

PIPER CAMS

Landis CNC Camshaft Profiling

Piper cams have been designing and manufacturing performance camshafts since the late 1960's. Continuous investment in state of the art machinery has kept us at the forefront of profile design. For some years now we have utilised CNC cam grinding equipment to complement our CNC workshop facilities, all of which allow us to hold the very closest tolerances.

Due to continuous expansion, during early 2007 we relocated to our new 25'000 sq/ft factory in Folkestone. Further investment in an air conditioned inspection department means we now offer the very best camshaft/valve train analysis/design facility in the UK.

Our CNC Landis machine will grind not only cams for use in Le Mans, WRC, Touring Cars, NASCAR, Indy Car, British & European Rallycross & Hot Rod but also most of our fast road profiles as well. The same in house design facilities and CNC machines are used to produce our huge range of performance road cams to the same exacting standards and with the same amount of success. This means the superior quality of our cams will be available to everybody whether you drive a NASCAR or a Nova!

Motor vehicle manufacturers are continually producing new engines, making them lighter and more efficient. Our continuous research and development programme keeps us at the forefront of engine development. We achieve phenomenal results by using modern design methods, developed in a competition environment, to produce cams that not only offer the best performance but the best longevity as well.

To complement our camshafts we offer a complete range of kits, adjustable vernier pulleys, performance valve springs, spring retainers, timing belts and cam followers.

Ian Cox: Managing Director

John Crabb: Technical Director

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Technical terminology

Lift:

This can be cam lift or valve lift. The latter being the cam lift multiplied by the rocker ratio. All lift figures in this catalogue refer to valve lift.

Duration:

This is the length of time, measured in crankshaft degrees that the valve is off its seat.

In these data sheets, Piper give you this figure as well as the timing figures. To calculate the duration, add the timing numbers together and add 180.

EXAMPLE: a cam with timing figures of 23/67 added, totals 90, plus 180, gives 270 deg duration.

Overlap:

The number of crankshaft degrees were both the inlet and exhaust valve are open at the same time.

To calculate overlap: Add the opening number of the inlet cam to the closing number of the exhaust cam, ie the first and last numbers of the cam timing. Using our same example of the 23/67 inlet and 67/23 exhaust (usually referred to as 23/67 - 67/23), add together the first and last numbers (23 and 23) and the total (46) is the overlap. In general terms the larger this number or the greater the overlap, the hotter the cam.

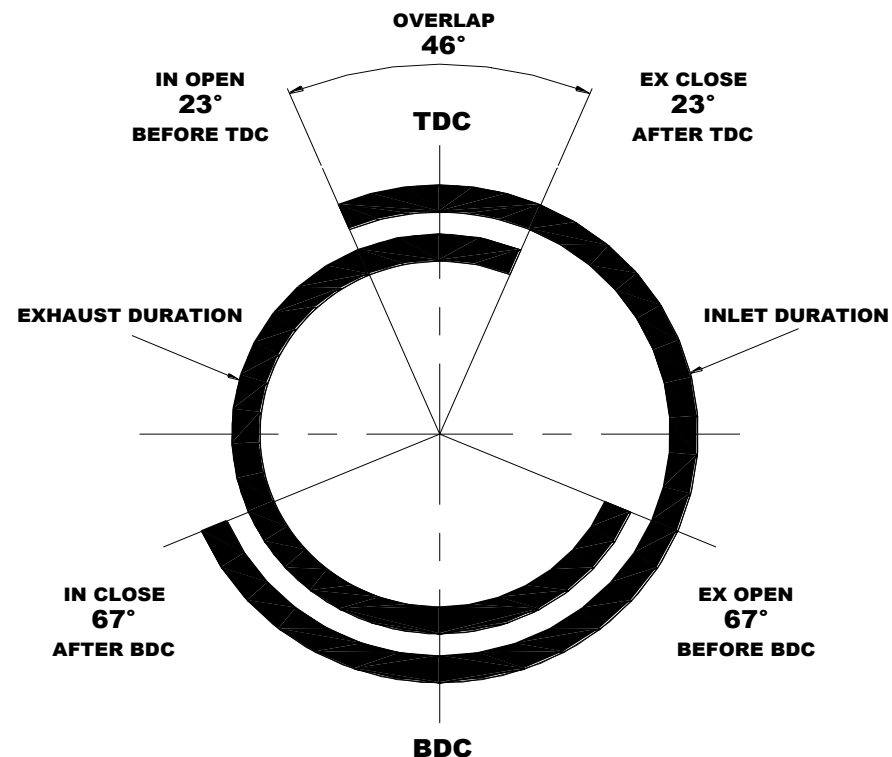
Cam Timing:

The position of the camshaft relative to the crankshaft. This is expressed as the number of degrees that full lift occurs after top dead centre (tdc) in the case of the inlet, and before tdc for the exhaust. This figure is included in the Piper technical data, but to calculate this, take the duration figure and divide by 2.

EXAMPLE: With inlet cam of 23/76, the duration is the addition of these two numbers, plus 180, equals 270. Then divide by 2 resulting in 135. Deduct the number of degrees before TDC that the valve started to open, ie 23 degrees – the result 112. The valve is correctly timed with full lift 112 degrees after TDC.

Valve Timing:

The opening and closing position of inlet and exhaust valves relative to the crankshaft as figures before and after TDC and BDC.



Lobe Angle:

The angle between the inlet and exhaust lobe, measure in degrees.

Ramp:

The ramp is the part of the profile that takes up the valve clearance and slack in the valve train gradually, before the valve is actually lifted from the seat. It also rests the valve gently back to the seat after the closing flank. Mechanical profiles use a much larger ramp than hydraulic ones, as the hydraulic cam follower should be in contact with the lobe at all times. The height of the ramp dictates what measurement the valve clearances should be set to.

Flank:

This is the part of the profile between the ramp and nose. It is the most important part of the whole design. The flank controls the velocity and acceleration of the valve train. The acceleration / deceleration rate must be within the working limits of the valve spring, too much and valve float will occur. Generally high acceleration & velocity figures are beneficial to engine performance.

Nose radius:

The larger the nose radius the better. Our profiles are designed to utilise the biggest nose radius possible to keep the stresses to a minimum.

Dwell:

As the valve reaches full lift it will stop moving for a few degrees before starting to drop back towards the seat, this period is known as the dwell. When checking the cam timing using the full lift figure method the mid-point of the dwell should be taken as exact full lift.

Rocker Ratio:

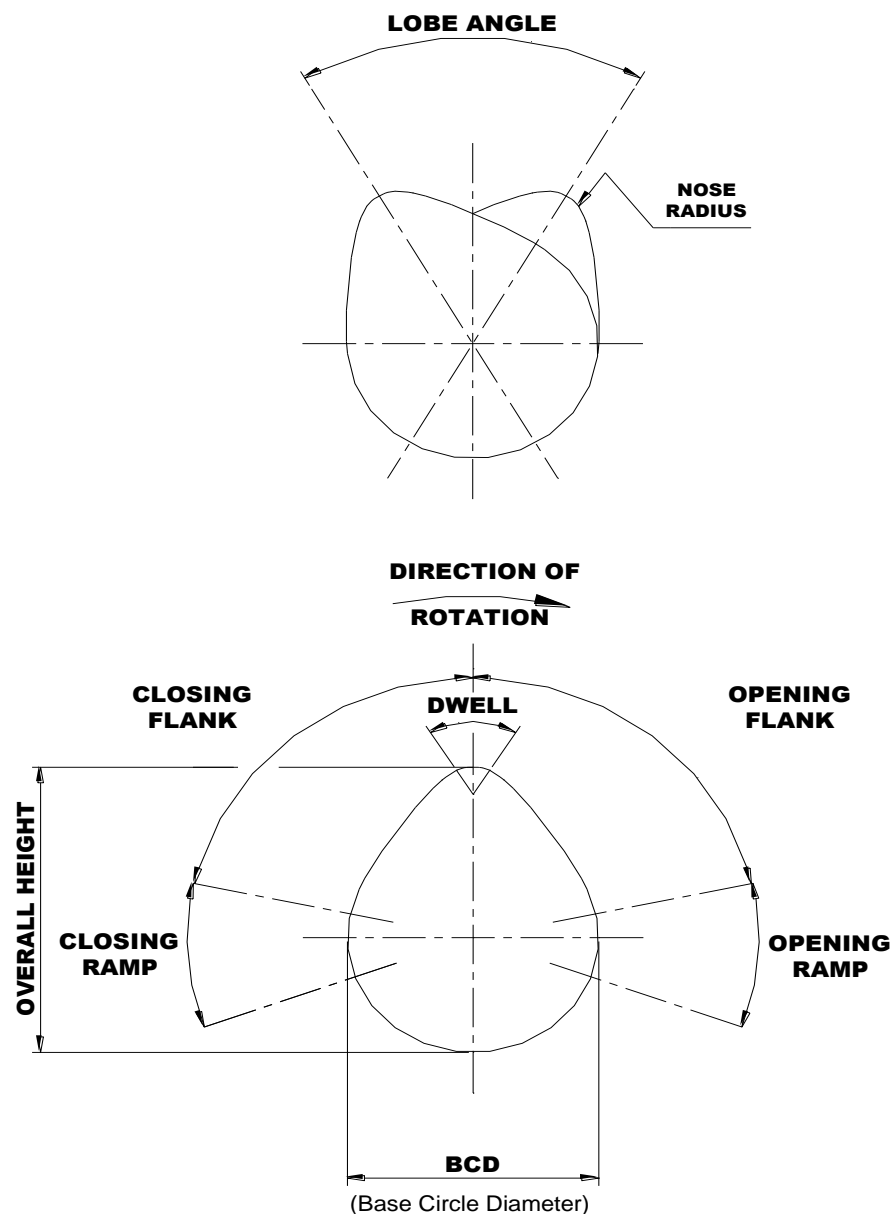
The ratio between valve motion vs cam follower motion. Push rod engines typically use a ratio of between 1.1:1 & 2.0:1. Over head cam, direct operating engines obviously have no rocker ratio as the cam follower motion is exactly the same as the valve motion.

Overall height:

The measurement from the nose of the lobe to the bottom of the base circle, in a straight line through the centre of the lobe.

Base circle diameter:

The measurement across the lobe, calculated by measuring the overall height and subtracting the cam lift.



CONDITIONS OF TRADING

Goods supplied will be in accordance with our specification unless a written variation is agreed. Minor variations which do not adversely affect the goods may be made.

Quoted dates for delivery are approximate only. Orders cannot be cancelled for late delivery.

Ownership of goods will not pass until after payment in full. If payment is late, goods must be available for collection on demand. No liability is accepted for loss or damage of goods after delivery.

Unless credit terms are agreed before placement of order, payment for goods is due on acceptance of order. Five days is required for clearance of cheques. Interest is payable on overdue payments at 5% p.a. above Barclays Bank plc base lending rate from time to time.

Goods are warranted free from defect in normal use for six months after delivery unless otherwise stated. Defective goods must be returned within one month after defect appears. Replacement of defective goods or refund of purchase price will satisfy our liability. Our liability for goods originally supplied to us is limited to the suppliers liability to us. Liability for consequential loss of any kind is excluded except that liability for death or injury is not limited and consumers statutory rights are not affected by these terms.

No goods will be supplied to customers who are or appear likely to become insolvent. Presentation of a petition under the insolvency act 1986 or appointment of a receiver in respect of a customer will entitle us to cancel any contract with that customer.

No third party is intended to benefit from any express or implied warranty given in respect of goods supplied by us.

All contracts with our customers are to be construed in accordance with the laws of England.

Recallshow Limited T/A Piper

The Rules of Successful Camshaft Installation

PIPER CAMS

Research indicates that most cams that wear out start to fail during the first few moments of operation. Many cams are irreparably damaged, even before the engine is started, because the basic rules of camshaft break-in have not been followed.

The cause of premature cam and tappet failure is metal to metal contact between the tappet and cam lobe. Should this contact occur due to lack of proper lubrication or excessively high pressure due to valve train interference shearing the oil film, then 'galling' will take place. When this happens, metal is transferred from the tappet to the cam or vice versa in a process comparable to welding. Microscopic high spots, which are present on all machined parts, become overheated due to friction and pressure and bond together, tearing sections loose from the tappet or lobe. These pieces of metal remain attached and create further local overheating during the following revolutions of the camshaft and lead to ultimate failure of the affected components. Listed below are steps to ensure long and trouble free life from the camshaft and associated components.

1. New Piper cam followers **MUST** be used.
2. Coat cam and followers generously with **PIPER** cam lube.
3. Check entire valve train for interference before starting engine, i.e. valve to piston contact, for twin cam engines, valve to valve possible contact and spring boxing. Valve springs should show .030" clearance between centre coils. Valve should have minimum .060" clearance from piston/block. Engines that utilise hydraulic tappets should have at least one inlet and one exhaust tappet temporarily replaced with mechanical item set with zero clearance. This will allow accurate figures to be obtained from the above checks. Once the checks have been done make sure the original hydraulic items are refitted.
4. Do not remove black phosphate coating from cam lobes. This coating helps the bedding in procedure by aiding oil retention on the surface of the cam lobe.
5. To ensure that your Piper camshaft reaches you in the same condition that it left the factory it has been coated with a transparent rust inhibitor that must be removed before fitting. Wash off in a suitable solvent e.g. Paraffin. After washing it is essential that your camshaft be liberally coated with cam lube.
6. It is **ESSENTIAL** that you ensure that the cam you are fitting is **IDENTICAL IN EVERY WAY** (apart from the lobe forms) to the cam you remove. Failure to check may invalidate your warranty.

7. Before starting all engines, prime the oil system by turning the oil pump manually. Fill carburettor with petrol, fill radiator, and ensure correct ignition timing. Engine must start right away and not be subjected to a long grind on the starter.

8. Do not idle engine during the first twenty minutes of operation; rpm should be kept at 2500 or above; in pushrod engines oil throw-off from the crank may not be sufficient to lubricate the cam followers. Also contact stresses at the nose of the cam are very high at low speed. If adjustments need to be made during the twenty minutes break-in period, shut the engine down. **DO NOT IDLE.**

9. In some OHC engines where reprofiled cams are used, you may need larger than standard adjustment shims.

10. When modifying engines that utilise finger followers i.e. Ford Pinto SOHC engine. It is imperative that you ensure the followers sit in a horizontal position. Failure to do so will alter the rocker geometry. Increasing or decreasing the valve lift can result in failure.

11. **HAVE YOU CHANGED YOUR CAM BELT?** The importance of changing your cam belt at the manufacturers recommended intervals could not be over-emphasized. A failure of this item will more often than not result in massive engine damage. Our range of belts have been specifically designed to cope with the demands of a competition engine, if you are in any doubt as to the mileage your belt has covered.... **CHANGE IT!** Our up rated belts retail at prices very close to that of a standard replacement item. Do not take a chance, fit a Piper cam belt.

A GUIDE TO CORRECT TIMING

To check your cam timing, you will need a 360 degree protractor and dial gauge. The engine must be set at TDC and the protractor bolted to the crank pulley. Attach the dial gauge so that the foot is resting on valve spring cap (or follower on OHC engine). Attach a pointer to engine and zero the protractor. Engine is now at TDC with the protractor reading zero.

Turn engine until full lift is first shown on dial gauge. Note number of degrees (e.g. 106 degrees ATDC) continue to turn engine and note when lift starts to reduce (e.g. 110 degrees ATDC) true full lift position will, in this case, be 108 degrees. Your figures will differ but true full lift is at midway point.

The correct full lift position for your cam is shown on attached information sheet.

CAMSHAFTS ALFA ROMEO GIULIETTA / GIULIA 1300 / 1600 / 1750 / 2000 8v**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

Many other profiles available

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|----------------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| ALFRBP270 | FAST ROAD | 1500-6500 | 10 BHP | 264 deg | 264 deg | .400" 10.15mm | .398" 10.11mm | 24 - 60 60 - 24 | 108 deg | 108 deg | .078" 1.98mm | .076" 1.93mm | .010" / .25mm .012" / .30mm |
| ALFRBP285 | ULTIMATE ROAD | 2000-7000 | 15+ BHP | 280 deg | 280 deg | .430" 10.92mm | .428" 10.87mm | 34 - 66 66 - 34 | 106 deg | 106 deg | .118" 2.99mm | .116" 2.94mm | .010" / .25mm .012" / .30mm |
| ALFRBP300 | RALLY | 2800-7500 | | 290 deg | 290 deg | .438" 11.13mm | .436" 11.08mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .160" 4.06mm | .158" 4.01mm | .010" / .25mm .012" / .30mm |
| ALFRBP320 | RACE | 3000-8000 | | 296 deg | 296 deg | .470" 11.94mm | .468" 11.89mm | 47 - 73 76 - 44 | 102 deg | 104 deg | .177" 4.50mm | .164" 4.18mm | .010" / .25mm .012" / .30mm |

ALFA ROMEO 75 / 155 / 164 TWIN SPARK 2.0 8v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| ALFR20BP270 | FAST ROAD 2.0 TWIN SPARK | 1500-6500 | 12 BHP | 278 deg | 278 deg | .445" 11.29mm | .400" 10.15mm | 31 - 67 67 - 31 | 108 deg | 108 deg | .117" 2.97mm | .092" 2.34mm | .014" / .35mm .016" / .40mm |
| ALFR20BP285 | ULTIMATE ROAD Not recommended for standard injection | 2500-7000 | | 290 deg | 290 deg | .438" 11.13mm | .436" 11.08mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .157" 4.00mm | .155" 3.95mm | .010" / .25mm .012" / .30mm |
| ALFR20BP300 | RALLY | 2800-7500 | | 300 deg | 300 deg | .480" 12.19mm | .478" 12.13mm | 47 - 73 76 - 44 | 103 deg | 106 deg | .180" 4.57mm | .164" 4.17mm | .008" / .20mm .010" / .25mm |

ALFA ROMEO 145 / 146 / 155 / 156 / GTV / SPIDER 1.8 / 2.0 16V VVT

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| AR16VBP270H | FAST ROAD | 1500-6500 | 10 BHP | 258 deg | 258 deg | .395" 10.03mm | .395" 10.03mm | 19 - 59 59 - 19 | 110 deg | 110 deg | .053" 1.33mm | .053" 1.33mm | HYDRAULIC |
| AR16VBP285 | ULTIMATE ROAD | 2500-7500 | | 272 deg | 264 deg | .432" 10.97mm | .415" 10.53mm | 30 - 62 58 - 26 | 106 deg | 106 deg | .084" 2.14mm | .081" 2.06mm | .008" / .20mm .010" / .25mm |
| AR16VBP300 | RALLY | 3000-8000 | | 276 deg | 276 deg | .457" 11.60mm | .450" 11.42mm | 32 - 64 64 - 32 | 106 deg | 106 deg | .110" 2.80mm | .097" 2.46mm | .008" / .20mm .010" / .25mm |
| AR16VBP320 | RACE | 3000-8000 | | 284 deg | 276 deg | .469" 11.91mm | .455" 11.55mm | 40 - 64 60 - 36 | 102 deg | 102 deg | .161" 4.08mm | .130" 3.29mm | .008" / .20mm .010" / .25mm |

ALFA ROMEO GTV6 / 156 / 164 V6 24V

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| ARV6BP270H | FAST ROAD | 1500-6500 | 15 BHP | 260 deg | 260 deg | .380" 9.65mm | .380" 9.65mm | 21 - 59 59 - 21 | 109 deg | 109 deg | .040" 1.00mm | .040" 1.00mm | HYDRAULIC |
|------------|------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|

ALFA ROMEO 33 / 145 / 146 1.7ie 16V BOXER

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|------------------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| AR17BP270H | FAST ROAD | 1500-6500 | 8 BHP | 260 deg | 260 deg | .380" 9.65mm | .380" 9.65mm | 21 - 59 59 - 21 | 109 deg | 109 deg | .040" 1.00mm | .040" 1.00mm | HYDRAULIC |
|------------|------------------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|

AUDI - SEE V.A.G.**ADDITIONAL COMPONENTS FOR ABOVE ENGINES:**

FOLAR16V - Alfa Romeo 2.0 16v hydraulic follower set

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS ASTON MARTIN DB5 / DB6

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| ASTONBP285 | ULTIMATE ROAD | 1800-6500 | | 284 deg | 284 deg | .448" 11.37mm | .446" 11.32mm | 34 - 70 70 - 34 | 108 deg | 108 deg | .127" 3.23mm | .125" 3.18mm | .012" / .30mm .014" / .35mm |
| ASTONBP300 | RALLY | 2500-7000 | | 300 deg | 300 deg | .523" 13.28mm | .521" 13.23mm | 44 - 76 76 - 44 | 106 deg | 106 deg | .178" 4.52mm | .176" 4.47mm | .012" / .30mm .014" / .35mm |
| ASTONBP320 | RACE | 2800-7500 | | 310 deg | 310 deg | .543" 13.79mm | .541" 13.74mm | 51 - 79 79 - 51 | 104 deg | 104 deg | .191" 4.85mm | .189" 4.80mm | .017" / .43mm .019" / .48mm |

AUSTIN HEALEY SPRITE - SEE BMC A SERIES

AUSTIN HEALEY 100/4

Valve lifts quoted assume a rocker ratio of 1.45:1

| | | | | | | | | | | | | | | |
|----------|----------------|-------------------------------|-----------|---------|---------|------------------|------------------|--------------------|--------------------|---------|-----------------|-----------------|--------------------------------|--------------------------------|
| AH4M | LE MANS M SPEC | 1000-5000 | | 244 deg | 244 deg | .411" 10.44mm | .409" 10.38mm | 14 - 50 50 - 14 | 108 deg | | .037" 0.94mm | .022" 0.56mm | .013" / .33mm .015" / .38mm | |
| AH4BP270 | FAST ROAD | 1500-5500 | 10 BHP | 272 deg | 272 deg | .400" 10.16mm | .398" 10.11mm | 31 - 61 66 - 26 | 105 deg | | .074" 1.89mm | .050" 1.26mm | .014" / .35mm .016" / .40mm | |
| AH4BP285 | ULTIMATE ROAD | Additional machining required | 2000-6000 | 15 BHP | 288 deg | 288 deg | .421" 10.69mm | .419" 10.64mm | 39 - 69 74 - 34 | 105 deg | | .105" 2.66mm | .080" 2.02mm | .014" / .35mm .016" / .40mm |
| AH4BP300 | RALLY | Additional machining required | 2500-6500 | | 296 deg | 296 deg | .456" 11.59mm | .454" 11.54mm | 43 - 71 71 - 43 | 104 deg | | .138" 3.52mm | .136" 3.46mm | .016" / .40mm .018" / .45mm |

AUSTIN HEALEY 3000

Valve lifts quoted assume a rocker ratio of 1.45:1

| | | | | | | | | | | | | | | |
|------------|------------------------------|-------------------------------|-----------|---------|---------|------------------|------------------|--------------------|--------------------|---------|-----------------|-----------------|--------------------------------|--------------------------------|
| AH3BJ8 | BJ8 - MK3 HEALEY STD PROFILE | 1000-5000 | | 266 deg | 266 deg | .371" 9.54mm | .369" 9.38mm | 28 - 58 63 - 23 | 105 deg | | .073" 1.85mm | .052" 1.32mm | .015" / .38mm .016" / .40mm | |
| AH3BP270 | FAST ROAD | 1300-5200 | 14 BHP | 272 deg | 272 deg | .400" 10.16mm | .398" 10.11mm | 31 - 61 66 - 26 | 105 deg | | .074" 1.89mm | .042" 1.07mm | .014" / .35mm .016" / .40mm | |
| AH3BP285 | ULTIMATE ROAD | Additional machining required | 1600-6000 | 20 BHP | 288 deg | 288 deg | .421" 10.69mm | .419" 10.64mm | 39 - 69 74 - 34 | 105 deg | | .105" 2.66mm | .080" 2.02mm | .014" / .35mm .016" / .40mm |
| AH3BP300 | RALLY | Additional machining required | 2000-6500 | | 296 deg | 296 deg | .456" 11.59mm | .454" 11.54mm | 43 - 71 71 - 43 | 104 deg | | .138" 3.52mm | .136" 3.46mm | .016" / .40mm .018" / .45mm |
| AH3BP320 | RACE | Additional machining required | 3000-7500 | | 328 deg | 328 deg | .548" 13.91mm | .546" 13.86mm | 62 - 86 87 - 61 | 102 deg | | .218" 5.53mm | .210" 5.34mm | .016" / .40mm .018" / .45mm |
| AH3SPRINT | RALLY RACE | Additional machining required | 2000-6800 | | 320 deg | 300 deg | .455" 11.56mm | .453" 11.51mm | 60 - 80 75 - 45 | 100 deg | | .188" 4.78mm | .132" 3.34mm | .015" / .38mm .015" / .38mm |
| AH3SSPRINT | RACE | Additional machining required | 2500-7000 | | 320 deg | 320 deg | .455" 11.56mm | .453" 11.51mm | 60 - 80 85 - 55 | 100 deg | | .188" 4.78mm | .163" 4.13mm | .015" / .38mm .015" / .38mm |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

FOLAHR - Austin Healey 3000 competition follower set

VDSA6 - Austin Healey 3000 double valve springs

CAMSHAFTS BMC A SERIES MINI / METRO / MIDGET

PIPER CAMS

Prefix part number with type of oil pump drive. PD pin drive, SCD star drive, MET for metro
All billet camshafts have drilled lobes for additional lubrication

Valve lifts quoted assume a rocker ratio of 1.28:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|---|---|------------|----------------|----------|---------|------------------|------------------|--------------------|-------------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl with clearance | Exh | |
| BP255 | MILD ROAD / TURBO Excellent all round cam for all engines sizes. Excellent torque, smooth idle | 1000-6000 | 8 BHP | 264 deg | 264 deg | .360" 9.14mm | .360" 9.14mm | 24 - 60 60 - 24 | 108 deg | .042" 1.07mm | .042" 1.07mm | .012" / .30mm .012" / .30mm | |
| BP270 | FAST ROAD Carb' cam for use in all engine sizes. Smooth idle. No machining required | 1500-6500 | 10 BHP | 276 deg | 276 deg | .385" 9.78mm | .385" 9.78mm | 31 - 65 65 - 31 | 107 deg | .082" 2.08mm | .080" 2.03mm | .012" / .30mm .012" / .30mm | |
| BP270i | FAST ROAD Single Point Injection cam. Excellent torque and very good idle | 1500-6500 | 8 BHP | 252 deg | 264 deg | .326" 8.28mm | .346" 8.76mm | 16 - 56 62 - 22 | 110 deg | .038" 0.97mm | .042" 1.07mm | .016" / .40mm .016" / .40mm | |
| BP270MPi | FAST ROAD Multipoint Injection cam. Excellent torque and very good idle | 1500-6500 | 10 BHP | 252 deg | 264 deg | .350" 8.89mm | .346" 8.76mm | 16 - 56 57 - 27 | 110 deg | .046" 1.17mm | .061" 1.55mm | .012" / .30mm .016" / .40mm | |
| METSC1 | FAST ROAD + Designed for supercharged application | 1700-7000 | | 280 deg | 276 deg | .408" 10.36mm | .391" 9.94mm | 33 - 68 66 - 31 | 108 deg | .088" 2.24mm | .080" 2.03mm | .012" / .30mm .012" / .30mm | |
| BP285 | ULTIMATE ROAD For use in 1275 and larger engines massive improvements in mid range torque and power | 2000-7000 | 14 BHP | 280 deg | 280 deg | .400" 10.16mm | .400" 10.16mm | 33 - 67 67 - 33 | 107 deg | .088" 2.24mm | .088" 2.24mm | .012" / .30mm .012" / .30mm | |
| BP300 | RALLY RACE Torque and Power are what you need to win rallies. That is exactly what this cam gives | 3000-8000 | | 316 deg | 316 deg | .390" 9.89mm | .390" 9.89mm | 54 - 82 82 - 54 | 104 deg | .149" 3.78mm | .149" 3.78mm | .014" / .35mm .014" / .35mm | |
| BP320 | RACE The reputation of this cam is legendary. It gives over 150bhp in 1380 engines | 4000-8500 | | 320 deg | 320 deg | .420" 10.67mm | .420" 10.67mm | 57 - 83 83 - 57 | 103 deg | .159" 4.04mm | .159" 4.04mm | .012" / .30mm .012" / .30mm | |
| 649+ | RACE The original 649 was an excellent cam, This derivative gives similar characteristics but more power | 3000-7500 | | 300 deg | 312 deg | .400" 10.16mm | .420" 10.67mm | 50 - 70 81 - 51 | 100 deg | .139" 3.53mm | .149" 3.78mm | .014" / .35mm .016" / .40mm | |
| 457 | BRISCA MINISTOCK | 3000-7500 | | 276 deg | 284 deg | .400" 10.16mm | .400" 10.16mm | 32 - 64 68 - 36 | 106 deg | .103" 2.62mm | .093" 2.36mm | .010" / .25mm .012" / .30mm | |
| 466 | SPEDEWORTH MINISTOCK For use with restrictor plate | 3000-7000 | | 272 deg | 272 deg | .345" 8.76mm | .350" 8.89mm | 32 - 60 65 - 27 | 104 deg | .065" 1.65mm | .050" 1.27mm | .012" / .30mm .012" / .30mm | |
| 2046 | SPEDEWORTH MINISTOCK For use with 17mm restrictor | 3000-7000 | | 256 deg | 256 deg | .366" 9.30mm | .364" 9.25mm | 24 - 52 52 - 24 | 104 deg | .066" 1.68mm | .064" 1.63mm | .012" / .30mm .014" / .35mm | |
| A SERIES TWIN GEAR "FORMULA JUNIOR" STYLE BILLET CAMS | | | | | | | | | ANY PROFILE | | | | |

CAM KITS BMC A SERIES MINI / METRO / MIDGET INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KB255 / 270 / 270i | X | FOLMIN | VDSMIN2 | | | | | | | | X |
| KBMET270MPI | X | FOLMIN | VDSMIN2 | | | | | | | | X |
| KB285 / 300 / 320 / 649+ | X | FOLMIN | VDSMIN2 | | | | | | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

NOTE BILLET CAMSHAFTS ARE ONLY AVAILABLE IN METRO SLOT TYPE OIL PUMP DRIVE

FOLMIN - A Series cam follower set

PULSMIN - A Series vernier duplex kit

PULDMIN - A Series all Alloy vernier duplex kit

(Please note on repro option profiles may vary from specs listed)

MINKEY2 - 2 Deg offset key

MINKEY4 - 4 Deg offset key

MINKEY6 - 6 Deg offset key

VDSMIN2 - Uprated double valve spring set

VDSMINR - Race double valve spring set

SC1 - A series steel spring retainer set

TCMIN - Duplex timing chain

CAMSHAFTS BMC B SERIES MGA / MGB

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.42:1

All MGB steel billet cams have cross drilled distributor drive gears to aid lubrication.

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|------------------|---|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| BBP255 | MILD ROAD | 1000-6000 | 8 BHP | 270 deg | 252 deg | .405" 10.29mm | .389" 9.88mm | 27 - 63 64 - 28 | 108 deg | .072" 1.83mm | .059" 1.50mm | .012" / .30mm .014" / .35mm | |
| BBP270 | FAST ROAD | 1500-6500 | 12 BHP | 276 deg | 276 deg | .405" 10.29mm | .403" 10.23mm | 31 - 65 65 - 31 | 107 deg | .085" 2.16mm | .075" 1.90mm | .014" / .35mm .016" / .40mm | |
| BBP285 | ULTIMATE ROAD | 2000-6750 | 18 BHP | 278 deg | 278 deg | .445" 11.30mm | .445" 11.30mm | 32 - 66 66 - 32 | 107 deg | .097" 2.46mm | .097" 2.46mm | .014" / .35mm .014" / .35mm | |
| BBP300 | RALLY | 2500-7000 | | 310 deg | 310 deg | .460" 11.68mm | .458" 11.63mm | 49 - 81 81 - 49 | 106 deg | .166" 4.22mm | .164" 4.17mm | .016" / .40mm .018" / .45mm | |
| BBP320 | RACE | 3000-7500 | | 312 deg | 312 deg | .465" 11.81mm | .465" 11.81mm | 53 - 79 79 - 53 | 103 deg | .175" 4.45mm | .175" 4.45mm | .014" / .35mm .014" / .35mm | |
| B929 | RACE | Standard lift long duration | | 300 deg | 300 deg | .360" 9.13mm | .360" 9.13mm | 44 - 76 76 - 44 | 106 deg | .119" 3.02mm | .133" 3.38mm | .014" / .35mm .016" / .40mm | |
| B851 | ULTIMATE RACE | For use with MGC diameter followers only. | | 328 deg | 328 deg | .536" 13.61mm | .534" 13.56mm | 58 - 90 88 - 60 | 106 deg | .192" 4.88mm | .211" 5.36mm | .016" / .40mm .018" / .45mm | |
| B714 | FAST ROAD | 2000-6000 | | 268 deg | 268 deg | .358" 9.09mm | .358" 9.09mm | 24 - 64 59 - 29 | 110 deg | .067" 1.70mm | .085" 2.16mm | .015" / .38mm .015" / .38mm | |
| B864 | ULTIMATE ROAD | 2500-6500 | | 268 deg | 268 deg | .358" 9.09mm | .358" 9.09mm | 36 - 52 56 - 32 | 98 deg | .107" 2.72mm | .083" 2.11mm | .018" / .45mm .018" / .45mm | |
| B770 | RALLY | 3000-7000 | | 300 deg | 310 deg | .445" 11.30mm | .445" 11.30mm | 50 - 70 75 - 45 | 100 deg | .153" 3.89mm | .129" 3.28mm | .018" / .45mm .018" / .45mm | |
| B862 | RACE SPRINT | 3500-7500 | | 320 deg | 300 deg | .445" 11.30mm | .445" 11.30mm | 60 - 80 75 - 45 | 100 deg | .182" 4.72mm | .129" 3.28mm | .018" / .45mm .018" / .45mm | |
| B863 | RACE SUPERSPRINT | 4000-8000 | | 320 deg | 320 deg | .445" 11.30mm | .445" 11.30mm | 60 - 80 80 - 60 | 100 deg | .182" 4.72mm | .182" 4.72mm | .018" / .45mm .018" / .45mm | |

CAM KITS BMC B SERIES - MGA / MGB

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------------------------|------|---------------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBB270 / 285 / 300 / 320 | X | FOLB / FOLB2* | VSSB / VDSB2* | | | | | | | | X |

NOTE The camkit for the BMC B SERIES is priced for post 1971 18v engine type for the earlier engine types please see notes below.

NOTE prefix* for Cam kits requiring FOLB2 followers (pre 1971) please add £25.00 to kit repro*/billet* price.

NOTE prefix* for Cam kits requiring VDSB2 double valve springs(pre 1971) please add £18.00 to kit repro*/billet* price.

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

VSSB - Uprated single valve spring set 18v

VDSB2 - Uprated double valve spring set pre 71

(Please note on repro option profiles may vary from specs listed)

MINKEY2 - 2 Deg offset key

MINKEY4 - 4 Deg offset key

MINKEY6 - 6 Deg offset key

PULSB - B series vernier duplex kit

PULSBS - B series vernier cam sprocket

FOLB - post 71 B series cam follower set

FOLB2 - Pre 71 B series cam follower set

CAMSHAFTS

BMW E30 2002 / 316 / 318 M10

Valve lifts quoted assume a rocker ratio of 1.29:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve Clearance |
|-----------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|------------------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| BMW4BP270 | FAST ROAD | 2000-6500 | 10 BHP | 268 deg | 268 deg | .396" 10.06mm | .396" 10.06mm | 24 - 64 64 - 24 | 110 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |
| BMW4BP285 | ULTIMATE ROAD | 2500-7000 | 16 BHP | 292 deg | 292 deg | .400" 10.16mm | .400" 10.16mm | 36 - 76 76 - 36 | 110 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |

BMW E36 318i M40

Valve lifts quoted assume a rocker ratio of 1.73:1

| | | | | | | | | | | | | |
|--------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|-----------|
| BMWM40BP270H | FAST ROAD | 1500-6000 | 10 BHP | 264 deg | 264 deg | .450" 11.43mm | .450" 11.43mm | 22 - 62 62 - 22 | 110 deg | N/A | N/A | HYDRAULIC |
| BMWM40BP285H | ULTIMATE ROAD | 2000-6500 | 14 BHP | 278 deg | 278 deg | .475" 12.07mm | .475" 12.07mm | 31 - 67 67 - 31 | 108 deg | N/A | N/A | HYDRAULIC |

BMW E36 318 IS 16v M42

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|-----------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| BMWISBP270 | FAST ROAD | 1500-6000 | 10 BHP | 264 deg | 264 deg | .400" 10.16mm | .400" 10.16mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .042" 1.07mm | .042" 1.07mm | HYDRAULIC |
|------------|-----------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|

BMW E30 320 / 323 / 325 'SMALL SIX' M20

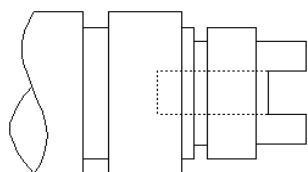
Valve lifts quoted assume a rocker ratio of 1.56:1

| | | | | | | | | | | | | |
|------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|--------------------------------|
| BMWS6BP270 | FAST ROAD | 1500-6500 | 12 BHP | 274 deg | 274 deg | .410" 10.41mm | .410" 10.41mm | 27 - 67 67 - 27 | 110 deg | N/A | N/A | .010" / .25mm .010" / .25mm |
| BMWS6BP285 | ULTIMATE ROAD | 2200-7000 | 14 BHP | 292 deg | 292 deg | .420" 10.66mm | .420" 10.66mm | 36 - 76 76 - 36 | 110 deg | N/A | N/A | .010" / .25mm .010" / .25mm |

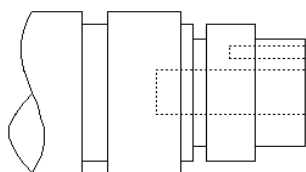
BMW 528 / 530 / 535 'LARGE SIX'

Valve lifts quoted assume a rocker ratio of 1.29:1

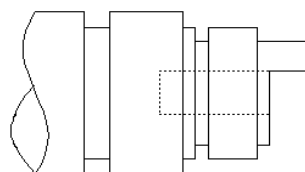
| | | | | | | | | | | | | |
|-------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|--------------------------------|
| BMW5L6BP270 | FAST ROAD | 1500-6500 | 12 BHP | 280 deg | 276 deg | .390" 9.91mm | .400" 10.16mm | 26 - 74 72 - 24 | 114 deg | N/A | N/A | .016" / .40mm .016" / .40mm |
| BMW5L6BP285 | ULTIMATE ROAD | 2200-7000 | 18 BHP | 288 deg | 288 deg | .400" 10.16mm | .400" 10.16mm | 34 - 74 74 - 34 | 110 deg | N/A | N/A | .010" / .25mm .010" / .25mm |



PRE MOTRONIC



MOTRONIC II



MOTRONIC I

FIAT UNO TURBO & PUNTO GT

Valve lifts quoted assume a rocker ratio of 1:1

Oversize shims or skimmed carrier may be required

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|--------------|---------------|------------|----------------|----------|---------|------------------|-----------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| FIAUNOTBP270 | FAST ROAD | 1000-6000 | 15 BHP | 270 deg | 250 deg | .409" 10.40mm | .364" 9.00mm | 23 - 67 57 - 13 | 112 deg | | .053" 1.35mm | .022" 0.56mm | .016" / .40mm .018" / .45mm |
| FIAUNOTBP285 | ULTIMATE ROAD | 2000-7000 | 20 BHP | 276 deg | 250 deg | .433" 11.00mm | .374" 9.50mm | 26 - 70 57 - 13 | 112 deg | | .071" 1.80mm | .022" 0.56mm | .016" / .40mm .018" / .45mm |
| FIAUNOTBP300 | RALLY | 2600-7500 | | 280 deg | 258 deg | .452" 11.50mm | .393" 9.98mm | 30 - 70 59 - 19 | 110 deg | | .123" 3.12mm | .057" 1.45mm | .016" / .40mm .018" / .45mm |

FIAT X19 / 128 1.3 / 1.5 SOHC

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|--|-----------------|-----------------|--------------------------------|
| FIAX19BP270 | FAST ROAD | 2000-6500 | 10 BHP | 280 deg | 280 deg | .385" 9.80mm | .385" 9.80mm | 33 - 67 67 - 33 | 107 deg | | .103" 2.61mm | .097" 2.46mm | .008" / .20mm .010" / .25mm |
| FIAX19BP285 | ULTIMATE ROAD | 2500-7300 | 15 BHP | 288 deg | 288 deg | .410" 10.40mm | .410" 10.40mm | 36 - 72 72 - 36 | 108 deg | | .107" 2.72mm | .105" 2.67mm | .008" / .20mm .010" / .25mm |
| FIAX19BP300 | RALLY | 3000-7800 | | 290 deg | 290 deg | .440" 11.18mm | .440" 11.18mm | 39 - 71 71 - 39 | 106 deg | | .156" 3.96mm | .154" 3.91mm | .010" / .25mm .012" / .30mm |
| FIAX19BP320 | RACE | 3500-8000 | | 316 deg | 316 deg | .440" 11.18mm | .440" 11.18mm | 53 - 83 83 - 53 | 105 deg | | .166" 4.22mm | .164" 4.26mm | .010" / .25mm .012" / .30mm |

FIAT TWIN CAM 1.6 / 1.8 / 2.0

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| FIATTCBP270 | FAST ROAD | 2000-6500 | 10 BHP | 280 deg | 280 deg | .385" 9.80mm | .385" 9.80mm | 32 - 68 68 - 32 | 108 deg | 108 deg | .099" 2.51mm | .097" 2.46mm | .008" / .20mm .010" / .25mm |
| FIATTCBP285 | ULTIMATE ROAD | 2500-7000 | 15 BHP | 288 deg | 288 deg | .410" 10.40mm | .410" 10.40mm | 36 - 72 72 - 36 | 108 deg | 108 deg | .107" 2.72mm | .105" 2.67mm | .008" / .20mm .010" / .25mm |
| FIATTCBP300 | RALLY | 3000-7500 | | 290 deg | 290 deg | .440" 11.18mm | .440" 11.18mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .156" 3.96mm | .154" 3.91mm | .008" / .20mm .010" / .25mm |
| FIATTCBP320 | RACE | 3500-8000 | | 304 deg | 304 deg | .472" 11.98mm | .470" 11.93mm | 48 - 76 76 - 48 | 104 deg | 106 deg | .178" 4.51mm | .166" 4.21mm | .008" / .20mm .010" / .25mm |

FIAT 1.2 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|-----------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| FIAT12BP270 | FAST ROAD | 2000-6500 | 8 BHP | 248 deg | 248 deg | .320" 8.13mm | .320" 8.13mm | 14 - 54 54 - 14 | 110 deg | 110 deg | .016" 0.40mm | .016" 0.40mm | HYDRAULIC |
|-------------|-----------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

VDSFTC - Fiat 1.6/2.0 twin cam double valve springs

VDSPUN - Fiat Punto GT double valve springs

(Please note on repro option profiles may vary from specs listed)

TBP1 - Fiat Uno turbo 1.3 & X19 1500 comp.cam belt

TBP2 - Fiat Uno turbo 1.4 comp.cam belt

TBP3 - Fiat 2.0 twin cam comp.cam belt

PULDUNO - Fiat Uno turbo / Punto GT alloy vernier pulley

PULDIX19 - Fiat X19 / 128 SOHC alloy vernier pulley

PULDFTC - Pr Fiat twin cam 1.6/2.0 alloy vernier pulleys

PULDFIRE - Fiat fire alloy vernier pulley

CAMSHAFTS FORD X FLOW 1300 / 1600**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1.5:1

Many other profiles are available. Ask for details

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|---|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| XFBP255 | MILD ROAD Ideal for autotest and trials where low down torque is required. No other engine mods required | 1000-6000 | 8 BHP | 260 deg | 260 deg | .384" 9.75mm | .384" 9.75mm | 21 - 59 59 - 21 | 109 deg | .048" 1.22mm | .048" 1.22mm | .018" / .45mm .018" / .45mm | |
| XFBP270 | FAST ROAD Excellent power & torque improvement with smooth idle. Ideal with twin carbs & 4:2:1 manifold | 1500-6500 | 12 BHP | 268 deg | 268 deg | .415" 10.54mm | .413" 10.49mm | 26 - 62 62 - 26 | 108 deg | .070" 1.78mm | .068" 1.72mm | .014" / .35mm .014" / .35mm | |
| XFBP285 | ULTIMATE ROAD Massive improvements in mid range and top end power. No machining required | 2500-7500 | 18 BHP | 292 deg | 292 deg | .430" 10.92mm | .430" 10.92mm | 38 - 74 74 - 38 | 108 deg | .086" 2.18mm | .086" 2.18mm | .014" / .35mm .014" / .35mm | |
| XFBP300 | RALLY For use in well modified engines where serious power and 'thumping' mid range torque is required | 3000-8000 | | 316 deg | 316 deg | .459" 11.66mm | .459" 11.66mm | 54 - 82 82 - 54 | 104 deg | .177" 4.50mm | .177" 4.50mm | .015" / .38mm .015" / .38mm | |
| XFBP320 | RACE The ultimate race profile. Designed to give phenomenal top end power and a wide power band | 4000-8500 | | 320 deg | 320 deg | .493" 12.52mm | .493" 12.52mm | 57 - 83 83 - 57 | 103 deg | .186" 4.72mm | .186" 4.72mm | .014" / .35mm .014" / .35mm | |
| XF391 | 1300 STOCKROD No machining required. This is the hottest profile that can be installed without machining. | 3000-7000 | | 296 deg | 296 deg | .440" 11.18mm | .440" 11.18mm | 38 - 78 78 - 38 | 110 deg | .104" 2.64mm | .104" 2.64mm | .018" / .45mm .018" / .45mm | |
| XFA6 | RACE | | | 324 deg | 324 deg | .410" 10.42mm | .408" 10.37mm | 56 - 88 88 - 56 | 106 deg | .154" 3.91mm | .152" 3.86mm | .016" / .40mm .018" / .45mm | |
| XFA8 | RACE | | | 332 deg | 332 deg | .411" 10.43mm | .409" 10.38mm | 66 - 88 88 - 66 | 100 deg | .171" 4.34mm | .169" 4.29mm | .017" / .43mm .019" / .48mm | |
| XFA9 | RACE | | | 336 deg | 336 deg | .441" 11.19mm | .439" 11.14mm | 64 - 92 92 - 64 | 104 deg | .169" 4.29mm | .167" 4.24mm | .017" / .43mm .019" / .48mm | |

CAM KITS FORD X FLOW 1300 / 1600 INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBXF255 / 270 | X | FOLFW | VSSF | | | | | | | | X |
| KBXF285 | X | FOLFW | VDSFBPR | | VSOXF | SC10 | | | | | X |
| KBXF300 / 320 | X | FOLFW | VDSFBPR | | VSOXF | SC10 | | | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

Note * prefix after price = require customers camshaft.

PULSXF - Xflow vernier duplex kit

TCXF - Xflow duplex timing chain

FOLFW - Xflow 711 follower set

FOLFN - Pre Xflow follower set

(Please note on repro option profiles may vary from specs listed)

XFDOW3 - Xflow 3 Deg offset dowl

XFDOW5 - Xflow 5 Deg offset dowl

XFDOW7 - Xflow 7 Deg offset dowl

XFDOW9 - Xflow 9 Deg offset dowl

SC9 - Steel retainers to suit VDSF2

SC10 - Steel spring caps to suit VDSFBPR

VSSF - Single valve spring set

VDSF2 - Xflow double valve spring kit

VDSFBPR - Race double valve springs

CAMSHAFTS FORD 1600 / 1800 / 2000 SOHC 'PINTO'

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.65:1

CHILL CAST BLANKS FEATURING REINFORCED THRUST GROOVES

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift Inl ATDC Exh BTDC | Lift @ TDC with clearance | | Valve Clearance |
|----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------------------------------|------------------------------|-----|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | | Inl | Exh | |
| OHCBP255 | MILD ROAD Gives improvements in torque throughout the rev range. Ideal for towing. No other engine mods | 1500-6000 | 8 BHP | 268 deg | 268 deg | .400" 10.16mm | .400" 10.16mm | 21 - 67 67 - 21 | 113 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHC134 | FAST ROAD INJECTION Excellent power and torque increase combined with smooth idle | 2000-6500 | 15 BHP | 266 deg | 266 deg | .480" 12.19mm | .480" 12.19mm | 23 - 63 63 - 23 | 110 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHCBP270 | FAST ROAD CARB For use in carburettor engines, gives excellent power & torque increase combined with a smooth idle | 2000-6500 | 15 BHP | 268 deg | 268 deg | .430" 10.92mm | .430" 10.92mm | 23 - 65 65 - 23 | 111 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHCBP285 | ULTIMATE ROAD Excellent mid range and top end power and torque. Good with std carb, ideal with 2 x 45DCOE's | 2200-7000 | 22 BHP | 270 deg | 290 deg | .465" 11.81mm | .465" 11.81mm | 27 - 63 73 - 37 | 108 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHCBP300 | RALLY Phenomenal range of torque over a wide rev range is what makes this cam the no.1 choice for rally drivers | 2500-7500 | | 292 deg | 292 deg | .495" 12.57mm | .495" 12.57mm | 40 - 72 72 - 40 | 106 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHCBP320 | RACE For circuit racing where outright power is the name of the game. Capable of producing over 220bhp in a 2ltr | 4000-8500 | | 322 deg | 322 deg | .540" 13.70mm | .540" 13.70mm | 57 - 85 85 - 57 | 104 deg | N/A | N/A | .012" / .30mm .012" / .30mm |
| OHCA8 | RALLY/GRASS/ 2.0 HOT ROD | 2800-7800 | | 304 deg | 304 deg | .500" 12.70mm | .500" 12.70mm | 48 - 76 76 - 48 | 104 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHC947 | F2 SUPERSTOCK Fantastic oval cam gives massive torque for excellent corner acceleration | 3000-7900 | | 300 deg | 300 deg | .510" 12.95mm | .510" 12.95mm | 46 - 74 74 - 46 | 104 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| OHC1802 | F2 SUPERSTOCK | 3000-7900 | | 298 deg | 298 deg | .490" 12.45mm | .490" 12.45mm | 43 - 75 75 - 43 | 106 deg | N/A | N/A | .010" / .25mm .012" / .30mm |

CAM KITS FORD 1600 / 1800 / 2000 SOHC 'PINTO' INCLUDE:

| Part No. | Cam | Followers | Valve Springs | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------------------------|-----|-----------|---------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBOHC 255 / 134 / 270 / 285 | X | FOLOHC | VSSOHC | VSOOHC | | SBAR | BSTUD * | | | X |
| KBOHC A8 / 947 / 1802 | X | FOLOHC | VSSOHC | VSOOHC | | SBAR | BSTUD * | | | X |
| KBOHC 300 / 320 | X | FOLOHC | VSSOHC | VSOOHC | | SBAR | BSTUD * | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

Note * Kit includes std length ball studs (33mm available at extra cost)

VSSOHC - SOHC single valve spring set
 VDSOHC - SOHC double valve spring set
 SC8A - Steel retainers for single springs
 SC8B - Steel retainers for double springs

PULDOHC - SOHC alloy vernier pulley
 FOLOHC - SOHC follower set
 PULDAUX - SOHC alloy auxiliary pulley
 VSOOHC - SOHC valve stem seals

TBP7 - 1.8/2.0 Competition cam belt
 TBP6 - 1.6 Competition cam belt
 BSTUD - SOHC ball stud set
 BSTUD33 - SOHC ball stud set 33mm length
 SBAR - SOHC spray bar

CAMSHAFTS FORD BDA / BDG / BDT**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|-------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|---------------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl Exh | | |
| BDAL1 | | | | 304 deg | 304 deg | .400" 10.16mm | .400" 10.16mm | 46 - 78 78 - 46 | 106 deg | 106 deg | .134" 3.40mm | .134" 3.40mm | .010" / .25mm .010" / .25mm |
| BDAF1 | | | | 320 deg | 320 deg | .400" 10.16mm | .400" 10.16mm | 58 - 82 82 - 58 | 106 deg | 106 deg | .163" 4.15mm | .163" 4.15mm | .010" / .25mm .010" / .25mm |
| BDAPH4 | | | | 312 deg | 312 deg | .427" 10.84mm | .427" 10.84mm | 50 - 82 82 - 50 | 106 deg | 106 deg | .162" 4.11mm | .162" 4.11mm | .010" / .25mm .010" / .25mm |
| BDABD4 | | | | 312 deg | 312 deg | .418" 10.66mm | .418" 10.61mm | 54 - 78 80 - 52 | 106 deg | 106 deg | .153" 3.88mm | .153" 3.88mm | .010" / .25mm .010" / .25mm |
| BDADA10 | | | | 312 deg | 312 deg | .400" 10.16mm | .400" 10.16mm | 50 - 82 82 - 50 | 106 deg | 106 deg | .144" 3.66mm | .144" 3.66mm | .010" / .25mm .010" / .25mm |
| BDADA19 | | | | 304 deg | 304 deg | .443" 11.24mm | .443" 11.24mm | 46 - 78 78 - 46 | 106 deg | 106 deg | .143" 3.83mm | .143" 3.83mm | .010" / .25mm .010" / .25mm |

FORD V6 3.0 'ESSEX'

Valve lifts quoted assume a rocker ratio of 1.47:1

| | | | | | | | | | | | | |
|-----------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| V630BP270 | FAST ROAD | 1500-6500 | 18 BHP | 272 deg | 272 deg | .403" 10.24mm | .401" 10.18mm | 28 - 64 64 - 28 | 108 deg | .062" 1.57mm | .060" 1.52mm | .014" / .35mm .016" / .40mm |
| V630BP285 | ULTIMATE ROAD | 2000-6500 | 24 BHP | 288 deg | 288 deg | .457" 11.61mm | .455" 11.56mm | 35 - 73 73 - 35 | 109 deg | .086" 2.18mm | .084" 2.13mm | .014" / .35mm .016" / .40mm |
| V630BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .438" 11.13mm | .438" 11.13mm | 42 - 78 78 - 42 | 108 deg | .115" 2.92mm | .113" 2.87mm | .014" / .35mm .016" / .40mm |
| V630BP320 | RACE | 3500-7500 | | 320 deg | 320 deg | .450" 11.43mm | .450" 11.43mm | 54 - 86 86 - 54 | 106 deg | .166" 4.22mm | .164" 4.17mm | .012" / .30mm .014" / .35mm |

FORD V6 2.3 / 2.8 'COLOGNE' CARB (Please note post 1982 blanks limited availability)

Valve lifts quoted assume a rocker ratio of 1.47:1

State year when ordering: Bearing size change - No.1 journal Pre 1982 =1.652"/41.90mm. Post 1982 =1.730"/43.90mm.

| | | | | | | | | | | | | |
|-----------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| V623BP270 | FAST ROAD | 1500-6500 | 15 BHP | 272 deg | 272 deg | .403" 10.24mm | .403" 10.24mm | 28 - 64 64 - 28 | 108 deg | .062" 1.57mm | .060" 1.52mm | .014" / .35mm .016" / .40mm |
| V623BP285 | ULTIMATE ROAD | 2200-6800 | 20 BHP | 282 deg | 272 deg | .416" 10.57mm | .403" 10.24mm | 33 - 69 64 - 28 | 108 deg | .072" 1.83mm | .062" 1.57mm | .012" / .30mm .014" / .35mm |
| V623BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .438" 11.13mm | .438" 11.13mm | 42 - 78 78 - 42 | 108 deg | .115" 2.92mm | .113" 2.87mm | .014" / .35mm .016" / .40mm |
| V623BP320 | RACE | 3500-7500 | | 320 deg | 320 deg | .450" 11.43mm | .450" 11.43mm | 54 - 86 86 - 54 | 106 deg | .166" 4.22mm | .164" 4.17mm | .012" / .30mm .014" / .35mm |

CAM KITS**FORD V6 2.3 / 2.8 'COLOGNE' CARB ENGINE INCLUDE:**

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBV623270 / 285 | X | FOLV6G | VSSV6G | | | | | | | | X |

FORD V6 3.0 'ESSEX' INCLUDE:

| | | | | | | | | | | | |
|-----------------|---|-------|-------|--|--|--|--|--|--|--|---|
| KBV630270 / 285 | X | FOLV6 | VSSV6 | | | | | | | | X |
|-----------------|---|-------|-------|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

FOLV6 - Essex V6 cam follower set
FOLV6G - Cologne V6 cam follower set

VSSV6G - Cologne V6 single valve spring set
VSSV6 - Essex V6 single valve spring set

CAMSHAFTS FORD V6 2.8 'COLOGNE' INJECTION ENGINE (Please note post 1982 blanks limited availability)

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.47:1

State year when ordering: Bearing size change - No.1 journal Pre 1982 =1.652"/41.90mm. Post 1982 =1.730"/43.90mm.

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| V628BP270 | FAST ROAD | 1500-6500 | 15 BHP | 272 deg | 272 deg | .403" 10.24mm | .403" 10.24mm | 24 - 68 68 - 24 | 112 deg | .043" 1.09mm | .041" 1.04mm | .014" / .35mm .016" / .40mm | |
| V628BP285 | ULTIMATE ROAD | 2000-6500 | 20 BHP | 276 deg | 276 deg | .422" 10.72mm | .422" 10.72mm | 26 - 70 70 - 26 | 112 deg | .052" 1.32mm | .050" 1.27mm | .012" / .30mm .014" / .35mm | |
| V628BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .438" 11.13mm | .438" 11.13mm | 42 - 78 78 - 42 | 108 deg | .115" 2.92mm | .113" 2.87mm | .014" / .35mm .016" / .40mm | |
| V628BP320 | RACE | 3500-7500 | | 320 deg | 320 deg | .450" 11.43mm | .450" 11.43mm | 54 - 86 86 - 54 | 106 deg | .166" 4.22mm | .164" 4.17mm | .012" / .30mm .014" / .35mm | |

FORD V6 2.9 ENGINE

Valve lifts quoted assume a rocker ratio of 1.47:1

| | | | | | | | | | | | | |
|-----------|-------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| V629BP270 | FAST ROAD | 1500-6500 | 14 BHP | 268 deg | 268 deg | .403" 10.24mm | .403" 10.24mm | 23 - 65 65 - 23 | 111 deg | .040" 1.01mm | .038" 0.96mm | .018" / .45mm .020" / .50mm |
| V629BP285 | ULTIMATE ROAD | 2200-6800 | 20 BHP | 290 deg | 290 deg | .427" 10.85mm | .427" 10.85mm | 37 - 73 73 - 37 | 108 deg | .075" 1.90mm | .073" 1.85mm | .012" / .30mm .014" / .35mm |
| V629BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .438" 11.13mm | .438" 11.13mm | 42 - 78 78 - 42 | 108 deg | .113" 2.87mm | .111" 2.82mm | .016" / .40mm .018" / .45mm |
| V629BP320 | RACE | 3500-7500 | | 320 deg | 320 deg | .450" 11.43mm | .450" 11.43mm | 54 - 86 86 - 54 | 106 deg | .164" 4.17mm | .162" 4.11mm | .014" / .35mm .016" / .40mm |
| V629EURO1 | RACE Eurocar spec | 3000-7300 | | 300 deg | 300 deg | .462" 11.68mm | .462" 11.68mm | 46 - 74 74 - 46 | 104 deg | .154" 3.91mm | .152" 3.86mm | .016" / .40mm .018" / .45mm |

FORD V6 2.9 COSWORTH FAST ROAD SPEC AVAILABLE FOR BOA & BOB TYPE - REPROFILE OE CAMS ONLY

FORD V6 2.5/3.0 NOBLE, MONDEO ST, MONDEO ST220 FAST ROAD SPECS AVAILABLE - REPROFILE OE CAMS ONLY

CAM KITS FORD V6 2.8 'COLOGNE' INJECTION ENGINE INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBV628270 / 285 | X | FOLV6G | VSSV6G | | | | | | | | X |
| KBV628300 / 320 | X | FOLV6G | VSSV6G | | | | | | | | X |

FORD V6 2.9 ENGINE INCLUDE:

| | | | | | | | | | | | |
|-------------------------|---|--------|--------|--|--|--|--|--|--|--|---|
| KBV629270 / 285 | X | FOLV6G | VSSV6G | | | | | | | | X |
| KBV629300 / 320 / EURO1 | X | FOLV6G | VSSV6G | | | | | | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

(Please note on repro option profiles may vary from specs listed)

FOLV6 - Ford V6 3000 cam followers

FOLV6G - Ford V6 2.3/2.8/2.9 CAM FOLLOWERS

VSSV6G - Cologne V6 single valve spring set

VSSNFV6 - Ford V6 2.5/3.0 VALVE SPRING KIT

CAMSHAFTS FORD ESCORT / SIERRA COSWORTH 16v

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

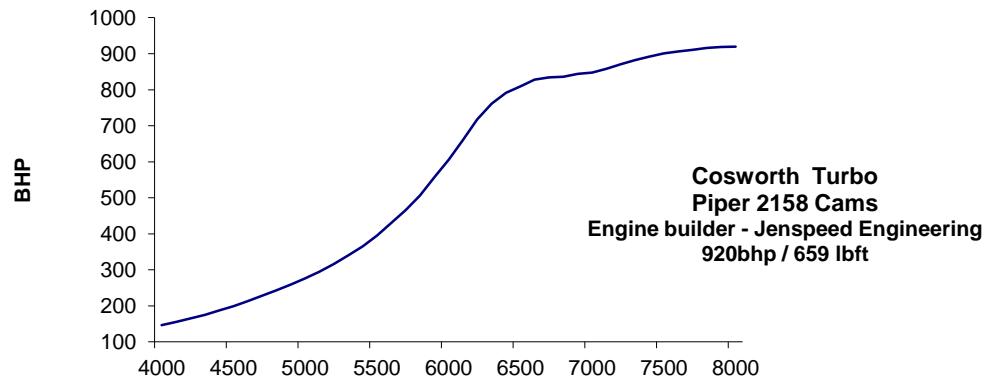
Note: If blanks cams are fitted to 2WD cylinder heads then a 5mm thrust spacer is required. Part no: COSWASH

| Part No. | Application | | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|---------------|---------------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| COSBP270HT | FAST ROAD | Turbo | 2000-6200 | 20 BHP | 264 deg | 264 deg | .340" 8.64mm | .340" 8.64mm | 20 - 64 64 - 20 | 112 deg | 112 deg | .034" 0.86mm | .034" 0.86mm | HYDRAULIC |
| COSBP285HT | ULTIMATE ROAD | Turbo | 2500-6600 | 30 BHP | 264 deg | 264 deg | .350" 8.89mm | .340" 8.64mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .047" 1.19mm | .047" 1.19mm | HYDRAULIC |
| COSBP300HT | RALLY | Turbo | 3000-7000 | | 264 deg | 264 deg | .400" 10.16mm | .400" 10.16mm | 26 - 58 58 - 26 | 106 deg | 106 deg | .075" 1.90mm | .075" 1.90mm | HYDRAULIC |
| COSBP320HT | RACE | Turbo | 3500-7500 | | 264 deg | 264 deg | .428" 10.87mm | .428" 10.87mm | 26 - 58 58 - 26 | 106 deg | 106 deg | .078" 1.98mm | .078" 1.98mm | HYDRAULIC |
| COS2158 | RACE | Turbo | 4500-8000 | | 288 deg | 288 deg | .440" 11.17mm | .438" 11.12mm | 40 - 68 68 - 40 | 104 deg | 104 deg | .126" 1.98mm | .124" 1.98mm | .008" / .20mm .010" / .25mm |
| COSBP270H | FAST ROAD | Naturally Aspirated | 2000-6500 | | 268 deg | 268 deg | .395" 10.03mm | .367" 9.32mm | 26 - 62 62 - 26 | 108 deg | 108 deg | .067" 1.70mm | .065" 1.65mm | HYDRAULIC |
| COSBP285H | ULTIMATE ROAD | Naturally Aspirated | 2500-7000 | | 288 deg | 288 deg | .407" 10.34mm | .407" 10.34mm | 36 - 72 72 - 36 | 108 deg | 108 deg | .086" 2.18mm | .086" 2.18mm | HYDRAULIC |
| COSBP285M | ULTIMATE ROAD | Naturally Aspirated | 2500-7000 | | 274 deg | 274 deg | .420" 10.67mm | .418" 10.62mm | 29 - 65 65 - 29 | 108 deg | 108 deg | .102" 2.59mm | .102" 2.59mm | .008" / .20mm .010" / .25mm |
| COSBP300H | RALLY | Naturally Aspirated | 3000-7500 | | 288 deg | 280 deg | .440" 11.18mm | .433" 11.00mm | 40 - 68 66 - 34 | 104 deg | 106 deg | .124" 3.15mm | .100" 2.54mm | HYDRAULIC |
| COSBP300M | RALLY | Naturally Aspirated | 3000-7500 | | 304 deg | 300 deg | .464" 11.79mm | .420" 10.67mm | 49 - 75 75 - 45 | 103 deg | 105 deg | .182" 4.62mm | .144" 3.66mm | .010" / .25mm .010" / .25mm |
| COSBP320M | RACE | Naturally Aspirated | 3500-8000 | | 320 deg | 300 deg | .450" 11.43mm | .448" 11.38mm | 58 - 82 74 - 46 | 102 deg | 104 deg | .193" 4.90mm | .153" 3.89mm | .008" / .20mm .010" / .25mm |

Many other profiles available ie BD10 / 14 / 15 / 16 & 16+

CAM KITS FORD ESCORT / SIERRA COSWORTH YB 16v INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBCOS270HT / 285HT | X | FOLCOSH | | | | | | | | | X |
| KBCOS300HT / 320HT | X | FOLCOSH | VDSCOS | | | SC7 | | | | | X |
| KBCOS270H / 285H | X | FOLCOSH | VDSCOS | | | SC7 | | | | | X |



ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

- PULDCOS - Pr cosworth alloy vernier pulleys
- TBP9 - Cosworth competition cam belt
- VDSCOS - Cosworth double valve spring set
- SC7 - Cosworth steel valve spring retainers
- COSWASH - 5mm thrust spacer
- FOLCOSH - Cosworth hydraulic follower set
- FOLCOSM - Cosworth solid follower set

CAMSHAFTS FORD ZETEC 16v 1.6 / 1.8 / 2.0 ESCORT / ORION MK 5-8 / FIESTA MK 3 / MONDEO MK 1

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

All profiles designed for standard diameter tappets unless otherwise stated

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-------------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| ZETABP270AH | FAST ROAD For 1.6 90 bhp engine | 1800-6800 | 12 BHP | 264 deg | 264 deg | .340" 8.64mm | .340" 8.64mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .024" 0.61mm | .024" 0.61mm | HYDRAULIC |
| ZETABP270BH | FAST ROAD For 130 bhp engine | 1800-6800 | 16 BHP | 264 deg | 260 deg | .395" 10.03mm | .367" 9.32mm | 22 - 62 60 - 20 | 110 deg | 110 deg | .058" 1.47mm | .039" 0.99mm | HYDRAULIC |
| ZETABP285H | ULTIMATE ROAD Not recommended for use with std injection, gives 200bhp in 2.0 running throttle bodies & ported head | 2500-7500 | 22 BHP | 280 deg | 270 deg | .406" 10.31mm | .370" 9.40mm | 36 - 64 59 - 31 | 104 deg | 104 deg | .106" 2.70mm | .089" 2.26mm | HYDRAULIC |
| ZETABP300M | RALLY | 3000-8000 | | 284 deg | 280 deg | .450" 11.43mm | .425" 10.80mm | 36 - 68 68 - 32 | 104 deg | 104 deg | .123" 3.12mm | .108" 2.75mm | .010" / .25mm .012" / .30mm |
| ZETABP320M | RACE Use special tappets part no. FOLZETAM31 with shims underneath | 3500-8500 | | 290 deg | 284 deg | .484" 12.29mm | .464" 11.79mm | 41 - 69 68 - 36 | 104 deg | 106 deg | .142" 3.60mm | .115" 2.92mm | .010" / .25mm .010" / .25mm |

FORD RS2000 16v (150HP) GALAXY / SCORPIO 2.3i 16V (145HP)

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| RS2BP270H | FAST ROAD | 2000-7000 | 10 BHP | 264 deg | 264 deg | .428" 10.87mm | .396" 10.05mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .063" 1.60mm | .058" 1.47mm | HYDRAULIC |
| RS2BP285H | ULTIMATE ROAD | 2500-7500 | 15 BHP | 288 deg | 264 deg | .407" 10.33mm | .396" 10.05mm | 34 - 74 62 - 22 | 110 deg | 110 deg | .076" 1.93mm | .058" 1.47mm | HYDRAULIC |
| RS2BP300H | RALLY | 2800-8000 | | 290 deg | 290 deg | .425" 10.80mm | .425" 10.80mm | 41 - 69 73 - 37 | 104 deg | 108 deg | .143" 3.64mm | .128" 3.18mm | HYDRAULIC |
| RS2BP300M | RALLY | 2800-8000 | | 280 deg | 280 deg | .423" 10.74mm | .421" 10.69mm | 36 - 64 66 - 34 | 104 deg | 106 deg | .121" 3.08mm | .110" 2.80mm | .010" / .25mm .012" / .30mm |
| RS2BP320M | RACE | 3000-8500 | | 288 deg | 284 deg | .470" 11.94mm | .443" 11.25mm | 40 - 68 68 - 36 | 104 deg | 106 deg | .165" 4.20mm | .137" 3.47mm | .010" / .25mm .012" / .30mm |

FORD PUMA 1.7 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| PUMBP270 | FAST ROAD | 2000-7000 | 10 BHP | 272 deg | 240 deg | .358" 9.09mm | .304" 7.72mm | 26 - 66 50 - 10 | 110 deg | 110 deg | .055" 1.39mm | .018" 0.40mm | .008" / .20mm .012" / .30mm |
| PUMRBP270 | FAST ROAD - PUMA RACING | 2000-7000 | 10 BHP | 272 deg | 248 deg | .368" 9.35mm | .343" 8.72mm | 26 - 66 54 - 14 | 110 deg | 110 deg | .082" 2.08mm | .024" 0.61mm | .008" / .20mm .012" / .30mm |
| PUMBP285 | ULTIMATE ROAD Not recommend for use with std injection | 3500-8200 | | 280 deg | 272 deg | .368" 9.35mm | .358" 9.09mm | 34 - 66 64 - 28 | 106 deg | 108 deg | .105" 2.67mm | .061" 1.56mm | .010" / .25mm .010" / .25mm |
| PUMBP300 | RALLY | 3500-8500 | | 288 deg | 276 deg | .441" 11.19mm | .421" 10.68mm | 40 - 68 64 - 32 | 104 deg | 106 deg | .127" 3.23mm | .095" 2.41mm | .008" / .20mm .010" / .25mm |

CAM KITS FORD ZETEC 16v 1.6 / 1.8 / 2.0 ESCORT / ORION MK 5-8 / FIESTA MK 3 / MONDEO MK 1 INCLUDES :

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBZETA270AH / 270BH | X | FOLZETAH | | | | | | | | | X |
| KBZETA285H | X | FOLZETAH | VSSZETA | | | | | | | | X |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDPUM - Puma 1.7 alloy vernier exh pulley
FOLPUM - Puma 1.7 competition solid follower set
FOLZETAH - Zetec hydraulic follower set

FOLZETAM - Zetec solid follower set
FOLZETAM31 - Zetec 31mm oversize solid follower set
TBP8 - Zetec competition cam belt
PULDZETA - Pr zetec alloy vernier pulleys

VSSZETA - Zetec single valve spring set
SC11 - Zetec steel valve spring retainers
VSSRS2 - RS2000 16v single valve spring set

CAMSHAFTS FORD FOCUS & FIESTA 1.25 / 1.4 / 1.6 16v**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

These cams are cnc ground std base circle size, BP285 & hotter may require the head machined to allow the cam to rotate.

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve Clearance |
|------------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|------------------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| FOC12BP270 | FAST ROAD For use in 1.250 capacity engine | 2000-7000 | 8 BHP | 232 deg | 232 deg | .273" 6.93mm | .271" 6.88mm | 6 - 46 46 - 6 | 110 deg | 110 deg | .008" 0.21mm | .006" 0.16mm | .014" / .35mm .016" / .40mm |
| FOC14BP270 | FAST ROAD For use in 1.4 capacity engine | 2000-7000 | 8 BHP | 232 deg | 232 deg | .300" 7.62mm | .271" 6.88mm | 6 - 46 46 - 6 | 110 deg | 110 deg | .008" 0.21mm | .006" 0.16mm | .012" / .30mm .016" / .40mm |
| FOC16BP270 | FAST ROAD For use in 1.6 capacity engine | 2000-7000 | 10 BHP | 240 deg | 232 deg | .308" 7.83mm | .280" 7.11mm | 12 - 48 46 - 6 | 108 deg | 110 deg | .025" 0.63mm | .008" 0.20mm | .012" / .30mm .014" / .35mm |
| FOC16BP285 | ULTIMATE ROAD Not recommended for use with std injection. Piper valve spings (Part no VSSFOC) must be used | 3000-7500 | | 272 deg | 240 deg | .358" 9.09mm | .304" 7.72mm | 26 - 66 50 - 10 | 110 deg | 110 deg | .055" 1.39mm | .018" 0.40mm | .008" / .20mm .012" / .30mm |
| FOC16BP300 | RALLY Not recommended for use with std injection. Piper valve springs (Part no VSSFOC) must be used | 3500-8200 | | 288 deg | 276 deg | .441" 11.19mm | .421" 10.68mm | 40 - 68 64 - 32 | 104 deg | 106 deg | .127" 3.23mm | .095" 2.41mm | .008" / .20mm .010" / .25mm |
| FOC16BP320 | RACE Not recommended for use with std injection. Piper valve springs (Part no VSSFOC) must be used | 3800-8500 | | 288 deg | 284 deg | .460" 11.69mm | .401" 10.19mm | 42 - 66 64 - 40 | 102 deg | 104 deg | .147" 3.73mm | .108" 2.78mm | .010" / .25mm .012" / .30mm |

FORD Ti-VCT 1.6 16v

Full lift data is achieved with timing tool installed when setting up camshaft installation

| | | | | | | | | | | | | | |
|-------------|---|-----------|--|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| SIGVCTBP270 | FAST ROAD Suitable for 1.6 Ti-VCT 16V, Remapped Ecu & exhaust recommended for best results. | 2000-6700 | | 256 deg | 256 deg | .352" 8.94mm | .350" 8.89mm | -12 - 88 69 - 7 | 140 deg | 121 deg | .003" 0.08mm | .009" 0.23mm | .008" / .20mm .010" / .25mm |
| SIGVCTBP285 | ULTIMATE ROAD Suitable for 1.6 Ti-VCT 16V, Remapped Ecu & exhaust recommended for best results. | 2000-7200 | | 268 deg | 256 deg | .386" 9.80mm | .370" 9.40mm | -6 - 94 69 - 7 | 140 deg | 121 deg | .003" 0.08mm | .012" 0.30mm | .008" / .20mm .010" / .25mm |

FORD FOCUS & MONDEO Mk2 1.8 / 2.0 16v (05/98 On) "BLACK TOP" with 27.5 mm dia biscuit shims

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| FOC20BP270 | FAST ROAD | 1800-7000 | 12 BHP | 260 deg | 248 deg | .372" 9.45mm | .345" 8.76mm | 20 - 60 54 - 14 | 110 deg | 110 deg | .045" 1.14mm | .024" 0.61mm | .010" / .25mm .012" / .30mm |
| FOC20BP285 | ULTIMATE ROAD | 2500-7500 | | 264 deg | 256 deg | .382" 9.71mm | .361" 9.18mm | 24 - 60 56 - 20 | 108 deg | 108 deg | .063" 1.60mm | .045" 1.14mm | .010" / .25mm .012" / .30mm |
| FOC20BP300 | RALLY | 2800-8000 | | 280 deg | 280 deg | .423" 10.74mm | .421" 10.69mm | 36 - 64 66 - 34 | 104 deg | 106 deg | .121" 3.08mm | .110" 2.80mm | .010" / .25mm .012" / .30mm |
| FOC20BP320 | RACE | 3000-8500 | | 288 deg | 284 deg | .470" 11.94mm | .443" 11.25mm | 40 - 68 68 - 36 | 104 deg | 106 deg | .165" 4.20mm | .137" 3.47mm | .010" / .25mm .012" / .30mm |

FORD FOCUS 2.0 16v ST170 (NOT TO BE USED WITH THE VVT SYSTEM ACTIVATED)

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|---|-----------|--|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| FOCSTBP285 | ULTIMATE ROAD | 2500-7500 | | 280 deg | 264 deg | .425" 10.80mm | .380" 9.66mm | 34 - 66 58 - 26 | 106 deg | 106 deg | .101" 2.57mm | .069" 1.75mm | .010" / .25mm .012" / .30mm |
| FOCSTBP300 | RALLY Use valve spring kit VSSST170 | 3000-8000 | | 284 deg | 272 deg | .450" 11.44mm | .413" 10.50mm | 38 - 66 60 - 32 | 104 deg | 104 deg | .122" 3.10mm | .086" 2.18mm | .010" / .25mm .012" / .30mm |

FORD FOCUS RS MK1

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| FOCRSBP270 | FAST ROAD | 1800-7000 | 18 BHP | 260 deg | 260 deg | .370" 9.40mm | .368" 9.35mm | 20 - 60 60 - 20 | 110 deg | 110 deg | .046" 1.16mm | .044" 1.11mm | .010" / .25mm .012" / .28mm |
|------------|------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDFOC - Pr focus 1.6 alloy vernier pulleys
VSSFOC16 - Focus 1.6 single valve spring and cap set
SC24 - Focus 1.6 steel valve spring retainers
TBP31 - Focus 1.4 / Puma 1.7 comp cam belt

PULDZETA - Pr Focus 2.0 & RS alloy vernier pulleys
VSSZETA34 - Focus 2.0 & RS single valve spring kit
SC11 - Focus 2.0 & RS spring retainers
TBP30 - Focus 1.6/2.0 comp cam belt

PULDST170 - Focus ST170 alloy vernier exh pulley
VSSST170 - Focus ST170 single valve spring kit
SC37 - Focus ST170 steel valve spring retainers

CAMSHAFTS FORD DURATEC 1.8 / 2.0 / 2.3 16v / FIESTA ST150 / MONDEO Mk3 / 2005 FOCUS 2.0 16v

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

All profiles CNC ground to standard base circle size and designed for standard diameter tappets

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| DURBP270 | FAST ROAD Straight forward installation | 1800-6800 | 12 BHP | 260 deg | 244 deg | .383" 9.73mm | .348" 8.84mm | 17 - 63 48 - 17 | 113 deg | 105 deg | .034" 0.87mm | .034" 0.87mm | .008" / .20mm .010" / .25mm |
| DUR1892 | For use with throttle bodies & Piper VSSDUR springs. These are the hottest profile that can be fitted without machining pistons. | 2000-7200 | | 276 deg | 276 deg | .402" 10.21mm | .400" 10.16mm | 30 - 66 66 - 30 | 108 deg | 108 deg | .084" 2.13mm | .082" 2.08mm | .008" / .20mm .010" / .25mm |
| DURBP285 | ULTIMATE ROAD For use with throttle bodies. Piper single valve springs, VSSDUR, must be used | 3000-7000 | | 296 deg | 288 deg | .460" 11.68mm | .420" 10.67mm | 46 - 70 68 - 40 | 102 deg | 104 deg | .154" 3.91mm | .116" 2.95mm | .010" / .25mm .012" / .28mm |
| DUR2170 | NATIONAL HOT ROD For use with throttle bodies. Piper double valve springs, VDSUR, must be used | 2500-7800 | | 280 deg | 272 deg | .492" 12.49mm | .450" 11.42mm | 36 - 64 60 - 32 | 104 deg | 104 deg | .152" 3.85mm | .126" 3.20mm | .008" / .20mm .010" / .25mm |
| DURBP300 | RALLY For use with throttle bodies. Piper double valve springs, VDSUR, must be used | 3000-8000 | | 296 deg | 288 deg | .490" 12.45mm | .458" 11.64mm | 46 - 70 68 - 40 | 102 deg | 104 deg | .165" 4.19mm | .130" 3.30mm | .010" / .25mm .012" / .28mm |
| DURBP320 | RACE For use with throttle bodies. Piper valve springs, VDSUR, must be used | 3500-8500 | | 300 deg | 288 deg | .517" 13.13mm | .485" 12.32mm | 48 - 72 68 - 40 | 102 deg | 104 deg | .206" 5.76mm | .150" 4.62mm | .010" / .25mm .012" / .28mm |

FORD FOCUS ST225 - 5 CYL

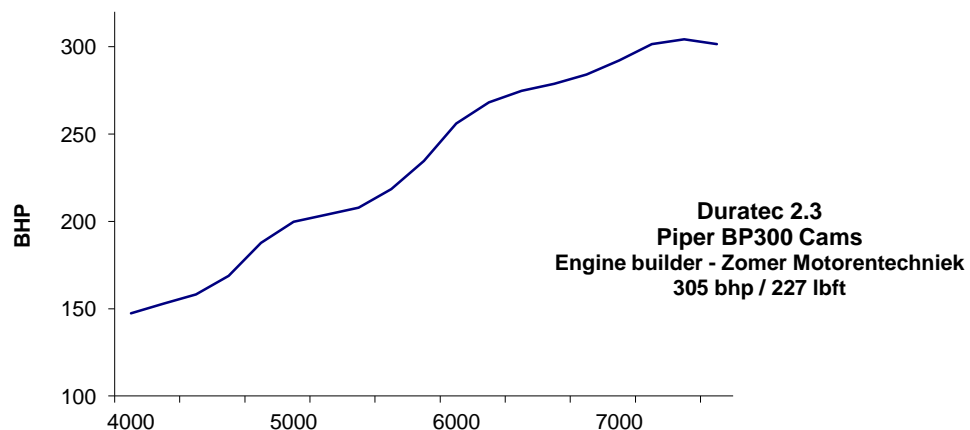
Valve lifts quoted assume a rocker ratio of 1:1

| | |
|-------------|------------------|
| FOC225BP270 | FAST ROAD |
|-------------|------------------|

CAM KITS

FORD DURATEC 1.8 / 2.0 / 2.3 16v / FIESTA ST150 / MONDEO Mk3 / 2005 FOCUS 2.0 16v

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------------------------|----------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBDUR1892 / BP285 | X | | VSSDUR | | | SC20B | | | | | X |
| KBDUR2170 / BP300 / BP320 | X | | VDSUR | SSDUR | VSODUR | SC22 | | | | | X |



ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

- PULSDUR - Duratec vernier kit
- VSSDUR - Duratec single valve spring and cap set
- VDSUR - Duratec double valve spring, seat, seal and cap set
- VSODUR - Duratec oil seals
- SSDUR - Duratec spring seats
- SC20B - Duratec spring cap set
- VSSST225 - Focus ST225 single valve spring & cap set

CAMSHAFTS HONDA CIVIC TYPE R 2.0 16v I-VTEC K20

PIPER CAMS

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|---|------------|----------------|----------|---------|------------|-------|--------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| IVTECBP300 | RALLY For use with throttle bodies / supercharged | 3800-9000 | | 280 deg | 300 deg | .355" | .355" | | 108 deg | 108 deg | .035" 0.89mm | .025" 0.64mm | .010" / .25mm .012" / .30mm |

JAGUAR 6 CYL 3.8/4.2

Valve lifts quoted assume a rocker ratio of 1:1

***TRIBO FINISH AVAILABLE ON STEEL BILLETS**

| | | | | | | | | | | | | | |
|-----------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| JAG6BP255 | MILD ROAD | 1500-5800 | 8 BHP | 264 deg | 264 deg | .400" 10.17mm | .398" 10.12mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .067" 1.68mm | .065" 1.63mm | .010" / .25mm .012" / .30mm |
| JAG6BP270 | FAST ROAD | 2000-6000 | 15 BHP | 276 deg | 276 deg | .423" 10.67mm | .421" 10.62mm | 28 - 68 68 - 28 | 110 deg | 110 deg | .076" 1.93mm | .074" 1.88mm | .008" / .20mm .010" / .25mm |
| JAG6BP285 | ULTIMATE ROAD | 2500-6500 | 20 BHP | 280 deg | 280 deg | .450" 11.43mm | .448" 11.38mm | 30 - 70 70 - 30 | 110 deg | 110 deg | .110" 2.79mm | .108" 2.74mm | .010" / .25mm .012" / .30mm |
| JAG6BP300 | RALLY | 2800-7000 | | 280 deg | 280 deg | .460" 11.68mm | .438" 11.13mm | 32 - 68 68 - 32 | 108 deg | 108 deg | .126" 3.20mm | .095" 2.41mm | .010" / .25mm .012" / .30mm |
| JAG6BP320 | RACE | 3000-7500 | | 296 deg | 296 deg | .470" 11.94mm | .468" 11.89mm | 42 - 74 76 - 40 | 106 deg | 108 deg | .156" 3.96mm | .143" 3.64mm | .010" / .25mm .012" / .30mm |
| JAG6BP330 | ULTIMATE RACE | 3500-8000 | | 296 deg | 292 deg | .520" 13.21mm | .480" 12.20mm | 42 - 74 72 - 40 | 106 deg | 106 deg | .195" 4.96mm | .162" 4.12mm | .010" / .25mm .012" / .30mm |

JAGUAR 12 CYL

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|----------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| JAG12BP255 | MILD ROAD | 1800-6000 | 20 BHP | 264 deg | 264 deg | .400" 10.17mm | .398" 10.12mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .067" 1.68mm | .065" 1.63mm | .010" / .25mm .012" / .30mm |
| JAG12BP270 | FAST ROAD | 2200-7000 | 25 BHP | 274 deg | 274 deg | .420" 10.67mm | .418" 10.62mm | 27 - 67 67 - 27 | 110 deg | 110 deg | .092" 2.33mm | .090" 2.28mm | .008" / .20mm .010" / .25mm |
| JAG12BP285 | ULTIMATE ROAD | 2500-7500 | | 280 deg | 280 deg | .450" 11.43mm | .448" 11.38mm | 30 - 70 70 - 30 | 110 deg | 110 deg | .110" 2.79mm | .108" 2.74mm | .010" / .25mm .012" / .30mm |

JAGUAR 3.0 V6 (S type only) X type available but need to be used with PULSJV6 sprocket kit

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|------------|----------------------|--|-----------------------|-----------|---------|-----------------|------------------|--------------------|--------------------|---------|-----------------|-----------------|--------------------------------|--------------------------------|
| JAGV6BP270 | FAST ROAD | 1500-6000 | 20 BHP | 264 deg | 272 deg | .376" 9.55mm | .374" 9.50mm | 26 - 58 64 - 28 | 106 deg | 108 deg | .060" 1.53mm | .062" 1.58mm | .010" / .25mm .012" / .30mm | |
| JAGV6BP285 | ULTIMATE ROAD | Use with FOLJV6 followers (shim under bucket type) | Not suitable with vvt | 2000-7000 | 280 deg | 272 deg | .444" 11.28mm | .428" 10.87mm | 36 - 64 62 - 30 | 104 deg | 106 deg | .110" 2.80mm | .080" 2.04mm | .011" / .28mm .012" / .30mm |
| JAGV6BP300 | RALLY | Use with FOLJV6 followers (shim under bucket type) | Not suitable with vvt | 2500-7500 | 280 deg | 280 deg | .463" 11.75mm | .442" 11.23mm | 36 - 64 66 - 34 | 104 deg | 106 deg | .140" 3.55mm | .102" 2.58mm | .008" / .20mm .010" / .25mm |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULSJV6- Jaguar V6 vernier kit
FOLJV6 - Jaguar V6 followers (shim under)

SC12 - Honda vtec 1.6 steel valve spring retainer set
TBP32 - Honda vtec 1.6 competition cam belt
PULDVTEC - Pr Honda vtec 1.6 alloy vernier pulleys
VDSVTEC - Honda vtec 1.6 double valve spring set

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS

LANCIA DELTA INTEGRALE 16v TURBO

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve Clearance |
|------------|-------------|------------|----------------|----------|---------|-----------------|-----------------|-------------------|-----------|----------|------------------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| LANCTBP270 | FAST ROAD | 1500-6500 | 15 BHP | 244 deg | 230 deg | .368" 9.33mm | .342" 8.69mm | 12 - 52 45 - 5 | 110 deg | 110 deg | .026" 0.65mm | .006" 0.15mm | .016" / .40mm .016" / .40mm |

LOTUS TWIN CAM 8v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| LOTBP270 | FAST ROAD | 1500-6000 | 12 BHP | 270 deg | 270 deg | .352" 8.94mm | .350" 8.89mm | 25 - 65 65 - 25 | 110 deg | 110 deg | .079" 2.00mm | .077" 1.96mm | .008" / .20mm .010" / .25mm |
| LOTBP285 | ULTIMATE ROAD | 2000-7000 | 16 BHP | 280 deg | 280 deg | .384" 9.75mm | .382" 9.70mm | 30 - 70 70 - 30 | 110 deg | 110 deg | .090" 2.28mm | .088" 2.23mm | .008" / .20mm .010" / .25mm |
| LOTBP300 | RALLY | 2500-7500 | | 304 deg | 304 deg | .402" 10.21mm | .402" 10.21mm | 46 - 78 81 - 43 | 106 deg | 109 deg | .136" 3.45mm | .121" 3.06mm | .008" / .20mm .010" / .25mm |
| LOTBP320 | RACE | 3000-8000 | | 324 deg | 324 deg | .451" 11.44mm | .449" 11.39mm | 60 - 84 84 - 60 | 102 deg | 102 deg | .201" 5.12mm | .199" 5.06mm | .008" / .20mm .010" / .25mm |

LOTUS ELISE / EXIGE - SEE ROVER K SERIES OR TOYOTA VVT LI

MAZDA MX5 1.6/1.8 NON VVT B6ZE/BP

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|---------------|------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| MAZMX16BP270H | FAST ROAD 1600cc | 1500-6500 | 10 BHP | 238 deg | 256 deg | .336" 8.53mm | .325" 8.26mm | 9 - 49 58 - 18 | 110 deg | 110 deg | .016" 0.41mm | .028" 0.70mm | HYDRAULIC |
| MAZMX18BP270H | FAST ROAD 1800cc | 1500-6500 | 10 BHP | 256 deg | 256 deg | .350" 8.89mm | .350" 8.89mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .033" 0.84mm | .033" 0.84mm | HYDRAULIC |

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS MINI ONE / COOPER / COOPER S 2001 - 2006

Valve lifts quoted assume a rocker ratio of 1.645:1 Inlet / 1.4:1 Exhaust

PIPER CAMS

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve Clearance |
|----------|-------------|------------|----------------|----------|---------|-----------------|-----------------|--------------------|-----------|----------|---------------------------|-----------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| MINBP270 | FAST ROAD | 1500-6500 | 10 BHP | 256 deg | 248 deg | .360" 9.14mm | .350" 8.89mm | 16 - 60 56 - 12 | 112 deg | N/A | N/A | HYDRAULIC | |
| MINBP300 | RALLY | 3000-7500 | | 284 deg | 280 deg | .360" 9.14mm | .350" 8.89mm | 31 - 73 71 - 29 | 111 deg | N/A | N/A | HYDRAULIC | |

CAMSHAFTS MITSUBISHI EVO 10 (01/03/2008on)

Valve lifts quoted assume a rocker ratio of 1:1

NOTE: FOR CUSTOM PROFILES PLEASE ENQUIRE

| Profile | Application | Duration @ 1mm | | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve clearance | |
|-------------|--|----------------|---------|----------|---------|------------------|------------------|--------------------|-----------|----------|---------------------------|-----------------|-----------------|-----------------|
| | | Inl | Exh | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | Inl | Exh |
| MITS10STD | STANDARD PROFILE | 223 deg | 193 deg | 260 deg | 232 deg | .374" 9.50mm | .327" 8.31mm | 20 - 60 46 - 6 | 110 deg | 110 deg | .046" 1.17mm | .005" 0.13mm | .008" 0.20mm | .012" 0.30mm |
| MITS10BP270 | FAST ROAD <small>For use with standard valve springs (Maximum lift achievable)</small> | 230 deg | 207 deg | 264 deg | 240 deg | .400" 10.16mm | .366" 9.30mm | 22 - 62 50 - 10 | 110 deg | 110 deg | .061" 1.55mm | .016" 0.41mm | .008" 0.20mm | .010" 0.25mm |
| MITS10BP285 | ULTIMATE ROAD <small>Extra high lift profile. Only Piper valve springs (Part no VSSMITS10) must be used.</small> | 232 deg | 223 deg | 268 deg | 240 deg | .437" 11.10mm | .394" 10.00mm | 24 - 64 50 - 10 | 110 deg | 110 deg | .066" 1.68mm | .046" 1.17mm | .008" 0.20mm | .010" 0.25mm |

CAM KITS MITSUBISHI EVO 10 CAM KITS INCLUDE :

| Model | Part No. | Cams | Valve Springs | Followers | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------|-------------|------|---------------|-----------|--------------|------------|-------------|-----------|-------------|----------------|--------------------|
| EVO 10 | KBMITS10285 | X | VSSMITS10 | | | | SC47 | | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

VSSMITS10 - Mitsubishi Evo single valve spring and caps set

SC47 - Mitsubishi Evo 10 steel valve spring retainer set

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS MITSUBISHI EVO 1 - 9

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.724:1

| Profile | Application | | Duration @ 1mm | | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | |
|---------|----------------------|--|----------------|---------|----------|---------|------------------|------------------|----------------------------|-----------|----------|-----------------------|-----------------|
| | | | Inl | Exh | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh |
| BP255 | FAST ROAD | Improvement over "MR" cams, for use with standard valve springs | 218 deg | 208 deg | 272 deg | 256 deg | .425" 10.80mm | .400" 10.16mm | 28 - 64 55 - 21 | 108 deg | 107 deg | .037" 0.94mm | .029" 0.74mm |
| BP270 | FAST ROAD | Extra high lift profile. Only Piper valve springs (Part no VSSMITS) must be used. | 210 deg | 204 deg | 264 deg | 260 deg | .433" 11.00mm | .394" 10.00mm | 24 - 60 57 - 23 | 108 deg | 107 deg | .028" 0.71mm | .026" 0.66mm |
| BP285 | ULTIMATE ROAD | Extra high lift profile. Only Piper valve springs (Part no VSSMITS) must be used. | 217 deg | 211 deg | 265 deg | 265 deg | .453" 11.50mm | .425" 10.80mm | 24.5 - 60.5 60.5 - 24.5 | 108 deg | 107 deg | .038" 0.97mm | .041" 1.04mm |
| BP300 | RALLY | Extra high lift profile. Only Piper valve springs (Part no VSSMITS) must be used. | 217 deg | 217 deg | 265 deg | 265 deg | .453" 11.50mm | .453" 11.50mm | 24.5 - 60.5 60.5 - 24.5 | 108 deg | 107 deg | .038" 0.97mm | .041" 1.04mm |
| BP320 | RACE | Extra high lift profile. Only Piper valve springs (Part no VSSMITS) must be used. | 224 deg | 224 deg | 272 deg | 272 deg | .472" 12.00mm | .472" 12.00mm | 28 - 64 63 - 29 | 108 deg | 107 deg | .050" 1.27mm | .053" 1.35mm |
| GPA | GROUP A | Extra high lift profile. Only Piper valve springs (Part no VSSMITS) must be used. | 217 deg | 212 deg | 265 deg | 267 deg | .453" 11.50mm | .378" 9.60mm | 26.5 - 58.5 63 - 29 | 106 deg | 108 deg | .045" 1.14mm | .038" 0.96mm |

MECHANICAL PROFILES DESIGNED FOR COMPETITION APPLICATIONS ONLY

| | | | | | | | | | | | | | |
|------|------------------|--|---------|---------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|
| 1744 | RACE | MECHANICAL - Extra high lift profile: Only Piper valve springs (Part no VSSMITS) must be used | 230 deg | 230 deg | 270 deg | 270 deg | .453" 11.50mm | .453" 11.50mm | 29 - 61 61 - 29 | 106 deg | 106 deg | .074" 1.88mm | .074" 1.88mm |
| 1743 | RACE | MECHANICAL - Extra high lift profile: Only Piper valve springs (Part no VSSMITS) must be used | 236 deg | 236 deg | 274 deg | 274 deg | .453" 11.50mm | .453" 11.50mm | 31 - 63 63 - 31 | 106 deg | 106 deg | .085" 2.16mm | .085" 2.16mm |
| 1742 | RACE | MECHANICAL - Extra high lift profile: Only Piper valve springs (Part no VSSMITS) must be used | 232 deg | 232 deg | 274 deg | 274 deg | .472" 12.00mm | .472" 12.00mm | 31 - 63 63 - 31 | 106 deg | 106 deg | .074" 1.88mm | .074" 1.88mm |
| 1741 | DRAG RACE | MECHANICAL - Extra high lift profile: Only Piper valve springs (Part no VSSMITS) must be used | 242 deg | 242 deg | 290 deg | 290 deg | .472" 12.00mm | .472" 12.00mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .096" 2.44mm | .096" 2.44mm |

Camshaft part numbers:

| Model | Part number | |
|---------|-------------|---------------------|
| | 1st half | 2nd half (Profile) |
| EVO 1-3 | MIT51 | BP255 or BP270 etc. |
| EVO 4-7 | MIT5 | BP255 or BP270 etc. |
| EVO 8 | MIT58 | BP255 or BP270 etc. |
| EVO 9 | MIT59 | BP255 or BP270 etc. |

CAM KITS

MITSUBISHI EVO 1 - 9 CAM KITS INCLUDE :

| Model | Part No. | Cams | Valve Springs | Followers | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------|-------------------------------------|----------|---------------|-----------|--------------|------------|-------------|-----------|-------------|----------------|--------------------|
| EVO 1-3 | KBMIT51 270 / 285 / 300 / 320 / GPA | X | VSSMITS | | | | SC21 | | | PULDMITS | X |
| EVO 4-7 | KBMIT5 270 / 285 / 300 / 320 / GPA | X | VSSMITS | | | | SC21 | | | PULDMITS | X |
| EVO 8 | KBMIT58 270 / 285 / 300 / 320 / GPA | X | VSSMITS | | | | SC21 | | | PULDMITS | X |
| EVO 9 | KBMIT59 270 / 285 / 300 / 320 / GPA | X | VSSMITS | | | | SC21 | | | PULDMITS9 | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

MITSHLA - Mitsubishi HD hydraulic lifter set

VSSMITS - Mitsubishi Evo single valve spring and caps set

SC21 - Mitsubishi Evo steel valve spring retainer set

MIT5ADJM - MECHANICAL ADJUSTABLE LIFTER SET

PULDMITS - Mitsubishi Evo alloy vernier pulleys

PULDMITS9 - Mitsubishi Evo 9 alloy Exh vernier pulley

TBP34 - Mitsubishi Evo performance cam belt**

** NOTE : Fits 4/5/6/7/8 ONLY

CAMSHAFTS NISSAN ALMERA / PRIMERA 16v (NON ROLLER ROCKER ENGINES)

Valve lifts quoted assume a rocker ratio of 1.59:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| NISBP270 | FAST ROAD | 1500-6800 | 12 BHP | 262 deg | 262 deg | .418" 10.62mm | .418" 10.62mm | 21 - 61 61 - 21 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |
| NISBP285 | ULTIMATE ROAD <small>Not recommended for use with std injection</small> | 2500-7500 | 20 BHP | 268 deg | 268 deg | .437" 11.10mm | .437" 11.1mm | 24 - 64 64 - 24 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |

NISSAN ALMERA / PRIMERA 16v (ROLLER ROCKER ENGINES)

Valve lifts quoted assume a rocker ratio of 1.59:1

| | | | | | | | | | | | | | |
|-----------|--|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----|-----|-----------|
| NISBP270R | FAST ROAD | 1500-6800 | 12 BHP | 258 deg | 248 deg | .413" 10.49mm | .413" 10.49mm | 19 - 59 54 - 14 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |
| NISBP285R | ULTIMATE ROAD <small>Not recommended for use with std injection</small> | 2500-7500 | 20 BHP | 270 deg | 270 deg | .457" 11.61mm | .457" 11.61mm | 25 - 65 65 - 25 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |

NISSAN MICRA 1.3 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|----------------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| NISMICBP270 | FAST ROAD | 1500-6800 | 8 BHP | 248 deg | 248 deg | .345" 8.77mm | .343" 8.72mm | 14 - 54 54 - 14 | 110 deg | 110 deg | .027" 0.68mm | .025" 0.63mm | .010" / .25mm .012" / .30mm |
| NISMICBP285 | ULTIMATE ROAD | 2500-7500 | 12 BHP | 272 deg | 272 deg | .357" 9.07mm | .355" 9.02mm | 30 - 62 62 - 30 | 106 deg | 106 deg | .071" 1.80mm | .069" 1.75mm | .010" / .25mm .012" / .30mm |

NISSAN SUNNY / PULSAR GTI R

Valve lifts quoted assume a rocker ratio of 1.59:1

| | | | | | | | | | | | | | |
|------------|----------------------|-----------|---------|---------|---------|------------------|------------------|--------------------|---------|---------|-----|-----|--------------------------------|
| NGTIRBP270 | FAST ROAD | 2000-7200 | 15 BHP | 260 deg | 260 deg | .438" 11.13mm | .438" 11.13mm | 20 - 60 60 - 20 | 110 deg | 110 deg | N/A | N/A | .010" / .25mm .012" / .30mm |
| NGTIRBP285 | ULTIMATE ROAD | 2600-7800 | 20 BHP+ | 278 deg | 278 deg | .436" 11.13mm | .434" 11.13mm | 33 - 65 65 - 33 | 106 deg | 106 deg | N/A | N/A | .008" / .20mm .010" / .25mm |

NISSAN SKYLINE R32 GTR

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|----------------------|-----------|---------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| NSKYBP270H | FAST ROAD | 1800-7000 | 20 BHP+ | 256 deg | 256 deg | .325" 8.26mm | .325" 8.26mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .028" 0.70mm | .028" 0.70mm | HYDRAULIC |
| NSKYBP285M | ULTIMATE ROAD | 2300-7600 | 30 BHP+ | 264deg | 264deg | .344" 8.73mm | .342" 8.68mm | 24 - 60 60 - 24 | 108 deg | 108 deg | .058" 1.48mm | .056" 1.43mm | .008" / .20mm .010" / .25mm |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULSSR20 - Nissan GTiR / Almera & Primera vernier sprockets
(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS PEUGEOT 205 / CITROEN AX 1360cc 'ALLOY BLOCK'

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.4:1 - Rocker ratio varies with base circle size. Therefore competition cams may produce more lift than quoted

No.1 Journal size: 1.671" / 42.44mm

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|----------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| P13BP270 | FAST ROAD | 2000-6500 | 10 BHP | 268 deg | 268 deg | .340" 8.64mm | .340" 8.64mm | 25 - 63 63 - 25 | 109 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |
| P13BP285 | ULTIMATE ROAD | 2500-7000 | 14 BHP | 284 deg | 284 deg | .380" 9.65mm | .380" 9.65mm | 35 - 69 69 - 35 | 107 deg | N/A | N/A | .014" / .35mm .014" / .35mm | |
| P13BP300 | RALLY | 3000-7500 | | 300 deg | 300 deg | .400" 10.16mm | .400" 10.16mm | 45 - 75 75 - 45 | 105 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |
| P13BP320 | RACE | 4000-8000 | | 310 deg | 310 deg | .410" 10.42mm | .410" 10.42mm | 50 - 80 80 - 50 | 105 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |
| P13660 | 1400 STOCK ROD | 3500-8000 | | 306 deg | 306 deg | .380" 9.65mm | .380" 9.65mm | 49 - 77 77 - 49 | 104 deg | N/A | N/A | .008" / .20mm .010" / .25mm | |
| P13GPA1 | GROUP A RACE | 2500-7000 | | 304 deg | 304 deg | .410" 10.42mm | .410" 10.42mm | 48 - 76 76 - 48 | 104 deg | N/A | N/A | .010" / .25mm .010" / .25mm | |

PEUGEOT 106/306 1.4 XSi 91-97 'IRON BLOCK'

Valve lifts quoted assume a rocker ratio of 1.4:1 - Rocker ratio varies with base circle size. Therefore competition cams may produce more lift than quoted

| | | | | | | | | | | | | |
|-------------|---------------|--|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|--------------------------------|
| P14BP270 | FAST ROAD | 1500-6500 | 10 BHP | 260 deg | 260 deg | .350" 8.89mm | .350" 8.89mm | 21 - 59 59 - 21 | 109 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| P14BP270RAL | FAST ROAD | Suit 106 1.6 Rallye | 12 BHP | 284 deg | 284 deg | .395" 10.03mm | .395" 10.03mm | 34 - 70 70 - 34 | 108 deg | N/A | N/A | .011" / .28mm .013" / .33mm |
| P14BP285 | ULTIMATE ROAD | Not recommended for use with std injection | 14 BHP | 284 deg | 284 deg | .380" 9.65mm | .380" 9.65mm | 35 - 69 69 - 35 | 107 deg | N/A | N/A | .014" / .35mm .014" / .35mm |
| P14BP300 | RALLY | 3000-7500 | | 300 deg | 300 deg | .400" 10.16mm | .400" 10.16mm | 45 - 75 75 - 45 | 105 deg | N/A | N/A | .010" / .25mm .010" / .25mm |
| P14BP320 | RACE | 4000-8000 | | 310 deg | 310 deg | .410" 10.42mm | .410" 10.42mm | 50 - 80 80 - 50 | 105 deg | N/A | N/A | .010" / .25mm .010" / .25mm |

CAM KITS

PEUGEOT 205 / CITROEN AX 1360cc (ALLOY BLOCK) INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBP13270 / 285 | X | FOLP13 | VSSP13 | | | | | | | | X |
| KBP13300 / 320 / GPA1 | X | FOLP13 | VSSP13 | | | | | | | | X |

PEUGEOT 106 / 306 8v (IRON BLOCK) INCLUDE:

| | | | | | | | | | | | |
|----------------------------|---|--------|--------|--|--|--|--|--|--|--|---|
| KBP14270 / 285 / 300 / 320 | X | FOLP13 | VSSP13 | | | | | | | | X |
|----------------------------|---|--------|--------|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

VSSP13 - Peugeot 1360 single valve springs
 FOLP13 - Peugeot 1360 cam followers
 PULD205 - Peugeot 1360 alloy vernier pulley

TBP11 - Peugeot 205 1360 competition cam belt
 TBP12 - Peugeot Xsi 1.4 & 306 1.6 competition cam belt

CAMSHAFTS PEUGEOT 106 / 306 1.3 (Rallye) / 1.4 / 1.6 & CITROEN SAXO VTR NON-ROLLER 94 - 97

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.4:1

'BLACK ROCKER COVER'

No.1 Journal size: 1.738" / 42.44mm

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-------------|---|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| VTRBP270 | FAST ROAD | 1500-6500 | 10 BHP | 260 deg | 260 deg | .350" 8.89mm | .350" 8.89mm | 21 - 59 59 - 21 | 109 deg | N/A | N/A | .008" / .20mm .010" / .25mm | |
| VTRBP270RAL | FAST ROAD Suit 106 1.3 Rallye | 2000-7000 | 12 BHP | 284 deg | 284 deg | .395" 10.03mm | .395" 10.03mm | 34 - 70 70 - 34 | 108 deg | N/A | N/A | .011" / .28mm .013" / .33mm | |
| VTRBP285 | ULTIMATE ROAD Not recommended for use with std injection | 2000-6800 | 14 BHP | 280 deg | 280 deg | .400" 10.16mm | .400" 10.16mm | 32 - 68 68 - 32 | 108 deg | N/A | N/A | .008" / .20mm .010" / .25mm | |

PEUGEOT 106 / 206 / 306 & CITROEN SAXO 1.4 & 1.6 VTR ROLLER ROCKER 97 - ON

Valve lifts quoted assume a rocker ratio of 1.75:1

'GREY ROCKER COVER'

| | | | | | | | | | | | | |
|-----------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|--------------------------------|
| VTRBP270R | FAST ROAD | 1500-6500 | 10 BHP | 258 deg | 258 deg | .422" 10.71mm | .422" 10.71mm | 15 - 63 63 - 15 | 114 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| VTRBP285R | ULTIMATE ROAD Not recommended for use with std injection | 2000-7000 | 14 BHP | 264 deg | 264 deg | .422" 10.71mm | .422" 10.71mm | 22 - 62 62 - 22 | 110 deg | N/A | N/A | .008" / .20mm .010" / .25mm |

PEUGEOT 106 GTI & CITROEN SAXO VTS 1.6 16V

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|--------------|----------------------|--|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| SAX16BP270H | FAST ROAD | Air filter, exhaust, flowed head achieves over 150 bhp | 2000-7000 | 15 BHP | 260 deg | 260 deg | .380" 9.65mm | .380" 9.65mm | 20 - 60 60 - 20 | 110 deg | 110 deg | .035" 0.90mm | .035" 0.90mm | HYDRAULIC |
| SAX16BP270T | FAST ROAD | For use in a turbo application, Blank only | 2000-7000 | | 248 deg | 260 deg | .366" 9.30mm | .367" 9.33mm | 12 - 56 62 - 18 | 112 deg | 112 deg | .029" 0.74mm | .033" 0.83mm | HYDRAULIC |
| SAX16BP270TR | FAST ROAD | For use in a turbo application Reprofiled spec only | 2000-7000 | | 256 deg | 256 deg | .350" 8.89mm | .350" 8.89mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .033" 0.84mm | .033" 0.84mm | HYDRAULIC |
| SAX16BP270S | FAST ROAD | For use in a supercharged application | 2000-7000 | | 260 deg | 264 deg | .380" 9.65mm | .378" 9.60mm | 20 - 60 62 - 22 | 110 deg | 110 deg | .035" 0.89mm | .057" 1.47mm | HYDRAULIC |
| SAX16BP285H | ULTIMATE ROAD | Not recommended for use with std injection. Throttle bodies, flowed head, manifold achieves over 180 bhp | 3000-7500 | 20 BHP | 264 deg | 260 deg | .400" 10.16mm | .380" 9.65mm | 22 - 62 64 - 16 | 110 deg | 114 deg | .058" 1.47mm | .016" 0.40mm | HYDRAULIC |
| SAX16BP300H | RALLY | Piper valve springs 'VDSVTS' must be used | 3500-8000 | | 274 deg | 274 deg | .430" 10.93mm | .430" 10.93mm | 33 - 61 63 - 31 | 104 deg | 106 deg | .107" 2.73mm | .096" 2.43mm | HYDRAULIC |
| SAX16BP300 | RALLY | Piper valve springs 'VDSVTS' must be used | 3600-8000 | | 284 deg | 284 deg | .450" 11.44mm | .448" 11.39mm | 36 - 68 68 - 36 | 106 deg | 106 deg | .112" 2.84mm | .110" 2.79mm | .010" / .25mm .012" / .30mm |
| SAX16BP320 | RACE | Oversized followers required (Part No FOLVTSM31) must be used | 4200-8500 | | 292 deg | 292 deg | .481" 12.21mm | .479" 12.16mm | 42 - 70 70 - 42 | 104 deg | 104 deg | .169" 4.29mm | .167" 4.24mm | .010" / .25mm .012" / .30mm |

CAM KITS

PEUGEOT 106 / 306 1.3 (Rallye) / 1.4 / 1.6 & CITROEN SAXO VTR NON-ROLLER 94 - 97 INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|----------|----------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBVTR270 | X | FOLP13 | | | | | | | | | X |
| KBVTR285 | X | FOLP13 | VSSVTR2 | | | | | | | | X |

PEUGEOT 106 GTI & CITROEN SAXO VTS 1.6 16V INCLUDE:

| | | | | | | | | | | | |
|--------------------------|----------|---------|--------|--|--|------|--|--|--|--|----------|
| KBSAX16270 / 270T / 285H | X | FOLVTSH | | | | | | | | | X |
| KBSAX16300H | X | FOLVTSH | VDSVTS | | | SC18 | | | | | X |
| KBSAX16300M | X | FOLVTSM | VDSVTS | | | SC18 | | | | | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDVTR - Saxo VTR (40 tooth) alloy vernier pulley
 PULDVTS - Pair Saxo VTS alloy vernier pulley
 TBP39 - Saxo VTS 1.6 16v cam belt

VSSVTR - Saxo VTR (roller type) single valve spring set
 VSSVTR2 - Saxo VTR (non-roller type) single valve spring set
 VDSVTS - Saxo VTS double valve spring kit

FOLP13 - VTR non roller follower set
 FOLVTSH - Saxo VTS hydraulic follower set
 FOLVTSM - Saxo VTS solid follower set
 FOLVTSM31 - Saxo VTS 31mm solid follower set

CAMSHAFTS PEUGEOT 205 / 309 GTI 1600 / 1900

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

NOTE: Our cams have both the thrust groove & thrust shoulders, we recommend the shoulder type only for competition applications.

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|---|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| P16BP270 | FAST ROAD Skim .028" from head & fit this cam to produce 120bhp @ the wheels instantly | 2000-6500 | 20 BHP | 272 deg | 272 deg | .462" 11.73mm | .460" 11.68mm | 28 - 64 64 - 28 | 108 deg | .062" 1.57mm | .060" 1.52mm | .008" / .20mm .010" / .25mm | |
| P16BP285 | ULTIMATE ROAD Not recommended for use with std injection. Phenominal power when used with 2 x 45 dcoe's | 2500-7000 | 30 BHP | 284 deg | 284 deg | .462" 11.73mm | .460" 11.68mm | 36 - 68 68 - 36 | 106 deg | .109" 2.77mm | .107" 2.72mm | .008" / .20mm .010" / .25mm | |
| P16BP300 | RALLY | 2800-7500 | | 304 deg | 304 deg | .480" 12.19mm | .480" 12.19mm | 46 - 78 78 - 46 | 106 deg | .175" 4.45mm | .173" 4.39mm | .008" / .20mm .010" / .25mm | |
| P16BP320 | RACE 1600 Race camshaft | 4000-8500 | | 308 deg | 308 deg | .528" 13.41mm | .526" 13.36mm | 50 - 78 78 - 50 | 104 deg | .190" 4.83mm | .188" 4.78mm | .011" / .28mm .013" / .32mm | |
| P16GPA2 | GROUP A RALLY | 3000-7600 | | 308 deg | 308 deg | .490" 12.45mm | .490" 12.45mm | 50 - 78 78 - 50 | 104 deg | .186" 4.72mm | .184" 4.67mm | .008" / .20mm .010" / .25mm | |
| P16727 | HOT HATCH RACE Championship winning power. When std plenum chamber must be used | 3000-7500 | | 292 deg | 292 deg | .512" 13.00mm | .512" 13.00mm | 42 - 70 70 - 42 | 104 deg | .179" 4.54mm | .177" 4.49mm | .010" / .25mm .012" / .30mm | |
| P16528 | HOT ROD RACE The ultimate power in 1900 engines | 4000-8500 | | 328 deg | 328 deg | .552" 14.02mm | .552" 14.02mm | 62 - 86 90 - 58 | 102 deg | .227" 5.76mm | .225" 5.71mm | .010" / .25mm .012" / .30mm | |

PEUGEOT MI16 /S16 & CITROEN BX / XANTIA 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|--|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| P16VBP270 | FAST ROAD | 1500-6500 | 10 BHP | 264 deg | 264 deg | .390" 9.91mm | .390" 9.91mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .049" 1.24mm | .049" 1.24mm | HYDRAULIC |
| P16VBP285H | ULTIMATE ROAD Piper valve springs (Part no VDSMI16) must be used | 2500-7500 | | 274 deg | 274 deg | .430" 10.92mm | .430" 10.92mm | 31 - 63 65 - 29 | 106 deg | 108 deg | .098" 2.48mm | .088" 2.23mm | HYDRAULIC |
| P16VBP285 | ULTIMATE ROAD Piper valve springs (Part no VDSMI16) must be used | 2500-7500 | | 280 deg | 280 deg | .435" 11.05mm | .435" 11.05mm | 34 - 66 68 - 32 | 106 deg | 108 deg | .108" 2.75mm | .096" 2.44mm | .010" / .25mm .012" / .30mm |
| P16VBP300 | RALLY Piper valve springs (Part no VDSMI16) must be used | 3000-8000 | | 290 deg | 290 deg | .455" 11.57mm | .455" 11.57mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .140" 3.61mm | .142" 3.56mm | .010" / .25mm .010" / .25mm |
| P16VBP320 | RACE Piper valve springs (Part no VDSMI16) must be used | 4000-8500 | | 300 deg | 300 deg | .480" 12.19mm | .480" 12.19mm | 46 - 74 76 - 44 | 104 deg | 106 deg | .192" 4.88mm | .180" 4.58mm | .008" / .20mm .010" / .25mm |
| P16VGPA | GROUP A RALLY Piper valve springs (Part no VDSMI16) must be used | 2800-7800 | | 282 deg | 282 deg | .448" 11.38mm | .419" 10.60mm | 35 - 67 67 - 35 | 106 deg | 106 deg | .144" 3.66mm | .110" 2.80mm | .008" / .20mm .010" / .25mm |

CAM KITS

PEUGEOT 205 / 309 GTI 1600 / 1900 INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|----------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBP16270 / 285 | X | FOLP16 | | | | | | | | | X |

PEUGEOT MI16/S16 16v INCLUDE:

| | | | | | | | | | | | |
|-----------|---|----------|--|--|--|--|--|--|--|--|---|
| KBP16V270 | X | FOLMI16H | | | | | | | | | X |
|-----------|---|----------|--|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

TBP13 - Peugeot Gti 1.6/1.9 >92 competition cam belt

TBP14 - Peugeot Gti 1.6/1.9 92-on competition cam belt

TBP15 - Peugeot 1.9 MI16 competition cam belt

(Please note on repro option profiles may vary from specs listed)

PULD205 - Peugeot alloy vernier pulley

PULDMI16 - Peugeot MI16 vernier pulleys

VDSMI16 - Peugeot MI16 / S16 double valve spring kit

VDSP16 - Peugeot 1.6/1.9 Race double springs

FOLP16 - Peugeot 1.6/1.9 cam followers

FOLMI16M - Peugeot MI16 / S16 comp.solid cam followers

FOLMI16H - Peugeot MI16 / S16 hydraulic cam followers

CAMSHAFTS PEUGEOT 306 XSI 2.0 8v**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

Many other profiles are available. Ask for details

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|-------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| PXSIBP270 | FAST ROAD | 1500-6500 | 8 BHP | 252 deg | 256 deg | .425" 10.80mm | .434" 11.02mm | 16 - 56 58 - 18 | 110 deg | 110 deg | .044" 1.12mm | .054" 1.36mm | .015" / .38mm .017" / .43mm |

PEUGEOT 306 GTI 6 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|---------------|--|-----------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| GTI6BP270H | FAST ROAD | 1500-6500 | 10 BHP | 256 deg | 256 deg | .417" 10.59mm | .417" 10.59mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .043" 1.09mm | .043" 1.09mm | HYDRAULIC |
| GTI6BP285H | ULTIMATE ROAD | Piper valve springs (Part No VDSP306) must be used. Fully mappable ecu recommended | 2000-7500 | 264 deg | 264 deg | .428" 10.87mm | .428" 10.87mm | 24 - 60 62 - 22 | 108 deg | 110 deg | .072" 1.82mm | .063" 1.60mm | HYDRAULIC |
| GTI6BP285 | ULTIMATE ROAD | Piper valve springs (Part No VDSP306) must be used. Fully mappable ecu recommended | 2500-7800 | 280 deg | 280 deg | .435" 11.05mm | .435" 11.05mm | 34 - 66 68 - 32 | 106 deg | 108 deg | .107" 2.72mm | .095" 2.41mm | .010" / .25mm .012" / .30mm |
| GTI6BP300 | RALLY | Piper valve springs (Part No VDSP306) must be used. Fully mappable ecu recommended | 3000-8000 | 290 deg | 290 deg | .455" 11.57mm | .455" 11.57mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .140" 3.56mm | .138" 3.51mm | .010" / .25mm .010" / .25mm |
| GTI6BP320 | RACE | Piper valve springs (Part No VDSP306) must be used. Fully mappable ecu recommended | 4500-8500 | 300 deg | 300 deg | .480" 12.19mm | .480" 12.19mm | 46 - 74 76 - 44 | 104 deg | 106 deg | .182" 4.62mm | .180" 4.57mm | .008" / .20mm .010" / .25mm |

PEUGEOT 206 2.0 16v GTI (130 bhp)

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|------------|---------------|--|-----------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| GTI2BP270R | FAST ROAD | 1500-6500 | 12 BHP | 248 deg | 244 deg | .365" 9.27mm | .342" 8.69mm | 14 - 54 52 - 12 | 110 deg | 110 deg | .034" 0.85mm | .022" 0.55mm | HYDRAULIC |
| GTI2BP270 | FAST ROAD | Inlet cam only | 1500-6500 | 260 deg | N/A | .380" 9.65mm | N/A | 22 - 58 | 108 deg | N/A | .068" 1.72mm | N/A | HYDRAULIC |
| GTI2BP285 | ULTIMATE ROAD | Not recommended for use with std injection. Piper valve springs (Part No VSSP206) must be used | 2000-7500 | 274 deg | 274 deg | .430" 10.92mm | .430" 10.93mm | 31 - 63 63 - 31 | 106 deg | 106 deg | .098" 2.49mm | .098" 2.49mm | HYDRAULIC |
| GTI2BP300 | RALLY | Not recommended for use with std injection. Piper valve springs (Part No VSSP206) must be used | 3000-8000 | 296 deg | 288 deg | .459" 11.66mm | .419" 10.65mm | 42 - 74 70 - 38 | 106 deg | 106 deg | .136" 3.45mm | .108" 2.74mm | .010" / .25mm .012" / .30mm |
| GTI2BP320 | RACE | Not recommended for use with std injection. Piper valve springs (Part No VSSP206) must be used | 4000-9000 | 300 deg | 296 deg | .472" 11.99mm | .460" 11.68mm | 48 - 72 72 - 44 | 102 deg | 104 deg | .161" 4.09mm | .143" 3.63mm | .008" / .20mm .010" / .25mm |

CAM KITS**PEUGEOT 306 GTI 6 16v INCLUDE:**

| Part No. | Cams | Followers | Hydraulic Adjusters | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|------------|------|-----------|---------------------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBPGTI6270 | X | FOLGTI6H | | | | | | | | | | X |

PEUGEOT 206 2.0 16v GTI INCLUDE:

| | | | | | | | | | | | | |
|--------------|---|----------|--|--|--|--|--|--|--|--|--|---|
| KBPGTI2270R | X | FOLGTI6H | | | | | | | | | | X |
| KBPGTI2270 * | X | FOLGTI6H | | | | | | | | | | X |

* = Note this kit includes inlet cam & followers only

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

FOLGTI6M - 306 GTI6 comp.solid cam followers
VDSP306 - 306 GTI6 double valve springs kit

PULDXXSI - Peugeot 2.0 8v vernier pulley
TBP14 - Peugeot 2.0 8v XSi cam belt
TBP28 - Peugeot S16 '96-on / GTI 6 competition cam belt

FOLGTI6H - 306 GTI6 hydraulic cam followers
PULDGTI6 - Pr 306 GTI6 vernier pulleys (for competition use)
TBP28 - Peugeot S16 '96-on / GTI 6 competition cam belt
SC14 - 306 GTI6 steel valve spring retainers

CAMSHAFTS PEUGEOT 306 TURBO DIESEL

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-------------|-------------|------------|----------------|----------|---------|-----------------|-----------------|-------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| PEUGTDBP270 | FAST ROAD | 1500-6500 | 15 BHP | 236 deg | 244 deg | .350" 8.90mm | .365" 9.26mm | 6 - 50 54 - 10 | 112 deg | .022" 0.56mm | .027" 0.68mm | .016" / .40mm .019" / .47mm | |

PEUGEOT 206 / 306 2.0 HDI

Valve lift quoted assumes a rocker ratio of 1.7:1

| | | | | | | | | | | | | | |
|-----------|---------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----|-----|-----------|
| PHDIBP270 | FAST ROAD | 1500-6500 | 8 BHP | 236 deg | 255 deg | .342" 8.68mm | .355" 9.02mm | 8 - 48 58 - 18 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |
| PHDIBP285 | ULTIMATE ROAD | 1500-6500 | 12 BHP | 258 deg | 256 deg | .365" 9.26mm | .383" 9.73mm | 19 - 59 58 - 18 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |

PORSCHE 924

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| PORBP270 | FAST ROAD | 1500-6200 | 8 BHP | 278 deg | 278 deg | .462" 11.72mm | .460" 11.67mm | 29 - 69 69 - 29 | 110 deg | .088" 2.24mm | .060" 1.52mm | .008" / .20mm .010" / .25mm |
| PORBP285 | ULTIMATE ROAD | 2000-7000 | 12 BHP | 284 deg | 284 deg | .462" 11.72mm | .460" 11.67mm | 34 - 70 70 - 34 | 108 deg | .100" 2.54mm | .098" 2.49mm | .008" / .20mm .010" / .25mm |

RENAULT 5 TURBO

Valve lifts quoted assume a rocker ratio of 1.5:1

| | | | | | | | | | | | | |
|----------|---------------|---|--------|---------|---------|-----------------|-----------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| R5TBP270 | FAST ROAD | 2000-6000 | 15 BHP | 260 deg | 260 deg | .342" 8.68mm | .342" 8.68mm | 20 - 60 60 - 20 | 110 deg | .026" 0.66mm | .024" 0.60mm | .010" / .25mm .012" / .30mm |
| R5TBP285 | ULTIMATE ROAD | Piper valve springs Part no.VSSR5 must be used 2500-6500 | 20 BHP | 270 deg | 270 deg | .392" 9.95mm | .390" 9.90mm | 23 - 67 67 - 23 | 112 deg | .037" 0.94mm | .035" 0.89mm | .010" / .25mm .012" / .30mm |
| R5TBP300 | RALLY | Piper valve springs Part no.VSSR5 must be used 2500-6500 | 20 BHP | 276 deg | 276 deg | .362" 9.19mm | .360" 9.14mm | 26 - 70 71 - 25 | 112 deg | .068" 1.73mm | .062" 1.57mm | .008" / .20mm .010" / .25mm |

RENAULT CLIO 2.0 16v 172 / 182 / CUP

Valve lifts quoted assume a rocker ration of 1.72:1

| | | | | | | | | | | | | | |
|-----------|-----------|-----------|--------|---------|---------|------------------|-----------------|--------------------|---------|---------|-----|-----|-----------|
| R172BP270 | FAST ROAD | 1800-7000 | 10 BHP | 278 deg | 270 deg | .405" 10.28mm | .373" 9.47mm | 29 - 69 65 - 25 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |
|-----------|-----------|-----------|--------|---------|---------|------------------|-----------------|--------------------|---------|---------|-----|-----|-----------|

CAM KITS

RENAULT 5 TURBO INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|----------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBR5T270 / 285 | X | | VSSR5 | | | | | | | PULSR5 | X |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULSR5 - Renault 5 Turbo vernier pulley
VSSR5 - Renault 5 Turbo valve spring set
PULDOR - Porsche 924 vernier pulley

FOLPOR - Porsche 924 lightweight cam followers
PULD306TD - Peugeot 306 TD vernier pulley
SC27 - 206 GTI steel valve spring retainer

SC28 - 206 GTI steel valve spring retainer (solid follower)
VSS206A - 206 GTI single valve spring & retainer set
VSS206B - 206 GTI single valve spring & retainer set (solid followers)

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS RENAULT CLIO 1.8 16v & WILLIAMS 2.0 16v

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-------------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| R16VBP270H | FAST ROAD Vernier pulleys recommended | 1800-6800 | 12 BHP | 264 deg | 256 deg | .390" 9.90mm | .362" 9.20mm | 22 - 62 58 - 18 | 110 deg | 110 deg | .050" 1.27mm | .034" 0.86mm | HYDRAULIC |
| RW16VBP270H | WILLIAMS FAST ROAD Vernier pulleys recommended | 1800-6800 | 12 BHP | 264 deg | 256 deg | .407" 10.34mm | .390" 9.90mm | 22 - 62 58 - 18 | 110 deg | 110 deg | .076" 1.93mm | .058" 1.47mm | HYDRAULIC |
| R16VBP285H | ULTIMATE ROAD Vernier pulleys recommended | 2500-7300 | 18 BHP | 268 deg | 268 deg | .438" 11.13mm | .438" 11.13mm | 28 - 60 60 - 28 | 106 deg | 106 deg | .087" 2.21mm | .087" 2.21mm | HYDRAULIC |
| R16VBP300M | RALLY Mechanical | 3000-8000 | | 290 deg | 290 deg | .455" 11.57mm | .455" 11.57mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .140" 3.56mm | .138" 3.51mm | .010" / .25mm .010" / .25mm |
| R16VBP320M | RACE Mechanical | 4000-8300 | | 300 deg | 300 deg | .480" 12.19mm | .480" 12.19mm | 46 - 74 76 - 44 | 104 deg | 106 deg | .192" 4.88mm | .180" 4.57mm | .008" / .20mm .010" / .25mm |

ROVER K SERIES V6 2.5 KV6

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|-------------|---|--|------------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|------------------|--------------------------------|
| ARKV6BP270H | FAST ROAD | | 1500-6500 | 20 BHP | 260 deg | 260 deg | .380" 9.65mm | .380" 9.65mm | 20 - 60 64 - 16 | 110 deg | 114 deg | .035" 0.89mm | .016" 0.41mm | HYDRAULIC |
| ARKV6BP285H | ULTIMATE ROAD Not recommended for use with std injection. | | 2000-6800 | | 274 deg | 274 deg | .430" 10.92mm | .430" 10.92mm | 33 - 61 63 - 31 | 104 deg | 106 deg | .105" 2.67mm | .0100" 2.54mm | HYDRAULIC |
| ARKV6BP285M | ULTIMATE ROAD Not recommended for use with std injection. | | 2000-68000 | | 276 deg | 276 deg | .440" 11.18mm | .438" 11.13mm | 34 - 62 64 - 32 | 104 deg | 106 deg | .110" 2.80mm | .098" 2.48mm | .008" / .20mm .010" / .25mm |

ROVER T SERIES 2.0 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|------------|---|--|--|---------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| ARTBP270H | FAST ROAD | | | 10 BHP | 248 deg | 248 deg | .348" 8.84mm | .348" 8.84mm | 14 - 54 54 - 14 | 110 deg | 110 deg | .045" 1.14mm | .045" 1.14mm | HYDRAULIC |
| ARTBP285M | ULTIMATE ROAD Not recommended for use with std injection. | | | 15 BHP | 260 deg | 260 deg | .384" 9.75mm | .384" 9.75mm | 22 - 58 58 - 22 | 108 deg | 108 deg | .059" 1.50mm | .057" 1.45mm | .008" / .20mm .010" / .25mm |
| ARTBP270HT | FAST ROAD TURBO | | | 16 BHP | 240 deg | 240 deg | .346" 8.79mm | .346" 8.79mm | 10 - 50 50 - 10 | 110 deg | 110 deg | .017" 0.43mm | .017" 0.43mm | HYDRAULIC |
| ARTBP285MT | ULTIMATE ROAD TURBO | | | 20 BHP+ | 260 deg | 260 deg | .384" 9.75mm | .384" 9.75mm | 20 - 60 60 - 20 | 110 deg | 110 deg | .049" 1.24mm | .047" 1.19mm | .008" / .20mm .010" / .25mm |

CAM KITS

RENAULT CLIO / 19 16v & WILLIAMS 2.0 16v INCLUDE:

| Part No. | Cams | Followers | Hydraulic Adjusters | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-------------|----------|-----------|---------------------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBR16V270H | X | FOLCLIOH | | | | | | | | | | X |
| KBRW16V270H | X | FOLCLIOH | | | | | | | | | | X |
| KBR16V285H | X | FOLCLIOH | | | | | | | | | | X |

ROVER K SERIES V6 2.5 KV6 INCLUDE:

| | | | | | | | | | | | | |
|------------|----------|---------|--|--|--|--|--|--|--|--|--|----------|
| KBARKV6270 | X | FOLKV6H | | | | | | | | | | X |
|------------|----------|---------|--|--|--|--|--|--|--|--|--|----------|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDCLIO - Pr Clío 16v alloy vernier pulleys
 PULDT - Pr T-Series alloy vernier pulleys
 FOLTH - T series hydraulic cam follower set
 FOLTM - T series solid cam follower & shim set £280

PULDCLIO - Pr Clío 16v alloy vernier pulleys
 TBP16 - Clío 16v competition cam belt
 FOLCLIOH - Clío 16v hydraulic cam followers
 FOLCLIOM - Clío 16v comp.solid cam followers

FOLKV6H - KV6 hydraulic cam follower set
 VSSKV6 - Uprated single valve spring set
 VDSKV6 - Uprated double valve spring set

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS ROVER K SERIES 16v

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

Many other profiles are available. Ask for details

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl with clearance | Exh | |
| ARKBP255H | FAST ROAD Designed for use in 1400 engine.Vernier pulleys advised. | 2000-7000 | 10 BHP | 248 deg | 248 deg | .348" 8.84mm | .348" 8.84mm | 14 - 54 54 - 14 | 110 deg | 110 deg | .045" 1.14mm | .045" 1.14mm | HYDRAULIC |
| ARKBP270H | FAST ROAD Straight forward installation.Designed for 1600/1800 engine. Vernier pulleys advised. | 2000-7000 | 16 BHP | 260 deg | 260 deg | .380" 9.65mm | .380" 9.65mm | 20 - 60 64 - 16 | 110 deg | 114 deg | .035" 0.89mm | .016" 0.41mm | HYDRAULIC |
| VVCBP270 | FAST ROAD VVC exhaust camshaft | 2000-7000 | | N/A | 264 deg | N/A | .388" 9.86mm | 62 - 22 | N/A | 110 deg | N/A | .050" 1.27mm | HYDRAULIC |
| ARKBP285H | ULTIMATE ROAD Not recommended for use with std injection. | 2500-7500 | 20 BHP+ | 274 deg | 274 deg | .433" 11.00mm | .433" 11.00mm | 29 - 65 67 - 27 | 108 deg | 110 deg | .088" 2.23mm | .078" 1.98mm | HYDRAULIC |
| ARKBP285M | ULTIMATE ROAD Not recommended for use with std injection. 1.8 capable of producing over 190bhp | 2800-7800 | 20 BHP+ | 276 deg | 276 deg | .440" 11.18mm | .438" 11.13mm | 34 - 62 64 - 32 | 104 deg | 106 deg | .110" 2.80mm | .098" 2.48mm | .008" / .20mm .010" / .25mm |
| ARKBP300H | SPRINT / HILL CLIMB | 2800-7500 | | 288 deg | 288 deg | .445" 11.30mm | .445" 11.30mm | 40 - 68 70 - 38 | 104 deg | 106 deg | .133" 3.38mm | .122" 3.10mm | HYDRAULIC |
| ARKBP300M | SPRINT / HILL CLIMB Over 200bhp easily obtainable with tremendous torque. | 3200-8000 | | 280 deg | 280 deg | .442" 11.23mm | .440" 11.18mm | 34 - 66 70 - 30 | 104 deg | 106 deg | .121" 3.08mm | .108" 2.75mm | .008" / .20mm .010" / .25mm |
| ARKBP320M | RACE / SPRINT Over 120 bhp/litre achievable. | 4500-8500 | | 290 deg | 280 deg | .460" 11.68mm | .440" 11.18mm | 39 - 71 71 - 39 | 106 deg | 106 deg | .141" 3.58mm | .108" 2.75mm | .010" / .25mm .012" / .30mm |
| ARK1227 | SLR 500 Now a legendary profile in the k series tuning world | 4500-8500 | | 280 deg | 280 deg | .462" 11.73mm | .460" 11.68mm | 36 - 64 68 - 32 | 104 deg | 108 deg | .140" 3.55mm | .117" 2.97mm | .008" / .20mm .010" / .25mm |
| ARK1444 | RACE / SPRINT On Dave Walker's rollers this profile shows more torque & power over the 1227's!!! | 4500-8500 | | 276 deg | 276 deg | .481" 12.22mm | .479" 12.17mm | 34 - 62 66 - 30 | 104 deg | 108 deg | .143" 3.63mm | .120" 3.05mm | .010" / .25mm .012" / .30mm |

CAM KITS ROVER K SERIES 16v INCLUDE:

| Part No. | Cams | Followers | Hydraulic Adjusters | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------|------|-----------|---------------------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBARK270H | X | FOLKH | | | | | | | | | | X |
| KBARK285H | X | FOLKH | | VSSK | | | | | | | | X |
| KBARK300H | X | FOLKH | | VSSK | | | | | | | | X |

ROVER K SERIES 16v VVC TO NON-VVC CONVERSION KITS INCLUDE:

| Part No. | Cams | Solid Followers | Shims | Single Valve Springs | Spring Seats | Double Valve Springs | Spring Caps | End Plates | Actuator Plate Cover | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|----------|------|-----------------|--------|----------------------|--------------|----------------------|-------------|------------|----------------------|-------------|----------------|--------------------|
| KK1 HYD | X | | | VSSK | | | | PLATES | PLATES | | PULDK | X |
| KK2 COMP | X | FOLKM | SHIM74 | | | VDSK | SC3 | PLATES | PLATES | | PULDK | X |

The VVC cylinder head utilises substantially larger valves than the standard K series head. It is more economical to use this casting rather than have larger valves fitted to a standard head. For this reason we have developed a kit to convert the VVC mechanism back to two conventional camshafts. A 1600 engine fitted with this conversion is capable of producing in excess of 210 bhp and 1800's are now nudging 250 bhp.

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

Chill cast VVC inlet & exhaust cam any spec
TBP17 - K series wide competition cam belt
FOLKH - K series hydraulic cam follower set
FOLKM - K series solid cam follower & shim set

PLATES - K series end/actuator cover plate
ROTOR - K Series rotor arm attachment
PULDK - Pair K series alloy vernier pulleys
VDSK - Uprated double valve spring set

VSSK - Uprated single valve spring set
SC3 - Steel spring cap set to suit FOLKM
SC19 - Steel spring cap set to suit FOLKH

CAMSHAFTS ROVER 3.5 / 3.9 & 4.0 / 4.6 'SERPENTINE'

Valve lifts quoted assume a rocker ratio of 1.6:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | with clearance Exh | |
| V8BP255 | MILD ROAD and AUTO | 1000-5000 | 10 BHP | 272 deg | 272 deg | .420" 10.67mm | .420" 10.67mm | 24 - 68 68 - 24 | 112 deg | .054" 1.37mm | .054" 1.37mm | HYDRAULIC | |
| V8BP270 | FAST ROAD CARBURETTOR | 1500-6000 | 24 BHP | 272 deg | 272 deg | .420" 10.67mm | .420" 10.67mm | 28 - 64 64 - 28 | 108 deg | .072" 1.83mm | .081" 2.06mm | HYDRAULIC | |
| V8BP270i | FAST ROAD INJECTION <small>Can be used in a 'carb' engine to produce low down torque</small> | 1500-6000 | 22 BHP | 272 deg | 272 deg | .420" 10.67mm | .420" 10.67mm | 26 - 66 66 - 26 | 110 deg | .063" 1.60mm | .063" 1.60mm | HYDRAULIC | |
| V8BP285 | ULTIMATE ROAD | 2000-6500 | 30 BHP | 276 deg | 276 deg | .440" 11.18mm | .440" 11.18mm | 31 - 65 65 - 31 | 107 deg | .070" 1.78mm | .070" 1.78mm | HYDRAULIC | |
| V8BP300H | RALLY RACE | 2500-7000 | | 286 deg | 286 deg | .446" 11.33mm | .446" 11.33mm | 39 - 67 67 - 39 | 104 deg | .108" 2.74mm | .108" 2.74mm | HYDRAULIC | |
| V8BP300 | RALLY RACE | 2500-7000 | | 300 deg | 300 deg | .507" 12.87mm | .505" 12.82mm | 44 - 76 76 - 44 | 107 deg | .168" 4.27mm | .177" 4.36mm | .018" / .45mm .020" / .50mm | |
| V8BP320 | RACE | 3500-8000 | | 306 deg | 306 deg | .537" 13.64mm | .535" 13.59mm | 47 - 79 75 - 51 | 106 deg | .168" 4.27mm | .188" 4.78mm | .018" / .45mm .020" / .50mm | |
| V8GPAK | GROUP A | 2000-6500 | | 300 deg | 300 deg | .390" 9.91mm | .390" 9.91mm | 44 - 76 76 - 44 | 106 deg | .095" 2.41mm | .095" 2.41mm | HYDRAULIC | |

ROVER V8 4.0 / 4.6 (ENGINES WITH NO DISTRIBUTOR) SHORT NOSE TYPE

| | | | | | | | | | | | | |
|-----------|------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|-----------|
| V846BP270 | FAST ROAD | 1000-5500 | 21 BHP | 280 deg | 268 deg | .450" 11.42mm | .467" 11.87mm | 28 - 72 66 - 22 | 112 deg | .054" 1.37mm | .064" 1.63mm | HYDRAULIC |
| V846BP285 | ROAD RALLY | 1800-6000 | 35 BHP | 280 deg | 286 deg | .477" 12.11mm | .477" 12.11mm | 30 - 70 73 - 33 | 110 deg | .074" 1.88mm | .083" 2.11mm | HYDRAULIC |

CAM KITS ROVER V8 3.5 / 3.9 INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|----------------------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBV8255 / 270 / 270i / 285 / 300 | X | FOLV8 | VSSV8 | | | | | | | | X |

ROVER V8 4.0 / 4.6 (ENGINES WITH NO DISTRIBUTOR) SHORT NOSE TYPE INCLUDE:

| | | | | | | | | | | | |
|-----------------|---|-------|-------|--|--|--|--|--|--|--|---|
| KBV846270 / 285 | X | FOLV8 | VSSV8 | | | | | | | | X |
|-----------------|---|-------|-------|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULSV8 - Rover V8 vernier duplex kit
 FOLV8 - Rover V8 cam hydraulic follower set
 FOLV8M - Rover V8 cam solid follower set

VSSV8 - Uprated single valve spring set
 VTSV8 - Triple valve spring set
 TCV8 - Duplex timing chain

CAMSHAFTS SEAT - SEE V.A.G.

PIPER CAMS

SUBARU IMPREZA TURBO

MANY MORE SPECS AVAILABLE TO SPECIAL ORDER

Many other profiles are available. Ask for details

Valve lifts quoted assume a rocker ratio of 1:1

NOTE : If solid lifter oversized shims required with reprofiled cams

BLANKS FOR VERSION 5-9 ENGINES

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC with clearance | | Valve Clearance |
|-----------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|------------------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| SUBBP270H | FAST ROAD HYDRAULIC | 1800-6000 | 15 BHP | 264 deg | 264 deg | .352" 8.94mm | .352" 8.94mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .047" 1.19mm | .047" 1.19mm | HYDRAULIC |
| SUBBP285H | ULTIMATE ROAD HYDRAULIC | 2500-7000 | | 264 deg | 264 deg | .400" 10.13mm | .400" 10.13mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .056" 1.43mm | .057" 1.44mm | HYDRAULIC |
| SUBBP285 | ULTIMATE ROAD | 2500-7000 | | 276 deg | 276 deg | .402" 10.19mm | .400" 10.13mm | 28 - 68 68 - 28 | 110 deg | 110 deg | .075" 1.91mm | .075" 1.91mm | .008" / .20mm .010" / .25mm |
| SUBGPA | GROUP A RALLY For use with 34mm restrictor | 2700-6500 | | 252 deg | 252 deg | .410" 10.41mm | .410" 10.41mm | 16 - 56 56 - 16 | 110 deg | 110 deg | .060" 1.52mm | .060" 1.52mm | .008" / .20mm .010" / .25mm |

SUZUKI SWIFT GTI 16v (NON VVT TYPE)

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| SSBP270H | FAST ROAD | 2500-7000 | 10 BHP | 256 deg | 256 deg | .340" 8.64mm | .340" 8.64mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .024" 0.61mm | .024" 0.61mm | HYDRAULIC |
| SSBP285 | ULTIMATE ROAD | 3500-7800 | | 280 deg | 280 deg | .334" 8.48mm | .334" 8.48mm | 34 - 66 66 - 34 | 106 deg | 106 deg | .095" 2.41mm | .093" 2.36mm | .008" / .20mm .010" / .25mm |
| SSBP300 | RALLY | 4000-8500 | | 290 deg | 284 deg | .356" 9.04mm | .340" 8.64mm | 41 - 69 66 - 38 | 104 deg | 104 deg | .108" 2.74mm | .088" 2.24mm | .008" / .20mm .010" / .25mm |

TALBOT (HILLMAN) IMP

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|----------|--|-----------|--|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| IMPBP270 | FAST ROAD | 2000-7000 | | 276 deg | 276 deg | .294" 7.45mm | .292" 7.40mm | 29 - 67 67 - 29 | 109 deg | 109 deg | .056" 1.42mm | .054" 1.37mm | .008" / .20mm .010" / .25mm |
| IMPBP285 | ULTIMATE ROAD Repro only available on Imp Sport cam. | 3000-7500 | | 284 deg | 284 deg | .323" 8.20mm | .321" 8.15mm | 33 - 71 71 - 33 | 109 deg | 109 deg | .084" 2.13mm | .082" 2.08mm | .008" / .20mm .010" / .25mm |
| IMPBP300 | RALLY | 4000-8000 | | 286 deg | 286 deg | .352" 8.94mm | .350" 8.89mm | 37 - 69 69 - 37 | 106 deg | 106 deg | .132" 3.35mm | .130" 3.30mm | .014" / .30mm .016" / .35mm |
| IMPBP320 | RACE | 4500-8500 | | 300 deg | 300 deg | .355" 9.00mm | .353" 8.95mm | 47 - 73 73 - 47 | 103 deg | 103 deg | .152" 3.86mm | .150" 3.81mm | .008" / .20mm .010" / .25mm |

TOYOTA 4AGE 16v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|--|-----------|--------|---------|---------|-----------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| TOY16VBP270 | FAST ROAD | 2000-6500 | 9 BHP | 252 deg | 252 deg | .303" 7.70mm | .303" 7.70mm | 16 - 56 56 - 16 | 110 deg | 110 deg | .037" 0.94mm | .035" 0.89mm | .008" / .20mm .010" / .25mm |
| TOY16VBP285 | ULTIMATE ROAD Not recommended for use with std injection | 2800-7500 | 12 BHP | 288 deg | 288 deg | .353" 8.94mm | .351" 8.89mm | 38 - 70 70 - 38 | 106 deg | 108 deg | .096" 2.41mm | .094" 2.36mm | .008" / .20mm .010" / .25mm |
| TOY16VBP300 | RALLY | 3000-8000 | | 300 deg | 300 deg | .351" 8.89mm | .349" 8.84mm | 44 - 76 76 - 44 | 106 deg | 106 deg | .144" 3.62mm | .142" 3.57mm | .008" / .20mm .010" / .25mm |
| TOY16VBP320 | RACE For use with "shim under" buckets | 4000-9000 | | 326 deg | 326 deg | .375" 9.49mm | .373" 9.44mm | 57 - 89 89 - 57 | 106 deg | 106 deg | .158" 4.01mm | .156" 3.96mm | .008" / .20mm .010" / .25mm |

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS TOYOTA 4AGE 1.6 20v

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-------------|---------------|------------|----------------|----------|---------|------------------|-----------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl with clearance | Exh | |
| TOY20VBP270 | FAST ROAD | 1800-7000 | 10 BHP | 264 deg | 264 deg | .342" 8.69mm | .318" 8.08mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .049" 3.17mm | .033" 2.62mm | .010" / .25mm .012" / .30mm |
| TOY20VBP285 | ULTIMATE ROAD | 2500-8000 | | 276 deg | 264 deg | .340" 8.64mm | .340" 8.64mm | 30 - 66 60 - 24 | 108 deg | 108 deg | .073" 1.84mm | .055" 1.39mm | .010" / .25mm .012" / .30mm |
| TOY20VBP300 | RALLY | 3000-8500 | | 296 deg | 280 deg | .327" 8.31mm | .327" 8.31mm | 42 - 74 66 - 34 | 106 deg | 106 deg | .125" 3.17mm | .103" 2.62mm | .010" / .25mm .012" / .30mm |
| TOY20VBP320 | RACE | 4000-9000 | | 320 deg | 296 deg | .402" 10.16mm | .325" 9.00mm | 56 - 84 72 - 42 | 104 deg | 106 deg | .142" 3.61mm | .123" 3.12mm | .008" / .20mm .012" / .30mm |

TOYOTA CELICA 2ZZ VVTI

Valve lifts quoted assume a rocker ratio of 1.645:1 Low Lift / 1.795:1 High Lift

| Part No. | Application | Power Band | Power Increase | Duration | | | | Valve Lift | | | | Valve Clearance |
|------------|---|------------|----------------|----------|--------|---------|--------|-----------------|------------------|-----------------|------------------|--------------------------------|
| | | | | Inlet | | Exhaust | | Inlet | | Exhaust | | |
| | | | | Low | High | Low | High | Low | High | Low | High | |
| VVTLIBP270 | FAST ROAD <small>Massive mid range improvements + 26lb/ft!</small> | 2000-8500 | 15 BHP | 268deg | 288deg | 268deg | 284deg | .362" 9.20mm | .472" 12.00mm | .362" 9.20mm | .433" 11.00mm | .008" / .20mm .010" / .25mm |
| VVTLIBP285 | ULTIMATE ROAD | 2000-8500 | | 276deg | 288deg | 276deg | 284deg | .382" 9.70mm | .482" 12.30mm | .380" 9.65mm | .445" 11.30mm | .008" / .20mm .010" / .25mm |
| VVTLIBP320 | RACE | 2000-8500 | | 276deg | 304deg | 276deg | 296deg | .382" 9.70mm | .500" 12.70mm | .380" 9.65mm | .460" 11.68mm | .008" / .20mm .010" / .25mm |

TOYOTA MR2 MK2 / CELICA 2.0 16v 3SGE & 3SGTE TURBO (Not suitable for 'BEAMS')

Reprofiled cams will require
oversize shims

Valve lifts quoted assume a rocker ratio of 1:1

Blank cams ground with standard BCD. Due to the extra lift the head maybe require machining in pre1994

| | | | | | | | | | | | | | |
|-------------|-----------------------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| TOYSGBP270 | FAST ROAD NATURALLY ASPIRATED | 2000-6500 | 10 BHP | 260 deg | 260 deg | .369" 9.37mm | .367" 9.32mm | 20 - 60 60 - 20 | 110 deg | 110 deg | .042" 1.06mm | .040" 1.01mm | .010" / .25mm .012" / .30mm |
| TOYSGBP270T | FAST ROAD TURBO | 2000-6500 | 14 BHP | 260 deg | 260 deg | .369" 9.37mm | .367" 9.32mm | 20 - 60 60 - 20 | 110 deg | 110 deg | .042" 1.06mm | .040" 1.01mm | .010" / .25mm .012" / .30mm |
| TOYSGBP285 | ULTIMATE ROAD NATURALLY ASPIRATED | 2500-7000 | 14 BHP | 264 deg | 264 deg | .412" 10.47mm | .410" 10.42mm | 24 - 60 60 - 24 | 108 deg | 108 deg | .071" 1.78mm | .069" 1.68mm | .008" / .20mm .010" / .25mm |
| TOYSGBP285T | ULTIMATE ROAD TURBO | 2500-7000 | 20BHP | 264 deg | 264 deg | .412" 10.47mm | .410" 10.42mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .062" 1.58mm | .060" 1.52mm | .008" / .20mm .010" / .25mm |
| TOYSGTBP300 | RALLY NATURALLY ASPIRATED | 2500-7000 | | 272 deg | 272 deg | .430" 10.92mm | .428" 10.87mm | 28 - 64 66 - 26 | 108 deg | 110 deg | .072" 1.83mm | .060" 1.52mm | .010" / .25mm .012" / .30mm |

TOYOTA SUPRA 2JZ

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-------------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| TOY2JZBP270 | FAST ROAD | 2000-6500 | 25 BHP | 264 deg | 264 deg | .365" 9.05mm | .354" 9.00mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .040" 1.02mm | .038" 0.97mm | .010" / .25mm .012" / .30mm |
| TOY2JZBP285 | ULTIMATE ROAD | 2500-7000 | | 264 deg | 272 deg | .376" 9.55mm | .374" 9.50mm | 22 - 62 66 - 26 | 110 deg | 110 deg | .044" 1.12mm | .054" 1.37mm | .010" / .25mm .012" / .30mm |
| TOY2JZBP300 | RALLY | 3000-7500 | | 272 deg | 280 deg | .423" 10.74mm | .421" 10.69mm | 26 - 66 70 - 30 | 110 deg | 110 deg | .076" 1.94mm | .092" 2.34mm | .010" / .25mm .012" / .30mm |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULD3SG - Toyota 3SG / 3SGTE vernier pulleys

VSS3SG - TOYOTA 3SGE / 3SGTE single valve spring set

VDS3SG - TOYOTA 3SGE / 23SGTE double valve spring set

CAMSHAFTS TRIUMPH 1.2 / 1.3 / 1.5 4 Cyl

Large 49.94mm & Small 46.755mm journal blank available

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1.5:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | with clearance Exh | |
| TRBP255 | MILD ROAD | 1500-5800 | 6 BHP | 252 deg | 252 deg | .380" 9.65mm | .380" 9.65mm | 17 - 55 55 - 17 | 109 deg | .042" 1.06mm | .040" 1.01mm | .022" / .55mm .024" / .60mm | |
| TRBP270 | FAST ROAD | 2000-6400 | 10 BHP | 268 deg | 268 deg | .414" 10.52mm | .412" 10.47mm | 26 - 62 62 - 26 | 108 deg | .070" 1.77mm | .068" 1.72mm | .012" / .30mm .014" / .35mm | |
| TRBP285 | ULTIMATE ROAD | 2800-6800 | 14 BHP | 284 deg | 284 deg | .414" 10.52mm | .414" 10.52mm | 36 - 68 68 - 36 | 106 deg | .112" 2.84mm | .114" 2.89mm | .012" / .30mm .014" / .35mm | |
| TRBP300 | RALLY | 3500-7500 | | 300 deg | 300 deg | .445" 11.30mm | .445" 11.30mm | 44 - 76 76 - 44 | 106 deg | .125" 3.18mm | .123" 3.12mm | .016" / .40mm .018" / .45mm | |

TRIUMPH TR 3 / 4

Valve lifts quoted assume a rocker ratio of 1.5:1

| | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| TR3BP270 | FAST ROAD | 1300-5500 | 8 BHP | 272 deg | 272 deg | .411" 10.44mm | .409" 10.39mm | 26 - 66 66 - 26 | 110 deg | .055" 1.40mm | .053" 1.35mm | .014" / .30mm .016" / .35mm |
| TR3BP285 | ULTIMATE ROAD | 2000-6000 | 12 BHP | 286 deg | 286 deg | .446" 11.32mm | .444" 11.27mm | 33 - 73 73 - 33 | 110 deg | .112" 2.84mm | .110" 2.79mm | .016" / .40mm .018" / .45mm |
| TR3BP300 | RALLY | 2500-6500 | | 302 deg | 302 deg | .465" 11.81mm | .463" 11.76mm | 43 - 79 79 - 43 | 108 deg | .139" 3.53mm | .137" 3.48mm | .016" / .40mm .018" / .45mm |
| TR3BP320 | RACE | 3000-7000 | | 328 deg | 328 deg | .495" 12.57mm | .493" 12.52mm | 58 - 90 90 - 58 | 106 deg | .175" 4.44mm | .173" 4.39mm | .016" / .40mm .018" / .45mm |

TRIUMPH 2.0 / 2.5 6 Cyl

Valve lifts quoted assume a rocker ratio of 1.5:1

| | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| TR6BP255 | MILD ROAD | 1000-5500 | 8 BHP | 252 deg | 252 deg | .380" 9.65mm | .380" 9.65mm | 17 - 55 55 - 17 | 109 deg | .042" 1.06mm | .040" 1.01mm | .022" / .55mm .024" / .60mm |
| TR6BP270 | FAST ROAD | 1500-6000 | 12 BHP | 264 deg | 264 deg | .406" 10.31mm | .406" 10.31mm | 24 - 60 60 - 24 | 108 deg | .070" 1.77mm | .068" 1.72mm | .016" / .40mm .018" / .45mm |
| TR6BP285 | ULTIMATE ROAD | 2500-6500 | 16 BHP | 284 deg | 284 deg | .414" 10.52mm | .414" 10.52mm | 36 - 68 68 - 36 | 106 deg | .112" 2.84mm | .114" 2.89mm | .012" / .30mm .014" / .35mm |
| TR6BP300 | RALLY | 2800-7000 | | 300 deg | 300 deg | .445" 11.30mm | .445" 11.30mm | 44 - 76 76 - 44 | 106 deg | .125" 3.18mm | .123" 3.12mm | .016" / .40mm .018" / .45mm |
| TR6BP320 | RACE | 3200-7500 | | 312 deg | 312 deg | .490" 12.45mm | .490" 12.45mm | 52 - 80 80 - 52 | 104 deg | .180" 4.57mm | .178" 4.52mm | .014" / .35mm .016" / .40mm |

CAM KITS TRIUMPH 1.2 / 1.3 / 1.5 4 Cyl

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBTR270 / 285 | X | FOLT | VSSTR4 | | | | | | | | X |

TRIUMPH 2.0 / 2.5 6 Cyl

| | | | | | | | | | | | |
|----------------|---|-------|--------|--|--|--|--|--|--|--|---|
| KBTR6270 / 285 | X | FOLT6 | VSSTR6 | | | | | | | | X |
|----------------|---|-------|--------|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

VSSTR6 - Triumph 6 cyl single spring set
VDSTR6 - Triumph 6 cyl double spring set
FOLT6 - Triumph 6 cyl cam follower set

FOLT - Triumph 4cyl cyl cam follower set
VSSTR4 - Triumph 4 cyl single spring set 1.2/1.3/1.5

(Please note on repro option profiles may vary from specs listed)

CAMSHAFTS TRIUMPH DOLOMITE SPRINT 16v**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

Solid followers must be used with this range of camshafts

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| TRSBP270* | FAST ROAD | 2000-6500 | 8 BHP | 280 deg | 280 deg | .385" 9.78mm | .383" 9.73mm | 32 - 68 68 - 32 | 108 deg | .099" 2.51mm | .097" 2.46mm | .012" / .30mm .014" / .35mm | |
| TRSBP285* | ULTIMATE ROAD | 2500-7000 | 12 BHP | 296 deg | 296 deg | .426" 10.82mm | .424" 10.77mm | 40 - 76 76 - 40 | 108 deg | .139" 3.53mm | .137" 3.48mm | .008" / .20mm .010" / .25mm | |
| TRSBP300* | RALLY | 3000-7500 | | 312 deg | 312 deg | .427" 10.85mm | .425" 10.80mm | 48 - 84 84 - 48 | 108 deg | .154" 3.91mm | .152" 3.86mm | .008" / .20mm .010" / .25mm | |
| TRSBP320* | RACE | 3500-8000 | | 316 deg | 316 deg | .443" 11.25mm | .443" 11.25mm | 50 - 86 86 - 50 | 108 deg | .164" 4.17mm | .162" 4.12mm | .014" / .30mm .016" / .35mm | |

VAUXHALL / OPEL C.I.H. 1600 / 1900 / 2000

Valve lifts quoted assume a rocker ratio of 1.52:1

| | | | | | | | | | | | | |
|---------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| OPBP255 | MILD ROAD | 1800-6000 | 6 BHP | 260 deg | 260 deg | .393" 9.98mm | .393" 9.98mm | 21 - 59 59 - 21 | 109 deg | .051" 1.30mm | .049" 1.25mm | .016" / .40mm .018" / .45mm |
| OPBP270 | FAST ROAD | 2000-6500 | 10 BHP | 268 deg | 268 deg | .421" 10.69mm | .421" 10.69mm | 26 - 62 62 - 26 | 108 deg | .071" 1.80mm | .069" 1.75mm | .012" / .30mm .014" / .35mm |
| OPBP285 | ULTIMATE ROAD | 2500-6700 | 16 BHP | 280 deg | 280 deg | .435" 11.05mm | .435" 11.05mm | 34 - 66 66 - 34 | 106 deg | .088" 2.23mm | .086" 2.18mm | .012" / .30mm .014" / .35mm |
| OPBP300 | RALLY | 3000-7400 | | 300 deg | 300 deg | .450" 11.43mm | .450" 11.43mm | 46 - 74 74 - 46 | 104 deg | .135" 3.43mm | .133" 3.38mm | .016" / .40mm .018" / .45mm |
| OPBP320 | RACE | 4000-8000 | | 328 deg | 328 deg | .517" 13.13mm | .517" 13.13mm | 62 - 86 86 - 62 | 102 deg | .210" 5.33mm | .208" 5.28mm | .012" / .30mm .014" / .35mm |

VAUXHALL / OPEL CARLTON / SENATOR 6 Cyl

Valve lifts quoted assume a rocker ratio of 1.52:1

| | | | | | | | | | | | | |
|----------|---------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| OP6BP255 | MILD ROAD | 1500-5800 | 6 BHP | 260 deg | 260 deg | .393" 9.98mm | .393" 9.98mm | 21 - 59 59 - 21 | 109 deg | .051" 1.30mm | .049" 1.25mm | .016" / .40mm .018" / .45mm |
| OP6BP270 | FAST ROAD | 1800-6200 | 10 BHP | 268 deg | 268 deg | .421" 10.69mm | .421" 10.69mm | 26 - 62 62 - 26 | 108 deg | .071" 1.80mm | .069" 1.75mm | .012" / .30mm .014" / .35mm |
| OP6BP285 | ULTIMATE ROAD | 2200-6750 | 16 BHP | 280 deg | 280 deg | .435" 11.05mm | .435" 11.05mm | 34 - 66 66 - 34 | 106 deg | .088" 2.23mm | .086" 2.18mm | .012" / .30mm .014" / .35mm |

VAUXHALL OPEL OMEGA / VECTRA 2.5 / 3.0 / 3.2 V6 24v C25XE / X25XE / Y26SE / Y32SE

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|------------|-----------|-----------------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| OPV6BP270A | FAST ROAD | For use in 2.5 engine | 1800-6000 | 15 BHP | 248 deg | 248 deg | .375" 9.53mm | .375" 9.53mm | 14 - 54 54 - 14 | 110 deg | 110 deg | .032" 0.81mm | .032" 0.81mm | HYDRAULIC |
| OPV6BP270B | FAST ROAD | For use in 3.0 & 3.2 engine | 2000-6500 | 20 BHP | 256 deg | 256 deg | .415" 10.54mm | .415" 10.54mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .043" 1.09mm | .043" 1.09mm | HYDRAULIC |

CAM KITS**VAUXHALL / OPEL C.I.H. 1600 / 1900 / 2000 INCLUDE:**

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|---------------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBOP270 / 285 / 300 / 320 | X | FOLO | VSSOP | | | | | | | | X |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

* Cast camshafts also available

PULSOP - Vauxhall CIH vernier duplex kit

VSSOP - Vauxhall CIH 4 cyl single spring/seat kit

FOLO -Vauxhall CIH 4 cyl solid cam follower set

CAMSHAFTS VAUXHALL / OPEL ASTRA / NOVA 1.2 / 1.3 / 1.4 / 1.6 GTE

PIPER CAMS

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|--------------------------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| A13BP270H | FAST ROAD | 2000-6500 | 12 BHP | 272 deg | 272 deg | .444" 11.29mm | .444" 11.29mm | 28 - 64 64 - 28 | 108 deg | N/A | N/A | HYDRAULIC | |
| A13BP270Hi | FAST ROAD For use in 1.4 injection engines | 2000-6000 | 10 BHP | 268 deg | 268 deg | .444" 11.29mm | .444" 11.29mm | 24 - 64 64 - 24 | 110 deg | N/A | N/A | HYDRAULIC | |
| A13BP285H | ULTIMATE ROAD For use with 2 x 40 DCOE's | 2200-6800 | 14 BHP | 280 deg | 280 deg | .487" 12.37mm | .487" 12.37mm | 33 - 67 67 - 33 | 107 deg | N/A | N/A | HYDRAULIC | |
| A13BP300H | RALLY Cam carrier requires skimming | 2800-7500 | | 300 deg | 300 deg | .475" 12.06mm | .475" 12.06mm | 44 - 76 76 - 44 | 106 deg | N/A | N/A | HYDRAULIC | |
| A13BP320M | RACE 1.3 Stock Rod | 3500-8000 | | 300 deg | 300 deg | .485" 12.32mm | .485" 12.32mm | 44 - 76 76 - 44 | 106 deg | N/A | N/A | .008" / .20mm .010" / .25mm | |
| A13743 | RACE 1.4 Stock Rod | 3500-8000 | | 300 deg | 308 deg | .465" 11.81mm | .465" 11.81mm | 44 - 76 80 - 48 | 106 deg | N/A | N/A | .008" / .20mm .010" / .25mm | |

VAUXHALL OPEL / ASTRA / CAVALIER / CALIBRA / VECTRA 1.6i / 1.8i / 2.0i 8v J SERIES

Valve lifts quoted assume a rocker ratio of 1.69:1

| | | | | | | | | | | | | |
|------------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----|-----|--------------------------------|
| A18BP270HA | FAST ROAD | 2000-6500 | 10 BHP | 272 deg | 272 deg | .444" 11.29mm | .444" 11.29mm | 28 - 64 64 - 28 | 108 deg | N/A | N/A | HYDRAULIC |
| A18BP270HB | FAST ROAD For use in SRI 130 | 2000-6500 | 10 BHP | 276 deg | 268 deg | .465" 11.81mm | .444" 11.29mm | 28 - 68 64 - 24 | 110 deg | N/A | N/A | HYDRAULIC |
| A18BP285H | ULTIMATE ROAD For use with 2 x DCOE's | 2200-6800 | 14 BHP | 280 deg | 280 deg | .490" 12.45mm | .490" 12.45mm | 33 - 67 67 - 33 | 107 deg | N/A | N/A | HYDRAULIC |
| A18BP300M | RALLY Mechanical | 3000-7600 | | 300 deg | 300 deg | .513" 13.03mm | .513" 13.03mm | 44 - 76 76 - 44 | 106 deg | N/A | N/A | .008" / .20mm .010" / .25mm |
| A18BP320M | RACE Mechanical | 3500-8000 | | 310 deg | 310 deg | .559" 14.20mm | .559" 14.20mm | 49 - 81 81 - 49 | 106 deg | N/A | N/A | .014" / .35mm .016" / .40mm |

CAM KITS

VAUXHALL / OPEL ASTRA / NOVA 1.2 / 1.3 / 1.4 / 1.6 GTE INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Hydraulic Adjusters | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------------------------|----------|-----------|---------------|---------------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBV13270H / 270HI / 285H | X | FOLAST | | ASTADJH | | | | | | | X |
| KBV13300H / 320H | X | FOLAST | VSSAST13 | ASTADJH | | | | | | | X |

VAUXHALL OPEL / ASTRA / CAVALIER / CALIBRA / VECTRA 1.6i / 1.8i / 2.0i 8v J SERIES INCLUDE:

| | | | | | | | | | | | |
|--------------------------|----------|--------|----------|---------|--|--|--|--|--|--|----------|
| KBV18270HA / 270HB / 285 | X | FOLAST | | ASTADJH | | | | | | | X |
| KBV18300H / 320H | X | FOLAST | VSSAST18 | ASTADJH | | | | | | | X |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDA13 - Vauxhall 1.3 alloy vernier pulley
 PULDGTE - Vauxhall 1.4/1.6 GTE vernier pulley
 PULDA18 - Vauxhall 1.8/2.0 alloy vernier pulley
 VSSAST18 - Vauxhall 1.6/1.8 single spring kit

ASTADJH - Vauxhall fwd hydraulic adjusters
 FOLAST - Vauxhall fwd cam follower set
 FOLASTM - Vaux fwd follower set for use with ASTADJH
 VSSAST13 - Vauxhall 1.3/1.4/1.6 single spring kit

TBP18 - Vauxhall 1.3 1980 on comp.cam belt
 TBP19 - Vauxhall 1.4/1.6 (104 tooth) comp.cam belt
 TBP20 - Vauxhall 1.4/1.6 (111 tooth) comp.cam belt
 TBP21 - Vauxhall 1.6/1.8/2.0 comp.cam belt

CAMSHAFTS VAUXHALL / OPEL CORSA / TIGRA 1.4 / 1.6 16v X14XE / X16XE**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|--|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| C16VBP270H | FAST ROAD | 1800-6800 | 10 BHP | 256 deg | 256 deg | .372" 9.45mm | .372" 9.45mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .032" 0.81mm | .032" 0.81mm | HYDRAULIC |
| C16VBP285H | ULTIMATE ROAD Not recommended for use with std injection. | 2000-7000 | 14 BHP | 264 deg | 264 deg | .395" 10.03mm | .395" 10.03mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .058" 1.47mm | .058" 1.47mm | HYDRAULIC |
| C16VBP300H | RALLY | 3000-7800 | | 280 deg | 278 deg | .450" 11.43mm | .435" 11.05mm | 34 - 66 65 - 33 | 106 deg | 106 deg | .108" 2.74mm | .098" 2.49mm | HYDRAULIC |
| C16VBP300M | RALLY | 3000-8000 | | 290 deg | 280 deg | .455" 11.56mm | .420" 10.67mm | 39 - 71 66 - 34 | 106 deg | 106 deg | .138" 3.51mm | .106" 2.69mm | .012" / .30mm .012" / .30mm |
| C16VBP320M | RACE | 4000-8500 | | 300 deg | 300 deg | .462" 11.73mm | .435" 11.05mm | 48 - 72 74 - 46 | 102 deg | 104 deg | .187" 4.75mm | .146" 3.71mm | .012" / .30mm .012" / .30mm |

VAUXHALL ASTRA / VX220 2.2 16v (ROLLER ROCKER TYPE) Z22SE

Valve lifts quoted assume a rocker ratio of 1.72:1

| | | | | | | | | | | | | | |
|-----------|------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----|-----|-----------|
| VX22BP270 | FAST ROAD | 2000-6800 | 10 BHP | 260 deg | 260 deg | .423" 10.74mm | .423" 10.74mm | 23 - 63 63 - 23 | 110 deg | 110 deg | N/A | N/A | HYDRAULIC |
|-----------|------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----|-----|-----------|

VAUXHALL / OPEL 1.8 - 2.0 ECOTEC 16v X18XE / X20XE

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| ECOBP270H | FAST ROAD | 1500-6500 | 10 BHP | 256 deg | 256 deg | .372" 9.45mm | .372" 9.45mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .032" 0.81mm | .032" 0.81mm | HYDRAULIC |
| ECOBP285H | ULTIMATE ROAD Not recommended for use with std injection | 2000-7000 | 14 BHP | 264 deg | 264 deg | .395" 10.03mm | .395" 10.03mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .058" 1.47mm | .058" 1.47mm | HYDRAULIC |
| ECOBP300H | RALLY | 3000-7800 | | 280 deg | 278 deg | .450" 11.43mm | .435" 11.05mm | 34 - 66 65 - 33 | 106 deg | 106 deg | .108" 2.74mm | .098" 2.49mm | HYDRAULIC |

CAM KITS**VAUXHALL / OPEL CORSA / TIGRA 1.4 / 1.6 16v X14XE / X16XE**

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|------------|----------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBC16V270H | X | FOLCOR | | | | | | | | | X |
| KBC16V285H | X | FOLCOR | VSSCOR | SSCOR | | SC63 | | | | | X |
| KBC16V300H | X | FOLCOR | VDSCOR | | | SC16 | | | | | X |

VAUXHALL / OPEL 1.8 / 2.0 X18XE / X20XE ECOTEC 16v INCLUDE:

| | | | | | | | | | | | |
|------------------|----------|--------|--------|--|--|------|--|--|--|--|----------|
| KBECO270H / 285H | X | FOLECO | | | | | | | | | X |
| KBECO285H | X | FOLECO | | | | | | | | | X |
| KBECO300H | X | FOLECO | VDSECO | | | SC58 | | | | | X |

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

SSCOR vauxhall X14XE X16XE spring seats

PULDCOR - Pr vauxhall corsa 16v alloy vernier pulleys

PULDECO - Pr vauxhall ecotec alloy vernier pulleys

TBP36 - Vauxhall Ecotec X18XE X20XE cam belt

SC63 - Vauxhall Corsa X14/X16XE 16v steel valve spring retainers

VSSCOR - Vauxhall corsa 16v single valve spring kit

VDSCOR - Vauxhall corsa 16v double valve spring kit

SC16 - Vauxhall corsa b 16v double valve spring retainers

SC58 - Vauxhall ecotec 1.8 16v steel valve spring retainers

CAMSHAFTS VAUXHALL / OPEL CORSA / ASTRA 1.8 ECOTEC 16v Z18XE

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|-------------|------------|----------------|----------|---------|-----------------|-----------------|--------------------|-----------|----------|-----------------|-----------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| Z18BP270 | FAST ROAD | 2000-6800 | 10 BHP | 240 deg | 244 deg | .347" 8.81mm | .344" 8.72mm | 10 - 50 52 - 12 | 110 deg | 110 deg | .017" 0.44mm | .010" 0.26mm | HYDRAULIC |

VAUXHALL / OPEL ASTRA / CAVALIER / CALIBRA 16v C20XE

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | | |
|-------------|-------------------|---|------------|---------|---------|------------------|------------------|--------------------|--------------------|---------|-----------------|-----------------|-----------------|--------------------------------|
| A16VBP270H | FAST ROAD | 1500-6700 | 15 BHP | 264 deg | 264 deg | .400" 10.16mm | .400" 10.16mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .042" 1.07mm | .042" 1.07mm | HYDRAULIC | |
| A16VBP270HT | FAST ROAD TURBO | For use in turbo engine | 1800-6500 | 15 BHP | 256 deg | 256 deg | .372" 9.45mm | .372" 9.45mm | 18 - 58 58 - 18 | 110 deg | 110 deg | .032" 0.81mm | .032" 0.81mm | HYDRAULIC |
| A16VBP285H | ULTIMATE ROAD | Not recommended for use with std injection. Piper valve springs (Part No VDSAST16) must be used | 2000-7200 | 20 BHP | 280 deg | 278 deg | .450" 11.43mm | .435" 11.05mm | 34 - 66 65 - 33 | 106 deg | 106 deg | .108" 2.74mm | .098" 2.49mm | HYDRAULIC |
| A16VBP300H | RALLY | Piper valve springs (Part No VDSAST16) must be used | 2600-7800 | | 280 deg | 280 deg | .455" 11.56mm | .455" 11.56mm | 34 - 66 66 - 34 | 106 deg | 106 deg | .115" 2.92mm | .115" 2.92mm | HYDRAULIC |
| A16VBP285M | ULTIMATE ROAD | Not recommended for use with std injection. Piper valve springs (Part No VDSAST16) must be used | 2000-7200 | 20 BHP | 280 deg | 268 deg | .437" 11.10mm | .427" 10.85mm | 34 - 66 60 - 28 | 106 deg | 106 deg | .108" 2.74mm | .074" 1.88mm | .008" / .20mm .010" / .25mm |
| A16VBP300M | RALLY | Piper valve springs (Part No VDSAST16) must be used | 3000-8000 | | 290 deg | 280 deg | .455" 11.56mm | .420" 10.67mm | 39 - 71 66 - 34 | 106 deg | 106 deg | .138" 3.51mm | .106" 2.69mm | .012" / .30mm .012" / .30mm |
| A16VBP320M | RACE | Piper valve springs (Part No VDSAST16) must be used | 4000-8500 | | 300 deg | 300 deg | .462" 11.73mm | .435" 11.05mm | 48 - 72 74 - 46 | 102 deg | 104 deg | .187" 4.75mm | .146" 3.71mm | .012" / .30mm .012" / .30mm |
| A16VHOTROD | RACE HOT ROD | Piper valve springs (Part No VDSAST16) must be used | 4000-8500+ | | 304 deg | 300 deg | .466" 11.80mm | .440" 11.18mm | 46 - 78 76 - 44 | 106 deg | 106 deg | .170" 4.32mm | .137" 3.48mm | .008" / .20mm .010" / .25mm |
| A16VPICKUP | RACE PICK UP | Piper valve springs (Part No VDSAST16) must be used | 3700-7800 | | 296 deg | 300 deg | .440" 11.18mm | .440" 11.18mm | 42 - 74 76 - 44 | 106 deg | 106 deg | .161" 4.09mm | .137" 3.48mm | .008" / .20mm .010" / .25mm |
| A16V2072 | RACE HOT ROD 2006 | Piper valve springs (Part No VDSAST16) must be used | 3700-7800 | | 284 deg | 276 deg | .450" 11.42mm | .420" 10.66mm | 40 - 64 62 - 34 | 102 deg | 104 deg | .129" 3.27mm | .101" 2.56mm | .008" / .20mm .010" / .25mm |

VAUXHALL ASTRA VXR 2.0 TURBO Z20LEH (Reprofiled spec also available but milder than blank option)

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|---------------------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| VXRBP270H | FAST ROAD (Blank cam spec only) | 1500-6700 | 15 BHP | 254 deg | 254 deg | .400" 10.16mm | .400" 10.16mm | 17 - 57 57 - 17 | 110 deg | 110 deg | .035" 0.89mm | .035" 0.89mm | HYDRAULIC |
|-----------|---------------------------------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|

CAM KITS

VAUXHALL / OPEL CORSA / ASTRA 1.8 ECOTEC 16v Z18XE

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|-----------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBZ18270H | X | FOLCOR | | | | | | | | | X |

VAUXHALL / OPEL ASTRA / CAVALIER / CALIBRA 16v C20XE C20LET*

| | | | | | | | | | | | |
|---------------------|---|-----------|----------|--|--|--|--|--|--|--|---|
| KBA16V270H / 270HT* | X | FOLAST16H | | | | | | | | | X |
| KBA16V285H / 300H | X | FOLAST16H | VDSAST16 | | | | | | | | X |

VAUXHALL ASTRA VXR 2.0 TURBO Z20LEH

| | | | | | | | | | | | |
|-----------|---|---------|--|--|--|--|--|--|--|--|---|
| KBVXR270H | X | FOLECOH | | | | | | | | | X |
|-----------|---|---------|--|--|--|--|--|--|--|--|---|

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDA20 - Pr Vaux 2.0 16v alloy vernier pulleys (round tooth)

PULDA20B - Pr Vaux 2.0 16v alloy vernier pulleys (square tooth)

VDSAST16 - Vauxhall 2.0 16v double valve spring kit

SC17 - Vauxhall 2.0 16v steel valve spring retainers

FOLAST16H - Vauxhall 16v hydraulic follower set

FOLAST16M - Vauxhall 16v comp.solid follower set

TBP42 -Vauxhall Corsa/Tigra B X14xe X16xe cam belt

TBP43 -Vauxhall Corsa C Z14xe Z18XE cam belt

TBP35 - Vauxhall 2.0 16v 93> competition cam belt (square tooth)

TBP22 - Vauxhall 2.0 16v >92 competition cam belt (round tooth)

CAMSHAFTS V.A.G. LUPO / POLO 1.6 16V (AVY,ARC)**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:92

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|-------------|------------|----------------|----------|---------|-----------------|-----------------|--------------------|-----------|----------|--------------------|-----|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| LUPOBP270R | FAST ROAD | 1500-6000 | 8 BHP | 254 deg | 236 deg | .386" 9.80mm | .378" 9.60mm | 20 - 54 45 - 11 | 107deg | 107deg | N/A | | HYDRAULIC |

V.A.G.POLO 1.4 16V (AFH) HYDRAULIC

| | | | | | | | | | | | | | |
|--------------|-----------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|--------|--------|-----------------|-----------------|-----------|
| POL16VBP270H | FAST ROAD | 1500-6700 | 8 BHP | 240 deg | 240 deg | .347" 8.80mm | .347" 8.80mm | 10 - 50 50 - 10 | 110deg | 110deg | .019" 0.48mm | .019" 0.48mm | HYDRAULIC |
|--------------|-----------|-----------|-------|---------|---------|-----------------|-----------------|--------------------|--------|--------|-----------------|-----------------|-----------|

V.A.G. GOLF / POLO 1400 8V INC G40 HYDRAULIC

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|---------------|-------------------------------------|-----------|---------|---------|------------------|------------------|--------------------|--------------------|-----------------|-----------------|-----------------|-----------|
| VPHBP270H | FAST ROAD | 1500-6700 | 8 BHP | 254 deg | 254 deg | .400" 10.16mm | .400" 10.16mm | 17 - 57 57 - 17 | 110 deg | .042" 1.07mm | .042" 1.07mm | HYDRAULIC | |
| G40BP270H | FAST ROAD | For use in G40 Supercharged engine. | 1800-6500 | 15 BHP | 252 deg | 274 deg | .372" 9.45mm | .433" 11.00mm | 16 - 56 67 - 27 | 110 deg | .032" 0.81mm | .078" 1.98mm | HYDRAULIC |
| VPHBP285H | ULTIMATE ROAD | 2000-7200 | 12 BHP | 268 deg | 268 deg | .428" 10.87mm | .428" 10.87mm | 26 - 62 62 - 26 | 108 deg | .069" 1.75mm | .069" 1.75mm | HYDRAULIC | |
| VPHBP300H | RALLY | 3000-7800 | | 280 deg | 280 deg | .433" 11.00mm | .433" 11.00mm | 34 - 66 66 - 34 | 106 deg | .098" 2.49mm | .098" 2.49mm | HYDRAULIC | |

V.A.G. GOLF GTI Mk1 MECHANICAL

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | |
|----------|---------------|-----------------------------|------------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|--------------------------------|
| GTIBP270 | FAST ROAD | 1800-6000 | 10 BHP | 276 deg | 276 deg | .420" 10.67mm | .420" 10.67mm | 30 - 66 66 - 30 | 108 deg | .102" 2.59mm | .100" 2.54mm | .008" / .20mm .010" / .25mm |
| GTIBP285 | ULTIMATE ROAD | 2200-6500 | 14 BHP | 280 deg | 280 deg | .430" 10.92mm | .428" 10.87mm | 34 - 66 66 - 34 | 106 deg | .119" 3.02mm | .117" 2.97mm | .010" / .25mm .012" / .30mm |
| GTIBP300 | RALLY | 3000-7300 | | 304 deg | 304 deg | .435" 11.05mm | .435" 11.05mm | 48 - 76 76 - 48 | 104 deg | .166" 4.22mm | .164" 4.17mm | .010" / .25mm .012" / .30mm |
| GTIBP320 | RACE | 3500-8000 | | 316 deg | 316 deg | .435" 11.05mm | .435" 11.05mm | 54 - 82 82 - 54 | 104 deg | .171" 4.34mm | .169" 4.29mm | .008" / .20mm .010" / .25mm |
| GTI528 | RACE HOT ROD | The ultimate oval race cam. | 4000-8500+ | 328 deg | 328 deg | .552" 14.02mm | .552" 14.02mm | 62 - 86 86 - 62 | 102 deg | .238" 6.04mm | .236" 5.99mm | .008" / .20mm .010" / .25mm |

CAM KITS**V.A.G. GOLF / POLO 1400 8V INC G40 INCLUDE:**

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|------------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBVG270H / 285H / 300H | X | FOLVWH | | | | | | | | | X |
| KBG40270H | X | FOLVWH | | | | | | | | | X |

V.A.G. GOLF GTI Mk1 MECHANICAL INCLUDE:

| | | | | | | | | | | | |
|---------------|---|--|--|--|--|--|--|--|--|---------|---|
| KBVG270 / 285 | X | | | | | | | | | PULDGTI | X |
|---------------|---|--|--|--|--|--|--|--|--|---------|---|

CAMSHAFTS V.A.G. GOLF GTI 1800 8v HYDRAULIC

PIPER CAMS

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|---------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|-----------------|--------------------|-----------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| GTIBP270H | FAST ROAD | 2000-6200 | 10 BHP | 260 deg | 260 deg | .428" 10.87mm | .428" 10.87mm | 22 - 58 58 - 22 | 108 deg | .069" 1.75mm | .069" 1.75mm | HYDRAULIC | |
| GTIBP285H | ULTIMATE ROAD | 2500-6800 | 15 BHP | 276 deg | 276 deg | .450" 11.43mm | .450" 11.43mm | 30 - 66 70 - 26 | 108 deg | .104" 2.64mm | .081" 2.06mm | HYDRAULIC | |
| GTIBP300H | RALLY | 3000-7500 | | 294 deg | 294 deg | .445" 11.30mm | .445" 11.30mm | 41 - 73 73 - 41 | 106 deg | .134" 3.40mm | .134" 3.40mm | HYDRAULIC | |

V.A.G. GOLF GTI Mk3 & NEW BEETLE 2.0 8v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | |
|-------------|-----------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|-----------|
| GTI20BP270H | FAST ROAD | 2000-6000 | 10 BHP | 256 deg | 264 deg | .417" 10.59mm | .428" 10.87mm | 18 - 58 62 - 22 | 110 deg | .043" 1.09mm | .063" 1.60mm | HYDRAULIC |
|-------------|-----------|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|-----------|

V.A.G. GOLF G60 SUPERCHARGED

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | |
|-----------|---------------|---|--------|---------|---------|------------------|------------------|--------------------|---------|-----------------|-----------------|-----------|
| G60BP270H | FAST ROAD | 2000-6000 | 12 BHP | 260 deg | 260 deg | .428" 10.87mm | .428" 10.87mm | 16 - 64 64 - 16 | 114 deg | .040" 1.01mm | .040" 1.01mm | HYDRAULIC |
| G60BP285H | ULITMATE ROAD | Ideal for use with pulley/chip kit 2400-6500 | 18 BHP | 268 deg | 268 deg | .438" 11.13mm | .438" 11.13mm | 20 - 68 68 - 20 | 114 deg | .042" 1.07mm | .042" 1.07mm | HYDRAULIC |

CAM KITS

V.A.G. GOLF GTI 1800 8v HYDRAULIC INCLUDE:

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|------------------------|------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBVG270H / 285H / 300H | X | FOLVWH | | | | | | | | | X |

V.A.G. GOLF Mk3 & NEW BEETLE 2.0 8v INCLUDE:

| | | | | | | | | | | | |
|-----------|---|--------|--|--|--|--|--|--|--|--|---|
| KBVG20270 | X | FOLVWH | | | | | | | | | X |
|-----------|---|--------|--|--|--|--|--|--|--|--|---|

V.A.G. GOLF G60 SUPERCHARGED INCLUDE:

| | | | | | | | | | | | |
|----------------|---|--------|--|--|--|--|--|--|--|--|---|
| KBG60270 / 285 | X | FOLVWH | | | | | | | | | X |
|----------------|---|--------|--|--|--|--|--|--|--|--|---|

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDGTI - VW Golf Gti 8v/G60 alloy vernier pulley

FOLVWH - VW Golf hydraulic cam follower set

TBP23 - VW Golf 1.5/1.6/1.8 comp.cam belt

TBP24 - VW Golf 2.0 competition cam belt

CAMSHAFTS V.A.G. GOLF GTI 1.8 / 2.0 16v**PIPER CAMS**

Valve lifts quoted assume a rocker ratio of 1:1

Many other profiles available

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|------------|---|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|-----------------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | with clearance Inl | Exh | |
| V16VBP270H | FAST ROAD | 2000-6500 | 12 BHP | 264 deg | 264 deg | .409" 10.39mm | .428" 10.87mm | 22 - 62 62 - 22 | 110 deg | 110 deg | .045" 1.14mm | .063" 1.60mm | HYDRAULIC |
| V16VBP285H | ULTIMATE ROAD Not recommended for use with std injection | 2500-7000 | 14 BHP | 274 deg | 276 deg | .433" 11.00mm | .450" 11.43mm | 29 - 65 66 - 30 | 108 deg | 108 deg | .088" 2.24mm | .104" 2.64mm | HYDRAULIC |
| V16VBP300H | RALLY | 3000-7500 | | 294 deg | 294 deg | .445" 11.30mm | .445" 11.30mm | 41 - 73 73 - 41 | 106 deg | 106 deg | .134" 3.40mm | .134" 3.40mm | HYDRAULIC |
| V16VBP300M | RALLY Mechanical followers part no.FOLV16VM req'd | 3000-7500 | | 280 deg | 280 deg | .440" 11.18mm | .438" 11.13mm | 34 - 66 66 - 34 | 106 deg | 106 deg | .120" 3.05mm | .118" 3.00mm | .008" / .20mm .010" / .25mm |
| V16VBP320M | RACE Mechanical followers part no.FOLV16VM req'd | 4000-8000 | | 290 deg | 290 deg | .460" 11.68mm | .458" 11.63mm | 43 - 67 69 - 41 | 102 deg | 104 deg | .175" 4.45mm | .163" 4.14mm | .010" / .25mm .012" / .30mm |

V.A.G. GOLF / VENTO VR6 12v

Valve lifts quoted assume a rocker ratio of 1:1

| | | | | | | | | | | | | | |
|-----------|---|-----------|--------|---------|---------|------------------|------------------|--------------------|---------|--|-----------------|-----------------|-----------|
| VR6BP270H | FAST ROAD | 1800-6000 | 15 BHP | 264 deg | 264 deg | .428" 10.87mm | .428" 10.87mm | 22 - 62 62 - 22 | 110 deg | | .063" 1.60mm | .063" 1.60mm | HYDRAULIC |
| VR6BP285H | ULTIMATE ROAD Not recommended for use with std injection | 2300-6500 | | 276 deg | 276 deg | .450" 11.43mm | .450" 11.43mm | 30 - 66 66 - 30 | 108 deg | | .104" 2.64mm | .104" 2.64mm | HYDRAULIC |
| VR6BP300H | RALLY | 2700-7000 | | 294 deg | 294 deg | .445" 11.30mm | .445" 11.30mm | 41 - 73 73 - 41 | 106 deg | | .134" 3.40mm | .134" 3.40mm | HYDRAULIC |

V.A.G. 1.8T 20v

Valve lifts quoted assume a rocker ration of 1:1

| | | | | | | | | | | | | | |
|-------------|--------------------------------|-----------|---------|---------|---------|-----------------|------------------|--------------------|---------|---------|-----------------|-----------------|-----------|
| AUD20TBP270 | FAST ROAD | 2000-6000 | 15 BHP | 252 deg | 246 deg | .325" 8.26mm | .380" 9.66mm | 14 - 58 55 - 11 | 112 deg | 112 deg | .021" 0.53mm | .024" 0.60mm | HYDRAULIC |
| AUD20TBP285 | ULTIMATE ROAD | 2500-6500 | 20+ BHP | 256 deg | 252 deg | .342" 8.69mm | .407" 10.34mm | 18 - 58 56 - 16 | 110 deg | 110 deg | .024" 0.60mm | .021" 0.53mm | HYDRAULIC |
| AUD20TBP300 | COMPETITION / TRACK DAY | 3500-7500 | | 264 deg | 268 deg | .350" 8.89mm | .433" 11.00mm | 24 - 60 64 - 24 | 108 deg | 110 deg | .045" 1.13mm | .064" 1.62mm | HYDRAULIC |

CAM KITS**V.A.G. GOLF GTI 1.8 / 2.0 16v INCLUDE:**

| Part No. | Cams | Followers | Valve Springs | Spring Seats | Stem Seals | Spring Caps | Spray Bar | Ball Studs | Timing Belt | Vernier Pulley | Timing Disc & Lube |
|--------------------------|----------|-----------|---------------|--------------|------------|-------------|-----------|------------|-------------|----------------|--------------------|
| KBV16V270H / 285H / 300H | X | FOLVW16H | | | | | | | | | X |

V.A.G. GOLF / VENTO VR6 INCLUDE:

| | | | | | | | | | | | |
|-------------------------|----------|---------|--|--|--|--|--|--|--|--|----------|
| KBVR6270H / 285H / 300H | X | FOLVR6H | | | | | | | | | X |
|-------------------------|----------|---------|--|--|--|--|--|--|--|--|----------|

(Please note on repro option profiles may vary from specs listed)

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

PULDV16V - VW Golf 16v alloy vernier pulley
PULSV16V - VW Golf 16v internal vernier sprocket
FOLVW16H - VW Golf 16v hydraulic cam follower set
FOLVW16M - VW Golf 16v comp.solid cam follower set
FOLVR6H - VW Golf VR6 hydraulic cam follower set

PULDV20V - VW / AUDI 1.8T 20v alloy vernier pulley
TBP40 - Early VAG 1.8T 20v comp.cam belt
TBP41 - Late VAG 1.8T 20v comp.cam belt
TBP25 - VW Golf 1.8 16v comp.cam belt
TBP29 - VW Golf 2.0 16v comp.cam belt

CAMSHAFTS V.A.G 5 CYLINDER 10V

PIPER CAMS

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|----------------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|-----------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| VB18BP270 | FAST ROAD | 1500-6000 | 10 BHP | 276 deg | 276 deg | .379" 9.63mm | .377" 9.58mm | 28 - 68 68 - 28 | 110 deg | 110 deg | .054" 1.36mm | .052" 1.31mm | .012" / .30mm .014" / .35mm |
| VB18BP285 | ULTIMATE ROAD | 2000-6500 | 14 BHP | 280 deg | 280 deg | .426" 10.81mm | .424" 10.76mm | 32 - 68 68 - 32 | 108 deg | 108 deg | .097" 2.45mm | .095" 2.40mm | .017" / .43mm .019" / .48mm |
| VB18BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .444" 11.27mm | .442" 11.22mm | 44 - 76 76 - 44 | 106 deg | 106 deg | .124" 3.14mm | .122" 3.09mm | .017" / .43mm .019" / .48mm |

VOLVO B18

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|-----------|----------------------|------------|----------------|----------|---------|------------------|------------------|--------------------|-----------|----------|-----------------|-----------------|--------------------------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| VB18BP270 | FAST ROAD | 1500-6000 | 10 BHP | 276 deg | 276 deg | .379" 9.63mm | .377" 9.58mm | 28 - 68 68 - 28 | 110 deg | 110 deg | .054" 1.36mm | .052" 1.31mm | .012" / .30mm .014" / .35mm |
| VB18BP285 | ULTIMATE ROAD | 2000-6500 | 14 BHP | 280 deg | 280 deg | .426" 10.81mm | .424" 10.76mm | 32 - 68 68 - 32 | 108 deg | 108 deg | .097" 2.45mm | .095" 2.40mm | .017" / .43mm .019" / .48mm |
| VB18BP300 | RALLY | 3000-7000 | | 300 deg | 300 deg | .444" 11.27mm | .442" 11.22mm | 44 - 76 76 - 44 | 106 deg | 106 deg | .124" 3.14mm | .122" 3.09mm | .017" / .43mm .019" / .48mm |
| VB18BP320 | RACE | 3700-7500 | | 314 deg | 314 deg | .506" 12.86mm | .504" 12.81mm | 53 - 81 81 - 53 | 104 deg | 104 deg | .180" 4.56mm | .178" 4.51mm | .016" / .40mm .018" / .45mm |

VOLVO T5

Valve lifts quoted assume a rocker ratio of 1:1

| Part No. | Application | Power Band | Power Increase | Duration | Duration | Valve Lift | Valve Lift | Timing | Full Lift | Full Lift | Lift @ TDC | Lift @ TDC | Valve Clearance |
|----------|------------------|------------|----------------|----------|----------|-----------------|-----------------|--------------------|-----------|-----------|-----------------|-----------------|-----------------|
| | | | | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl | Exh | |
| V5BP270H | FAST ROAD | 1800-6500 | 15 BHP | 240 deg | 240 deg | .348" 8.84mm | .348" 7.87mm | 10 - 50 50 - 10 | 110 deg | 110 deg | .017" 0.22mm | .017" 0.22mm | HYDRAULIC |

ADDITIONAL COMPONENTS FOR ABOVE ENGINES:

FOLVB18 - SET VOLVO B18 CAM FOLLOWERS £63

VDSB18 - SET VOLVO B18 DOUBLE VALVE SPRING KIT INC CAPS & SEATS £147

(Please note on repro option profiles may vary from specs listed)

SC40 - SET VOLVO B18 SPRING CAPS £42

SSB18 - SET VOLVO B18 SPRING SEATS £34

MISCELLANEOUS ITEMS

MITSHLA MITSUBISHI EVO HD HYDRAULIC ADJUSTERS
 MITSADJM MITSUBISHI EVO MECHANICAL ADJUSTERS
 ASTADJH ASTRA HYDRAULIC ADJUSTERS
 BSTUD FORD SOHC BALL STUDS STD LENGTH
 BSTUD33 FORD SOHC BALL STUDS 33MM LONG
 COSWASH COSWORTH YB 5mm THRUST SPACER
 DISC TIMING DISC
 LUBE BOTTLE OF CAM LUBE
 MINKEY2 A SERIES 2 DEG OFFSET KEY
 MINKEY4 A SERIES 4 DEG OFFSET KEY
 MINKEY6 A SERIES 6 DEG OFFSET KEY
 PLATES K SERIES VVC CONVERSION PLATE KIT
 PRODISC PROFESSIONAL 10" DIA ALLOY T/DISC
 PULDAUX FORD SOHC ALLOY AUX DRIVE PULLEY

SBAR FORD SOHC SPRAY BAR
 SSCVH CVH COMBINED SPRING SEATS & SEALS
 SSDUR DURATEC SPRING SEATS
 SSB18 VOLVO B18 SPRING SEATS
 TCMIN A SERIES DUPLEX TIMING CHAIN
 TCOP OPEL CIH DUPLEX TIMING CHAIN
 TCV8 ROVER V8 DUPLEX TIMING CHAIN
 TCXF FORD XFLOW DUPLEX TIMING CHAIN
 VSOXE VAUX/OPEL VALVE STEM OIL SEALS
 VSODUR DURATEC OIL SEALS
 VSOHC FORD SOHC VALVE STEM OIL SEALS
 XFDOW3 FORD XFLOW 3 DEG OFFSET DOWEL
 XFDOW7 FORD XFLOW 5 DEG OFFSET DOWEL
 XFDOW9 FORD XFLOW 7 DEG OFFSET DOWEL



Audi

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|-----------|--|
| EX925043F | FPA123 AUDI TURBO DRAIN GASKET |
| C4247-051 | VW/AUDI 1800/2000CC 83MM.051" MLS HEAD GASKET |
| C4246-051 | VW/AUDI 1800/2000CC 85MM.051" MLS HEAD GASKET |
| C4541-051 | VW/AUDI 2.0L 16v 2005+ BWA/BPY 83.5mm BORE 0.051" MLS HEAD G |

Austin Rover

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|--------------|--|
| C4146-030 | AUSTIN MINI 1300CC 73MM BORE .030" MLS HEAD GASKET |
| C4146-040 | AUSTIN MINI 1300CC 73MM BORE.040" MLS HEAD GASKET |
| C4146-120 | AUSTIN MINI 1300cc 73mm BORE 0.120" MLS HEAD GASKET |
| C4148-040 | MG MIDGET 1275CC 74MM BORE.040" MLS HEAD GASKET |
| C4147-040 | MGB 4 CYL 75-80 HEAD 83MM.040" MLS |
| H0525SP7030S | AUSTIN MINI 1300CC 73.5MM BORE.030" MLS-NO WATER HOLES" |
| H0525SP3030S | AUSTIN MINI 1300cc 73.5mm BORE 0.030" MLS-WITH WATER HOLES |
| H0525SP3040S | AUSTIN MINI 1300cc 73.5MM BORE .040" MLS HEAD GASKET |
| H0525SPA030S | AUSTIN MINI 1300cc 72.50MM BORE .030" THICKNESS |
| H0525SPA040S | AUSTIN MINI 1300cc 72.50MM BORE .040" MLS HEAD GASKET |
| H0794SP7040S | MGB 1975-80 83.50MM BORE .040" MLS HEAD GASKET |

BMW

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|---------------|---|
| C4293-051 | BMW 1766/1990cc 72-88 90MM.051" MLS M10 ENGINE |
| C4308-027 | BMW MINI COOPER 78.5MM.027" MLS HEAD GASKET |
| C4328-120 | BMW M50B25/M52B28 85MM BORE MLS HEAD GASKET |
| C4329-070 | BMW B30/B32 Z3/M3 87MM BORE .070" MLS 5LYR H/GASKET |
| C4348-060 | BMW 318/Z3 M42/M44 89-98 85mm BORE 0.060" MLS-5 HEAD GASKET |
| C4348-080 | BMW 318/Z3 M42/M44 89-98 85mm BORE 0.080" MLS-5 HEAD GASGET |
| H1867SPD051XP | BMW M10 / M12 72-88 90MM BORE .051" MLS FWP |
| H1867SPG051XP | BMW M10/M12 90.00MM .051" MLS HEAD GASKET |

Coventry Climax

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|-----------|--|
| C4139-043 | COVENTRY CLIMAX 1.2&1.5L 78MM.043" CFM-20 MODEL FWB/E" |
| C4267-059 | COVENTRY CLIMAX 2L FPF 82MM.059" CFM-20 HEAD GASKET" |
| C4229-043 | COVENTRY CLIMAX 2L OB 80MM.043" CFM-20 MODEL FWA/B/E" |

Fiat

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|-----------|---|
| C4124-040 | FIAT/LANCIA DELTA 85MM BORE.040" GASKET |
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Ford

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|--------------|--|
| C4218-040 | FORD PINTO SOHC 2L 92.5MM.040" MLS STANDARD HEAD GASKET |
| C4279-027 | FORD FOCUS/CONTOUR/ZX2 87MM.027" MLS 2L-ZETEC HEAD GASKET" |
| C4280-040 | FORD FOCUS ZX2 87MM |
| C4138-040 | COSWORTH 4 VALVE FVC/FVA .040" MLS 87mm BORE |
| C4350-051 | FORD COSWORTH YB 92.5MM MLS.051" MLS PERFORMANCE GROUP A |
| C4350-070 | FORD COSWORTH YB 92.5M MLS.070" GPA MLS-5 LAYER HEAD" |
| C4494-040 | COSWORTH FORD BDG 2L .040" MLS HEAD GASKET |
| C5756-051 | FORD 1.6&1.8L CVH 83MM.051" MLS HEAD GASKET |
| C5756-070 | FORD 1.6 & 1.8 CVH 83MM |
| H1267SP1040S | FORD PINTO SOHC 2L 94.5MM.040" MLS STANDARD HEAD GASKET |
| C4248 | FORD/COSWORTH YB CASE KIT.060" AFM |
| VC051060AFM | FORD/COSWORTH YB VALVE COVER.060" AFM |
| H2389030S | FORD DURATECH 2.3L 90MM.030" MLS HEAD GASKET |
| H2264SP6030S | FORD DURATECH 2.3L 90MM.030" MLS W/12MM STUD HOLES" |
| C4174 | FORD/COS/LOTUS BDA CASE KITBELT DRIVEN DOHC 16V |
| C4271 | FORD COS/LOTUS FVC.FVA CASE KIT |
| WP126060AFM | FORD/COS/LOTUS 4 CYL THERMO |
| WP156060AFM | FORD PINTO/PB THERMOSTAT GASKET .060" AFM |

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|--------------|---|
| TC003060AFM | FORD/COS/LOTUS 4 CYL TIMING COVER .060" AFM |
| C4491 | FORD/LOTUS TWIN CAM CASE KIT |
| C4350-080 | COSWORTH YB 92.5mm BORE .080" MLS GPA |
| C4353-064 | FORD / COSWORTH BDA 4-BOLT EXH GASKET .064 AM |
| C4354-064 | FORD / COSWORTH BDA 3-BOLT EXH GASKET .064 AM |
| H2389050S | FORD DURATEC 2.0/2.3 90MM BORE .050" MLS |
| H2389SP2030S | FORD DURATEC 86mm BORE .030" MLS HEAD GASKET |
| H2389SP3060S | FORD DURATEC 90.00MM BORE .060" MLS-5 LAYER HG 12MM STUDS |
| OP083060AFM | FORD/COS/LOTUS BDA OIL PUMP .060" AFM GASKET |
| H1908SP2140S | FORD 1.6/1.8 CVH 84MM BORE .140" MLS-5 HEAD GASKET |
| EC570060AFM | FORD COS 4 CYL REAR COVER .060" AFM GASKET |
| EX1165064AM | SWEDISH DURATEC TURBO .064" AM EXHAUST GASKET |
| EX785SP3094C | FORD DURATEC COPPER EXHAUST GASKET .094" |

Honda

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|-----------|--|
| C4250-051 | HONDA CRV 97 - 02 85mm BORE 0.051" MLS HEAD GASKET B20 MOTOR |
| C4255-030 | HONDA PRELUDE 87MM '92-96'2.2LTR VTEC .030"MLS HEAD H22" |
| C8702-027 | HON CBR1000RR 04-07 75MM BORE.027" MLS HEAD GASKET |
| C8499 | HON CBR1100XX 97-03 81MM BORE.030" MLS HEAD GASKET |
| C8736 | HON CBR600RR 07 68.5MM BORE.027" MLS HEAD GASKET (STOCK) |
| C7826 | HONDA TRX400/XR440 '96-'05 89MM |
| C4313-030 | HONDA K20 / K24 89mm BORE 0.030" MLS HEAD GASKET |
| C8702-018 | HONDA CBR1000RR 07-07 75MM BORE 0.018" MLS |
| C8736-018 | HONDA CBR600RR 07-10 68.5MM BORE .018 MLS HG |

Jaguar

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|---------------|--|
| H1763SP1040XP | JAG 3.8L 6 CYL 89MM BORE.040" MLS HEAD GASKET |
| H1763SP1051XP | JAG 3.8L 6 CYL 89MM BORE.051" MLS HEAD GASKET |
| H1762SP2040XP | JAG 3.4L 6 CYL 85MM BORE.040" MLS HEAD GASKET |
| H1762SP3040XP | JAG 3.4L 6 CYL 84MM BORE.040" MLS HEAD GASKET |
| H1763SP1040XP | JAG 3.8L 6 CYL 89MM BORE.040" MLS HEAD GASKET |
| VC053060AFM | JAG 3.4/3.8/4.2L CAM COVER.060" TRIM TO FIT ALL MODELS |
| WP132060AFM | JAG 3.4/3.8L THERMOSTAT COVER.060" AFM GASKET |
| C4127-040 | JAG 4.2L 6 CYL 68- BORE 3.690" 0.040" MLS W/BOLT HOLE POCKET |
| C4128-040 | JAG 4.2L 6 CYL 68- BORE 3.670" 0.040" MLS W/BOLT HOLE POCKET |
| C4220-059 | JAG 4.2L 6 CYL 68- 93MM BORE 0.059"CFM-20 HEAD GASKET |
| C4306-060 | JAG 3.4L 6 CYL 89MM BORE .060" MLS-5 HEAD GASKET |
| C4338-059 | JAG 4.2L SERIES-1 65-67 93MM BORE 0.059"CFM-20 |
| IR315060AFM | JAGUAR 3.8/4.2 STR PORT AFM INTAKE GASKET |
| IR326060AFM | JAGUAR 3.4/3.8 B TYPE HEAD AFM INTAKE GASKET |

Kawasaki

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|-----------|--|
| C8570 | KAW ZX-9R 00-03 77MM BORE.027" MLS HEAD GASKET |
| C8460-018 | KAW ZX-14 06-UP 84MM BORE.018" MLS HEAD GASKET |

Lancia

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|-----------|---|
| C4124-040 | FIAT/LANCIA DELTA 85MM BORE.040" GASKET |
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Lotus

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|---------------|--|
| C4133-030 | LOTUS 4 CYL 85MM BORE 0.030" MLS HEAD GASKET |
| C4133-040 | LOTUS 4 CYL 85MM BORE 0.040" MLS HEAD GASKET |
| C4142-030 | LOTUS 4 CYL 86MM BORE 0.030" MLS HEAD GASKET |
| C4142-040 | LOTUS 4 CYL HEAD GASKET 86MM.040 MLS |
| C4103-040 | LOTUS 4 CYL HEAD GASKET 83MM.040 MLS |
| H04645P9040XP | LOTUS TWIN CAM 84MM HEAD.040" XP W/NONEMBOSSED CENTER" |
| C4271 | FORD COS/LOTUS FVC.FVA CASE KIT |
| WP126060AFM | FORD/COS/LOTUS 4 CYL THERMO |
| TC003060AFM | FORD/COS/LOTUS 4 CYL TIMING COVER .060" AFM |



Lotus

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| C4491 | FORD/LOTUS TWIN CAM CASE KIT |
| C4355-064 | LOTUS T/C EXH 1.3" DIA .064" ARMOUR 400 |

Mitsubishi

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|-----------|--|
| C4233-051 | MIT 4G63T 85.5MM .051"MLS*ECLIPS.GALANT.LANCER THRU EVO3 |
| C4234-051 | MITSUBISHI EVO 86MM BORE .051" MLS HEAD GASKET |
| C4156-051 | MIT LANCER EVO4-8 86MM BORE.051" MLS 4G63 MOTOR 96-UP* |
| C4243-051 | MIT 6G72/6G72D4 V-6 93MM.051" MLS DIAMANTE. 3000GT |

Nissan

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|--------------|--|
| C4130-040 | NIS SR20DE/DET 88.5MM FWD.040 MLS W/ NO EXTRA OIL HOLES |
| C4283-051 | NISS SR20 DE/DET S14 88.5mm BORE 0.051" MLS W/BOTH ADD. OIL |
| C4283-066 | NISS SR20DE/DET S14 88.5mm BORE 0.066" MLS-5 BOTH ADD OIL HO |
| C4318-051 | NIS RB-25 6 CYL 87MM.051" MLS HEAD GASKET |
| C4318-060 | NIS RB-25 6 CYL 87mm BORE 0.060" MLS HEAD GASKET |
| C4320-051 | NIS RB-26 6 CYL 87MM.051" MLS HEAD GASKET |
| SCRM29255 | NISSAN VG30DE 90-96 REAR MAIN SEAL |
| SCTC12400 | NISSAN KA24DE 91-98 FRONT CRANK SEAL |
| PRO2018B | NISSAN CA18DET 89-93 BOTTOM END GASKET KIT |
| PRO2018T | NISSAN CA18DET 89-93 84MM TOP END GASKET KIT |
| C4480-051 | NISSAN CA18 DOHC 84-87 85MM BORE SKY/SUN/200SX .051" |
| H1796SPC045S | NISSAN SR20DE/DET 90mm BORE EPPLOGO 0.045" MLS W/BOTH ADD OI |

Peugeot

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|-----------|---|
| C4227-051 | PEUGEOT 405 M16 86.5MM BORE 0.051" MLS |
| C4228-051 | PEUGEOT 405 M16 88MM BORE 0.051" MLS |
| C4225-051 | PEUG P405 M-16 84MM.051" MLS HEAD GASKET |
| C4493-060 | PEUGEOT 106 16V 97-05 79MM.060" MLS-5 1.6L TU5J4 MOTOR* |

Porsche

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|-----------|--|
| C4272-040 | PORSCHE 944 2.5L 100.5MM.040" MLS HEAD GASKET |
| C4149-050 | PORSCHE 924 HD GSKT 88MM.050" COPPER HEAD GASKET |

Renault

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|-----------|---|
| C4519-030 | RENAULT CLIO16V 1.8/2.0 84.5MM.030" MLS HEAD F4P / F4R MOTOR* |
| C4540-051 | RENAULT CLIO 16V 1.8/2.0 84MM.051" MLS '89-99' F7P/F7R MOTR* |
| C4518-030 | RENAULT CLIO 16V F4P/F4R 1.8/2.0 83mm BORE 0.030" MLS HEAD G |

Rover

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|-----------|---|
| C4367-040 | ROV V8 89MM BORE.040" MLS 14 BOLT HEAD 70-93" |
| C4366-040 | ROV V8 89MM BORE.040" MLS 10 BOLT HEAD 94-UP" |

Suzuki

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|-----------|--|
| C8302 | SUZ GSX-R600 06-07 68MM BORE.027" MLS HEAD GASKET |
| C8302-018 | SUZ GSX-R600 06-07 68MM BORE.018" MLS HEAD GASKET |
| C8717 | SUZ GSX-R750 06-07 70MM.027" MLS HEAD GASKET |
| C8717-018 | SUZ GSX-R750 06-07 70MM BORE.018" MLS HEAD GASKET |
| C8214 | SUZ GSXR750/1000 '00-'08 75MM.030" MLS HEAD GASKET |
| C8214-018 | SUZ GSXR750/1000 '00-'08 75MM.018" MLS HEAD GASKET |
| C8656 | SUZ GSX1300R BUSA 99-UP 81MM.030" MLS HEAD GASKET |
| C8656-018 | SUZ GSX1300R BUSA 99-UP 81MM.018" MLS HEAD GASKET |
| C8660 | SUZ GSX1300R BUSA 99-UP 82MM.030" MLS HEAD GASKET |
| C8657 | SUZ GSX1300R BUSA 99-UP 83MM.030" MLS HEAD GASKET |
| C8657-018 | SUZ GSX1300R BUSA 99-UP 83MM.018" MLS HEAD GASKET |
| C8658 | SUZ GSX1300R BUSA 99-UP 84MM.030" MLS HEAD GASKET |

More Cometic gaskets are being added all of the time, see our website for the latest applications.

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| C8659 | SUZ GSX1300R BUSA 99-UP 85MM.030" MLS HEAD GASKET |
| C8659-018 | SUZ GSX1300R BUSA 99-UP 85MM.018" MLS HEAD GASKET |
| C8585 | SUZ GSX1300R BUSA 99-UP BASE 010" S/S GASKET 1299-1360CC* |
| C8742 | SUZ GSX-R600 06-08 750 06-08ENGINE CASE REBUILD KIT |
| C8752AFM | SUZ GSXR1000 2007-08 AFMENGINE CASE REBUILD KIT |
| C8587AFM | SUZ GSX1300R BUSA 99-UPAFM ENGINE CASE REBUILD KIT |
| EC945032AFM | SUZ GSXR750/1000 '04-'05 CAM.032" AFM CHAIN TENSIONER GSKT |
| OP269060AFM | SUZ GSX-R1000 07-08 OIL PAN.060" AFM GASKET |
| C8772-018 | SUZUKI GSXR1000K9 - L2 74.5MM BORE MLS GASKETS |

Subaru

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|-----------|--|
| C4261-045 | SUB EJ20GN TURBO 93MM.045" MLS GSK-DOHC 16V TURBO* |
| C4263-051 | SUB EJ22E TURBO 98MM.051" MLS GSK SOHC 16V TURBO |

Toyota

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|-----------|---|
| C4314-040 | TOYOTA 3S-GE/3S-GTE 87MM 87-97.040" MLS HEAD GASKET |
| C4276-060 | TOYOTA 2ZZ SUPRA 93- 87MM BORE MLS HEAD GASKET |
| C4278-066 | TOYOTA SUPRA' 87-'92' 84MM BORE |
| C4278-080 | TOYOTA SUPRA 7MGTE 87-92 84mm BORE 0.080" MLS-5 HEAD GASKET |
| C4170-040 | TOY 4AG-GE 81MM BORE.040" MLS HEAD GASKET |
| C4166-040 | TOY 4AG-GE 83MM.040" MLS HEAD GASKET |

Toyota

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|-----------|---|
| C4275-051 | TOYOTA SUPRA' 87-'92' 86MM.051" MLS 7MGTE MOTOR |
| C4413 | TOY 4AGE 88-91 COMP KITW/O HEAD GASKET |

Vauxhall

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|-----------|---|
| C4129-059 | VAUXHALL/OPEL 2.3 4 CYL 99MM BORE .059" CFM HG |
| C4257-051 | VAUXHALL/OPEL 16 V 1.6L 82MM.051" MLS HEAD GASKET |
| C4216-051 | VAUXHALL 16 VALVE 2L 88MM.051" MLS HEAD GASKET |
| C4216-070 | VAUXHALL 16 VALVE 2L 88MM.070" MLS 5-LAYER GASKET* |
| C5768-040 | GM ECOTEC 2.2L DOHC 87MM.040" MLS HEAD-L61/L42 MOTOR* |

Volkswagen

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|-----------|--|
| C4247-051 | VW/AUDI 1800/2000CC 83MM.051" MLS HEAD GASKET |
| C4246-051 | VW/AUDI 1800/2000CC 85MM.051" MLS HEAD GASKET |
| C4541-051 | VW/AUDI 2.0L 16v 2005+ BWA/BPY 83.5mm BORE 0.051" MLS HEAD G |

Volvo

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|--------------|---|
| C4289-045 | VOLVO B20A/E/F MOTOR 92MM.045" MLS HEAD GASKET 1968-UP* |
| C4288-045 | VOLVO B20A/E/F MOTOR 90MM BORE .045" MLS H/GASKET |
| C4287-045 | VOLVO B18A/B/D MOTOR 86MM.045" MLS HEAD GASKET 1961-68" |
| H1840SP3040S | VOLVO B18A/B/D MOTOR 89MM BORE.040"MLS HG |

Yamaha

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|--------------|--|
| EC1152032AFM | YAM YZF-R6 06-07 CAM CHAIN.032" AFM TENSIONER GASKET |
| C8285 | YAM FJ1100.1200 LEGEND APPROVE 77.5MM 1195THRU1202CC S/S |
| C8146 | YAM FJ1100/1200 ENG. CASE KITLEGEND APPROVED |
| C8686 | YAM R1 '04-'05 78MM HEAD.018" MLS |
| C8710 | YAM YZF-R6 06-08 68MM BORE.027" MLS HEAD GASKET |
| C8720 | YAM YZF-R6 06-08 ENGINE CASEREBUILD KIT |
| OP201032AFM | YAM YZF-R6 06-07 OIL PAN.032" AFM GASKET |
| C8612AFM | YAM YZF600R 1999-01 KITENGINE CASE REBUILD |
| C8683 | YAMAHA R6 03-05 ENGINE CASE REBUILD KIT |
| C8688 | YAMAHA R1 04-05 ENGINE CASE REBUILD KIT |
| H2258030S | YAMAHA R1 '04-'06' 78MM BORE .030 MLS HEAD GASKET |
| C8710-18 | YAMAHA YZF-R6 06-08 68mm BORE 0.018" MLS HEAD GASKET |
| C8710-27 | YAMAHA YZF-R6 06-08 68mm BORE 0.027" MLS HEAD GASKET |
| C8794 | YAMAHA YZF R1 09-10 79MM BORE 018" THICK MLS |
| C8796 | YAMAHA YZF R1 09-10 .010" RC BASE GASKET |

CAM FOLLOWERS

| PART NO. | DESCRIPTION | PART NO. | DESCRIPTION |
|-----------------|---|-----------------|------------------------------|
| ALFA | | RENAULT | |
| FOLAR16V | ALFA ROMEO 2.0 16v HYD | FOLCLIOH | CLIO 16V HYD |
| AUSTIN | | FOLCLIOM | CLIO 16V MECH |
| FOLAHR | HEALEY 3000 | ROVER | |
| BMC | | FOLKH | K SERIES HYD |
| FOLMIN | A SERIES | FOLKM | K SERIES MECH |
| FOLMINR | A SERIES RACE (with oil drain hole) | FOLKV6H | K SERIES V6 HYD |
| FOLB | POST '71 B SERIES 18v | FOLTH | T SERIES HYD |
| FOLB2 | PRE '71 B SERIES | FOLTM | T SERIES MECH |
| FORD | | FOLV8 | ROVER V8 HYD |
| FOLBDA | BDA | FOLV8M | ROVER V8 MECH |
| FOLCOSH | COSWORTH YB 16V HYD | TRIUMPH | |
| FOLCOSMGPA | COSWORTH YB 16V MECH | FOLT | 1.2/1.3/1.5 4 CYL |
| FOLCVH | CVH HYD | FOLT6 | 2.0/2.5 6 CYL |
| FOLST170 | FORD FOCUS ST170 & ZETEC R SOLID TAPPET 30.00MM | FOLTR4 | 2.0 /2.2 |
| FOLFN | PRE XFLOW NARROW STEM | VAG | |
| FOLFW | XFLOW 711M WIDE STEM | FOLAUD5 | AUDI 5 CYL 10V HYD |
| FOLOHC | OHC 1.6/2.0 | FOLVWH | 1.3/1.4/1.6/1.8/2.0 HYD |
| FOLV6 | V6 3.0 ESSEX | FOLVW16H | 16V HYD |
| FOLV6G | V6 2.3/2.8/2.9 GERMAN | FOLVW16M | 16V MECH |
| FOLZETAH | ZETEC E HYD | VAUXHALL | |
| FOLZETAM | ZETEC E MECH | FOLOP | 1.6/1.9/2.0 CIH MEC H |
| FOLZETAM31 | ZETEC 31mm MECH FOLLOWERS | FOLAST | ASTRA 1.3/1.8 FWD |
| FOLCOSMLS | COSWORTH YB LONG STEM MECH | FOLASTM | ASTRA FWD WITH ADJ HOLES |
| PEUGEOT | | FOLAST16H | ASTRA 2.0 16V HYD |
| FOLVTSH | 106 GTI / SAXO VTS 16V HYD | FOLAST16M | ASTRA 2.0 16V MECH |
| FOLVTSM | 106 GTI / SAXO VTS 16V MECH | FOLCOR | CORSA/TIGRA 1.4/1.6 16V HYD |
| FOLMi16H | 1.9 / 2.0 Mi16 16V HYD | FOLCORM | CORSA/TIGRA 1.4/1.6 16V MECH |
| FOLMi16M | 1.9 / 2.0 Mi16 16V MECH | VOLVO | |
| FOLGTI6H | 306 GTI6 HYD | FOLVB18 | B18 VOLVO |
| FOLGTI6M | 306 GTI6 MECH | | |
| FOLP13 | 205/106 1.3/1.4 | | |
| FOLP16 | 205/309 1.6/1.9 | | |
| FOLP206H | 206 GTI HYD | | |
| FOLP206M | 206 GTI MECH | | |

VERNIER PULLEYS (*Please see note)

PIPER CAMS

| PART NO. | DESCRIPTION | MATERIAL | PART NO. | DESCRIPTION | MATERIAL |
|-------------------|-----------------------------|----------|-----------------|--------------------------------------|----------|
| BMC | | | PEUGEOT | | |
| PULSMIN | A SERIES DUPLEX KIT | STEEL | PULDVTR | SAXO VTR | ALLOY |
| PULDMIN | A SERIES DUPLEX KIT | ALLOY | PULDVTS | PR SAXO VTS 16V | ALLOY |
| PULSB | B SERIES DUPLEX KIT | STEEL | PULDMI16 | PRMI16 | ALLOY |
| PULSBS | B SERIES CAM SPROCKET | STEEL | PULD205 | 106 1.4 & 205 1.3/1.6/1.9 gti | ALLOY |
| FIAT | | | PULD306TD | 306 1.9 TURBO DIESEL | ALLOY |
| PULDUNO | UNO TURBO/PUNTO/GT | ALLOY | PULDXSI | 2.0 8V Xsi | ALLOY |
| PULDX19 | X19/128 1300/1500 SOHC | ALLOY | PULDGTI6** | PR 306 GTI6 16V | ALLOY |
| PULDFTC | PR 1.6/1.8/2.0 TWIN CAM | ALLOY | PULD206 | PR 206 GTI | ALLOY |
| PULDFIRE | FIAT FIRE | ALLOY | PORSCHE | | |
| FORD | | | PULDPOR | PORSCHE 924 | ALLOY |
| PULDOHC | OHC 1.6.2.0 PINTO | ALLOY | RENAULT | | |
| PULDCVH | CVH 1.3/1.6 | ALLOY | PULSR5 | REN 5 GT TURBO | STEEL |
| PULSXF | XFLOW DUPLEX KIT | STEEL | PULDCLIO | PR CLIO 16V | ALLOY |
| PULDCOS | PR COSWORTH 16V | ALLOY | ROVER | | |
| PULDZETA | PR ZETEC 16V | ALLOY | PULSV8 | V8 DUPLEX KIT 3.5/3.9 only | STEEL |
| PULSDUR | PR DURATEC 16V | STEEL | PULDK | PR K SERIES | ALLOY |
| PULDFOC | PR FOCUS 16V | ALLOY | PULDT | PR T SERIES | ALLOY |
| PULDPUM | PUMA 1.7 16V EXH ONLY | ALLOY | TOYOTA | | |
| PULDST170 | FOCUS ST170 EXH ONLY | ALLOY | PULD3SG | PR TOYOTA 3SGE/3SGTE | ALLOY |
| HONDA | | | VAG | | |
| PULDVTEC | PR VTEC 1.6 16V | ALLOY | PULDAUD | AUDI 4 CYL 8V/ 5CYL 10V | ALLOY |
| JAGUAR | | | PULDGTI | GOLF 1.6/1.8/2.0 & G60/ AUDI 80 | ALLOY |
| PULSJAG | SET JAG V6 | STEEL | PULDV16V | GOLF 16V EXTERNAL PULLEY | ALLOY |
| HYUNDAI | | | PULSV16V | GOLF 16V INTERNAL SPROCKET | STEEL |
| PULDHYN | HYUNDAI ACCENT | ALLOY | PULDV20V | VAG 20V EXTERNAL PULLEY | ALLOY |
| MITSUBISHI | | | VAUXHALL | | |
| PULDMITS | PR MITSUBISHI EVO 4/5/6/7/8 | ALLOY | PULSOP | 1.6/1./2.0 C.I.H DUPLEX KIT | STEEL |
| PULDMITS9 | MITSUBISHI EVO 9 EXH ONLY | ALLOY | PULDA13 | 1.3 ASTRA / NOVA | ALLOY |
| NISSAN | | | PULDGTE | 1.4/1.6 GTE (ROUND TOOTH) | ALLOY |
| PULSSR20 | PAIR PULSAR GTIR | STEEL | PULDA18 | 1.6/2.0 ASTRA/ CAVALIER | ALLOY |
| | | | PULDA20 | PR C20 XE 2.0 16V UP TO '93 | ALLOY |
| | | | PULDA20B | PR C20 XE 2.0 16V '93 ON - LOW NOISE | ALLOY |
| | | | PULDCOR** | PR CORSA 16V | ALLOY |

** - These pulleys do not have sensor pick-ups, therefore are only recommended for vehicles with an ecu, triggered from elsewhere

* The default colour is BLACK please add R for RED or B for BLUE to the part number

VALVE SPRINGS & SPRING KITS

| PART NO. | APPLICATION | CAPS | SEATS | SEALS | TYPE | RATE | NOMINAL I.D. | NOMINAL O.D. | INSTALLED LENGTH | CRUSH HEIGHT | |
|--------------------------|------------------------------------|------|-------|-------|--------|--------|--------------|--------------|------------------|--------------|----------|
| AUSTIN | | | | | | | | | | | |
| VDSA6 | HEALEY 3000 | | | | DOUBLE | 286 lb | 18.80 mm | 33.00 mm | 39.00 mm | 21.92 mm | |
| BMC | | | | | | | | | | | |
| VDSEMIN2 | A SERIES | | | | DOUBLE | 223 lb | 16.00 mm | 29.10 mm | 35.00 mm | 22.02 mm | |
| VDSEMINR | A SERIES FULL RACE | | | | DOUBLE | 312 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm | |
| VSSB | B SERIES 18v post 71 | | | | SINGLE | 240 lb | 21.80 mm | 30.00 mm | 38.00 mm | 23.21 mm | |
| VDSB2 | B SERIES | | | | DOUBLE | 228 lb | 18.60 mm | 33.20 mm | 38.00 mm | 23.78 mm | |
| CITROEN / PEUGEOT | | | | | | | | | | | |
| VSSVTR | SAXO VTR (ROLLER TYPE) | | | | SINGLE | 233 lb | 20.00mm | 28.00mm | 37.50 mm | 24.80 mm | |
| VSSVTR2 | SAXO VTR (NON - ROLLER TYPE) | | | | SINGLE | 276 lb | 20.10mm | 28.30mm | 40.74 mm | 25.01 mm | |
| VDSVTS | SAXO VTS 16V | KIT | SC18 | YES | DOUBLE | 259 lb | 13.50mm | 25.10mm | 37.20 mm | 20.46 mm | |
| VSSP13 | PEUGEOT 1360cc | | | | SINGLE | 240 lb | 21.80 mm | 30.00 mm | 38.50 mm | 23.21 mm | |
| VDSP16 | PEUGEOT 1.6/1.9 RACE | KIT | SC35 | YES | DOUBLE | 286 lb | 18.80 mm | 33.00 mm | 39.00 mm | 21.92 mm | |
| VDSP306 | PEUGEOT 306 GTI 6 | KIT | SC14 | | DOUBLE | 312 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm | |
| VDSMI16 | PEUGEOT MI 16 | KIT | SC26 | | DOUBLE | 275 lb | 15.60 mm | 28.50 mm | 37.00 mm | 22.27 mm | |
| VSSP206A | PEUGEOT 206 GTI - SUIT HYD LIFTERS | KIT | SC27 | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm | |
| VSSP206B | PEUGEOT 206 GTI - SUIT MEC LIFTERS | KIT | SC28 | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm | |
| FIAT | | | | | | | | | | | |
| VDSFTC | TWIN CAM 8V | | | | DOUBLE | 278 lb | 18.05 mm | 31.65 mm | 37.10 mm | 20.30 mm | |
| VDSPUN | PUNTO GT TURBO | | | | DOUBLE | 278 lb | 18.05 mm | 31.65 mm | 37.10 mm | 20.30 mm | |
| FORD | | | | | | | | | | | |
| VSSNFV6 | V6 2.5/3.0 NOBLE-ST MONDEO | KIT | SC54 | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 34.65 mm | 23.50 mm | |
| VSSF | XFLOW | | | | SINGLE | 246 lb | 20.10 mm | 27.90 mm | 34.00 mm | 21.94 mm | |
| VDSF2 | XFLOW | KIT | SC9 | YES | DOUBLE | 264 lb | 18.35 mm | 31.70 mm | 32.10 mm | 20.00 mm | |
| VDSFR | XFLOW RACE | KIT | SC9 | | DOUBLE | 278 lb | 18.05 mm | 31.65 mm | 36.83 mm | 20.30 mm | |
| VDSFBPR | XFLOW RACE | KIT | SC10 | | DOUBLE | 312 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm | |
| VSSOHC | OHC | | | | SINGLE | 240 lb | 22.30 mm | 30.50 mm | 36.80 mm | 22.26 mm | |
| VDSOHC | OHC RACE | | | | DOUBLE | 276 lb | 18.05 mm | 31.65 mm | 37.50 mm | 20.30 mm | |
| VSSCVH | CVH | KIT | | YES | YES | SINGLE | 275 lb | 23.3 mm | 32.00 mm | 37.10 mm | 23.06 mm |
| VDSCVH2 | CVH | KIT | SC34 | YES | YES | DOUBLE | 290 lb | 18.35 mm | 32.45 mm | 37.10 mm | 25.00 mm |
| VSSV6 | V6 3L ESSEX | | | | SINGLE | 232 lb | 23.95 mm | 32.45 mm | 38.85 mm | 23.16 mm | |
| VSSV6G | V6 2.8 COLOGNE | | | | SINGLE | 200 lb | 25.20 mm | 33.90 mm | 40.00 mm | 25.88 mm | |
| VSSZETA | ZETEC 16V 1.6/1.8/2.0 HYD | | | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm | |
| VDSCOS | COSWORTH 16V | | | | DOUBLE | 312 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm | |
| VSSDUR | DURATEC | KIT | SC20B | | SINGLE | 242 lb | 18.08 mm | 25.6 mm | 38.00 mm | 23.50 mm | |
| VDSDUR | DURATEC | KIT | SC22 | YES | YES | DOUBLE | 297 lb | 15.50 mm | 28.50 mm | 38.00 mm | 22.27 mm |
| VSSFOC16 | FOCUS 1.6 16V | KIT | SC24 | | SINGLE | 207lb | 16.00 mm | 22.74 mm | 38.00 mm | 24.00 mm | |
| VSSZETA34 | FOCUS 2.0 16V | KIT | SC37 | | SINGLE | 171lb | 18.00 mm | 25.00 mm | 34.00 mm | 24.00 mm | |
| VSSST170 | FOCUS ST170 | KIT | SC37 | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm | |
| VSSRS2 | RS2000 16v | | | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm | |

VALVE SPRINGS & SPRING KITS (CONT)

PIPER CAMS

| PART NO. | APPLICATION | CAPS | SEATS | SEALS | TYPE | RATE | NOMINAL I.D | NOMINAL O.D | INSTALLED LENGTH | CRUSH HEIGHT |
|-------------------|-----------------------------|------|-------|-------|--------|--------|-------------|-------------|------------------|--------------|
| HONDA | | | | | | | | | | |
| VDSVTEC | VTEC 1.6 16V | | | | DOUBLE | 263 lb | 16.70 mm | 29.10 mm | 34.00 mm | 19.98 mm |
| MITSUBISHI | | | | | | | | | | |
| VSSMITS | EVO | KIT | SC21 | | SINGLE | 276 lb | 20.10 mm | 28.30 mm | 41.00 mm | 25.01mm |
| RENAULT | | | | | | | | | | |
| VSSR5 | 5 GT TURBO | | | | SINGLE | 162 lb | 21.70 mm | 29.10 mm | 34.00 mm | 22.03 mm |
| VDSMEG | MEGANE / CLIO 16V | KIT | SC29 | | DOUBLE | 301 lb | 16.00 mm | 30.50 mm | 38.50 mm | 22.26 mm |
| ROVER | | | | | | | | | | |
| VSSV8 | ROVER V8 | | | | SINGLE | 246lb | 22.25 mm | 30.75 mm | 40.40 mm | 25.29 mm |
| VTSV8 | ROVER V8 | | | | TRIPLE | 282 lb | 16.30 mm | 31.05 mm | 38.00 mm | 21.59 mm |
| VSSK | K SERIES 16V | | | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm |
| VDSK | K SERIES 16V | | | | DOUBLE | 258 lb | 13.50 mm | 25.10 mm | 37.20 mm | 20.46 mm |
| VSSK | K SERIES V6 24V | | | | SINGLE | 242 lb | 18.08 mm | 25.60 mm | 37.20 mm | 23.50 mm |
| VDSKV6 | K SERIES V6 24V | | | | DOUBLE | 258 lb | 13.50mm | 25.10mm | 37.20 mm | 20.46 mm |
| TOYOTA | | | | | | | | | | |
| VSS3SG | TOYOTA 2.0 16V 3SGE & 3SGTE | | | | SINGLE | 197 lb | 20.60 mm | 27.70 mm | 32.50 mm | 18.64 mm |
| VDS3SG | TOYOTA 2.0 16V 3SGE & 3SGTE | | | | DOUBLE | 280 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm |
| TRIUMPH | | | | | | | | | | |
| VSSTR4 | 1500 SPITFIRE | | | | SINGLE | 246 lb | 20.10 mm | 27.90 mm | 35.00 mm | 21.94 mm |
| VSSTR6 | TR6 | | | | SINGLE | 246 lb | 20.10 mm | 27.90 mm | 35.00 mm | 21.94 mm |
| VDSTR6 | TR6 | | | | DOUBLE | 277 lb | 20.19 mm | 29.10 mm | 35.00 mm | 22.02 mm |
| VAUXHALL | | | | | | | | | | |
| VSSAST13 | ASTRA / NOVA 1.3 | | | | SINGLE | 197 lb | 20.60 mm | 27.70 mm | 32.50 mm | 18.64 mm |
| VSSAST18 | ASTRA / CAV 1.6 / 1.8 | | | | SINGLE | 160 lb | 25.00 mm | 33.20 mm | 38.00 mm | 23.78 mm |
| VSSAST16V | ASTRA 2.0 16V C20XE / LET | | | | SINGLE | 246 lb | 20.10 mm | 27.90 mm | 34.00 mm | 21.94 mm |
| VDSAST16V | ASTRA 2.0 16V C20XE / LET | KIT | SC17 | | DOUBLE | 267 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm |
| VSSOP | C.I.H. 1.6 / 1.9 / 2.0 | KIT | | YES | SINGLE | 251 lb | 25.00 mm | 34.00 mm | 40.00 mm | 26.55 mm |
| VDSCOR | CORSA 16V X14XE / X16XE | KIT | SC16 | YES | DOUBLE | 267 lb | 15.20 mm | 27.70 mm | 34.00 mm | 18.64 mm |
| VSSCOR | CORSA 16V X14XE / X16XE | KIT | SC63 | YES | SINGLE | 246 lb | 20.10 mm | 27.90 mm | 36.30 mm | 21.65 mm |
| VSSCVXR | CORSA 16V VXR Z16LER | KIT | SC64 | | SINGLE | 207 lb | 16.00 mm | 22.74 mm | 37.00 mm | 24.00 mm |
| VOLVO | | | | | | | | | | |
| VDSB18 | VOLVO B18 | KIT | SC40 | YES | DOUBLE | 312 lb | 15.20 mm | 27.70 mm | 33.00 mm | 18.64 mm |

COMPETITION CAM BELTS**PART NO.****CITROEN / PEUGEOT**

| | | |
|-------|--------------------------|------------------------------------|
| TBP10 | AX 1.0/1.1 | 205 1.0/1.1/1.3 RALLY |
| TBP11 | AX 1.4 '88-91 | 205/309 1.4 '85-93 |
| TBP13 | BX GTI 1.6/1.9 to 01-'92 | 205 / 309 GTI 1.6/1.9 to 01-'92 |
| TBP15 | BX 1.9 MI16 '87-93 | 309/405 1.9 MI16 |
| TBP11 | SAXO 1.4 | 106/306 1.4 '91-04 >Mtr 3666765 |
| TBP12 | SAXO 1.6 VTR '96-04 | 106 Xsi 1.4 & RALLYE/306 1.6 & 106 |
| TBP39 | SAXO VTS 1.6 16V | 106 GTI 16V |
| TBP14 | BX/XANTIA 1.6/1.8/2.0 8V | 205/309/306 GTI 1.6/1.9 '92-99 |
| TBP27 | XANTIA 2.0 16V | 306 2.0 MI16 - (150HP) |
| TBP28 | XANTIA 2.0 16V (132HP) | 605 2.0 16V |
| TBP11 | XSARA 1.4 | 206/307 1.4 '98-on >Mtr 3666765 |
| TBP39 | XSARA 1.6 16V | 1007 1.6 16V |
| TBP28 | XSARA 1.8/2.0 16V | 306/406 1.8/2.0 16V (132hp) |
| TBP28 | XSARA 2.0 16V (163HP) | 306 2.0 16V GTI6 (163HP) |
| TBP39 | C2/C3/C4 1.6 16V | 206/207/307 1.6 16V |

FIAT

| | |
|------|---------------------------------------|
| TBP1 | FIAT UNO 1.1/1.3/1.3 TURBO & SOHC 1.5 |
| TBP2 | FIAT UNO 1.4/1.4 TURBO & TIPO 1.3 |
| TBP3 | FIAT 2.0 TWIN CAM |

FORD

| | |
|-------|---|
| TBP4 | FORD CVH 1.4/1.6 |
| TBP5 | FORD CVH 1.1/1.3 |
| TBP6 | FORD SOHC 1.6 NOT SIERRA 1.6 E.MAX |
| TBP7 | FORD SOHC 1.8/2.0 |
| TBP8 | FORD ZETEC 16V 1.6/1.8/2.0 - SILVER TOP |
| TBP30 | FORD FOCUS/MONDEO 1.8/2.0 16v - BLACK TOP |
| TBP30 | FORD FOCUS 2.0 16V ST170 |
| TBP31 | FORD FIESTA/FOCUS/PUMA 1.25/1.4/1.6 16v |
| TBP37 | BDA |

HONDA

| | |
|-------|---------------------------|
| TBP32 | HONDA 1.6 VTEC B16 '89-98 |
|-------|---------------------------|

MITSUBISHI

| | |
|-------|-----------------------------------|
| TBP34 | MITSUBISHI ECLIPSE/GALANT 2.0 16V |
| TBP34 | MITSUBISHI EVO 4 / 5 / 6 / 7 |

PART NO.**DESCRIPTION****RENAULT**

| | |
|-------|---|
| TBP16 | RENAULT 19 / CLIO 16V 1.8 / SPYDER / WILLIAMS 2.0 16V |
|-------|---|

ROVER

| | |
|-------|---|
| TBP17 | ROVER K SERIES 1.4/1.6/1.8 16V (MANUAL TENSIONER) |
| TBP33 | ROVER K SERIES 1.8 16V 'Nov 98-on (AUTOMATIC TENSIONER) |

SUBARU

| | |
|-------|------------------------------------|
| TBP26 | SUBARU IMPREZA 2.0 TURBO UP TO '98 |
| TBP26 | SUBARU LEGACY 2.0 TURBO 16V |

VAUXHALL

| | |
|-------|---|
| TBP18 | VAUX 1.3 1980 ON |
| TBP19 | VAUX 1.4/1.6 8 VALVE UP TO 91 (104 TOOTH) |
| TBP20 | VAUX 1.2/1.4/1.6 8 VALVE '91-00 (111 TOOTH) |
| TBP21 | VAUX ASTRA/CAV 1.6/1.8/2.0 J SERIES |
| TBP42 | VAUX CORSA B / TIGRA X14XE X16XE 16V '93 -00 |
| TBP43 | VAUX CORSA C Z14XE-Z18XE-Vectra X18XE |
| TBP22 | VAUX ASTRA/CAV C20XE UP TO 1992 |
| TBP35 | VAUX ASTRA/CAV C20XE C20LET '93-97 |
| TBP36 | VAUX ECOTEC X20XE (136HP) |
| TBP44 | VAUX CORSA VXR 1.6 16V TURBO Z16LER 2006 - |
| TBP45 | VAUX ASTRA VXR 2.0 16V TURBO Z20LER 2004 - 09 |

VAG

| | |
|-------|---|
| TBP24 | AUDI 80 2.0 & GOLF 2.0 8V (115HP) |
| TBP25 | AUDI 80 2.0 16V & CABRIOLET/COUPE 2.0 16V |
| TBP25 | AUDI A6 2.0 16V '94-97 |
| TBP40 | AUDI A4/A6 1.8/1.8T 20V 10/94 - 09/01 |
| TBP41 | AUDI TT 1.8/1.8T 20V '98 - 07/06 |
| TBP23 | SEAT IBIZA/TOLEDO/CORDOBA 1.6/1.8 '93-99 |
| TBP25 | SEAT IBIZA/TOLEDO/CORDOBA 16V (136HP) |
| TBP29 | SEAT IBIZA/TOLEDO/CORDOBA 16V (150HP) |
| TBP41 | SEAT IBIZA 1.8T 20V INC CUPRA 2004 ON |
| TBP23 | VW GOLF/PASSAT 1.5, 1.6 & 1.8 GTI & G60 |
| TBP25 | VW GOLF/SCIROCCO/JETTA 1.8 16V |
| TBP29 | VW GOLF 2.0 16V 93-96 |
| TBP41 | VW GOLF 1.8/1.8T 20V 10/97 - 09/03 |
| TBP40 | VW PASSAT 1.8/1.8T 20V 11/96 - 08/00 |
| TBP46 | VW POLO 1.4 16V AFH 04/96 - 12/99 100 BHP |
| TBP47 | VW LUPO AVY & POLO ARC 1.6 16V 125 BHP |

VALVE SPRING CAPS - STEEL

PART NO DESCRIPTION

BMC

SC1 A SERIES (Suit VDSMINR springs)

CITROEN

SC18 SAXO VTS 16v (Suit VDSVTS springs)
 SC30 SAXO VTR (Suit VSSVTR springs)

FORD

SC7 COSWORTH (Suit VDSCOS springs)
 SC33 COSWORTH LONG VALVE
 SC34 CVH (Suit VDSCVH2 springs)
 SC8A OHC (Suit VSSOHC springs)
 SC8B OHC (Suit VDSOHCRC springs)
 SC9 XFLOW (Suit VDSF2 / VDSFR springs)
 SC10 XFLOW (Suit VDSFBPR springs)
 SC11 ZETEC 16V SINGLE GROOVE VALVE (Suit VSSZETA / VSSZETA34 springs)
 SC20B DURATEC 16v (Suit VSSDUR springs)
 SC22 DURATEC 16v (Suit VDSDUR springs)
 SC24 FOCUS 1.6 16v (Suit VSSFOC springs)
 SC37 FOCUS ST170 (Suit VSSST170 springs)

HONDA

SC12 VTEC (Suit VDSVTEC springs)

MITSUBISHI

SC21 EVO 1-9 (Suit VSSMITS springs)
 SC47 EVO 10 (Suit VSSMITS10 springs)

NISSAN

SC36 MICRA 16V (Suit std springs)

PEUGEOT

SC14 306 16v (Suit VDSP306 springs)
 SC26 MI16 (Suit VDSMI16 springs)
 SC27 206 GTI (As SC28 expect to suit hyd buckets)
 SC28 206 GTI (Suit VSSP206 springs)
 SC35 205 GTI (Suit VDSP16 springs)

PART NO DESCRIPTION

RENAULT

SC29 MEGANE / CLIO (Suit VDSMEG springs)

ROVER

SC3 K SERIES (Suit VSSK & VDSK springs)
 SC19 K SERIES (As SC3 except to suit hyd buckets)
 SC23 KV6 (Suit VSSKV6 & VDSKV6 springs)
 SC25 KV6 (As SC23 except to suit hyd buckets)

VAUXHALL

SC16 CORSA 16v (Suit VDSCOR springs)
 SC17 ASTRA 2.0 16v (Suit VDSAST16V springs)
 SC58 ECOTEC 16v (Suit VDSECO springs)
 SC63 CORSA 16v (Suit VSSCOR springs)
 SC64 CORSA 16v VXR (Suit VSSCVXR springs)

VOLVO

SC40 B18 (Suit VDSB18 springs)

TOP HAT SHIMS

SHIM63 SHIM TO SUIT 6 MM STEM VALVE 3 MM THICK
 SHIM64 SHIM TO SUIT 6 MM STEM VALVE 4 MM THICK
 SHIM65 SHIM TO SUIT 6 MM STEM VALVE 5 MM THICK
 SHIM66 SHIM TO SUIT 6 MM STEM VALVE 6 MM THICK
 SHIM73 SHIM TO SUIT 7 MM STEM VALVE 3 MM THICK
 SHIM74 SHIM TO SUIT 7 MM STEM VALVE 4 MM THICK
 SHIM75 SHIM TO SUIT 7 MM STEM VALVE 5 MM THICK
 SHIM76 SHIM TO SUIT 7 MM STEM VALVE 6 MM THICK
 SHIM83 SHIM TO SUIT 8 MM STEM VALVE 3 MM THICK
 SHIM84 SHIM TO SUIT 8 MM STEM VALVE 4 MM THICK
 SHIM85 SHIM TO SUIT 8 MM STEM VALVE 5 MM THICK
 SHIM86 SHIM TO SUIT 8 MM STEM VALVE 6 MM THICK

BISCUIT SHIMS

SHIM11535 SHIM DIAMETER 11.50MM X 3.50MM THICK
 SHIM11540 SHIM DIAMETER 11.50MM X 4.00MM THICK
 SHIM11545 SHIM DIAMETER 11.50MM X 4.50MM THICK
 SHIM11550 SHIM DIAMETER 11.50MM X 5.00MM THICK

CAMSHAFTS**HONDA**

Valve lifts quoted assume a rocker ratio of 1:1

PIPER CAMS

| Part No. | Application | TRACK DAY / RACE | Duration @ 1mm | | Cam Lift | | Valve Lift | | Timing | Full Lift | | Lift @ TDC | | Valve Clearance |
|----------|--------------------------------|------------------|-------------------|---------|-----------------|-----------------|-----------------|-----------------|--------------------|-----------|----------|--------------------|-----------------|--------------------------------|
| | | | Inl | Exh | Inl | Exh | Inl | Exh | | Inl ATDC | Exh BTDC | Inl with clearance | Exh | |
| PH5 | CBR600 FM - FW 1991 - 1998 | TRACK DAY / RACE | 241 deg | 240 deg | .367" 9.32mm | .345" 8.76mm | .359" 9.11mm | .335" 8.51mm | 18 - 42 44 - 16 | 102 deg | 104 deg | .114" 2.90mm | .084" 2.13mm | .008" / .20mm .010" / .25mm |
| PH6 | CBR600 FX - FY 1999 - 2000 | TRACK DAY / RACE | 248 deg | 234 deg | .340" 8.64mm | .316" 8.03mm | .332" 8.43mm | .306" 7.77mm | 20 - 48 41 - 13 | 104 deg | 104 deg | .112" 2.84mm | .083" 2.10mm | .008" / .20mm .010" / .25mm |
| PH7 | CBR600 RR 2003 - | SUPERSPORT | 255 deg | 235 deg | .335" 8.51mm | .293" 7.44mm | .327" 8.31mm | .283" 7.19mm | 24 - 52 45 - 11 | 104 deg | 107 deg | .123" 3.12mm | .074" 1.88mm | .008" / .20mm .010" / .25mm |
| PH14 | CBR600 RR 2003 - | SUPERSPORT | 253 deg | 235 deg | .335" 8.51mm | .293" 7.44mm | .327" 8.31mm | .281" 7.19mm | 21 - 51 43 - 13 | 105 deg | 105 deg | .112" 2.85mm | .078" 1.98mm | .008" / .20mm .010" / .25mm |
| PH10 | CBR600 RR 2003 - | RACE | 250 deg | 242 deg | .363" 9.22mm | .330" 8.38mm | .355" 9.01mm | .320" 8.13mm | 23 - 47 45 - 17 | 102 deg | 104 deg | .127" 3.22mm | .097" 2.46mm | .008" / .20mm .010" / .25mm |
| PH1 | CBR900RR 893cc N - 1992 - 2001 | TRACK DAY / RACE | 244 deg | 244 deg | .325" 8.26mm | .302" 7.67mm | .319" 8.10mm | .294" 7.47mm | 19 - 45 48 - 16 | 103 deg | 106 deg | .095" 2.41mm | .090" 2.28mm | .006" / .15mm .008" / .20mm |
| PH2 | CBR900RR 954cc 2002 - 2003 | TRACK DAY / RACE | 237 deg | 228 deg | .377" 9.58mm | .340" 8.64mm | .369" 9.37mm | .330" 8.38mm | 17 - 41 38 - 10 | 102 deg | 104 deg | .110" 2.79mm | .077" 1.95mm | .008" / .20mm .010" / .25mm |
| PH3 | CBR900RR 954cc 2002 - 2003 | RACE | 245 deg | 242 deg | .392" 9.96mm | .380" 9.65mm | .384" 9.75mm | .370" 9.40mm | 21 - 45 45 - 17 | 102 deg | 104 deg | .121" 3.07mm | .108" 2.74mm | .008" / .20mm .010" / .25mm |
| PH8 | CBR1000 RR 2004 ON | TRACK DAY / RACE | 248 deg | 240 deg | .391" 9.93mm | .375" 9.52mm | .383" 9.72mm | .365" 9.27mm | 22 - 46 44 - 16 | 102 deg | 104 deg | .128" 3.25mm | .104" 2.64mm | .008" / .20mm .010" / .25mm |
| PH9 | CBR1000 RR 2004 ON | TRACK DAY / RACE | 250 deg | 242 deg | .363" 9.22mm | .346" 9.22mm | .355" 9.01mm | .336" 8.53mm | 23 - 47 45 - 17 | 102 deg | 104 deg | .127" 3.22mm | .105" 2.67mm | .008" / .20mm .010" / .25mm |
| PH11 | CBR1000 RR 2004 ON | TRACK DAY / RACE | 255 deg | 248 deg | .363" 9.22mm | .346" 9.22mm | .355" 9.01mm | .336" 8.53mm | 26 - 50 48 - 20 | 102 deg | 104 deg | .131" 3.33mm | .111" 2.83mm | .008" / .20mm .010" / .25mm |
| PH4 | CBR1100 XX 1997 - | STREET / KIT CAR | 241 deg | 240 deg | .367" 9.32mm | .345" 8.76mm | .359" 9.11mm | .335" 8.51mm | 16 - 44 46 - 14 | 104 deg | 106 deg | .105" 2.67mm | .076" 1.93mm | .008" / .20mm .010" / .25mm |

KAWASAKI

Valve lifts quoted assume a rocker ratio of 1:1

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|------|---------------------------|------------------|---------|---------|------------------|------------------|------------------|-----------------|--------------------|---------|---------|-----------------|-----------------|--------------------------------|
| PK1 | ZX6 R F1 - J2 1995 - 2002 | TRACK DAY / RACE | 244 deg | 233 deg | .380" 9.65mm | .350" 8.89mm | .373" 9.47mm | .342" 8.69mm | 20 - 44 41 - 13 | 102 deg | 104 deg | .118" 3.00mm | .090" 2.28mm | .007" / .18mm .008" / .20mm |
| PK1 | ZX6 R 636 A1 2002 | TRACK DAY / RACE | 244 deg | 233 deg | .380" 9.65mm | .350" 8.89mm | .373" 9.47mm | .342" 8.69mm | 20 - 44 41 - 13 | 102 deg | 104 deg | .118" 3.00mm | .090" 2.28mm | .007" / .18mm .008" / .20mm |
| PK2 | ZX6 R 636 2003 | TRACK DAY / RACE | 249 deg | 245 deg | .376" 9.55mm | .353" 8.97mm | .368" 9.35mm | .343" 8.71mm | 22 - 46 47 - 19 | 102 deg | 104 deg | .127" 3.23mm | .106" 2.69mm | .008" / .20mm .010" / .25mm |
| PK4 | ZX7 R RR 1996 - 2002 | TRACK DAY / RACE | 245 deg | 230 deg | .392" 9.96mm | .312" 7.92mm | .384" 9.75mm | .302" 7.67mm | 21 - 45 39 - 11 | 102 deg | 104 deg | .121" 3.07mm | .076" 2.01mm | .008" / .20mm .010" / .25mm |
| PK10 | ZX7 R R-RR 1996 - 2002 | RACE | 245 deg | 242 deg | .392" 9.96mm | .380" 9.65mm | .384" 9.75mm | .370" 9.40mm | 21 - 45 45 - 17 | 102 deg | 104 deg | .121" 3.07mm | .108" 2.74mm | .008" / .20mm .010" / .25mm |
| PK5 | ZX9 R 1994-97 B | TRACK DAY / ROAD | 263 deg | 258 deg | .274" 6.96mm | .264" 6.70mm | .347" 8.81mm | .333" 8.46mm | 41 - 71 68 - 38 | 105 deg | 105 deg | .174" 4.42mm | .164" 4.17mm | .008" / .20mm .010" / .25mm |
| PK6 | ZX9 R 1998 - 2002 | TRACK DAY / RACE | 245 deg | 242 deg | .392" 9.93mm | .380" 9.65mm | .384" 9.75mm | .370" 9.40mm | 21 - 45 45 - 17 | 102 deg | 104 deg | .121" 3.07mm | .108" 2.74mm | .008" / .20mm .010" / .25mm |
| PK12 | ZX9 R 2000 - 2002 | TRACK DAY / RACE | 251 deg | 251 deg | .392" 9.93mm | .366" 9.30mm | .384" 9.75mm | .352" 8.94mm | 22 - 48 51 - 19 | 103 deg | 106 deg | .128" 3.25mm | .099" 2.51mm | .008" / .20mm .010" / .25mm |
| PK7 | ZX12 R 2000 - | RACE | 259 deg | 251 deg | .410" 10.41mm | .394" 10.01mm | .400" 10.16mm | .384" 9.75mm | 21 - 57 53 - 17 | 108 deg | 108 deg | .132" 3.35mm | .108" 2.74mm | .010" / .25mm .010" / .25mm |
| PK9 | ZX12 R 2000 - | STREET | 250 deg | 251 deg | .378" 9.60mm | .362" 9.19mm | .370" 9.40mm | .352" 8.94mm | 17 - 53 53 - 17 | 108 deg | 108 deg | .119" 3.02mm | .092" 2.34mm | .008" / .20mm .010" / .25mm |

SUZUKI

Valve lifts quoted assume a rocker ratio of 1:1

*blank includes sprockets

PIPER CAMS

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|------|------------------------------|----------------------|-----------------|------------------|-----------------|------------------|-----------------|---------------------|-----------------|-----------------|-----------------|--------------------------------|
| PS1 | GSX R600 WV-WY 1996 - 2000 | TRACK DAY / RACE | 243 deg 218 deg | .343" 8.71mm | .314" 7.98mm | .335" 8.51mm | .280" 7.11mm | 20 - 44 32 - 43 | 102 deg 104 deg | .111" 2.82mm | .055" 1.40mm | .008" / .20mm .010" / .35mm |
| PS2 | GSX R600 K1 - 4 | TRACK DAY / RACE | 250 deg 230 deg | .350" 8.89mm | .285" 7.24mm | .342" 8.69mm | .304" 7.72mm | 23 - 47 41 - 9 | 102 deg 106 deg | .126" 3.20mm | .071" 1.88mm | .008" / .20mm .010" / .35mm |
| PS3 | GSX R600 K1 - 3 | SUPERSPORT | 248 deg 237 deg | .337" 8.56mm | .284" 7.21mm | .330" 8.38mm | .278" 7.06mm | 22 - 46 39 - 19 | 102 deg 100 deg | .126" 3.20mm | .103" 2.62mm | .006" / .15mm .008" / .20mm |
| PS16 | GSX R600 K6-7 | SUPERSPORT | 263 deg 235 deg | .339" 8.61mm | .314" 7.96mm | .333" 8.46mm | .304" 7.72mm | 26 - 56 47 - 8.6 | 105 deg 109 deg | .125" 3.18mm | .067" 1.70mm | .006" / .15mm .010" / .25mm |
| PS22 | GSX R600 K6-7 | SUPERSPORT | 252 deg 235 deg | .338" 8.81mm | .314" 7.96mm | .330" 8.38mm | .304" 7.72mm | 21 - 51 47 - 8.6 | 105 deg 109 deg | .117" 2.97mm | .067" 1.70mm | .008" / .20mm .010" / .25mm |
| PS4 | GSX R750 WW - WX 1998 - 1999 | RACE | 248 deg 238 deg | .376" 9.55mm | .355" 9.02mm | .368" 9.35mm | .330" 8.38mm | 22 - 46 45 - 13 | 102 deg 106 deg | .127" 3.23mm | .085" 2.16mm | .008" / .20mm .012" / .30mm |
| PS5 | GSX R750 K1-3 | RACE | 251 deg 237 deg | .392" 9.96mm | .284" 7.21mm | .384" 9.75mm | .345" 8.76mm | 23 - 47 44 - 12 | 102 deg 106 deg | .132" 3.35mm | .086" 2.18mm | .008" / .20mm .010" / .25mm |
| PS10 | GSX R750 K | RACE | 248 deg 237 deg | .336" 8.53mm | .284" 7.21mm | .330" 8.37mm | .276" 7.01mm | 22 - 46 39 - 19 | 102 deg 100 deg | .126" 3.21mm | .103" 2.62mm | .006" / .15mm .008" / .20mm |
| PS6 | GSX R1000 K1-3 | TRACK DAY / RACE | 248 deg 238 deg | .376" 9.55mm | .312" 7.92mm | .368" 9.35mm | .330" 8.38mm | 20 - 48 45 - 13 | 104 deg 106 deg | .118" 3.00mm | .087" 2.21mm | .008" / .20mm .010" / .25mm |
| PS15 | GSX R1000 K2 | TRACK DAY / RACE | 250 deg 230 deg | .350" 8.89mm | .355" 9.02mm | .342" 8.68mm | .302" 7.67mm | 20 - 50 40 - 10 | 105 deg 105 deg | .115" 2.92mm | .075" 1.90mm | .008" / .20mm .010" / .25mm |
| PS7 | GSX R1000 K3 | RACE | 251 deg 237 deg | .392" 9.96mm | .338" 8.58mm | .384" 9.75mm | .345" 8.76mm | 23 - 47 42 - 14 | 102 deg 104 deg | .132" 3.35mm | .093" 2.36mm | .008" / .20mm .010" / .25mm |
| PS11 | GSX R1000 K1 - 4 | RACE | 255 deg 240 deg | .405" 10.28mm | .350" 8.89mm | .397" 10.08mm | .328" 8.33mm | 23 - 53 45 - 15 | 105 deg 105 deg | .125" 3.18mm | .093" 2.36mm | .008" / .20mm .010" / .25mm |
| PS12 | GSX R1000 K1 - 4 | RACE | 245 deg 242 deg | .392" 9.96mm | .380" 9.65mm | .384" 9.75mm | .370" 9.40mm | 21 - 45 45 - 17 | 105 deg 105 deg | .108" 2.74mm | .104" 2.64mm | .008" / .20mm .010" / .25mm |
| PS14 | GSX R1000 K1 - 4 | RACE | 250 deg 226 deg | .378" 9.60mm | .326" 8.28mm | .370" 9.40mm | .316" 8.03mm | 20 - 50 38 - 8 | 105 deg 105 deg | .119" 3.02mm | .069" 1.75mm | .008" / .20mm .010" / .25mm |
| PS17 | GSX R1000 K5 - 8 | RACE | 256 deg 248 deg | .400" 10.16mm | .350" 8.89mm | .394" 10.00mm | .342" 8.69mm | 23 - 53 49 - 19 | 105 deg 105 deg | .136" 3.46mm | .110" 2.79mm | .006" / .15mm .008" / .20mm |
| PS23 | GSX R1000 K7 - 8 | RACE | 257 deg 256 deg | .417" 10.59mm | .362" 9.19mm | .409" 10.39mm | .352" 8.94mm | 24 - 54 58 - 18 | 105 deg 110 deg | .134" 3.40mm | .102" 2.59mm | .008" / .20mm .010" / .25mm |
| PS24 | GSX R1000 K7 - 8 | RACE | 257 deg 256 deg | .425" 10.80mm | .372" 9.45mm | .417" 10.60mm | .362" 9.19mm | 24 - 54 58 - 18 | 105 deg 110 deg | .126" 3.20mm | .099" 2.51mm | .008" / .20mm .010" / .25mm |
| PS8 | GSX R1300 1999 - | STREET / KIT CAR | 249 deg 245 deg | .376" 9.55mm | .353" 8.97mm | .368" 9.35mm | .343" 8.71mm | 22 - 46 47 - 19 | 102 deg 104 deg | .127" 3.23mm | .106" 2.69mm | .008" / .20mm .010" / .25mm |
| PS21 | GSX R1300 1999 - | GRASS / KIT CAR SPEC | 241 deg 224 deg | .367" 9.32mm | .320" 8.13mm | .359" 9.11mm | .310" 7.83mm | 16 - 44 38- 5.9 | 104 deg 106 deg | .105" 2.67mm | .060" 1.52mm | .008" / .20mm .010" / .25mm |
| PS19 | GSX R1300 1999 - | GRASS SPEC | 256 deg 237 deg | .400" 10.16mm | .355" 9.02mm | .394" 10.00mm | .345" 8.76mm | 23 - 53 43 - 13 | 105 deg 105 deg | .136" 3.46mm | .090" 2.28mm | .006" / .15mm .010" / .25mm |
| PS20 | GSX R1300 1999 - | GRASS SPEC | 241 deg 240 deg | .367" 9.32mm | .345" 8.76mm | .359" 9.11mm | .335" 8.51mm | 16 - 44 46 - 14 | 104 deg 106 deg | .105" 2.67mm | .076" 1.93mm | .008" / .20mm .010" / .25mm |

CAMSHAFTS YAMAHA

PIPER CAMS

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|---------------|-----------------------------------|--------------------|-----------------|------------------|-----------------|------------------|-----------------|----------------------------|-----------------|-----------------|-----------------|----------------------------------|
| PY5 | YZF R6 1999 - 2002 | RACE | 252 deg 234 deg | .340" 8.64mm | .316" 8.03mm | .334" 8.48mm | .306" 7.77mm | 24 - 48 41 - 13 | 102 deg 104 deg | .117" 2.97mm | .083" 2.11mm | .006" / .15mm .010" / .25mm |
| PY6 | YZF R6 INJ 2003 | RACE | 252 deg 234 deg | .340" 8.64mm | .316" 8.03mm | .334" 8.48mm | .306" 7.77mm | 24 - 48 47 - 7 | 102 deg 110 deg | .117" 2.97mm | .063" 1.60mm | .006" / .15mm .010" / .25mm |
| PY7 | YZF R6 INJ 2003 | SUPERSPORT | 256 deg 240 deg | .335" 8.51mm | .299" 7.59mm | .327" 8.31mm | .291" 7.39mm | 23 - 53 50 - 10 | 105 deg 110 deg | .122" 3.10mm | .073" 1.85mm | .008" / .20mm .010" / .25mm |
| PY10 | YZF R6 INJ 2006 - 9 | SUPERSPORT | 251 deg 236 deg | .346" 8.79mm | .315" 8.00mm | .340" 8.64mm | .307" 7.80mm | 21 - 51 47 - 9 | 105 deg 109 deg | .102" 2.59mm | .064" 1.63mm | .006" / .15mm .008" / .20mm |
| PY12 | YZF R6 INJ 2006 - 9 | SUPERSPORT | 256 deg 242 deg | .347" 8.79mm | .315" 8.00mm | .339" 8.61mm | .305" 7.75mm | 18 - 58 51 - 11 | 110 deg 110 deg | .100" 2.54mm | .066" 1.68mm | .008" / .20mm .010" / .25mm |
| PY1 B | FZS 1000 FAZER - 2003 | STREET | 242 deg 234 deg | .316" 8.03mm | .316" 8.03mm | .310" 7.87mm | .308" 7.82mm | 13 - 49 43 - 11 | 108 deg 106 deg | .081" 2.06mm | .078" 1.98mm | .006" / .15mm .008" / .20mm |
| PY1 A / B / C | YZF R1 1998 - 2002 | STREET | 242 deg 234 deg | .316" 8.03mm | .316" 8.03mm | .310" 7.87mm | .308" 7.82mm | 13 - 49 43 - 11 | 108 deg 106 deg | .081" 2.06mm | .078" 1.98mm | .006" / .15mm .008" / .20mm |
| PY2 A / B / C | YZF R1 1998 - 2002 | TRACK DAY / RACE | 252 deg 242 deg | .340" 8.64mm | .330" 8.38mm | .334" 8.48mm | .322" 8.18mm | 24 - 48 51 - 11 | 102 deg 110 deg | .117" 2.97mm | .078" 1.98mm | .006" / .15mm .008" / .20mm |
| PY3C | YZF R1 2003 | RACE | 252 deg 248 deg | .340" 8.64mm | .339" 8.61mm | .334" 8.48mm | .330" 8.38mm | 24 - 48 54 - 14 | 102 deg 110 deg | .117" 2.97mm | .090" 2.29mm | .006" / .15mm .008" / .20mm |
| PY4C | YZF R1 2003 | RACE | 248 deg 248 deg | .314" 7.98mm | .340" 8.64mm | .304" 7.72mm | .330" 8.38mm | 22 - 46 54 - 14 | 102 deg 110 deg | .109" 2.77mm | .090" 2.29mm | .006" / .15mm .008" / .20mm |
| PY8 | YZF R1 INJ 2004 - 06 | STREET / TRACK DAY | 248 deg 242 deg | .314" 7.98mm | .330" 8.38mm | .304" 7.72mm | .320" 8.13mm | 22 - 46 49 - 13 | 102 deg 108 deg | .109" 2.77mm | .083" 2.11mm | .008" / .20mm .010" / .25mm |
| PY9 | YZF R1 INJ 2004 - 06 | RACE / TORQUE | 251 deg 242 deg | .345" 8.76mm | .330" 8.38mm | .337" 8.56mm | .320" 8.13mm | 21 - 51 46 - 16 | 105 deg 105 deg | .107" 2.72mm | .093" 2.36mm | .008" / .20mm .010" / .25mm |
| PY15 | YZF R1 INJ 2004 - 06 | RACE TOP END | 251 deg 251 deg | .345" 8.76mm | .327" 8.30mm | .337" 8.56mm | .317" 8.05mm | 21 - 51 46 - 16 | 105 deg 105 deg | .107" 2.72mm | .107" 2.72mm | .008" / .20mm .010" / .25mm |
| PY11 | YZF R1 2007 MUST USE KIT SPRING | RACE | 261 deg 257 deg | .390" 9.90mm | .355" 9.01mm | .385" 9.77mm | .348" 8.83mm | 21 - 61 59 - 19 | 110 deg 110 deg | .106" 2.70mm | .098" 2.49mm | .005" / .127mm .007" / .178mm |
| PY14 | YZF R1 2008 BSB SPEC | RACE | 254 deg 250 deg | .369" 9.37mm | .328" 8.33mm | .375" 9.37mm | .338" 8.33mm | 17 - 57 55 - 15 | 110 deg 110 deg | .096" 2.45mm | .085" 2.17mm | .006" / .15mm .008" / .20mm |
| PY16 | YZF R1 2009 - STD V/S & PISTON | RACE | 260 deg 254 deg | .374" 9.50mm | .339" 8.69mm | .368" 9.35mm | .331" 8.41mm | 20 - 60 57 - 17 | 110 deg 110 deg | .101" 2.57mm | .091" 2.31mm | .006" / .15mm .008" / .20mm |
| PY17 | YZF R1 2009 - MUST USE KIT SPRING | RACE | 255 deg 250 deg | .410" 10.41mm | .358" 8.38mm | .404" 10.26mm | .350" 8.89mm | 17.5 - 57.5 55 - 15 | 110 deg 110 deg | .120" 3.05mm | .093" 2.37mm | .006" / .15mm .008" / .20mm |
| PY18 | YZF R1 2008 - MUST USE KIT SPRING | RACE | 255 deg 251 deg | .417" 10.60mm | .378" 9.60mm | .411" 10.44mm | .370" 9.40mm | 17.5 - 57.5 54.5 - 15.5 | 110 deg 110 deg | .108" 2.37mm | .097" 2.46mm | .006" / .15mm .008" / .20mm |

MOTORCYCLE ADJUSTABLE SPROCKETS

| PART NO. | DESCRIPTION | MATERIAL |
|--------------|------------------------------------|----------|
| HONDA | | |
| PULMH6F23 | CBR600 F2 / 3 1991 - 1998 SPROCKET | STEEL |
| PULMH6F4 | CBR600 F4 1999 - 2002 SPROCKET | STEEL |
| PULMH6RR | CBR600 RR 2003 On SPROCKET | STEEL |
| PULMH900 | CBR900 RR 1992 - 1999 SPROCKET | STEEL |
| PULMH929 | CBR900 RR 2000 On SPROCKET | STEEL |
| PULMH1100 | CBR1100BB 1996 On SPROCKET | STEEL |

SUZUKI

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|-----------|--|-------|
| PULMS750 | GSX R600 / R750 1998 - 1999 SPROCKET KIT | STEEL |
| PULMS7502 | GSX R750 K 2000 On SPROCKET KIT | STEEL |
| PULMS1300 | GSX R1300 1999 On SPROCKET KIT | STEEL |

YAMAHA

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|----------|-------------------------|-------|
| PULMYR1 | YZF R1 1998-03 SPROCKET | STEEL |
| PULMYR6 | YZF R6 1999-05 SPROCKET | STEEL |
| PULMYR62 | YZFR6 2006-2008 | STEEL |

MECHANICAL CAM CHAIN ADJUSTER

PIPER CAMS

| PART NO. | DESCRIPTION | MATERIAL |
|---------------|--------------------------------------|----------|
| SUZUKI | | |
| ST750Y2K* | GSXR600K1-3 GSXR750K1-3 GSXR1000K1-2 | ALLOY |
| ST1000-3* | GSXR600K4-8 GSXR750K4-8 GSXR1000K3-8 | ALLOY |
| ST1300GX* | GSXR1300 HAYABUSA -07 | ALLOY |
| ST1300-08* | GSXR1300 HAYABUSA 2008 | ALLOY |

* INCLUDES NEW GASKET

YAMAHA

| | | |
|--------|-------------------------------------|-------|
| YTR6 | YZFR6 2006- | ALLOY |
| YTR1 | YZFR1 2004 - 2006 | ALLOY |
| YT1000 | YZFR6 1999 - 2005 YZFR1 1998 - 2003 | ALLOY |

NEW MODELS ALWAYS BEING ADDED

MOTORCYCLE SHIMS

7.50MM DIAMETER FROM 1.50MM TO 3.50MM THICKNESS AVAILABLE
9.50MM DIAMETER FROM 1.50MM TO 3.50MM THICKNESS AVAILABLE

Notes

PIPER CAMS