

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 where 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.

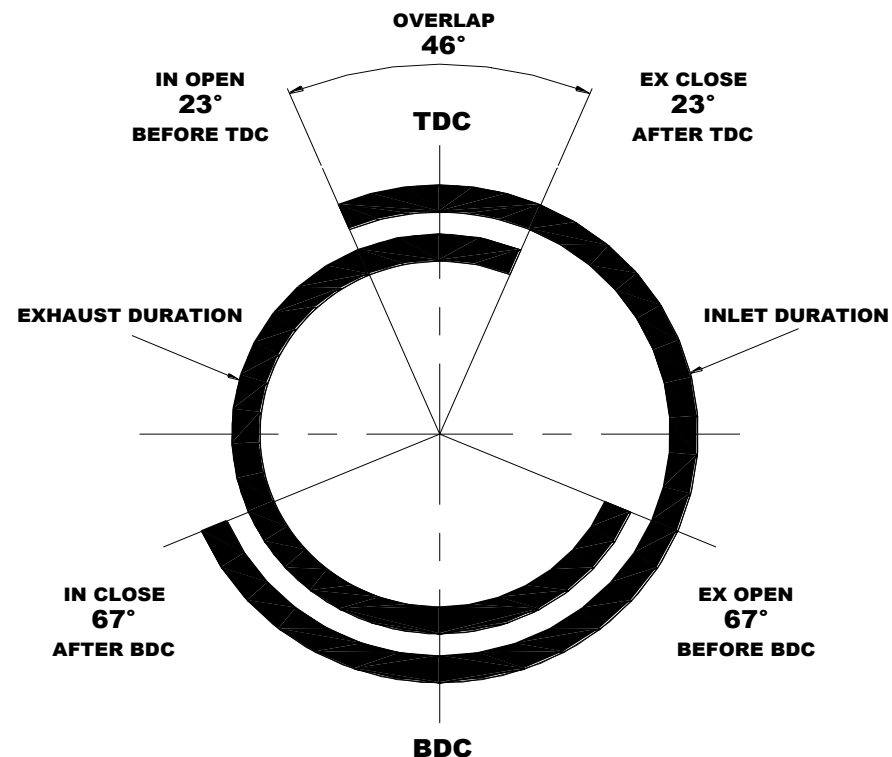
Cam Timing:

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:

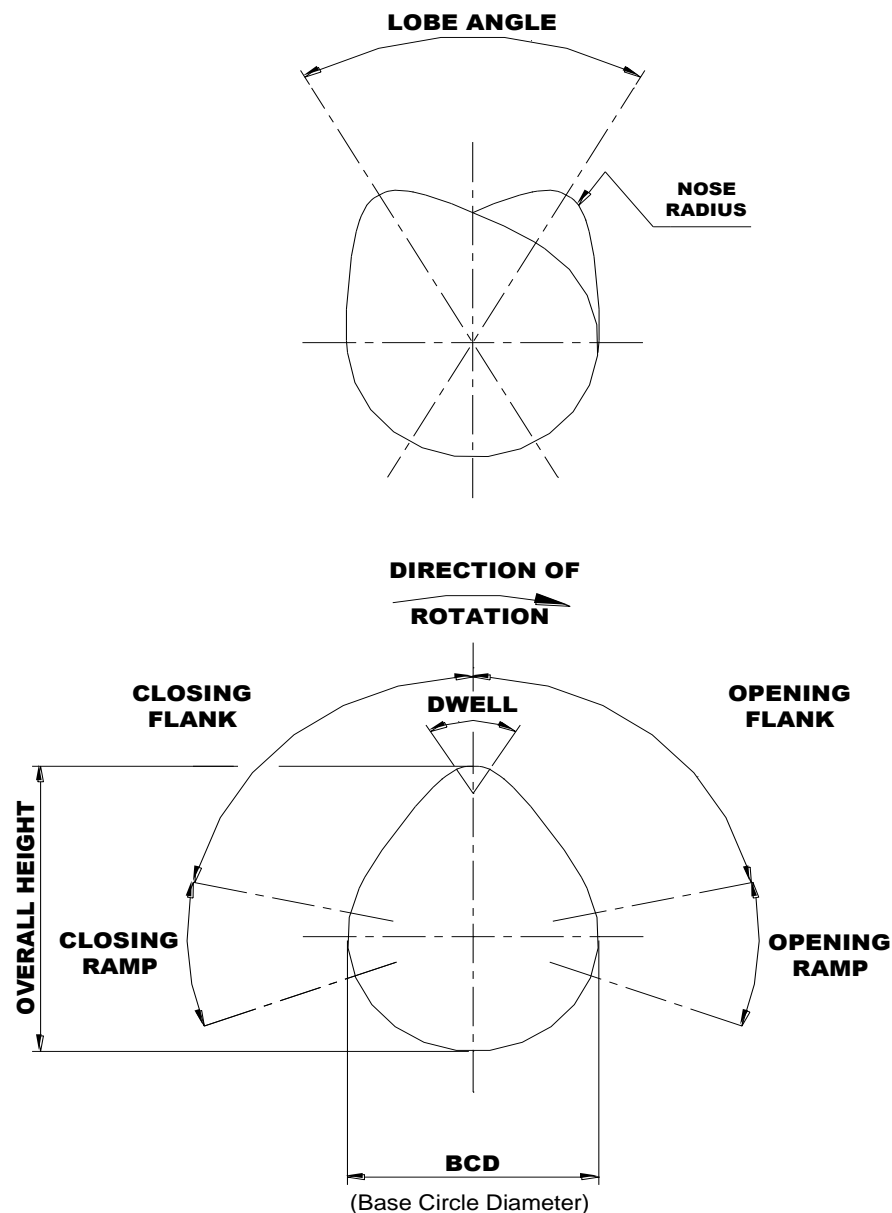
The ratio between valve motion vs cam follower motion. Push rod engines typically use a ratio of between 1.1:1 & 2.0:1. Over head cam, direct operating engines obviously have no rocker ratio as the cam follower motion is exactly the same as the valve motion.

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
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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
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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

BMW40BP270H	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
BMW40BP285H	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
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BMW E30 320 / 323 / 325 'SMALL SIX' M20

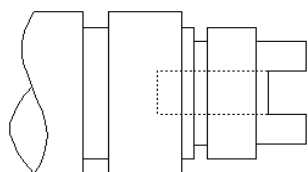
Valve lifts quoted assume a rocker ratio of 1.56:1

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

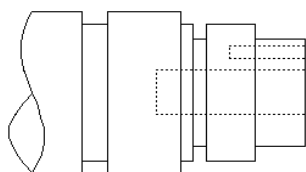
BMW 528 / 530 / 535 'LARGE SIX'

Valve lifts quoted assume a rocker ratio of 1.29:1

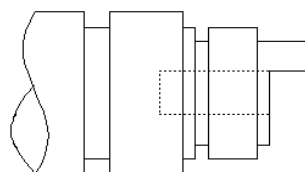
BMW5L6BP270	FAST ROAD	1500-6500	12 BHP	280 deg	276 deg	.390" 9.91mm	.400" 10.16mm	26 - 74 72 - 24	114 deg	N/A	N/A	.016" / .40mm .016" / .40mm
BMW5L6BP285	ULTIMATE ROAD	2200-7000	18 BHP	288 deg	288 deg	.400" 10.16mm	.400" 10.16mm	34 - 74 74 - 34	110 deg	N/A	N/A	.010" / .25mm .010" / .25mm



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
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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
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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

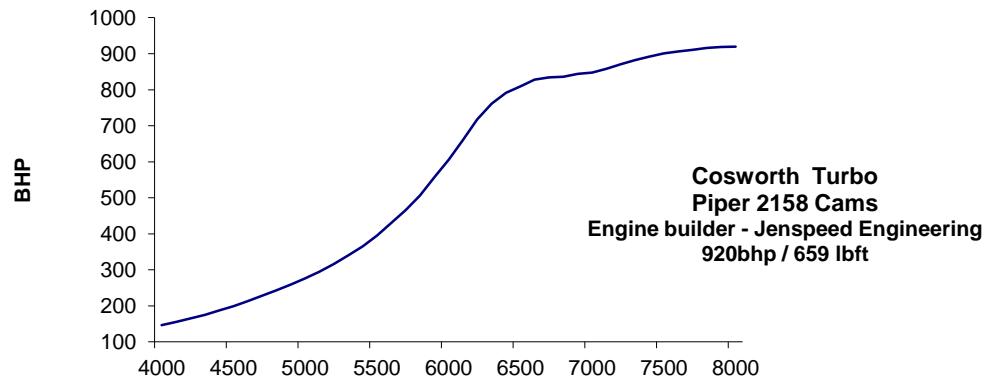
Note: If blanks cams are fitted to 2WD cylinder heads then a 5mm thrust spacer is required. Part no: COSWASH

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	The "Jenspeed" profile 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:

PULDUMP - 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
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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

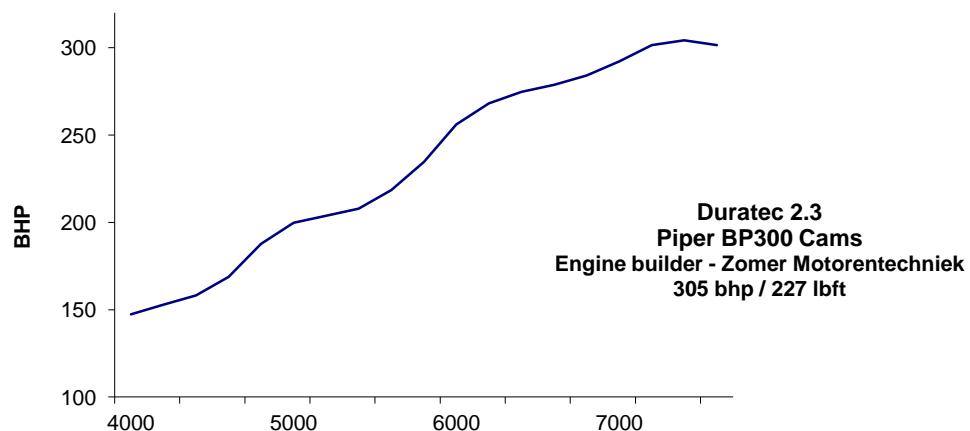
Valve lifts quoted assume a rocker ratio of 1:1

FOC225BP270	FAST ROAD
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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	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

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
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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
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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
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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
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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'

PIPER CAMS

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	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
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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

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	
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

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

Valve lifts quoted assume a rocker ratio of 1:1

VPHP270H	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
VPHP285H	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	
VPHP300H	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
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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
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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
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V.A.G. GOLF G60 SUPERCHARGED INCLUDE:

KBG60270 / 285	X	FOLVWH									X
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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
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(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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mitsubishi

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

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

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

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

Renault

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

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

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.

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

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

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

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

Vauxhall

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

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

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

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****ALFA**

FOLAR16V ALFA ROMEO 2.0 16v HYD

AUSTIN

FOLAHR HEALEY 3000

BMC

FOLMIN A SERIES
 FOLMINR A SERIES RACE (with oil drain hole)
 FOLB POST '71 B SERIES 18v
 FOLB2 PRE '71 B SERIES

FORD

FOLBDA BDA
 FOLCOSH COSWORTH YB 16V HYD
 FOLCOSMGPA COSWORTH YB 16V MECH
 FOLCVH CVH HYD
 FOLST170 FORD FOCUS ST170 & ZETEC R SOLID TAPPET 30.00MM
 FOLFN PRE XFLOW NARROW STEM
 FOLFW XFLOW 711M WIDE STEM
 FOLOHC OHC 1.6/2.0
 FOLV6 V6 3.0 ESSEX
 FOLV6G V6 2.3/2.8/2.9 GERMAN
 FOLZETAH ZETEC E HYD
 FOLZETAM ZETEC E MECH
 FOLZETAM31 ZETEC 31mm MECH FOLLOWERS
 FOLCOSMLS COSWORTH YB LONG STEM MECH

PEUGEOT

FOLVTSH 106 GTI / SAXO VTS 16V HYD
 FOLVTSM 106 GTI / SAXO VTS 16V MECH
 FOLMi16H 1.9 / 2.0 MI16 16V HYD
 FOLMi16M 1.9 / 2.0 MI16 16V MECH
 FOLGTI6H 306 GTI6 HYD
 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

PART NO. DESCRIPTION**RENAULT**FOLCLIOH CLIO 16V HYD
FOLCLIOM CLIO 16V MECH**ROVER**

FOLKH K SERIES HYD
 FOLKM K SERIES MECH
 FOLKV6H K SERIES V6 HYD
 FOLTH T SERIES HYD
 FOLTM T SERIES MECH
 FOLV8 ROVER V8 HYD
 FOLV8M ROVER V8 MECH

TRIUMPH

FOLT 1.2/1.3/1.5 4 CYL
 FOLT6 2.0/2.5 6 CYL
 FOLTR4 2.0 /2.2

VAG

FOLAUD5 AUDI 5 CYL 10V HYD
 FOLVWH 1.3/1.4/1.6/1.8/2.0 HYD
 FOLVW16H 16V HYD
 FOLVW16M 16V MECH

VAUXHALL

FOLOP 1.6/1.9/2.0 CIH MEC H
 FOLAST ASTRA 1.3/1.8 FWD
 FOLASTM ASTRA FWD WITH ADJ HOLES
 FOLAST16H ASTRA 2.0 16V HYD
 FOLAST16M ASTRA 2.0 16V MECH
 FOLCOR CORSA/TIGRA 1.4/1.6 16V HYD
 FOLCORM CORSA/TIGRA 1.4/1.6 16V MECH

VOLVO

FOLVB18 B18 VOLVO

VERNIER PULLEYS (*Please see note)

PART NO. DESCRIPTION MATERIAL

BMC

PULSMIN A SERIES DUPLEX KIT STEEL
 PULDMIN A SERIES DUPLEX KIT ALLOY
 PULSB B SERIES DUPLEX KIT STEEL
 PULSBS B SERIES CAM SPROCKET STEEL

FIAT

PULDUNO UNO TURBO/PUNTO/GT ALLOY
 PULDX19 X19/128 1300/1500 SOHC ALLOY
 PULDFTC PR 1.6/1.8/2.0 TWIN CAM ALLOY
 PULDFIRE FIAT FIRE ALLOY

FORD

PULDOHC OHC 1.6.2.0 PINTO ALLOY
 PULDCVH CVH 1.3/1.6 ALLOY
 PULSXF XFLOW DUPLEX KIT STEEL
 PULDCOS PR COSWORTH 16V ALLOY
 PULDZETA PR ZETEC 16V ALLOY
 PULSDUR PR DURATEC 16V STEEL
 PULDFOC PR FOCUS 16V ALLOY
 PULDPUM PUMA 1.7 16V EXH ONLY ALLOY
 PULDST170 FOCUS ST170 EXH ONLY ALLOY

HONDA

PULDVTEC PR VTEC 1.6 16V ALLOY

JAGUAR

PULSJAG SET JAG V6 STEEL

HYUNDAI

PULDHYN HYUNDAI ACCENT ALLOY

MITSUBISHI

PULDMITS PR MITSUBISHI EVO 4/5/6/7/8 ALLOY
 PULDMITS9 MITSUBISHI EVO 9 EXH ONLY ALLOY

NISSAN

PULSSR20 PAIR PULSAR GTIR STEEL

** - 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

PIPER CAMS

PART NO. DESCRIPTION MATERIAL

PEUGEOT

PULDVTR SAXO VTR ALLOY
 PULDVTS PR SAXO VTS 16V ALLOY
 PULDMI16 PRMI16 ALLOY
 PULD205 106 1.4 & 205 1.3/1.6/1.9 gti ALLOY
 PULD306TD 306 1.9 TURBO DIESEL ALLOY
 PULDXSI 2.0 8V Xsi ALLOY
 PULDGTI6** PR 306 GTI6 16V ALLOY
 PULD206 PR 206 GTI ALLOY

PORSCHE

PULDPOR PORSCHE 924 ALLOY

RENAULT

PULSR5 REN 5 GT TURBO STEEL
 PULDCLIO PR CLIO 16V ALLOY

ROVER

PULSV8 V8 DUPLEX KIT 3.5/3.9 only STEEL
 PULDK PR K SERIES ALLOY
 PULDT PR T SERIES ALLOY

TOYOTA

PULD3SG PR TOYOTA 3SGE/3SGTE ALLOY

VAG

PULDAUD AUDI 4 CYL 8V/ 5CYL 10V ALLOY
 PULDGTI GOLF 1.6/1.8/2.0 & G60/ AUDI 80 ALLOY
 PULDV16V GOLF 16V EXTERNAL PULLEY ALLOY
 PULSV16V GOLF 16V INTERNAL SPROCKET STEEL
 PULDV20V VAG 20V EXTERNAL PULLEY ALLOY

VAUXHALL

PULSOP 1.6/1./2.0 C.I.H DUPLEX KIT STEEL
 PULDA13 1.3 ASTRA / NOVA ALLOY
 PULDGTE 1.4/1.6 GTE (ROUND TOOTH) ALLOY
 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

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
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MINI

TBP34	MINI COOPER 1.6 16V
TBP34	MINI COOPER 1.8 16V

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
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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 VDSOHC 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	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

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

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

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" 8.61mm	.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

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

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