V8 | .840" | Flat Tappet | Yes | 320 |
| HT2011R | Chrysler | Hemi 6 and V8 | .902" | Flat Tappet | Yes | 320 |

SOLID LIFTERS

| | | | | | | |
|----------------|----------------------|---|-------|-------------|-----|-----|
| AT31 | Chrysler | Slant 6 | .902" | Flat Tappet | No | 400 |
| AT282 | Ford Falcon 6, FE V8 | Pre Xflow 6, FE V8 | .872" | Flat Tappet | No | 400 |
| AT992 | GM | Chevrolet & Holden | .840" | Flat Tappet | Yes | 400 |
| AT992EO | GM Edge Orifice | Chevrolet & Holden | .840" | Flat Tappet | Yes | 400 |
| AT2000 | Ford | Falcon Xflow 6, Cleveland, Windsor V8 & 429-460 | .872" | Flat Tappet | Yes | 400 |
| VT2014 | Ford | Cortina 1600 1970-81 | .514" | Flat Tappet | No | 400 |

SOLID LIFTERS WITH POSITIVE EDM OILING TO LIFTER FACE

| | | | | | | |
|-------------------|------|---|-------|-------------|-----|-----|
| AT2000L-16 | Ford | Falcon Xflow 6, Cleveland, Windsor V8 & 429-460 | .872" | Flat Tappet | Yes | 400 |
| AT992L-16 | GM | Chevrolet and Holden | .840" | Flat Tappet | Yes | 400 |

HYDRAULIC ROLLER LIFTERS STREET PERFORMANCE.

| Part Number | Application | Model | Body Dia. | Roller Dia. | Type | |
|----------------|----------------|---|-----------|-------------|---------------------------------------|---------|
| 5200H | Chevrolet | Small Block V8 Retro Fit to 1986 | .842" | .700" | Tie Bar | 380 |
| 5200HP | Chevrolet | Small Block V8 Retro Fit. Performance 7000RPM Lifter. | .842" | .750" | Tie Bar | 400 |
| 5318H | Chrysler | Small Block V8 Retro Fit | .902" | .700" | Tie Bar | 380 |
| 5300H | Ford | Windsor EFI V8 Factory | .872" | .700" | Standard Replacement | 300 |
| 5325 | Ford | Big Block V8 460 and FE | .875" | .750" | Tie Bar | 380 |
| 5351HPF | Ford | Ford V8 Retro Fit | .875" | .750" | Tie Bar | 380 |
| 3800R | Holden 3800 V6 | VN to VY Heavy Duty | .840" | .700" | Standard Replacement | 400 |
| 5208H | Holden | Red, Blue, Black V8 & EFI | .840" | .700" | Tie Bar | 380 |
| 5210H | Holden | Chev Big Block Hyd Roll | .842" | .700" | Tie Bar | 380 |
| 5250 | Holden | LS V8 LS7 Style | .840" | .700" | Standard Replacement | 400 |
| 5251 | Holden | LS V8 Street Performance | .840" | .700" | Tie Bar | 450 |
| 5263AFM | Holden | LS V8 L76 AFM Engine | .840" | .700" | Std Replace (8 x 5250, 8 x 5250AFM-1) | Factory |
| 5250AFM | Holden | LS V8 L76 AFM Engine | .840" | .700" | Std Replace Set of 8 AFM Lifters | Factory |

CAM FOLLOWERS

HYDRAULIC ROLLER LIFTERS HIGH RPM STREET RACE BILLET BODY

NOTE* USE 5W40 OR LIGHTER WEIGHT OILS IN HIGH RPM HYDRAULIC ROLLER LIFTERS

| Part Number | Application | Model | Body Dia. | Roller Dia. | Type | Max Pressure |
|-------------|-------------|--|-----------|-------------|---------|--------------|
| 5044 | Chevrolet | Small Block V8 Retro fit to 1986 | .840" | .750" | Tie Bar | 550 |
| 5294 | GM | LS V8 | .840" | .750" | Tie Bar | 550 |
| 5879 | Ford | Cleveland & Windsor V8 - High RPM Lifter | .872" | .750" | Tie Bar | 550 |

SOLID ROLLER LIFTERS STREET RACE

| | | | | | | |
|--------------|-----------|----------------------------------|-------|-------|--------------------|-----|
| 5200C | Chevrolet | Small Block V8 Retro Fit to 1986 | .840" | .750" | Tie Bar | 700 |
| 5208 | Holden | Red, Blue, Black V8 | .840" | .700" | Tie Bar | 700 |
| 5210 | Chevrolet | Big Block V8 | .840" | .750" | Vertical Tie Bar | 700 |
| 5211 | Chevrolet | Big Block V8 | .840" | .750" | Horizontal Tie Bar | 700 |
| 5261 | GM | LS V8 | .840" | .750" | Tie Bari | 700 |

SEVERE DUTY SOLID ROLLER LIFTERS WITH PRIORITY OILING

| | | | | | | |
|---------------|-----------|------------------------------------|-------|-------|---------|-----|
| 4838PF | Chevrolet | Small Block .180" Int Offset L&R | .840" | .750" | Tie Bar | 700 |
| 5200PF | Chevrolet | Small Block V8 Severe Duty | .840" | .750" | Tie Bar | 700 |
| 5212PF | Chevrolet | Big Block V8 Severe Duty | .840" | .750" | Tie Bar | 700 |
| 5300PF | Ford | Windsor & Cleveland V8 Severe Duty | .872" | .750" | Tie Bar | 700 |

ULTIMATE RACE SOLID ROLLER LIFTERS

BUSH BEARING PRESSURE FED LUBRICATION FOR MAXIMUM LOAD RATING

| | | | | | | |
|-----------------|-----------|---------------------------------|-------|-------|---------|-----|
| 4838BUSH | Chevrolet | Small Block V8 .180" Offset L&R | .840" | .750" | Tie Bar | 850 |
| 5200BUSH | Chevrolet | Small Block V8 Extreme Duty | .840" | .750" | Tie Bar | 850 |
| 5212BUSH | Chevrolet | Big Block V8 Extreme Duty | .840" | .750" | Tie Bar | 850 |
| 6177BUSH | Holden | LS Engines V8 Super Duty | .840" | .750" | Tie Bar | 850 |
| 5300BUSH | Ford | Small Block V8 Extreme Duty | .872" | .750" | Tie Bar | 850 |
| 5351BUSH | Ford | Small Block V8 Extreme Duty | .872" | .750" | Tie Bar | 850 |

EXTREME DUTY .904" SOLID ROLLER LIFTERS.

PRESSURE FED EXTREME DUTY LIFTERS TO WITHSTAND SPRING PRESSURES OF OVER 1000LBS.

| | | | | | | |
|---------------|-----------|-----------------------------------|-------|-------|---------|------|
| 5209PF | Chevrolet | Small Block V8 | .904" | .815" | Tie Bar | 1000 |
| 52090S | Chevrolet | Small Block V8 .210" L & R Offset | .904" | .815" | Tie Bar | 1000 |
| 5219PF | Chevrolet | Big Block V8 | .904" | .815" | Tie Bar | 1000 |
| 52190S | Chevrolet | Big Block V8 .210" L & R Offset | .904" | .815" | Tie Bar | 1000 |
| 5309PF | Ford | Small Block V8 | .904" | .815" | Tie Bar | 1000 |
| 53090S | Ford | Small Block V8 .210" L & R Offset | .904" | .815" | Tie Bar | 1000 |

CAM FOLLOWER ARMS

| | | |
|--------------|------------|----------------------------------|
| RR368 | GM, Daewoo | All Family 1, 4 Cylinder Engines |
| RR811 | Ford | Cortina 2000cc OHC Engine |

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.

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.
 - 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 TPI = .042" per full turn
and .042" / 4 = .0105" per quarter turn.
 - e) Use the chart above to determine how many quarter-turns to tighten the adjuster nut after Zero-Lash:

| 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" |

5. Repeat these adjustments for each cylinder running through the firing order.

TYPES OF MOREL HYDRAULIC LIFTERS:

1. Street Performance

The street performance hydraulic lifters are made from a cold formed body with a clipped axle and have 6500RPM capability. These lifters have a .120" plunger travel and have an 80% fill rate with the test oil. The lifter wheels in this series are .700" diameter.

Recommended Spring Pressure:

100-180lbs Seat Pressure
280-380lbs Open Pressure

2. Hi-RPM

The HI-RPM hydraulic lifters are made from a billet body and have a clipped axle. These lifters have 7000+ RPM capability with .120" plunger travel and have an 80% fill rate with the test oil. These lifters have a .750" diameter roller wheel for the .842" & .875" diameter lifters and a .810" diameter roller wheel for the .903" diameter lifters. The internal tolerances are much tighter in this series.

Do not use engine oil heavier than 5w40.

Recommended Spring Pressure:

100-225lbs Seat Pressure
350-550lbs Open Pressure

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 your spring is not listed please see the spring specification chart on page xx or contact our technical staff.

Making correct measurements before assembly is critical as many variables are present to catch the unwary.
Note Dual Valve Springs may require head machining to fit. Dual Valve Springs measured with .100" Thick Retainer.

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|---|------------------|--------------------|-------------------|-----------|--------------|-----------------|-----------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|
| CHEV. BIG BLOCK 396 - 454 Standard retainers have large step which may bind on damper. | | | | | | | | | | | | | | |
| 7737-16 | 1.880" | 90 | 270 | .520" | 1.310" | 12700 | 12708 | 1.510" | 1.086" | 0.965" | 1+ Damper | L | 2.220" | 345 |
| 7437-16^b | 1.880" | 118 | 300 | .780" | 1.050" | 12700 | 12708 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 |
| 4910-16^b | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 12710 / TR405 | 12708 | 1.550" | 1.150" | 0.800" | 2 | R | 2.466" | 555 |
| 8937-16^b | 1.900" | 131 | 325 | .650" | 1.180" | 12710 | 12708 | 1.530" | 1.120" | 0.760" | 2+ Damper | L | 2.335" | 390 |
| 9731-16 | 1.950" | 130 | 295 | .720" | 1.180" | 12700 | 12708 | 1.550" | 1.125" | 1.000" | 1+ Damper | L | 2.460" | 320 |
| 8337-16^b | 1.980" | 130 | 305 | .725" | 1.114" | 12710 | 12708 | 1.515" | 1.120" | 0.800" | 2 | L | 2.350" | 360 |
| 9936-16^b | 1.980" | 143 | 345 | .800" | 1.180" | 12710 | 12708 | 1.539" | 1.120" | 0.765" | 2+ Damper | L | 2.460" | 400 |
| 9950-16^b | 1.980" | 165 | 410 | .760" | 1.150" | 12710 | 12708 | 1.540" | 1.130" | 0.725" | 2+ Damper | L | 2.430" | 485 |
| 9945-16^b | 1.980" | 138 | 370 | .760" | 1.200" | 12710 | 12708 | 1.560" | 1.010" | 0.690" | 2+ Damper | L | 2.475" | 460 |
| 4920-16^b | 2.000" | 267 | 574 | .770" | 1.180" | 12710 / TR405 | 12708 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |
| CHEV. SMALL BLOCK V8 | | | | | | | | | | | | | | |
| 4931-16 | 1.700" | 85 | 250 | .550" | 1.140" | 11707 | 11701 | 1.230" | 0.880" | 0.770" | 1+ Damper | R | 2.020" | 275 |
| 4828-16 | 1.700" | 110 | 285 | .570" | 1.080" | 11707 | 11701 | 1.250" | 0.870" | | 1 | R | 2.030" | 360 |
| 4833-16 | 1.700" | 110 | 320 | .570" | 1.080" | 11707 | 11701 | 1.255" | 0.868" | 0.780" | 1+ Damper | R | 2.030" | 415 |
| 4843-16 | 1.700" | 120 | 320 | .490" | 1.160" | 11707 | 11701 | 1.265" | 0.875" | 0.760" | 1+ Damper | R | 2.015" | 411 |
| 7328-16^b | 1.700" | 140 | 285 | .690" | .960" | 11700 | 11701 | 1.430" | 1.080" | 0.810" | 2 | L | 2.372" | 280 |
| 4438-16^b | 1.800" | 155 | 330 | .650" | 1.050" | 11717 | 4133 | 1.290" | 0.948" | 0.690" | 2 | R | 2.345" | 365 |
| 7333-16^b | 1.800" | 130 | 295 | .650" | 1.050" | 13101/11710 | 11101 / 4134 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| 7331-16^b | 1.800" | 160 | 330 | .700" | 1.100" | 13101/11710 | 11101 / 4134-16 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|---|------------------|--------------------|-------------------|-----------|--------------|-----------------|--------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|
| CHEV. SMALL BLOCK V8 ...CONTINUED | | | | | | | | | | | | | | |
| 4845-16 | 1.850" | 95 | 285 | .660" | 1.140" | 11717 | 4134 | 1.260" | 0.880" | 0.785" | 1+ Damper | R | 2.130" | 380 |
| 7342-16^o | 1.850" | 125 | 320 | .650" | 1.060" | 13101/11710 | 11101 / 4134 | 1.460" | 1.080" | .800" | 2 | R | 2.240" | 390 |
| 7437-16^o | 1.850" | 130 | 315 | .750" | 1.050" | 13101/11710 | 11101 / 4134 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 |
| 4910-16^o | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 13101 / TR405 | 11101 | 1.550" | 1.150" | 0.800" | 2 | R | 2.460" | 555 |
| 4920-16^o | 2.000" | 267 | 574 | .770" | 1.180" | 13101 / TR405 | 11101 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |
| CHRYSLER SMALL BLOCK 273 - 360 V8 | | | | | | | | | | | | | | |
| 5091-16 | 1.667" | 90 | 270 | .542" | 1.095" | 12700 | 12108 | 1.500" | 1.080" | 0.990" | 1+ Damper | R | 1.960" | 355 |
| 7736-16 | 1.667" | 120 | 294 | .510" | 1.100" | 12700 | 12108 | 1.440" | 1.040" | 0.950" | 1+ Damper | L | 2.100" | 345 |
| 7331-16^o | 1.667" | 200 | 370 | .700" | 1.100" | 12700 | 12108 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 |
| CHRYSLER 300C V8 5.7 - 6.1 | | | | | | | | | | | | | | |
| 4435-16 | 1.800" | 135 | 314 | .600" | 1.150" | Stock | Stock | 1.060" TOP 1.200" BOT | 0.640" TOP 0.800" BOT | | 1 Conical | R | 2.220" | 350 |
| CHRYSLER SLANT 6 225 | | | | | | | | | | | | | | |
| 5091-12 | 1.650" | 100 | 285 | .542" | 1.095" | Std. | Std. | 1.500" | 1.080" | 0.990 | 1+ Damper | R | 1.960" | 355 |
| CHRYSLER HEMI 6 | | | | | | | | | | | | | | |
| 5091-12 | 1.667" | 90 | 270 | .542" | 1.095" | 12700 | 12102-12 | 1.500" | 1.080" | 0.990 | 1+ Damper | R | 1.960" | 355 |
| 7736-12 | 1.667" | 120 | 295 | .510" | 1.100" | 12700 | 12102-12 | 1.440" | 1.040" | 0.950" | 1+ Damper | L | 2.100" | 345 |
| DATSUN L SERIES ENGINES, 1600-2000 4CYL / 2400-2800 6CYL | | | | | | | | | | | | | | |
| 5840-8^o | 1.580" | 90 | 265 | .670" | 0.860" | Std. | Std. | 1.335" | 1.000" | 0.720" | 2 | R | 1.930" | 345 |
| FORD BA 6 CYLINDER | | | | | | | | | | | | | | |
| 1808-24 | 1.480" | 90 | 200 | .550" | .880" | Std | Std | 0.970" TOP 1.060" BOT | 0.650" TOP 0.727" BOT | | 1 Conical | R | 1.970" | 220 |
| 1809-24 | 1.520" | 105 | 205 | .570" | .900" | 10703 | Std | 1.060" BOT | 0.650" TOP 0.740" BOT | | 1 Conical | R | 2.180" | 205 |
| FORD BA V8 290KW / XR8 FROM MAY 2008 | | | | | | | | | | | | | | |
| 1808-32 | 1.490" | 88 | 188 | .550" | .880" | Std | Std | 0.970" TOP 1.060" BOT | 0.650" TOP 0.727" BOT | | 1 Conical | R | 1.970" | 220 |
| 1809-32 | 1.590" | 90 | 190 | .570" | .900" | 10705 | Std | 1.060" BOT | 0.650" TOP 0.740" BOT | | 1 Conical | R | 2.180" | 205 |
| 1804-32 | 1.590" | 120 | 260 | .520" | 1.020" | Std | Std; | 0.995" TOP 1.060" BOT | 0.635" TOP 0.700" BOT | | 1 Conical | R | 2.060" | 280 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|--|------------------|--------------------|-------------------|-----------|--------------|-----------------|-------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|
| FORD FALCON CROSSFLOW | | | | | | | | | | | | | | |
| 7739-12 | 1.760" | 115 | 290 | .600" | 1.120" | 12706-12 | 11704-12 | 1.420" | 1.015" | 0.925" | 1+ Damper | R | 2.160" | 340 |
| 7333-12^o | 1.820" | 124 | 285 | .650" | 1.050" | 12700-12 | 11704-12 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| FORD FALCON AU NB. Step to be M/C off head for double springs | | | | | | | | | | | | | | |
| 7739-12 | 1.820" | 100 | 270 | .600" | 1.120" | 11750-12 | Standard | 1.420" | 1.015" | 0.925" | 1+ Damper | R | 2.160" | 340 |
| 7332-12^o | 1.820" | 98 | 255 | .650" | 1.050" | 11740-12 | Standard | 1.445" | 1.090" | 0.800" | 2 | L | 2.335" | 315 |
| 7333-12^o | 1.820" | 124 | 285 | .650" | 1.050" | 11740-12 | Standard | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| FORD FALCON PRE-CROSSFLOW | | | | | | | | | | | | | | |
| 1025-12 | 1.550" | 125 | 260 | .520" | 1.030" | 11700-12 | 11703-12 | 1.370" | 1.005" | | 1 | L | 2.110" | 265 |
| FORD 4.6 V8 4 VALVE | | | | | | | | | | | | | | |
| 1832-32 | 1.470" | 95 | 265 | .500" | .900" | N/A | Standard | 0.970" TOP 1.105" BOT | 0.585" TOP 0.745" BOT | | 1 Conical | R | 1.810" | 310 |
| FORD FALCON 6 OHC TO EL NB. Step to be M/C off head for double springs | | | | | | | | | | | | | | |
| 7739-12 | 1.820" | 100 | 270 | .600" | 1.120" | 12700-12 | 11704-12 | 1.420" | 1.015" | 0.925" | 1+ Damper | R | 2.160" | 340 |
| 7332-12^o | 1.820" | 98 | 255 | .650" | 1.050" | 12700-12 | 11704-12 | 1.445" | 1.090" | 0.800" | 2 | L | 2.335" | 315 |
| 7333-12^o | 1.820" | 124 | 285 | .650" | 1.050" | 12700-12 | 11704-12 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| FORD 998 - 1600 PUSHROD ENGINE NB. Step to be M/C off head for double springs | | | | | | | | | | | | | | |
| 2834-8^o | 1.280" | 115 | 270 @.400 | .430" | .830" | Standard | Standard | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 390 |
| 2836-8^o | 1.280" | 130 | 290 @.400 | .460" | .830" | Standard | Standard | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 355 |
| 2021-8 | 1.289" | 75 | 195 | .489" | .750" | Standard | Standard | 1.140" | 0.830" | | 1 | R | 1.650" | 235 |
| FORD 2000 OHC | | | | | | | | | | | | | | |
| 4250-8^o | 1.417" | 72 | 195 | .550" | .805" | Standard | Standard | 1.212" | 0.930" | .0695" | 2 | R | 1.960" | 250 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|---|------------------|--------------------|-------------------|-----------|--------------|-----------------|-------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|
| FORD CLEVELAND & BIG BLOCK 370-460 SINGLE OR MULTI GROOVE VALVES | | | | | | | | | | | | | | |
| NB. Step to be M/C off head for double springs | | | | | | | | | | | | | | |
| 7342-16^o | 1.800" | 145 | 340 | .650" | 1.060" | 11700 | 4133 | 1.460" | 1.080" | .800" | 2 | R | 2.240" | 390 |
| 7737-16 | 1.820" | 110 | 295 | .520" | 1.310" | 12700 | 11702 | 1.510" | 1.086" | 0.965" | 1+ Damper | L | 2.220" | 370 |
| 7739-16 | 1.760" | 115 | 290 | .600" | 1.120" | 12706 | 11702 | 1.420" | 1.015" | 0.925" | 1+ Damper | R | 2.160" | 340 |
| 7333-16^o | 1.820" | 124 | 285 | .650" | 1.050" | 11700 | 4133 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| 7437-16^o | 1.820" | 135 | 330 | .750" | 1.050" | 11700 | 4133 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 |
| 4910-16^o | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 12710 / TR405 | 12708 | 1.550" | 1.150" | 0.800" | 2 | R | 2.460" | 555 |
| 7331-16^o | 1.920" | 125 | 285 | .700" | 1.100" | 13101 | 11101 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 315 |
| 9950-16^o | 1.920" | 190 | 440 | .760" | 1.150" | 13102 | 11101 | 1.540" | 1.130" | 0.725" | 2+ Damper | L | 2.430" | 500 |
| 4920-16^o | 2.000" | 267 | 574 | .770" | 1.180" | 13101 / TR405 | 11101 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |

FORD WINDSOR

Check installed height before selecting springs as models vary

| | | | | | | | | | | | | | | |
|----------------------------|---------------|-----------|-----------|-------|--------|---------------|--------------|--------|--------|--------|-----------|---|--------|-----|
| 7736-16 | 1.700" | 115 | 290 | .510" | 1.150" | 11700 | 11701 | 1.440" | 1.040" | 0.950" | 1+ Damper | L | 2.100" | 345 |
| 7333-16^o | 1.800" | 130 | 295 | .650" | 1.050" | 11710 | 11701 / 4134 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 |
| 7437-16^o | 1.800" | 145 | 335 | .750" | 1.050" | 11710 | 4133 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 390 |
| 7342-16^o | 1.800" | 145 | 340 | .650" | 1.060" | 11700 | 4134 | 1.460" | 1.080" | .800" | 2 | R | 2.240" | 390 |
| 4910-16^o | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 12710 / TR405 | 12708 | 1.550" | 1.150" | 0.800" | 2 | L | 2.460" | 555 |
| 4920-16^o | 2.000" | 267 | 574 | .770" | 1.180" | 13101 / TR405 | 11101 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|----------------------------|------------------|--------------------|-------------------|-----------|--------------|-----------------|-------------|------------------------|------------------------|-------------|-------------|------------------|-------------|---------------------|
| HOLDEN VN-VP V6 | | | | | | | | | | | | | | |
| 4936-12 | 1.700" | 85 | 250 | .550" | 1.120" | 11707 | 11703 | 1.230" | 0.875" | 0.780" | 1+ Damper | R | 2.000" | 330 |
| 4836-12 | 1.700" | 115 | 315 | .550" | 1.100" | 11707 | 11703 | 1.250" | 0.875" | 0.780" | 1+ Damper | R | 2.040" | 405 |
| 4334-12^o | 1.700" | 120 | 280 | .650" | .950" | 11707 | 4133 | 1.280" | 0.950" | 0.710" | 2 | L | 2.130" | 340 |
| 4835-12 | 1.700" | 120 | 290 | .560" | 1.090" | 11707 | 11703 | 1.220" | 0.860" | 0.765" | 1+ Damper | R | 2.170" | 340 |
| 7332-12^o | 1.700" | 135 | 295 | .650" | 1.050" | 11700 | 4133 | 1.445" | 1.090" | 0.800" | 2 | L | 2.335" | 325 |
| 4231-12 | 1.780" | 120 | 270 | .550" | 1.100" | 11707 | 11703-12 | 1.045"TOP 1.275"BOT | 0.650"TOP 0.870"BOT | | 1 Conical | R | 2.260" | 300 |

HOLDEN ECOTEC V6

| | | | | | | | | | | | | | | |
|----------------------------|--------|-----|-----|-------|--------|-------|-------|------------------------|-------------------------|--------|-----------|---|--------|-----|
| 4231-12 | 1.780" | 120 | 270 | .550" | 1.100" | 10707 | 10701 | 1.045"TOP 1.275"BOT | 0.650"TOP 0.870"BOT | | 1 Conical | R | 2.260" | 300 |
| 4438-12^o | 1.780" | 165 | 340 | .650" | 1.000" | 10708 | 10701 | 1.295" | 0.948" | 0.690" | 2 | R | 2.365" | 355 |
| 4511X-12 | 1.780" | 150 | 335 | .600" | 1.100" | 10707 | 10701 | 1.035"TOP 1.290"BOT | 0.655"TOP 0.910" BOT | | 1 Conical | R | 2.230" | 365 |
| 4919-12 | 1.780" | 150 | 310 | .590" | 1.090" | 10707 | 10701 | 1.050"TOP 1.275"BOT | 0.650"TOP 0.880"BOT | | 1 Conical | R | 2.390 | 320 |
| 4918-12 | 1.780" | 135 | 295 | .640" | 1.090" | 10707 | 10701 | 1.040"TOP 1.275"BOT | 0.640"TOP 0.875" BOT | | 1 Conical | R | 2.335" | 314 |
| 4021-12 | 1.780" | 55 | 230 | .630" | 1.150" | 11707 | 11701 | 1.065"TOP 1.255"BOT | 0.670"TOP 0.875" BOT | | 1 Conical | R | 1.960" | 350 |

HOLDEN 6 CYLINDER RED MOTOR

| | | | | | | | | | | | | | | |
|----------------------------|--------|-----|-----|-------|--------|-------|-------|--------|--------|--------|-----------|---|--------|-----|
| 4719-12 | 1.625" | 85 | 210 | .645" | .930" | 11707 | 11703 | 1.240" | 0.920" | 0.840" | 1 | L | 2.090" | 250 |
| 4823-12 | 1.625" | 115 | 250 | .615" | .960" | 11707 | 11703 | 1.275" | 0.930" | 0.850" | 1+ Damper | L | 2.170" | 270 |
| 4334-12^o | 1.700" | 120 | 280 | .650" | .950" | 11707 | 4134 | 1.280" | 0.950" | 0.710" | 2 | L | 2.130" | 340 |
| 7333-12^o | 1.810" | 125 | 290 | .650" | 1.050" | 11710 | 4134 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 325 |
| 7331-12^o | 1.810" | 160 | 324 | .700" | 1.100" | 11710 | 4134 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 310 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|---|------------------|--------------------|-------------------|-----------|--------------|-----------------|--------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|
| HOLDEN 6 CYLINDER BLUE & BLACK MOTOR | | | | | | | | | | | | | | |
| 4028-12 | 1.470" | 120 | 215 | .470" | 0.950" | 11707 | 11703 | 1.250" | 0.920" | | 1 | L | 2.105" | 190 |
| 4038-12 | 1.470" | 95 | 285 | .500" | 0.920" | 11707 | 11703 | 1.200" | 0.860" | | 1 | R | 1.830" | 380 |
| 4823-12 | 1.605" | 120 | 255 | 0.615" | 0.960" | 11717 | 4134 | 1.275" | 0.930" | 0.850" | 1+ Damper | L | 2.170" | 275 |
| 4334-12^o | 1.700" | 120 | 280 | .650" | .950" | 11717 | 4134 | 1.280" | 0.950" | 0.710" | 2 | L | 2.130" | 340 |
| HOLDEN GEMINI | | | | | | | | | | | | | | |
| 5840-8^o | 1.550" | 100 | 275 | .640" | .860" | Standard | Standard | 1.330" | 0.990" | 0.770" | 2 | R | 1.930" | 345 |
| 5833-8^o | 1.550" | 110 | 280 | .600" | .900" | Standard | Standard | 1.330" | 0.990" | 0.760" | 2 | R | 2.160" | 330 |
| HOLDEN 253, 304, 308 | | | | | | | | | | | | | | |
| 4931-16 | 1.700" | 85 | 245 | .550" | 1.140" | 11707 | 11701 | 1.230" | 0.880" | 0.780" | 1+ Damper | R | 2.020" | 320 |
| 4828-16 | 1.700" | 105 | 285 | .570" | 1.080" | 11707 | 11701 | 1.250" | 0.870" | | 1 | R | 2.030" | 360 |
| 4833-16 | 1.700" | 110 | 320 | .570" | 1.080" | 11707 | 11701 | 1.255" | 0.868" | 0.780" | 1+ Damper | R | 2.030" | 415 |
| 4843-16 | 1.700" | 120 | 320 | .490" | 1.160" | 11707 | 11701 | 1.265" | 0.875" | 0.760" | 1+ Damper | R | 2.015" | 411 |
| 4438-16^o | 1.800" | 155 | 330 | .650" | 1.050" | 11717 | 4133 | 1.290" | 0.948" | 0.690" | 2 | R | 2.345" | 365 |
| 7333-16^o | 1.800" | 125 | 290 | .650" | 1.050" | 11710 | 4133 | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 325 |
| 7331-16^o | 1.800" | 160 | 330 | .700" | 1.100" | 13101/11710 | 11101 / 4134 | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 |
| 4845-16 | 1.850" | 95 | 285 | .660" | 1.140" | 11717 | 4134 | 1.260" | 0.875" | 0.785" | 1+ Damper | R | 2.130" | 380 |
| 7342-16^o | 1.850" | 125 | 320 | .650" | 1.060" | 13101/11710 | 11101 / 4134 | 1.460" | 1.080" | .800" | 2 | R | 2.240" | 390 |
| 7437-16^o | 1.850" | 130 | 315 | .750" | 1.050" | 13101/11710 | 11101 / 4134 | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 |
| 4910-16^o | 1.900"/2.000" | 240 / 190 | 520 / 460 | .700" | 1.100" | 12710 / TR405 | 12708 | 1.550" | 1.150" | 0.800" | 2 | R | 2.460" | 555 |
| 4920-16^o | 2.000" | 267 | 574 | .770" | 1.180" | 13101 / TR405 | 11101 | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 |

| Part Number | Installed Height | Installed Pressure | Pressure @.5 Lift | Max. Lift | Solid Height | Spring Retainer | Valve Locks | O/D | ID of Outer | ID of Inner | Spring Type | RH or LH (Outer) | Free Length | Spring Rate (Lb/in) |
|-----------------------------------|------------------|--------------------|-------------------|-----------|--------------|-----------------|-------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|
| HOLDEN V8 LS ENGINE FAMILY | | | | | | | | | | | | | | |
| 4231-16 | 1.780" | 120 | 270 | .550" | 1.100" | 11707 | 11703 | 1.045"TOP 1.275"BOT | 0.650"TOP 0.870"BOT | | 1 Conical | R | 2.260" | 300 |
| 1511ML-16 | 1.780" | 140 | 330 | .600" | 1.100" | 10707 | 10701 | 1.050" TOP 1.295" BOT | 0.643" TOP 0.908" BOT | | 1 Conical | R | 2.180" | 385 |
| 4438-16^o | 1.780" | 165 | 340 | .650" | 1.000" | 10708 | 10701 | 1.295" | 0.948" | 0.690" | 2 | R | 2.365" | 355 |
| 4439-16^o | 1.800" | 165 | 360 | .650" | 1.020" | 10708 | 10701 | 1.305" | 0.950" | 0.690" | 2 | R | 2.300" | 375 |
| 4207X-16^o | 1.800" | 155 | 385 | .700" | 1.000" | 10708 | 10701 | 1.304" | 0.950" | 0.680" | 2 | R | 2.300" | 430 |
| 4209X-16^o | 1.800" | 160 | 415 | .750" | 1.000" | 10708 | 10701 | 1.324" | 0.950" | 0.689" | 2 | R | 2.330" | 495 |
| 1335-16^o | 1.800" | 250 | 860 @ .750" | .800" | 0.985" | TR432-16 | 10701-16 | 1.300" | 0.900" | 0.616" | 2 | R | 2.250" | 813 |
| NISSAN RB30 | | | | | | | | | | | | | | |
| 5840-12^o | 1.570" | 95 | 270 | .660" | 0.860" | Standard | Standard | 1.330" | 0.990" | 0.770" | 2 | R | 1.930" | 345 |
| 5833-12^o | 1.570" | 105 | 270 | .600" | 0.900" | Standard | Standard | 1.330" | 0.990" | 0.760" | 2 | R | 2.160" | 330 |
| 5835-12^o | 1.570" | 110 | 280 | .570" | 0.950" | Standard | Standard | 1.330" | 0.971" | 0.720" | 2 | R | 1.920" | 335 |
| 5838-12^o | 1.600" | 120 | 310 | .550" | 1.000" | Standard | Standard | 1.330" | 0.980" | 0.690" | 2 | R | 1.930" | 395 |
| MITSUBISHI SIGMA | | | | | | | | | | | | | | |
| 5840-8^o | 1.560" | 100 | 275 | .660" | 0.860" | Standard | Standard | 1.330" | 0.990" | 0.770" | 2 | R | 1.930" | 345 |
| TOYOTA 1FZ-FE | | | | | | | | | | | | | | |
| 4163-12 | 1.487" | 105 | 235 | .462" | 0.975" | 10715 | Std | 1.160" | 0.835" | | 1 | R | 1.980" | 260 |

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 |
|---|-----------------|----------------|-------|-------|------|-------|------------|---------|--------------|
| CHRYSLER | | | | | | | | | |
| 5091-12 | Slant 6 | 225 | 1.65 | 1.500 | | 0.990 | 100 | 285 | 1.095 |
| FORD 4 | | | | | | | | | |
| 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 | 0.950 |
| 4250-8* | Laser | B6 1600 | 1.40 | 1.214 | 0.93 | 0.870 | 70 | 200 | 0.817 |
| 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 |
| FORD 6 | | | | | | | | | |
| 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 | 0.950 |
| 5825-12 | Zephyr | MKII | 1.65 | 1.330 | | 0.960 | 60 | 180 | 0.950 |
| Note: Ford 6 Spring Retainer may need machining to suit double spring | | | | | | | | | |
| FORD 8 | | | | | | | | | |
| 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 |
| GM 4 | | | | | | | | | |
| 5833-8* | Gemini | G161-G200Z | 1.55 | 1.330 | 0.98 | 0.760 | 100 | 260 | 0.900 |
| GM 6 | | | | | | | | | |
| 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 |
|----------------------|---------------|-------------|------|--------------------|-------|--------------------|------------|--------------|--------------|
| GM 6 | | | | | | | | | |
| 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 | 0.950 |
| 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 | 0.980 | 0.720 | 85 | 255 | 0.860 |
| 5835-12 | Commodore | RB30 | 1.57 | 1.325 | 0.970 | 0.710 | 110 | 250 | 0.950 |
| 7332-12* | Commodore | VN V6 | 1.70 | 1.445 | 1.090 | 0.800 | 132 | 290 | 1.020 |
| 4836-12 | Commodore | VP V6 | 1.70 | 1.255 | | 0.780 | 115 | 310 | 1.100 |
| GM V8 | | | | | | | | | |
| 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 |
| INTERNATIONAL | | | | | | | | | |
| 7739-16 | 345 | V8 | 1.82 | 1.420 | | 0.916 | 110 | 275 | 1.150 |
| ISUZU | | | | | | | | | |
| 5828-4* | 4JB1 | Diesel | 1.50 | 1.330 | | 0.660 | 80 | 270 | 0.840 |
| LEYLAND, BMC | | | | | | | | | |
| 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 |
| MAZDA | | | | | | | | | |
| 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 |
| MITSUBISHI | | | | | | | | | |
| 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 |
|-------------------|-------------|-------------|------|-------|------|-------|------------|---------|--------------|
| NISSAN | | | | | | | | | |
| 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 |
| 5840-8/12* | Datsun | L Series | 1.58 | 1.330 | 0.98 | 0.720 | 85 | 250 | 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 |
| NISSAN 6 | | | | | | | | | |
| 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 |
| TOYOTA | | | | | | | | | |
| 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 | 100 | 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 |
|--------------------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 0507 | 1.000" | 0.760" | | 1 | L | 2.050" | 75 | 0.750" |
| 0511 | 0.937" | 0.697" | | 1 | L | 1.490" | 123 | 0.740" |
| 0513 | 0.953" | 0.697" | | 1 | L | 1.937" | 132 | 0.930" |
| 0514 | 0.838" | 0.612" | | 1 | L | 1.500" | 145 | 0.710" |
| 0515 | 1.015" | 0.725" | | 1 | L | 2.165" | 155 | 1.060" |
| 0612 | 1.090" | 0.810" | | 1 | R | 2.055" | 120 | 0.880" |
| 0613 | 1.080" | 0.796" | | 1 | R | 2.230" | 130 | 1.000" |
| 0615 | 1.015" | 0.740" | | 1 | L | 2.000" | 135 | 0.870" |
| 1025 | 1.370" | 1.005" | | 1 | L | 2.110" | 265 | 1.030" |
| 1511ML | 1.050" TOP 1.295" BOT | 0.643" TOP 0.908" BOT | | 1 Conical | R | 2.180" | 385 | 1.100" |
| 1804 | 0.995" TOP 1.060" BOT | 0.635" TOP 0.700" BOT | | 1 Conical | R | 2.060" | 280 | 1.020" |
| 1808 | 0.970" TOP 1.060" BOT | 0.650" TOP 0.727" BOT | | 1 Conical | R | 1.970" | 220 | 0.880" |
| 1809 | 0.970" TOP 1.060" BOT | 0.650" TOP 0.740" BOT | | 1 Conical | R | 2.180" | 205 | 0.900" |
| 1832 | 0.970" TOP 1.105" BOT | 0.585" TOP 0.745" BOT | | 1 Conical | R | 1.810" | 310 | 0.900" |
| 2021 | 1.140" | 0.840" | | 1 | R | 1.650" | 235 | 0.750" |
| 2834^D | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 390 | 0.830" |
| 2836^D | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 355 | 0.830" |
| 4021 | 1.065" TOP 1.255" BOT | 0.670" TOP 0.875" BOT | | 1 Conical | R | 1.960" | 350 | 1.190" |
| 4028 | 1.250" | 0.920" | | 1 | L | 2.105" | 190 | 0.950" |
| 4038 | 1.200" | 0.860" | | 1 | R | 1.830" | 380 | 0.920" |
| 4162 | 1.100" | 0.765" | | 1 | R | 1.895" | 260 | 0.980" |
| 4163 | 1.160" | 0.835" | | 1 | R | 1.980" | 260 | 0.975" |
| 4164 | 1.050" | 0.735" | | 1 | R | 1.740" | 265 | 0.840" |
| 4177^D | 1.113" | 0.805" | 0.636" | 2 | R | 1.660" | 230 | 0.730" |
| 4207X^D | 1.304" | 0.950" | 0.680" | 2 | R | 2.300" | 430 | 1.000" |
| 4209X^D | 1.324" | 0.950" | 0.689" | 2 | R | 2.230" | 495 | 1.000" |
| 4220^D | 1.210" | 0.926" | 0.700" | 2 | R | 1.900" | 200 | 0.820" |
| 4231 | 1.045" TOP 1.275" BOT | 0.650" TOP 0.870" BOT | | 1 Conical | R | 2.260" | 300 | 1.100" |
| 4250^D | 1.212" | 0.930" | 0.695" | 2 | R | 1.960" | 250 | 0.805" |
| 4320 | 1.245" | 0.910" | | 1 | L | 2.105" | 210 | 0.950" |
| 4330^D | 1.280" | 0.926" | 0.700" | 2 | R | 1.960" | 315 | 0.925" |
| 4334^D | 1.280" | 0.950" | 0.710" | 2 | L | 2.130" | 340 | 0.950" |
| 4403 | 1.000" | 0.700" | | 1 | R | 1.900" | 260 | 0.945" |

Note: Springs marked with xxxx-xx^D 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 |
|-------------------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 4420 | 1.110" TOP 1.440" BOT | 0.660" TOP 0.990" BOT | | 1 Conical | R | 2.445" | 360 | 1.200" |
| 4429^D | 1.167" | 0.860" | 0.660" | 2 | R | 1.820" | 240 | 0.810" |
| 4435 | 1.060" TOP 1.200" BOT | 0.640" TOP 0.800" BOT | | 1 Conical | R | 2.220" | 350 | 1.150" |
| 4438^D | 1.290" | 0.948" | 0.690" | 2 | R | 2.345" | 365 | 1.050" |
| 4439^D | 1.305" | 0.950" | 0.690" | 2 | R | 2.300" | 375 | 1.020" |
| 4511X | 1.035" TOP 1.290" BOT | 0.665" TOP 0.910" BOT | | 1 Conical | R | 2.230" | 365 | 1.100" |
| 4718 | 1.255" | 0.920" | 0.835" | 1 | L | 2.100" | 230 | 0.930" |
| 4719 | 1.240" | 0.920" | 0.840" | 1 | L | 2.090" | 250 | 0.930" |
| 4823 | 1.275" | 0.930" | 0.850" | 1 + Damper | L | 2.170" | 275 | 0.960" |
| 4828 | 1.250" | 0.870" | | 1 | R | 2.030" | 360 | 1.080" |
| 4830 | 1.220" | 0.860" | 0.755" | 1 + Damper | R | 2.140" | 310 | 1.120" |
| 4833 | 1.255" | 0.868" | 0.780" | 1 + Damper | R | 2.030" | 415 | 1.100" |
| 4835 | 1.220" | 0.860" | 0.765" | 1 + Damper | R | 2.170" | 340 | 1.090" |
| 4836 | 1.250" | 0.875" | 0.780" | 1 + Damper | R | 2.040" | 405 | 1.080" |
| 4843 | 1.265" | 0.875" | 0.760" | 1 + Damper | R | 2.015" | 411 | 1.160" |
| 4845 | 1.260" | 0.880" | 0.785" | 1 + Damper | R | 2.130" | 380 | 1.140" |
| 4910^D | 1.550" | 1.150" | 0.800" | 2 | R | 2.460" | 555 | 1.110" |
| 4918 | 1.040" TOP 1.275" BOT | 0.640" TOP 0.875" BOT | | 1 Conical | R | 2.335" | 314 | 1.090" |
| 4920^D | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 | 1.180" |
| 4931 | 1.230" | 0.880" | 0.770" | 1 + Damper | R | 2.020" | 275 | 1.140" |
| 4936 | 1.230" | 0.875" | 0.780" | 1 + Damper | R | 2.000" | 330 | 1.120" |
| 5002 | 1.510" | 1.090" | 0.970" | 1 + Damper | L | 2.200" | 345 | 1.300" |
| 5014 | 1.420" | 1.010" | | 1 | L | 2.145" | 310 | 1.250" |
| 5037 | 1.230" | 0.875" | | 1 | R | 2.060" | 265 | 1.230" |
| 5038 | 1.211" | 0.857" | | 1 | R | 1.780" | 340 | 1.010" |
| 5077 | 1.500" | 1.080" | 0.990" | 1 + Damper | R | 1.960" | 355 | 1.095" |
| 5078^D | 1.332" | 0.990" | 0.715" | 2 | L | 1.835" | 330 | 1.070" |
| 5080 | 1.283" | 0.930" | | 1 | R | 1.750" | 240 | 0.930" |
| 5088 | 1.375" | 0.960" | | 1 | R | 2.050" | 335 | 1.200" |
| 5091 | 1.500" | 1.080" | 0.99" | 1 + Damper | R | 1.960" | 355 | 1.095" |

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 |
|-------------------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 5092 | 1.390" | 1.000" | | 1 | R | 2.035" | 245 | 1.120" |
| 5094 | 1.420" | 1.000" | | 1 | L | 2.120" | 350 | 1.265" |
| 5107 | 1.330" | 0.960" | | 1 | R | 1.920" | 230 | 0.930" |
| 5825 | 1.330" | 0.960" | | 1 | R | 1.935" | 230 | 0.950" |
| 5827 | 1.330" | 0.980" | | 1 | R | 1.860" | 228 | 0.840" |
| 5828^D | 1.330" | 0.980" | 0.660" | 2 | R | 1.860" | 350 | 0.840" |
| 5833^D | 1.330" | 0.990" | 0.760" | 2 | R | 2.160" | 330 | 0.900" |
| 5835^D | 1.330" | 0.971" | 0.720" | 2 | R | 1.920" | 335 | 0.950" |
| 5838^D | 1.330" | 0.980" | 0.690" | 2 | R | 1.930" | 395 | 0.950" |
| 5840^D | 1.335" | 1.000" | 0.720" | 2 | R | 1.930" | 345 | 0.860" |
| 5844-IRH | 0.950" | 0.720" | | 1 | R | 1.955" | 95 | 0.750" |
| 5854^D | 1.335" | 0.980" | 0.690" | 2 | R | 1.960" | 410 | 0.900" |
| 6038 | 1.255" | 0.900" | | 1 | R | 2.050" | 340 | 1.170" |
| 7331^D | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 | 1.100" |
| 7332^D | 1.445" | 1.090" | 0.800" | 2 | L | 2.335" | 315 | 1.050" |
| 7333^D | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 | 1.050" |
| 7334^D | 1.455" | 1.080" | 0.810" | 2 | L | 2.440" | 320 | 1.050" |
| 7335 | 1.465" | 1.070" | | 1 | L | 2.410" | 285 | 1.040" |
| 7341^D | 1.470" | 1.080" | 0.800" | 2 | L | 2.280" | 430 | 1.050" |
| 7342^D | 1.460" | 1.080" | 0.800" | 2 | R | 2.240" | 390 | 1.060" |
| 7437^D | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 | 1.050" |
| 7733^D | 1.465" | 1.085" | 0.790" | 2 | L | 2.470" | 320 | 1.030" |
| 7736 | 1.440" | 1.040" | 0.950" | 1 + Damper | L | 2.100" | 345 | 1.150" |

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 |
|--------------------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 7737 | 1.510" | 1.086" | 0.965" | 1 + Damper | L | 2.220" | 345 | 1.310" |
| 7739 | 1.420" | 1.015" | 0.925" | 1 + Damper | R | 2.160" | 340 | 1.150" |
| 7930 ^D | 1.460" | 1.000" | .690" | 2 + Damper | L | 2.360" | 350 | 1.070" |
| 7937 ^D | 1.465" | 1.000" | 0.720" | 2 + Damper | L | 2.360" | 350 | 1.080" |
| 8333 ^D | 1.515" | 1.120" | 0.800" | 2 | L | 2.480" | 350 | 1.210" |
| 8335 ^D | 1.515" | 1.120" | 0.795" | 2 | L | 2.480" | 322 | 1.210" |
| 8337 ^D | 1.515" | 1.120" | 0.800" | 2 | L | 2.350" | 360 | 1.114" |
| 8937 ^D | 1.530" | 1.120" | 0.760" | 2 + Damper | L | 2.335" | 390 | 1.180" |
| 9731 | 1.550" | 1.125" | 1.000" | 1 + Damper | L | 2.460" | 320 | 1.180" |
| 9936 ^D | 1.539" | 1.120" | 0.765" | 2 + Damper | L | 2.460" | 400 | 1.180" |
| 9941 ^D | 1.540" | 1.025" | 0.740" | 2 + Damper | R | 2.380" | 440 | 1.140" |
| 9945 ^D | 1.560" | 1.010" | 0.690" | 2 + Damper | L | 2.475" | 460 | 1.200" |
| 9950 ^D | 1.540" | 1.130" | 0.725" | 2 + Damper | L | 2.430" | 485 | 1.150" |

Note: Springs marked with xxxx-xx^D 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 |
|--------------------------|--------------------------|--------------------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 0514 | 0.838" | 0.612" | | 1 | L | 1.500" | 145 | 0.710" |
| 0511 | 0.937" | 0.697" | | 1 | L | 1.490" | 123 | 0.740" |
| 5844-IRH | 0.950" | 0.710" | | 1 | R | 1.955" | 95 | 0.750" |
| 0513 | 0.953" | 0.697" | | 1 | L | 1.937" | 132 | 0.930" |
| 1832 | 0.970" TOP 1.105" BOT | 0.585" TOP 0.745" BOT | | 1 Conical | R | 1.810" | 310 | 0.900" |
| 1808 | 0.970" TOP 1.060" BOT | 0.650" TOP 0.727" BOT | | 1 Conical | R | 1.970" | 220 | 0.880" |
| 1809 | 0.970" TOP 1.060" BOT | 0.650" TOP 0.740" BOT | | 1 Conical | R | 2.180" | 205 | 0.900" |
| 1804 | 0.995" TOP 1.060" BOT | 0.635" TOP 0.700" BOT | | 1 Conical | R | 2.060" | 280 | 1.020" |
| 0507 | 1.000" | 0.760" | | 1 | L | 2.050" | 75 | 0.750" |
| 4403 | 1.000" | 0.700" | | 1 | R | 1.900" | 260 | 0.945" |
| 0615 | 1.015" | 0.740" | | 1 | L | 2.000" | 135 | 0.870" |
| 0515 | 1.015" | 0.725" | | 1 | L | 2.165" | 155 | 1.060" |
| 4511X | 1.035" TOP 1.290" BOT | 0.665" TOP 0.910" BOT | | 1 Conical | R | 2.230" | 365 | 1.100" |
| 4918 | 1.040" TOP 1.275" BOT | 0.640" TOP 0.875" BOT | | 1 Conical | R | 2.335" | 314 | 1.090" |
| 4231 | 1.045" TOP 1.275" BOT | 0.650" TOP 0.870" BOT | | 1 Conical | R | 2.260" | 300 | 1.100" |
| 1511ML | 1.050" TOP 1.295" BOT | 0.643" TOP 0.908" BOT | | 1 Conical | R | 2.180" | 385 | 1.100" |
| 4164 | 1.050" | 0.735" | | 1 | R | 1.740" | 265 | 0.840" |
| 4435 | 1.060" TOP 1.200" BOT | 0.640" TOP 0.800" BOT | | 1 Conical | R | 2.220" | 350 | 1.150" |
| 4021 | 1.065" TOP 1.255" BOT | 0.670" TOP 0.875" BOT | | 1 Conical | R | 1.960" | 350 | 1.190" |
| 0613 | 1.080" | 0.796" | | 1 | R | 2.230" | 130 | 1.000" |
| 0612 | 1.090" | 0.810" | | 1 | R | 2.055" | 120 | 0.880" |
| 4162 | 1.100" | 0.765" | | 1 | R | 1.895" | 260 | 0.980" |
| 4420 | 1.110" TOP 1.440" BOT | 0.660" TOP 0.990" BOT | | 1 Conical | R | 2.445" | 360 | 1.200" |
| 4177 ^D | 1.113" | 0.805" | 0.636" | 2 | R | 1.660" | 230 | 0.730" |
| 2021 | 1.140" | 0.840" | | 1 | R | 1.650" | 235 | 0.750" |
| 2834 ^D | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 390 | 0.830" |
| 2836 ^D | 1.140" | 0.830" | 0.612" | 2 | R | 1.650" | 355 | 0.830" |
| 4163 | 1.160" | 0.835" | | 1 | R | 1.980" | 260 | 0.975" |
| 4429 ^D | 1.167" | 0.860" | 0.660" | 2 | R | 1.820" | 240 | 0.810" |

Note: Springs marked with xxxx-xx^D 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 |
|--------------------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 4038 | 1.200" | 0.860" | | 1 | R | 1.830" | 380 | 0.920" |
| 4220 ^D | 1.210" | 0.926" | 0.700" | 2 | R | 1.900" | 200 | 0.820" |
| 5038 | 1.211" | 0.857" | | 1 | R | 1.780" | 340 | 1.010" |
| 4250 ^D | 1.212" | 0.930" | 0.695" | 2 | R | 1.960" | 250 | 0.805" |
| 4830 | 1.220" | 0.860" | 0.755" | 1 + Damper | R | 2.140" | 310 | 1.120" |
| 4835 | 1.220" | 0.860" | 0.765" | 1 + Damper | R | 2.170" | 340 | 1.090" |
| 5037 | 1.230" | 0.875" | | 1 | R | 2.060" | 265 | 1.230" |
| 4931 | 1.230" | 0.880" | 0.770" | 1 + Damper | R | 2.020" | 275 | 1.140" |
| 4936 | 1.230" | 0.875" | 0.780" | 1 + Damper | R | 2.000" | 330 | 1.120" |
| 4719 | 1.240" | 0.920" | 0.840" | 1 | L | 2.090" | 250 | 0.930" |
| 4320 | 1.245" | 0.910" | | 1 | L | 2.105" | 210 | 0.950" |
| 4836 | 1.250" | 0.875" | 0.780" | 1 + Damper | R | 2.040" | 405 | 1.080" |
| 4828 | 1.250" | 0.870" | | 1 | R | 2.030" | 360 | 1.080" |
| 4028 | 1.250" | 0.920" | | 1 | L | 2.105" | 190 | 0.950" |
| 4833 | 1.255" | 0.868" | 0.780" | 1 + Damper | R | 2.030" | 415 | 1.100" |
| 4718 | 1.255" | 0.920" | 0.835" | 1 | L | 2.100" | 230 | 0.930" |
| 6038 | 1.255" | 0.900" | | 1 | R | 2.050" | 340 | 1.170" |
| 4845 | 1.260" | 0.880" | 0.785" | 1 + Damper | R | 2.130" | 380 | 1.140" |
| 4843 | 1.265" | 0.875" | 0.760" | 1 + Damper | R | 2.015" | 411 | 1.160" |
| 4235 | 1.270" | 0.885" | 0.752" | 1 + Damper | R | 2.200" | 390 | 1.080" |
| 4823 | 1.275" | 0.930" | 0.850" | 1 + Damper | L | 2.170" | 275 | 0.960" |
| 4330 ^D | 1.280" | 0.926" | 0.700" | 2 | R | 1.960" | 315 | 0.925" |
| 4334 ^D | 1.280" | 0.950" | 0.710" | 2 | L | 2.130" | 340 | 0.950" |
| 5080 | 1.283" | 0.930" | | 1 | R | 1.750" | 240 | 0.930" |
| 4438 ^D | 1.290" | 0.948" | 0.690" | 2 | R | 2.345" | 365 | 1.050" |

Note: Springs marked with xxxx-xx^D 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 |
|---------------------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 4207X ^D | 1.304" | 0.950" | 0.680" | 2 | R | 2.300" | 430 | 1.000" |
| 4439 ^D | 1.305" | 0.950" | 0.690" | 2 | R | 2.300" | 375 | 1.020" |
| 4209X ^D | 1.324" | 0.950" | 0.689" | 2 | R | 2.330" | 495 | 1.000" |
| 5835 ^D | 1.330" | 0.971" | 0.720" | 2 | R | 1.920" | 335 | 0.950" |
| 5827 | 1.330" | 0.980" | | 1 | R | 1.860" | 228 | 0.840" |
| 5828 ^D | 1.330" | 0.980" | 0.660" | 2 | R | 1.860" | 350 | 0.840" |
| 5833 ^D | 1.330" | 0.990" | 0.760" | 2 | R | 2.160" | 330 | 0.900" |
| 5107 | 1.330" | 0.960" | | 1 | R | 1.920" | 230 | 0.930" |
| 5825 | 1.330" | 0.960" | | 1 | R | 1.935" | 230 | 0.950" |
| 5838 ^D | 1.330" | 0.980" | 0.690" | 2 | R | 1.930" | 395 | 0.950" |
| 5078 ^D | 1.332" | 0.990" | 0.715 | 2 | L | 1.835" | 330 | 1.070" |
| 5854 ^D | 1.335" | 0.980" | 0.690" | 2 | R | 1.960" | 410 | 0.900" |
| 5840 ^D | 1.335" | 1.000" | 0.720" | 2 | R | 1.930" | 345 | 0.860" |
| 1025 | 1.370" | 1.005" | | 1 | L | 2.110" | 265 | 1.030" |
| 5088 | 1.375" | 0.960" | | 1 | R | 2.050" | 335 | 1.200" |
| 5092 | 1.390" | 1.000" | | 1 | R | 2.035" | 245 | 1.120" |
| 7739 | 1.420" | 1.015" | 0.925" | 1 + Damper | R | 2.160" | 340 | 1.150" |
| 5014 | 1.420" | 1.010" | | 1 | L | 2.145" | 310 | 1.250" |
| 5094 | 1.420" | 1.000" | | 1 | L | 2.120" | 350 | 1.265" |
| 7332 ^D | 1.445" | 1.090" | 0.800" | 2 | L | 2.335" | 315 | 1.050" |
| 7736 | 1.440" | 1.040" | 0.950" | 1 + Damper | L | 2.100" | 345 | 1.150" |
| 7331 ^D | 1.450" | 1.090" | 0.800" | 2 | L | 2.350" | 330 | 1.100" |
| 7333 ^D | 1.450" | 1.090" | 0.820" | 2 | L | 2.345" | 330 | 1.050" |
| 7334 ^D | 1.455" | 1.080" | 0.810" | 2 | L | 2.440" | 320 | 1.050" |
| 7342 ^D | 1.460" | 1.080" | 0.800" | 2 | R | 2.240" | 390 | 1.060" |
| 7930 ^D | 1.460" | 1.000" | .690" | 2 + Damper | L | 2.360" | 350 | 1.070" |
| 7937 ^D | 1.465" | 1.000" | 0.720" | 2 + Damper | L | 2.360" | 350 | 1.080" |
| 7733 ^D | 1.465" | 1.085" | 0.790" | 2 | L | 2.470" | 320 | 1.030" |

Note: Springs marked with xxxx-xx^D 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 |
|--------------------------|--------|-------------|-------------|-------------|------------------|-------------|---------------------|--------------|
| 7335 | 1.465" | 1.070" | | 1 | L | 2.410" | 285 | 1.040" |
| 7437 ^D | 1.465" | 1.080" | 0.800" | 2 | L | 2.260" | 380 | 1.050" |
| 7341 ^D | 1.470" | 1.080" | 0.800" | 2 | L | 2.280" | 430 | 1.050" |
| 5077 | 1.500" | 1.080" | 0.99 | 1 + Damper | R | 1.960" | 355 | 1.095" |
| 5091 | 1.500" | 1.080" | 0.99 | 1 + Damper | R | 1.960" | 355 | 1.095" |
| 7737 | 1.510" | 1.086" | 0.965" | 1 + Damper | L | 2.220" | 345 | 1.310" |
| 5002 | 1.510" | 1.090" | 0.970" | 1 + Damper | L | 2.200" | 345 | 1.300" |
| 8333 ^D | 1.515" | 1.120" | 0.800" | 2 | L | 2.480" | 350 | 1.210" |
| 8335 ^D | 1.515" | 1.120" | 0.795" | 2 | L | 2.480" | 322 | 1.210" |
| 8337 ^D | 1.515" | 1.120" | 0.800" | 2 | L | 2.350" | 360 | 1.114" |
| 8937 ^D | 1.530" | 1.120" | 0.760" | 2 + Damper | L | 2.335" | 390 | 1.180" |
| 9936 ^D | 1.539" | 1.120" | 0.765" | 2 + Damper | L | 2.460" | 400 | 1.180" |
| 9950 ^D | 1.540" | 1.130" | 0.725" | 2 + Damper | L | 2.430" | 485 | 1.150" |
| 9941 ^D | 1.540" | 1.025" | 0.740" | 2 + Damper | R | 2.380" | 440 | 1.140" |
| 9731 | 1.550" | 1.125" | 1.000" | 1 + Damper | L | 2.460" | 320 | 1.180" |
| 4910 ^D | 1.550" | 1.150" | 0.800" | 2 | R | 2.460" | 555 | 1.110" |
| 9945 ^D | 1.560" | 1.010" | 0.690" | 2 + Damper | L | 2.475" | 460 | 1.200" |
| 4920 ^D | 1.560" | 1.110" | 0.780" | 2 | R | 2.475" | 620 | 1.180" |

Note: Springs marked with xxxx-xx^D denotes that it is a double spring.

CUSTOM GRINDING SERVICE

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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 | |
| 1561 | 193 | 202 | 98 | 101 | 262 | 264 | .275 | .275 | 112 |
| 26 | 195 | 196 | 101 | 101 | 270 | 277 | .273 | .273 | 112 |
| 907 | 197 | 206 | 111 | 118 | 254 | 265 | .288 | .300 | 109 |
| 759 | 200 | 210 | 110 | 121 | 267 | 277 | .289 | .307 | 112 |
| 1524 | 200 | 207 | 102 | 107 | 262 | 270 | .274 | .274 | 109 |
| 1562 | 202 | 207 | 106 | 110 | 275 | 285 | .275 | .275 | 113 |
| 1339 | 203 | 209 | 109 | 113 | 268 | 275 | .281 | .281 | 118 |
| 1440 | 205 | 214 | 105 | 111 | 274 | 283 | .268 | .271 | 111 |
| 1335 | 206 | 212 | 111 | 116 | 256 | 265 | .283 | .283 | 114 |
| 50 | 207 | 209 | 110 | 112 | 265 | 268 | .280 | .280 | 117 |
| 160 | 207 | 207 | 113 | 113 | 267 | 267 | .281 | .281 | 112 |
| 1430 | 207 | 218 | 126 | 135 | 262 | 274 | .315 | .315 | 114 |
| 1563 | 207 | 210 | 115 | 118 | 276 | 281 | .295 | .295 | 112 |
| 1752 | 208 | 207 | 129 | 128 | 261 | 260 | .321 | .320 | 112 |
| 1309 | 209 | 214 | 119 | 122 | 275 | 282 | .300 | .300 | 114 |
| 1338 | 210 | 210 | 115 | 115 | 272 | 272 | .282 | .282 | 118 |
| 1350 | 210 | 210 | 114 | 114 | 280 | 260 | .278 | .277 | 115 |
| 1487 | 210 | 222 | 101 | 110 | 285 | 298 | .259 | .260 | 114 |
| 1336 | 211 | 209 | 115 | 113 | 278 | 270 | .285 | .284 | 119 |
| 1368 | 211 | 211 | 114 | 114 | 275 | 275 | .277 | .277 | 116 |
| 913 | 213 | 226 | 132 | 145 | 267 | 283 | .324 | .334 | 116 |
| 1331 | 213 | 209 | 122 | 118 | 277 | 280 | .288 | .288 | 115 |
| 1370 | 213 | 213 | 123 | 123 | 288 | 288 | .311 | .311 | 114 |
| 1414 | 213 | 223 | 124 | 134 | 277 | 287 | .307 | .318 | 112 |
| 1755 | 213 | 212 | 133 | 132 | 268 | 264 | .315 | .316 | 113 |
| 757 | 214 | 218 | 123 | 124 | 280 | 280 | .311 | .311 | 110 |

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 | |
| 1747 | 214 | 223 | 140 | 144 | 266 | 277 | .353 | .334 | 116 |
| 1738 | 215 | 223 | 128 | 132 | 274 | 283 | .333 | .333 | 114 |
| 1371 | 216 | 216 | 125 | 125 | 290 | 290 | .312 | .312 | 115 |
| 940 | 217 | 226 | 130 | 136 | 282 | 283 | .316 | .316 | 108 |
| 799 | 218 | 224 | 127 | 134 | 288 | 291 | .322 | .323 | 110 |
| 1318 | 218 | 214 | 133 | 129 | 281 | 275 | .332 | .332 | 111 |
| 1333 | 218 | 212 | 126 | 122 | 289 | 276 | .305 | .304 | 116 |
| 1756 | 218 | 218 | 128 | 134 | 268 | 272 | .320 | .316 | 115 |
| 1534 | 219 | 219 | 127 | 127 | 282 | 282 | .322 | .322 | 111 |
| 1565 | 219 | 219 | 130 | 130 | 284 | 284 | .337 | .336 | 111 |
| 1330 | 220 | 227 | 139 | 145 | 276 | 283 | .328 | .334 | 110 |
| 1771 | 220 | 232 | 143 | 148 | 269 | 286 | .360 | .338 | 114 |
| 1395 | 221 | 221 | 126 | 126 | 292 | 292 | .300 | .300 | 111 |
| 1317 | 222 | 217 | 135 | 130 | 309 | 296 | .333 | .333 | 112 |
| 1715 | 222 | 231 | 139 | 146 | 287 | 280 | .329 | .327 | 112 |
| 1354 | 225 | 224 | 134 | 134 | 293 | 299 | .319 | .319 | 116 |
| 1466 | 226 | 223 | 137 | 132 | 315 | 328 | .335 | .334 | 109 |
| 1528 | 226 | 230 | 135 | 139 | 290 | 290 | .320 | .320 | 110 |
| 1758 | 226 | 236 | 145 | 155 | 281 | 290 | .344 | .358 | 119 |
| 1433 | 228 | 237 | 148 | 155 | 297 | 303 | .368 | .365 | 110 |
| 1515 | 228 | 234 | 138 | 147 | 294 | 298 | .359 | .357 | 110 |
| 1734 | 228 | 233 | 141 | 144 | 288 | 290 | .346 | .344 | 108 |
| 1478 | 232 | 236 | 142 | 146 | 296 | 299 | .323 | .322 | 108 |
| 1735 | 232 | 236 | 144 | 146 | 296 | 301 | .345 | .346 | 108 |
| 669 | 234 | 240 | 142 | 147 | 304 | 314 | .331 | .331 | 110 |
| 1574 | 236 | 242 | 144 | 147 | 288 | 295 | .320 | .320 | 108 |
| 1477 | 237 | 241 | 146 | 148 | 307 | 314 | .325 | .324 | 107 |
| 1315 | 238 | 244 | 150 | 155 | 304 | 308 | .345 | .345 | 112 |
| 1719 | 238 | 243 | 156 | 157 | 295 | 315 | .356 | .378 | 107 |

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 | |
| 1725 | 241 | 246 | 155 | 158 | 298 | 306 | .377 | .378 | 108 |
| 926 | 245 | 252 | 165 | 170 | 301 | 311 | .364 | .363 | 110 |
| 900 | 246 | 253 | 166 | 174 | 301 | 313 | .359 | .376 | 110 |
| 1571 | 246 | 246 | 156 | 156 | 310 | 310 | .380 | .380 | 110 |
| 790 | 247 | 246 | 148 | 147 | 323 | 317 | .322 | .322 | 110 |
| 905 | 247 | 255 | 158 | 167 | 316 | 329 | .358 | .376 | 110 |
| 1435 | 249 | 258 | 158 | 166 | 317 | 326 | .344 | .344 | 111 |
| 909 | 250 | 260 | 165 | 174 | 326 | 335 | .375 | .375 | 108 |
| 1520 | 258 | 256 | 164 | 164 | 320 | 322 | .338 | .339 | 107 |
| 1707 | 258 | 263 | 164 | 167 | 324 | 336 | .355 | .356 | 103 |
| 1708 | 263 | 266 | 170 | 171 | 331 | 334 | .370 | .370 | 117 |
| 1728 | 267 | 277 | 180 | 188 | 334 | 338 | .370 | .367 | 114 |

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 | .334 | .332 | 109 |
| 1328 | 230 | 230 | 124 | 124 | 272 | 272 | .294 | .294 | 110 |
| 752 | 230 | 245 | 140 | 151 | 269 | 286 | .326 | .326 | 108 |
| 1599 | 232 | 230 | 147 | 146 | 265 | 265 | .381 | .380 | 115 |
| 969 | 233 | 242 | 142 | 147 | 304 | 315 | .332 | .332 | 110 |
| 902 | 236 | 239 | 271 | 277 | 151 | 153 | .366 | .370 | 108 |
| 945 | 237 | 241 | 278 | 279 | 151 | 155 | .368 | .372 | 108 |
| 914 | 238 | 246 | 278 | 286 | 152 | 159 | .383 | .393 | 106 |
| 1583 | 239 | 240 | 154 | 154 | 272 | 274 | .378 | .378 | 116 |
| 1471 | 239 | 247 | 150 | 158 | 280 | 288 | .350 | .360 | 109 |
| 942 | 241 | 243 | 298 | 300 | 167 | 170 | .381 | .375 | 108 |
| 618 | 242 | 247 | 155 | 160 | 280 | 284 | .392 | .388 | 107 |
| 691 | 244 | 252 | 145 | 154 | 284 | 291 | .325 | .338 | 107 |
| 1551 | 245 | 251 | 160 | 165 | 278 | 284 | .376 | .376 | 108 |
| 1476 | 248 | 250 | 157 | 162 | 288 | 292 | .383 | .383 | 106 |
| 1548 | 248 | 251 | 162 | 166 | 284 | 284 | .401 | .399 | 106 |
| 1573 | 248 | 253 | 162 | 166 | 282 | 287 | .403 | .402 | 106 |
| 809 | 249 | 250 | 159 | 163 | 290 | 290 | .414 | .410 | 105 |
| 751 | 250 | 248 | 161 | 161 | 294 | 298 | .333 | .333 | 106 |
| 1321 | 250 | 250 | 160 | 160 | 284 | 284 | .350 | .350 | 107 |
| 812 | 250 | 259 | 152 | 162 | 284 | 291 | .340 | .340 | 106 |
| 687 | 250 | 260 | 164 | 175 | 288 | 300 | .397 | .416 | 106 |
| 1532 | 252 | 252 | 166 | 166 | 284 | 284 | .405 | .405 | 108 |
| 816 | 252 | 254 | 156 | 158 | 298 | 303 | .325 | .328 | 113 |
| 1482 | 252 | 257 | 167 | 172 | 290 | 294 | .404 | .404 | 113 |
| 1301 | 252 | 260 | 165 | 170 | 286 | 295 | .360 | .360 | 108 |
| 904 | 253 | 265 | 282 | 295 | 173 | 184 | .384 | .396 | 110 |
| 1601 | 253 | 261 | 164 | 169 | 284 | 290 | .361 | .362 | 107 |
| 1304 | 253 | 253 | 108 | 108 | 285 | 285 | .233 | .233 | 108 |
| 621 | 253 | 264 | 163 | 174 | 289 | 299 | .373 | .373 | 104 |
| 916 | 254 | 261 | 287 | 293 | 176 | 183 | .442 | .441 | 108 |

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 | |
| 1305 | 254 | 254 | 163 | 163 | 285 | 285 | .335 | .333 | 104 |
| 1504 | 254 | 254 | 155 | 155 | 284 | 284 | .309 | .309 | 108 |
| 1423 | 254 | 262 | 179 | 184 | 284 | 291 | .429 | .419 | 110 |
| 939 | 255 | 262 | 287 | 300 | 176 | 180 | .411 | .422 | 107 |
| 813 | 255 | 255 | 170 | 170 | 288 | 288 | .381 | .382 | 110 |
| 1417 | 255 | 265 | 175 | 183 | 286 | 296 | .409 | .412 | 108 |
| 929 | 256 | 270 | 288 | 302 | 175 | 187 | .390 | .400 | 106 |
| 1590 | 257 | 257 | 160 | 160 | 287 | 287 | .312 | .312 | 102 |
| 1419 | 257 | 263 | 182 | 186 | 286 | 293 | .431 | .429 | 110 |
| 884 | 257 | 257 | 170 | 160 | 296 | 310 | .374 | .359 | 106 |
| 754 | 257 | 262 | 172 | 178 | 294 | 298 | .398 | .407 | 106 |
| 1518 | 258 | 250 | 178 | 165 | 290 | 282 | .430 | .409 | 106 |
| 856 | 258 | 268 | 172 | 170 | 297 | 308 | .415 | .340 | 108 |
| 612 | 258 | 274 | 170 | 181 | 297 | 315 | .387 | .397 | 110 |
| 1409 | 259 | 252 | 177 | 172 | 295 | 288 | .430 | .431 | 107 |
| 819 | 259 | 266 | 169 | 175 | 291 | 298 | .360 | .360 | 108 |
| 1594 | 259 | 256 | 176 | 173 | 292 | 288 | .441 | .414 | 107 |
| 1579 | 259 | 259 | 170 | 170 | 292 | 292 | .366 | .366 | 108 |
| 1538 | 259 | 259 | 172 | 172 | 292 | 292 | .403 | .403 | 108 |
| 1387 | 259 | 265 | 168 | 174 | 298 | 303 | .392 | .390 | 108 |
| 868 | 259 | 270 | 179 | 189 | 295 | 306 | .423 | .426 | 106 |
| 1468 | 260 | 266 | 181 | 187 | 293 | 299 | .429 | .429 | 105 |
| 915 | 260 | 271 | 287 | 306 | 183 | 191 | .438 | .427 | 108 |
| 1526 | 260 | 260 | 171 | 171 | 290 | 290 | .358 | .358 | 111 |
| 1348 | 260 | 267 | 170 | 175 | 304 | 311 | .429 | .406 | 107 |
| 1592 | 260 | 277 | 174 | 188 | 294 | 312 | .438 | .418 | 108 |
| 923 | 261 | 270 | 292 | 300 | 184 | 192 | .435 | .432 | 104 |
| 935 | 261 | 267 | 296 | 303 | 178 | 184 | .431 | .440 | 109 |
| 1516 | 261 | 250 | 181 | 166 | 290 | 286 | .431 | .409 | 109 |
| 1543 | 261 | 261 | 174 | 174 | 294 | 294 | .414 | .414 | 108 |
| 894 | 261 | 271 | 182 | 184 | 293 | 309 | .445 | .410 | 107 |
| 941 | 262 | 271 | 294 | 306 | 185 | 184 | .446 | .433 | 108 |
| 1358 | 262 | 263 | 180 | 179 | 296 | 297 | .424 | .398 | 107 |
| 662 | 262 | 264 | 173 | 174 | 309 | 314 | .377 | .380 | 105 |
| 1512 | 262 | 265 | 180 | 183 | 294 | 298 | .430 | .430 | 105 |
| 1475 | 262 | 267 | 165 | 170 | 303 | 307 | .350 | .350 | 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 | |
| 1492 | 262 | 268 | 165 | 171 | 301 | 306 | .378 | .038 | 107 |
| 732 | 262 | 271 | 177 | 187 | 300 | 310 | .415 | .415 | 108 |
| 1267 | 263 | 263 | 177 | 176 | 295 | 293 | .406 | .401 | 108 |
| 1481 | 263 | 266 | 175 | 178 | 304 | 306 | .408 | .404 | 112 |
| 922 | 263 | 271 | 294 | 303 | 184 | 192 | .447 | .454 | 107 |
| 818 | 263 | 263 | 173 | 173 | 312 | 312 | .380 | .380 | 105 |
| 1347 | 263 | 268 | 173 | 175 | 305 | 312 | .405 | .407 | 106 |
| 946 | 264 | 273 | 298 | 307 | 174 | 183 | .375 | .389 | 114 |
| 952 | 264 | 271 | 296 | 302 | 180 | 187 | .398 | .397 | 102 |
| 1313 | 264 | 264 | 180 | 180 | 310 | 310 | .415 | .415 | 101 |
| 1327 | 264 | 264 | 178 | 178 | 295 | 295 | .391 | .391 | 108 |
| 1355 | 264 | 264 | 182 | 182 | 297 | 297 | .414 | .415 | 101 |
| 638 | 265 | 264 | 181 | 178 | 305 | 305 | .419 | .417 | 106 |
| 1578 | 265 | 268 | 177 | 181 | 297 | 300 | .365 | .365 | 110 |
| 1359 | 265 | 269 | 184 | 185 | 299 | 302 | .426 | .399 | 110 |
| 1546 | 265 | 273 | 186 | 189 | 298 | 310 | .448 | .420 | 107 |
| 1470 | 266 | 262 | 181 | 183 | 300 | 295 | .411 | .443 | 106 |
| 1320 | 266 | 266 | 185 | 185 | 300 | 300 | .432 | .432 | 104 |
| 763 | 266 | 271 | 183 | 185 | 300 | 308 | .416 | .412 | 106 |
| 1376 | 266 | 271 | 182 | 187 | 303 | 308 | .463 | .463 | 107 |
| 908 | 267 | 276 | 297 | 311 | 188 | 197 | .438 | .448 | 107 |
| 1380 | 267 | 278 | 187 | 195 | 302 | 317 | .451 | .422 | 103 |
| 1357 | 267 | 271 | 186 | 189 | 310 | 315 | .459 | .438 | 109 |
| 758 | 267 | 277 | 165 | 166 | 306 | 315 | .366 | .355 | 110 |
| 938 | 268 | 274 | 300 | 305 | 183 | 189 | .395 | .398 | 108 |
| 1332 | 268 | 266 | 184 | 184 | 305 | 302 | .418 | .421 | 100 |
| 735 | 268 | 271 | 184 | 186 | 306 | 310 | .440 | .411 | 106 |
| 928 | 269 | 279 | 302 | 312 | 187 | 196 | .449 | .434 | 110 |
| 1389 | 269 | 269 | 190 | 190 | 302 | 302 | .432 | .413 | 107 |
| 1453 | 270 | 274 | 184 | 190 | 307 | 309 | .414 | .413 | 107 |
| 1314 | 270 | 266 | 302 | 298 | 185 | 183 | .416 | .414 | 100 |
| 1508 | 270 | 270 | 190 | 190 | 300 | 300 | .437 | .437 | 108 |
| 659 | 270 | 273 | 183 | 186 | 311 | 313 | .417 | .415 | 105 |
| 1361 | 270 | 274 | 188 | 189 | 302 | 308 | .415 | .415 | 103 |
| 811 | 270 | 280 | 185 | 194 | 306 | 316 | .413 | .414 | 106 |
| 1474 | 271 | 274 | 188 | 191 | 306 | 309 | .418 | .417 | 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 | |
| 1352 | 271 | 265 | 188 | 183 | 320 | 315 | .429 | .417 | 115 |
| 1418 | 272 | 282 | 194 | 199 | 302 | 315 | .455 | .440 | 108 |
| 1431 | 272 | 294 | 192 | 205 | 304 | 337 | .502 | .484 | 114 |
| 1545 | 272 | 274 | 185 | 186 | 307 | 309 | .411 | .398 | 108 |
| 1312 | 272 | 275 | 188 | 191 | 305 | 308 | .431 | .432 | 105 |
| 1378 | 272 | 277 | 183 | 187 | 306 | 312 | .410 | .408 | 103 |
| 1525 | 273 | 271 | 186 | 186 | 305 | 305 | .409 | .409 | 107 |
| 906 | 274 | 283 | 308 | 322 | 192 | 194 | .468 | .459 | 112 |
| 927 | 274 | 282 | 307 | 315 | 189 | 196 | .396 | .396 | 110 |
| 1536 | 274 | 281 | 184 | 190 | 309 | 314 | .406 | .390 | 108 |
| 936 | 275 | 282 | 308 | 315 | 196 | 201 | .490 | .490 | 112 |
| 1511 | 275 | 257 | 194 | 176 | 305 | 285 | .431 | .412 | 110 |
| 1373 | 275 | 270 | 191 | 185 | 309 | 304 | .427 | .402 | 104 |
| 1502 | 275 | 272 | 195 | 193 | 309 | 307 | .410 | .408 | 111 |
| 668 | 275 | 276 | 191 | 192 | 312 | 312 | .420 | .419 | 104 |
| 663 | 275 | 280 | 184 | 188 | 310 | 316 | .435 | .415 | 106 |
| 925 | 276 | 276 | 312 | 310 | 195 | 195 | .524 | .518 | 116 |
| 1325 | 276 | 317 | 320 | 376 | 176 | 216 | .489 | .508 | 118 |
| 1576 | 276 | 278 | 186 | 191 | 307 | 310 | .375 | .375 | 108 |
| 917 | 277 | 285 | 314 | 323 | 189 | 285 | .442 | .441 | 113 |
| 1580 | 277 | 282 | 196 | 199 | 314 | 320 | .444 | .435 | 107 |
| 1535 | 277 | 283 | 194 | 196 | 316 | 318 | .460 | .450 | 109 |
| 739 | 277 | 285 | 194 | 198 | 310 | 319 | .428 | .428 | 105 |
| 855 | 278 | 285 | 191 | 198 | 314 | 320 | .422 | .426 | 112 |
| 1356 | 278 | 289 | 187 | 197 | 322 | 332 | .428 | .433 | 112 |
| 1351 | 279 | 282 | 187 | 190 | 321 | 324 | .428 | .408 | 108 |
| 1465 | 280 | 286 | 199 | 204 | 313 | 321 | .438 | .438 | 107 |
| 807 | 280 | 290 | 183 | 189 | 337 | 347 | .390 | .390 | 104 |
| 901 | 281 | 288 | 314 | 321 | 200 | 201 | .455 | .439 | 110 |
| 808 | 281 | 291 | 187 | 198 | 322 | 336 | .428 | .446 | 105 |
| 932 | 282 | 300 | 316 | 340 | 200 | 211 | .484 | .484 | 115 |
| 646 | 282 | 280 | 191 | 188 | 327 | 330 | .437 | .389 | 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 | |
| 1489 | 283 | 304 | 191 | 211 | 328 | 350 | .497 | .497 | 119 |
| 869 | 283 | 295 | 203 | 208 | 316 | 339 | .469 | .450 | 113 |
| 1343 | 284 | 284 | 192 | 192 | 325 | 325 | .420 | .440 | 112 |
| 1342 | 284 | 285 | 202 | 199 | 316 | 320 | .460 | .427 | 106 |
| 1519 | 284 | 285 | 190 | 188 | 318 | 321 | .376 | .371 | 110 |
| 1349 | 284 | 291 | 195 | 202 | 330 | 337 | .453 | .455 | 107 |
| 1564 | 284 | 291 | 197 | 200 | 320 | 327 | .472 | .460 | 107 |
| 897 | 284 | 292 | 201 | 202 | 316 | 326 | .477 | .468 | 114 |
| 764 | 284 | 294 | 190 | 199 | 330 | 344 | .402 | .412 | 95 |
| 1570 | 284 | 297 | 196 | 200 | 324 | 341 | .473 | .443 | 112 |
| 1507 | 285 | 285 | 200 | 200 | 319 | 319 | .465 | .465 | 112 |
| 1517 | 285 | 288 | 194 | 197 | 319 | 322 | .408 | .410 | 106 |
| 1369 | 286 | 299 | 195 | 205 | 328 | 340 | .489 | .429 | 114 |
| 858 | 286 | 291 | 197 | 200 | 320 | 325 | .454 | .418 | 110 |
| 652 | 286 | 295 | 191 | 198 | 329 | 345 | .435 | .450 | 108 |
| 1549 | 287 | 282 | 185 | 177 | 337 | 328 | .422 | .403 | 114 |
| 1345 | 287 | 289 | 195 | 196 | 327 | 328 | .438 | .419 | 112 |
| 1542 | 287 | 292 | 195 | 197 | 324 | 330 | .428 | .419 | 107 |
| 1388 | 288 | 298 | 197 | 205 | 331 | 339 | .489 | .438 | 114 |
| 810 | 288 | 287 | 196 | 192 | 328 | 329 | .466 | .417 | 113 |
| 1310 | 288 | 288 | 202 | 202 | 327 | 327 | .480 | .480 | 116 |
| 1530 | 288 | 290 | 203 | 203 | 320 | 322 | .473 | .433 | 110 |
| 865 | 288 | 296 | 199 | 206 | 323 | 331 | .470 | .435 | 108 |
| 1469 | 289 | 296 | 197 | 211 | 332 | 333 | .439 | .476 | 115 |
| 1486 | 289 | 306 | 207 | 220 | 323 | 348 | .523 | .510 | 117 |
| 707 | 289 | 294 | 200 | 204 | 324 | 329 | .470 | .434 | 108 |
| 1501 | 289 | 295 | 206 | 212 | 321 | 330 | .474 | .474 | 115 |
| 1467 | 290 | 301 | 200 | 202 | 333 | 346 | .473 | .456 | 113 |
| 912 | 290 | 292 | 337 | 337 | 194 | 198 | .481 | .509 | 116 |
| 1415 | 290 | 295 | 197 | 202 | 334 | 340 | .478 | .512 | 116 |
| 1422 | 290 | 317 | 203 | 225 | 329 | 359 | .510 | .477 | 123 |
| 1541 | 290 | 290 | 205 | 205 | 323 | 323 | .478 | .477 | 115 |

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 | |
| 845 | 290 | 295 | 200 | 209 | 333 | 333 | .473 | .478 | 114 |
| 910 | 291 | 292 | 331 | 328 | 205 | 209 | .525 | .537 | 119 |
| 924 | 291 | 291 | 325 | 325 | 198 | 198 | .420 | .420 | 112 |
| 1434 | 291 | 307 | 206 | 220 | 330 | 348 | .525 | .500 | 116 |
| 1509 | 291 | 287 | 203 | 196 | 325 | 321 | .457 | .445 | 115 |
| 772 | 291 | 292 | 202 | 203 | 325 | 327 | .467 | .456 | 108 |
| 1319 | 291 | 291 | 205 | 204 | 328 | 326 | .426 | .424 | 108 |
| 1497 | 292 | 294 | 200 | 202 | 338 | 341 | .501 | .503 | 116 |
| 1505 | 292 | 292 | 200 | 193 | 328 | 330 | .421 | .410 | 114 |
| 1567 | 292 | 292 | 207 | 207 | 325 | 325 | .506 | .506 | 116 |
| 1495 | 293 | 293 | 205 | 205 | 337 | 335 | .520 | .517 | 116 |
| 1353 | 293 | 293 | 208 | 209 | 332 | 330 | .506 | .506 | 115 |
| 760 | 293 | 294 | 203 | 193 | 331 | 333 | .457 | .414 | 111 |
| 1366 | 294 | 302 | 193 | 199 | 340 | 353 | .505 | .521 | 117 |
| 1307 | 294 | 293 | 209 | 206 | 332 | 330 | .492 | .446 | 114 |
| 657 | 294 | 297 | 203 | 206 | 334 | 332 | .446 | .432 | 110 |
| 1454 | 295 | 299 | 208 | 213 | 333 | 338 | .485 | .511 | 117 |
| 1527 | 295 | 296 | 189 | 209 | 325 | 326 | .429 | .434 | 109 |
| 1523 | 295 | 297 | 207 | 209 | 329 | 331 | .470 | .472 | 114 |
| 844 | 295 | 297 | 209 | 211 | 332 | 335 | .478 | .508 | 113 |
| 891 | 295 | 301 | 206 | 215 | 333 | 340 | .477 | .511 | 114 |
| 1598 | 295 | 295 | 207 | 207 | 332 | 332 | .477 | .478 | 112 |
| 1456 | 296 | 296 | 197 | 197 | 345 | 345 | .477 | .477 | 113 |
| 1498 | 296 | 295 | 213 | 212 | 330 | 330 | .523 | .524 | 116 |
| 1595 | 296 | 296 | 334 | 335 | 206 | 206 | .425 | .427 | 114 |
| 1334 | 296 | 296 | 334 | 334 | 212 | 212 | .476 | .476 | 116 |
| 1408 | 296 | 296 | 206 | 206 | 333 | 333 | .504 | .505 | 115 |
| 1539 | 296 | 290 | 208 | 206 | 335 | 327 | .475 | .448 | 112 |
| 1577 | 298 | 300 | 212 | 214 | 335 | 337 | .472 | .473 | 114 |
| 1555 | 299 | 293 | 213 | 207 | 332 | 327 | .516 | .503 | 116 |
| 903 | 299 | 295 | 334 | 333 | 215 | 211 | .499 | .501 | 113 |
| 943 | 299 | 305 | 337 | 342 | 216 | 222 | .561 | .578 | 119 |
| 1451 | 300 | 289 | 212 | 200 | 344 | 333 | .476 | .475 | 115 |
| 1584 | 300 | 294 | 213 | 210 | 338 | 328 | .473 | .447 | 112 |
| 1452 | 302 | 300 | 214 | 212 | 343 | 342 | .499 | .499 | 114 |
| 1425 | 302 | 305 | 214 | 216 | 337 | 340 | .500 | .500 | 118 |

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 |
| 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 |
| 680 | 270 | 270 | 175 | 175 | 308 | 308 | 0.370 | 0.370 | 100 |

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 | |
| 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 | 277 | 179 | 179 | 320 | 320 | 0.379 | .379 | 108 |
| 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 |

SUIT FORD LIFTER (0.875" Minimum Diameter)

| | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-------|-------|-----|
| 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 |
| 820 | 257 | 263 | 168 | 175 | 290 | 296 | 0.360 | 0.389 | 108 |
| 1552 | 272 | 282 | 175 | 183 | 315 | 328 | 0.380 | 0.379 | 107 |

SUIT CHRYSLER LIFTER (0.905" Minimum Diameter)

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-------|-------|-----|
| 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 | |
| 1537 | 194 | 194 | 102 | 102 | 250 | 250 | .266 | .266 | 109 |
| 613 | 194 | 202 | 96 | 105 | 260 | 267 | .261 | .272 | 112 |
| 766 | 194 | 202 | 98 | 110 | 257 | 267 | .264 | .279 | 110 |
| 615 | 196 | 196 | 74 | 76 | 264 | 264 | .230 | .230 | 108 |
| 678 | 197 | 197 | 94 | 94 | 260 | 260 | .254 | .254 | 108 |
| 771 | 201 | 205 | 102 | 108 | 259 | 266 | .265 | .272 | 111 |
| 631 | 202 | 207 | 100 | 105 | 269 | 269 | .263 | .263 | 112 |
| 805 | 203 | 208 | 107 | 112 | 255 | 270 | .275 | .275 | 112 |
| 666 | 204 | 214 | 108 | 121 | 267 | 281 | .278 | .295 | 112 |
| 776 | 204 | 215 | 105 | 114 | 266 | 279 | .271 | .277 | 112 |
| 695 | 205 | 205 | 112 | 112 | 251 | 254 | .280 | .280 | 109 |
| 221 | 205 | 209 | 110 | 115 | 265 | 271 | .273 | .281 | 109 |
| 1364 | 206 | 206 | 113 | 113 | 260 | 260 | .281 | .281 | 112 |
| 220 | 206 | 211 | 103 | 105 | 270 | 280 | .262 | .264 | 109 |
| 624 | 206 | 222 | 110 | 118 | 268 | 300 | .278 | .284 | 116 |
| 602 | 208 | 208 | 116 | 116 | 270 | 270 | .280 | .280 | 110 |
| 745 | 212 | 212 | 113 | 114 | 280 | 280 | .270 | .270 | 108 |
| 890 | 212 | 218 | 117 | 124 | 273 | 278 | .289 | .293 | 110 |
| 603 | 214 | 214 | 120 | 120 | 280 | 280 | .295 | .295 | 110 |
| 665 | 214 | 224 | 120 | 133 | 280 | 290 | .296 | .312 | 112 |
| 892 | 215 | 215 | 121 | 121 | 275 | 275 | .294 | .294 | 112 |
| 770 | 214 | 226 | 120 | 130 | 280 | 290 | .293 | .297 | 111 |
| 1365 | 219 | 224 | 122 | 127 | 288 | 290 | .286 | .290 | 110 |
| 1540 | 218 | 214 | 123 | 119 | 282 | 276 | .294 | .294 | 113 |
| 170 | 219 | 219 | 121 | 121 | 280 | 280 | .286 | .284 | 111 |
| 843 | 219 | 219 | 116 | 116 | 286 | 286 | .282 | .282 | 110 |
| 1550 | 219 | 224 | 124 | 127 | 290 | 295 | .295 | .295 | 112 |
| 651 | 222 | 222 | 128 | 128 | 282 | 282 | .298 | .298 | 113 |
| 689 | 222 | 229 | 127 | 132 | 282 | 289 | .298 | .300 | 106 |
| 685 | 224 | 220 | 128 | 115 | 277 | 279 | .282 | .267 | 110 |
| 667 | 224 | 224 | 130 | 130 | 286 | 286 | .306 | .306 | 111 |
| 801 | 224 | 224 | 130 | 130 | 280 | 280 | .300 | .300 | 114 |
| 686 | 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 | |
| 619 | 226 | 232 | 130 | 137 | 286 | 290 | .306 | .316 | 109 |
| 817 | 226 | 230 | 137 | 138 | 280 | 282 | .318 | .320 | 109 |
| 1367 | 226 | 236 | 133 | 134 | 293 | 299 | .310 | .326 | 112 |
| 1510 | 227 | 226 | 132 | 132 | 294 | 291 | .317 | .316 | 106 |
| 1589 | 227 | 220 | 129 | 124 | 289 | 282 | .294 | .294 | 113 |
| 604 | 228 | 228 | 128 | 128 | 304 | 304 | .280 | .280 | 110 |
| 617 | 228 | 228 | 130 | 130 | 290 | 290 | .294 | .296 | 110 |
| 605 | 222 | 236 | 125 | 133 | 297 | 305 | .291 | .294 | 114 |
| 622 | 230 | 230 | 140 | 140 | 282 | 282 | .320 | .320 | 110 |
| 650 | 230 | 230 | 133 | 133 | 292 | 292 | .300 | .300 | 113 |
| 761 | 230 | 230 | 133 | 133 | 292 | 292 | .300 | .300 | 109 |
| 778 | 230 | 230 | 134 | 134 | 290 | 290 | .303 | 302 | 110 |
| 672 | 230 | 230 | 137 | 137 | 280 | 280 | .318 | .317 | 108 |
| 880 | 231 | 231 | 138 | 138 | 285 | 285 | .310 | .310 | 110 |
| 1424 | 230 | 238 | 139 | 146 | 288 | 295 | .324 | .324 | 110 |
| 703 | 232 | 232 | 124 | 124 | 312 | 312 | .276 | .276 | 110 |
| 620 | 234 | 234 | 140 | 140 | 294 | 294 | .315 | .315 | 110 |
| 649 | 234 | 244 | 134 | 143 | 282 | 295 | .303 | .303 | 108 |
| 730 | 236 | 244 | 149 | 159 | 284 | 292 | .340 | .340 | 112 |
| 747 | 236 | 246 | 149 | 157 | 294 | 307 | .349 | .354 | 107 |
| 690 | 238 | 243 | 144 | 148 | 300 | 310 | .320 | .320 | 108 |
| 787 | 238 | 246 | 147 | 151 | 284 | 295 | .324 | .327 | 112 |
| 616 | 240 | 240 | 140 | 140 | 300 | 300 | .299 | .299 | 110 |
| 700 | 241 | 248 | 147 | 153 | 307 | 313 | .332 | .328 | 108 |
| 682 | 244 | 244 | 136 | 136 | 303 | 303 | .288 | .288 | 106 |
| 802 | 246 | 246 | 156 | 156 | 295 | 295 | .338 | .338 | 108 |
| 648 | 248 | 252 | 151 | 158 | 320 | 322 | .326 | .336 | 108 |
| 1520 | 258 | 256 | 164 | 164 | 320 | 322 | .338 | .339 | 107 |
| 675 | 258 | 258 | 161 | 161 | 307 | 307 | .326 | .325 | 108 |
| 671 | 259 | 259 | 164 | 164 | 310 | 310 | .345 | .345 | 108 |
| 1503 | 263 | 263 | 162 | 162 | 320 | 320 | .324 | .324 | 107 |
| 769 | 269 | 275 | 156 | 164 | 351 | 359 | .327 | .329 | 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 |
| SOLID | | | | | | | | |
| 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 |
| HYDRAULIC | | | | | | | | |
| 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 |
|-------------------------|----------------------|----------------------|---------------------------|----------------------|------------------------|-------------|
| HYDRAULIC ROLLER | | | | | | |
| 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 |
| 1200 | 204/212 | 119/125 | 260/269 | .303/.305 | .515/.519 | 116 |
| 1255 | 206/209 | 118/120 | 267/269 | .300/.299 | .510/.509 | 111 |
| 1259 | 207/213 | 119/125 | 262/267 | .302/.306 | .513/.520 | 112 |
| 1752 | 208/208 | 129/128 | 261/260 | .321/.320 | .546/.544 | 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 |
| 1208 | 216/221 | 135/139 | 275/281 | .350/.350 | .595/.595 | 112 |
| 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 |
| 1759 | 217/246 | 141/168 | 267/296 | .356/.367 | .605/.624 | 120 |
| 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 |
| 1771 | 220/233 | 143/149 | 269/286 | .360/.338 | .612/.575 | 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 |
| 949 | 225/243 | 146/163 | 278/294 | .352/.357 | .598/.607 | 118 |
| 1292 | 225/244 | 149/164 | 276/296 | .357/.357 | .607/.607 | 115 |
| 1226 | 226/222 | 146/143 | 279/276 | .339/.339 | .576/.576 | 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 |
| 1777 | 226/236 | 148/158 | 279/285 | .357/.362 | .607/.615 | 113 |
| 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 |
| 1218 | 227/244 | 146/159 | 286/297 | .344/.346 | .585/.588 | 114 |
| 1281 | 227/244 | 143/158 | 294/310 | .355/.354 | .603/.601 | 114 |
| 1287 | 227/244 | 150/165 | 278/296 | .358/.359 | .607/.610 | 114 |
| 1773 | 228/230 | 148/149 | 283/285 | .352/.352 | .598/.598 | 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 |
| 1212 | 229/232 | 151/155 | 281/282 | .359/.361 | .611/.614 | 112 |

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 |
|-------------------------|----------------------|----------------------|---------------------------|----------------------|------------------------|-------------|
| HYDRAULIC ROLLER | | | | | | |
| 1223 | 229/235 | 145/148 | 293/304 | .344/.344 | .584/.585 | 112 |
| 1753 | 230/225 | 151/145 | 279/275 | .334/.330 | .568/.561 | 116 |
| 1206 | 230/235 | 148/154 | 289/294 | .335/.347 | .571/.591 | 110 |
| 1762 | 230/237 | 153/160 | 282/289 | .361/.365 | .614/.621 | 109 |
| 1763 | 230/249 | 153/171 | 281/303 | .360/.367 | .612/.624 | 120 |
| 1214 | 231/239 | 153/155 | 282/291 | .352/.342 | .598/.581 | 112 |
| 1761 | 231/244 | 155/167 | 280/295 | .362/.367 | .615/.624 | 113 |
| 1261 | 232/232 | 152/152 | 285/285 | .353/.353 | .600/.600 | 110 |
| 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 |
| 1269 | 232/238 | 153/156 | 288/295 | .363/.367 | .617/.624 | 113 |
| 1765 | 232/246 | 154/163 | 286/302 | .361/.354 | .614/.602 | 120 |
| 1221 | 233/234 | 150/150 | 295/292 | .343/.325 | .583/.553 | 111 |
| 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 |
| 1772 | 235/236 | 154/154 | 289/288 | .351/.351 | .597/.597 | 110 |
| 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 |
| 947 | 236/248 | 155/169 | 289/299 | .351/.364 | .597/.619 | 113 |
| 1237 | 236/249 | 154/169 | 291/302 | .367/.372 | .624/.632 | 112 |
| 1754 | 237/231 | 156/151 | 288/281 | .340/.336 | .578/.571 | 115 |
| 1272 | 237/242 | 153/158 | 301/304 | .368/.363 | .625/.617 | 112 |
| 1241 | 237/245 | 159/162 | 293/298 | .365/.346 | .620/.588 | 114 |
| 948 | 237/248 | 155/169 | 295/295 | .361/.364 | .614/.619 | 110 |
| 1283 | 238/242 | 159/162 | 293/296 | .368/.368 | .626/.625 | 114 |
| 1289 | 238/254 | 156/169 | 295/319 | .362/.362 | .614/.614 | 113 |
| 1232 | 239/242 | 155/158 | 294/295 | .345/.347 | .585/.590 | 114 |
| 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 |
| 1294 | 240/243 | 155/159 | 292/294 | .342/.344 | .581/.585 | 116 |
| 1235 | 241/243 | 162/163 | 293/296 | .357/.359 | .607/.610 | 112 |
| 1741 | 242/245 | 159/163 | 309/306 | .367/.367 | .623/.623 | 112 |
| 1240 | 242/248 | 159/163 | 299/305 | .352/.352 | .598/.599 | 112 |
| 1231 | 243/246 | 158/161 | 296/298 | .348/.350 | .592/.595 | 114 |
| 1291 | 244/261 | 158/169 | 311/340 | .365/.362 | .621/.616 | 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 |
| 1733 | 246/251 | 162/165 | 306/314 | .364/.365 | .619/.621 | 112 |

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 |
|-------------------------|----------------------|----------------------|---------------------------|----------------------|------------------------|-------------|
| HYDRAULIC ROLLER | | | | | | |
| 1207 | 246/255 | 155/161 | 311/315 | .329/.327 | .559/.556 | 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 |
| 1219 | 250/250 | 163/166 | 309/311 | .359/.363 | .610/.617 | 108 |
| 1271 | 250/258 | 150/161 | 325/337 | .361/.364 | .614/.618 | 114 |
| 1760 | 253/253 | 173/173 | 304/302 | .370/.370 | .629/.629 | 110 |
| 1224 | 254/259 | 166/171 | 322/327 | .374/.374 | .636/.636 | 109 |
| 1770 | 255/265 | 176/185 | 305/315 | .367/.367 | .624/.624 | 112 |
| 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 | 267/277 | 180/188 | 334/338 | .370/.367 | .629/.624 | 114 |
| 1217 | 274/274 | 191/191 | 327/328 | .367/.366 | .624/.622 | 114 |
| SOLID ROLLER | | | | | | |
| 1757 | 246/246 | 164/165 | 278/280 | .404/.404 | .687/.687 | 112 |
| 1750 | 259/265 | 180/184 | 288/295 | .401/.401 | .682/.682 | 110 |
| 1222 | 273/277 | 189/192 | 307/311 | .436"/.435" | .741"/.740" | 108 |
| 1751 | 276/283 | 201/202 | 304/312 | .464/.461 | .789/.783 | 110 |

Note: Other solid roller profiles are available. These will need to be checked as durations will vary depending on base circle size. Please contact the Crow Cams Technical department to discuss a profile.

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 |
|-------------------------|-----------|---------|-----------|-------------|
| HYDRAULIC ROLLER | | | | |
| STD AU | 181 / 197 | 233/246 | .247/.268 | 119 |
| 896 | 193 / 187 | 240/230 | .236/.227 | 114 |
| STD EB | 193 / 187 | 241/239 | .235/.227 | 114 |
| 825 | 195 /195 | 262 | 0.245 | 113 |
| 2526 | 197 / 192 | 249/246 | .265/.252 | 115 |
| 2557 | 198 / 198 | 260 | 0.245 | 113 |
| 2519 | 199 / 194 | 262/251 | .246/.236 | 113 |
| 2522 | 201 / 194 | 263/257 | .269/.255 | 111 |
| 2543 | 209 / 207 | 271/269 | .250/.239 | 114 |
| 2549 | 210 / 199 | 271/261 | .264/.250 | 111 |
| 1514 | 219 / 219 | 275 | 0.28 | 112 |
| 1300 | 220 / 220 | 282/289 | 0.25 | 110 |
| 1560 | 224 / 220 | 282/277 | 0.28 | 115 |
| 2596 | 227 / 227 | 282 | 0.296 | 110 |
| 2546 | 233 / 233 | 295 | 0.264 | 110 |
| 2550 * | 235 / 235 | 295 | 0.308 | 106 |

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

| SOLID ROLLER | | | | |
|---------------------|-----|-----|-------|-----|
| 2527 | 230 | 272 | .300" | 106 |
| 2518 | 237 | 295 | .260" | 107 |

NISSAN TB48 GRINDS

| Part Number | Adv. Duration | | .050" Duration | | Valve Lift | | LSA |
|----------------------------------|---------------|---------|----------------|---------|------------|---------|-----|
| | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | |
| 538797 539797 | 287 | 287 | 258 | 258 | .500" | .500" | |
| 538876 539876 | 302 | 303 | 250 | 250 | .500" | .500" | |
| 5381472 5391472 | 265 | 265 | 248 | 248 | .440" | .440" | |
| 5381840 5391840 | 248 | 248 | 223 | 223 | .401" | .401" | |
| 5381841 5391841 | 248 | 248 | 231 | 223 | .425" | .401" | |
| 5381842 5391842 | 248 | 248 | 231 | 231 | .406" | .406" | |
| 5381843 5391843 | 254 | 254 | 231 | 231 | .406" | .406" | |
| 5381844 5391844 | 255 | 254 | 234 | 231 | .426" | .426" | |
| 5381845 5391845 | 255 | 255 | 234 | 234 | .405" | .405" | |
| 5381847 5391847 | 271 | 270 | 240 | 239 | .405" | .405" | |
| 5381848 5391848 | 255 | 255 | 238 | 238 | .429" | .429" | |
| 5381849 5391849 | 272 | 273 | 244 | 244 | .468" | .467" | |
| 5381850 5391850 | 265 | 256 | 248 | 238 | .440" | .429" | |
| 5381851 5391851 | 265 | 265 | 248 | 248 | .440" | .440" | |
| 5381764 5391764 | 294 | 294 | 253 | 253 | .490" | .490" | |

TOYOTA 1FZ-FE GRINDS

| Part Number | Adv. Duration | | .050" Duration | | Valve Lift | | LSA |
|----------------------------------|---------------|---------|----------------|---------|------------|---------|-----|
| | Intake | Exhaust | Intake | Exhaust | Intake | Exhaust | |
| 528000 529000 | 277 | 277 | 194 | 194 | .340" | .340" | |
| 5281840 5291840 | 248 | 248 | 223 | 223 | .401" | .401" | |
| 5281843 5291843 | 254 | 254 | 231 | 231 | .406" | .406" | |
| 5281844 5291844 | 255 | 254 | 234 | 231 | .426" | .406" | |
| 5281845 5291845 | 255 | 255 | 234 | 234 | .426" | .426" | |
| 5281848 5291848 | 255 | 255 | 238 | 238 | .429" | .429" | |
| 5281849 5291849 | 272 | 273 | 244 | 244 | .468" | .467" | |
| 5281850 5291850 | 265 | 256 | 248 | 238 | .440" | .429" | |
| 5281851 5291851 | 265 | 265 | 248 | 248 | .440" | .440" | |
| 5281852 5291852 | 282 | 282 | 247 | 247 | .472" | .472" | |
| 5281764 5291764 | 294 | 294 | 253 | 253 | .490" | .490" | |

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