# FORD V8 ENGINE PARTS-for 221, 260, 281-4.6, 289, 302W, 351W/C/M, 400M, 390, 427, 428, 429, 460

CYLINDER BLOCK AREA	S2/1
CRANKSHAFTAREA	S2/4
CAMSHAFT/VALVE TRAIN AREA	S2/10
CYLINDER HEAD/VALVES	S2/15
OIL SYSTEM	S2/24
ELECTRICAL/DISTRIBUTOR	
GASKETS AND SEALS	
COOLING	
FLYWHEEL & CLUTCH PARTS	
INDUCTION	S2/38
ROCKER COVERS	
EXHAUST	

# CYLINDER BLOCK AREA

# CORE PLUGS/OIL GALLERY PLUG KITS HARDWARE KITS [dowels/f/pump drive etc] PE108BRBrass core plug kit for 221-351W £19.32

11	AKD WAKE KITS (uoweis/i/puilip)	11116611	J
BYPE108BR	Brass core plug kit for 221-351W	£19.32	
BYPE108CAM	Plug-rear of cam-289-302W	£1.37	
BYPE109BR	Brass core plug kit-351C/351M/400M	£19.03	
BY381-8017	Brass core plug kit- FE 390/427/428	£21.49	
BYAJG375	Plug-rear of cam FE & DART	£1.14	
BY219-9494	Brass core plug kit for 429/460	£20.82	2 4 6
BYAJG295	Rear cam plug [Ford Racing Blocks]	£1.70	·
BY12338136	NPT [1/4"] oil gallery plug	£1.08	
BYAJG200	Hardware kit 289/302/351 Carb	£31.00	~ ( ( )
BYAJG205	Hardware kit 302/351W FI in rlr	£32.24	
BYAJG1125	Hardware kit 351C+351M/400M	£27.83	
BYAJG210	Hardware kit 390 FE	£37.23	
BYAJG215	Hardware kit 429/460	£26.80	
_	Twist pin-holds in core plug-racing	£0.23	_
	1 1 0 0		

# CLEVITE-77°

#### CLEVITE 77 CAMBEARINGS



BYSH510S Standard	£38.08
<b>221</b> 1962-63, <b>255</b> 1980-82, <b>260</b> 1962-65, <b>289</b> 1963-68, <b>30</b>	
	Z VV 1906-
2001, <b>351W</b> 1969-98	
BYAJG1095Coated bearings for Racing	£62.39
Same fitment range as BYSH510S	
BYAJG85 Common OD 302/351 Race	£61.90
BYSH710S Standard	£39.66
<b>351C</b> 1970-74, <b>351M</b> 75-82, <b>400M</b> 71-82	
BYSH781S Standard	£34.44
390 61-76, 427 63-67 [excl 66-68 Wedge Head], 428 66-70	
BYSH1111SStandard	£33.10
<b>429-460</b> 68-98	

# MECHANICAL FUEL PUMP BLOCK OFF PLATES and to block-off the fuel nump mounting bass when a mechanical fuel

Designed to block-off the fuel pump mounting boss when a mechanical fuel pump is not being used. Chrome plated steel/Billet Aluminium.

 BY65394
 Except
 351C/M/400M/281-4.6
 £14.99

 BY55023K
 Bolt kit 221-351W
 £3.43

 BY41620
 Billet alum' 221-351W+429-460+FE
 £34.16

 The above item is complete with bolts

**BY1517** 351 Cleveland/Modified/400M **£20.94** 



RV154-5401 280-302W 2-bolt main std type block

# MAIN STUD KITS



ARP Main studs help eliminate main cap walk and fretting, and protect the threads in the cylinder block. Manufactured from aircraft quality 8740 Chrome Moly Steel, after heat treating the fasteners are ground and thread-rolled to ensure precise tolerances. The stud kits come complete with hardened, parallel-ground washers and high strength hex head nuts. Tensile strength of 200,000 PSI.



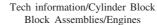




£80 11

<b>b1134-3401</b> 269-302 w 2-001t main, std type block	202.11
BY254-5501 289-302W 2-bolt main, std block +windage tray	£147.70
BYAPN1116289-302W 2BM w-tray stud main nut	£0.31
BYWTN-1 289-302W 2BM w-tray nut	£0.26
BYAJG595 289-302W 2BM with girdle [BY22928]	£95.03
BY154-5403 351W 2-bolt main, std type block	£102.25
BY154-5503 351W 2-bolt main, std block + windage tray	£118.72
BY154-5404 351C 2-bolt main	£93.35
BY155-5401 390-428 FE 2-bolt main, std type block	£113.14
BY155-5402 429-460 2-bolt main, std type block	£100.92

# - FORD V8 -





# RACING PERFORMANCE PARTS

#### 221-260-289-302W

<b>221W</b> 1962-63. Bore x Stroke = 3.5" x 2.87". Block Height = 8.206".
<b>260W</b> 1962-64. Bore x Stroke = 3.8" x 2.87". Block Height = 8.206".
<b>289W</b> 1963-68. Bore x Stroke = 4.0" x 2.87". Block Height = 8.206".
<b>302W</b> 1968-72. Bore x Stroke = 4.0" x 3.00". Block Height = 8.206".
<b>302W</b> 1973-76. Bore x Stroke = 4.0" x 3.00". Block Height = 8.229".
302W 1077-06 Rore v Stroke - 4.0" v 3.00" Rlock Height - 8.206"

#### 351W/351C/351M/400M

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351W 1969-70. Bore x Stroke = 4.0" x 3.50". Block Height = 9.48". 351W 1971-96. Bore x Stroke = 4.0" x 3.50". Block Height = 9.503". 351C 1970-74. Bore x Stroke = 4.0" x 3.50". Block Height = 9.206". 351M 1975-85. Bore x Stroke = 4.0" x 3.50". Block Height = 10.297". 400M 1971-81. Bore x Stroke = 4.0" x 4.00". Block Height = 10.29-10.302",
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# 429/460- Big Block

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429 1968-70. Bore x Stroke = 4.36" x 3.59". Block Height = 10.300". 429 1970.5-71. Bore x Stroke = 4.36" x 3.59". Block Height = 10.310". 460 1969-96. Bore x Stroke = 4.36" x 3.85". Block Height = 10.322". NB: There are various deck heights used with 460 blocks, measure it if there is a doubt
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#### CYLINDER SLEEVE

These sleeves are centrifugally spun-cast using Chrome-moly iron alloy material.



BYCSL1113A 289-302 Melling-4.19"x 3.97" x 5.125"

£23.40ea

#### DAR

#### 302 Dart SHP Cast Iron Performance Block

Brand new precision machined cast iron block. It features- Siamesed cylinders with extra thick cylinder walls, 8.20" deck height, steel 4 bolt main caps with splayed outer bolts, [caps 1&5 are 2 bolt] 1 piece rear seal, 2.249" main diameter, priority main oiling system, blind head bolt bosses, extra thick decks. Supplied with 4.00" bore, [unfinished] can be bored to 4.185". Will accept stock OE roller lifters & retainers. Needs core plugs, cam brgs & dowels. Extended cyl barrels.



BY31374175 Dart SHP Cyl Block 302W- 600bhp ok £3400.55

#### (DAIRI

#### 351W Dart SHP Cast Iron Performance Block

Brand new precision machined cast iron block. It features- Siamesed cylinders with extra thick cylinder walls, 9.50° deck height, steel 4 both main caps with splayed outer bolts, [caps 1&5 are 2 botl]. 1 piece rear seal, 2.75° [351C] main diameter, priority main oiling system, blind head bolt bosses, extra thick decks. Supplied with 4.00° bore, [unfinished] can be bored to 4.185°. Needs core plugs, cam brgs & dowels. Extended cyl barrels.



BY31375135 Dart SHP Cyl Block 351- 600bhp ok £3122.03

#### FORD 302cu in/5.0 litre R.S. Crate Engine 330bhp

This BLUEPRINTED 302 FORD V8 long engine, is built to the highest engineering standards, starting with an NOS cylinder block. With a wide torque band, a very pleasant idle & a great show of power, it will suit many different applications, manual or automatic. Shown below, is a list of tasks carried out on each engine-

Remove all plugs from block [oil & water]. Clean out & check all threads. Install ARP main studs. Machine both decks parallel to the main tunnel centreline & for correct piston deck height. Check I.D. of cam tunnels, if incorrect, hone to size. [not uncommon with Ford 302's.].

Check & adjust Clevite Plasma-Moly piston ring clearances, check Keith Black hypereutectic piston to bore clearances & balance pistons. Fit new Eagle 3" stroke crankshaft & check Clevite big end & main bearing clearances, crankshaft end float, conrod side clearance at big end & ID of big end on new Eagle 1-beam, fully floating, conrods. Balance crankshaft & reciprocating components to less than 4 grams [We usually build 28"oz versions, but 50"oz is an option.]. Thread oil gallery plugs that are presently press fit. Remove all parts from block. All parts are then washed & the cylinder block is painted blue.

Install all oil & water plugs, fit Clevite camshaft bearings & insert Performer camshaft, Assemble short engine. Fit Edelbrock E-street aluminium cylinder heads, with Johnson style high performance cam followers, with "eyed circlips", .080" wall, HD pushrods, Aluminium roller rockers. Adjust lifter preload. Check rocker geometry is ok. Mount engine in wooden carrier. [Not in a box, this would cost extra.] Cover engine with Moroso engine bag. Supplied with correct running in oil & extra Zinc.

The original test version of this engine was dyno tested with several combinations to get the best results.

If you can supply the block, we can build this engine from an "old" cylinder block.

#### MACHINED & BUILT IN ENGLAND.

Normal Price Gold Card Price

BY302330MK3 [NOS cyl block] £6050.23

£5445.21

#### 281-4.6 OHC and DOHC

2 valve, 3 valve and 4 valve

**281** 1990-14 Bore x Stroke=3.5512" x 3.543" Block Height=8.937". Con rod length 5.933"

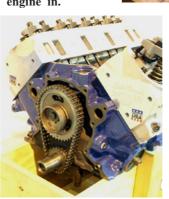
#### 390/427/428- Big Block FE

**390** 1961-76. Bore x Stroke = 4.05" x 3.78". Block Height = 10.17". **427** 1963-68. Bore x Stroke = 4.23" x 3.78". Block Height = 10.17". **428** 1966-70. Bore x Stroke = 4.13" x 3.98". Block Height = 10.17".

#### 429 CJ-SCJ/429 Boss (S)/429 Boss (T)

**429CJ-SCJ** 1969-70. Bore x Stroke = 4.36" x 3.59". Block Height =measure **429Boss(S)** 1969. Bore x Stroke = 4.36" x 3.59". Block Height = 10.30". **429Boss(T)** 1969-70. Bore x Stroke = 4.36" x 3.59". Block Height = 10.30".

Comes complete with harmonic balancer and bolt, oil pump and ARP bolt kit, remaining gaskets from gasket sets, header gaskets, H.D. oil pump drive shaft, Fram oil filter, oil additive package for flat tappet cams & wooden stand to sit engine in.





302cu in, maximum power 330bhp. Max torque occurs at 4000rpm [347ftlbs]. Torq exceeds 300ft lbs from 3-5500rpm. Good idle quality. Will pull like a train!

#### FORD 327cu in/5354cc R.S. Crate Engine 393bhp

This BLUEPRINTED 327 FORD V8 long engine, is built to the highest engineering standards. With a wide torque band, a very pleasant idle & a great show of power, it will suit many different applications, manual or automatic. Shown below, is a list of tasks carried out on each engine-

Remove all plugs from block [oil & water]. Clean out & check all threads. Install ARP main studs. Check bore size for KB hypereutectic pistons. Machine both decks parallel to the main tunnel centreline & for correct piston deck height. Check I.D. of cam tunnels, if incorrect, hone to size. [not uncommon with Ford 302's,]

Check & correct the Clevite Plasma-Moly piston ring clearances, check new EAGLE stroker crankshaft. Check piston to bore clearances & balance pistons. Check Clevite HD big end & OE type main bearing, clearances, crankshaft end float, conrod side clearance at big end & ID of big end on new Eagle 5.40" floating pin conrods. Balance crankshaft & reciprocating components to less than 4 grams [external balance @ 28" oz]. Thread oil gallery plugs that are presently press fit. All parts are then washed & the NOS std bore cylinder block is painted blue

Install all oil & brass water plugs, fit Clevite camshaft bearings & insert Comp-Cams camshaft. Assemble short engine. Fit AFR Renegade 20 degree, Street CNC ported cylinder heads, Johnson HD hyd lifters with proper "eyed" circlips, HD .080" wall one piece pushrods & aluminium roller rockers & adjust lifter preload. Check rocker geometry is ok. Mount engine in wooden carrier. [Not in a box, this would cost extra.] Cover engine with Moroso engine bag. Requires SUPER-UNLEADED FUEL [Shell is good quality].

#### MACHINED & BUILT IN ENGLAND.

Normal Price

Gold Card Price

BY327393

£7766.93

£6990.24

Comes complete with harmonic balancer and bolt, oil pump and ARP bolt kit. remaining gaskets from gasket sets, header gaskets, H.D. oil pump drive shaft, Fram oil filter, oil additive package for flat tappet cams & wooden stand to sit engine in.





327cu in, maximum power 393bhp. Max torque occurs at 4500rpm [386ft lbs]. Torq exceeds 362ft lbs from 3-5500rpm. Good idle quality. Will pull like a train!

#### Reconditioned Ford 302W 5.0 litre Engine "1968-74"

This reconditioned 302 5.0 litre engine assembly covers the year ranges "1968-74". It is a stripped long engine, and does not include- sump, timing cover or rocker covers. The dipstick could be mounted in the timing cover or the side of the block. Presently, the hole for the side dipstick is blocked off. From your old unit you will need to transfer all the "tinware", eg, rocker covers, sump, timing cover, inlet manifold, distributor etc. A 50"oz 157 tooth flywheel & a 50" oz harmonic balancer are supplied. The unit is fitted with spark plugs and a fuel pump eccentric. If you have an early Mustang with a manual transmission, you will need a bracket for the clutch shaft.



G/Card Price Retail £tha £tha

Reconditioned 302W/5.0 BYAJG722

# Reconditioned Ford 351W 5.8 litre 1/2 Engine

This reconditioned 351W half engine, is recommended for 1988-1993 [non-roller block]. It is reconditioned in the USA. Main tunnels are line bored, brass core plugs are used and the unti is balanced. Hypereutectic pistons are used, with molly rings. 60cc heads would give 9.3:1 compression.

Retail G/Card Price

BYAJG1120 Reconditioned 351W/5.8 1/2engine

£tba

£tba

#### HIGH PERFORMANCE 180,000psi MAIN BOLT KITS

ARP Main bolts are far superior to any other main bolt kit offered for use in modified engines. Manufactured from aircraft quality 8740 Chrome Moly Steel, after heat treating the fasteners are threadrolled to ensure precise tolerances. These kits are complete with hardened, parallel-ground washers. These bolts have a nominal tensile strength of 180,000 PSI.



BY855202 221-302W SBF std main bolts [NOT ARP]	£30.01
BY154-5001 221-302W SBF 2-bolt main	£77.89
BY154-5003 351W SBF 2 bolt main	£87.55
BY154-5004 351C SBF 2 bolt main	£82.51
BY155-5201 390-428 FE BBF	£95.70

#### **ENGINE MOUNT BOLT KIT**



Crankshaft Area

BY450-3101 ARP S/less-Polished 12pnt SBF £36.96 BY55024K S/less not polished SBF

#### STANDARD STYLE ENGINE MOUNTS

BY2221 Right hand 289 £26.72ea BY2220 Left hand 289 £26.72ea

260 engine: 1963-64 Galaxie, 1964 Mustang. 289 engine: 1963-64 Galaxie, 1964 Custom 500, 1964-65 Falcon-not

convertible, 1964-march 1966 Mustang.

£32,99ea

BY2257 Left & Right

289 engine: 1966-68 Falcon, 1964-67 Fairlane, march 1966-68 Mustang,

1968 Torino.

302 engine: 1968-70 Falcon, 1968-70 Fairlane, 1968-72 Mustang Coupe, 1968-72 Mustang convertible LH only, 1968-73 Mustang convertible RH only, 1970-71 Cobra, 1968-71 Torino.

351 engine: 1969-72 Mustang coupe, 1969-70 Mustang convertible, 1969-71

Torino, 1970-71 Cobra.

BY2287 Left & Right Price: £21.96ea

289 engine: 1965-67 Galaxie. **302 engine:** 1968-72 Custom 500, 1968-72 Galaxie 500.

351 engine: 1969-77 Custom 500, 1969-70 Fairlane, 1969-74 Galaxie 500

BY2547 Right hand 302 £8.84ea

BY2546 Left hand 302 302 engine: 1979-83 Mustang.

BY2683 Right hand 302 £23.63ea BY2682 Left hand 302 £23.63ea

302 engine: 1984-20/2/92- Mustang Coupe, 1983-85 T-Bird

**BY2726** Right hand 302 £29.24ea BY2725 Left hand 302 £29.24ea 302 engine: 1983-93- Mustang Convertible, 20/2/92-95 Mustang Coupe.

1980-82 Thunderbird with "Shake Condition".

# ARP Stainless/Black ENGINE BOLT KIT

The ARP 12pt bolt kit, is a selection of bolts in one box, for a specific engine. These bolts are available in certified premium stainless 300 &8740 Chrome Moly steel with a black oxide finish, rated at 170,000 psi tensile strength. Stainless is resistant to rust and corrosion and has a polished finish. Some kits, especially for later model Cars, may require the purchase of extra bolts.

BY554-9501 289 to 302 SBF STAINLESS £322.75 BY554-9701 289 to 302 SBF BLACK £251.50 BY554-9503 351W SBF £235.10 BY554-9504351C SBF £271.85 BY555-9502 390-428 FE BBF £339.35

65' 289 bolt kit T/c+W/p+Alt £217.34

Above kit is the same as standard OEM Mustang. NOT ARP







BY4849 SBF 260-351W+pre 73 351C £182.78 Fits frame rails 24-37" wide. Centre-centre between perches 17-1/4"

#### STANDARD STYLE ENGINE MOUNTS

BY2240 Right hand £10.26ea BY2241 Left hand £10.26ea

390 engine: 1967-68 T-bird, 1968-69 Torino,1968 Galaxie 500,

1966-69 Fairlane, 1968 Custom 500,

427 engine: 1965-68 Custom 500, 1965-68 Galaxie 500, 1966-68 Fairlane, 1966-68 Torino.

428 engine: 1966-68 Custom 500, 1966-68 Galaxie 500, 1966-67 T-bird,

1968-69 Torino.

BY2723 Right hand £29.40ea BY2724 Left hand £26.34ea

429 engine: 1969-72 Galaxie, 1969-71 Mustang, 1968-73 T-bird.





#### ENERGY SUSPENSION POLYURETHANE ENGINE MOUNTS

Made from Hyper-flex performance polyurethane, impervious to road 

BY4-1135G Mustang 289 68-77/302+351 67-72 £228.64pr



#### STEEL STAND FOR MOUNT-HEIDTS C/MEMBER

This steel bracket kit bolts to the Heidts crossmember and accepts a Ford style mounting to mount a SBF Windsor



BYAJW335 Steel stands for mount

281 [4.6L SOHC] 1991-03; DOHC 1993-02

330 Triton-[5.4L SOHC] 1997-03; DOHC 1999-02

Standard

£121.26

£31.08sp

# CRANKSHAFTAREA

*Technical Information:* **221, 260, 289, 302W**: Bigends 2.1228"-2.1236": Mains 2.2482"-2.249"; **351W, 351M, 400M**: Bigends 2.3103"-2.3111": Mains 2.9994"-3.0002": **351C**: Bigends 2.3103"-2.3111": Mains 2.7484"-2.7492": **390, 427, 428FE**: Bigends 2.438"-2.4388": Mains 2.7484"-2.7492": **429, 460**: Bigends 2.4992"-2.5": Mains 2.9994"-3.0002": **281**-**4.6L SOHC:** Bigends 2.086"-2.0867": Mains 2.6568"-2.6576":

## STANDARD AND HIGH PERFORMANCE BEARING SETS

Clevite 77 CON ROD BEARING Sets **CLEVIT** 



£11.23ea

281 [4.6L SOHC] 1991-03; DOHC 1993-02 330 Triton-[5.4L SOHC] 1997-03; DOHC 1999-02

BYCB1442P Standard £30.24



BYMS2204P

GIEVILET

BYMS2204P.25 +.25mm "[.010"]" £31.08sp 281 SOHC, 1991-92 Vin W, 1 piece thrust washer set & lwr half flanged thrust b BYMS2007P Standard £24.05sp £26.91sp BYMS2007P.25 +.25mm "[.010"]" 281 SOHC, 1993-03 Vin W, X, 1 piece thrust washer set & lwr half flanged thrust brg Standard £29.78sp

Clevite 77 MAIN BEARING Sets

BYMS2202P BYMS2202P.25 £29.78sp +.25mm "[.010"]" 281 SOHC, 1996-03 Vin 6, 330 Triton 1997-03, straight shell brgs & 3 piece thrust set.

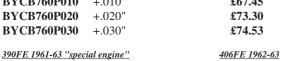
BYMS2259A £32.50sp Standard

281 DOHC, 1993-02 contains half flanged brg.



#### **Standard Bearing Sets**

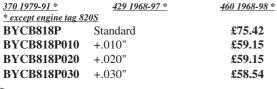
Standard	l Clevite 77 CON R	OD BEARING S	ets
CLEVITE 77			CLEVITE 77
<u>221 1962-63</u>	<u>255 1980-82</u>	<u>260 1962-65</u>	
289 1963-68 2B		Boss & Eliminator	
BYCB634P	Standard	£64.04	
BYCB634P010	+.010"	£59.54	
BYCB634P020	+.020"	£58.54	
BYCB634P030	+.030"	£57.53	
BYCB634P040	+.040"	£57.05	
351W 1969-98			
BYCB831P	Standard	£59.54	
BYCB831P010	+.010"	£57.55	
BYCB831P020	+.020"	£60.05	
BYCB831P030	+.030"	£57.55	
351C 1970-74	351M 1975-82		
400M 1971-82			
BYCB927P	Standard	£68.86	
BYCB927P010	+.010"	£70.02	
BYCB927P020	+.020"	£64.92	
BYCB927P030	+.030"	£71.96	*
BYCB927P040	+.040"	£71.98	
330/361/391FE 1964-	.78	332FE 1958-5	9
352FE 1958-67	359FE 1974-75	360FE 1976	_
361FE 1958-59	389FE 1975-78	390FE 1961-7	<u>'6</u> *
410FE 1966-67	<u>428FE 1966-70</u>		
•	ith C70E-2700A c/rod & C	<u> 29AZ-6303D crank</u>	
8	63 "Special Engine"	0/0.25	
BYCB760P	Standard	£69.25	
BYCB760P010	+.010"	£67.45	
BYCB760P020	+.020"	£73.30	Y '



427FE 1963-67 "high performance" except with C70E-6200A con rod

& C9AZ-6303D crankshaft Use BYCB760P BYCB756P BYCB756P010 Use BYCB760P010

BYCB756P020	Use BYCB760P020	
370 1979-91 *	429 1968-97 *	460 1968
* except engine tag 82 BYCB818P	<u>208</u> Standard	£75.4



### Standard Clevite 77 CON ROD BEARING Sets

GIEVITE Stroker Ford "302" with Eagle 5.4" conrods Version using Chevrolet V6 bearings

BYCB1227PStandard £89.36 BYCB1227P010 +.010" £89.36

#### Clevite 77 MAIN BEARING Sets

GLEVITE 7

# CLEVITE 7/

<u>221 1962-63</u>	<u>255 1980-82</u>	<u>260 1962-65</u>	
<u>289 1963-68</u>	<u>302W 1968-01</u>		
BYMS590P	Standard		£70.40
BYMS590P010	+.010"		£70.40
BYMS590P020	+.020"		£68.06
BYMS590P030	+.030"		£70.40
351W 1969-76	400M 1	<u>971-76</u>	

351W 1969-76 351M 1975-76

BYMS981P	Standard	£79.58
BYMS981P010	+.010"	£76.36
BYMS981P020	+.020"	£73.82
BYMS981P030	+.030"	£78.40

351W 1977-98 400M 1977-82

351M 1977-82

SOME SHELLS HA	VE LOCATION TA	GS IN CENTRE
BYMS1432P	Standard	£78.22
BYMS1432P010	+.010"	£76.88
BYMS1432P020	+.020"	£75.60
BYMS1432P030	+.030"	£67.50
351C 1970-74		

BYMS1010P Standard £108.98 BYMS1010P010 +.010" £109.00 +.020" BYMS1010P020 £111.84 £52.82

+.030" [Fed-Mog] BY4925M030

332FE 1958-59 390FE 1961-63	352FE 1958-63 406FE 1962-63	<u>361FE 1958-59</u> <u>427FE 1963</u>
BY4020M	Standard [Fed-Mog]	£81.13
BYMS445P010	+.010"	£117.84
BYMS445P020	+.020"	£78.22
330/361/391FE 1964-	78	332FE 1958-5

352FE 1964-67 359FE 1974-75 360FE 1976 389FE 1975-78 390FE 1964-76 410FE 1966-67 427FE 428FE 1966-70 1964-68

BYMS685P \* Standard £89.14 BYMS685P010 \* +.010" £98.40 BYMS685P020 \* +.020" £75.65 BYMS685P030 \* +.030" £75.65

\* 1964-65 engines only. Flange diameter is 3.764-3.824'

BYMS863P **	Standard	£90.26
BYMS863P010 **	+.010"	£97.38
BYMS863P020 **	+.020"	£97.38
BYMS863P030 **	+.030"	£90.25
** 1066 78 ongines	only Flora	diameter is 3 888

1966-78 engines only. Flange diameter is 3.888-3.948"

<u>370 1979-91</u>	<u>429 1968-97</u>	<u>460 1968-98</u>
BYMS1039P	Standard	£93.30
BYMS1039P010	+.010"	£80.57
BYMS1039P020	+.020"	£79.13
BYMS1039P030	+.030"	£76.85



#### **Performance Bearing Sets**

# Performance Clevite "H series" CON ROD BEARING Sets GLIVII: 7 CHECK FOR FILLET CLEARANCE! GLIVII: 7

These bearings were developed primarily for NASCAR type racing, but are suitable for all types of competition engines. H series bearings have a medium level of eccentricity, high crush, & conrod bearings have a hardened steel back & thin overlay. The chamfers are enlarged for greater crankshaft fillet clearance, & are made without flash plating for better seating. Mains have grooved upper halves and plain lower halves. Ideal for engines running in the medium to high RPM range. Contact pattern should be 2/3 to 3/4 of the bearing surfaces.

221 1962-63 255 1980-82 260 1962-65

<u>221 1962-63</u>	<u>255 1980-82</u>	<u> 260 1962-65</u>
<u>289 1963-68</u>	302W 1968-01	
BYCB634H	Standard	£99.55
BYCB634H001	+ .001" [tighter]	£102.19
BYCB634HX	001" [looser]	£111.64
BYCB634H010	+ .010"	£97.86
_		

#### Performance Clevite "H series" MAIN BEARING Sets CHECK FOR FILLET CLEARANCE! CLEVIII GEVITE-7

These bearings were developed primarily for NASCAR type racing, but are suitable for all types of competition engines. H series bearings have a medium level of eccentricity, high crush, & conrod bearings have a hardened steel back & thin overlay. The chamfers are enlarged for greater crankshaft fillet clearance, & are made without flash plating for better seating. Mains have grooved upper halves and plain lower halves. Ideal for engines running in the medium to high RPM range. Contact pattern should be 2/3 to 3/4 of the bearing surfaces.

<u>221 1962-63</u>	<u>255 1980-82</u>	<u>260 1962-65</u>
<u>289 1963-68</u>	302W 1968-01	
BYMS590H	Standard	£107.94
BYMS590H001	+ .001" [tighter]	£102.44
BYMS590HX	001" [looser]	£108.72
BYMS590H010	+ .010"	£98.92



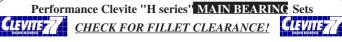
#### **Performance Bearing Sets**

# Performance Clevite "H series" CON ROD BEARING Sets CHECK FOR FILLET CLEARANCE! CIEVILE 7

These bearings were developed primarily for NASCAR type racing, but are suitable for all types of competition engines. H series bearings have a medium level of eccentricity, high crush, & conrod bearings have a hardened steel back & thin overlay. The chamfers are enlarged for greater crankstaff fillet clearance, & are made without flash plating for better seating. Mains have grooved upper halves and plain lower halves. Ideal for engines running in the medium to high RPM range. Contact pattern should be 2/3 to 3/4 of the bearing surfaces.

#### Stroker Ford 302/347 with Eagle 5.4" Conrods

BYCB1227H	Standard	£103.72
BYCB1227HX	1 thou looser	£96.79
BYCB1227H001	1 thou tighter	£104.93



These bearings were developed primarily for NASCAR type racing, but are suitable for all types of competition engines. H series bearings have a medium level of eccentricity, high crush, & conrod bearings have a hardened steel back & thin overlay. The chamfers are enlarged for greater crankshaft fillet clearance, & are made without flash plating for better seating. Mains have grooved upper halves and plain lower halves. Ideal for engines running in the medium to high RPM range. Contact pattern should be 2/3 to 3/4 of the bearing surfaces.

351C 1970-74

BYMS1010H Standard £98.47 BYMS1010H010 +.010" £98.47

351W 1977-98 400M 1977-82

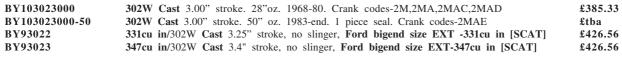
351M 1977-82

BYMS1432H Standard £90.84





#### NEW Crankshafts [without bearings]- Require Balancing Ext=external balance: Int=internal balance [with specified bobweight] [cu in sizes on stroker cranks use 4.030" & 4.125" bore]



BY430234025400 347cu in/302W Forged 4340 steel 3.40" strk, c/drilled,nitrided INT-347/363cu in. Ford BE £919.80

392cu in/351W Cast 3.85" stroke, EXT-392cu in. BY103513850 £498.89 392cu in/351C Cast 3.85" stroke, EXT-392cu in BY103563850 £567.20

BY435240006200 427cu in/351W Fgd 4340 steel 4.0" strk, c/drilled, nit INT- 427cu in.

The above crank has 2.75" main journals

It is claimed the above crankshafts can be used in a block with a 2 piece

rear seal or 1 piece CRANKSHAFTS REQUIRE BALANCING!



#### STROKER ENGINE PARTS INFORMATION

Check piston skirt to crank web clearance, before balancing

FORD 302 BASED- 331cu in- better for fast street & occasional strip, as the piston has a longer skirt than a 347cu in, for better wear properties. use as below-

BY103023252 Eagle stroker crankshaft 3.25" cast 28"-or-BY430232525400 Eagle stroker crankshaft 3.25" forged-zero balance BYFSI5400FB Eagle conrods I beam, 4340 forged 5.40" with 7/16" bolts

BYIC9970 Icon FHR f orged pistons- 4"//4.030"//4.040"

FORD 302 BASED- 347cu in- If using with lots of Nitrous, Supercharger or Turbo, use

piston BYIC709. For components, use as below-

BY103023402 Eagle stroker crankshaft 3.40" cast 28"-or-BY430234025400 Eagle stroker crankshaft 3.40" forged-internal balance BYFSI5400FB

Eagle conrods I beam, 4340 forged 5.40" with 7/16" bolts Keith Black hypereutectic pistons- 4.030"-or-Icon FHR forged pistons- 4"//4.030"//4.040" **BYKB366 BYIC9971** 

BYIC709 Icon forged racing pistons- 4.060'

FORD 351W BASED- 392cu in- for components, use as below-BY103513850 Eagle stroker crankshaft 3.85" cast, 28" balance Eagle conrods I beam, 5140 forged, bushed BYSIR5956FB

BYIC9973 Icon forged FHR pistons- 4.030"//4.040" N.B. for a budget version, use std 351W c/rods and 302W pistons-

FORD 351C BASED- 392cu in- for components, use as below-BY103523850 Eagle stroker crankshaft 3.85" cast-28" balance Eagle conrods I beam, 4340 forged, 7/16" bolts, bushed BYFSI6000B

BYIC879 Icon forged pistons- 4.030"//4.040'

FORD 351W BASED- 427cu in- for components, use as below-Dart HD, 2.75" 4BM,cylinder block, bore to 4.125" BY31365135 Eagle stroker crankshaft 4.00" 4340 forged, internal balance BY435240006200 BYFSI6250B Eagle conrods I beam, 4340 forged, 7/16" bolts, bushed

BY930248525 Mahle forged 4032 pistons- 4.125" inc rings

FORD 390FE BASED- 444cu in- for components, use as below-BY104284250 Eagle stroker crankshaft 4.25" cast-

Eagle conrods I beam, 5140 forged, 6.70" bushed BYSIR6700B

BYIC583CKTD030 Icon forged pistons- 4.080" inc rings



# EAGLE 444 [352-390FE] STROKER KIT



Using Edelbrock 72cc heads, you will get 9.53:1 CR with .020" deck, and 9.75:1 with .008" deck height. 4.08" bore, 22cc dish.

BY104284250 Eagle cast crank 4.25" BYSIR6700B Eagle I beam 6.7" conrods

BYIC583CKTD030 Icon forged pistons Above pistons are complete with rings

£517.80 £508.19 £797.28

£903.08



# ARP CON ROD BOLTS

ARP 8740 alloy chrome moly steel. Rated at a tensile strength of approx 200,000 psi, 5 times more reliable than std bolts. **ARP 2000** Pro series Wave-Loc bolts have 200% the fatigue life of 8740 & tensile strength of about 220,000 psi.

BY154-6002	8740-289-302W std size -5/16"	£99.47	
BY200-8632	Nuts for above bolts [pack 10]	£8.46	
BY150-6005	8740-289 "K" HP engine-3/8"	£108.53	
BY150-6004	8740-Boss 302W & 351W	£102.89	
BY154-6003	<b>8740</b> -351 Cleveland	£99.47	
BY155-6002	<b>8740</b> -390-428 FE BBF- <u>3/8"</u>	£101.16	(
BY155-6003	8740-429-460 & 351Wsq head	£93.68	1
BYN502	Nuts for 11/32" bolts	£0.37	





#### Spacer with Counterweight 460/514

This spacer with counterweight, is for 1979-97 460 engines, as they are externally balanced. Used on Ford Racing crate engines also



BYAJG240 Crank damper counterweight

CRANKSHAFTKEY



BYAJG50 £1.18 302/351W

#### **BALANCER BOLT KIT**



BY150-2501 ARP -All except 351C 2.05"x5/8" £38.92 BY859048 Pioneer- All except 351C £25.60 BY154-2501 ARP-351C only 1.8"x5/8" £31.48





BYAJG40

BYM-8509-EM

#### STANDARD TIMING SETS

Passenger Car only

BYC-3032 221-260-289 1962-65 £66.64 BYC-3014K 289 65-70/302-351W 67-72 £37.44 BYC-3004K 302-351W 72-88 £35.86 BYC-3057K 302- HO 21-3-84 to 88, 302 89-93

351W-HO 21-3-84 to 89/351W 90-92 Use BYC-3057X roller type chain

BYC-3005K 351C 2b-400M 70-72/351C 4b 73-74 £33.16 BYC-3009K 351C 2b-400M 73-79/351M 75-79 £28.02 BYC-3012K 390 63-71/427 63-68/428 66-70 £41.83

BYC-3037 429 68-71/429 special 1973 Use BYC-3079X

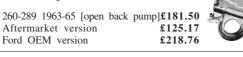


£310.97

#### TIMING COVER ALUMINIUM-V-BELT TYPE SBF

New timing covers. Ford type has more clearance, if wider timing gears are being used for racing. See S9/9 for ARP bolts.

AJM408 BY302TC



#### STANG BILLET ALUMINIUM PULLEY SET





Performance pulleys when used in sets will give a power increase, by reducing the speed of the alternator & water pump. Hi-water Flow pulleys, speed up the w/pump

## ALUMINIUM CRANK PULLEYS- "V"-Belt Single/Twin Groove

289-302-351W with 4 bolt harmonic balancer BY1614 V belt- fits as below listed; 1-Groove £150.96 BY1545 V belt- fits as below listed; 2-Grooves £170.40 OK, for RH & LH inlet water pumps, with either Hi-waterf performance water pump pulleys

TRANS BY8316 Steel crank pulley 2 groove 3 bolt £123.95 Above pulley is painted blue, fits 289/302/351W

#### (CLOYES COMP\* **ROLLER TIMING SETS**

3 keyways for more precise timing-std, 4 degrees retard & advance. Double roller chain.

BYC-3054X Cloyes 221-351W 1962 to 21-3-84 [1pce+long dowel] £62.16 BYC-3057X Cloyes 302-351W 21-3-84> [2pce+short dowel] £56.48 £10645 BY2121C C/Cams 351C/351M/400M 70-82 BYC-3029X Cloyes BBF FE 390-428 £86.30 £65.44 BYC-3079X Cloyes BBF 429-460

#### CLOYES. CLOYES BILLET TRUE "9-Keyway" Sets

Billet steel, induction heat treated gears, seamless true-roller chain with .250" rollers, 9 keyway crank gear.

BY9-3535X9 Cloyes 221 to 351W 1962 on BY9-3521X9 Cloyes 351C-M/400 1970-82 £122.56 Cloyes 390-428 FE 1964-74 £121.10 BY9-3508X9 BY9-3522X9 Cloyes 429-460 £127.46

**CLOYES RACE True Roller Sets** 

Hand matched, induction heat treated billet sprockets, with Premium .250" true-roller chain, 9 keyway crank sprocket, allowing +/-8degrees of adjustment, in 2 crank degree increments..

BY9-3635X9 221-351W 1962-84 1pc eccentric £177.42 Best race set 221-351W BY9-3635X9Z £231.53

BY9-130Z Replacement race chain-33% stronger £114.36



#### SPIGOT BUSH/BEARING

BYAJG100	Bronze bush 65-69 Mustang 289	£6.10
BYAJG115	Bronze bush BBF1.85" OD	£12.76
BYAJG415	Mustang 302-351 1968-73	£16.22
BYAIG105	Brg in a case 79-91 Mustang 302	£10.57



#### STANDARD CRANK HARMONIC DAMPER

BYDA-289	28"oz, 3bolt SBF 289	£127.34
BYDA-3512	28"oz 351 Windsor	£100.84
BYDA-3515	28"oz 351 Cleveland	£113.59
BYDA-390	390 FE	£160.54



#### PROSTREET CRANK HARMONIC DAMPER

30% stronger Nodular Iron. Timing Marks up to 40 degrees Bolt in Counterweights. Precision balanced. Bonded inner/outer ring.

BY24269 28"oz, 3&4bolt SBF 302 >1980/351 £178.14 BY25269 Spare weight for BY24269 £20.64

£181.09 BY24270 50"oz, 4 bolt SBF 302 1981on BY25270 Spare weight for BY24270 £44.38

BY69270 Spacer kit for above dampers [spare] £18.68



#### Pro-Race SFI Crankshaft Harmonic Damper For Racing, exceeds SFI spec 18-1

BY64269 SBF ext balanced-up to 80 28"oz £429.08 BY65270 50"oz -use with above for 81> £17.96sp For 81 on 5L 302 engines, remove 28"oz weight & fit the 50"oz weight. BY34272 BBF 429-460 [Prosport] £192.62



#### STANDARD CONNECTING ROD

Reconditioned, recircled con rods with new nuts and bolts.



BYR25AS Sealed Power for 429, 460 £10.03sp

429 engine 1968-73, 460 69-4/76, forging number C8VE-A



Technical Information: 221, 260, 289W: C/Rod length 5.155"; Big end eye ID 2.239-2.2398"// 302W: C/Rod length 5.09"; Big endeye ID 2.239-2.2398"//351W: C/Rodlength 5.956"; Big endeye ID 2.4265-2.4273"//351C: C/Rodlength 5.78"; Big endeye ID 2.4361-2.4369"//351M,400M: C/Rod length 6.58"; Big end eye ID 2.4361-2.4369"//390FE,427FE,428FE: C/Rod length 6.489"; Big end eye ID 2.5907-2.5915"//429,460: C/Rod length 6.605" [not 429 Boss (S); Big end eye ID 2.6522-2.653": 429 Boss (S): C/Rod length 6.549"; Big end eye ID 2.6522-2.653":

## PERFORMANCE CON ROD SETS





Forged "I" beam 5140 steel with 3/8" ARP 8740 bolts. Weight matched +/- 2g. CNC sized big ends. Good for 500-550bhp.

BYSIR5090FP	5.090" press fit 302	£446.77
BYSIR5090FB	5.090" bushed 302	£tba
BYICR5090	5.090" bushed 302 [SCAT]	£443.36
BYSIR5956FB	5.956" bushed 351W	£499.22



## PERFORMANCE CON ROD SETS

Forged "I" beam 4340 steel, 7/16" ARP 8740 bolts. Weight matched

## BYFS15400FB 5.4" strkr-FordB.E.927"pin **£tba**BYFS16250B 6.25" bushed 427 stroker **£505.46**## Beam 4340 forged steel con-rod. 3-D stroker design, 2 piece forging for increased strength, ARP 7/16" 8740 capscrew bolts, good for 700bhp. X-rayed, sonic tested, magnafluxed, 100% machined. Shot peened to stress relieve the metal. Big end & small end accurate to .0002". Cto C.001". Weight matched +/- 1 gram. "Dowelled" caps. Only available- bushed. Good for 750-800bhp.

BYCRS5155F3D 5.155" 289



silV-@	-LITE	SILVO	OLITE/GRA	ANT/SPI		SILV-O-LITE					
	MODEL	STD BORE	STROKE	С.Н	G/PIN	RINGS-1,2,3	C/R-OEM	CROWN	WT	C/ROD	PRICE/SET
BY1106030	260 1962-64	3.80"	2.87"	1.58"	.9122"	5/64"-3/32"-3/16"	8.4:1	Flat	686g	5.155"	£419.22
BY1106040	260 1962-64	3.80"	2.87"	1.58"	.9122"	5/64"-3/32"-3/16"	8.4:1	Flat	754g	5.155"	£308.24
BY3135H.75	281 1990-97	3.5512"	3.5433"	1.20"	.8665"	1.5/1.5/3mm	9/9.8	Dish .157"	458g	5.9331"	£86.53sp
BY3101HC	289 1964-68	4.00"	2.87"	1.605"	.9122"	5/64"-5/64"-3/16"		Flat 4VR	760g	5.155"	£210.07
BY3101H030	289 1964-68	4.00"	2.87"	1.605"	.9122"	5/64"-5/64"-3/16"		Flat 4VR	760g	5.155"	£210.07
BY3101H040	289 1964-68	4.00"	2.87"	1.605"	.9122"	5/64"-5/64"-3/16"		Flat 4VR	759g	5.155"	£210.07
BY3101H060	289 1964-68	4.00"	2.87"	1.605"	.9122"	5/64"-5/64"-3/16"		Flat 4VR	771g	5.155"	£223.20
BY3101HC	302 1968-90	4.00"	3.00"	1.605"	.9122"	5/64"-5/64"-3/16"	9.0:1	Flat 4VR	760g	5.09"	£223.20
BY3101H030	302 1968-90	4.00"	3.00"	1.605"	.9122"	5/64"-5/64"-3/16"	9.0:1	Flat 4VR	760g	5.09"	£223.20
BY3101H040	302 1968-90	4.00"	3.00"	1.605"	.9122"	5/64"-5/64"-3/16"	9.0:1	Flat 4VR	762g	5.09"	£223.20
BY3101H060	302 1968-90	4.00"	3.00"	1.605"	.9122"	5/64"-5/64"-3.16"	9.0:1	Flat 4VR	771g	5.09"	£223.20
ВҮЗЗ29Н030	351C	4.00"	3.50"	1.65"	.9122"	1.5 -1.5-4mm	8.82:1	Flat 2VR		5.778"	£325.31
BY3329H040	351C	4.00"	3.50"	1.65"	.9122"	1.5- 1.5-4mm	8.86:1	Flat 2VR		5.778"	£321.64
Above .030" pi	ston- deck .00	8", OE 2	v head= 9.19	9:1. deck	.023" 6	Occ head= 10.50:1					
BY1116040	390 1961-65	4.05"	3.78"	1.76"	.9752"	5/64"-3/32"-3/16"	9.7:1	Dish .073"	904g	6.489"	£232.31

PERFORMANCE PISTONS				KEITH BLACK HYPEREUTECTIC [T6] PISTON SETS [OKfor racing-compression ratios approximate-all fully floating pins]									PERFORMANCE PISTONS		
MODEL		STD BORE	STRK	с.н	PIN	RINGS	-,	atio-w-c	c Hea 64	ds 70	WT	CROWN	C/ROD	PRICE/SET	
BYKB115030	302	4.00"	3.00"	1.608"	.912"	5/64"-3/16"	9.6	9.37	8.96	8.39	703g	F/T -6.5	5.09"	£409.75	
BYKB115040	302	4.00"	3.00"	1.608"	.912"	5/64"-3/16"	9.64	9.42	9.00	8.42	740g	F/T -6.5	5.09"	£423.88	
BYKB115060	302	4.00"	3.00"	1.608"	.912"	5/64"-3/16"	9.73	9.48	9.06	8.48	751g	F/T -6.5	5.09"	£413.20	
BYKB116030	302	4.00"	3.00"	1.608"	.912"	5/64"-3/16"		10.54	9.98	9.28	756g	P/U +2.6	5.09"	£328.55	
BYKB116040	302	4.00"	3.00"	1.608"	.912"	5/64"-3/16"		10.56	10.03	9.30	748g	P/U +2.6	5.09"	£367.20	
BYKB108030	351C	4.00"	3.50"	1.67"	.912"	1/16"-3/16"	9.5 v	v/76cc &	.002"	deck		F/T -2	5.778"	£371.76	
BYKB108040	351C	4.00"	3.50"	1.67"	.912"	1/16"-3/16"	9.55	w/76cc 6	& .002	,,	678g	F/T -2	5.778"	£297.14	
BYKB151030	351W	4.00"	3.50"	1.774"	.912"	5/64"-3/16"	10.54	4 w/60cc	+.010	deck	678g	F/T -6.5	5.956"	£413.20	
BYKB151040	351W	4.00"	3.50"	1.774"	.912"	5/64"-3/16"	10.57	7 w/60cc	+.010	deck	678g	F/T -6.5	5.956"	£427.56	
Above piston Kl	B151, comp	ratio wi	th 69cc	heads and	.010" deck	= @ .030" 9	54. (	@ 040"	9.56						

[Key:  $F/T = Flat\ Top:\ P/U = Pop\ Up\ or\ Raised:\ D/C = D-Cup:\ S/D = Step\ Dish:$ 

# MAHLE

#### MAHLE FORGED 4032 PISTON SET

MAHLE

[OKfor racing-compression ratios approximate-fully floating pins]

These pistons are for a 427cu in, 351W, built using a Dart HD Block at 4.125" bore, a 4" stroke crankshaft, and 6.250" conrods. C/Ratio-w-cc Heads

BORE STRK C.H 70 WT **MODEL** PIN RINGS 58 60 64 CROWN C/ROD PRICE/SET BY930248525 351W 4.125" 4.00" 1.245" .927" £869.74 1mm-2mm 10.4 10.27 9.90 9.4 435g Dish -26 6.250"



#### ICON/KEITH BLACK FORGED PISTON SETS

[OKfor racing-compression ratios approximate-all fully floating pins]



Familia nha rini	200000			Lough			77		<i>J</i>	,	<u> </u>		Famous	and removed
		STD					C/Ra	tio-w-c	c Hea	ds				
	MODEL	BORE	STRK	С.Н	PIN	RINGS	58	60	64	70	WT	CROWN	C/ROD	PRICE/SET
BYIC719030	302	4.00"	3.00"	1.608"	.912"	1/16"-3/16"	9.82	9.58	9.13	8.55	621g	F/T -4.8	5.09"	£384.88sp
BYIC9970STD	<b>326</b> [302]	4.00"	3.25"	1.17"	.927"	1/16"-3/16"	9.67	9.44	9.04	8.49		F/T -11	5.40"	£623.46
BYIC9970030	<b>331</b> [302]	4.00"	3.25"	1.17"	.927"	1/16"-3/16"	9.78	9.57	9.14	8.61		F/T -11	5.40"	£618.04
BYIC9970040	<b>333</b> [302]	4.00"	3.25"	1.17"	.927"	1/16"-3/16"	9.83	9.59	9.18	8.63		F/T -11	5.40"	£623.46
BYIC9971STD	<b>341</b> [302]	4.00"	3.40"	1.09"	.927"	1/16"-3/16"	10.07	9.83	9.41	8.84		F/T -11	5.40"	£446.47
BYIC9971030	<b>346</b> [302]	4.00"	3.40"	1.09"	.927"	1/16"-3/16"	10.19	9.96	9.52	8.96		F/T -11	5.40"	£624.98
BYIC9971040	<b>348</b> [302]	4.00"	3.40"	1.09"	.927"	1/16"-3/16"	10.24	9.99	9.56	8.98		F/T -11	5.40"	£652.80
BYIC709060	<b>352</b> [302]	4.00"	3.40"	1.09"	.927"	1/16"-3/16"		10.85	10.32	9.67		F/T -4.8	5.40"	£434.23sp
BYIC879030	<b>392</b> [3510	C]4.00"	3.85"	1.266"	.927"	1/16"-3/16"		10.03	w/.005'	deck		S/D -20.0	6.00"	£653.53
BY!C9973030	<b>392</b> [351W]	]4.00"	3.85"	1.608"	.912"	1/16"-3/16"	10.4	310.21	9.80	9.27		Dish-19.0	5.956"	£490.39
BYIC9973040	<b>394</b> [351W	]4.00"	3.85"	1.608"	.912"	1/16"-3/16"	10.4	710.26	9.84	9.31		Dish-19.0	5.956"	£453.86
BYIC667KTD030	<b>444</b> 390FE	2 4.05"	4.25"	1.325"	.990"	1/16"-3/16"		w/.020" ng 72cc				Dish-22.0	6.70"	£829.81

[Key:  $F/T = Flat\ Top:\ P/U = Pop\ Up\ or\ Raised:\ D/C = D-Cup:\ S/D = Step\ Dish:$ 



## FORGED PISTON SETS

[OKfor racing, Nitrous, Blowers & Turbos OK-compression ratios approximate-all fully floating pins]



	STD					C/Ratio-w-cc Heads						INDUSTRIES		
	MODEL	BORE	STRK	С.Н	PIN	RINGS	58	60	64	70	WT	CROWN	C/ROD	PRICE/SET
BY10480030	<b>347</b> [302]	4.00"	3.40"	1.090"	.927"	1/16"-3mm		12.98	12.21	11.25	565g	P/U +9	5.40"	£310.06sp
BY10670030	<b>383</b> [351]	W]4.00"	3.75"	1.350"	.927"	1/16"-3/16"		11.82	11.26	10.51	605g	F/T -4	6.25"	£309.59sp
BY206064	<b>383</b> [351]	W]4.00"	3.75"	1.35"	.927"	1/16"-3/16"	8.97	8.82	8.51	8.11		D/C -32	6.25"	£450.08sp

1. Head gasket is .039" compressed 2. Piston is .001" down the bore at top dead centre- unless stated otherwise!

#### ALL COMPRESSION RATIOS ARE ESTIMATES, BASED ON INFORMATION AVAILABLE!

#### Standard Replacement Ring Sets [for OEM ring groove sizes] NOT MARINE

#### 1962-64 260 & 1956-60 312

GRANT

1963-86 289/302, 69-91 351W/C/M & 400M

Oil: 3/16"

Bore: 3.800" Top Comp: 5/64"2nd Comp: 3/32" Oil: 3/16"

BY3101STD Cast rings, standard bore £37.16 BYC3101030 £59.35 Chrome top ring, +030" BYC3101040 Chrome top ring, +040" £60.32



Bore: 4.	00" Comp: 5/64"	Oil: 3/1
BY2271STD	Cast rings, standard bore	£48.60
BYC2271030	Chrome top ring, +.030"	£49.56
BYC2271040	Chrome top ring, +.040"	£56.16
BYC2271060	Chrome top ring, +.060"	£52.38



# - FORD V8 -Crankshaft Area

Camshaft and Valve Train Area

#### 1963-86 289/302 69-91 351w/c/m & 400m

Comp: 5/64"

Oil: 3/16'

#### Ringset for 1 piston only!

BY11-C2271030 Set for 1 piston [chrome] +030£7.93



**GR/NT** 

#### 1961-65 & 68-76 390 FE

Bore: 4.05" Top Comp: 5/64"2nd Comp: 3/32" Oil: 3/16

BY2206STD Cast rings, standard bore Chrome top ring set +.040" £55.52 BYC2206040

1962-65 427 FE

Bore: 4.233" Top Comp: 5/64"2nd Comp: 3/32" Oil: 3/16

BY2208STD Cast rings, standard bore £30.58



1966-70 428 FE

Bore: 4.130" Comp: 5/64" Oil: 3/16 BY3612STD

Cast rings, standard bore £35.44

#### 1987-2000 302 Vin "N"

GRANT

Bore: 4.00"

Comp: 1.5mm

Oil: 4mm



BY3856STD

Cast rings, standard bore

£66.12



429 1968-78/460 1969-92

Bore: 4.36" Comp5/64" Oil: 3/16' £56.80

BY2229STD Cast rings, std bore BYC2229030 £52.00

# Chrome top ring, +030"

## Perfect Circle Plasma-Moly Rings-High Perf Street/Strip, Pro Street, Ovals & Drags, Nitrous

#### Performance Plasma Moly-not File Fit

Ductile Top Ring Comp: 5/64" Oil: 3/16 Bore: 4.00" BYAJG135 Standard bore Plasma- Moly £78.20 BYAJG140 + .030" Plasma-Moly £92.75 BYAJG145 + .040" Plasma-Moly £87.56 BYAJG150 + .060" Plasma-Moly £85.48





#### Performance Plasma Moly-not File Fit **Ductile Top Ring**

Performance Plasma Moly-File Fit

Bore: 4.00" Comp: 1/16" Oil: 3/16 BYAJG155 Standard bore-Plasma-Moly £129.19 BYAJG160 + .030" Plasma-Moly £143.84 BYAJG165 + .040" Plasma-Moly £150.43 BYAJG615 + .060" Plasma-Moly £139.44



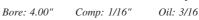
### Performance Plasma Moly-File Fit



Oil: 3/16 Bore: 4.00" Comp: 5/64"

BY3150034035 + .035" Plasma-Moly £163.45 BY3150034045 + .045" Plasma-Moly £181.62





BY3150036005 Std/005 bore Plasma- Moly £147.53 + .035" Plasma-Moly BY3150036035 £147.41 BY3150036045 + .045" Plasma-Moly £145.01 BY3150036065 + .065" Plasma-Moly £130.15



PERFECT CIRCL

#### Performance Plasma Moly-File Fit



Bore: 4.00" Comp: 1/16" Oil: 1/8"

BY3150033035 + .035" Plasma-Moly £185.68



# Performance Plasma Moly-File Fit



Bore: 4.125" Comp: 1/16" Oil: 3/16"

£129.54

BY3150032005 +.005" Plasma-Moly £125.19 BY3150032035 + .035" Plasma-Moly £163.39



# Camshaft/Valve Train Area

# STANDARD/PERFORMANCE & RACING CAMSHAFTS

# STANDARD CAMSHAFTS

BY2291601 Clevite 77 Hydraulic camshaft £159.79 289 engine 1963 to 68 excl SP & 4B, 302 1968 to 19-5-75

**Duration** @ .050" lift = In 184, Ex 189, **Valve lift** = In .368", Ex .381", **Lobe sep** 109 Clevite 77 Hydraulic camshaft BY2291655

351W engine 1969-86 excl HO & Police. 351W Truck 1981-85 not 4B or P.I. 351W Goodwrench.

<u>Duration</u> @ .050" lift = In 195, Ex 195, <u>Valve lift</u> = In .416", Ex .416", <u>Lobe sep</u> 107.5

BY2291833 Clevite 77 Hydraulic camshaft £113.99

351W engine 1980-86 HO, 351W 1987-91, 1985 Truck 4B & P.I., 1985-93 Truck. 351W Marine.

<u>Duration</u> @ .050" lift = In 206, Ex 221, <u>Valve lift</u> = In .445", Ex .453", <u>Lobe sep</u> 115 BY2291647 Clevite 77 Hydraulic camshaft £162.61

 $351C\ engine\ 1971-74\ 2B,\ 351M\ 75-79\ \&\ 77-82\ Truck,\ 400M\ 71-79\ \&\ 72-82\ Truck.$ 

<u>Duration</u> @ .050" lift = In 192, Ex 198, <u>Valve lift</u> = In .427", Ex .433", <u>Lobe sep</u> 110

BY2291883 Clevite 77 Hydraulic camshaft £181.03

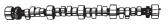
351C engine 1970-72 4B, 1973-74 Cobra-Jet.

<u>Duration</u> @ .050" lift = In 206, Ex 221, <u>Valve lift</u> = In .481", Ex .490", <u>Lobe sep</u> 115

BY2291634 Clevite 77 Hydraulic camshaft £112.85

390 engine, 1966, 68 Mustang, 68 2B, 67-69 4B, 66-68 428 Thunderbird excl Hi-Perf. 68-69 Ranchero 4B.

<u>Duration</u> @ .050" lift = In 200, Ex 200, <u>Valve lift</u> = In .438", Ex .438", <u>Lobe sep</u> 110.5





### Performer Hydraulic Camshafts-mild Performance

Good torque, performance gains in the low and mid range. Good idle. Can give power to 5500rpm

Important: Check that your valve springs are not "coil binding" at full lift. It should be possible to open the valve a further .090", at full lift, with the lifters full of oil, before the spring becomes "coilbound" or solid. Alternatively, use the valve springs listed for the cam, and install them at the correct height.

AJJ100 221-302 62-89 "Performer" camshaft- idle to 5500rpm Price:£147.61 <u>Duration</u> @ .050" lift = In 204, Ex 214, <u>Valve lift</u> = In .448", Ex .472", <u>Lobe sep</u> 112. <u>Use with BY942-16+BY768-16+BY601-16</u>

|COMP.::/

BY2291776 390-427-428 FE "Performer" camshaft- idle to 5500rpm Price:£180.97

Duration @ .050" lift = In 204, Ex 214, Valve lift = In .484", Ex .510", Lobe sep 112. Springs

#### **Competition Cams- Hydraulic- Flat Tappet- Camshafts- Performance**

**COMPS**262 Hydraulic "Xtreme Energy" Camshaft

BY31-238-3

262XE for 221-302 & 351W\*\* engines 1963-95- 1.60 rockers

262XE for 221-302 & 351W\*\* engines 1963-95- 1.60 rockers
262XE for 351C+351-400M engines 1970-82- 1.73 rockers
262XE for 352-428 engines 1963-77 1.73 rockers
262XE for 429-460 engines 1968-95 1.73 rockers
£262.80

Excellent response, good mid-range, stock converter, 3.23-4.10 gears. \*\* To use in 351W engine, use firing order, 15426378

 RpmRange
 Advertised
 @ .050"
 Lift-1.60 Rockers
 Lift-1.73 Rockers
 Lobe Sep

 1300-5600rpm
 262/270
 218/224
 .493"/.500"
 .513"/.520"
 110

Compatible components- 221-351W-BY942-16 Springs, BY768-16 Spring Caps, BY601-16 Collets, BYB45779 Seals

351C+351-400M-BY972-16 Springs, BY747-16 Spring caps, BY624-16 Collets [Multi-groove], BYB45779 Seals

#### 268 Hydraulic "High Energy" Camshaft

BY31-218-2 268 for 221-302 & 351W\*\*engines 1963-95- 1.60 rockers
BY32-221-3 268 for 351C, 351M-400M engines 1970-82- 1.73 rockers
BY33-224-3 268 for 352-428 FE engines 1963-76- 1.73 rockers
£258.85

Good Cam for everyday performance driving, or heavy towing with lower gears. Broad power, noticeable

idle. Very popular camshaft. \*\* To use in 351W engine, use 15426378 firing order.

 Rpm Range
 Advertised
 @ .050"
 Lift-1.60 Rockers
 Lift-1.73 Rockers
 Lobe Sep

 1500-5500rpm
 In.268
 Ex.268 In.218
 Ex.218
 In; .456"Ex; .456" In; .494" Ex; .494"
 110 degrees

 Compatible components 110 degrees
 110 degrees
 110 degrees

221-351W- BY942-16 Springs, BY768-16 Spring caps, BY601-16 Collets, BY502-16 Seals

351C,351M-400M-- BY940-16 Springs, BY743-16 Spring caps, BY601-16 Collets, (BY605-16 4 groove), BYB45779 Seals.

352-428FE- BY940-16 Springs, BY744-16 Spring caps, BY603-16 Collets, BY504-16 Seals.



COMP :

Rpm Range

2000-6000rpm

BY32-242-4

BY33-238-4

BY34-238-4

#### 280 Hydraulic "MAGNUM" Camshaft

COMP

BY32-225-4 280 for 351C, 351M-400M engines 1970-82- 1.73 rockers

@.050"

. .

£243.96

Great cam for Street Machines 350 cu in & up. Broad Power, needs 2500rpm stall converter, needs lower gears in rear axle [higher numerically], 9.5:1 compression, minimum & headers, rough idle.

50" Lift-1.60 Rockers Lift-1.73 Rockers Lobe Sep Ex.230 In; .512"Ex; .512" In; .530"Ex; .530" 110 degrees

Compatible components-

Advertised

Ex.280 In.230

In.280

351C,351M-400M-BY972-16 [BY926-16, 429-460] Springs, BY747-16 Springs caps, BY611-16 Collets, (BY624-16 4 groove), BYB45779 Seals.



#### Camshaft and Valve Train Area

### Competition Cams- Hydraulic- Flat Tappet- Camshafts- Performance

NOTES: Some Ford V8's, have 4 groove collets (BY605-16 & BY624-16), particularly 351C, 351M, & 400M. Please check your valves before ordering collets, then the correct collets can be supplied. Always buy the correct valve springs for your cam. This can avoid mechanical failures later on. Do not use a standard timing set, as these may have "retard" built in to them. Do not use performance camshafts with non adjustable rockers, or injected engines. There are two firing orders on Ford V8. These appear below. Some cams we use, have a different firing order to std. Please look for these notations. Distributors run anticlockwise.

1-3-7-2-6-5-4-8 5.0L HO, 351W, 351M, 400M.



1-5-4-2-6-3-7-8 Most Ford V8

#### Edelbrock Performer RPM Hydraulic Cam & Lifter Kit

BY7122 Performer RPM for 260-302W engines 1963-95- 1.60 rockers £395.32 Performer RPM for 351W engines not injected 1.60 rockers BY7182 £336.04

Street high perf'. These cams are dyno matched to the Perf' RPM inlet manifolds, & cylinder heads. Should give 10-12" of manifold vac' at idle. Edelbrock claim up to 367bhp at 6500rpm on the 302, and 400bhp @ 6000rpm on the 351W using Performer RPM cam, inlet & cylinder heads, together with a 750cfm carb, and 1-3/4" headers.

@.050" Lift-1.60 Rockers Lobe Sep Rpm Range Ex.234 In; .496" Ex; .520" 1500-6500rpm In.224 112/110 [351W]



Compatible components-BY5796 Springs, caps & collets kit.

#### Competition Cams Xtreme Energy Hydraulic Camshafts-Faster Inlet Lobes-Better Power with Performance Heads!





268 Hydraulic "Xtreme Energy" Camshaft

268XE for 221-302 & 351W\*\* engines 1963-95- 1.60 rockers £317.16 BY31-242-3

Great for Street Machines 2200+ stall. \*\* To use in 351W engine, use firing order, 15426378 Advertised Rpm Range @ .050" Lift-1.60 RockersLobe Sep

1600-5800rpm 268/280 224/230 .510"/.512"110

Compatible components- 221-351W-BY942-16 Springs, BY768-16 Spring Caps, BY601-16 Collets, BYB45779 Seals

**COMP** 



#### 274 Hydraulic "Xtreme Energy" Camshaft

BY31-246-3 274XE for 221-302 & 351W\*\* engines 1963-95- 1.60 rockers £220.42

Very strong torque & throttle response 2400-2500+ stall. \*\* To use in 351W engine, use firing order, 15426378

@.050" Lobe sep Rpm Range Advertised Lift 1.73 Rkrs Lift-1.60 Rockers .519"/.523" 1800-6000rpm 274/286 230/236 .562"/.565" 110

Compatible components- 221-351W-BY986-16 Springs, BY740-16 Spring Caps, BY611-16 Collets, BY518-16 Seals

429-460-BY924-16 Springs, BY741-16 Spring Caps, BY611-16 Colletts, BY503-16 Seals





#### 284 Hydraulic "Xtreme Energy" Camshaft

BY31-250-4 284XE for 221-302 & 351W\*\* engines 1963-95- 1.60 rockers £233.45

Street/Strip with 2800+ stall, headers, gears, rough idle. \*\* To use in 351W engine, use firing order, 15426378 @.050" Lift-1.60 Rockers Advertised Rpm Range

.541''/.544'' 2300-6500rpm 284/296 240/246

Compatible components- 221-351W-BY986-16 Springs, BY740-16 Spring Caps, BY611-16 Collets, BY518-16 Seals



## Competition Cams Hydraulic ROLLER- for engines that had an OEM Roller Cam fitted as std Competition Cams Xtreme Energy Hydraulic ROLLER Camshafts-for engines that never had an OEM Roller Cam 282XR Hydraulic Retro-fit Roller "Xtreme Energy" Camshaft COMP\* 282XR for 221-302\*\* & 351W engines 1963-95- 1.60 rockers BY35-425-8 £523.42 Great for Street machines, needs inlet, headers, 2500+ converter, & 3.73 + gears, rough idle. \*\* To use in 302W engine, use firing order, 13726548 Lift-1.60 Rockers @ .050" Rpm Range Advertised 2000-6000rpm 282/289 230/236 .513"/.529" 110 Compatible components- 221-351W-BY986-16 Springs, BY740-16 Spring Caps, BY611-16 Collets, BY518-16 Seals 288XR Hydraulic Retro-fit Roller "Xtreme Energy" Camshaft COMP | 288XR for 221-302\*\* & 351W engines 1963-95- 1.60 rockers BY35-426-8 Street/Strip 9:1 comp, inlet, headers, 2800+ converter, 3.73+ gears, rough idle. \*\* To use in 302W engine, use firing order, 13726548 Rpm Range 2200-6200rpm Advertised @ .050" Lift-1.60 Rockers Lobe sep .555''/.576'' 288/294 236/240 110 Compatible components- 221-351W-BY987-16 Springs, BY740-16 Spring Caps, BY611-16 Collets, BY518-16 Seals Competition Cams Mechanical Flat Tappet Camshafts 294S Mechanical Flat Tappet "Magnum" Camshaft & 351W\*\* engines 1963-95- 1.60 rockers BY31-335-4 294S for 221-302 £253.10 Great for Street/Strip, 3500 stall, inlet, headers, low gears, 10:1 comp, radical idle. \*\* To use in 351W engine, use firing order, 15426378 Lift-1.60 Rockers .560"/.560" Lift-1.73 Rockers @.050" Advertised Rpm Range Lobe sep 2500-6500rpm 294/294 248/248 .605"/.605" Compatible components- 221-351W-BY986-16 Springs, BY740-16 Spring Caps, BY611-16 Collets, BY518-16 Seals

#### STANDARD HYDRAULIC LIFTERS

BABABABA

BYA0900 V8's-excl "FE" £154.34set 390-428 "FE" V8 **BYA2083** £82.14set

#### 'Hi-Rev' ANTI-PUMP HYDRAULIC LIFTERS

These lifters feature the same quality material & much tighter tolerances than the standard hydraulic lifter. A proper "eyed" circlip is used on the A0900R version.

BYA0900R V8's-except "FE" £125 70 BYA2083R V8's- "FE" £122.03



#### Speed-Pro 'Hydraulic' Roller Lifters

For use in blocks originally equipped with hydraulic roller cam and in Retro kit for 221-302W/351W/351C/351M/400M.



BY851-16 OEM or Retro fit £219.34

#### SOLID/MECHANICAL LIFTERS

Precision ground crown radius and surface finish. Lightweight design & premium one piece pushrod seat. Precision machined & accurately positioned oil band for consistent, properly metered oil flow. Designed for Race valve springs. Ideal for high end street & race.

BY2910-16 Performance series

£207.12



#### **Comp** Comp Cams Mechanical Roller Lifters

Competition Cams special patented design roller lifters offer superior performance & durability, the axle is heat treated chromemoly, edge orifice type oil metering is used, and they are rebuildable.



BY838-16 289-351W set 16-£738.53

#### **ARP Cam Gear Bolt**

Increased preload clamping force, for positive timing gear register. Helps overcome valvetrain harmonics & stress. Tensile strength of 170,000 psi.

BY154-1001 260/289/302/351W, 3/8-16 x 1.46" £5.75 BY154-1002 351C/M & 400M, 3/8-16 x 1.97" £4.91 BY155-1002 FE 390/406/427/428, 7/16-14 x 1.75"£5.45

BY155-1001 429/460, 3/8-16 x 1.58"



#### COMP\*/

# Hyd Roller Cam Installation Kit



BY35-1001 **OEM fit** (later blocks with 2 raised threaded bosses in lifter valley) £78.40 BY31-1000 Blocks that never had a roller cam from new £78.04 289/302/351W/351C/351M/400M

# COMP ::

## **Distributor Gears**

Std 221-302 pre-roller .467" shaft £43.14 BY85832



BY29418PD Mallory- Steel £52.90

302 with steel billet and production roller camshaft. For distributor shaft diameter .467"

Bronze 260-351W-for .467" shaft **£87.29** Bronze 260-351W-for .500" shaft **£70.36** BY431 **BY438** Bronze 351C-460 -for .530" shaft£101.12 **BY436** 

The std cast iron gear isn't compatible with a billet steel roller cam. These gears are machined from AMPCO-45 extruded alum' bronze with 5% nickel added, featuring a high strength tooth design that will resist wear even when a HV o/pump is used. Expect a higher wear rate than standard.



# Camshaft Retaining/Thrust Plate

BYAJG225 221-351W.250" thick [UK Made] £51.79 KIT902 Bolt for above plate £0.44 BYAJG220 351C/351M/400M/429/460 £18.92

BY3120TB 221-351W C/Cams roller brg type£150.24

#### Sealed Power Standard Push-rods [sets of 16 only]

BYMPR-279 221, 289 & 302 early (l= 6.801") £33.79

221 engine 1962-63 302 engine 1968-69 (exc. 69-70 Special)

289 engine 1963-68 302 engine 1969 "Truck"

BYRP-3167 255, 260 & 302 (l= 6.876") £37.44 255 engine 1980-82 302 engine 1970-85 (w/o Rlr lifters)

260 engine 1962-65 302 "Truck" 1969-91 (w/o Rlr lifters)

 $BYRP\text{-}3241\ 302\ (oem\ rlr\ cam)\ (l=\ 6.25")$ £37.60

302 engine 1985-95 302 "Truck" 1992-01

BYRP-3166 351W (1=8.142") £44.96

351W engine 1969-78

BYRP-3209 351W (l= 8.182") £30.56

351W engine 1978-97 351W 1994-96 Lightning

BYRP-3278 351W (oem rlr cam) (l= 7.523")£10.88sp 351W engine 1994-97 "Truck" excl Lightning-OEM Roller

**BYRP-3184 351C** (l= 8.412")

£36.16

351C engine 1970-74 BYRP-3172 390FE, 427FE, 428FE (l= 9.621") £35.52

390 engine 1961-76 (excl 1963-64 T-bird) 427 engine 1968 428 engine 1966-70 inc "Truck" 1969

Performance Push-rods [sets of 16 only]
Use with cams up to ".500 lift" not Racing

BY7831-16 6.876" long, 5/16" diam, hardened £67.48 255 engine 1980-82 302 engine 1970-85 (w/o Rlr lifters) 302 "Truck" 1969-91 (w/o Rlr lifters) 260 engine 1962-65

BY7826-16 6.25" long, 5/16" diam, hardened £64.37 302 engine 1985 on with OEM hyd roller cam

BY7833-16 9.62" long, 5/16" diam, NOT hard £63.79 390-428 engine 1965-72 (OEM non adjustable rockers only)

# COMP

Performance Push-rods [sets of 16 only] Street, Strip engines, Budget Racing



BY7632-16 6.80" long, 5/16" diam, hardened £198.86 BY7631-16 6.90" long, 5/16" diam, hardened £197.10 221-302 some engines only

BY7472-16 8.15" long, 5/16" diam, hardened £192.49 351W some engines only

BY7502-16 8.4" long, 5/16" diam, hardened £212.77



#### ADJUSTABLE PUSHRODS

Enables you to adjust the preload on your hydraulic lifters, where you have non-adjustable rocker arms. Mandatory when you fit a performance cam, or your heads/block have been machined.



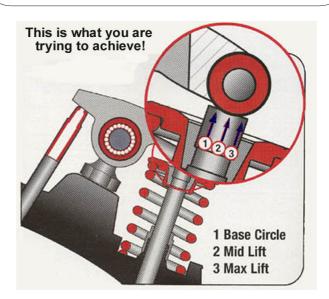
BYAJG1155For FE 9.605"

£217.94

#### STREET/STRIP/RACING PUSHRODS [sets of 16 only COMP

One Piece .083" 4130 Seamless Chromemoly Highest Quality, [hardened for guide plate use]

Highest C	Quanty, [nardened for	guide piate usej
BY7917-16 6.25	" long, 5/16" diam	£232.84
BY7754-16 6.40	" long, 5/16" diam	£245.16
BY7769-16 6.60	" long, 5/16" diam	£255.29
BY7772-16 6.75	" long, 5/16" diam	£243.49
BY7929-16 6.80	" long, 5/16" diam	£227.59
BY7930-16 6.85	" long, 5/16" diam	£228.08
BY7933-16 6.90	" long, 5/16" diam	£222.44
BY695PRODS	6.95" long, 5/16" diam	£161.22
BY7936-16 7.00	" long,5/16" diam	£222.34
BY7937-16 7.05	" long, 5/16" diam	£179.70
BY710PRODS	7.10" long, 5/16" diam	£161.22
BY790PRODS	7.70" long, 5/16" diam	£161.22
BY7996-16 8.05	" long, 5/16" diam	£175.73
BY7997-16 8.10	" long, 5/16" diam	£229.99
BY7966-16 8.20	" long, 5/16" diam	£244.01
BY7934-16 8.55	" long, 3/8" diam	£214.73



Technical Information: There are many variables involved when selecting pushrods for a performance engine. Block height, cylinder head thickness, type of camshaft, rocker type used, lifter or tappet depth, etc, etc. If you are unsure about the selection criteria, ask for a copy of pages 264/265 from the Competition Cams catalogue, when you order your valve train parts. Always check that a clearance exists between your pushrods, and the tunnels in the cylinder heads. Sometimes, clearancing is necessary. If you need an adjustable pushrod length checker, to help work out your pushrod length, see S9/11 in the Real Steel catalogue, tools section.

# **Cylinder Heads/Valves**

#### STANDARD SMALL BLOCK CYL HEAD PARTS



BYAJG230 Core/frost plugs for heads £3.92 ea BYAJG235 5/8" [O.D.] to 7/16" unc adaptor [end of head] £25.81 ea 58UNCPLUG Blocks "ex" hole in end of OEM cyl head £2.16 ea

# **Cylinder Head/Valves**

#### **EDELBROCK E-street Aluminium Heads 289-351W**

(complete with stainless valves/ 1-1/4" springs- 3/8" screw in studs/guideplates etc)

E-Street, is an all new line of Edelbrock cylinder heads, made in the USA, not China. These heads are designed for entry level (300-400bhp) street performance engines, ideally operating up to 5500rpm. Every E-Street head is assembled with manganese bronze valve guides, powered metal interlocking valve seats, stainless one piece valves with hardened tips, 1-1/4" springs, 3/8" screw in studs & hardened guide plates. Additionally, hardened spring cups are used under the springs, and threaded inserts are used in the rocker bosses.

The 170cc inlet port will give great throttle response & torque right through the rev range. A 302 with these heads, 9.5 compression & a performer type cam, should give around 320-330bhp if properly built. Hardened pushrods will be required. For 289 & 302 **BY9680** bushes will be required. Heads with the 1.90" inlet valve, will work with std 289/302 piston cutaways, & work very well on the 289/302. The 2.02" valve will need pistons with aftermarket cutaways. The larger valve version works very well on the 347 stroker, or the 351W. Use Champion BYRC?YC type spark plugs. Use inlet manifold gasket? These heads cannot be used with the Performer RPM cam. Use a Performer cam.

In. valve 1.9/2.02" Com. chamber vol In. runner vol Ex. runner vol Ex. valve Spring Dia 170cc 1.60" 60cc 60cc





BY5023 Has 1.90" inlet valve+1.60" exhaust £1850.88pr BY5025 Has 2.02" inlet valve+1.60" exhaust £1588.33pr

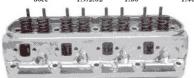
#### **EDELBROCK Performer RPM Aluminium Heads 289-351W**

(complete with stainless valves/springs-3/8" screw in studs/guideplates etc)

Designed for street high-performance, non emission 289/302 & 351W engines. These besigned for site ingit-performance, non-emission 289/302 & 351 w engines. These head assemblies offer a good 'out of the box', bolt on power improvement. Performance is greatly improved from 1500-6500 rpm. The 170cc inlet port gives great throttle response throughout the powerband as well as outstanding top end power (up to 400bhp from a 351 with 9.5:1 comp, & 367bhp from a 302). Features: CNC matched intake and exhaust ports for maximum power. Std port locations compatible with std manifolds. Hardened pushrods will be required. For 289 & 302 **BY9680** bushes will be needed. Heads with the 1.90" inlet valve, will work with standard 289/302 piston cutaways. These heads are best for the 289/302 where strong midrange torque/power is required, rather than being all at the top end. The 2.02" valve will need pistons with aftermarket cutaways. Max valve lift .575". Use Champion BYRC?YC type spark plugs. Use inlet manifold gasket BY5831.

In. valve Com. chamber vol In. runner vol Ex. runner vol Ex. valve Spring Dia 1.9/2.02" 1.60"





BY6025 Has 2.02" inlet valve+1.60" exhaust £1941.06 pr

#### **EDELBROCK Performer RPM Aluminium Heads 390-428 FE**

(complete with stainless valves/springs-etc)

Designed for street high-performance, non emission 1961-76 390-427-428 engines. These head assemblies offer a good 'out of the box', bolt on power improvement. The 428 Cobra-Jet sized valves promote excellent flow for streetable power. Features: A356 aluminium heat treated to T6 spec, is 18 lbs lighter than std. 1.55" valve springs handle lifts up to. 600" on complete heads. No exhaust crossover passage for cooler, denser charge & more power. Vertical & diagonal exhaust manifold bolt patterns. Std port locations compatible with std manifolds. High flow 125cc exhaust ports work with OEM. manifolds or headers. For better rocker shaft retension, use the Edelbrock stud kit, BY6009. Use Champion BYRC?YC type spark plugs. Use inlet manifold gasket BY1247.

Com. chamber vol In. runner vol Ex. runner vol Spring Dia 170cc 125cc 1.66" 1.55" 72cc





BY6006E Heads 390-428 FE £2312.50 pr

#### AFR Aluminium Cylinder Heads 302 [5 litre] [Pedestal Rockers]





These are the ultimate heads for the Roller Cam 5 litre 302 OHV V8. No special parts are needed, you can use your standard parts if required [excl pushrods & rail type rockers]. The valves are lightweight with an 8mm stem. A rev range of idle to 6000rpm would work with the right components. The deck of the head casting is 3/4" thick which makes the head ideal for Nitrous or blower applications. Hardened pushrods are required. The 1986 5.0L must have pistons notched for clearance. These heads are emissions legal.

#### AFR ALUMINIUM CYLINDER HEADS 289-302 [Stud Mounted Rockers]

BY1399	Heads alum	inium compl	<u>ete</u>		£2715.94	pr
Comb chamber vol	In. runner vol	Ex. runner vol	In. valve	Ex. valv	re	_
58cc	165cc	68cc	1.90''	1.60''		
BY1388A	Heads alum	inium compl	<u>ete</u>		£2715.94	pr
Comb chamber vol	In. runner vol	Ex. runner vol	In. valve	Ex. valve		-
√ 58cc	185cc	70cc	2.02"	1.60"		/

#### **EDELBROCK Victor Jnr Aluminium Heads 302-351W**

Designed for competition & ultra high performance 302-351W engines. These heads offer 500+ hp potential out of the box, using standard valve train geometry. No exhaust crossover passage for cooler, denser charge & more power. Features: High flowing 210cc inlet ports and .130" raised 75cc exhaust ports. CNC gasket matched port entries/exits with blended valve bowls. Spark plug holes & valves are in the standard location. Rocker cover rails are raised by .150". A relief in the head allows most roller lifters to be changed without removing the heads. Rocker stud, inlet & exhaust bolt holes are helicoiled for longer life. Exhaust flange has standard 2" wide bolt pattern. Use Champion BYRC?YC type spark plugs. Use inlet manifold gasket BY5831.

Ex. valve Com, chamber vol In, runner vol Ex, runner vol In. valve Spring Dia 210cc 75cc 2.05" 1.60



302-351W 70cc- no valves **BY7738** 

£893.72sp pr

#### EDELBROCK Performer RPM Alum' Heads 351C/M/400M

(complete with stainless valves/springs-7/16" screw in studs/guideplates etc)

Designed for street high-performance, non emission 351C/351M/400M engines. These head assemblies offer a good 'out of the box', bolt on power improvement. The 190cc inlet port gives great throttle response throughout the powerband as well as outstanding top end power. Features: "Compact Charge" combustion chamber for increased power & torque. Optimized spark plug location. Std port locations compatible with std manifolds. Hardened pushrods will be required. High flow 90cc exhaust ports work with 0EM manifolds or headers. For best performance use the Performer RPM Air Gap inlet manifold, Maximum valve lift .580". Use Champion BYRC?YC type spark plugs. Use inlet manifold gasket BY?

In. runner vol Ex. runner vol Ex. valve Spring Dia 60cc 190cc 90cc 2.05" 1.60 1.54"



BY6162 Heads 351C/351M/400M



£3168.77pr

#### Cylinder Head and Valves

#### MELLING STANDARD VALVES- Cars & some Commercials

# MELLING

All dimensions approximate & in inches								
	Head Dia	Length	Tip	Price				
			_					
BYV0742-Ex			.254"	£9.29				
260 V8 1964-65 BYS1566-In	*	4.863"	.245"	£9.77				
260 V8 1964-65			.243	£9.//				
BYV1000-Ex		4.873"	.370"	£7.80				
289 V8 4-10-65			.570	27.00				
BYV0947-In	,	4.863"	.248"	£8.47				
289 V8 1963 to								
BYV1001M-In	1.780"	4.865"	.365"	£8.58				
289 V8 4-10-65								
BYV1135-Ex	1.452"	5.068"	.476"	£9.24				
302 V8 1969-85	5, Thunderbird	1987-93, Musta	ang 1987-95-					
excluding Cobra								
BYV1137-Ir	ı 1.781"	5.055"	.479"	£11.34				
302 V8 1969	-77, 302 197	8 with rocke	er studs					
BYV1328-Ir	1.782"	5.07"	.407"	£7.46				
302 V8 1978	with bolt or	rockers, 30	02 1979-85,	302 1987-95				
Mustang, 302								
BYV1237-E				£12.42				
351W V8 19		3.073	.570	212.12				
BYV1327-E		5.07"	400"	£11.41				
351W 1975-		3.07	00	211.71				
BYV1453-Ex		5 01"	422"	00.07				
			433"	£8.86				
351W V8 19								
BYV1238-Ir		5.07"	.396"	£10.46				
351W V8 19								
BYV1269-Ex				£11.98				
351C V8 2V 19			1971-77	012.10				
BYV1173-Ex		5.055"		£13.10				
351C V8 4V 19				60.77				
<b>BYV1270-In</b> 351C V8 2V 19		5.23"	1071 79	£9.67				
331C VO 2V 19	70-74, 331WI 15	775-70, 400IVI	17/1-/0					



BYV1174-In			•	£8.51
351C V8 4V 197	70-74, 351 Co	bra Jet 1971-72		
BYV1242-Ex	1.558"	5.356"		£12.10
390FE 1961-71,	428FE 1966-	70 excl Cobra Jet		
BYV1167-Ex	1.653"	5.435"		£21.88
427FE 1963-65	special, 427Fl	E 1968 with 4BC	, 428FE	
1968-70 Cobra J	et			
BYV0637-In	2.032"	5.45"		£12.77
390FE 1961-71	excl HD & 19	62 special, 428FI	E 1966-68 excl	
Police/Cobra Jet	& HD			
BY211-1836	-In	2.029"	5.454"	£7.72
390FE 1961-71	HD excl 1962	special, 428FE 1	1966-68 HD &	
Police, 428FE 19	69-70 Police			
BYV1168-In	2.09"	5.449"		£11.47
427FE 1965 spec	cial, 427FE 19	968 HD with 4B0	C, 428FE	
1968-69 HD, 42	8FE 1970 Col	ora Jet		
BYV1165-Ex	1.725"	5.068"		£11.82
429 1970-71 Col		2.000	•	W11102
BYV1271-Ex	1.653"	4.983"		£6.01
429 1973, 460 1	973-78 excl I	Police		
BYV1166-In	2.245"	5.288"		£9.85
429 1970-71 Col	ora Jet			
BYV1272-In	2.083"	5.204"		£3.50
429 1973, 460 1	973-78 excl I	Police		

Head Dia

All dimensions approximate & in inches

Length

Tip

Price

#### Manley Stainless Performance INLET Valves

MANLEY			All dimensions in inc	ches	
	"	Head Dia	Overall Length	Material	Tip Price
BY10476-1	<b>(1)</b>	1.94"	4.88"	NK-840	.250"£13.21
BY11522-1	<b>(3)</b>	1.94"	4.911"	NK-842	.250" <b>£30.90</b>
BY10550-1	<b>(2)</b>	2.02"	4.911"	NK-840	.250"£18.70
BY10552-1	<b>(2)</b>	2.02"	5.011"+100	NK-840	.250" <b>£12.37</b>
BY11566-1	<b>(3)</b>	2.02"	4.911"	NK-842	.250" <b>£28.44</b>
BY11318-1	<b>(4)</b>	2.02"	5.04"	NK-842	.290"£14.34sp
BY10556-1	<b>(2)</b>	2.055"	5.011"+100	NK-840	.250" £6.07sp
BY11546-1	<b>(3)</b>	2.055"	5.04"	NK-842	.290" <b>£28.69</b>
BY11560-1	(3)	2.08"	5.04"	NK-842	.290" <b>£29.62</b>
BY11872-1	<b>(4)</b>	2.19"	5.244"	NK-842	.250" <b>£30.90</b>

#### The above valves are all 11/32" stem size

(1) -Budget replacement, chrome stem, hard tip, unmachined finish (2) -Budget performance, chrome stem, hard tip, machined finish (3) -Race Flo, chrome stem, hard tip, machined finish, Pro Flo underhead (4) -Race Master, straight & chrome stem, hard tip, machined finish

# MANLEY

### **Manley Recommendations**

NK-840 = Replacement & Mild Street Performance NK-842 = High Performance Street, Bracket Racing, Oval Track, Sportsman Racer, Normally Aspirated Alcohol engines

#### Manley Stainless Performance **EXHAUST** Valves

#### MANUEY All dimensions in inches Head Dia Overall Length Tip Price Material BY10077-1 (1) 1.50" 4.92" XH-422 .290"£13.21 4.911" BY10577-1 (2) 1.50" XH-422 .250"£19.51 4.911" BY10549-1 (2) 1.60" XH-422 .250"£18.43 4.911" BY11565-1 (3) 1.60" XH-426 .250"**£30.12** BY10551-1 (2) 1.60" 5.011" XH-422 .250" £13.43 BY11545-1 (3) 1.60" 5.065" .290"£29.21 XH-426 BY11873-1 (4) 1.71" 5.042" XH-426 .250"£30.90

# MANLEY

#### The above valves are all 11/32" stem size

(1) -Budget replacement, chrome stem, hard tip, unmachined finish (2) -Budget performance, chrome stem, hard tip, machined finish (3) -Race Flo, chrome stem, hard tip, machined finish, Pro Flo underhead (4) -Race Master, straight & chrome stem, hard tip, machined finish

### MANLEY

#### **Manley Recommendations**

XH-422 = Replacement & Mild Street Performance XH-426 = High Performance Street, Bracket Racing, Oval Track, Sportsman Racer, Normally Aspirated Alcohol engines

#### Cylinder Head and Valves

£2.99

#### Valve Seat Inserts- Ex- Unleaded & LPG OK

BY70643 **260** 64-65, **289** 63-68, **302** 68-96, **351W** 75-91 BY70658 351C 2 b 1973-74, 351M, 400M, 427 FE 63-68. 428 FE 68-70/1.653" valve, 429 68-73 not HP,

460 68-78

BY70648 351W 1969-74, 428 FE1966-70/1.559" valve BY70670 390 FE 1961-71



£5.23

£4.26

£4.63

# STANDARD VALVE SPRINGS

BYVS-1575 1.359" O.D. valve spring **221** engine 1962-63 **260** engine 1962-65 **289** engine 1963-64 **289** engine 1965-66 (excl Special)

BYVS-660 1.255" O.D. valve spring

**289** engine 1966-67 (excl Special)

**BYVS-672** 1.379" O.D. valve spring £4.43

**289** engine 1967-68 (excl Special) **289** engine 1965-68 *TRUCK* 

**302** engine 1968-69 (excl Special)

**BYVS-718** 1.394" O.D. valve spring

302 engine INLET 1978 w/stamped steel rockers **255** engine *INLET* 1980-82

**302** engine *INLET* 1979-91 (excl H.O.)

302 engine INLET 1990-91 (excl Cougar, Mustang, T/bird, Town Car) 2.028" free ht

**302** engine <u>INLET</u> 1980-01 <u>TRUCK</u> from BE0001

351W engine 24/4/70-76 inc TRUCK

**351W** engine *INLET* 1977-83, also 1984-85 with 2B carb *TRUCK* 

**351W** engine *INLET* 1977-91 (excl HO)

BYVS-733 1.394" O.D. valve spring 1.853" free length £3.90

**302** engine *EXHAUST* 1973-91 (excl H.O. GT)

**302** engine *EXHAUST* 1992-01 *TRUCK* 

**351W** engine *EXHAUST* 1977-79

**351W** engine *EXHAUST* 1980-86 (excl HO)

**351W** engine *EXHAUST* 1977-83 *TRUCK* 

351W engine EXHAUST 1984-85 with 2B carb TRUCK

BYVS-703 1.400" O.D. valve spring £1.96

**302** engine *INLET* 1973-77 *TRUCK* **302** engine 1970-72 *TRUCK* 

**302** engine *INLET* 1978 *TRUCK* to BE0000

**351M** engine 1975-77 inc 1977 *TRUCK* **351C 2V** engine 1970-74

**400M** engine 1971-77 **400M** engine 1972-77 *TRUCK* 

**351M & 400M** engine *INLET* only 1978-79 351M engine *INLET* 1978-81 *TRUCK* 

**400M** engine *INLET* 1978-82 *TRUCK* 

429 engine 1970-72 (excl Police, Cobra Jet & Spec) **429** engine 1968-69

**429** engine 1973 **429** engine 1970-73 <u>TRUCK</u> **460** engine 1969-78 (excl Police) **460** engine 1973-88 *TRUCK* 

#### **Sealed Power Standard Valve Springs**

# SPEED-PRO

BYVS-682 1.462" O.D. valve spring inc damper £3.54

390FE engine 1961 (excl 10.6 compression)

390FE engine 1962-65 (excl Custom, Galaxie, Special Galaxie, Thunderbird)

390FE engine 1966-68 (excl Mercury with 4 barrel)

**390FE** engine 1969-71 390FE engine 1968-75 TRUCK

**390FE** engine *INLET* 1976 *TRUCK* 

**428FE** engine 1968 (excl Police) 428FE engine 1966-67

BYVS-920 1.41" O.D. valve spring £3.07

460 engine 1989-97 TRUCK





#### Valve Springs for Performer/RPM Cams

BY5872 Performer 351C/351M/400M 71-82 £36.36

BY5796 Kit inc caps/collets Perf RPM 289-351W £184.80

#### **Competition Cams Single Valve Springs**

1 464



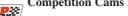


1.200"

BY942-16	Single Outer Spring with dampe	er		£129.48
O.D.	Press. @ Check Ht. Pr	ress. @	Open Ht.	Coil Bind
1.437"	115lbs 1.700"	284lbs	1.200"	1.125"
BY972-16	Single Outer Spring with dampe	er		£162.88
O.D.	Press. @ Check Ht. Pr	ress. @	Open Ht.	Coil Bind
1.460"	125lbs 1.800"	308lbs	1.250"	1.195"
BY926-16	Single Outer Spring with dampe	er		£152.44
O.D.	Press. @ Check Ht. Pr	ress. @	Open Ht.	Coil Bind
1.475"	108lbs 1.800"	316lbs	1.300"	1.140"
BY940-16	Single Outer Spring with dampe	er		£151.40
O.D.	Press. @ Check Ht. Pr	ress. @	Open Ht.	Coil Bind

### **Competition Cams Dual Valve Springs**

89lbs 1.900"





232lbs 1.300"

			`	
BY985-16	Spring Assembly Dual			£168.07
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.430"	165lbs 1.750"	346lbs	1.250"	1.150"
BY986-16	Spring Assembly Dual			£169.62
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.430"	132lbs 1.750"	293lbs	1.250"	1.150"
BY924-16	Spring Assembly Dual with	damper		£193.34
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.509"	115lbs 1.900"	322lbs	1.200"	1.175"
BY987-16	Spring Assembly Dual			£126.89
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.430"	121lbs 1.800"	388lbs	1.200"	1.150"
BY977-16	Spring Assembly Dual			£214.56
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.460"	155lbs 1.850"	419lbs	1.250"	1.195"
BY950-16	Spring Assembly Dual			£215.18
O.D.	Press. @ Check Ht.	Press. @	Open Ht.	Coil Bind
1.464"	132lbs 1.900"	331lbs	1.300"	1.200"