cylinder heads

COMPRESSION FOR POWER

One commonly accepted method of increasing horsepower and torque values of the internal combustion engine is to increase the Compression Ratio. Higher compression ratios coupled with large, free-breathing values, polished ports and properly matched value springs accomplish the purpose of creating greater working pres-sures and heat-energy, thus producing additional power from the fuel/air charge. Breathing, both intake and exhaust, is substantially improved and creates additional working efficiency of the engine.

DRAG RACE CYLINDER HEADS

These machined-modified cylinder heads are manufactured Inese machined-modified cylinder heads are manufactured to comply with National Hot Rod Association (NHRA) regu-lations. A marked increase in breathing efficiency is pro-vided by matched ports and large racing valves. The cylin-der heads are furnished completely assembled with valves, valve springs, valve stem seals and spring retainers. Rock-er arm studs are threaded for high RPM applications; valve springs operate satisfactorily to 6500 RPM. Flycut Racing Pistons (Set No. GFJK-6108-B) are required to pro-vide clearance for the large valves vide clearance for the large valves.

FULL COMPETITION "351" CYLINDER HEADS For 351 & 289 CID Engines

Our new full competition cylinder heads are produced from 351 C.I.D. head castings and feature 1.938 diameter intake and 1.600 diameter exhaust valves. These heads are fully ported and polished, and flow tested to deliver 10% more air through the intake valves and ports than our older heads which use 289 castings. They are completely assem-bled with valve seals, valves, aluminum retainers, competi-tion valve springs inner and outer, and rocker guide plates. Rocker studs are threaded for high RPM usage. When used on the 289 engine our non-un racing pistons part number Kocker studs are threaded for high RPM usage. When used on the 289 engine our pop-up racing pistons part number GFJK-6108-B should be used to provide the proper com-pression and correct valve relief. In the 351 C.I.D. engine our pistons, part number 351-6108-A should be used to provide proper valve clearance and will give approximately 115-11 11.5 - 1 compression.

302 BOSS 351-C COMPETITION HEADS

Countiess hours of flow bench and dyno work have gone into the development of the reworked cylinder head kit. The results have been very rewarding, as we have man-aged to increase the C.F.M. flow by as much as 28%, at certain valve lifts. Intake and exhaust valve diameters are 2.19 and 1.71. The valves and ports have been care-fully contoured to provide optimum air flow. On actual engine dyno tests, we have added over 72 H.P. to a 302 BOSS race engine. Comparable results can be obtained on 351-C engines. The heads are fully ported and pol-ished, and they are milled .050°. The valves are con-toured and polished, and the heads are equipped with rocker guide plates and screw-in rocker studs. Full com-petition silicon steel inner and outer valve springs are used with aluminum spring retainers and hardened steel bottom spring seats. New parts and castings are used throughout. throughout.

351K-6049-B	For 351-C engine
BOSK-6049-A	For 302 BOSS engin

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The above cylinder heads may be used on 289 engines. However, the following BOSS components must be used: push rods, rocker arms, head gaskets and head studs. Piston to valve clearance should be checked to prevent interference.

The Shelby-modified Cylinder Head Assemblies illustrated are de-signed for 260-289-302-351 CID engines in Mustang, Fairlane, Falcon and Ford vehicles. If the stock intake manifold is utilized, it must be machined according to the specifications listed below in order to provide a proper fit. Shelby high-performance intake manifolds are available which do not require machining (see Induction Systems Section.)





STOCK INTAKE MANIFOLD MILLING CHART

PART NUMBER	DESCRIPTION	MACHINING SPECIFICATIONS		
		Manifold Bottom	Manifold Sides	
GFJA-6049-A	Drag Race	.069″	.049″	
GFJA-6049-B	Road Race	.086″	.062″	

DESCRIPTION	PART NUMBER & PRICE	OVERSIZE		ENLARGED PORT SIZES		COMBUSTION	MILLED FROM		WEIDED
		INTAKE (inches)	EXHAUST (inches.	INTAKE (inches)	EXHAUST (inches	CHAMBER (CC)	STOCK (inches)	AND POLISH	WATER PORT
DRAG RACE	GFJK-6049-A \$379.60	1.875	1.600	1 ³ /16×2 ¹ /8	1 ³ / ₁₆ x 1 ¹ / ₂	47.5	.040	NO	NO
FULL COMPETITION	351K-6049-A \$535.00	1.938	1.600	1 ³ /16 x 2 ¹ /8	1 ³ /16×1 ¹⁷ /32	56	.050	YES	NONE
FULL COMPETITION	351K-6049-B \$550.00	2.19	1.71	2.55x1.8	2.1x1.8	58	.050	YES	NO
FULL COMPETITION	BOSK-6049-A \$550.00	2.19	1.71	2.55x1.8	2.1x1.8	58	.050	YES	NO

THE PERFORMANCE LINE



cylinder heads 352-428 cid





COMPETITION CYLINDER HEADS FOR 352, 390, 406, 427, 428 C.I.D. ENGINES WITH FLAT TOP PISTONS

These heads have been extensively reworked to provide maximum horsepower and free breathing on the 390 CID engine. They feature fully polished combustion chambers enlarged intake and exhaust ports and large intake and exhaust valves fully polished. Intake valve diameter is

2.09 and exhaust diameter is 1.66. They are equipped with our 8,000 RPM valve springs with aluminum alloy retainers. An increase of 40-45 H.P. can be expected when installed on a fully modified engine. GFNK-6049-A \$572.00

427 HIGH PERFORMANCE HEADS

These are high performance heads that our part #CFPK-6049-A heads are processed from these are not ported or polished but have large passages and the same large diameter valves intake 2.19, exhaust 1.72. They have fully machined combustion chambers and are equipped

with high performance springs that will allow operation to 7,000 RPM. A good value in cylinder heads that will produce good results in everything but an all out competition engine.

GFPK-6049-C \$500.00

COMPETITION CYLINDER HEADS FOR 427 CID

These 427 CID heads are reworked from Ford "F" suffix heads and are the finest and freest breathing wedge heads available. They are completely ported and polished and the fully machined combustion chambers have been opened up for full flow around the valves. Valves are

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Ford high rev. fully polished with hollow stems. Valve springs are full competition with aluminum retainers and will operate to 8,000 RPM. For maximum benefit use in an engine equipped with long duration (headers and full flow induction)

GFPK-6049-B \$590.00

23

COMPETITION CYLINDER HEADS FOR 429 CID

AVAILABLE APRIL 1, 1970

