



CATALOG NO.
X-3009
2015



**Performance
Engine Parts and Kits**

PERFORMANCE



DUROSHIELD® **Competition Series** **Coated Bearings**



The latest in advanced bearing technology

- **Enhanced molybdenum disulfide coating in a polymer base adds an extra layer of protection**
- **High lubricity and low friction reduces potential damage from interrupted lubrication**

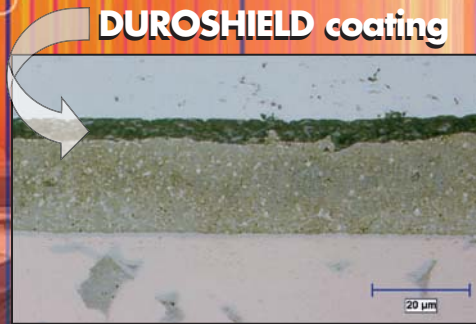
Speed-Pro has consistently delivered the latest technology in performance engine bearings. Our unparalleled H-14 alloy, 3/4 groove lubrication design, and "ramp and flat" thrust bearing configuration revolutionized the racing bearing industry. We are taking the next step by offering the first coated bearing program that has been tested and backed by a major manufacturer.

Advanced chemistry delivers an extra layer of protection

Speed-Pro DUROSHIELD coated bearings deliver all the performance and race winning durability found in our traditional race parts, plus unique additional benefits derived from the specialized polymer coating. A micro-thin unique enhanced molybdenum disulfide in a polymer base, the coating's hydrophilic matrix becomes part of the bearing, absorbing oil for high lubricity and low friction. You get an added level of protection from potential damage caused by dry starts or interrupted lubrication.

Tested and Proven

Speed-Pro DUROSHIELD coated bearings have been tested and proven under brutal operating conditions. We've run them in Mike Moran's twin turbo 3000 horsepower drag engine at nearly 240 miles per hour with no signs of stress. We ran them in Hot Rod magazine's record setting Camaro at the Bonneville salt flats.



DUROSHIELD coating

Coating layer is only .0003" thick

-.005
-.010
-.015
-.020



PERFORMANCE TIMING SETS

**Specifically engineered
for specific performance**

Speed-Pro offers a broad assortment of high performance timing sets engineered to meet your engine-building needs. Each set includes a high quality timing chain selected to meet each engine's particular design requirements, plus precision made-in-the USA sprockets that mesh precisely with the chain for optimum performance and long life. Sets are available in three levels to meet the widest variety of needs, from street performance to hardcore racer:

- **Competition Roller - Series 3600**
- **Billet Roller - Series 3500**
- **Performance Roller - Series 1100**

See which one is right for you.

Competition Roller Timing Sets (3600)

RACE READY

Features

- Induction heat-treated, billet steel sprockets
- 9-keyway billet steel crank sprocket allows +/- 8°, adjustability in 2° increments
- Premium roller chain with .250" diameter rollers
- Hand matched to qualify center distance and control run-out



Billet Roller Timing Sets (3500)

SPORTSMAN RACER

Features

- Billet steel cam sprocket
- Induction heat-treated, billet steel crank sprocket
- 9 keyways allow +/- 8 degrees
- Adjustability in 2 crank degree increments
- Roller chain with .250" diameter rollers
- Made in USA





PERFORMANCE TIMING SETS

Performance Roller Timing Set (1100) STREET PERFORMANCE AND VALUE

Features

- Cast-iron cam sprocket
- Induction heat-treated, billet steel crank sprocket
- 3-keyways allow +/- 4 degrees adjustability in 2 crank degree increments
- Roller chain with .250" diameter rollers
- Made in USA

Type	Part Number	Application		New for 2014	Featured Technology							COMPETITION
					CAM SPROCKET	CRANK SPROCKET	MACHINING	CHAIN	CRANK KEYWAYS	TIMING RANGE	HAND MATCHED	
SPEED-PRO COMPETITION ROLLER TIMING SET 3600 SERIES	CTS-3600TX9R*	Chevy	Small Block / V6	New	HIGHEST DURABILITY INDUCTION HARDENED OIL QUENCHED BILLET STEEL	HIGHEST DURABILITY INDUCTION HARDENED OIL QUENCHED BILLET STEEL	CNC MACHINED FOR EXACTING TOLERANCES	PREMIUM 0.25" DIA COLD ROLLED AND HARDENED FULL ROLLER WITH HIGH STRENGTH HEAT TREATED STEEL SIDE PLATES	9 KEYWAYS FOR MAXIMUM ADJUSTABILITY	+/- 8° IN 2° INCREMENTS	HAND MATCHED FOR CONSISTENT TIMING, OPTIMAL PERFORMANCE AND INCREASED CHAIN LIFE	COMPETITION
	CTS-3603X9R	Chrysler	Small Block / V6	New								
	CTS-3608X9R	Ford	FE Series	New								
	CTS-3610TX9R*	Chevy	Big Block	New								
	CTS-3612X9R	Pontiac	V8	New								
	CTS-3621X9R	Ford	Cleveland / Modified	New								
	CTS-3622X9R	Ford	Big Block	New								
	CTS-3625TX9R*	Chrysler	Big Block	New								
	CTS-3635X9R	Ford	Small Block	New								
SPEED-PRO BILLET ROLLER TIMING SET 3500 SERIES	CTS-3500TX9R*	Chevy	Small Block / V6	New	HIGH STRENGTH BILLET STEEL	HIGH DURABILITY INDUCTION HARDENED BILLET STEEL	CNC MACHINED FOR TOLERANCES	0.25" DIA ROLLER TO ELIMINATE SLIDING FRICTION	9 KEYWAYS FOR MAXIMUM ADJUSTABILITY	+/- 8° IN 2° INCREMENTS	NO	SPORTSMAN RACER
	CTS-3503X9R	Chrysler	Small Block / V6	New								
	CTS-3510TX9R*	Chevy	Big Block	New								
	CTS-3512X9R	Pontiac	V8	New								
	CTS-3513X9R	Olds	V8	New								
	CTS-3521X9R	Ford	Cleveland / Modified	New								
	CTS-3522X9R	Ford	Big Block	New								
	CTS-3525TX9R*	Chrysler	Big Block	New								
	CTS-3532X9R	Buick	Small Block / V6	New								
	CTS-3535X9R	Ford	Small Block	New								
CTS-3545X9R	Chevy	Small Block / V6	New									
SPEED-PRO PERFORMANCE ROLLER TIMING SET 1100 SERIES	CTS-1100NR	Chevy	Small Block / V6	Supersedes CTS-1100R	CAST IRON	HIGH DURABILITY INDUCTION HARDENED BILLET STEEL	CNC MACHINED FOR EXACTING TOLERANCES	0.25" DIA ROLLER TO ELIMINATE SLIDING FRICTION	3 KEYWAYS FOR IMPROVED ADJUSTABILITY VS OE SINGLE KEYWAY	+/- 4° IN 2° INCREMENTS	NO	STREET PERFORMANCE
	CTS-1103R	Chrysler	Small Block / V6	New								
	CTS-1104R	Chrysler	Big Block	New								
	CTS-1108R	Ford	FE Series	New								
	CTS-1110NR	Chevy	Big Block	Supersedes CTS-1110R								
	CTS-1110TR*	Chevy	Big Block	New								
	CTS-1112R	Pontiac	V8	New								
	CTS-1113R	Olds	V8	New								
	CTS-1121R	Ford	Cleveland / Modified	New								
	CTS-1122R	Ford	Big Block	New								
	CTS-1125R	Chrysler	Big Block	New								
	CTS-1132R	Buick	Small Block / V6	New								
	CTS-1135NR	Ford S	Small Block	Supersedes CTS-1111R								
	CTS-1138NR	Ford	Small Block	Supersedes CTS-1119R								
	CTS-1145R	Chevy	Small Block / V6	New								

* Includes Roller Thrust Bearing

DUROSHIELD® HYPEREUTECTIC Piston Sets With Rings

Each complete set contains:

- **Eight size and weight matched hypereutectic pistons**
 - Ideal for budget conscious engine builders
 - Weights accurate to within 2 grams per set
 - Reduces or eliminates the need for piston balancing
 - Size matched within .0005" – you can bore the cylinders to one size
 - DUROSHIELD coating delivers longer life and reduced friction
 - Save time and money – pistons & rings together in a single package
- **Sealed Power premium quality moly faced piston ring set**
 - A perfect match for the pistons – guaranteed correct sizing
 - Moly facing delivers optimal sealing and long life
 - Famous SS50 expander design delivers superior oil control
- **Piston pins**
 - Pin fit and ready for installation
- **Lock rings (as required)**
 - Many feature the latest round wire retainer technology



Piston Set w/Rings Base Number	Available Sizes	Piston Number	Ring Set Number	Notes	Features	Dome Design	Compression Ratio
Hypereutectic							
Chevrolet 350							
8-KH423NCP	30 40 60	H423NCP	E251K		DUROSHIELD coated	.070" dish 4 relief	8.9:1 w/34cc heads
8-KH345NCP	29 40 60	H345NCP	E251K		DUROSHIELD coated	flat top 4 relief	9.35:1 w/64cc heads
8-KH618CP	30 40 60	H618CP	E251K		DUROSHIELD coated	.125" dome	10.72:1 w/64cc heads
8-KH100CP	30 40 60	H100CP	R8902		DUROSHIELD coated, CNC machined	CNC flat top 2 relief	9.73:1 w/64cc heads
8-KH631CP	30 40 60	H631CP	E251K		DUROSHIELD coated	flat top 2 relief	9.73:1 w/64cc heads
Chevrolet 383							
8-KH670CP	30	H670CP	E251K	5.565" rod	DUROSHIELD coated	.070" dish,	9.78:1 w/64cc heads
8-KH859CP	30 40 60	H859CP	E251K	5.7" rod	DUROSHIELD coated	.110" dish 2 relief	9.67:1 w/64cc heads
8-KH137CL	30	H137CL	R8902	5.7" rod	DUROSHIELD coated tapered pin	CNC reverse dome	9.67:1 w/64cc heads
8-KH860CP	30 40 60	H860CP	E251K	5.7" rod	DUROSHIELD coated	flat top 2 relief	10.4:1 w/64cc heads
8-KH124CL	30 40 60	H124CL	R8902	6" rod	DUROSHIELD coated	CNC flat top 2 relief	10.53:1 w/64cc heads
Chevrolet 400							
8-KH616CP	30 40 60	H616CP	E243K	5.7" rod	DUROSHIELD coated	flat top 4 relief	10.84:1 w/64cc heads
Chevrolet 454							
8-KH625CP	30 40 60	H625CP	E233K		DUROSHIELD coated	flat top 2 relief	8.5:1 w/107cc heads
8-KH426CP	30 40 60	H426CP	E233K		DUROSHIELD coated	.100" dome 1 relief	9.37:1 w/107cc heads
Chrysler 360							
8-KH116CP	30 40 60	H116CP	E251K		DUROSHIELD coated, CNC machined	CNC flat top, 2 reliefs	9.5:1 w/68cc heads
Chrysler 440							
8-KH147CP	30	H147CP	E424K		DUROSHIELD coated, CNC machined	CNC flat top, 2 reliefs	9.4:1 w/88cc heads
Ford 4.6L 2V							
8-KH591CP	.50-.75-1.00MM	H591CP	E538K		DUROSHIELD coated	.150" dish	9.45:1 w/63cc heads
Ford 302							
8-KH273CP	30 40 60	H273CP	E251K		DUROSHIELD coated	flat top 4 relief	8.6:1 w/63cc heads
8-KH120CP	30 40 60	H120CP	R8902		DUROSHIELD coated, CNC machined	CNC flat top 2 relief	9.09:1 w/63cc heads
Ford 347							
8-KH146CL	30	H146CL	R8968	5.4" rod	DUROSHIELD coated	flat top, CNC 2 reliefs	9.9:1 w/63cc heads

POWERFORGED®

Piston Sets With Rings

Each complete set contains:

- **Eight size and weight matched POWERFORGED pistons**
 - The optimal choice for street performance and racing applications
 - Weights accurate to within 2 grams per set
 - Reduces or eliminates the need for piston balancing
 - Size matched within .0005" – you can bore the cylinders to one size
 - DUROSHIELD® coating delivers longer life and reduced friction
 - Save time and money – pistons & rings together in a single package
- **Sealed Power premium quality moly faced piston ring set**
 - A perfect match for the pistons – guaranteed correct sizing
 - Moly facing delivers optimal sealing and long life
 - Famous SS50 expander design delivers superior oil control
- **Piston pins**
 - Pin fit and ready for installation
- **Lock rings (as required)**
 - Many feature the latest round wire retainer technology



Piston Set w/Rings Base Number	Available Sizes	Piston Number	Ring Set Number	Notes	Features	Dome Design	Compression Ratio
POWERFORGED							
Chevrolet 327							
8-KL2166NF	30 40 60	L2166NF	E251K	5.7" rod	DUROSHIELD coated	.125" dome	10.35:1 w/64cc heads
8-KL2165F	30 40 60	L2165F	E251K	5.7" rod	DUROSHIELD coated	flat top 2 relief	9.07:1 w/64cc heads
Chevrolet 350							
8-KL2441F	30	L2441F	E251K	5.7" rod	DUROSHIELD coated	"D" shaped cup	8.35:1 w/64cc heads
8-KLW2603F	30 60	LW2603F	R8902	5.7" rod	DUROSHIELD coated lightweight, tapered pin	reverse dome	8.97:1 w/64cc heads
8-KL2256F	30 40 60	L2256F	E251K	5.7" rod	DUROSHIELD coated	flat top 4 relief	9.72:1 w/64 cc heads
8-KLW2256F	30 40 60	LW2256F	R8902	5.7" rod	DUROSHIELD coated lightweight, tapered pin	flat top 4 relief	9.72:1 w/64 cc heads
8-KL2490F	30 60	L2490F	R8902	5.7" rod	DUROSHIELD coated	flat top 2 relief	10.06:1 w/64 cc heads
8-KL2304F	30 60	L2304F	E251K	5.7" rod	DUROSHIELD coated	.100" dome	10.63:1 w/64cc heads
Chevrolet 383							
8-KLW2605F	30 60	LW2605F	R8902	5.7" rod	DUROSHIELD coated lightweight, tapered pin	reverse dome	9.68:1 w/64cc heads
8-KL2491F	30 60	L2491F	R8902	5.7" rod	DUROSHIELD coated	flat top 2 relief	10.76:1 w/64 cc heads
Chevrolet 396							
8-KL2240NF	30 60	L2240NF	E243K		DUROSHIELD coated	.182" dome	9.09:1 w/107cc heads
Chevrolet 400							
8-KLW2606F	30	LW2606F	R8375	5.7" rod	DUROSHIELD coated lightweight, tapered pin	reverse dome	9.78:1 w/64cc heads
8-KL2352F	30 40	L2352F	E251K	5.7" rod	DUROSHIELD coated	.083" dish 4 relief	9.91:1 w/64 cc heads
Chevrolet 427							
8-KL2300F	30 40 60	L2300F	E233K		DUROSHIELD coated	.140" dome	9.46:1 w/107cc heads
Chevrolet 454							
8-KL2377F	30 40	L2377F	E233K		DUROSHIELD coated	flat top 2 relief	8.36:1 w/107 cc heads
8-KL2399F	30 60	L2399F	E233K		DUROSHIELD coated	.095" dome	9.7:1 w/107cc heads
8-KL2465F	30 60	L2465F	E233K		DUROSHIELD coated	.215" dome	10.68:1 w/107cc heads
Chrysler 440							
8-KL2266F	30 40 60	L2266F	E424K		DUROSHIELD coated	flat top	8.66:1 w/88cc heads
8-KL2355F	30 40 60	L2355F	E424K		DUROSHIELD coated	flat top	9.37:1 w/88cc heads
Ford 302							
8-KL2305F	30 40 60	L2305F	E251K		DUROSHIELD coated	.068" dish	8.67:1 w/63cc heads
8-KL2482F	30 40 60	L2482F	E251K		DUROSHIELD coated	flat top 4 relief	9.13:1 w/63 cc heads
8-KL2488F	30 40 60	L2488F	E458K		DUROSHIELD coated	flat top 4 relief	9.53:1 w/63 cc heads
Ford 351C							
8-KL2379F	30 40	L2379F	E251K		DUROSHIELD coated	flat top 2 relief	8.9:1 w/76cc heads
Ford 351W							
8-KL2446F	30 40	L2446F	E251K		DUROSHIELD coated	.110" dish	9.06:1 w/63cc heads
8-KLW2601F	30 40	LW2601F	R8902		DUROSHIELD coated lightweight	flat top 2 relief	9.65:1 w/63cc heads
Ford 429							
8-KL2366F	30 40	L2366F	E296K		DUROSHIELD coated	flat top	10.26:1 w/77cc heads
Ford 460							
8-KL2404F	30 40 60	L2404F	E296K		DUROSHIELD coated	.180" dish	9.02:1 w/77cc heads
8-KLW2602F	30 60	LW2602F	E296K		DUROSHIELD coated lightweight	flat top 1 relief	9.70:1 w/92cc heads
8-KL2443NF	30 60	L2443NF	E296K		DUROSHIELD coated	.400" dome	10.55:1 w/92cc heads

POWERFORGED[®] PISTONS

The best value in performance pistons

- Weight Matched Sets \pm 2 Grams
- Skirt Coated
- CNC Machined
- Media Blasted
- More Accurate Machining
- Precise Tolerances

Professional Quality at a Sportsman Price!

POWERFORGED pistons are setting new standards for performance and value. These pistons feature unique aerospace quality alloy forged to shape using 3,000 tons of force – a dramatically improved level of machining quality – and come with our proprietary DUROSHIELD[®] skirt coating . . . at no extra-cost!



A major investment in CNC manufacturing technology delivers dependable power, awesome quality, and maximum value. From micro-accurate ring grooves to complex skirt profiles, POWERFORGED pistons are now better than ever!





LIGHTWEIGHT "LW" SERIES POWERFORGED® PISTONS

Compare the Features! Compare the Value!

- Tapered Pins
- Dramatically Lighter
- Floating Pins
- CNC Machined
- DUROSHIELD® Skirt Coated
- 1/16 - 1/16 - 3/16 Grooves;
1.5mm - 1.5mm - 3.0mm
Grooves
- Round Wire Lock Rings
- Media Blasted



Numerous Applications

- Small Block Chevy
- Small Block Ford
- Big Block Chevy

- Reverse Domes
- Flat Tops
- Domes
- Stokers

**COMBINE WITH SPEED-PRO
RING SETS FOR A HIGH
VALUE POWER PACKAGE!**

The latest in computerized engineering and manufacturing technology delivers an unbeatable combination of accuracy, power, and value!



HYPEREUTECTIC PISTONS

-.005
-.010
-.015

Your best value in a performance piston

Speed-Pro combines our proprietary FM244 alloy, sophisticated design, and DUROSHIELD® coating in a high value hypereutectic piston – perfect for the racer on a budget.

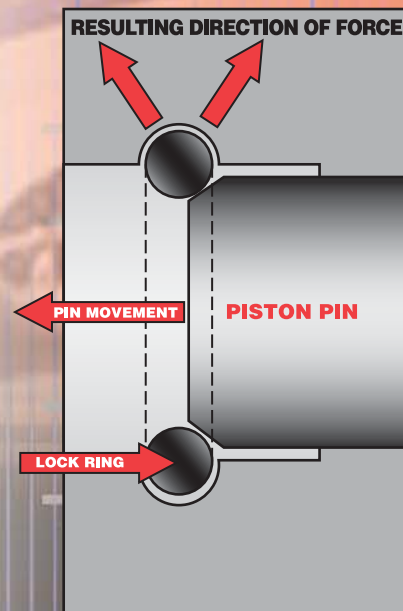
- **Weight Matched Sets**
- **Work perfectly with normal ring gaps**
- **DUROSHIELD friction reducing coating**
- **Round wire retainers**



Round Wire Pin Retainers

Speed-Pro pistons are designed and manufactured by Federal-Mogul, in one of the world's most advanced piston facilities.

Speed-Pro pistons that utilize floating pins use **round wire retainers** along with a chamfered pin. This retainer design eliminates potential stress risers and spreads side loads across the entire pin boss area – resulting in a much stronger piston.





CNC MACHINED DIGITAL DIAMOND PROFILED™ (DDP) PISTONS



The finest hypereutectic pistons available

- **Weight Matched Sets \pm 2 Grams**
- **DUROSHIELD® Skirt Coated**
- **CNC Machined**
- **Work perfectly with normal ring gaps**
- **Round wire retainers**
- **Optional tapered pin**

Speed-Pro combines our exclusive FM244 aluminum alloy, sophisticated design, high technology CNC machining, and DUROSHIELD skirt coating to deliver the ultimate hypereutectic piston!

Speed-Pro pistons are designed and manufactured by Federal-Mogul, in one of the nation's most advanced piston facilities.



Dedicated CNC technology delivers awesome quality, with micro-accurate ring grooves, consistent dome dimensions, and complex skirt profiles.



FILE-FIT AND "DROP-IN" PISTON RING SETS

Race winning technology that everyone can afford

Oval track "claimer", Saturday night "cruiser", or bracket racer – we have your rings!

Compared to stock rings, Speed-Pro piston rings will make more horsepower and last longer. An upgrade to Speed-Pro rings is an investment in quality – for any high performance engine.

Most Speed-Pro top rings are made from virtually unbreakable, high strength ductile iron, with a plasma-moly facing for instant seating and long life.

Speed-Pro second rings are cylinder friendly SAEJ929a cast iron, with an oil controlling taper face profile and an intentional open gap design that reduces inter-ring pressure buildup.

Stainless steel oil rings prevent the high RPM deflection that low cost "rebuilder" designs are subject to – excellent oil control at the highest RPM.



- **Proven race winning power**
- **Reliable cylinder sealing under "real-world" conditions**
- **Consistently accurate**
- **Readily available**
- **Excellent oil control**

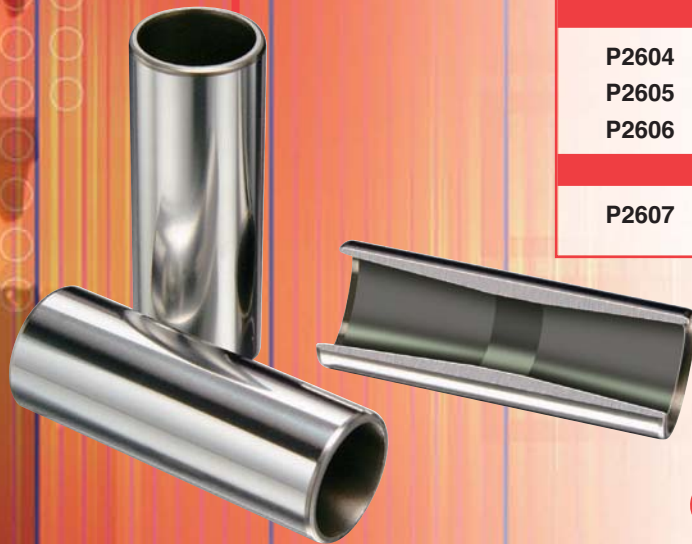
FILE FIT SPEED-PRO RING SETS

CHECK THE RING SECTION FOR DETAILS!

4.6L Ford	R-10596	1.5mm - 1.5mm - 3.0mm	13mm-64mm-89mm
LS1 Chevy	R-10598	1.5mm - 1.5mm - 3.0mm	13mm-38mm
Honda B18	R-10599	1.0mm - 1.2mm - 2.8mm	13mm-64mm
Honda D16	R-10600	1.0mm - 1.2mm - 2.8mm	13mm-64mm
4.000" Bore	R-10603	1.5mm - 1.5mm - 3.0mm	5-25-35-45-65
4.125" Bore	R-10604	1.5mm - 1.5mm - 3.0mm	5-35-45-65



LIGHTWEIGHT TAPERED PINS FOR SPEED-PRO PISTONS



CHEVY VERSIONS:

P2604	2.50" x .927	Chevy 350	100 grams
P2605	3.00" x .927	Chevy 350	125 grams
P2606	2.95" x .990	Chevy 454	150 grams

FORD VERSION:

P2607	2.75" x .912	Ford 302	120 grams
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SPEED-PRO CLAIMER SERIES RING SETS



For Oval Track Claimer Engines

- Economically priced
- 1/16 top ring beveled for high RPM sealing
- Available moly facing for increased durability
- Race proven design
- 1/16 taper faced second ring
- Excellent oil control to prevent detonation
- SS-50 stainless steel oil control ring

The ultimate in oil control.

4.000" BORE SERIES

4.000	R-6902 Standard	Top Ring	1/16	BT-10-557
		2nd Ring	1/16	RBT-10-102
		Oil Ring	3/16	SS-50U-5029

Standard Tension, Available Oversizes: .030, .060

4.000	R-8902 Moly	Top Ring	1/16	BR-10PF-177
		2nd Ring	1/16	RBT-10-102
		Oil Ring	3/16	SS-50U-5029

Standard Tension, Available Oversizes: .030, .040, .060

4.125" BORE SERIES

4.125	R-6375 Standard	Top Ring	1/16	BT-10-059
		2nd Ring	1/16	RBT-10-084
		Oil Ring	3/16	SS-50U-640

Standard Tension, Available Oversizes: .030, .040

4.125	R-8375 Moly	Top Ring	1/16	BRI-10Y-093
		2nd Ring	1/16	RBT-10-084
		Oil Ring	3/16	SS-50U-640

Standard Tension, Available Oversizes: .030, .040, .060



COMPETITION SERIES RACE BEARINGS

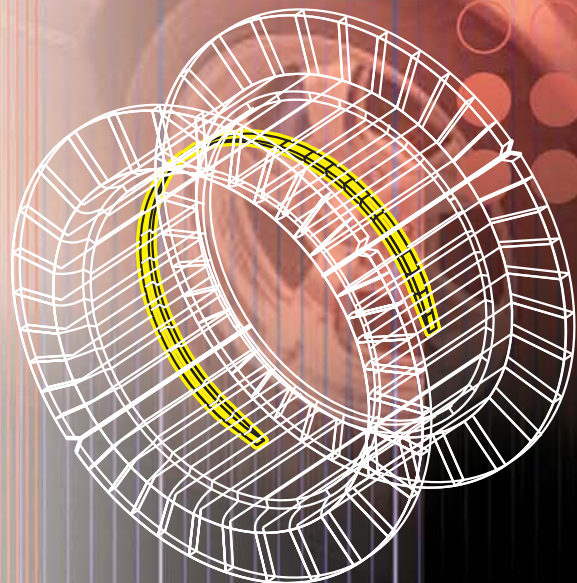
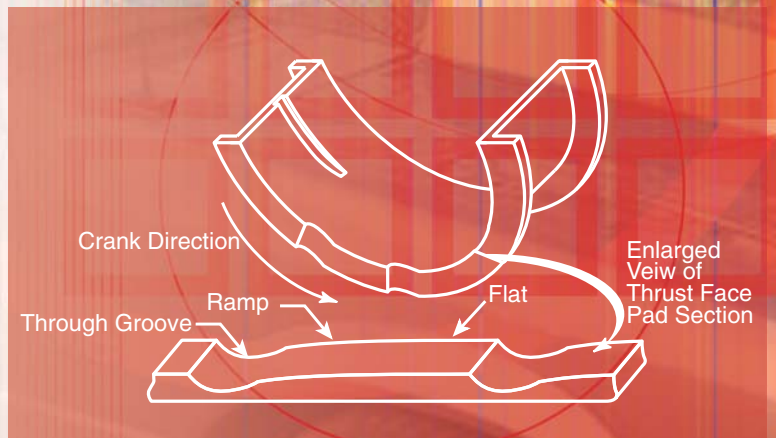
Contoured Flange Design - Double Thrust Load Capacity

Competition series main sets incorporate a patented “contoured flange” thrust bearing design, which greatly increases thrust load capacity. These unique bearings use a series of formed “ramp and flat” hydrodynamic profiles on the flange surface. This contour channels oil onto the surface of the flanged face. Applications using high clutch loads or frequent “on and off” throttle transitions will benefit from this innovation.

Competition series thrust bearings also feature three vertical grooves machined into the flange surface, instead of the “thumbnail” shaped oil reliefs found on previous bearings. The through groove design provides added lubrication.

3/4 Oil Groove - the solution for racing durability

The greater the surface area, the more load a main bearing can handle. But without adequate oiling, the rod bearings will fail. Our solution to this challenge is the 3/4 groove, which maintains full surface area in the high load portion of the bearing, while permitting improved oil flow to the rod bearing. This unique design gives the best of both worlds – ultimate high strength with outstanding lubrication characteristics.





HIGH PERFORMANCE VALVETRAIN COMPONENTS



Valve Spring Retainers

- **High Strength 4140 Chrome Moly**
 - For 3/8" and 11/32" Valve Stems
 - Available in both 7 and 10 degree designs
 - Heat-treated for added strength

Valve Locks

- **VK 100R series**
 - Stamped steel
- **VK 200R, VK 300R Series**
 - 4140 chrome moly
 - Machined

Rocker Studs

- **4140 Chrome Moly steel – rolled threads for high strength**

Performance Valves

Speed-Pro offers two series of performance valves:

- **Competition Series**
 - For serious race efforts
 - Specialized materials and heat treating for maximum performance
- **POWERFORGED**
 - For street performance
 - Race quality features at an excellent price



All Speed-Pro Valves Include:

- Stainless steel
- One piece design
- Swirl polished
- Chrome stem
- Hardened tip



Speed-Pro Performance Rocker Arms

- **Long slot stamped steel rockers**
 - Stock replacement ball pivot mounting
 - Allows use of high lift cams
- **Aluminum roller rockers**
 - Heavy duty roller trunion for stud mounting
 - Roller tip for reduced friction
 - High strength anodized aluminum body
- **Steel roller tip rockers**
 - Stock replacement ball pivot mounting
 - Roller tip for reduced friction
 - Optional 1.6 ratio available
- **Stainless steel roller rockers**
 - Heavy duty roller trunion for stud mounting
 - Roller tip for reduced friction
 - Extra high strength stainless steel body

Competition Series Pushrods

- **Super high strength pushrods for serious racing**
 - Premium .080" wall 4130 chrome moly tubing
 - One piece forged design
 - Available in numerous lengths from 6.25" to 9.75"
 - Black oxide coated for corrosion resistance
 - Laser etched part numbers for positive identification
 - See pushrod numerical listing for complete selection





SPEED-PRO® PERFORMANCE CAMSHAFTS

Emission Legal Performance Camshafts

- Seven grinds available
- 50 state legal for use in emission controlled vehicles
- Fits 1987 & earlier carbureted small block Chevrolets
- E.O. Number D-297-1

Hydraulic Lifter Performance Camshafts

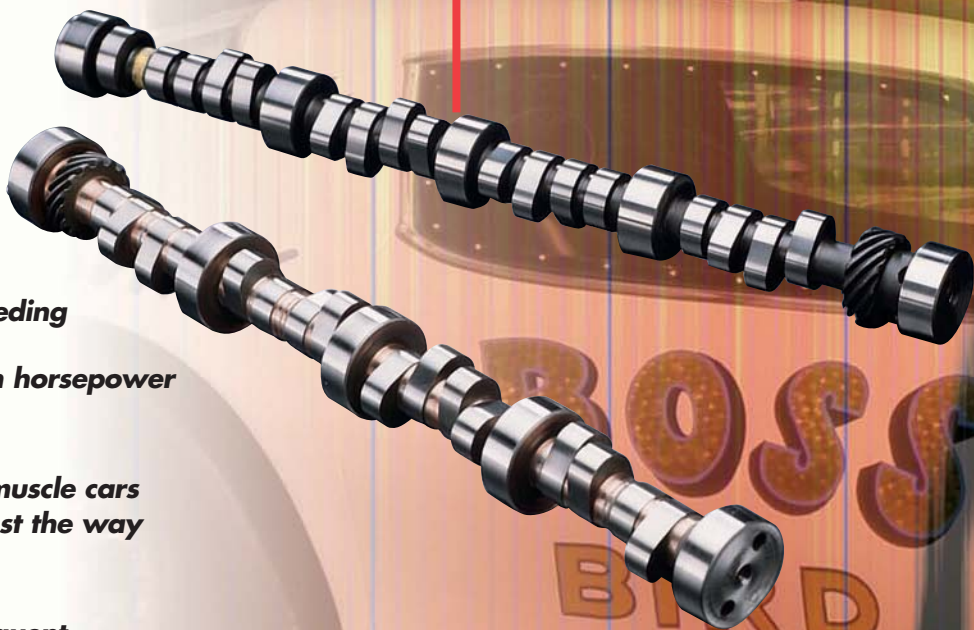
- Hundreds of cams to meet any need daily driver, RV, or racing
- Precision ground to exact specs in heat-treated cast iron
- Quiet, reliable operation without needing frequent adjustment
- Priced right. An outstanding value in horsepower per dollar!

Muscle Car Camshafts

- Original profiles for many popular muscle cars
- They install, perform, and sound "just the way you remembered"

Hydraulic Roller Camshafts

- Roller cam performance without frequent lash adjustment
- Top quality materials ensure outstanding reliability
- Smooth valvetrain action
- Available individually or in complete kits for easy installation
- 17 cam grinds available
 - Small Block Chevy
 - 4 Retro-fit kits for pre-'87 non-roller cam engines
 - 6 Upgrade kits for '87 & newer roller cam-engines
 - Big Block Chevy
 - 3 retro-fit kits for non-roller cam engines
 - Small Block Ford
 - 4 cams for '85- 93 5.0L GT-Mustangs



Speed-Pro Engine Kit Section

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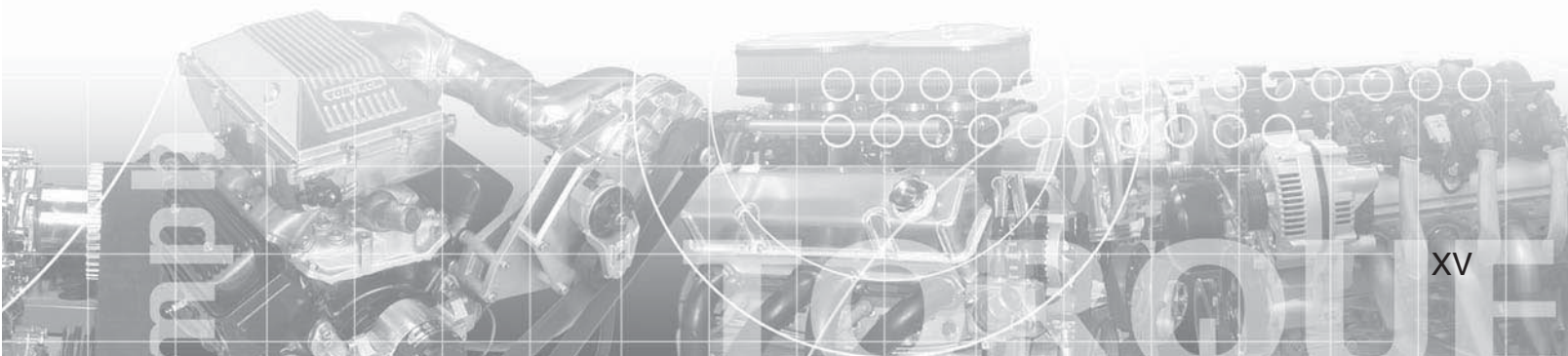
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How To Use This Catalog



The Component Application Section Includes:

- Speed-Pro POWERFORGED Pistons
- Speed-Pro Hypereutectic Pistons
- Speed-Pro Piston Rings
- Speed-Pro Engine Bearings
- Speed-Pro Camshafts
- Speed-Pro Valves and Valvetrain Components

This section is arranged first by **VEHICLE MANUFACTURER**, then by **ENGINE FAMILY**. Each engine family contains an information page with technical tips and precautions relating to that particular engine. See Engine Builder Highlights on pages XXXVIII-XLIX.

Pistons are listed in the following order:

- 1) Basic Engine Displacement – i.e., 283", 350"
- 2) Piston Type - Hypereutectic, POWERFORGED
- 3) Rod Length and Stroke Variations – Stock, "Stroker" ("stroker" engines use a non-original crankshaft to alter engine size.)
- 4) Compression Ratio – Using "Standard" piston as a reference. (oversizes are listed in order below the standard bore)
- 5) Compression Ratio data is given for a number of popular chamber volumes. Compression Ratios and Deck Clearances have been recalculated using a standardized gasket and a non-cut O.E. block deck height.
- 6) Piston Ring options are listed alongside each piston.

Camshaft and Valvetrain information includes all cylinder head components and timing products along with the cam and lifters.

- 1) The catalog has been constructed to show the camshaft and it's matching lifters, springs, locks, and retainers in the same listing. Each camshaft has lift and duration specifications alongside the part number.
- 2) The camshaft identification codes have been revised. Cams are listed first by lifter type, then by increasing intake duration.

Valves are shown separately in order of application, head diameter, stem diameter, and material.

Pushrods, Rockers, etc. are also listed separately, and shown in order of ratio, length, material, or features, as appropriate.

Engine Bearings and Oil Pumps will be listed immediately after engine family camshaft data.

Many products listed in this catalog are dedicated racing items and are not intended for use in emission controlled vehicles. Unless otherwise indicated, these parts are not to be installed in vehicles subject to emission control regulations.

Products which may impact a vehicle's emission output include, but are not limited to: camshaft, pistons, timing sets, and valves.

If any part in this catalog is different than the O.E. replacement part listed for the specific vehicle in the Sealed Power standard replacement parts catalogs, it is likely to be unsuitable for street use in that application.

Check with your state vehicle emission regulating authorities before installation of any parts listed in this catalog. Federal-Mogul is not liable for your vehicle's emission law compliance or for the failure of an emission test or inspection.

Warranty Disclaimer*

Due to the nature of performance applications, the parts in this catalog are sold without any expressed warranty or any implied warranty of merchantability or fitness for a particular purpose. Federal-Mogul shall not, under any circumstances, be liable for any special, incidental or consequential damages, including, but not limited to damage or loss of other property or equipment, loss of profits or revenue, cost of purchased or replacement goods, or claims of customers of the purchaser, which may arise and/or result from the sale, installation or use of these parts.

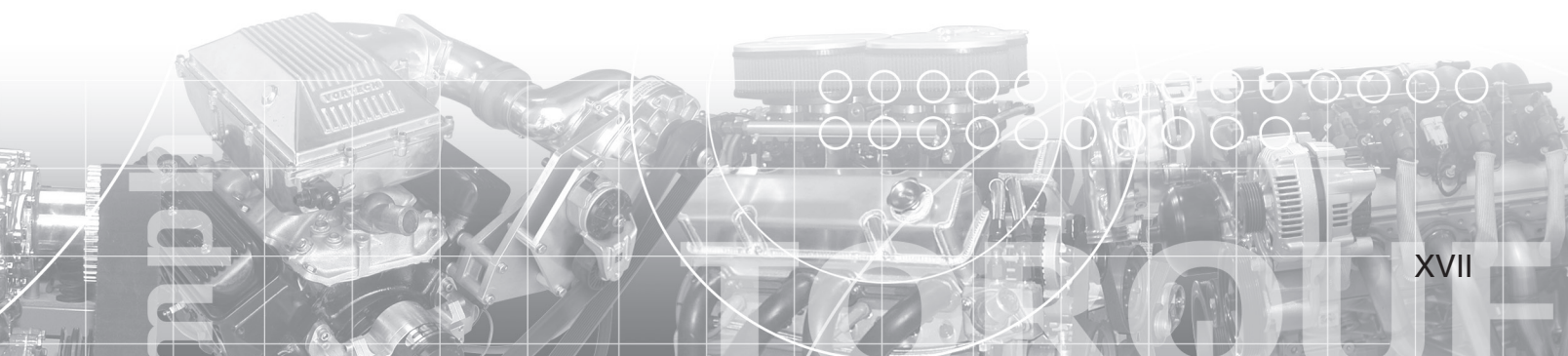
Installation of these parts could adversely affect the vehicle manufacturer's warranty coverage.

*Subject to applicable state law.

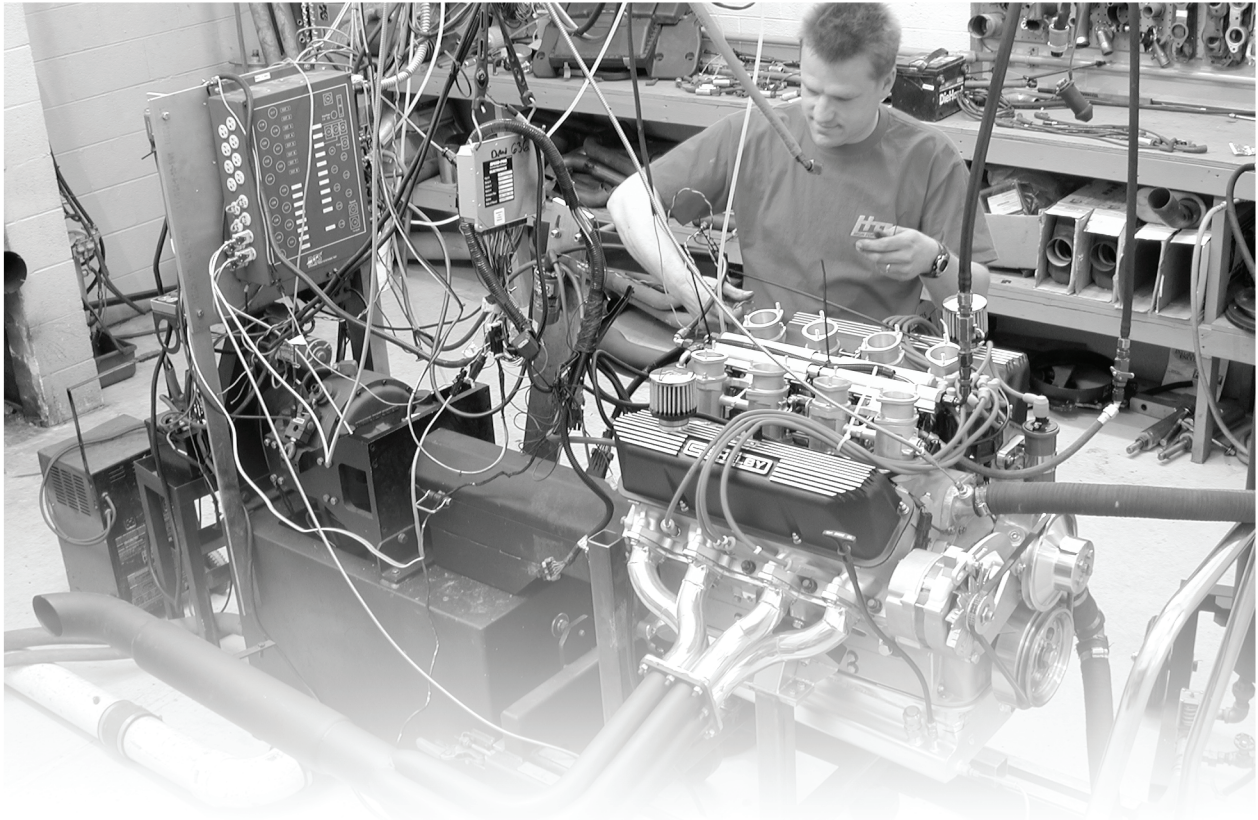
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- One part number gets you the best package in the industry. Proven quality at a sportsman price.

Buick 231 Turbo

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1984-90	Hyper	7.6 to 1	Grand National Street / Strip Pump Gas			KC-1016R	MHP-112

Cam Kits

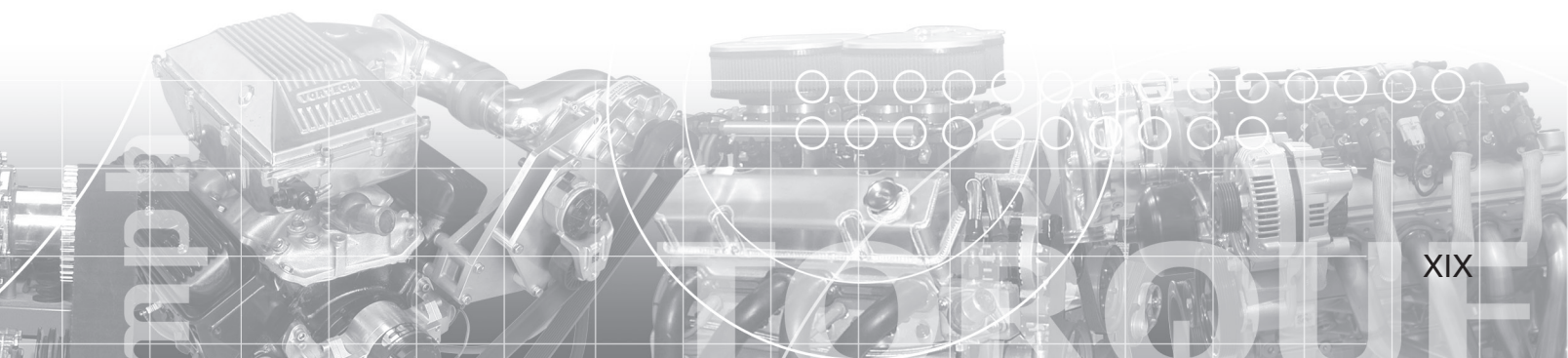
Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1984-90	KC-1000R Hydraulic .402/.426 194°/202°	KC-1112R Hydraulic .424/ 448 194°/204° KC-1016R Hydraulic .448/.472 204°/214°			

Timing Sets

Oil Pumps

Year	Speed-Pro Timing Set	Year	Standard Volume	High Volume
	1962-82		Billet Roller CTS-3532X9R Performance Roller CTS-1132R	1984-90



Performance Engine Kits

Chevrolet 305 Non-roller cam, w/o fuel injection

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1976-85	Hyper	8.7 to 1	High Torque / Towing			KC-1014R	MHP-124

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1976-85		KC-1014R* Hydraulic .420/.442 204°/214° KC-1028R Hydraulic .444/.444 214°/214° KC-1104R* Hydraulic .414/.414 209°/209°	KC-1013R Hydraulic .442/.465 214°/224° KC-179R Hydraulic .447/.447 222°/222° KC-1095R Hydraulic .450/.460 224°/224° KC-1062R Hydraulic .468/.480 220°/231°	KC-186R Hydraulic .480/.480 231°/231° KC-1168R Hydraulic .488/.488 232°/234°	

Timing Sets

Year	Timing Set
1955-96	Competition Roller CTS-3600TX9R
	Billet Roller CTS-3500TX9R
	Performance Roller CTS-1100NR

Oil Pumps

Year	Standard Volume	High Volume
1976-85	224-4146	224-4143

*E.O. #D292-1 Emission Legal

Chevrolet 350 Non-roller cam, w/o fuel injection

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1967-85	Forged	9.0 to 1	Daily Driver / Towing	5.7" rods	64cc	KC-1014R	MHP-164
	Forged	9.75 to 1	Mega Torque / Street / Strip	5.7" rods	64cc	KC-186R	MHP-125
	Forged	9.75 to 1	High Torque / Pump Gas	5.7" rods	64cc	KC-1014R	MHP-144
	Hyper	9.35 to 1	Daily Driver / Towing	5.7" rods	64cc	KC-1014R	MHP-126N
	Hyper	9.5 to 1	Mega Torque / Street / Strip	6.0" rods	64cc	KC-1062R	MHP-147
	Hyper	10.9 to 1	Saturday Night Special	6.0" rods	64cc	KC-1146R	MHP-149

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1967-85		KC-1014R* Hydraulic .420/.422 204°/214°	KC-1013R Hydraulic .442/.465 214°/224°	KC-186R Hydraulic .480/.480 231°/231°	KC-187R Hydraulic .509/.509 244°/244°
		KC-1028R Hydraulic .444/.444 214°/214°	KC-179R Hydraulic .447/.447 222°/222°	KC-1168R Hydraulic .488/.488 232°/234°	KC-1146R Hydraulic .510/.533 244°/254°
		KC-1104R* Hydraulic .414/.414 209°/209°	KC-1095R Hydraulic .450/.460 224°/224°		KC-1227R Solid .518/.540 254°/264°
			KC-1062R Hydraulic .468/.480 220°/231°		

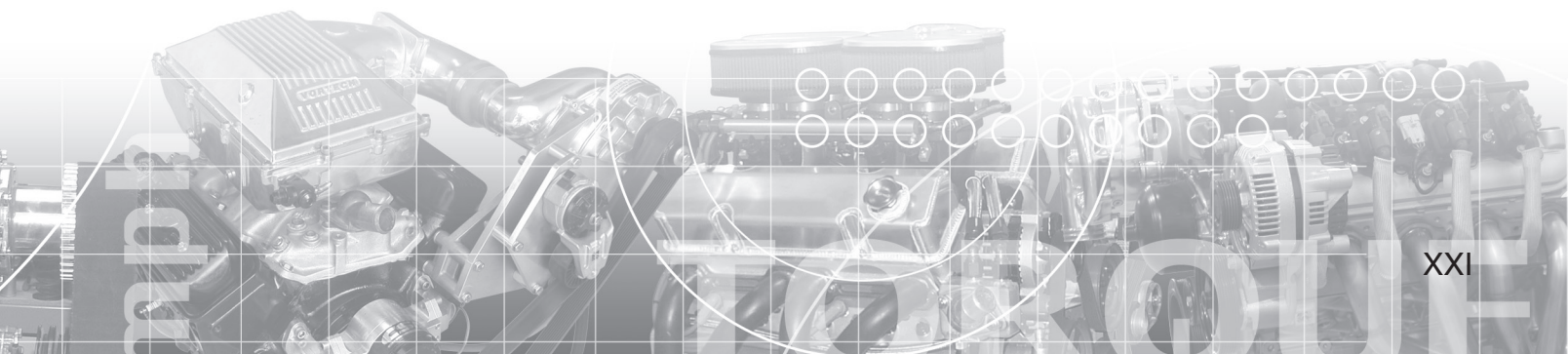
Timing Sets

Year	Timing Set
1955-96	Competition Roller CTS-3600TX9R
	Billet Roller CTS-3500TX9R
	Performance Roller CTS-1100NR

Oil Pumps

Year	Standard Volume	High Volume
1967-85	224-4146	224-4143

*E.O. #D292-1 Emission Legal



Performance Engine Kits

Chevrolet 383 350 engine w/400 crank

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
	Forged	10.8 to 1	Saturday Night Special	5.7" rods	64cc	KC-186R	MHP-162
	Hyper	9.7 to 1	Mega Torque / Street / Strip	5.7" rods	64cc	KC-1014R	MHP-159
	Hyper	10.3 to 1	Mega Torque / Street / Strip	5.7" rods	64cc	KC-1013R	MHP-160
	Hyper	11.5 to 1	Saturday Night Special	5.7" rods	64cc	KC-186R	MHP-161

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
		KC-1014R* Hydraulic .420/.422 204°/214°	KC-1013R Hydraulic .442/.465 214°/224°	KC-186R Hydraulic .480/.480 231°/231°	KC-187R Hydraulic .509/.509 244°/244°
		KC-1028R Hydraulic .444/.444 214°/214°	KC-179R Hydraulic .447/.447 222°/222°	KC-1168R Hydraulic .488/.488 232°/234°	KC-1146R Hydraulic .510/.533 244°/254°
			KC-1095R Hydraulic .450/.460 224°/224°		KC-1108R Solid .540/.563 264°/274°
			KC-1062R Hydraulic .468/.480 220°/231°		KC-1227R Solid .518/.540 254°/264°

Timing Sets

Year	Timing Set
1955-96	Competition Roller CTS-3600TX9R**
	Billet Roller CTS-3500TX9R**
	Performance Roller CTS-1100NR**

Oil Pumps

Year	Standard Volume	High Volume
	224-4146	224-4143

*E.O. #D292-1 Emission Legal

** Non-Roller Cam

Chevrolet 400 small block

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1970-76	Forged	9.9 to 1	Mega Torque / Street / Strip	5.565" rods	64cc	KC-1062R	MHP-120
	Hyper	9 to 1	High Torque / Pump Gas	5.565" rods	76cc	KC-1013R	MHP-165
	Hyper	10.1 to 1	Mega Torque / Street / Strip	5.7" rods	64cc	KC-1013R	MHP-167
	Hyper	10.8 to 1	Saturday Night Special	5.7" rods	64cc	KC-1062R	MHP-168

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1970-76		KC-1014R* Hydraulic .420/.422 204°/214°	KC-1013R Hydraulic .442/.465 214°/224°	KC-186R Hydraulic .480/.480 231°/231°	KC-187R Hydraulic .509/.509 244°/244°
		KC-1028R Hydraulic .444/.444 214°/214°	KC-179R Hydraulic .447/.447 222°/222°	KC-1168R Hydraulic .488/.488 232°/234°	KC-1146R Hydraulic .510/.533 244°/254°
			KC-1095R Hydraulic .450/.460 224°/224°		KC-1108R Solid .540/.563 264°/274°
			KC-1062R Hydraulic .468/.480 220°/231°		KC-1227R Solid .518/.540 254°/264°

Timing Sets

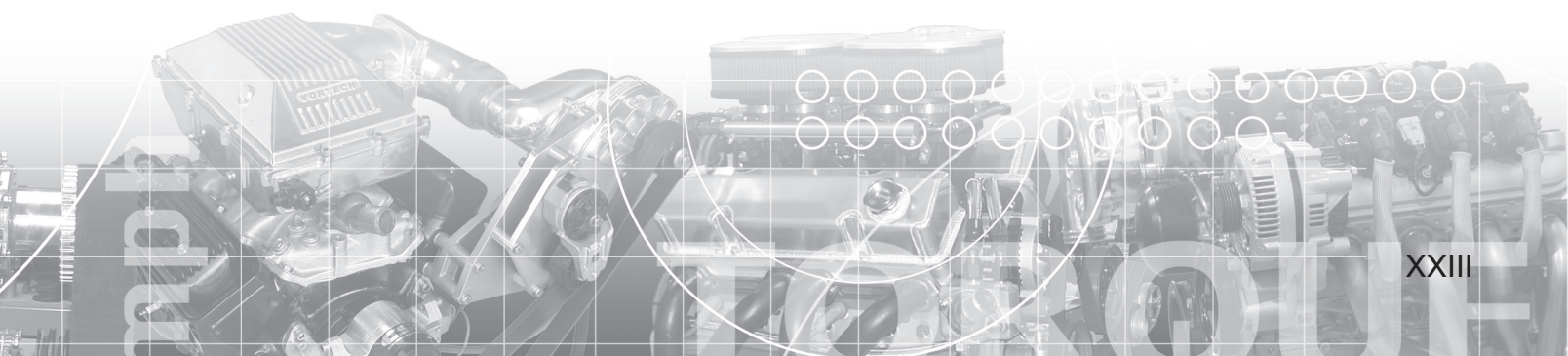
Year	Timing Set
1955-96	Competition Roller CTS-3600TX9R**
	Billet Roller CTS-3500TX9R**
	Performance Roller CTS-1100NR**

Oil Pumps

Year	Standard Volume	High Volume
1970-76	224-4146	224-4143

*E.O. #D292-1 Emission Legal

** Non-Roller Cam



Performance Engine Kits

Chevrolet 454

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1970-90	Forged Forged	8.4 to 1	Regular Gas / Towing / RV Mega Torque / Pump Gas		107cc	KC-1015R KC-175R	MHP-142 MHP-186
		9.0 to 1			119cc		
	Hyper Hyper	9.4 to 1	Mega Torque / Pump Gas Mega Torque / Pump Gas		107cc	KC-1088R KC-1015R	MHP-143 MHP-187
		9.3 to 1			119cc		

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1984-90	KC-1004R Hydraulic .439/.464 190°/200°	KC-1029R Hydraulic .459/.459 204°/208°	KC-1015R Hydraulic .502/.527 214°/224°	KC-190R Hydraulic .513/.513 230°/230°	KC-191R Hydraulic .576/.576 246°/246°
		KC-1088R Hydraulic .478/.503 204°/214°	KC-175R Hydraulic .500/.507 222°/235°		
		KC-1005R Hydraulic .476/.476 208°/208°			

Timing Sets

Year	Timing Set
1965-98	Competition Roller CTS-3610TX9R**
	Billet Roller CTS-3510TX9R**
	Performance Roller CTS-1110NR**

Oil Pumps

*E.O. #D292-1 Emission Legal

** Non-Roller Cam



Chrysler 318

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1984-90		KC-1006R Hydraulic .420/.420 208°/208°	KC-644 Hydraulic .429/.442 210°/220° KC-1019R Hydraulic .442/.465 214°/224° KC-1143R Hydraulic .447/.450 222°/232°		

Timing Sets

Oil Pumps

Year	Timing Set	Year	Standard Volume	High Volume
1956-91	Competition Roller CTS-3603X9R	1967-88	224-4166	224-4166V
	Billet Roller CTS-3503X9R			
	Performance Roller CTS-1103R			



Performance Engine Kits

Chrysler 360 w/o roller cam

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1971-88	Hyper	8.7 to 1	High Torque / Regular Gas		68cc	KC-1019R	MHP-179

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1984-90		KC-1006R Hydraulic .420/.420 208°/208°	KC-644 Hydraulic .429/.442 210°/220° KC-1019R Hydraulic .442/.465 214°/224° KC-1143R Hydraulic .447/.450 222°/232°		

Timing Sets

Year	Timing Set
1956-91	Competition Roller CTS-3603X9R
	Billet Roller CTS-3503X9R
	Performance Roller CTS-1103R

Oil Pumps

Year	Standard Volume	High Volume
1971-88	224-4166	224-4166V

Chrysler 440

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1966-73	Hyper	9.0 to 1	High Torque / Pump Gas		88cc	KC-1148R	MHP-155
1974-78	Hyper	9.0 to 1	High Torque / Pump Gas		88cc	KC-1148R	MHP-156

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

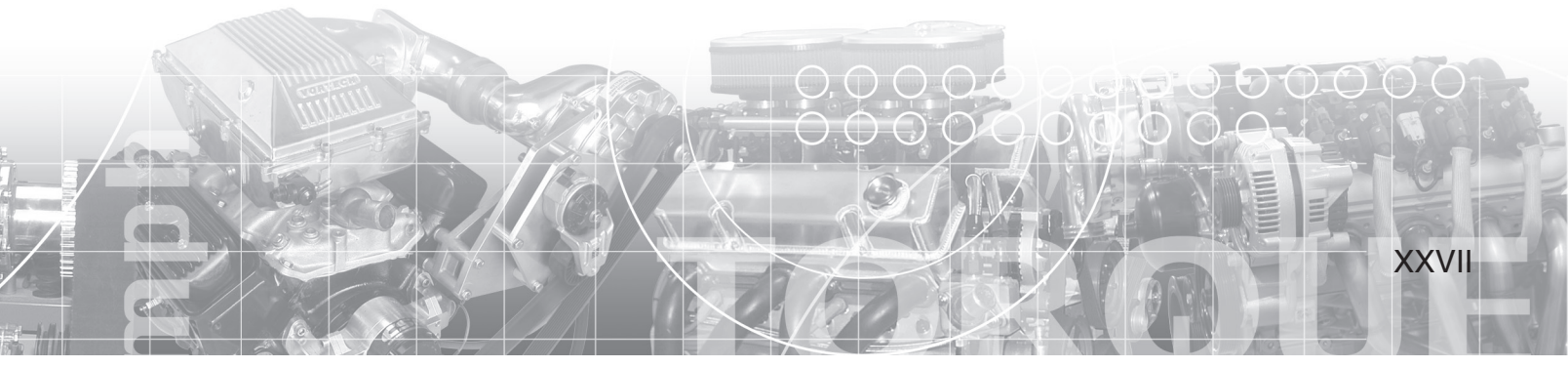
Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1966-78		KC-1007R Hydraulic .420/.420 208°/208° KC-1096R Hydraulic .420/.433 204°/214°	KC-661 Hydraulic .447/.459 213°/225° KC-1048R Hydraulic .455/.455 224°/224°	KC-1144R Hydraulic .480/.480 230°/230°	

Timing Sets

Oil Pumps

Year	Timing Set	Year	Standard Volume	High Volume
1958-78	Competition Roller CTS-3625TX9R*	1966-78	224-4174	224-4174V
	Billet Roller CTS-3525TX9R*			
	Performance Roller CTS-1125R*			

*3 Bolt Cam



Performance Engine Kits

Ford 302

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.	
	Piston Type	Compression Ratio	Application Notes		Heads		Cam Kit
1985-95	Forged	9.5 to 1	5.0L / Roller cam lifters sold separately – HT2205		63cc	CS-195R	MHP-188
1977-84	Forged	8.7 to 1	Non roller / Pump Gas		63cc	KC-108R	MHP-171
1985-95	Hyper	9.1 to 1	5.0L / Roller cam lifters sold separately – HT2205		63cc	CS-195R	MHP-190
1977-84	Hyper	9.1 to 1	Non roller / Pump Gas		63cc	KC-1084R	MHP-189

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1977-84	KC-1158R Hydraulic .424/.448 194°/204°	KC-1084R Hydraulic .450/.474 204°/214°	KC-108R Hydraulic .472/.496 214°/224°	KC-1141R Hydraulic .496/.520 224°/234°	
1985-95			CS-760 Hydraulic Roller .445/.445 210°/210° CS-195R Hydraulic Roller .493/.510 212°/222°		

Timing Sets

Year	Timing Set
1962-84	Competition Roller CTS-3635X9R*
	Billet Roller CTS-3535X9R*
	Performance Roller CTS-1135NR*

Oil Pumps

Year	Standard Volume	High Volume
1977-95	224-41118	224-41128

*Factory 1-pc. fuel pump eccentric

Ford 351W

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.
	Piston Type	Compression Ratio	Application Notes	Heads	Cam Kit	
1977-91	Forged Forged	9.0 to 1 9.7 to 1	High Torque / Pump Gas Mega Torque / Street / Strip	63cc 63cc	KC-108R KC-1141R	MHP-175 MHP-192
	Hyper	9.2 to 1	High Torque / Pump Gas	63cc	KC-1084R	MHP-191

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

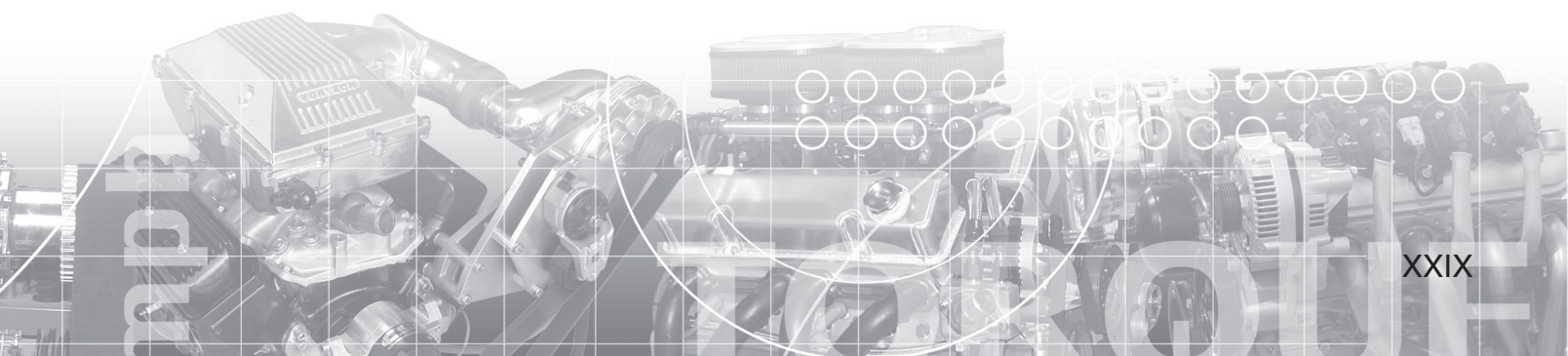
Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1984-90	KC-1158R Hydraulic .424/.448 194°/204°	KC-1084R Hydraulic .450/.474 204°/214°	KC-108R Hydraulic .472/.496 214°/224°	KC-1141R Hydraulic .496/.520 224°/234°	

Timing Sets

Year	Timing Set
1970-82	Competition Roller CTS-3621X9R
	Billet Roller CTS-3521X9R
	Performance Roller CTS-1121R

Oil Pumps

Year	Standard Volume	High Volume
1977-91	224-41143	224-41143V



Performance Engine Kits

Ford 460

Engine Kits

Year	Speed-Pro Notes & Specifications					M.H.P. Kit No.
	Piston Type	Compression Ratio	Application Notes	Heads	Cam Kit	
1977-90	Forged	9.4 to 1	Mega Torque / Street / Strip	72cc	KC-196R	MHP-177

Cam Kits

Valve Lift – (Int. / Exh.); Duration – (Int. / Exh.) at .050"

Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1977-90		KC-1155R Hydraulic .458/.484 194°/204° KC-1086R Hydraulic .486/.512 204°/214° KC-1012R Hydraulic .484/.484 208°/208°	KC-1159R Hydraulic .510/.536 214°/224° KC-196R Hydraulic .495/.495 218°/218°	KC-197R Hydraulic .522/.522 230°/230° KC-1160R Hydraulic .563/.588 234°/244°	

Timing Sets

Year	Timing Set
1968-71	Competition Roller CTS-3622X9R*
1988-92	Billet Roller CTS-3522X9R*
	Performance Roller CTS-113522R*

Oil Pumps

Year	Standard Volume	High Volume
1977-90	224-41139	224-41139V

*Factory timing TDC



Pontiac 455

Cam Kits

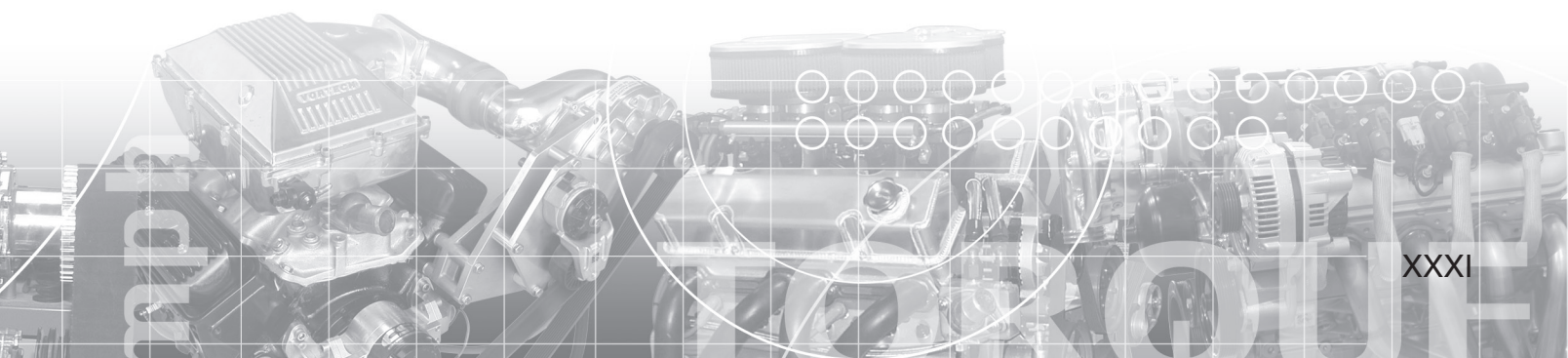
Year	Pro 1500 (Specifications)	Pro 2000 (Specifications)	Pro 3000 (Specifications)	Pro 4000 (Specifications)	Pro 5000 (Specifications)
1970-76		KC-1038R Hydraulic .422/.444 204°/214°	KC-1022R Hydraulic .442/.464 214°/224°	KC-1175R Hydraulic .465/.488 224°/234° KC-199R .480/.480 231°/231°	

Timing Sets

Year	Timing Set
1955-79	Competition Roller CTS-3612X9R
	Billet Roller CTS-3512X9R
	Performance Roller CTS-1112R

Oil Pumps

Year	Standard Volume	High Volume
1970-76		224-43364S



Performance Kits Numerical Listings

NOTE: ALL KITS INCLUDE EKSA2 MISCELLANEOUS SERVICE ITEMS.

Part Number Component Description

MHP-112

Buick 231 Turbo

381-8035 Brass Expansion Plug Kit
1755M Camshaft Bearing Set
6-3755AP Connecting Rod Bearing Set
7144M Main Bearing Set
E434K Economy Piston Ring Set
KC-1016R Cam/Lifter Kit
224-518 Oil Pump
H521ACP Hypereutectic Piston
260-1138 Gasket Kit
260-4014 Valley Pan Gasket
CTS-1132R Timing Set - 3pc

MHP-120

Chevrolet 400

381-8008 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4926MA Main Bearing Set
E243K Economy Piston Ring Set
KC1062R Cam/Lifter Kit
224-4146 Oil Pump
L2352F30 POWERFORGED Piston
260-1016 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-124

Chevrolet 305

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E356K Economy Piston Ring Set
KC1014R Cam/Lifter Kit
224-4146 Oil Pump
H534CP Hypereutectic Piston
260-1024 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-125

Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC186R Cam/Lifter Kit
224-4146 Oil Pump
L2256F POWERFORGED Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

Part Number Component Description

MHP-126N

Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC1014R Cam/Lifter Kit
224-4146 Oil Pump
H345NP Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-142

Chevrolet 454

380-8009 Brass Expansion Plug Kit
1404M Camshaft Bearing Set
8-3190A Connecting Rod Bearing Set
4400MA Main Bearing Set
E233K Economy Piston Ring Set
KC1015R Cam/Lifter Kit
224-4154 Oil Pump
L2377F POWERFORGED Piston
260-1009 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-143

Chevrolet 454

381-8009 Brass Expansion Plug Kit
1404M Camshaft Bearing Set
8-3190A Connecting Rod Bearing Set
4400MA Main Bearing Set
E233K Economy Piston Ring Set
KC1088R Cam/Lifter Kit
224-4154 Oil Pump
H426CP Hypereutectic Piston
260-1009 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-144

Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC1014R Cam/Lifter Kit
224-4146 Oil Pump
L2256F POWERFORGED Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

Part Number Component Description

MHP-147

Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E458K Economy Piston Ring Set
KC1062R Cam/Lifter Kit
224-4146 Oil Pump
H140CL Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-149

Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E458K Economy Piston Ring Set
KC1146R Cam/Lifter Kit
224-4146 Oil Pump
H141CL30 Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-155

Chrysler 440

380-8011 Brass Expansion Plug Kit
1453M Camshaft Bearing Set
8-2320CP Connecting Rod Bearing Set
4924MA Main Bearing Set
E424K Economy Piston Ring Set
KC1148R Cam/Lifter Kit
224-4174 Oil Pump
L2266F POWERFORGED Piston
260-1001 Gasket Kit
260-4019 Valley Pan Gasket
CTS-1104R Timing Set - 3pc

MHP-156

Chrysler 440

380-8011 Brass Expansion Plug Kit
1453M Camshaft Bearing Set
8-2320CP Connecting Rod Bearing Set
5025MA Main Bearing Set
E424K Economy Piston Ring Set
KC1148R Cam/Lifter Kit
224-4174 Oil Pump
L2266F POWERFORGED Piston
260-1001 Gasket Kit
260-4019 Valley Pan Gasket
CTS-1104R Timing Set - 3pc

NOTE: ALL KITS INCLUDE EKSA2 MISCELLANEOUS SERVICE ITEMS.

Part Number Component Description

MHP-159
Chevrolet 383

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC1014R Cam/Lifter Kit
224-4146 Oil Pump
H859CP Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-160
Chevrolet 383

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC1013R Cam/Lifter Kit
224-4146 Oil Pump
H860CP Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-161
Chevrolet 383

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
E251K Economy Piston Ring Set
KC186R Cam/Lifter Kit
224-4146 Oil Pump
H624CP30 Hypereutectic Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-162
Chevrolet 383

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
R8902 Claimer Piston Ring Set
KC186R Cam/Lifter Kit
224-4146 Oil Pump
L2491F30 POWERFORGED Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

Part Number Component Description

MHP-164
Chevrolet 350

381-8007 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4663M Main Bearing Set
R8902 Claimer Piston Ring Set
KC1014R Cam/Lifter Kit
224-4146 Oil Pump
LW2603F30 POWERFORGED Piston
260-1000 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-165
Chevrolet 400

381-8008 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4926MA Main Bearing Set
E243K Economy Piston Ring Set
KC1013R Cam/Lifter Kit
224-4146 Oil Pump
H601P Hypereutectic Piston
260-1016 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-167
Chevrolet 400

381-8008 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4926MA Main Bearing Set
E243K Economy Piston Ring Set
KC1013R Cam/Lifter Kit
224-4146 Oil Pump
H615CP Hypereutectic Piston
260-1016 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-168
Chevrolet 400

381-8008 Brass Expansion Plug Kit
1235M Camshaft Bearing Set
8-2555CP Connecting Rod Bearing Set
4926MA Main Bearing Set
E243K Economy Piston Ring Set
KC1062R Cam/Lifter Kit
224-4146 Oil Pump
H616CP Hypereutectic Piston
260-1016 Gasket Kit
CTS-1100NR Timing Set - 3pc

Part Number Component Description

MHP-175
Ford 351W

381-8015 Brass Expansion Plug Kit
1204M Camshaft Bearing Set
8-3380CPA Connecting Rod Bearing Set
5078M Main Bearing Set
E251K Economy Piston Ring Set
KC108R Cam/Lifter Kit
224-41143 Oil Pump
L2446F POWERFORGED Piston
260-1028 Gasket Kit
CTS-1135NR Timing Set - 3pc

MHP-177
Ford 460

381-8018 Brass Expansion Plug Kit
1414M Camshaft Bearing Set
8-3360CPA Connecting Rod Bearing Set
4907M Main Bearing Set
E296K Economy Piston Ring Set
KC196R Cam/Lifter Kit
224-41139 Oil Pump
L2404F POWERFORGED Piston
260-1013 Gasket Kit
260-4005 Valley Pan Gasket
CTS-1122R Timing Set - 3pc

MHP-179
Chrysler 360

381-8010 Brass Expansion Plug Kit
1484M Camshaft Bearing Set
8-2130CP Connecting Rod Bearing Set
4999MA Main Bearing Set
E251K Economy Piston Ring Set
KC1019R Cam/Lifter Kit
224-4166 Oil Pump
H405CPP Hypereutectic Piston
260-1033 Gasket Kit
CTS-1103R Timing Set - 3pc

MHP-186
Chevrolet 454

380-8009 Brass Expansion Plug Kit
1404M Camshaft Bearing Set
8-3190A Connecting Rod Bearing Set
4400MA Main Bearing Set
E233K Economy Piston Ring Set
KC175R Cam/Lifter Kit
224-4154 Oil Pump
L2399NF POWERFORGED Piston
260-1009 Gasket Kit
CTS-1100NR Timing Set - 3pc

Performance Kits Numerical Listings

NOTE: ALL KITS INCLUDE EKSA2 MISCELLANEOUS SERVICE ITEMS.

Part Number Component Description

MHP-187

Chevrolet 454

380-8009 Brass Expansion Plug Kit
1404M Camshaft Bearing Set
8-3190A Connecting Rod Bearing Set
4400MA Main Bearing Set
E233K Economy Piston Ring Set
KC1015R Cam/Lifter Kit
224-4154 Oil Pump
H693CP Hypereutectic Piston
260-1009 Gasket Kit
CTS-1100NR Timing Set - 3pc

MHP-188

Ford 302

381-8015 Brass Expansion Plug Kit
1204M Camshaft Bearing Set
8-2600CP Connecting Rod Bearing Set
4125M Main Bearing Set
E458K Economy Piston Ring Set
CS195R Cam
224-41118 Oil Pump
L2488F POWERFORGED Piston
260-1445 Gasket Kit
CTS-1138NR Timing Set - 3pc

Part Number Component Description

MHP-189

Ford 302

381-8015 Brass Expansion Plug Kit
1204M Camshaft Bearing Set
8-2600CP Connecting Rod Bearing Set
4125M Main Bearing Set
R8902 Claimer Piston Ring Set
KC1084R Cam/Lifter Kit
224-41118 Oil Pump
H120CP20 Hypereutectic Piston
260-1125 Gasket Kit
CTS-1135NR Timing Set - 3pc

MHP-190

Ford 302

1204M Camshaft Bearing Set
8-2600CP Connecting Rod Bearing Set
4125M Main Bearing Set
R8902 Claimer Piston Ring Set
CS195R Cam
224-41118 Oil Pump
H120CP20 Hypereutectic Piston
260-1445 Gasket Kit
CTS-1138NR Timing Set - 3pc

Part Number Component Description

MHP-191

Ford 351W

381-8015 Brass Expansion Plug Kit
1204M Camshaft Bearing Set
8-3380CPA Connecting Rod Bearing Set
5078M Main Bearing Set
E251K Economy Piston Ring Set
KC1084R Cam/Lifter Kit
224-41143 Oil Pump
H336CP Hypereutectic Piston
260-1028 Gasket Kit
CTS-1135NR Timing Set - 3pc





Competition Series

Competition Series gasket sets are designed to meet the needs of high output racing engines, and are highly recommended whenever your combination includes high compression, nitrous oxide, or a supercharger.

These sets feature:

- Proven race quality head gaskets with pre-flattened steel wire rings, non-stick coatings, and the sealing strength needed to withstand extreme loads and pressures
- These head gaskets will work with most popular iron cylinder heads, and will work with aluminum heads as well – with minimal brinelling
- Specialized racing intake gaskets with larger port openings to allow cylinder head modification
- All the other gaskets needed for a professional rebuild are included
- Steel core header gaskets with larger than stock port openings

Muscle Car Series

Muscle Car Series gasket sets are perfect for high performance street applications.

Sets include:

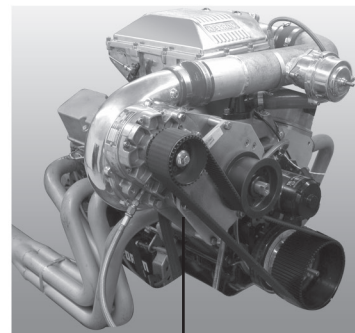
- Premium quality non-stick head gaskets which never need retorquing
- High performance intake manifold gaskets with exhaust crossover provisions
- Steel core header gaskets
- All the associated gaskets needed to complete your professional high performance engine rebuild

Optional Upgrades for Your Engine Kit

High Performance Gasket Sets

Engine	Part Number	Series	Application Notes	Head Gasket Thickness	Head Gasket Volume	Header Gasket Height	Header Gasket Width	Intake Gasket Height	Intake Gasket Width
CHEVROLET									
350	260-1079	Muscle Car Series				1.50	1.50	1.99	1.23
350	260-3013	Competition Series	for stock or moderate race heads, incl. 2 intake sets	.041	9.1cc	1.50	1.50	1.99	1.23
400	260-3020	Competition Series	w/steam holes	.039	9.0cc	1.50	1.50	2.21	1.34
396, 427, 454	260-1081	Muscle Car Series	rectangle port			1.88	1.88	2.09	1.28
	260-1717	Muscle Car Series	oval port			1.88	1.88	2.54	1.82
396, 427, 454	260-3015	Competition Series	rectangle and oval port includes 2 intake sets	.041	10.9cc	1.88	1.88	2.05	1.82
502 (Mark V)	260-3024	Competition Series	rectangle port incl. 1 pc. rear seal	.039	10.9cc	1.88	1.88	2.54	1.82
CHRYSLER									
440	260-3004	Competition Series		.039	9.9cc	1.84	1.33	2.27	1.23
	260-4035	valley pan intake						2.27	1.23
FORD									
289, 302	260-1082	Muscle Car Series	'62-82 engines			1.48	1.25	2.00	1.20
	260-1720	Muscle Car Series	'86-92 5.0L H.O. engines upper EFI gaskets not incl.			1.48	1.25	2.00	1.20
289, 302	260-3005	Competition Series	'62-82 engines includes 2 intake sets	.041	9.0cc	1.48	1.25	2.10	1.20
289, 302	260-3022	Competition Series	'83-92 5.0L H.O. engines upper EFI gaskets not incl.	.041	9.0cc	1.48	1.25	2.10	1.28
351C	260-3007	Competition Series	4 bbl. heads	.041	9.2cc	2.19	1.89	2.65	1.88
351W	260-3009	Competition Series	'69-82 engines	.041	9.0cc	1.48	1.25	2.10	1.28
390, 427, 428	260-3026	Competition Series	fits Std. & CJ heads; incl. 2 intake & 2 exhaust sets	.041	10.1cc	2.04	1.40	2.34	1.40
429, 460	260-3025	Competition Series	fits Std. & CJ heads; incl. 2 intake & 2 exhaust sets	.041	11.2cc	2.12	1.43	2.10	1.40
						2.35	1.55	2.26	1.98
								2.60	2.24
PONTIAC									
389, 400, 455	260-3027	Competition Series	fits Std., Ram Air, SD455 includes 2 exhaust sets		9.4cc	1.92	1.46	2.20	1.18
						1.88	1.88		

ENGINE BUILDER HIGHLIGHTS



AMC – Tech Highlights

While they have been out of production for quite a while, the engines produced by AMC are still frequently found in a number of Jeeps, as well as in restored and modified Javelins and AMX's from the muscle car era. The scarce nature of these engines mean that the AMC enthusiast will be spending some time searching swap meets and salvage yards for parts. This can be a challenge, but American Motors V8 engines share characteristics with many of the more popular engines produced by GM and Ford, and will respond well to basic modification techniques.

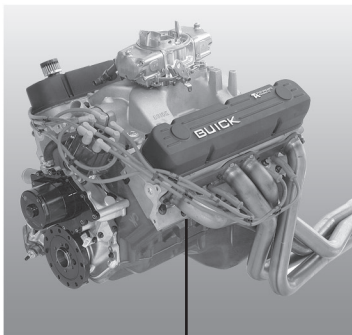
All AMC V8's share a common base design, thus a 304 engine can easily be swapped for a larger 360 or 401. Cubic inches are hard to beat – make the swap if you can, since performance horsepower levels are much easier to come by with the larger engines. The “dog leg” heads found on later engines are generally considered superior to earlier rectangular port versions, and should be considered a necessary part of a performance package.

Like the Buick, AMC engines use a timing cover mounted oil pump, which is serviced by replacing the internal gears with a “pump kit.” When replacing these parts, particular attention must be paid to the condition of the timing cover casting. Covers with scoring or visible wear will have a

detrimental effect on oil pressure, and should be replaced. Timing cover mounted oil pumps are the only design that requires packing with petroleum jelly to aid in oil pump priming. The timing set is also worthy of careful inspection. Jeep engines produced in 1979 and later use a new timing set that may have been installed as a service part on earlier engines – the newer timing set is NOT a heavy duty replacement, and should not be used in performance engines.

We offer POWERFORGED pistons for the 401 engines. The L2380F and L2381F are designed for street performance use in the 401 engine. Ductile iron Plasma-Moly Speed-Pro rings are available for these engines, and should be strongly considered wherever severe use or poor fuel quality may be encountered. The O.E. Replacement engine bearings for the AMC are of tri-metal construction, and should be more than adequate for most applications.

Most of these engines are going into relatively low RPM vehicles for off-road and street performance, thus the selection of camshafts, compression ratios, carburetion, and exhaust components should be on the conservative side. Low end torque, throttle response, and fuel tolerance are of major importance in the off road environment.



ENGINE BUILDER HIGHLIGHTS

Buick V6 Tech Highlights

The Buick V6 has been in production for many years, but became noted as a performance engine with the introduction of the popular "Grand National." This turbocharged muscle car was a dominant force in the mid-eighties, and created a new interest in V6 performance. We offer a variety of components for these engines, whether turbocharged or naturally aspirated.

Key determining factors when selecting pistons for these engines are the presence of a turbocharger, and the crankshaft design, which may be either "odd fire" or "even fire." The odd fire version uses a crankshaft with three equally spaced rod journals which results in a stronger crankshaft, but a rougher running engine. The even fire design uses a smaller offset journal for each rod providing smoother driving characteristics. The latter style is found in most applications.

Turbocharged engines require that particular attention be paid to the compression ratio and to the strength of the piston. Any efforts to increase performance through additional boost will put greater strain on components and may increase the chances of detonation and subsequent engine damage. Engines that are computer controlled may not realize the full benefit of modifications if the computer is forced to retard timing in order to protect the engine. Fuel quality will play a major part in determining performance in such engines. In most cases, turbocharged engines require lower compression than do naturally aspirated ones. Compression ratios in this catalog are calculated with an .0375 gasket thickness.

Our 107M racing bearing set for the V6 Buick has been upgraded with a 3/4 oil groove. This provides enhanced lubrication for the rod bearings.

Also worthy of special attention is the oil pump, which is built into the timing cover assembly. Scoring or other damage to the housing will require a new timing cover. High volume pump kits are available, using a spacer to increase the depth of the pump. Be particularly careful to install the spacer and gaskets correctly, as their combined thickness must provide the required pump rotor to cover clearance.

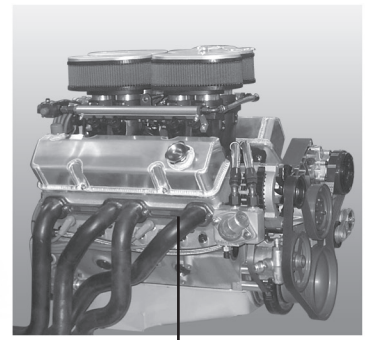
Buick V8 Tech Highlights

The Buick V8 can be an excellent engine for street performance. While not seen often at the track, the 455 engines are among the best when optimized for low end and midrange torque. They were used in the factory "Stage 1" cars in the early 70's, and most available performance parts are based around a similar combination. Our hypereutectic pistons are among the first "new" parts to be released for these engines in many years, and will fill the need for those restoring or modifying these cars. They deliver a moderate compression ratio, which is well suited for today's unleaded premium fuels. Our POWERFORGED pistons, along with Speed-Pro rings and bearings, were used in the assembly of an aluminum headed 455 Buick covered in Car Craft magazine – and helped generate 555 horsepower and 574 lb.-ft of torque – running on 92 octane.

The camshaft we offer for the Buick engine has been selected to complement our hypereutectic pistons, and delivers an excellent street performance package when properly tuned. As manufactured, these engines are not really intended for high RPM, so pay close attention to the valve train during assembly. New rockers, pushrods, and rocker arm retainers are good insurance. Maintain at least an additional .060 of valve spring travel at maximum valve lift, and check for adequate piston to valve clearance.

The oil pump is built into the timing cover assembly, similar to the design of the V6. Any scoring or damage to the housing will require a new timing cover. High volume pump kits are available, using a spacer to increase the depth of the pump. Be particularly careful to install the spacer and gaskets correctly, as their combined thickness must provide the required pump rotor to cover clearance. Due to the design of these oil pumps, and their distance from the pickup point in the oil pan, they must be packed with petroleum jelly to ensure priming before initial engine fire-up. A superior alternative would be the use of a pressurized pre-oiler device.

ENGINE BUILDER HIGHLIGHTS



Small Block Chevrolet – Tech Highlights

The small block Chevy is the most popular engine in the enthusiast market. It is the engine for which the greatest assortment of parts are available, and is the one most enthusiasts are likely to be familiar with. As a result, it is possible to assemble an engine that will meet virtually any specific need. The guys at Chevy High Performance magazine used Speed-Pro pistons, rings and bearings to assemble one 350 engine that survived over 1000 dyno pulls, and eventually kicked out over 500 horsepower. They put together another one that made nearly 400 horsepower – running on low cost 87 octane regular gas. There are still a few areas that require special attention, some of which could cause problems even for an experienced engine builder.

One potential problem area is in the stock valvetrain. Like many small blocks, the Chevy has a relatively short valve spring installed height. The spring diameter is also small at 1.25". These dimensions make it difficult to increase spring pressure and travel for performance cams. All standard diameter small block Chevy springs listed in our catalog are designed to work at an installed height of 1.69", +/- the difference that our retainers make. You **MUST** have an additional .060" of spring travel available at maximum valve lift. We offer chrome-moly spring retainers that provide additional installed height over that of the stock part. This allows the popular VS739R spring to work with cams that would otherwise cause it to approach coil bind. While this definitely works, machining the cylinder heads to accept larger diameter double spring combinations is well worth the added effort. Just remember that this is a task for a skilled machinist, as some O.E. Chevy heads are very thin in the spring pocket area.

On small bore engines the use of exhaust valves larger than 1.58", or intake valves larger than 1.88" may require the cylinder bores to be notched for clearance. Other critical areas to check include piston to cylinder head interference, piston deck clearance, and valve to piston clearance. Connecting rod bolt to camshaft interference can occur in stroker engines using the 400 crank, and should be checked and remedied if found during an engine test assembly. The counterweights on some 3.75" stroke cranks – particularly the currently popular imported units, have been known to contact the bottom of some pistons. Again – check before final assembly.

Camshaft selection can be very critical in computer controlled vehicles. Overlap, duration, and resulting manifold vacuum must be carefully considered when making your selection. Some systems are less forgiving than are others, and may

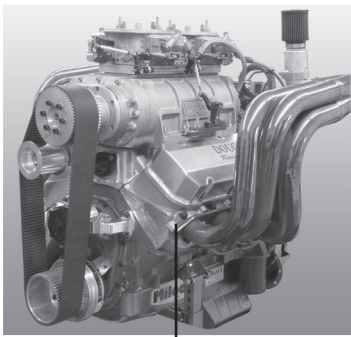
require recalibration of the computer to deliver acceptable performance. Few such combinations will meet emission legal standards. We do have a selection of cams that have been granted E.O. numbers for carbureted applications, making them street legal in all 50 states. This legality does not mean that they will meet driveability goals without vehicle and/or computer modification.

Valve to piston clearance is dependent upon piston dome configuration, camshaft and valvetrain characteristics, and cylinder head design. Check clearance and make modifications if it is less than .100". Check whenever changing cams, pistons, cylinder heads, valve sizes, or rocker arm ratios. Valve to piston contact does not occur at maximum valve lift – never assume that you are "OK" at any given lift value. The clearance is reduced if you mill the heads or go to 1.6:1 rockers, and will change if you advance or retard the cam timing. Valve to piston contact will destroy your engine, so check carefully before trying new parts!

Piston to cylinder head contact can be a problem in some engines. The piston domes are designed to work with various factory cylinder heads that were available at the time of initial development. The vast array of aftermarket heads now offered, along with the extensive modifications being made, can create problems unless interference is detected and corrected during the trial assembly of the engine. Clearances of .050-.060, including gasket thickness, should be considered the absolute minimum.

Unless assembled by a professional, deck clearance will be the result of tolerance stack-up rather than careful planning. This dimension is critical to getting the desired compression ratio. A common problem is determining whether a block's deck surface has been previously machined. If you are not sure of the block's past, have your machinist check the actual deck height before ordering pistons. Many small block Chevrolets have been rebuilt repeatedly over the years, and it is not uncommon to find one that has seen multiple machining operations.

Compression ratios and deck clearances in this catalog were calculated with a gasket thickness of .038, and an uncut 9.025" factory block height. Many of the resulting ratios will differ from factory "advertised" data. We have not changed the pistons, but are using a more realistic approach to stating compression ratios, using several popular cylinder heads. Gasket thickness and deck clearance will vary by manufacturer and application, use the compression ratios in this catalog as a comparative guideline.



ENGINE BUILDER HIGHLIGHTS

Big Block Chevrolet – Tech Highlights

The Big Block Chevrolet has become the standard for any application that demands brute power: serious street machines, heavy duty towing, and numerous classes of racing competition. These large displacement engines are quite forgiving – a fairly wild package will still deliver reasonable driveability if carefully tuned. In a recent Car Craft magazine article, a pump gas fueled 454 Chevy using Speed-Pro pistons, rings, and bearings delivered an impressive 533 horsepower and 565 lb-ft of torque. At the races you will often see the racer and the tow vehicle using this same basic engine design. Despite the big block's popularity, there remain a few areas that require careful attention to ensure success.

One of the strengths of the Chevy big block is also a source of much confusion. The variety of cylinder heads and pistons available allows the selection of parts that may not be compatible. While we can apply some general rules, the **ONLY** way to be sure that your chosen combination will work is to check piston to head clearance during the engine's trial assembly, and then to modify the piston domes if needed. The general break point is in the use of "open" versus "closed" chamber type cylinder heads. If you are not sure which you have, check with an experienced machinist.

Flat top pistons are usually safe with any cylinder head. Some domed pistons, such as the L2240NF for 396's, the L2383F for 402's, or the L2300F for 427's, can have their domes machined off, which lowers the compression ratio and allows the use of most available cylinder heads. Pistons designed for closed chamber use, such as the L2328F for 396/402 engines, the L2349F for 454's, or the L2239NF and L2268F for the 427, may also work with open chamber heads, but you **MUST** check piston to head clearance due to cylinder head variations. Pistons intended for open chamber heads usually will not work with closed chamber heads unless they are modified significantly. Examples include the L2465F and the L2399F, both are intended for use in 454 engines having open chamber type heads. Using pistons designed for your heads is better than trying to make others work.

Modification of pistons will make them ineligible for return, so be sure of your work. There are definite limits to the amount of material you can remove without compromising the strength and durability of the piston. Do not assume that all pistons can be modified. Many are too thin to allow major dome alterations. The Federal-Mogul Tech Line can

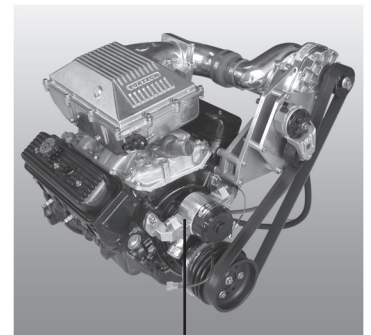
answer questions regarding the amount of material that can be safely removed. Carefully read the Piston Guidelines section of this catalog before making your piston selection.

Compression ratios and deck clearances listed in this catalog are calculated figures, not factory "advertised" numbers. The information shown for various O.E. combinations may differ from data published in the past. The compression ratio information now reflects the actual "as installed" condition. All compression ratios are calculated using a standard uncut block dimension, and a gasket thickness of .0385". Another piston related area of concern is the possibility of interference between the piston skirt and the crankshaft counterweights. This is a common problem in some 454 engines, and may occur with either O.E. or aftermarket crankshafts. The solution involves machining down the outside diameter of the counterweights and balancing the assembly.

When installing a performance camshaft, the primary concerns are the clearances between pistons and valves, and the prevention of valve spring coil bind. Piston to valve clearance must be at least .100", and must be checked when making a change to the cam, cam timing, pistons, heads, or rockers. Valve springs must have an additional .060" of available travel at maximum valve lift, or they will bind at operating speeds. VSS-7504R is a special spacer to replace valve rotators, which are not recommended for high performance use. Long slot or roller rockers are often required – check for adequate clearance between the rocker and the stud at full valve lift.

The big block Chevy uses different length pushrods for the intake and the exhaust. Guide plates are required, and must match the diameter of the pushrods that are being used. When using steel billet roller cams it is necessary to use both a thrust button and a bronze distributor gear. If you experience premature cam wear, check for improper lifter bore alignment and/or excess lifter bore clearance. Both situations have become fairly common in big block Chevy engines. Finally, it is important to note that 1965 and 1966 engines require that a 3/16" groove be machined into the center of the rear cam journal for proper lubrication. Absence of this groove will result in engine failure. Use the 1404M cam bearing set if using a grooved journal cam in a later model block.

ENGINE BUILDER HIGHLIGHTS



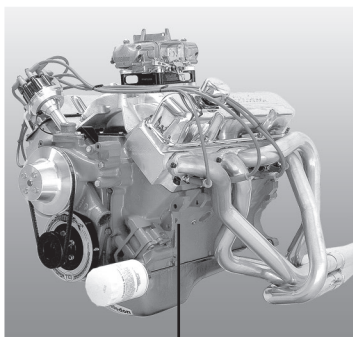
Small Block Chrysler – Tech Highlights

The small block Chrysler has been in continuous production for over thirty years, and is found in several displacements. The 273" was used in some performance packages in the mid-sixties, but is rarely found today. The more popular 318", 340", and 360" are the engines covered in this catalog. The 318" is suitable for mild performance usage, but potential is limited in comparison to the other two. The 340" was the high performance small block engine in Chrysler's "muscle cars;" many race oriented performance upgrades for the small block Chrysler were developed for this particular engine. The 360" is more readily available than the 340", offers better potential than the 318", and is recommended for most street performance applications.

When choosing pistons for these engines, pay particular attention to cylinder head selection. There are a wide variety of heads available, and these will dictate which piston to use. Most of the pistons offered are flat tops that use various compression distances to deliver a desired compression ratio when used with a particular cylinder head. The high compression 340" engines often have positive deck heights, with the pistons protruding about .018 out of the block. This condition mandates careful inspection of piston to head and piston to valve clearances, and requires that "decking" of the block be held to a minimum. For 360 engines, our new H116CP is a fully CNC machined, skirt coated hypereutectic piston that delivers a deck clearance of .015 and a compression ratio between 9.5 and 10.0 to 1. In comparison, many other engine combinations possible within this group place the piston fairly low in the cylinder, and respond well to deck machining for increased compression.

The compression ratios listed in this catalog are referenced to a single head gasket thickness of .039, and to an uncut factory block's deck height. The pistons have not been changed, but the variables have been eliminated, thus the ratios shown may differ from those previously published. The resulting ratios, whether for Hypereutectic or POWERFORGED pistons, can be directly compared to one another. The cylinder head volumes we used are also for reference only, as the chamber volume of factory heads will vary by 3 or 4 cc's from specifications in most cases. Unless you measure both actual deck clearance and chamber volume, you cannot accurately determine the compression ratio.

The 318" is considered easy to "overcam," be conservative when selecting a cam for one of these engines. An adjustable valvetrain is available for this family, and is required when using roller or solid lifters, as well as with any hydraulic lifter cam which has a small base circle design. Pay particular attention to valve spring installed height, which is rather short in these applications, and to the potential coil bind conditions which can occur. There must be at least .060 of additional spring travel available at maximum valve lift. Also be cautious when installing the rocker arm assemblies, as the rocker arms are not identical and must be installed in the correct position. Rocker shafts must be assembled with oiling holes facing downward to ensure proper lubrication.



ENGINE BUILDER HIGHLIGHTS

Big Block Chrysler – Tech Highlights

The big block engine from Chrysler was offered in two basic styles, the “B” designated engines having a shorter deck height than did the “RB” types. In the former group are the 383” and 400”; the 426” and 440” are in the latter. Most external engine parts, cylinder heads, and valvetrain related components are interchangeable between the two groups. While the 426” engines, whether “Hemi” or “Wedge,” are scarce collector’s items today, the others are readily available and make excellent street or race packages when properly prepared. The 440” is easily the best engine to use for performance, in this case bigger really is better. A recent engine build-up in Car Craft magazine included a Speed-Pro piston, ring and bearing equipped 440 that churned out 535 horsepower and a whopping 583 lb.-ft of torque – on pump gas.

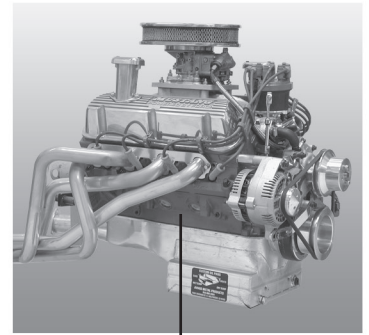
One key determining factor in piston selection will be the cylinder head chosen. Contrary to previously published data, only two wedge style cylinder head chamber configurations are commonly found within this engine family. The closed chamber heads, with a volume of approximately 78.5 c.c., were used in 1967 and earlier vehicles. The most desirable of these were from the 1967 440HP. These feature larger exhaust valves and carry a “915” designation. The open chamber heads average around 88 c.c., and are found on all ‘68 & later applications. The preferred version of this design was found on 1968-70 engines. Identified as the “906” castings, these heads have a better port configuration than do the later “emission” heads. The old information that indicated a wider variety of chamber volumes for these engines was based upon reported “minimums,” established for the use of certain race sanctioning bodies. These were intended to give the Chrysler racer a competitive edge in tightly controlled racing classifications and events.

The compression ratios in this catalog have been recalculated to reflect real world data, using a single reference head gasket of .0375 in. thickness. Deck clearances are calculated from the standard, uncut factory block deck height. The pistons have not been changed! All that has changed is the use of a more realistic approach in stating the compression ratio. Many original muscle car engines never actually had the high compression ratios which they were credited with. Cylinder heads vary from specifications widely, checking their true volume and measuring actual deck clearance is the only way to accurately determine your compression ratio. Since many Chrysler engines use large deck clearances, it is possible to mill the block to raise compression.

One other area requiring special attention when building a 440 is in the balancing method used by the factory. While most of the engines are “internally balanced,” the versions using the six pack rods (P/N 2951908) or a cast crankshaft (1975-78) are “externally balanced,” and require a specific balancer and flywheel. This is also true of the 1970-71 383 2bbl. and the 1972-78 400 engines.

Camshafts for big block Chryslers used one of two timing gear retention methods; either the single bolt type and the three bolt type. Service timing sets generally use the single bolt design. When using roller or solid lifter cams an adjustable valvetrain is necessary. This conversion will require both the rocker arms and a set of matching pushrods. You must have an additional .060” of valve spring travel available at maximum cam lift, and maintain a minimum of .100” piston to valve clearance.

ENGINE BUILDER HIGHLIGHTS



Small Block Ford – Tech Highlights

The small block Ford has been produced in cubic inch displacements ranging from 221 to 351. As original equipment in the popular 5.0L Mustang GT, it has been received considerable attention these last few years. The current version shares most of its basic architecture with its predecessors, but has undergone some changes that the engine builder must consider. Below is a brief listing of potential pitfalls and recommendations for assembly of one of these engines.

The greatest shortcoming of the small block Ford is the O.E. cylinder head design, which is somewhat restrictive, particularly on the exhaust side. While both Ford and the performance aftermarket have responded to the need for higher flowing heads in recent years, the average small block still responds well to camshaft and head modifications that enhance exhaust flow. With O.E. heads, a modification strategy that targets low end and midrange torque, instead of high RPM power, will yield the greatest benefits. Such items as small tube headers, dual plane intakes, lower CFM carburetors, and fairly conservative camshafts are advised for street use. Ford's Mustang GT package successfully used a similar approach, with the emphasis on power production up to about 4500RPM.

When you install a performance camshaft in a small block Ford, pay particular attention to the valve spring and retainer combination used. On some of these engines the factory valve rotator and spring combination barely allow enough clearance for the stock cam, let alone a performance unit. Valve rotation devices are not recommended for performance applications, and should be deleted from the cylinder head assembly. Also be aware that there may be differences in valve spring installed heights on various heads – and sometimes on the same head! The VS896R springs should be installed where a 1.70" height is required, while the VS1555 should be used for a 1.82" height. Do not install these springs at the opposite heights, as performance will definitely be compromised.

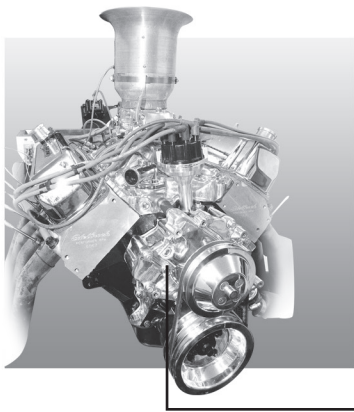
Camshafts using the 302 or 351W firing orders are interchangeable, provided that the spark plug and E.F.I. harness wiring is rerouted to match the selection made. Many small block Ford engines which are computer controlled are very sensitive to camshaft alterations. This is particularly true of the "speed density" type computer systems found

on late eighties Ford trucks and some Mustang GT's. Be very conservative when choosing a performance cam for one of these vehicles unless you are prepared to make computer upgrades.

There are two critical clearances that apply to camshaft and valve spring installation. The valve spring must have an additional .060" of travel available at maximum valve lift, and there must be at least .100" of piston to valve clearance. These critical clearances will be affected if you change the rockers, mill the cylinder heads, or alter cam timing!

Another area of concern is the variety of deck heights with which these engines were produced. The 302 engines from 1973 through 1976, along with the 351 engines built after 1972, have a deck height that is .023" higher than that of units made in other years. Since deck height has a direct impact on the engine's compression ratio, it is important to determine which one you have before ordering parts. It has been a fairly common practice to surface all blocks to a single standard, so an actual measurement may be necessary, especially if it is unknown whether the engine has been previously rebuilt. Compression ratios and deck clearances listed in this catalog are calculated figures, reflecting an uncut O.E. block and a .039" thick head gasket. These are to be used as a reference only – your engine's dimensions will likely be different, and should be checked before assembly.

When selecting pistons, be aware that the stock block employs a thin wall casting. They should not be bored more than .040" oversize. Using 351 Windsor heads on an earlier 302 engine will improve airflow, but lowers the compression ratio, so chose pistons accordingly. The ready availability of small chamber volume, high flow aftermarket heads have driven a move away from domed pistons. We now offer several high quality flat top style pistons that deliver great performance in these engines. The H120CP is a new lightweight, two valve relief hypereutectic piston that includes our exclusive DUROSHIELD skirt coating. We also have the LW2488F, a POWERFORGED piston that features reduced weight, 1/16-1/16-3/16 ring grooves, and drilled oil drainbacks for improved skirt rigidity. It and also comes with DUROSHIELD skirt coating, for less friction, longer life and more power potential. Either piston represents a solid upgrade from the original parts – at a very reasonable cost.



ENGINE BUILDER HIGHLIGHTS

Ford 351C – Tech Highlights

The 351 “Cleveland” was a short lived series of engines that first appeared in 1970. While it has the same displacement as the 351 “Windsor” motor, they share very few parts. The Cleveland engine came in two basic styles, with the four barrel version having much larger ports and valves than the two barrel variation. The four barrel heads are often considered overkill for many street applications, while the two barrel versions have moderate performance potential. The 351C was original equipment in several factory muscle cars, most notably the 1971 Boss 351. Many parts developed for this package are still available, and form the basis for high performance upgrades to this engine family.

In a situation similar to that of the big block Chevy, the Cleveland can be found with either “open” or “closed” chamber cylinder heads. The piston dedicated to the open chamber version is P/N L2408F. Do not use this piston in closed chamber applications due to potential cylinder head interference. Our other pistons can be used with either type head.

The 351M and 400 are “tall deck” variations of the Cleveland engine, introduced in response to changes in emission regulation and intended engine use. While neither one appeared in a high performance version, many of their components are similar to those of the 351C. Pistons are not directly interchangeable between engines, due to the different compression heights required.

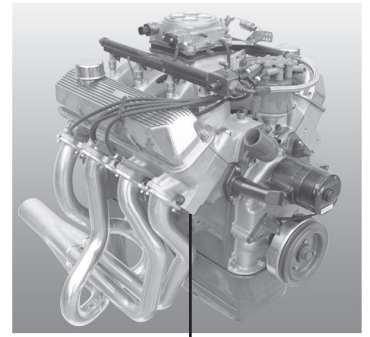
The area of greatest potential trouble in the assembly of these engines lies in the variety of valvetrain parts used in the cylinder heads. Depending upon the origins of your heads, you may find either an adjustable or a nonadjustable valvetrain, along with any combination of single and multigroove valve stem locks. If not originally equipped, the adjustability feature can be added to your heads by machining the rocker pedestal pads and installing studs and guide plates.

The single and multigroove stem valves are interchangeable, as long as you use the matching locks and retainers. Normally you would use the VSR7015R retainer with multigroove locks, and the VSR7017R retainer with the single groove type.

When building a high performance Cleveland engine the cylinder head design dictates the rest of the package. The four barrel heads work best at a high RPM level. The rest of the parts should be chosen to match this characteristic, with emphasis placed upon improving the somewhat restrictive exhaust side flow. If using the two barrel heads, you should concentrate on low and midrange enhancement, with smaller headers and carb than would be required for the four barrel headed variation.

Four barrel intake manifolds are readily available for the “two barrel” head engines, so don’t be misled by the description. This may be the better combination for regular street use.

ENGINE BUILDER HIGHLIGHTS



“FE Series” (390, 427, 428) Big Block Ford – Tech Highlights

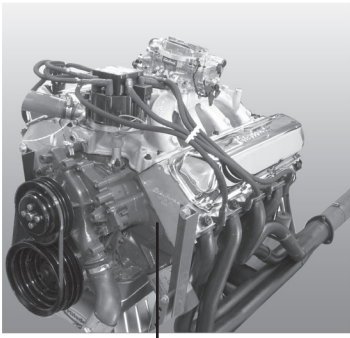
This family of engines includes the 390, the 427, and the 428, all which are found in performance applications. The latter two are quite different, despite the similarity in displacement. The 428 was the basis for the “Cobra Jet”, package found in Mustangs and Fairlanes from 1968 through 1970. This engine’s long stroke enhances low-end torque and makes for an excellent street package. The 427 is a higher RPM, large bore/short stroke engine that was the mainstay of Ford’s race efforts in the mid-60’s. The 427 engines have become collectors’ items in recent years, and are rarely seen in active competition. The 390 is a smaller bore engine which shares the 427’s short stroke. It was produced in large quantities for passenger car use, as well as for truck applications through 1975, and is the most common of the three. Newly available aftermarket engine blocks and heads have renewed interest in the FE engine series, particularly for use in replicas of the Cobra sports car. The continuous strong presence of 428CJ equipped cars in NHRA Stock and Super Stock ranks (where they regularly run 9 to 10 second quarter mile times) is a testimonial to the power potential of the FE engine.

Many parts such as heads or crankshafts can be interchanged between engines in this family, but carefully check for interference between valves, pistons, and the block if you stray from the factory combinations. When building an FE engine for street performance or towing it is best to emphasize low RPM torque, rather than high-speed power. When using most common O.E. cylinder heads, these engines respond well to fairly small tube headers, conservative carburetor sizes, and camshaft selections that target a 6000 RPM maximum. This is particularly true of the 390 engines. If you are fortunate enough to obtain a set of expensive and rare Medium Riser, Hi-Riser, or Tunnel Port heads these RPM limitations will not apply, but higher engine speeds will require modifications to the crankshaft, rods and valvetrain to improve durability. (The large valve heads noted above would not fit on small bore engines such as the 390). Both the 428CJ and aftermarket aluminum heads have great street and strip power potential, though when used on a 390 they will lower the compression ratio a bit.

The compression ratios shown in this catalog are calculated figures, not factory advertised numbers, and may vary from previously published data. We have not changed the piston dome volumes, only the way in which we calculated the ratios. The deck clearance and compression ratio calculations are based on an uncut factory block and a .041" head gasket. All FE engines have full floating piston pins from the factory. Our L2291F pistons for the 390, and the L2303F pistons for the 428CJ, are being upgraded to include an enhanced appearance and our unique DUROSHIELD skirt coating.

When camshaft selection and vehicle use becomes more race track oriented, the valve train should be upgraded. Any FE engine can be converted to an adjustable valve train through use of the proper rocker arms and pushrods. The adjustable rockers have a slightly higher ratio than do the nonadjustable ones, so check piston to valve and valve spring clearances when making this change. Stock replacement rocker shafts are prone to breakage in racing use; thus stronger aftermarket parts may be required. Also recommended are “end stands” which support the outer portion of the shafts. Some of the lower output engines came with two piece valve spring retainers, which should be replaced for performance use.

When using solid or roller lifters in these engines it is common to block off or restrict the oiling to the lifter galley. The factory 427’s with solid lifters did not directly oil the lifters, so this should not be a problem. Another frequently seen oiling modification is matching of the main oil passages to the holes in the bearings. These are frequently offset by quite a bit from the factory. It is also common to open up the inlet passage at the oil pump mounting area to match the outlet on the pump. Whether these changes really help is open to debate, but they certainly don’t hurt. Our 125M main bearing set features a 3/4 oil groove configuration, which will definitely enhance oiling. The recently released “Genesis” aftermarket block requires our 1268M cam bearing set.



ENGINE BUILDER HIGHLIGHTS

429, 460 Big Block Ford – Tech Highlights

This engine family first appeared in 1969, as a replacement for the FE Series of engines. Since 1976 this design has been the basis for all of Ford's large displacement V8s. The engines most familiar to the performance enthusiast are the 429 and the 460. The former was available in a number of high output versions, including the "Cobra Jet", and "Super Cobra Jet", while the latter is best known as the power plant for full size luxury cars and pickup trucks. Recent years have seen increasing numbers of enthusiasts combining the two, using the high performance components developed for the 429 on the larger displacement engine to make a potent street performance package. This trend has been accelerated through the support of both the factory and the aftermarket, as a steady flow of new high performance heads and blocks have been released. A good cylinder head design, along with a block configuration which permits creation of very large displacement engines, allows this design to deliver excellent power potential for either street or track use.

When building one of these engines, the target application will dictate the components to use. The "bigger is better" philosophy applies here, and few people will build a 429 if their situation allows them to go with a 460. Both engines share the same cylinder bore, thus a 429 can be converted to a 460 by changing the crankshaft and pistons. Some 429 engines used forged cranks, but trading some high RPM strength for an additional thirty cubic inches is a good move in most applications.

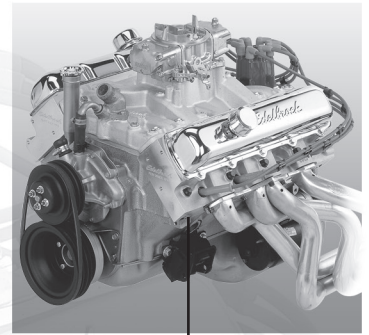
Cylinder heads interchange between engines in this family. Vehicles expected to operate at low RPM, such as trucks used for towing, should avoid the 429 CJ or SCJ heads, which have ports too large for such applications. Most pre-'72 heads will have provisions for an adjustable valve train. Later model heads with fulcrum mounted rockers can be converted to the earlier adjustable stud type with fairly basic machine work. If you choose to do this, the studs, rockers, and pushrods

used in the earlier engines will be required. These changes are required if you are intending to use a solid or a roller lifter cam.

Engine block deck heights within this group changed from year to year, with three different ones being common. This height will affect piston deck clearance, and will have a significant impact on the resulting compression ratio. If unsure of the vintage of the block being used, or if there has been machine work done in the past, check this height carefully before selecting pistons. It has been a common machine shop practice to mill these blocks to a single height; thus many late model engines end up having higher compression than was anticipated.

Our recently released LW2602F flat top POWERFORGED piston delivers a street friendly 9.4:1 compression ratio with 92cc cylinder heads. The same piston will deliver a 10.94:1 ratio when run with popular 72cc Cobra Jet heads. Domed pistons may require modification if they are to be used with certain cylinder heads. The assortment of heads available, along with the variations between castings, make it necessary to "clay check" the clearance between heads and pistons during a trial assembly. You cannot simply assume that a given piston will work with any given head. Flat top pistons are usually compatible with all heads, providing that the combined gasket thickness and deck clearance is equal to or greater than .040". Valve to piston clearance may be a problem with some performance cams, and should always be checked. The recommended minimum is .100". Valve to piston clearance will be affected if the block or heads are milled, or if cam timing is advanced or retarded after engine assembly. Careful inspection is the ONLY way to be sure that your components will work together.

ENGINE BUILDER HIGHLIGHTS



Oldsmobile – Tech Highlights

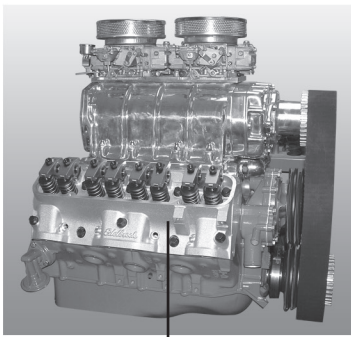
The Oldsmobile V8 can be modified for excellent street or track performance with careful planning and attention to the overall combination. Both large and small block iterations use similar components, including a common cylinder head layout. The small block engine is not often found in today's performance applications, although the factory offered a high powered W-31 version. Big block W-30 455s were among the strongest packages available during the musclecar era. The basic 455 engines are fairly common, having been used in many passenger cars, and form the basis for most high output Oldsmobiles. These engines generate considerable torque, and are at their best when optimized for low and midrange power. The recent availability of aftermarket aluminum cylinder heads for the Olds V8 has significantly raised the level of interest in these engines. The folks at Car Craft magazine recently assembled a pump gas 455 Olds using Speed-Pro pistons, rings, and bearings. The finished engine delivered 496 horsepower and an impressive 558 lb.-ft of torque.

Oldsmobile O.E. cylinder heads are commonly identified by a letter cast into the exhaust side of the head. The most desirable heads include those with the letters C, D, F, or H. While most of these heads will physically bolt on to any Oldsmobile block, pay close attention to valve size and chamber volume when selecting the ones to use with your combination. A cylinder head with large valves may lessen street driving performance in smaller engines. As produced, Olds cylinder heads use a non-adjustable valve train where rockers are paired with a common pivot "bridge". The O.E.

aluminum bridge has been known to break in service. We offer both the original style and a three piece unit with separate fulcrums and a steel connector.

As in any performance engine rebuild, you should pay close attention to clearances. The minimum piston to valve clearance is .100". Piston to cylinder head clearance minimum is approximately .040". The valve springs must have an additional .060" of available travel at maximum valve lift to prevent coil bind. Piston to valve clearance must be inspected whenever you mill the block or heads, change cams, or alter cam timing. Our CS176R cam has the original profile for the W-30 package, and is the largest Speed-Pro cam that is practical for a street driven vehicle. This cam is marginal with power accessories.

Identification of Oldsmobile engines can be a challenge, as many of them were externally marked at the factory with only a paper tag on the oil filler tube. These tags are often missing by the time the engine falls into the hands of an enthusiast. Check the bore diameter and crankshaft stroke to be sure of the engine you are working on prior to ordering parts. It is not unusual to find 455 Oldsmobile engine blocks with cracks around the motor mount area, and along the water jackets on the deck surface. These areas should be carefully inspected prior to machine work. Cracks in these areas are difficult, if not impossible to properly repair. Our racing main bearing set for these engines, part number 108M, has been upgraded to include a 3/4 oil groove. This design enhances rod bearing lubrication.



ENGINE BUILDER HIGHLIGHTS

Pontiac V8 – Tech Highlights

The Pontiac V8 was the powerplant for a whole generation of “muscle cars”, including the GTO and the Firebird Trans Am. The increasing popularity of muscle cars has renewed interest in the rebuilding and modification of these engines. The performance aftermarket has responded by re-releasing many older products, and concurrently designing several new items. Finding the parts necessary to put together a good running Pontiac should not be a problem. Since the 350, 400, and 455 engines are physically interchangeable, most Pontiac enthusiasts will eagerly step up to the big cubic inch variation – unless they are restoring an original car.

In response to this renewed enthusiasm, we have updated our Pontiac POWERFORGED pistons with improved machining and our unique friction reducing DUROSHIELD skirt coating. We have also released racing main bearings for both the 400 and the 455 featuring our unique groove design and our patented H14 overplate alloy. The recent availability of aftermarket aluminum heads has further spurred interest in Pontiac high performance. An aluminum head equipped Pontiac 455 was recently assembled by the staff at Car Craft magazine. This project engine used Speed-Pro pistons, rings, and bearings to kick out 501 horsepower and a staggering 575 lb.-ft of torque.

Pontiac cylinder heads will physically interchange among the various engines, but careful attention must be paid to the piston to combustion chamber clearances. Pontiac used a wide variety of combustion chamber volumes to achieve the desired compression ratios and characteristics, some pistons may not be compatible with the heads you select. The good news in this situation is that it is easy to lower or raise the compression ratio by swapping cylinder heads, as long as important clearances are maintained. One other

critical issue in Pontiac cylinder head repair is related to valve length. When Pontiac changed the chamber volumes, they would shorten or lengthen the valves as required to maintain valve train geometry. This means that otherwise identical engines with different compression ratios will require different length valves! Since many of these engines have been previously rebuilt or replaced, the only way to be sure of getting the right length valves is to compare and measure your old valves prior to ordering replacements. The original valve train in most Pontiac engines is a positive stop, non-adjustable type, which requires that the rockers be tightened to a specified torque against a step on the rocker stud. The heads can be converted to allow adjustment by changing studs and using rocker adjustment locks.

There are a couple of important notes regarding some of the pistons we've supplied for the 455 Pontiac. The L2423F piston was designed to work with the Super-Duty forged connecting rod. If it is to be used with other rods, the area between the pin bosses must be opened up to 1.360". Our L2394F piston was originally designed for the Super-Duty or H.O. heads, but has since been redesigned to be compatible with other heads.

As in any engine, the Pontiac requires careful attention to clearances throughout the assembly. A minimum of .050" should be maintained between the piston dome and the cylinder head. Piston to valve clearance should be at least .100". These clearances will change if you mill the block or heads, use 1.65 ratio rockers, changes cams, or alter cam timing – check them carefully before running any new parts!



PERFORMANCE CAMS

AMC L6

232; 258 Engines

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1069R	KC-1069R	Pro-2000	Smooth	1500-4000	208/208	280/280	.421	.421	112	56
Hydraulic		LIFTERS	HT-2011 (Std.)	HT-2011R (Race)						
		VALVE SPRING	VS-741R							
		RETAINER	VSR-7007R							
		LOCKS	VK-138R							



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
258 Engines							
Exhaust							
	1.406	V-2023	.3720	4.892	44	21-4N	1964-80; w/o rotators; 4 groove stem
	1.406	V-2205	.3720	4.892	44	21-2N	1981-90; 1 groove stem
Intake							
	1.787	V-1981	.3720	4.899	29	SIL-1	1964-80; 4 groove stem
	1.787	V-2206	.3720	4.899	30	1547	1981-90; 1 groove stem
Valve Guide - Manganese Bronze							
		VG-7004R	.3725	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7503R	.3725	2.500			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal
Valve Stem Seal							
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining



PERFORMANCE PISTONS

AMC V8

SPEED-PRO POWERFORGED Pistons

401 Engines (4.165 Bore x 3.680 Stroke)

Dome Shape: .170 dish
 Con Rod Length (in): 5.858
 Compression Distance (in): 1.505
 Deck Clearance (in): .000
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.000
 Pin Weight (grams): 173



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		50.6	56.50	58.00	58.60	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
407	L-2380NF 30	10.56	9.95	9.81	9.76	--	--	605	-27.5	E-302K 30	--	--	Yes	N/R
409	L-2380NF 40	10.61	10.00	9.85	9.80	--	--	610	-27.5	E-302K 40	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



AMC V8 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
290; 304; 343; 360 Engines					
Rod Set	O.E. Replacement	8-3310CPA	Overplated Copper-Lead Alloy		Std-10-20-30-40
Main Set	O.E. Replacement	5037M	Overplated Copper-Lead Alloy		Std-1-10-20-30
Cam Set	O.E. Replacement	1401M	Babbitt	Full round design	Std Only
390; 401 Engines					
Rod Set	O.E. Replacement	8-3385CP	Overplated Copper-Lead Alloy		10-30
Main Set	O.E. Replacement; 1970-78 O.E. Replacement; 1968-69 390	4950M 5037M	Overplated Copper-Lead Alloy Overplated Copper-Lead Alloy		10 Std-1-10-20-30
Cam Set	O.E. Replacement	1401M	Babbitt	Full round design	Std Only

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
304; 360; 390; 401 Engines			
Oil Pump Screen	O.E. Replacement	224-14161	
Oil Pump Kit	O.E. Replacement	224-51285	

PERFORMANCE CAMS



304; 360; 401 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1026R	KC-1026R	Pro-2000	Smooth	1500-4000	204/214	280/290	.448	.472	110	55
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-2011 (Std.) VS-741R VSR-7007R VK-138R	HT-2011R (Race)						

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
304 Engines							
Exhaust							
1.406		V-2023	.3720	4.892	44	21-4N	1971-80
Intake							
1.787		V-1981	.3720	4.899	29	SIL-1	1971-80
360 Engines							
Exhaust							
1.625		V-1830	.3710	4.918	45	21-2N	1970-72; 1 groove stem
1.680		V-1980	.3710	4.929	44	21-2N	1973-74; w/Rotocap; 1 groove stem
1.680		V-2024	.3721	4.909	44	21-4N	1972-76; w/o rotocap; 4 groove stem

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PERFORMANCE VALVES

AMC V8 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
360 Engines							
Intake							
	2.015	V-1831	.3715	4.899	29	8645	1970-72; 1 groove stem
	2.026	V-1979	.3719	4.898	30	EN-52	1973-76; 4 groove stem
390 Engines							
Exhaust							
	1.625	V-1830	.3710	4.918	45	21-2N	
Intake							
	2.015	V-1831	.3715	4.899	29	8645	
401 Engines							
Exhaust							
	1.680	V-1980	.3710	4.929	44	21-2N	1973-74; w/Rotocap; 1 groove stem
	1.680	V-2024	.3721	4.909	44	21-4N	1971-78; w/o rotocap; 4 groove stem
Intake							
	2.015	V-1831	.3715	4.899	29	8645	1971-72; 1 groove stem
	2.026	V-1979	.3719	4.898	30	EN-52	1973-78; 4 groove stem
Valve Guide - Manganese Bronze							
		VG-7004R	.3725	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7503R	.3725	2.500			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal
Valve Stem Seal							
		ST-2002	.3710				Rubber/PTFE insert; .625 guide dia.; Installation requires valve guide machining
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
304; 360; 390; 401 Engines				
Push Rods				
	RP-3212R	Hardened Chrome Moly	5/16 dia.	304; 360; 401; Stock length
	RP-3212R 100	Hardened Chrome Moly	5/16 dia.	304; 360; 401; +.100 in length
	RP-3212R 150	Hardened Chrome Moly	5/16 dia.	304; 360; 401; +.150 in length
	RP-3212R 200	Hardened Chrome Moly	5/16 dia.	304; 360; 401; +.200 in length
Rocker Arms				
	R-875	Stock Type		1973-78; Incl. 2 rockers, 2 pivots, 1 bridge
	MR-1839	Pivot		
	MR-1840	Bridge		

PERFORMANCE PISTONS



Buick V6

SPEED-PRO Hypereutectic Pistons

231 Engines (3.800 Bore x 3.400 Stroke)



Dome Shape: .255 dish
 Con Rod Length (in): 5.950
 Compression Distance (in): 1.800
 Deck Clearance (in): .088
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.939
 Pin Weight (grams): 156

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	--	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
231	H521ACP	7.57	--	--	--	--	506	-24.0	E-434K	--	--	Yes	N/R	
234	H521ACP 20	7.63	--	--	--	--	516	-24.0	--	--	--	Yes	N/R	
235	H521ACP 30	7.66	--	--	--	--	521	-24.0	E-434K 30	R-10499 30	--	Yes	N/R	
236	H521ACP 40	7.69	--	--	--	--	526	-24.0	E-434K 40	--	--	Yes	N/R	
239	H521ACP 60	7.74	--	--	--	--	536	-24.0	--	--	--	Yes	N/R	

Single Piston Part

231	WH521ACP	7.57	--	--	--	--	506	-24.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	N/R
234	WH521ACP 20	7.63	--	--	--	--	516	-24.0		Yes	N/R
235	WH521ACP 30	7.66	--	--	--	--	521	-24.0		Yes	N/R
236	WH521ACP 40	7.69	--	--	--	--	526	-24.0		Yes	N/R
239	WH521ACP 60	7.74	--	--	--	--	536	-24.0		Yes	N/R

Application Notes: Turbo; DUROSHIELD® skirt coated piston



Dome Shape: .190 dish; 4 reliefs
 Con Rod Length (in): 5.950
 Compression Distance (in): 1.855
 Deck Clearance (in): .033
 Skirt Clearance (in): .0012

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.939
 Pin Weight (grams): 156

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	--	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
231	H522CP	9.55	--	--	--	--	547	-14.0	E-369K	--	--	Yes	N/R	
235	H522CP 30	9.67	--	--	--	--	562	-14.0	E-369K 30	R-10499 30	--	Yes	N/R	
236	H522CP 40	9.71	--	--	--	--	567	-14.0	E-369K 40	--	--	Yes	N/R	

Single Piston Part

231	WH522CP	9.55	--	--	--	--	547	-14.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	N/R
235	WH522CP 30	9.67	--	--	--	--	562	-14.0		Yes	N/R
236	WH522CP 40	9.71	--	--	--	--	567	-14.0		Yes	N/R

Application Notes: Non-Turbo; DUROSHIELD® skirt coated piston

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Buick V6 - cont'd.

SPEED-PRO Hypereutectic Pistons

252 Engines (3.965 Bore x 3.400 Stroke)

Dome Shape: .276 dish
 Con Rod Length (in): 5.950
 Compression Distance (in): 1.808
 Deck Clearance (in): .083
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.939
 Pin Weight (grams): 165



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	--	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
256	H471CP 30	7.79	--	--	--	--	--	577	-30.0	--	--	--	Yes	N/R
257	H471CP 40	7.82	--	--	--	--	--	582	-30.0	E-408K 40	--	--	Yes	N/R
260	H471CP 60	7.88	--	--	--	--	--	592	-30.0	--	--	--	Yes	N/R
Single Piston Part #														
256	WH471CP 30	7.79	--	--	--	--	--	577	-30.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
257	WH471CP 40	7.82	--	--	--	--	--	582	-30.0				Yes	N/R
260	WH471CP 60	7.88	--	--	--	--	--	592	-30.0				Yes	N/R

Application Notes: Turbo; DUROSHIELD® skirt coated piston

SPEED-PRO POWERFORGED Pistons

231 Engines (3.800 Bore x 3.400 Stroke)

Dome Shape: .245 dish
 Con Rod Length (in): 5.950
 Compression Distance (in): 1.825
 Deck Clearance (in): .063
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.939
 Pin Weight (grams): 156



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	--	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
231	L-2481F	7.87	--	--	--	--	--	558	-24.5	E-434K	--	--	Yes	N/R
235	L-2481F 30	7.96	--	--	--	--	--	574	-24.5	E-434K 30	R-10499 30	--	Yes	N/R
236	L-2481F 40	7.99	--	--	--	--	--	578	-24.5	E-434K 40	--	--	Yes	N/R
Single Piston Part #														
231	WL-2481F	7.87	--	--	--	--	--	558	-24.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
235	WL-2481F 30	7.96	--	--	--	--	--	574	-24.5				Yes	N/R
236	WL-2481F 40	7.99	--	--	--	--	--	578	-24.5				Yes	N/R

Application Notes: Turbo; DUROSHIELD® skirt coated piston

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
231; Even Fire Engines					
Rod Set					
	O.E. Replacement Competition Series	6-3760A 6-7120CH	A-Series aluminum bearings Super Duty Alloy	Steel Cranks; Length - .735	Std-1-10-20-30-40 Std-1-10

PERFORMANCE ENGINE BEARINGS



Buick V6 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
231; Even Fire Engines - cont'd.					
Main Set	O.E. Replacement; 1977-87 VIN Code "A" Competition Series	7144MA 107M	A-Series aluminum bearings Super Duty Alloy	3/4 Groove	Std-10-20-30-40 Std-1-10
Cam Set	O.E. Replacement; w/20 Bolt Oil Pan	1755M	Babbitt		Std Only
231; Odd Fire Engines					
Rod Set	O.E. Replacement	6-2500RAA	A-Series aluminum bearings		Std-10-20-30-40
Main Set	O.E. Replacement; 1975-1991 VIN Code "C"	7144MA	A-Series aluminum bearings		Std-10-20-30-40



OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
231; 252 Engines			
Oil Pump Screen	O.E. Replacement	224-128	Compare to O.E. screen for correct application; 5 1/2" deep pan
Oil Pump Kit	O.E. Replacement Thrust Plate Kit High Volume	224-518 224-518TP 224-518V	Incl. screws, gaskets, and instructions



PERFORMANCE CAMS

231; Even Fire Engines											
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP	
					.050 LIFT	.006 LIFT	INT.	EXH.			
CS-1016R	KC-1016R	Pro-2000	Good	1500-4000	204/214	280/290	.448	.472	112	51	
Hydraulic		LIFTERS	HT-969 (Std.)	HT-969R (Race)							
		VALVE SPRING	VS-677								
		RETAINER	VSR-7023R								
		LOCKS	VK-115R								
		APPLICATION NOTES: Even fire									



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
231 Engines							
Exhaust	1.500	V-4168	.3408	4.718	45	21-4N	1979-88 Exc. VIN Code "C"; 1989 3.8-7
Intake	1.710	V-2117	.3407	4.713	45	SIL-1	1979-88 Exc. VIN Code "C"; 1989 3.8-7
252 Engines							
Intake	1.710	V-2117	.3407	4.713	45	SIL-1	
Valve Guide - Manganese Bronze							
		VG-7005R	.3435	2.500			Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal

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PERFORMANCE VALVES

Buick V6 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Stem Seal							
252 Engines							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
231; 252 Engines				
Push Rods				
	RP-3164	Stock Type	5/16 dia.	Stock length
	RP-3164 35	Stock Type	5/16 dia.	+.035 in length
	RP-3164 60	Stock Type	5/16 dia.	+.060 in length
	RP-3213R	Hardened Chrome Moly	5/16 dia.	8.690 in length
Rocker Arms				
	R-870	Stock Stamped Type		Exh. 1-3-4-6; Int. 2-5
Rocker Arm Retainer				
	MR-1829	Stock Type	Nylon	For rocker arm retention
Thrust Buttons				
	MR-1874	Stock Type		1984-88 VIN Code "3"; 1986 VIN code "B"
Timing Components				
	222-359	Timing Chain		Exc. for 1988-90 Vin Code "C" 1990-94 VIN Code "L"; Single roller
	223-610	Cam Sprocket	Silent Type	Even Fire Engs. w/o cam sensor
	223-323	Crank Sprocket	1 Keyway	Both Eng. types; Exc. '86-94 VIN Codes "3", "C" & "L"; Single roller
Complete Timing Sets				
	CTS-1132R	Performance Roller; .250" Double Roller	3 Keyway	For cams w/o integral distributor drive
	CTS-3532X9R	Billet Roller; .250" Double Roller	9 Keyway	For cams w/o integral distributor drive

PERFORMANCE PISTONS



Buick V8

SPEED-PRO Hypereutectic Pistons

455 Engines (4.312 Bore x 3.900 Stroke)



Dome Shape: .130 dish; 4 reliefs
 Con Rod Length (in): 6.600
 Compression Distance (in): 1.985
 Deck Clearance (in): .040
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.999
 Pin Weight (grams): 223

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.9	66.0	68.0	69.0	71.0	77.5			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
455	H392NCP	--	9.58	9.43	9.35	9.20	8.76	771	-23.0	E-289K	--	--	Yes	N/R
462	H392NCP 30	--	9.69	9.53	9.46	9.31	8.86	786	-23.0	E-289K 30	--	R-5883 35	Yes	N/R
464	H392NCP 40	--	9.73	9.57	9.49	9.34	8.89	791	-23.0	E-289K 40	--	--	Yes	N/R
469	H392NCP 60	--	9.80	9.64	9.56	9.41	8.96	801	-23.0	E-289K 60	--	--	Yes	N/R
Single Piston Part #														
455	WH392NCP	--	9.58	9.43	9.35	9.20	8.76	771	-23.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
462	WH392NCP 30	--	9.69	9.53	9.46	9.31	8.86	786	-23.0				Yes	N/R
464	WH392NCP 40	--	9.73	9.57	9.49	9.34	8.89	791	-23.0				Yes	N/R
469	WH392NCP 60	--	9.80	9.64	9.56	9.41	8.96	801	-23.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

SPEED-PRO POWERFORGED Pistons

455 Engines (4.312 Bore x 3.900 Stroke)



Dome Shape: .156 x 3.610" dia. dish
 Con Rod Length (in): 6.600
 Compression Distance (in): 1.975
 Deck Clearance (in): .050
 Skirt Clearance (in): .0025

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.999
 Pin Weight (grams): 223

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.9	66.0	68.0	69.0	71.0	77.5			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	L-2353F 30	--	9.15	9.01	8.94	8.81	8.41	762	-27.8	E-289K 30	--	R-5883 35	Yes	N/R
464	L-2353F 40	--	9.18	9.04	8.98	8.84	8.44	768	-27.8	E-289K 40	--	--	Yes	N/R
Single Piston Part #														
460	WL-2353F 30	--	9.15	9.01	8.94	8.81	8.41	762	-27.8	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
464	WL-2353F 40	--	9.18	9.04	8.98	8.84	8.44	768	-27.8				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
350 Engines					
Rod Set					
	O.E. Replacement	8-2500RAA	A-Series aluminum bearings		Std-10-20-30-40
Main Set					
	O.E. Replacement	4418M	Overplated Copper-Lead Alloy		Std-10-20-30

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PERFORMANCE ENGINE BEARINGS

Buick V8 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
350 Engines - cont'd.					
Cam Set	O.E. Replacement	1422M	Babbitt		Std Only
455 Engines					
Rod Set	O.E. Replacement Competition Series	8-3320CP 8-7260CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-10-20-30 Std-10
Main Set	O.E. Replacement Competition Series	4664M 157M	Overplated Copper-Lead Alloy Super Duty Alloy	3/4 Groove	Std-10-20-30 Std-1-10
Cam Set	O.E. Replacement	1422M	Babbitt		Std Only



OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
350 Engines			
Oil Pump Kit	O.E. Replacement Thrust Plate Kit High Volume	224-518 224-518TP 224-518V	Incl. screws, gaskets, and instructions
455 Engines			
Oil Pump Kit	O.E. Replacement Thrust Plate Kit	224-519 224-518TP	Use O.E. relief spring P/N 1233892 for Stage 1 Incl. screws, gaskets, and instructions



PERFORMANCE CAMS

400; 455 Engines											
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP	
					.050 LIFT	.006 LIFT	INT.	EXH.			
CS-1165R		Pro-3000	Good	1500-4500	214/224	290/300	.469	.493	112	61	
Hydraulic		LIFTERS VALVE SPRING LOCKS	HT-969 (Std.) VS-1582 VK-97	HT-969R (Race)							



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
400 Engines							
Exhaust	1.625	V-1799	.3725	5.162	45	21-2N	1967-69
Intake	2.000	V-1800	.3725	5.137	45	1047	1967-69
455 Engines							
Exhaust	1.625	V-1799	.3725	5.162	45	21-2N	1970-74; Exc. Gran Sport, Stage 1
Intake	2.000	V-1800	.3725	5.137	45	1047	1970-76; Exc. Gran Sport, Stage 1

PERFORMANCE VALVES



Buick V8 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Guide - Manganese Bronze							
455 Engines							
		VG-7007R	.3725	2.625			Straight; Cut-to-length; .502 O.D. Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal
		VG-7503R	.3725	2.500			
Valve Stem Seal							
		ST-2002	.3710				Rubber/PTFE insert; No cutter required
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Use w/VG-7503R

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
350 Engines				
Push Rods				
	RP-3214R	Hardened Chrome Moly	5/16 dia.	
Timing Sets				
	KT3-359S	3 Piece set	1 Keyway	Incl. cam & crank sprocket and chain; Single roller
Complete Timing Sets				
	CTS-1132R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3532X9R	Billet Roller; .250" Double Roller	9 Keyway	
350; 455 Engines				
Rocker Arms				
	R-870	Stock Stamped Type		Exh. 1-4-5-8; Int. 2-3-6-7
Rocker Arm Retainer				
	MR-1829	Stock Type	Nylon	For rocker arm retention
455 Engines				
Push Rods				
	RP-3179	Stock Type	5/16 dia.	9.390 in length

PERFORMANCE CAMS



Chevrolet L4

181 Marine Engines

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1068M		Marine	Smooth		204/204	281/281	.443	.443	109	57
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)	APPLICATION NOTES: GM No. 2770019; Std. rotation; 115 H.P., 135 H.P., 140 H.P.					

PERFORMANCE ENGINE BEARINGS



Chevrolet L6

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
230; 250 Engines					
Main Set					
	O.E. Replacement	4124MA	A-Series aluminum bearings		Std-1-10-20-30-40-60

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).



OIL PUMPS AND ACCESSORIES

Chevrolet L6 - cont'd.

PRODUCT	FEATURES	P/N	NOTES
230; 250 Engines			
Oil Pump	O.E. Replacement High Volume	224-4147 224-4157	



PERFORMANCE CAMS

230; 250 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1033R		Pro-1500	Smooth	1000-3500	194/204	272/282	.464	.490	110	45
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
230; 250 Engines							
Exhaust	1.500	V-1904	.3414	4.928	45	21-4N	
Intake	1.720	V-1927	.3413	4.917	45	SIL-1	
Valve Guide - Manganese Bronze							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D. Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
		VG-7501R	.3415	2.600			
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining PTFE; .531 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				
		ST-2018R	.3410				



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
230; 250 Engines				
Push Rods				
	RP-3214R	Hardened Chrome Moly	5/16 dia.	
Rocker Arms				
	R-832	Stock Type	1.7 Ratio	
Rocker Adjustment Locks				
	MR-1860PL	3/8 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1752	.003 Oversize Press-In		For stock rockers
	MR-1862RS	3/8 H/D Screw-In		
Timing Components				
	221-2528S	Timing Gear Set	1 Keyway	2 pc. Set; Incl. cam & crank gear; Single roller

PERFORMANCE PISTONS



Chevrolet V6

SPEED-PRO Hypereutectic Pistons

4.3L; (262) Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .045
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	50.0	55.0	58.0	65.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
262	H645NCP	--	--	--	--	9.17	--	536	-5.0	E-459K	--	--	Yes	N/R
265	H645NCP 20	--	--	--	--	9.25	--	546	-5.0	E-459K 20	--	--	Yes	N/R
266	H645NCP 30	--	--	--	--	9.28	--	551	-5.0	E-459K 30	--	--	Yes	N/R
268	H645NCP 40	--	--	--	--	9.32	--	556	-5.0	E-459K 40	--	--	Yes	N/R
270	H645NCP 60	--	--	--	--	9.39	--	566	-5.0	E-459K 60	--	--	Yes	N/R
Single Piston Part #														
262	WH645NCP	--	--	--	--	9.17	--	536	-5.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
265	WH645NCP 20	--	--	--	--	9.25	--	546	-5.0				Yes	N/R
266	WH645NCP 30	--	--	--	--	9.28	--	551	-5.0				Yes	N/R
268	WH645NCP 40	--	--	--	--	9.32	--	556	-5.0				Yes	N/R
270	WH645NCP 60	--	--	--	--	9.39	--	566	-5.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	50.0	55.0	58.0	65.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
265	H645ACP 20	--	--	--	--	9.16	--	539	-6.9	E-229K 20	--	--	Yes	Not Incl.
266	H645ACP 30	--	--	--	--	9.20	--	544	-6.9	E-229K 30	--	--	Yes	Not Incl.
268	H645ACP 40	--	--	--	--	9.24	--	549	-6.9	E-229K 40	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet V6 - cont'd.

SPEED-PRO Hypereutectic Pistons

4.3L; (262) Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		48.0	50.0	55.0	58.0	65.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
265	H645DCP 20	--	--	--	--	9.16	--	539	-6.9	E-229K 20	--	--	Yes	Not Incl.
266	H645DCP 30	--	--	--	--	9.20	--	544	-6.9	E-229K 30	--	--	Yes	Not Incl.
268	H645DCP 40	--	--	--	--	9.24	--	549	-6.9	E-229K 40	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63

PERFORMANCE ENGINE BEARINGS

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
2.8L (173) Engines					
Rod Set					
	Competition Series	7025CH	Super Duty Alloy	2.000 Journal	Std Only
Main Set					
	O.E. Replacement; 1980 - Early '85	5090MA	A-Series aluminum bearings		Std-.25-.50-.75-1.00MM
4.3L (262) Engines					
Rod Set					
	Competition Series	6-7085CH	Super Duty Alloy		Std-1-10
Main Set					
	O.E. Replacement	5085M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
Cam Set					
	O.E. Replacement	1463M	Babbitt	Full round design	Std-1

OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
2.8L (173) Engines			
Oil Pump			
	O.E. Replacement	224-4148	
	High Volume	224-43389V	Pass.; Exc. 2.8-1; Incl. shaft, screen
	High Volume	224-4148V	S-10; Pass. 2.8-1, 2.8S
Oil Pump Screen			
	O.E. Replacement	224-14232	1986-88 4WD S-10; Pass. Exc. 2.8-1, 2.8S
	O.E. Replacement	224-1348	1988-86 S-10 2WD
	O.E. Replacement	224-1148	Pass.; Exc. 2.8-1; 2.8S
Pump Shaft			
	O.E. Replacement	224-6148	
3.3L (200); 3.8L (229) Engines			
Oil Pump			
	O.E. Replacement	224-4146	
	High Volume	224-4143	Requires 224-6146E shaft

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

OIL PUMPS AND ACCESSORIES



Chevrolet V6 - cont'd.

PRODUCT	FEATURES	P/N	NOTES
3.3L (200); 3.8L (229) Engines - cont'd.			
Oil Pump Screen	O.E. Replacement	224-1246	
Pump Shaft	O.E. Replacement	224-6146	
	O.E. Replacement	224-6146E	Heavy Duty; w/Integral steel guide
	Shaft Guide	224-43343	Nylon
4.3L (262) Engines			
Oil Pump	O.E. Replacement	224-4146	
Oil Pump Screen	O.E. Replacement	224-1246	
Pump Shaft	O.E. Replacement	224-6146	
	Shaft Guide	224-43343	Nylon

PERFORMANCE CAMS



173 (2.8L) Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1087R		Pro-2000	Good	1500-4000	204/214	278/288	.422	.444	112	51
CS-1032R	KC-1032R	Pro-2000	Good	1500-4000	208/208	280/280	.420	.420	110	60
Hydraulic		LIFTERS	HT-2095 (Std.)							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
4.3L (262) Engines										
CS-1049M		Marine	Smooth		202/207	269/271	.404	.414	112	45
Hydraulic		LIFTERS	HT-817 (Std.) HT-817R (Race)		APPLICATION NOTES: GM No. 14095789; Std. rotation					
CS-1030R	KC-1030R	Pro-2000	Good	1500-4500	202/213	269/284	.410	.410	113	52
Hydraulic		LIFTERS	HT-817 (Std.) HT-817R (Race)							
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
CS-1051M		Marine	Smooth		202/213	270/284	.404	.410	112	55
Hydraulic Roller		LIFTERS	HT-2148 (Std.)		APPLICATION NOTES: GM No. 14096233; Std. rotation					

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
173 (2.8L) Engines							
Exhaust							
	1.425	V-2290	.3413	4.736	45	21-4N	1982-85 "Z"; '85-89 Camaro, Firebird, Fiero; '86-93 Truck
	1.425	V-2431	.3136	4.736	45	21-4N	1987-89 "W"
Intake							
	1.598	V-2173	.3410	4.697	45	1547	1980-81; 1982-85 Truck; 1982-84 Firebird, Camaro
	1.718	V-2291	.3413	4.705	45	SIL-1	1982-85 "Z"; '85-89 Camaro, Firebird, Fiero; '86-93 Truck
	1.718	V-2432	.3140	4.705	45	SIL-1	1987-89 "W"

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Chevrolet V6 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
229 (3.8L) Engines							
Exhaust							
1.500		V-1904	.3414	4.928	45	21-4N	
Intake							
1.839		V-2143	.3410	4.912	45	SIL-1	
262 (4.3L) Engines							
Exhaust							
1.500		V-1904	.3414	4.928	45	21-4N	
Intake							
1.940		V-1926	.3414	4.880	45	SIL-1	
Valve Guide - Manganese Bronze							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
2.8L (173) Engines				
Push Rods				
	RP-3207	Hardened Stock Type	5/16 dia.	
Rocker Arms				
	R-1024R	Stamped Steel Roller	1.5 Ratio	Requires 3/8 H/D screw-in studs
	R-1025R	Stamped Steel Roller	1.6 Ratio	Use w/3/8 H/D screw-in studs
	MR-1822			4 groove pivot ball
Rocker Studs				
	MR-1883	O.E. 10mm Screw-In		For stock rockers
	MR-1862RS	3/8 H/D Screw-In		For stock or roller rockers
3.3L (200); 3.8L (229); '86-'85 4.3L (262) Engines				
Guide Plates				
	MR-1896	Flat	5/16 Push Rods	
Push Rods				
	RP-3212R	Hardened Chrome Moly	5/16 dia.	Stock length
	RP-3212R 100	Hardened Chrome Moly	5/16 dia.	+ .100 in length
	RP-7001R	Hardened Chrome Moly; One Piece	5/16 dia.	Stock length
Rocker Arms				
	R-865R	Stamped Long Slot	1.5 Ratio	
	RR-7000R	Aluminum Roller	1.5 Ratio	Requires 3/8 H/D screw-in stud
	RR-7001R	Aluminum Roller	1.5 Ratio	Requires 7/16 H/D screw-in stud
	RR-7002R	Aluminum Roller	1.6 Ratio	Requires 3/8 H/D screw-in stud
	RR-7003R	Aluminum Roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
	RR-7020R	Stainless Steel Roller	1.5 Ratio	Requires 3/8 H/D screw-in stud
	RR-7022R	Stainless Steel Roller	1.5 Ratio	Requires 7/16 H/D screw-in stud
	RR-7023R	Stainless Steel Roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
	MR-1822	4 Groove		Anti-gall

VALVETRAIN COMPONENTS



Chevrolet V6 - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
3.3L (200); 3.8L (229); '86-'85 4.3L (262) Engines - cont'd.				
Rocker Adjustment Locks				
	MR-1858PL	3/8 Stud Diameter		For roller rockers
	MR-1860PL	3/8 Stud Diameter		For stock style ball pivot rockers
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1752	.003 Oversize Press-In		For roller rockers
	MR-1863RS	3/8 H/D Screw-In		For stock or roller rockers
	MR-1865RS	3/8 H/D Screw-In		For stock style ball pivot rockers
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth
	MR-1868RS	7/16 - 14 mounting threads; 7/16 - 20 stud threads		Special universal rocker arm stud
Complete Timing Sets				
	CTS-1100NR	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam; Exc. 4.3 w/Balance Shaft
	CTS-1100R	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam; Exc. 4.3 w/Balance Shaft; When depleted use CTS-1100NR
	CTS-1145R	Performance Roller; .250" Double Roller	3 Keyway	4.3 w/o balance shaft; Factory roller cam
	CTS-3500TX9R	Billet Roller; .250" Double Roller	9 Keyway	Incl. roller thrust brg.; Exc. Factory roller cam; Exc. 4.3 w/Balance Shaft
	CTS-3545X9R	Billet Roller; .250" Double Roller	9 Keyway	4.3 w/o balance shaft; Factory roller cam
	CTS-3600TX9R	Competition Roller; Premium .250" Double Roller	9 Keyway	Incl. roller thrust brg.; Exc. Factory roller cam; Exc. 4.3 w/Balance Shaft
	CTS-3645X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	4.3 w/o balance shaft; Factory roller cam

PERFORMANCE PISTONS



Chevrolet Gen III V8

SPEED-PRO Hypereutectic Pistons

346 LS1 Engines (3.897 Bore x 3.620 Stroke)



Dome Shape: Flat
 Con Rod Length (in): 6.098
 Compression Distance (in): 1.328
 Deck Clearance (in): .010
 Skirt Clearance (in): .0015

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press
 Pin Diameter (in): 0.945
 Pin Weight (grams): 151

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		--	--	66.0	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
346	H868CP	--	--	10.10	--	--	--	447	0.0	E-938K	--	R-10598 .13MM	Yes	N/R
349	H868CP .25MM	--	--	10.19	--	--	--	451	0.0	E-938K 25MM	--	R-10598 .38MM	Yes	N/R
Single Piston Part #														
346	WH868CP	--	--	10.10	--	--	--	447	0.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
349	WH868CP .25MM	--	--	10.19	--	--	--	451	0.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

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Chevrolet Gen III V8 - cont'd.

SPEED-PRO POWERFORGED Pistons

LS1 Based Engines; 382 Stroker (3.897 Bore x 4.000 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.125
 Compression Distance (in): 1.125
 Deck Clearance (in): -.010
 Skirt Clearance (in): .0030

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC					Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		--	--	66.0	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
382	LW-2624F	--	--	10.74	--	--	372	-5.0	E-938K	--	R-10598 .13MM	Yes	Included
386	LW-2624F .25MM	--	--	10.84	--	--	372	-5.0	E-938K .25MM	--	R-10598 .38MM	Yes	Included

Single Piston Part

382	WLW-2624F	--	--	10.74	--	--	372	-5.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
-----	-----------	----	----	-------	----	----	-----	------	---	--	--	-----	----------

Application Notes: CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

LS1 Based Engines; Using a 6.0 L Block (4.000 Bore x 3.620 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.097
 Compression Distance (in): 1.328
 Deck Clearance (in): .005
 Skirt Clearance (in): .0030

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press
 Pin Diameter (in): 0.945
 Pin Weight (grams): 151



CID	Piston Set Part #	Compression Ratio by Cyl Head CC					Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		--	--	66.0	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
369	L-2640F 30	--	--	10.35	--	--	474	-5.0	E-921K 30	--	R-10603 35	Yes	N/R
371	L-2640F 40	--	--	10.39	--	--	479	-5.0	E-921K 40	--	R-10603 45	Yes	N/R
375	L-2640F 60	--	--	10.49	--	--	489	-5.0	E-921K 60	--	R-10603 65	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

LS1 Based Engines; Using a 6.0 L Block (4.000 Bore x 4.000 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.125
 Compression Distance (in): 1.125
 Deck Clearance (in): -.010
 Skirt Clearance (in): .0030

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC					Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		--	--	66.0	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
402	LW-2625F	--	--	11.27	--	--	402	-5.0	E-921K	--	R-10603 5	Yes	Included
408	LW-2625F 30	--	--	11.42	--	--	415	-5.0	E-921K 30	--	R-10603 35	Yes	Included
414	LW-2625F 60	--	--	11.58	--	--	428	-5.0	E-921K 60	--	R-10603 65	Yes	Included

Application Notes: CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE ENGINE BEARINGS



Chevrolet Gen III V8 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
346 LS1 Engines					
Rod Set					
	Competition Series	8-7100CH	Super Duty Alloy	Chamfer	Std-1-1X-9-10-11-19-20-21-30
	Competition Series	C8-7100CH	Super Duty Alloy	Chamfer; Coated	Std-1-1X-10-20-30
Main Set					
	O.E. Replacement	7298MA	A-Series aluminum bearings	3/4 Groove	Std-10-20-30-40
	Competition Series	152M	Super Duty Alloy		Std-1-1X-10
Cam Set					
	O.E. Replacement; 1997-02	1888M	Babbitt		Std Only
	O.E. Replacement; 2003-04	1898M	Babbitt		Std Only



PERFORMANCE PISTONS

Chevrolet Small Block

SPEED-PRO Hypereutectic Piston Sets with Rings

350 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH423DCP 30	Hypereutectic	H423DCP E-251K	8 1	30-40-60
COMPRESSION RATIO: 8.84:1 w/64cc heads DOME DESIGN: .098 Dish; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; Use w/Lock Ring LR-63				
8KH345DCP 30	Hypereutectic	H345DCP E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.33:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; Use w/Lock Ring LR-63				
8KH669DCP 30	Hypereutectic	H669DCP E-921K	8 1	30
COMPRESSION RATIO: 9.58:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; Use w/Lock Ring LR-63				
8KH100CP 30	Hypereutectic	H100CP R-8902	8 1	30-60
COMPRESSION RATIO: 9.73:1 w/64cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; CNC machined				
8KH618CP 30	Hypereutectic	H618CP E-251K	8 1	30-40-60
COMPRESSION RATIO: 10.72:1 w/64cc heads DOME DESIGN: .125 dome; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				
383 Engines				
8KH423DCP 30	Hypereutectic	H423DCP E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.45:1 w/64cc heads DOME DESIGN: .098 Dish; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.565" rod; Use w/Lock Ring LR-63				

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).



PERFORMANCE PISTONS

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Piston Sets with Rings

383 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH137CL 30	Hypereutectic	H137CL R-8902	8 1	30
COMPRESSION RATIO: 9.67:1 w/64cc heads DOME DESIGN: Dish FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; CNC machined; Tapered pin				
8KH345DCP 30	Hypereutectic	H345DCP E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.98:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.565" rod; Use w/Lock Ring LR-63				
8KH669DCP 30	Hypereutectic	H669DCP E-921K	8 1	30
COMPRESSION RATIO: 10.24:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63; 5.565" rods				
8KH124CL 30	Hypereutectic	H124CL R-8902	8 1	30-60
COMPRESSION RATIO: 10.53:1 w/64cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; 6" rod; CNC machined; Tapered pin				

400 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH616CP 30	Hypereutectic	H616CP E-243K	8 1	30-40-60
COMPRESSION RATIO: 10.84:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				

SPEED-PRO POWERFORGED Piston Sets with Rings

327 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2165F 30	POWERFORGED	L-2165F E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.07:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				
8KL2166NF 30	POWERFORGED	L-2166NF E-251K	8 1	30-40-60
COMPRESSION RATIO: 10.35:1 w/64cc heads DOME DESIGN: .125 dome FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				

350 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2441F 30	POWERFORGED	L-2441F E-251K	8 1	30
COMPRESSION RATIO: 8.35:1 w/64cc heads DOME DESIGN: Dish FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Piston Sets with Rings				
350 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2256F 30	POWERFORGED	L-2256F E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.72:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KLW2256F 30	POWERFORGED	LW-2256F R-8902	8 1	30-60
COMPRESSION RATIO: 9.72:1 w/64cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod; Lightweight: Tapered pin				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2490NF 30	POWERFORGED	L-2490NF R-8902	8 1	30-60
COMPRESSION RATIO: 10.06:1 w/64cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2304F 30	POWERFORGED	L-2304F E-251K	8 1	30-60
COMPRESSION RATIO: 10.63:1 w/64cc heads DOME DESIGN: .100 dome FEATURES: DUROSHIELD® skirt coated piston; 5.7" rod				
383 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2491NF 30	POWERFORGED	L-2491NF R-8902	8 1	30-60
COMPRESSION RATIO: 10.76:1 w/64cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DuroShield® skirt coated piston; 5.7" rod				
400 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2352F 30	POWERFORGED	L-2352F E-243K	8 1	30-40
COMPRESSION RATIO: 9.91:1 w/64cc heads DOME DESIGN: .083 dish; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston; 5.565" rod				

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Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

305 Based Engines (3.736 Bore x 3.480 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
305	H534CP	8.84	8.60	8.29	7.96	7.67	7.39	472	-5.0	E-356K	--	--	Yes	N/R
309	H534CP 20	8.91	8.67	8.36	8.03	7.73	7.46	482	-5.0	E-356K 20	--	--	Yes	N/R
310	H534CP 30	8.95	8.71	8.39	8.06	7.76	7.49	487	-5.0	E-356K 30	--	R-10434 35	Yes	N/R
312	H534CP 40	8.99	8.74	8.43	8.10	7.80	7.52	492	-5.0	E-356K 40	--	--	Yes	N/R
315	H534CP 60	9.06	8.82	8.50	8.17	7.86	7.58	502	-5.0	E-356K 60	--	--	Yes	N/R

Single Piston Part

305	WH534CP	8.84	8.60	8.29	7.96	7.67	7.39	472	-5.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	N/R
309	WH534CP 20	8.91	8.67	8.36	8.03	7.73	7.46	482	-5.0		Yes	N/R
310	WH534CP 30	8.95	8.71	8.39	8.06	7.76	7.49	487	-5.0		Yes	N/R
312	WH534CP 40	8.99	8.74	8.43	8.10	7.80	7.52	492	-5.0		Yes	N/R
315	WH534CP 60	9.06	8.82	8.50	8.17	7.86	7.58	502	-5.0		Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
329	H534CP	9.44	9.19	8.85	8.50	8.18	7.89	472	-5.0	E-356K	--	--	Yes	N/R
333	H534CP 20	9.52	9.27	8.93	8.58	8.25	7.96	482	-5.0	E-356K 20	--	--	Yes	N/R
334	H534CP 30	9.57	9.31	8.97	8.61	8.29	7.99	487	-5.0	E-356K 30	--	R-10434 35	Yes	N/R
336	H534CP 40	9.61	9.35	9.01	8.65	8.32	8.03	492	-5.0	E-356K 40	--	--	Yes	N/R
340	H534CP 60	9.69	9.43	9.08	8.72	8.39	8.09	502	-5.0	E-356K 60	--	--	Yes	N/R

Single Piston Part

329	WH534CP	9.44	9.19	8.85	8.50	8.18	7.89	472	-5.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	N/R
333	WH534CP 20	9.52	9.27	8.93	8.58	8.25	7.96	482	-5.0		Yes	N/R
334	WH534CP 30	9.57	9.31	8.97	8.61	8.29	7.99	487	-5.0		Yes	N/R
336	WH534CP 40	9.61	9.35	9.01	8.65	8.32	8.03	492	-5.0		Yes	N/R
340	WH534CP 60	9.69	9.43	9.08	8.72	8.39	8.09	502	-5.0		Yes	N/R

Application Notes: 3-3/4" stroker w/400 crank & rods; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

327 Based Engines (4.000 Bore x 3.250 Stroke)



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.675
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
327	H660CP	9.66	9.39	9.04	8.67	8.33	8.03	587	-4.0	E-251K	R-9903	R-9343 5	Yes	Included
330	H660CP 20	9.74	9.47	9.11	8.74	8.40	8.09	597	-4.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
332	H660CP 30	9.79	9.51	9.15	8.78	8.44	8.13	602	-4.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
333	H660CP 40	9.83	9.55	9.19	8.82	8.47	8.16	607	-4.0	E-251K 40	--	R-9343 45	Yes	Included
337	H660CP 60	9.91	9.63	9.27	8.89	8.54	8.23	617	-4.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
327	WH660CP	9.66	9.39	9.04	8.67	8.33	8.03	587	-4.0	WE-251K	--	--	Yes	Included
330	WH660CP 20	9.74	9.47	9.11	8.74	8.40	8.09	597	-4.0	--	--	--	Yes	Included
332	WH660CP 30	9.79	9.51	9.15	8.78	8.44	8.13	602	-4.0	WE-251K 30	--	WR-9343 35	Yes	Included
333	WH660CP 40	9.83	9.55	9.19	8.82	8.47	8.16	607	-4.0	WE-251K 40	--	--	Yes	Included
337	WH660CP 60	9.91	9.63	9.27	8.89	8.54	8.23	617	-4.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: .098 dish; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H423DCP	9.27	--	8.73	8.41	8.12	7.85	512	-12.3	E-251K	R-9903	R-9343 5	Yes	Not Incl.
353	H423DCP 20	9.34	--	8.80	8.48	8.18	7.91	521	-12.3	E-251K 20	R-9903 20	R-9343 25	Yes	Not Incl.
355	H423DCP 30	9.38	--	8.84	8.52	8.22	7.94	526	-12.3	E-251K 30	R-9903 30	R-9343 35	Yes	Not Incl.
357	H423DCP 40	9.42	--	8.87	8.55	8.25	7.97	531	-12.3	E-251K 40	--	R-9343 45	Yes	Not Incl.
361	H423DCP 60	9.49	--	8.95	8.62	8.32	8.04	541	-12.3	E-251K 60	R-9903 60	R-9343 65	Yes	Not Incl.
Single Piston Part #														
350	WH423DCP	9.27	--	8.73	8.41	8.12	7.85	512	-12.3	WE-251K	--	--	Yes	Not Incl.
353	WH423DCP 20	9.34	--	8.80	8.48	8.18	7.91	521	-12.3	--	--	--	Yes	Not Incl.
355	WH423DCP 30	9.38	--	8.84	8.52	8.22	7.94	526	-12.3	WE-251K 30	--	WR-9343 35	Yes	Not Incl.
357	WH423DCP 40	9.42	--	8.87	8.55	8.25	7.97	531	-12.3	WE-251K 40	--	--	Yes	Not Incl.
361	WH423DCP 60	9.49	--	8.95	8.62	8.32	8.04	541	-12.3	WE-251K 60	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: .100 dish; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.540
 Deck Clearance (in): .045
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
353	H423NP 20	9.41	--	8.86	8.53	8.23	7.96	531	-10.0	E-251K 20	R-9903 20	R-9343 25	Yes	N/R

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H345DCP	9.83	--	9.22	8.86	8.53	8.22	529	-6.9	E-251K	R-9903	R-9343 5	Yes	Not Incl.
353	H345DCP 20	9.91	--	9.29	8.93	8.60	8.29	539	-6.9	E-251K 20	R-9903 20	R-9343 25	Yes	Not Incl.
355	H345DCP 30	9.95	--	9.33	8.79	8.63	8.32	544	-6.9	E-251K 30	R-9903 30	R-9343 35	Yes	Not Incl.
357	H345DCP 40	9.99	--	9.37	9.00	8.67	8.36	549	-6.9	E-251K 40	--	R-9343 45	Yes	Not Incl.
361	H345DCP 60	10.07	--	9.44	9.07	8.74	8.43	559	-6.9	E-251K 60	R-9903 60	R-9343 65	Yes	Not Incl.

Single Piston Part

350	WH345DCP	9.83	--	9.22	8.86	8.53	8.22	529	-6.9	WE-251K	--	--	Yes	Not Incl.
353	WH345DCP 20	9.91	--	9.29	8.93	8.60	8.29	539	-6.9	--	--	--	Yes	Not Incl.
355	WH345DCP 30	9.95	--	9.33	8.79	8.63	8.32	544	-6.9	WE-251K 30	--	WR-9343 35	Yes	Not Incl.
357	WH345DCP 40	9.99	--	9.37	9.00	8.67	8.36	549	-6.9	WE-251K 40	--	--	Yes	Not Incl.
361	WH345DCP 60	10.07	--	9.44	9.07	8.74	8.43	559	-6.9	WE-251K 60	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
353	H669DCP	10.10	--	9.46	9.08	8.73	8.41	549	-6.9	E-921K	--	R-10603 5	Yes	Included
355	H669DCP 30	10.23	--	9.58	9.19	8.84	8.51	563	-6.9	E-921K 30	--	R-10603 35	Yes	Included
357	H669DCP 40	10.27	--	9.62	9.23	8.87	8.55	568	-6.9	E-921K 40	--	R-10603 45	Yes	Included
361	H669DCP 60	10.36	--	9.70	9.31	8.95	8.62	577	-6.9	E-921K 60	--	R-10603 65	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H100CP	10.28	9.99	9.61	9.21	8.85	8.52	556	-5.0	R-8902	R-9902	R-9771 5	Yes	Included
355	H100CP 30	10.41	10.11	9.73	9.33	8.97	8.63	571	-5.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
357	H100CP 40	10.45	10.15	9.77	9.37	9.00	8.67	576	-5.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
361	H100CP 60	10.54	10.24	9.85	9.45	9.08	8.74	586	-5.0	R-8902 60	R-9902 60	R-9771 65	Yes	Included

Single Piston Part

350	WH100CP	10.28	9.99	9.61	9.21	8.85	8.52	556	-5.0	--	--	--	Yes	Included
355	WH100CP 30	10.41	10.11	9.73	9.33	8.97	8.63	571	-5.0	--	WR-9902 30	WR-9771 35	Yes	Included
357	WH100CP 40	10.45	10.15	9.77	9.37	9.00	8.67	576	-5.0	--	--	--	Yes	Included
361	WH100CP 60	10.54	10.24	9.85	9.45	9.08	8.74	586	-5.0	--	--	--	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H631CP	10.28	9.99	9.61	9.21	8.85	8.52	552	-5.0	E-251K	R-9903	R-9343 5	Yes	Included
353	H631CP 20	10.36	10.07	9.69	9.29	8.93	8.60	562	-5.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
355	H631CP 30	10.41	10.11	9.73	9.33	8.97	8.63	567	-5.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
357	H631CP 40	10.45	10.15	9.77	9.37	9.00	8.67	572	-5.0	E-251K 40	--	R-9343 45	Yes	Included
361	H631CP 60	10.54	10.24	9.85	9.45	9.08	8.74	582	-5.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Single Piston Part

350	WH631CP	10.28	9.99	9.61	9.21	8.85	8.52	552	-5.0	WE-251K	--	--	Yes	Included
353	WH631CP 20	10.36	10.07	9.69	9.29	8.93	8.60	562	-5.0	--	--	--	Yes	Included
355	WH631CP 30	10.41	10.11	9.73	9.33	8.97	8.63	567	-5.0	WE-251K 30	--	WR-9343 35	Yes	Included
357	WH631CP 40	10.45	10.15	9.77	9.37	9.00	8.67	572	-5.0	WE-251K 40	--	--	Yes	Included
361	WH631CP 60	10.54	10.24	9.85	9.45	9.08	8.74	582	-5.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .125 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H618CP	11.42	11.06	10.59	10.10	9.66	9.26	581	3.5	E-251K	R-9903	R-9343 5	Yes	Included
353	H618CP 20	11.52	11.15	10.68	10.19	9.74	9.34	591	3.5	E-251K 20	R-9903 20	R-9343 25	Yes	Included
355	H618CP 30	11.57	11.20	10.72	10.23	9.78	9.38	596	3.5	E-251K 30	R-9903 30	R-9343 35	Yes	Included
357	H618CP 40	11.62	11.25	10.77	10.27	9.82	9.42	601	3.5	E-251K 40	--	R-9343 45	Yes	Included
361	H618CP 60	11.71	11.34	10.86	10.36	9.91	9.50	611	3.5	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Single Piston Part

350	WH618CP	11.42	11.06	10.59	10.10	9.66	9.26	581	3.5	WE-251K	--	--	Yes	Included
353	WH618CP 20	11.52	11.15	10.68	10.19	9.74	9.34	591	3.5	--	--	--	Yes	Included
355	WH618CP 30	11.57	11.20	10.72	10.23	9.78	9.38	596	3.5	WE-251K 30	--	WR-9343 35	Yes	Included
357	WH618CP 40	11.62	11.25	10.77	10.27	9.82	9.42	601	3.5	WE-251K 40	--	--	Yes	Included
361	WH618CP 60	11.71	11.34	10.86	10.36	9.91	9.50	611	3.5	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: .100 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	H101CP 30	11.57	11.20	10.72	10.23	9.78	9.38	606	3.5	R-8902 30	R-9902 30	R-9771 35	Yes	Included
357	H101CP 40	11.62	11.25	10.77	10.27	9.82	9.42	611	3.5	R-8902 40	R-9902 40	R-9771 45	Yes	Included
361	H101CP 60	11.71	11.34	10.86	10.36	9.91	9.50	621	3.5	R-8902 60	R-9902 60	R-9771 65	Yes	Included
Single Piston Part #														
355	WH101CP 30	11.57	11.20	10.72	10.23	9.78	9.38	606	3.5	--	WR-9902 30	WR-9771 35	Yes	Included
357	WH101CP 40	11.62	11.25	10.77	10.27	9.82	9.42	611	3.5	--	--	--	Yes	Included
361	WH101CP 60	11.71	11.34	10.86	10.36	9.91	9.50	621	3.5	--	--	--	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: .275 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H617CP	12.86	12.38	11.78	11.17	10.63	10.13	601	11.8	E-251K	R-9903	R-9343 5	Yes	Included
355	H617CP 30	13.02	12.54	11.93	11.31	10.76	10.26	616	11.8	E-251K 30	R-9903 30	R-9343 35	Yes	Included
357	H617CP 40	13.07	12.59	11.98	11.36	10.81	10.31	621	11.8	E-251K 40	--	R-9343 45	Yes	Included
361	H617CP 60	13.18	12.70	12.08	11.46	10.90	10.39	631	11.8	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
350	WH617CP	12.86	12.38	11.78	11.17	10.63	10.13	601	11.8	WE-251K	--	--	Yes	Included
355	WH617CP 30	13.02	12.54	11.93	11.31	10.76	10.26	616	11.8	WE-251K 30	--	WR-9343 35	Yes	Included
357	WH617CP 40	13.07	12.59	11.98	11.36	10.81	10.31	621	11.8	WE-251K 40	--	--	Yes	Included
361	WH617CP 60	13.18	12.70	12.08	11.46	10.90	10.39	631	11.8	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: .240 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	H102CP 30	13.02	12.54	11.93	11.31	10.76	10.26	629	11.8	R-8902 30	R-9902 30	R-9771 35	Yes	Included
357	H102CP 40	13.07	12.59	11.98	11.36	10.81	10.31	634	11.8	R-8902 40	R-9902 40	R-9771 45	Yes	Included
361	H102CP 60	13.18	12.70	12.08	11.46	10.90	10.39	644	11.8	R-8902 60	R-9902 60	R-9771 65	Yes	Included
Single Piston Part #														
355	WH102CP 30	13.02	12.54	11.93	11.31	10.76	10.26	629	11.8	--	WR-9902 30	WR-9771 35	Yes	Included
357	WH102CP 40	13.07	12.59	11.98	11.36	10.81	10.31	634	11.8	--	--	--	Yes	Included
361	WH102CP 60	13.18	12.70	12.08	11.46	10.90	10.39	644	11.8	--	--	--	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 126



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H140CL	10.28	9.99	9.61	9.21	8.85	8.52	454	-5.0	--	--	--	Yes	Included
353	H140CL 20	10.36	10.07	9.69	9.29	8.93	8.60	464	-5.0	--	--	--	Yes	Included
355	H140CL 30	10.41	10.11	9.73	9.33	8.97	8.63	469	-5.0	--	R-9968 30	R-9342 35	Yes	Included
357	H140CL 40	10.45	10.15	9.77	9.37	9.00	8.67	474	-5.0	--	--	R-9342 45	Yes	Included
361	H140CL 60	10.54	10.24	9.85	9.45	9.08	8.74	484	-5.0	--	R-9968 60	R-9342 65	Yes	Included
Single Piston Part #														
350	WH140CL	10.28	9.99	9.61	9.21	8.85	8.52	454	-5.0	--	--	--	Yes	Included
355	WH140CL 30	10.41	10.11	9.73	9.33	8.97	8.63	469	-5.0	--	--	WR-9342 35	Yes	Included
357	WH140CL 40	10.45	10.15	9.77	9.37	9.00	8.67	474	-5.0	--	--	--	Yes	Included
361	WH140CL 60	10.54	10.24	9.85	9.45	9.08	8.74	484	-5.0	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: .120 dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 126

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H141CL	11.42	11.06	10.59	10.10	9.66	9.26	476	3.5	--	--	--	Yes	Included
355	H141CL 30	11.57	11.20	10.72	10.23	9.78	9.38	491	3.5	--	R-9968 30	R-9342 35	Yes	Included
357	H141CL 40	11.62	11.25	10.77	10.27	9.82	9.42	496	3.5	--	--	R-9342 45	Yes	Included
361	H141CL 60	11.71	11.34	10.86	10.36	9.91	9.50	506	3.5	--	R-9968 60	R-9342 65	Yes	Included
Single Piston Part #														
350	WH141CL	11.42	11.06	10.59	10.10	9.66	9.26	476	3.5	--	--	--	Yes	Included
355	WH141CL 30	11.57	11.20	10.72	10.23	9.78	9.38	491	3.5	--	--	WR-9342 35	Yes	Included
357	WH141CL 40	11.62	11.25	10.77	10.27	9.82	9.42	496	3.5	--	--	--	Yes	Included
361	WH141CL 60	11.71	11.34	10.86	10.36	9.91	9.50	506	3.5	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: .285 dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 126

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	H142CL	12.86	12.38	11.78	11.17	10.63	10.12	498	11.8	--	--	--	Yes	Included
355	H142CL 30	13.02	12.54	11.93	11.31	10.76	10.25	513	11.8	--	R-9968 30	R-9342 35	Yes	Included
357	H142CL 40	13.07	12.59	11.98	11.36	10.81	10.29	518	11.8	--	--	R-9342 45	Yes	Included
361	H142CL 60	13.18	12.70	12.08	11.46	10.90	10.38	528	11.8	--	R-9968 60	R-9342 65	Yes	Included
Single Piston Part #														
355	WH142CL 30	13.02	12.54	11.93	11.31	10.76	10.25	513	11.8	--	--	WR-9342 35	Yes	Included
357	WH142CL 40	13.07	12.59	11.98	11.36	10.81	10.29	518	11.8	--	--	--	Yes	Included
361	WH142CL 60	13.18	12.70	12.08	11.46	10.90	10.38	528	11.8	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: .098 dish; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H423DCP	9.91	--	9.33	8.99	8.67	8.38	512	-12.3	E-251K	R-9903	R-9343 5	Yes	Not Incl.
381	H423DCP 20	9.99	--	9.41	9.06	8.74	8.45	521	-12.3	E-251K 20	R-9903 20	R-9343 25	Yes	Not Incl.
383	H423DCP 30	10.03	--	9.45	9.10	8.78	8.48	526	-12.3	E-251K 30	R-9903 30	R-9343 35	Yes	Not Incl.
385	H423DCP 40	10.07	--	9.49	9.14	8.81	8.51	531	-12.3	E-251K 40	--	R-9343 45	Yes	Not Incl.
389	H423DCP 60	10.15	--	9.56	9.21	8.88	8.58	541	-12.3	E-251K 60	R-9903 60	R-9343 65	Yes	Not Incl.
Single Piston Part #														
377	WH423DCP	9.91	--	9.33	8.99	8.67	8.38	512	-12.3	WE-251K	--	--	Yes	Not Incl.
381	WH423DCP 20	9.99	--	9.41	9.06	8.74	8.45	521	-12.3	--	--	--	Yes	Not Incl.
383	WH423DCP 30	10.03	--	9.45	9.10	8.78	8.48	526	-12.3	WE-251K 30	--	WR-9343 35	Yes	Not Incl.
385	WH423DCP 40	10.07	--	9.49	9.14	8.81	8.51	531	-12.3	WE-251K 40	--	--	Yes	Not Incl.
389	WH423DCP 60	10.15	--	9.56	9.21	8.88	8.58	541	-12.3	WE-251K 60	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.548
 Deck Clearance (in): .037
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H345DCP	10.51	--	9.86	9.47	9.11	8.78	529	-6.9	E-251K	R-9903	R-9343 5	Yes	Not Incl.
381	H345DCP 20	10.60	--	9.94	9.55	9.19	8.86	539	-6.9	E-251K 20	R-9903 20	R-9343 25	Yes	Not Incl.
383	H345DCP 30	10.64	--	9.98	9.58	9.22	8.89	544	-6.9	E-251K 30	R-9903 30	R-9343 35	Yes	Not Incl.
385	H345DCP 40	10.68	--	10.02	9.62	9.26	8.93	549	-6.9	E-251K 40	--	R-9343 45	Yes	Not Incl.
389	H345DCP 60	10.77	--	10.10	9.70	9.34	9.00	559	-6.9	E-251K 60	R-9903 60	R-9343 65	Yes	Not Incl.
Single Piston Part #														
377	WH345DCP	10.51	--	9.86	9.47	9.11	8.78	529	-6.9	WE-251K	--	--	Yes	Not Incl.
381	WH345DCP 20	10.60	--	9.94	9.55	9.19	8.86	539	-6.9	--	--	--	Yes	Not Incl.
383	WH345DCP 30	10.64	--	9.98	9.58	9.22	8.89	544	-6.9	WE-251K 30	--	WR-9343 35	Yes	Not Incl.
385	WH345DCP 40	10.68	--	10.02	9.62	9.26	8.93	549	-6.9	WE-251K 40	--	--	Yes	Not Incl.
389	WH345DCP 60	10.77	--	10.10	9.70	9.34	9.00	559	-6.9	WE-251K 60	--	--	Yes	Not Incl.

Application Notes: DUROSHIELD® skirt coated piston; Use w/Lock Ring LR-63; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 149

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H669DCP	10.81	--	10.11	9.70	9.33	8.98	549	-6.9	E-921K	--	R-10603 5	Yes	Included
383	H669DCP 30	10.95	--	10.24	9.83	9.45	9.10	563	-6.9	E-921K 30	--	R-10603 35	Yes	Included
385	H669DCP 40	10.99	--	10.29	9.87	9.49	9.14	568	-6.9	E-921K 40	--	R-10603 45	Yes	Included
389	H669DCP 60	11.09	--	10.37	9.95	9.57	9.21	577	-6.9	E-921K 60	--	R-10603 65	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: Dish
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H890CP	8.95	8.75	8.49	8.21	7.95	7.71	504	-25.0	E-251K	R-9903	R-9343 5	Yes	Included
383	H890CP 30	9.06	8.86	8.59	8.31	8.05	7.80	519	-25.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
385	H890CP 40	9.10	8.90	8.63	8.34	8.08	7.83	524	-25.0	E-251K 40	--	R-9343 45	Yes	Included
389	H890CP 60	9.18	8.90	8.70	8.41	8.15	7.90	534	-25.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Single Piston Part

389	WH890CP 60	9.18	8.90	8.70	8.41	8.15	7.90	534	-25.0	WE-251K 60	--	--	Yes	Included
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Application Notes: CNC machined; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: Dish; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	H137CL 30	10.28	10.02	9.67	9.30	8.96	8.65	515	-12.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
385	H137CL 40	10.33	10.06	9.71	9.34	9.00	8.69	520	-12.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
389	H137CL 60	10.41	10.14	9.79	9.42	9.08	8.76	530	-12.0	R-8902 60	R-9902 60	R-9771 65	Yes	Included

Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston

Dome Shape: .110 dish; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H859CP	10.16	9.89	9.55	9.18	8.85	8.55	496	-12.0	E-251K	R-9903	R-9343 5	Yes	Included
381	H859CP 20	10.24	9.98	9.63	9.26	8.93	8.62	506	-12.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
383	H859CP 30	10.28	10.02	9.67	9.30	8.96	8.65	511	-12.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
385	H859CP 40	10.33	10.06	9.71	9.34	9.00	8.69	516	-12.0	E-251K 40	--	R-9343 45	Yes	Included
389	H859CP 60	10.41	10.14	9.79	9.42	9.08	8.76	526	-12.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Single Piston Part

377	WH859CP	10.16	9.89	9.55	9.18	8.85	8.55	496	-12.0	WE-251K	--	--	Yes	Included
381	WH859CP 20	10.24	9.98	9.63	9.26	8.93	8.62	506	-12.0	--	--	--	Yes	Included
383	WH859CP 30	10.28	10.02	9.67	9.30	8.96	8.65	511	-12.0	WE-251K 30	--	WR-9343 35	Yes	Included
385	WH859CP 40	10.33	10.06	9.71	9.34	9.00	8.69	516	-12.0	WE-251K 40	--	--	Yes	Included
389	WH859CP 60	10.41	10.14	9.79	9.42	9.08	8.76	526	-12.0	WE-251K 60	--	--	Yes	Included

Application Notes: Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H860CP	10.98	10.67	10.27	9.84	9.45	9.10	515	-5.0	E-251K	R-9903	R-9343 5	Yes	Included
381	H860CP 20	11.08	10.76	10.35	9.92	9.53	9.18	525	-5.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
383	H860CP 30	11.12	10.81	10.40	9.97	9.57	9.21	530	-5.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
385	H860CP 40	11.17	10.85	10.44	10.01	9.61	9.25	535	-5.0	E-251K 40	--	R-9343 45	Yes	Included
389	H860CP 60	11.26	10.94	10.53	10.09	9.69	9.33	545	-5.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Singe Piston Part

377	WH860CP	10.98	10.67	10.27	9.84	9.45	9.10	515	-5.0	WE-251K	--	--	Yes	Included
381	WH860CP 20	11.08	10.76	10.35	9.92	9.53	9.18	525	-5.0	--	--	--	Yes	Included
383	WH860CP 30	11.12	10.81	10.40	9.97	9.57	9.21	530	-5.0	WE-251K 30	--	WR-9343 35	Yes	Included
385	WH860CP 40	11.17	10.85	10.44	10.01	9.61	9.25	535	-5.0	WE-251K 40	--	--	Yes	Included
389	WH860CP 60	11.26	10.94	10.53	10.09	9.69	9.33	545	-5.0	WE-251K 60	--	--	Yes	Included

Application Notes: Lightweight pin. DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	H138CL 30	11.12	10.81	10.40	9.97	9.57	9.21	534	-5.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
385	H138CL 40	11.17	10.85	10.44	10.01	9.61	9.25	539	-5.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
389	H138CL 60	11.26	10.94	10.53	10.09	9.69	9.33	549	-5.0	R-8902 60	R-9902 60	R-9771 65	Yes	Included

Singe Piston Part

383	WH138CL 30	11.12	10.81	10.40	9.97	9.57	9.21	534	-5.0	--	WR-9902 30	WR-9771 35	Yes	Included
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Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: .100 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	H624CP 30	12.39	11.99	11.48	10.94	10.46	10.03	521	3.5	E-251K 30	R-9903 30	R-9343 35	Yes	Included
385	H624CP 40	12.44	12.04	11.52	10.99	10.51	10.07	526	3.5	E-251K 40	--	R-9343 45	Yes	Included
389	H624CP 60	12.55	12.14	11.62	11.08	10.60	10.15	536	3.5	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
383	WH624CP 30	12.39	11.99	11.48	10.94	10.46	10.03	521	3.5	WE-251K 30	--	WR-9343 35	Yes	Included
385	WH624CP 40	12.44	12.04	11.52	10.99	10.51	10.07	526	3.5	WE-251K 40	--	--	Yes	Included
389	WH624CP 60	12.55	12.14	11.62	11.08	10.60	10.15	536	3.5	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .200 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	H106CP 30	13.48	13.00	12.39	11.76	11.20	10.70	546	9.5	R-8902 30	R-9902 30	R-9771 35	Yes	Included
385	H106CP 40	13.53	13.05	12.44	11.81	11.25	10.74	551	9.5	R-8902 40	R-9902 40	R-9771 45	Yes	Included
389	H106CP 60	13.65	13.16	12.55	11.91	11.34	10.83	561	9.5	R-8902 60	R-9902 60	R-9771 65	Yes	Included
Single Piston Part #														
383	WH106CP 30	13.48	13.00	12.39	11.76	11.20	10.70	546	9.5	--	WR-9902 30	WR-9771 35	Yes	Included
385	WH106CP 40	13.53	13.05	12.44	11.81	11.25	10.74	551	9.5	--	--	--	Yes	Included
389	WH106CP 60	13.65	13.16	12.55	11.91	11.34	10.83	561	9.5	--	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; CNC machined; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)



Dome Shape: .200 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	H635CP 30	13.48	13.00	12.39	11.76	11.20	10.70	536	9.5	E-251K 30	R-9903 30	R-9343 35	Yes	Included
385	H635CP 40	13.53	13.05	12.44	11.81	11.25	10.74	541	9.5	E-251K 40	--	R-9343 45	Yes	Included
389	H635CP 60	13.65	13.16	12.55	11.91	11.34	10.83	551	9.5	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
383	WH635CP 30	13.48	13.00	12.39	11.76	11.20	10.70	536	9.5	WE-251K 30	--	WR-9343 35	Yes	Included
385	WH635CP 40	13.53	13.05	12.44	11.81	11.25	10.74	541	9.5	WE-251K 40	--	--	Yes	Included
389	WH635CP 60	13.65	13.16	12.55	11.91	11.34	10.83	551	9.5	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.130
 Deck Clearance (in): .020
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
381	8-H124CL 20	11.23	10.90	10.48	10.04	9.64	9.27	428	-5.0	--	R-9902 20	R-9771 25	Yes	Included
383	8-H124CL 30	11.28	10.95	10.53	10.08	9.68	9.31	432	-5.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
385	8-H124CL 40	11.32	11.00	10.57	10.13	9.72	9.35	436	-5.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
389	8-H124CL 60	11.42	11.09	10.66	10.21	9.81	9.43	444	-5.0	R-8902 60	R-9902 60	R-9771 65	Yes	Included

Application Notes: Matched set of 8; DUROSHIELD® skirt coated piston; Tapered lightweight pin

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: .240 dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.130
 Deck Clearance (in): .020
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	8-H134CL	13.97	13.45	12.79	12.11	11.50	10.96	432	11.8	R-8902	R-9902	R-9771 5	Yes	Included
381	8-H134CL 20	14.10	13.57	12.90	12.21	11.60	11.06	440	11.8	--	R-9902 20	R-9771 25	Yes	Included
383	8-H134CL 30	14.16	13.63	12.95	12.27	11.65	11.10	444	11.8	R-8902 30	R-9902 30	R-9771 35	Yes	Included
385	8-H134CL 40	14.22	13.68	13.01	12.32	11.70	11.15	448	11.8	R-8902 40	R-9902 40	R-9771 45	Yes	Included

Application Notes: CNC machined; Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston

400 Based Engines (4.125 Bore x 3.750 Stroke)

Dome Shape: .115 dish; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
400	H601P	10.65	10.38	10.02	9.64	9.29	8.97	597	-12.5	E-243K	--	R-5879 5	Yes	N/R
405	H601P 20	10.74	10.46	10.10	9.72	9.37	9.04	607	-12.5	E-243K 20	--	--	Yes	N/R
407	H601P 30	10.78	10.51	10.14	9.76	9.40	9.08	612	-12.5	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
409	H601P 40	10.83	10.55	10.18	9.80	9.44	9.11	617	-12.5	E-243K 40	--	--	Yes	N/R
413	H601P 60	10.92	10.63	10.27	9.88	9.52	9.19	627	-12.5	E-243K 60	R-10374 60	R-5879 65	Yes	N/R

Single Piston Part

400	WH601P	10.65	10.38	10.02	9.64	9.29	8.97	597	-12.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
405	WH601P 20	10.74	10.46	10.10	9.72	9.37	9.04	607	-12.5				Yes	N/R
407	WH601P 30	10.78	10.51	10.14	9.76	9.40	9.08	612	-12.5				Yes	N/R
409	WH601P 40	10.83	10.55	10.18	9.80	9.44	9.11	617	-12.5				Yes	N/R
413	WH601P 60	10.92	10.63	10.27	9.88	9.52	9.19	627	-12.5				Yes	N/R

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
400	H400CP	11.45	--	10.71	10.27	9.87	9.50	610	-6.0	E-243K	--	R-5879 5	Yes	N/R
405	H400CP 20	11.55	--	10.80	10.36	9.95	9.58	620	-6.0	E-243K 20	--	--	Yes	N/R
407	H400CP 30	11.59	--	10.84	10.40	9.99	9.62	625	-6.0	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
409	H400CP 40	11.64	--	10.89	10.44	10.03	9.66	630	-6.0	E-243K 40	--	--	Yes	N/R
413	H400CP 60	11.74	--	10.98	10.53	10.13	9.74	640	-6.0	E-243K 60	R-10374 60	R-5879 65	Yes	N/R

Single Piston Part

400	WH400CP	11.45	--	10.71	10.27	9.87	9.50	610	-6.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
405	WH400CP 20	11.55	--	10.80	10.36	9.95	9.58	620	-6.0				Yes	N/R
407	WH400CP 30	11.59	--	10.84	10.40	9.99	9.62	625	-6.0				Yes	N/R
409	WH400CP 40	11.64	--	10.89	10.44	10.03	9.66	630	-6.0				Yes	N/R
413	WH400CP 60	11.74	--	10.98	10.53	10.13	9.74	640	-6.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: .115 dish; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
400	H615CP	10.65	10.38	10.02	9.64	9.29	8.97	569	-12.5	E-243K	--	R-5879 5	Yes	Included
405	H615CP 20	10.74	10.46	10.10	9.72	9.37	9.04	574	-12.5	E-243K 20	--	--	Yes	Included
407	H615CP 30	10.78	10.51	10.14	9.76	9.40	9.08	579	-12.5	E-243K 30	R-10374 30	R-5879 35	Yes	Included
409	H615CP 40	10.83	10.55	10.18	9.80	9.44	9.11	584	-12.5	E-243K 40	--	--	Yes	Included
413	H615CP 60	10.92	10.63	10.27	9.88	9.52	9.19	594	-12.5	E-243K 60	R-10374 60	R-5879 65	Yes	Included

Single Piston Part

400	WH615CP	10.65	10.38	10.02	9.64	9.29	8.97	569	-12.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
405	WH615CP 20	10.74	10.46	10.10	9.72	9.37	9.04	574	-12.5				Yes	Included
407	WH615CP 30	10.78	10.51	10.14	9.76	9.40	9.08	579	-12.5				Yes	Included
409	WH615CP 40	10.83	10.55	10.18	9.80	9.44	9.11	584	-12.5				Yes	Included
413	WH615CP 60	10.92	10.63	10.27	9.88	9.52	9.19	594	-12.5				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

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Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
400	H616CP	11.45	--	10.71	10.27	9.87	9.50	578	-6.0	E-243K	--	R-5879 5	Yes	Included
405	H616CP 20	11.55	--	10.80	10.36	9.95	9.58	588	-6.0	E-243K 20	--	--	Yes	Included
407	H616CP 30	11.59	--	10.84	10.40	9.99	9.62	593	-6.0	E-243K 30	R-10374 30	R-5879 35	Yes	Included
409	H616CP 40	11.64	--	10.89	10.44	10.03	9.66	598	-6.0	E-243K 40	--	--	Yes	Included
413	H616CP 60	11.74	--	10.98	10.53	10.13	9.74	608	-6.0	E-243K 60	R-10374 60	R-5879 65	Yes	Included

Single Piston Part

400	WH616CP	11.45	--	10.71	10.27	9.87	9.50	578	-6.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	Included
405	WH616CP 20	11.55	--	10.80	10.36	9.95	9.58	588	-6.0		Yes	Included
407	WH616CP 30	11.59	--	10.84	10.40	9.99	9.62	593	-6.0		Yes	Included
409	WH616CP 40	11.64	--	10.89	10.44	10.03	9.66	598	-6.0		Yes	Included
413	WH616CP 60	11.74	--	10.98	10.53	10.13	9.74	608	-6.0		Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Dome Shape: .100 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
407	H107CP 30	13.05	12.63	12.09	11.53	11.02	10.56	576	3.5	R-8375 30	R-10375 30	R-10248 35	Yes	Included
409	H107CP 40	13.10	12.68	12.14	11.57	11.07	10.60	581	3.5	R-8375 40	R-10375 40	--	Yes	Included

Single Piston Part

407	WH107CP 30	13.05	12.63	12.09	11.53	11.02	10.56	576	3.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	Included
409	WH107CP 40	13.10	12.68	12.14	11.57	11.07	10.60	581	3.5		Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)



Dome Shape: .100 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
407	H623CP 30	13.05	12.63	12.09	11.53	11.02	10.56	564	3.5	E-243K 30	R-10374 30	R-5879 35	Yes	Included
409	H623CP 40	13.10	12.68	12.14	11.57	11.07	10.60	569	3.5	E-243K 40	--	--	Yes	Included
413	H623CP 60	13.21	12.78	12.24	11.67	11.16	10.69	579	3.5	E-243K 60	R-10374 60	R-5879 65	Yes	Included
Single Piston Part #														
407	WH623CP 30	13.05	12.63	12.09	11.53	11.02	10.56	564	3.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
409	WH623CP 40	13.10	12.68	12.14	11.57	11.07	10.60	569	3.5				Yes	Included
413	WH623CP 60	13.21	12.78	12.24	11.67	11.16	10.69	579	3.5				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: .200 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
407	H634CP 30	--	13.69	13.05	12.39	11.80	11.27	586	9.5	E-243K 30	R-10374 30	R-5879 35	Yes	Included
409	H634CP 40	--	13.75	13.10	12.44	11.85	11.31	591	9.5	E-243K 40	--	--	Yes	Included
413	H634CP 60	--	13.86	13.21	12.54	11.94	11.41	601	9.5	E-243K 60	R-10374 60	R-5879 65	Yes	Included
Single Piston Part #														
407	WH634CP 30	--	13.69	13.05	12.39	11.80	11.27	586	9.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
409	WH634CP 40	--	13.75	13.10	12.44	11.85	11.31	591	9.5				Yes	Included
413	WH634CP 60	--	13.86	13.21	12.54	11.94	11.41	601	9.5				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

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Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.130
 Deck Clearance (in): .020
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
407	8-H122CL 30	11.89	11.54	11.09	10.63	10.20	9.81	457	-5.0	R-8375 30	R-10375 30	R-10248 35	Yes	Included
413	8-H122CL 60	12.03	11.69	11.23	10.76	10.33	9.93	469	-5.0	R-8375 60	--	R-10248 65	Yes	Included

Application Notes: Matched set of 8; DUROSHIELD® skirt coated piston; Tapered lightweight pin

400 Based Engines Destroyed Using a 350 Crank (4.125 Bore x 3.480 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
372	H869CP	10.90	10.59	10.18	9.76	9.38	9.02	577	-5.0	E-243K	--	R-5879 5	Yes	Included
377	H869CP 30	11.03	10.72	10.31	9.88	9.49	9.13	592	-5.0	E-243K 30	R-10374 30	R-5879 35	Yes	Included
379	H869CP 40	11.08	10.76	10.35	9.92	9.53	9.17	597	-5.0	E-243K 40	--	--	Yes	Included
383	H869CP 60	11.17	10.85	10.44	10.00	9.61	9.25	607	-5.0	E-243K 60	R-10374 60	R-5879 65	Yes	Included

Application Notes: Lightweight pin; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines Destroyed Using a 350 Crank (4.125 Bore x 3.480 Stroke)



Dome Shape: .120 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	H870CP 30	12.28	11.88	11.37	10.84	10.37	9.93	602	3.5	E-243K 30	R-10374 30	R-5879 35	Yes	Included
379	H870CP 40	12.33	11.93	11.42	10.89	10.41	9.97	607	3.5	E-243K 40	--	--	Yes	Included
383	H870CP 60	12.43	12.03	11.51	10.98	10.49	10.05	617	3.5	E-243K 60	R-10374 60	R-5879 65	Yes	Included

Application Notes: Lightweight pin; DUROSHIELD® skirt coated piston



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	8-H123CL 30	11.03	10.72	10.31	9.88	9.49	9.13	470	-5.0	--	--	R-10202 35	Yes	Included
379	8-H123CL 40	11.08	10.76	10.35	9.92	9.53	9.17	484	-5.0	--	--	R-10202 45	Yes	Included

Application Notes: CNC machined; Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

400 Based Engines Destroyed Using a 350 Crank (4.125 Bore x 3.480 Stroke)

Dome Shape: .120 dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	8-H125CL 30	12.28	11.88	11.37	10.84	10.37	9.93	514	3.5	--	--	R-10202 35	Yes	Included

Application Notes: CNC machined; Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston

SPEED-PRO POWERFORGED Pistons

302 Based Engines (4.000 Bore x 3.000 Stroke)

Dome Shape: .430 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.805
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
306	L-2210AF 30	13.24	--	12.05	11.37	10.78	10.25	631	15.4	--	R-9968 30	R-9342 35	Yes	Included
311	L-2210AF 60	13.41	--	12.20	11.52	10.91	10.38	647	15.2	--	R-9968 60	R-9342 65	Yes	Included
Single Piston Part #														
306	WL-2210AF 30	13.24	--	12.05	11.37	10.78	10.25	631	15.4	--	--	WR-9342 35	Yes	Included
311	WL-2210AF 60	13.41	--	12.20	11.52	10.91	10.38	647	15.2	--	--	--	Yes	Included

Application Notes: 60 O/S has .410 dome; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

302 Based Engines (4.000 Bore x 3.000 Stroke)



Dome Shape: .350 dome
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.550
 Deck Clearance (in): .000
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
306	8LW-2503F 30	--	--	11.74	11.05	10.44	9.91	528	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
307	8LW-2503F 40	--	--	11.76	11.08	10.47	9.93	555	14.3	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
311	8LW-2503F 60	--	--	11.90	11.20	10.59	10.04	540	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; CNC machined; DUROSHIELD® skirt coated piston; Dome machining req'd

327 Based Engines (4.000 Bore x 3.250 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.671
 Deck Clearance (in): .029
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
327	L-2165F	9.57	--	8.96	8.60	8.27	7.97	600	-5.4	E-251K	R-9903	R-9343 5	Yes	N/R
330	L-2165F 20	9.65	--	9.03	8.67	8.34	8.03	609	-5.4	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
332	L-2165F 30	9.69	--	9.07	8.71	8.37	8.06	614	-5.4	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
333	L-2165F 40	9.73	--	9.11	8.74	8.41	8.10	619	-5.4	E-251K 40	--	R-9343 45	Yes	N/R
337	L-2165F 60	9.81	--	9.18	8.81	8.47	8.16	628	-5.4	E-251K 60	R-9903 60	R-9343 65	Yes	N/R

Single Piston Part

327	WL-2165F	9.57	--	8.96	8.60	8.27	7.97	600	-5.4	WE-251K	--	--	Yes	N/R
330	WL-2165F 20	9.65	--	9.03	8.67	8.34	8.03	609	-5.4	--	--	--	Yes	N/R
332	WL-2165F 30	9.69	--	9.07	8.71	8.37	8.06	614	-5.4	WE-251K 30	--	WR-9343 35	Yes	N/R
333	WL-2165F 40	9.73	--	9.11	8.74	8.41	8.10	619	-5.4	WE-251K 40	--	--	Yes	N/R
337	WL-2165F 60	9.81	--	9.18	8.81	8.47	8.16	628	-5.4	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

327 Based Engines (4.000 Bore x 3.250 Stroke)

Dome Shape: .125 dome; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.675
 Deck Clearance (in): .025
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
327	L-2166NF	11.06	--	10.23	9.74	9.31	8.92	576	5.3	E-251K	R-9903	R-9343 5	Yes	N/R
330	L-2166NF 20	11.15	--	10.31	9.82	9.39	8.99	585	5.3	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
332	L-2166NF 30	11.20	--	10.35	9.87	9.43	9.03	590	5.3	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
333	L-2166NF 40	11.24	--	10.40	9.91	9.46	9.06	595	5.3	E-251K 40	--	R-9343 45	Yes	N/R
337	L-2166NF 60	11.34	--	10.48	9.99	9.54	9.14	603	5.3	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
327	WL-2166NF	11.06	--	10.23	9.74	9.31	8.92	576	5.3	WE-251K	--	--	Yes	N/R
330	WL-2166NF 20	11.15	--	10.31	9.82	9.39	8.99	585	5.3	--	--	--	Yes	N/R
332	WL-2166NF 30	11.20	--	10.35	9.87	9.43	9.03	590	5.3	WE-251K 30	--	WR-9343 35	Yes	N/R
333	WL-2166NF 40	11.24	--	10.40	9.91	9.46	9.06	595	5.3	WE-251K 40	--	--	Yes	N/R
337	WL-2166NF 60	11.34	--	10.48	9.99	9.54	9.14	603	5.3	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Dish
 Con Rod Length (in): 5.800
 Compression Distance (in): 1.560
 Deck Clearance (in): .040
 Skirt Clearance (in): .0050

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
327	L-2441F	7.97	--	7.56	7.31	7.08	6.87	546	-21.1	E-251K	R-9903	R-9343 5	Yes	Included
332	L-2441F 30	8.06	--	7.65	7.40	7.17	6.95	561	-21.1	E-251K 30	R-9903 30	R-9343 35	Yes	Included
Single Piston Part #														
327	WL-2441F	7.97	--	7.56	7.31	7.08	6.87	546	-21.1	WE-251K	--	--	Yes	Included
332	WL-2441F 30	8.06	--	7.65	7.40	7.17	6.95	561	-21.1	WE-251K 30	--	WR-9343 35	Yes	Included

Application Notes: Supercharged or turbocharged; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

327 Based Engines (4.000 Bore x 3.250 Stroke)



Dome Shape: .350 dome
 Con Rod Length (in): 5.850
 Compression Distance (in): 1.550
 Deck Clearance (in): .000
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
332	8LW-2503F 30	--	--	12.63	11.89	11.23	10.65	528	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
333	8LW-2503F 40	--	--	12.66	11.91	11.26	10.68	555	14.3	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
337	8LW-2503F 60	--	--	12.81	12.05	11.38	10.79	540	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; CNC machined; DUROSHIELD® skirt coated piston; Dome machining req'd

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: Dish
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	L-2441F	8.71	--	8.24	7.96	7.70	7.46	546	-21.1	E-251K	R-9903	R-9343 5	Yes	Included
355	L-2441F 30	8.82	--	8.35	8.06	7.80	7.55	561	-21.1	E-251K 30	R-9903 30	R-9343 35	Yes	Included
Single Piston Part #														
350	WL-2441F	8.71	--	8.24	7.96	7.70	7.46	546	-21.1	WE-251K	--	--	Yes	Included
355	WL-2441F 30	8.82	--	8.35	8.06	7.80	7.55	561	-21.1	WE-251K 30	--	WR-9343 35	Yes	Included

Application Notes: Supercharged or turbocharged; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: Dish
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.550
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2603F 30	9.53	9.28	8.97	8.63	8.32	8.04	488	-10.9	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
360	LW-2603F 60	9.64	9.40	9.08	8.74	8.43	8.14	503	-10.9	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included
Single Piston Part #														
355	WLW-2603F 30	9.53	9.28	8.97	8.63	8.32	8.04	488	-10.9	--	WR-9902 30	--	Yes	Included
360	WLW-2603F 60	9.64	9.40	9.08	8.74	8.43	8.14	503	-10.9	--	--	--	Yes	Included

Application Notes: Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.550
 Deck Clearance (in): .035
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2505NF 30	10.20	9.92	9.55	9.17	8.82	8.49	521	-4.86	E-921K 30	--	R-10701 35	Yes	Included
356	LW-2505NF 40	10.24	9.96	9.59	9.20	8.85	8.53	525	-4.86	E-921K 40	--	R-10701 45	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.550
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	8LW-2505F 30	10.30	9.83	9.47	9.09	8.75	8.43	493	-5.9	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
360	8LW-2505F 60	10.43	9.95	9.58	9.20	8.85	8.53	508	-5.9	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.563
 Deck Clearance (in): .022
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 144

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	L-2256F	10.27	--	9.60	9.21	8.85	8.52	596	-6.1	E-251K	R-9903	R-9343 5	Yes	N/R
353	L-2256F 20	10.35	--	9.68	9.28	8.92	8.59	603	-6.1	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
355	L-2256F 30	10.40	--	9.72	9.32	8.96	8.62	607	-6.1	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
356	L-2256F 40	10.44	--	9.76	9.36	9.00	8.66	611	-6.1	E-251K 40	--	R-9343 45	Yes	N/R
360	L-2256F 60	10.53	--	9.85	9.44	9.07	8.73	618	-6.1	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
350	WL-2256F	10.27	--	9.60	9.21	8.85	8.52	596	-6.1	WE-251K	--	--	Yes	N/R
353	WL-2256F 20	10.35	--	9.68	9.28	8.92	8.59	603	-6.1	--	--	--	Yes	N/R
355	WL-2256F 30	10.40	--	9.72	9.32	8.96	8.62	607	-6.1	WE-251K 30	--	WR-9343 35	Yes	N/R
356	WL-2256F 40	10.44	--	9.76	9.36	9.00	8.66	611	-6.1	WE-251K 40	--	--	Yes	N/R
360	WL-2256F 60	10.53	--	9.85	9.44	9.07	8.73	618	-6.1	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.563
 Deck Clearance (in): .022
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 126

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2256F 30	10.40	--	9.72	9.32	8.96	8.62	554	-6.1	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
356	LW-2256F 40	10.44	--	9.76	9.36	9.00	8.66	559	-6.1	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
360	LW-2256F 60	10.53	--	9.85	9.44	9.07	8.73	566	-6.1	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included
Single Piston Part #														
355	WLW-2256F 30	10.40	--	9.72	9.32	8.96	8.62	554	-6.1	--	WR-9902 30	--	Yes	Included
356	WLW-2256F 40	10.44	--	9.76	9.36	9.00	8.66	559	-6.1	--	--	--	Yes	Included
360	WLW-2256F 60	10.53	--	9.85	9.44	9.07	8.73	566	-6.1	--	--	--	Yes	Included

Application Notes: Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.565
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	L-2490NF	10.66	--	9.93	9.51	9.12	8.77	478	-3.4	R-8902	R-9902	R-9401 5 (L)	Yes	Included
355	L-2490NF 30	10.79	--	10.06	9.63	9.24	8.88	490	-3.4	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
360	L-2490NF 60	10.93	--	10.19	9.75	9.36	8.99	503	-3.4	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included
Single Piston Part #														
355	WL-2490NF 30	10.79	--	10.06	9.63	9.24	8.88	490	-3.4	--	WR-9902 30	--	Yes	Included
360	WL-2490NF 60	10.93	--	10.19	9.75	9.36	8.99	503	-3.4	--	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .100 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	L-2304F	11.26	--	10.50	10.02	9.59	9.19	571	2.4	E-251K	R-9903	R-9343 5	Yes	N/R
355	L-2304F 30	11.40	--	10.63	10.15	9.71	9.31	583	2.4	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
360	L-2304F 60	11.55	--	10.77	10.27	9.83	9.43	597	2.4	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
350	WL-2304F	11.26	--	10.50	10.02	9.59	9.19	571	2.4	WE-251K	--	--	Yes	N/R
355	WL-2304F 30	11.40	--	10.63	10.15	9.71	9.31	583	2.4	WE-251K 30	--	WR-9343 35	Yes	N/R
360	WL-2304F 60	11.55	--	10.77	10.27	9.83	9.43	597	2.4	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: .100 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0040

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
356	LW-2304F 40	11.50	--	10.66	10.18	9.74	9.34	542	2.4	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston



Dome Shape: .220 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	L-2252YF 30	12.94	--	11.87	11.26	10.71	10.22	601	11.0	--	R-9968 30	R-9342 35	Yes	Included
356	L-2252YF 40	12.94	--	11.88	11.27	10.72	10.23	606	10.6	--	R-9968 40	R-9342 45	Yes	Included
360	L-2252YF 60	12.95	--	11.89	11.28	10.74	10.25	617	10.2	--	R-9968 60	R-9342 65	Yes	Included

Single Piston Part

355	WL-2252YF 30	12.94	--	11.87	11.26	10.71	10.22	601	11.0	--	--	WR-9342 35	Yes	Included
360	WL-2252YF 60	12.95	--	11.89	11.28	10.74	10.25	617	10.2	--	--	--	Yes	Included

Application Notes: 40 O/S has .213 dome; 60 O/S has .200 dome; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)

Dome Shape: .350 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.550
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	8LW-2503F 30	--	--	12.07	11.43	10.87	10.36	528	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
356	8LW-2503F 40	--	--	12.09	11.46	10.89	10.38	555	14.3	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
360	8LW-2503F 60	--	--	12.22	11.57	11.00	10.49	540	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; CNC machined; DUROSHIELD® skirt coated piston

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.250
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
360	8LW-2511F 60	10.23	--	9.58	9.20	8.85	8.53	415	-5.9	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.250
 Deck Clearance (in): .035
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2511NF 30	10.20	9.92	9.55	9.17	8.82	8.49	470	-4.86	E-921K 30	--	R-10701 35	Yes	Included
356	LW-2511NF 40	10.24	9.96	9.59	9.20	8.85	8.53	474	-4.86	E-921K 40	--	R-10701 45	Yes	Included
360	LW-2511NF 60	10.32	10.04	9.67	9.28	8.92	8.60	485	-4.86	E-921K 60	--	R-10701 65	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines (4.000 Bore x 3.480 Stroke)



Dome Shape: .100 dome
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.260
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2626F 30	11.46	--	10.63	10.15	9.71	9.31	472	2.4	E-921K 30	--	R-10603 35	Yes	Included
356	LW-2626F 40	11.51	--	10.68	10.19	9.75	9.35	477	2.4	E-921K 40	--	R-10603 45	Yes	Included
360	LW-2626F 60	11.61	--	10.77	10.27	9.83	9.43	486	2.4	E-921K 60	--	R-10603 65	Yes	Included

Single Piston Part

355	WLW-2626F 30	11.46	--	10.63	10.15	9.71	9.31	472	2.4	--	WR-9902 30	--	Yes	Included
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Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: .190 Dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.250
 Deck Clearance (in): .035
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	LW-2509NF 30	11.67	11.29	10.80	10.30	9.85	9.44	501	6.02	E-921K 30	--	R-10701 35	Yes	Included
356	LW-2509NF 40	11.71	11.34	10.85	10.34	9.89	9.48	505	6.02	E-921K 40	--	R-10701 45	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: .350 dome
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.250
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	8LW-2509F 30	--	--	12.07	11.43	10.87	10.36	453	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
360	8LW-2509F 60	--	--	12.22	11.57	11.00	10.74	465	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Based Engines Using An Offset Ground 350 Crank (4.000 Bore x 3.5625 Stroke) "3-9/16 Stroker"

Dome Shape: .350 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.550
 Deck Clearance (in): .000
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
363	8LW-2503F 30	--	--	13.74	12.93	12.21	11.57	528	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
365	8LW-2503F 40	--	--	13.78	12.96	12.25	11.61	555	14.3	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
369	8LW-2503F 60	--	--	13.93	13.10	12.37	11.73	540	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; CNC machined; DUROSHIELD® skirt coated piston; Dome machining req'd

Dome Shape: .350 dome
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.250
 Deck Clearance (in): .000
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
363	8LW-2509F 30	--	--	13.74	12.93	12.21	11.57	453	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
369	8LW-2509F 60	--	--	13.93	13.10	12.37	11.73	465	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Dome machining req'd; Tapered lightweight pin; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)



Dome Shape: Dish
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.560
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	L-2441F	9.31	--	8.80	8.50	8.22	7.96	546	-21.1	E-251K	R-9903	R-9343 5	Yes	Included
383	L-2441F 30	9.43	--	8.92	8.61	8.32	8.06	561	-21.1	E-251K 30	R-9903 30	R-9343 35	Yes	Included
Single Piston Part #														
377	WL-2441F	9.31	--	8.80	8.50	8.22	7.96	546	-21.1	WE-251K	--	--	Yes	Included
383	WL-2441F 30	9.43	--	8.92	8.61	8.32	8.06	561	-21.1	WE-251K 30	--	WR-9343 35	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.565
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	L-2490NF	11.40	--	10.63	10.17	9.75	9.37	478	-3.4	R-8902	R-9902	R-9401 5 (L)	Yes	Included
383	L-2490NF 30	11.55	--	10.76	10.30	9.88	9.49	490	-3.4	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
389	L-2490NF 60	11.70	--	10.90	10.43	10.01	9.62	503	-3.4	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included
Single Piston Part #														
383	WL-2490NF 30	11.55	--	10.76	10.30	9.88	9.49	490	-3.4	--	WR-9902 30	--	Yes	Included
389	WL-2490NF 60	11.70	--	10.90	10.43	10.01	9.62	503	-3.4	--	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.430
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
377	L-2491NF	11.40	--	10.63	10.17	9.75	9.37	465	-3.4	R-8902	R-9902	R-9401 5 (L)	Yes	Included
383	L-2491NF 30	11.55	--	10.76	10.30	9.88	9.49	477	-3.4	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
385	L-2491NF 40	11.58	--	10.79	10.33	9.91	9.52	481	-3.4	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
388	L-2491NF 60	11.70	--	10.90	10.43	10.01	9.62	490	-3.4	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included
Single Piston Part #														
383	WL-2491NF 30	11.55	--	10.76	10.30	9.88	9.49	477	-3.4	--	WR-9902 30	--	Yes	Included
388	WL-2491NF 60	11.70	--	10.90	10.43	10.01	9.62	490	-3.4	--	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .350 dome
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.550
 Deck Clearance (in): .035
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	8LW-2503F 30	--	--	12.93	12.24	11.63	11.09	528	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
385	8LW-2503F 40	--	--	12.95	12.27	11.66	11.11	555	14.3	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
388	8LW-2503F 60	--	--	13.09	12.39	11.78	11.22	540	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; Tapered lightweight pin; CNC machined; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.850
 Compression Distance (in): 1.250
 Deck Clearance (in): .050
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
360	8LW-2511F 60	10.56	10.28	9.92	9.54	9.18	8.86	415	-5.9	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston



Dome Shape: .350 dome
 Con Rod Length (in): 5.850
 Compression Distance (in): 1.250
 Deck Clearance (in): .050
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	8LW-2509F 30	--	--	12.38	11.76	11.20	10.69	453	14.3	R-8902 30	R-9902 30	R-9401 35 (L)	Yes	Included
388	8LW-2509F 60	--	--	12.53	11.90	11.33	10.82	465	14.3	R-8902 60	R-9902 60	R-9401 65 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston



Dome Shape: .115 Dish; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.125
 Deck Clearance (in): .025
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	LW-2617NF 30	9.65	9.41	9.11	8.79	8.49	8.21	442	-18.53	E-921K 30	--	R-10701 35	Yes	Included
385	LW-2617NF 40	9.69	9.45	9.15	8.82	8.53	8.25	446	-18.53	E-921K 40	--	R-10701 45	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

383 Stroker; 350 Engines Using a 400 Crank (4.000 Bore x 3.750 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.125
 Deck Clearance (in): .025
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	LW-2637NF 30	11.18	10.86	10.45	10.01	9.62	9.25	445	-4.86	E-921K 30	--	R-10701 35	Yes	Included
385	LW-2637NF 40	11.23	10.91	10.49	10.05	9.66	9.29	449	-4.86	E-921K 40	--	R-10701 45	Yes	Included
388	LW-2637NF 60	11.32	11.00	10.58	10.14	9.74	9.37	460	-4.86	E-921K 60	--	R-10701 65	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Dome Shape: .088 Dome; 2 reliefs
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.125
 Deck Clearance (in): .025
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 133



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
383	LW-2627NF 30	12.02	11.65	11.16	10.66	10.21	9.79	461	1.0	E-921K 30	--	R-10701 35	Yes	Included
385	LW-2627NF 40	12.07	11.70	11.21	10.71	10.25	9.84	465	1.0	E-921K 40	--	R-10701 45	Yes	Included
388	LW-2627NF 60	12.17	11.79	11.30	10.80	10.34	9.92	476	1.0	E-921K 60	--	R-10701 65	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

400 Based Engines (4.125 Bore x 3.750 Stroke)

Dome Shape: .083 dish; 4 reliefs
 Con Rod Length (in): 5.565
 Compression Distance (in): 1.555
 Deck Clearance (in): .030
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
406	L-2352F 30	10.53	--	9.91	9.55	9.21	8.90	620	-14.0	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
409	L-2352F 40	10.57	--	9.95	9.59	9.25	8.94	624	-14.0	E-243K 40	--	--	Yes	N/R
412	L-2352F 60	10.65	--	10.03	9.66	9.32	9.01	633	-14.0	E-243K 60	R-10374 60	R-5879 65	Yes	N/R

Single Piston Part

406	WL-2352F 30	10.53	--	9.91	9.55	9.21	8.90	620	-14.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
409	WL-2352F 40	10.57	--	9.95	9.59	9.25	8.94	624	-14.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)



Dome Shape: Dish
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
406	LW-2632F 30	9.54	--	9.05	8.75	8.47	8.21	504	-25.0	R-8375 30	R-10375 30	R-9346 35 (L)	Yes	Included
412	LW-2632F 60	9.66	--	9.16	8.85	8.57	8.31	519	-25.0	R-8375 60	--	R-9346 65 (L)	Yes	Included

Application Notes: Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston



Dome Shape: Dish
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.425
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 126

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
412	LW-2606F 60	10.50	10.24	9.90	9.54	9.21	8.90	550	-16.2	R-8375 60	--	R-9346 65 (L)	Yes	Included

Single Piston Part

406	WLW-2606F 30	10.38	10.12	9.78	9.43	9.10	8.80	535	-16.2	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
412	WLW-2606F 60	10.50	10.24	9.90	9.54	9.21	8.90	550	-16.2				Yes	Included

Application Notes: Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.430
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
406	8LW-2517F 30	11.80	11.46	11.02	10.56	10.14	9.76	513	-5.7	R-8375 30	R-10375 30	R-9346 35 (L)	Yes	Included

Application Notes: Matched set of 8; Lightweight; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

400 Based Engines (4.125 Bore x 3.750 Stroke)

Dome Shape: .150 dome
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.430
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
406	8LW-2515F 30	13.60	13.14	12.55	11.94	11.40	10.90	536	5.3	R-8375 30	R-10375 30	R-9346 35 (L)	Yes	Included

Application Notes: Matched set of 8; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

Dome Shape: Dish
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.125
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
409	LW-2629F 40	10.43	--	9.83	9.48	9.15	8.84	475	-16.2	--	--	R-10604 45	Yes	Included
412	LW-2629F 60	10.50	--	9.90	9.54	9.21	8.90	486	-16.2	--	--	R-10604 65	Yes	Included

Application Notes: Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston

400 Based Engines Destroyed Using a 350 Crank (4.125 Bore x 3.480 Stroke)

Dome Shape: .083 dish; 4 reliefs
 Con Rod Length (in): 5.700
 Compression Distance (in): 1.555
 Deck Clearance (in): .030
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.0	60.5	64.0	68.0	72.0	76.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
378	L-2352F 30	--	--	9.27	8.93	8.62	8.33	620	-14.0	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
379	L-2352F 40	--	--	9.31	8.97	8.65	8.36	624	-14.0	E-243K 40	--	--	Yes	N/R
Single Piston Part #														
378	WL-2352F 30	--	--	9.27	8.93	8.62	8.33	620	-14.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
379	WL-2352F 40	--	--	9.31	8.97	8.65	8.36	624	-14.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE ENGINE BEARINGS



Chevrolet Small Block - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
283; 327 Engines					
Rod Set					
	O.E. Replacement	8-2020CP	Overplated Copper-Lead Alloy		Std-10-20-30-40
	Competition Series	8-7065CH	Super Duty Alloy		Std-1-1X-10
	Competition Series	8-7065CHA	Super Duty Alloy	Dowel hole	Std-1-1X-10
	Competition Series	8-7195CH	Super Duty Alloy	Honda dimensions	Std-1-1X-10
	Competition Series	C8-7065CH	Super Duty Alloy	Coated	Std-1-10
	Competition Series	C8-7065CHA	Super Duty Alloy	Coated; Dowel hole	Std Only
Main Set					
	O.E. Replacement	994M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
Cam Set					
	O.E. Replacement; 1963 & Earlier	1145M	Babbitt	Full round design	Std Only
	O.E. Replacement; 1964 & Later	1235M	Babbitt	Full round design	Std-1-10
	Competition Series	2100M	H/D Babbitt	Full round design	Std Only
302; 305; 307; 350 Engines					
Rod Set					
	O.E. Replacement	8-2555CP	Overplated Copper-Lead Alloy		Std-1-10-20-30-40-50
	Competition Series	8-7095CH	Super Duty Alloy		Std-1-10-20-30
	Competition Series	8-7100CH	Super Duty Alloy	Chamfer	Std-1-1X-9-10-11-19-20-21-30
	Competition Series	8-7100CHA	Super Duty Alloy	Chamfer; Dowel hole	Std-1-1X-10
	Competition Series	8-7190CH	Super Duty Alloy	Quad 4 NASCAR	Std-1-1X-10
	Competition Series	8-7195CH	Super Duty Alloy	Honda dimensions	Std-1-1X-10
	Competition Series	C8-7100CH	Super Duty Alloy	Chamfer; Coated	Std-1-1X-10-20-30
	Competition Series	C8-7100CHA	Super Duty Alloy	Chamfer; Dowel hole; Coated	Std-10
	Competition Series	C8-7195CH	Super Duty Alloy	Honda dimensions; Coated	Std-1
Main Set					
	O.E. Replacement	4663M	Overplated Copper-Lead Alloy		Std-1-2-10-20-30-40-60
	Competition Series	139M	Super Duty Alloy	3/4 Groove	Std-1-1X-9-10-11-20-21-30
	Competition Series	C139M	Super Duty Alloy	3/4 Groove; Coated	Std-1-1X-10-20-30
Cam Set					
	O.E. Replacement	1235M	Babbitt	Full round design	Std-1-10
	Competition Series	2100M	H/D Babbitt	Full round design	Std Only
	Competition Series; Bowtie Blocks	2106M	H/D Babbitt	Full round design	Std Only
Pin Bushing					
		1834V20NH	Bronze	For floating pin conversion; No oil hole	
400 Engines					
Rod Set					
	O.E. Replacement	8-2555CP	Overplated Copper-Lead Alloy		Std-1-10-20-30-40-50
	Competition Series	8-7095CH	Super Duty Alloy		Std-1-10-20-30
	Competition Series	8-7100CH	Super Duty Alloy	Chamfer	Std-1-1X-9-10-11-19-20-21-30
	Competition Series	8-7100CHA	Super Duty Alloy	Chamfer; Dowel hole	Std-1-1X-10
	Competition Series	C8-7100CH	Super Duty Alloy	Chamfer; Coated	Std-1-1X-10-20-30
	Competition Series	C8-7100CHA	Super Duty Alloy	Chamfer; Dowel hole; Coated	Std-10
Main Set					
	O.E. Replacement	4926MA	A-Series aluminum bearings		Std-1-10-20-30
	Competition Series	140M	Super Duty Alloy	3/4 Groove	Std-1-1X-9-10-11-19-20
	Competition Series	C140M	Super Duty Alloy	3/4 Groove; Coated	Std-1-1X-10-20
Cam Set					
	O.E. Replacement	1235M	Babbitt	Full round design	Std-1-10
	Competition Series	2100M	H/D Babbitt	Full round design	Std Only

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
283; 302; 305; 327; 350; 400 Engines			
Oil Pump			
	O.E. Replacement	224-4146	
	High Volume	224-43469V	'93 & later; 3/4" inlet; Exc. Corvette; Street Performance
	High Volume	224-4143	Requires 224-6146E shaft
	High Pressure	224-4146A	Z-28 style pump

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OIL PUMPS AND ACCESSORIES

Chevrolet Small Block - cont'd.

PRODUCT	FEATURES	P/N	NOTES
283; 302; 305; 327; 350; 400 Engines - cont'd.			
Oil Pump Screen			
	O.E. Replacement	224-1146	'62-64; '67 Chevelle
	O.E. Replacement	224-1246	'65 & Up; Exc. Corvette; '67 Chevelle
	O.E. Replacement	224-14258	'93 & later; Exc. Corvette
	O.E. Replacement	224-14227	Corvette
Pump Shaft			
	O.E. Replacement	224-6146	Use w/Nylon shaft guide
	Heavy Duty Pump Shaft	224-6146E	w/Integral steel guide; For 224-4143 pump
	Shaft Guide	224-43343	Nylon



PERFORMANCE CAMS

283, 302, 305, 327, 350, 400 Engines

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1103R	KC-1103R	Pro-1500	Stock	1000-3500	194/204	268/278	.398	.420	112	41
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
		APPLICATION NOTES: CARB E.O. No. D-292-1								
CS-1150R		Pro-1500	Stock	1000-3500	194/204	268/278	.398	.420	104	57
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
CS-1107R		Pro-1500	Smooth	1200-3800	194/214	268/288	.398	.443	112	46
CS-1014R	KC-1014R	Pro-2000	Smooth	1500-4000	204/214	278/288	.420	.443	112	51
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
		APPLICATION NOTES: CARB E.O. No. D-292-1								
CS-1151R		Pro-2000	Good	1500-4000	204/214	278/288	.420	.443	110	55
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
CS-1104R	KC-1104R	Pro-2000	Smooth	1500-4000	209/209	273/273	.414	.414	110	45
CS-1105R	KC-1105R	Pro-2000	Smooth	1800-4400	209/216	283/286	.435	.455	112	51
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							
		APPLICATION NOTES: CARB E.O. No. D-292-1								
CS-1013R	KC-1013R	Pro-3000	Good	2000-4500	214/224	288/298	.442	.465	112	69
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-739R							
		RETAINER	VSR-7000R							
		LOCKS	VK-115R							

PERFORMANCE CAMS



Chevrolet Small Block - cont'd.

283, 302, 305, 327, 350, 400 Engines - cont'd.

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1106R	KC-1106R	Pro-3000	Good	2000-4500	214/224	288/298	.443	.465	112	61
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS APPLICATION NOTES: CARB E.O. No. D-292-1	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-1169R CS-184R		Pro-3000 Pro-3000	Good Good	2000-4500 2000-4500	218/218 218/218	292/292 295/295	.458 .429	.458 .429	110 110	64 75
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-179R	KC-179R	Pro-3000	Good	2200-5200	222/222	290/290	.447	.447	114	78
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS APPLICATION NOTES: 327-350HP; GM Part No. 3863151	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-1095R	KC-1095R	Pro-3000	Good	2200-5500	224/224	291/287	.450	.460	114	60
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS APPLICATION NOTES: 350-350HP LT-1; L82	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-1138R CS-1062R CS-1171R CS-112R CS-185R CS-1178R	KC-1138R KC-1062R KC-112R KC-185R KC-1178R	Pro-3000 Pro-3000 Pro-3000 Pro-3000 Pro-5000 Pro-5000	Good Fair Fair Rough Fair Rough	2200-5500 2200-5700 2500-6000 2800-6000 2200-5700 2500-6000	224/224 220/231 224/234 224/224 230/230 232/232	298/298 304/287 300/300 300/300 304/304 303/303	.465 .468 .465 .436 .453 .461	.465 .480 .488 .436 .453 .461	112 110 112 108 114 114	66 80 71 84 55 74
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-1168R	KC-1168R	Pro-5000	Rough	2500-6000	232/234	300/308	.488	.488	108	80
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-1590 VSR-7017R VK-315R	HT-817R (Race)						
CS-186R	KC-186R	Pro-5000	Rough	3000-6000	230/230	287/287	.480	.480	109	74
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-739R VSR-7000R VK-115R	HT-817R (Race)						
CS-187R CS-1146R	KC-187R KC-1146R	Pro-5000 Pro-5000	Rough Rough	3000-6500 3000-6500	244/244 244/254	318/318 318/328	.510 .510	.510 .533	108 112	94 91
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-817 (Std.) VS-1590 VSR-7017R VK-315R	HT-817R (Race)						

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Chevrolet Small Block - cont'd.

Marine 283, 305, 350, 400 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1043M		Marine	Good		202/213	269/284	.400	.410	110	58
Hydraulic		LIFTERS	HT-817 (Std.) HT-817R (Race)		APPLICATION NOTES: GM Nos. 340284; 6262944; Std. rotation; 198/200; 228/230 H.P. 305; 225 H.P. 327; 250/255, 260/270 H.P. 350					
283, 302, 305, 327, 350, 400 Engines										
CS-1079R	KC-1079R	Pro-2000	Smooth	1200-4500	198/210	273/288	.433	.462	112	57
CS-1080R	KC-1080R	Pro-3000	Good	1500-5000	210/215	288/284	.462	.470	110	68
Hydraulic Roller		LIFTERS	HT-2148 (Std.)		VALVE SPRING VS-739R					
		RETAINER	VSR-7000R		LOCKS VK-115R					
		APPLICATION NOTES: 1987-95 Engs.								
CS-1152R		Pro-3000	Fair	2000-5500	222/232	297/307	.479	.501	114	67
Hydraulic Roller		LIFTERS	HT-2148 (Std.)		VALVE SPRING VS-1590					
		RETAINER	VSR-7017R		LOCKS VK-315R					
		APPLICATION NOTES: 1987-95 Engs.; Requires Bronze distributor gear								
CS-1081R	KC-1081R	Pro-4000	Fair	2500-6000	230/230	306/306	.480	.480	108	90
Hydraulic Roller		LIFTERS	HT-2148 (Std.)		VALVE SPRING VS-739R					
		RETAINER	VSR-7000R		LOCKS VK-115R					
		APPLICATION NOTES: 1987-95 Engs.								
CS-113R		Pro-4000	Fair	2800-5800	228/230	270/270	.395	.401	110	66
Mechanical		LIFTERS	AT-992 (Std.)		VALVE SPRING VS-739R					
		RETAINER	VSR-7000R		LOCKS VK-115R					
		APPLICATION NOTES: 283 w/Fuel injection; GM Part No. 3736097 "Duntov"								
CS-1226R	KC-1226R	Pro-5000	Rough	3000-6000	244/254	289/299	.495	.518	106	91
Mechanical		LIFTERS	AT-992 (Std.)		VALVE SPRING VS-1590					
		RETAINER	VSR-7017R		LOCKS VK-315R					
CS-1145R	KC-1145R	Pro-5000	Rough	3000-6500	242/254	295/310	.459	.485	116	90
Mechanical		LIFTERS	AT-992 (Std.)		VALVE SPRING VS-1590					
		RETAINER	VSR-7017R		LOCKS VK-315R					
		APPLICATION NOTES: 350-370 HP LT-1; GM Part No. 3972178								
CS-118R	KC-118R	Pro-5000	Rough	3400-6800	254/254	295/295	.485	.485	114	86
Mechanical		LIFTERS	AT-992 (Std.)		VALVE SPRING VS-1590					
		RETAINER	VSR-7017R		LOCKS VK-315R					
		APPLICATION NOTES: 327-365 HP; GM Part No. 3849346								

PERFORMANCE CAMS



Chevrolet Small Block - cont'd.

283, 302, 305, 327, 350, 400 Engines - cont'd.

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1227R CS-189R	KC-1227R KC-189R	Pro-5000 Pro-5000	Rough Rough	3700-6700 4500-8000	254/264 274/274	316/326 312/312	.518 .557	.540 .557	106 110	109 92
Mechanical		LIFTERS VALVE SPRING RETAINER LOCKS	AT-992 (Std.) VS-1590 VSR-7017R VK-315R							
CS-1127R		Pro-5000	Rough	3500-6700	256/258	292/296	.630	.630	106	
Mechanical Roller		LIFTERS RETAINER LOCKS	AT-6027RA (Race) VSR-7020 VK-274 APPLICATION NOTES: Steel; Requires bronze distributor gear							

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
283, 302, 305, 327, 350, 400 Engines							
Exhaust							
	1.500	V-1199	.3415	4.928	45	21-4N	1967-70; Exc. Hi-Perf.
	1.500	V-1904	.3414	4.928	45	21-4N	1971-91; Exc. Hi-Perf., Corvette, Police
	1.600	V-1755	.3415	4.903	45	21-4N	1967-76; Hi-Perf.
	1.600	V-4231	.3407	4.900	45	21-4N	1967-76; Hi-Perf.
Intake							
	1.720	V-1927	.3413	4.917	45	SIL-1	
	1.839	V-2143	.3410	4.912	45	SIL-1	
	1.940	V-1612	.3410	4.880	45	SIL-1	1967-70; Exc. Hi-Perf.
	1.940	V-1926	.3414	4.880	45	SIL-1	1971-91; Exc. Hi-Perf., Corvette, Police
	2.020	V-1756	.3415	4.880	45	SIL-1	1967-76; Hi-Perf.
POWERFORGED Stainless Steel Valve							
Exhaust							
	1.500	V-8000R	.3415	4.915	45	21-2N	
	1.600	V-8001R	.3415	4.915	45	21-4N	
	1.600	V-8001R 100	.3415	5.016	45	21-4N	
Intake							
	1.937	V-8002R	.3415	4.915	45	21-4N	
	2.020	V-8003R	.3415	4.915	45	21-4N	
	2.020	V-8003R 100	.3415	5.015	45	21-2N	
	2.055	V-8004R	.3415	4.915	45	21-2N	
	2.055	V-8004R 100	.3415	5.015	45	21-2N	
POWERFORGED Competition Series Stainless Steel Valve							
Exhaust							
	1.600	V-2051R	.3415	4.905	45	21-2N	
Intake							
	1.940	V-2057R	.3414	4.897	45	422	
	2.020	V-2054R	.3415	4.897	45	422	
	2.080	V-2289R	.3413	4.956	45	SIL-1	
POWERFORGED Competition Series Stainless Steel Valve - With High Flow Undercut Stem							
Exhaust							
	1.500	V-2477R	.3415	4.911	45	21-2N	
	1.600	V-2480R	.3415	5.012	45	21-2N	
	1.600	V-2478R	.3415	4.912	45	21-2N	

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Chevrolet Small Block - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
POWERFORGED Competition Series Stainless Steel Valve - With High Flow Undercut Stem							
283, 302, 305, 327, 350, 400 Engines							
Intake							
	1.940	V-2473R	.3410	4.898	45	422	
	2.020	V-2474R	.3410	4.898	45	422	
	2.050	V-2475R	.3413	4.942	45	422	
	2.080	V-2476R	.3413	4.956	45	422	
Valve Guide - Manganese Bronze							
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D.
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2005	.3080				Rubber/PTFE; .500 guide dia.
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining
		ST-2022R	.3120				PTFE; .500 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
283; 302; 305; 327; 350; 400 Engines				
Guide Plates				
	MR-1891	Stepped	For 5/16 Push Rods	
	MR-1892	Stepped	For 3/8 Push Rods	
	MR-1896	Flat	For 5/16 Push Rods	
	MR-1930	Flat	For 3/8 Push Rods	
Push Rods				
	RP-3264R	Hardened Chrome Moly	5/16 dia.	For "retro-fit" hydraulic roller cam installations
	RP-3212R	Hardened Chrome Moly	5/16 dia.	Stock length
	RP-3212R 100	Hardened Chrome Moly	5/16 dia.	+ .100 in length
	RP-3212R 150	Hardened Chrome Moly	5/16 dia.	+ .150 in length
	RP-3212R 200	Hardened Chrome Moly	5/16 dia.	+ .200 in length
	RP-7001R	Hardened Chrome Moly; One Piece	5/16 dia.	Stock length
	RP-7001R 100	Hardened Chrome Moly; One Piece	5/16 dia.	.060 wall; +.100 in length
	RP-7001R 150	Hardened Chrome Moly; One Piece	5/16 dia.	.060 wall; +.150 in length
	RP-7001R 200	Hardened Chrome Moly; One Piece	5/16 dia.	.060 wall; +.200 in length
	RP-7500R 100	Hardened Chrome Moly; One Piece	5/16 dia.	.080 wall; +.100 in length
	RP-7500R 150	Hardened Chrome Moly; One Piece	5/16 dia.	.080 wall; +.150 in length
	RP-7500R 200	Hardened Chrome Moly; One Piece	5/16 dia.	.080 wall; +.200 in length
Push Rod Set				
	RP-5000RK	Hardened; Black Oxide Coated	5/16 dia.	Flat tappet cams; Std. length
	RP-5000RK 100	Hardened; Black Oxide Coated	5/16 dia.	Flat tappet cams; +.100 in length
Rocker Arms				
	R-1022R	Stamped Long Slot	1.5 Ratio	1987 & newer Engs. w/Center bolt valve covers
	R-1023R	Stamped Long Slot	1.6 Ratio	1987 & newer Engs. w/Center bolt valve covers
	R-865R	Stamped Long Slot	1.5 Ratio	1986 & earlier Engs.
	R-952R	Stamped Long Slot	1.6 Ratio	1986 & earlier Engs.
	R-1024R	Stamped Steel Roller	1.5 Ratio	1986 & earlier Engs.
	R-1025R	Stamped Steel Roller	1.6 Ratio	1986 & earlier Engs.
	RR-7000R	Aluminum Roller	1.5 Ratio	Requires 3/8 H/D screw-in studs
	RR-7001R	Aluminum Roller	1.5 Ratio	Requires 7/16 H/D screw-in studs
	RR-7002R	Aluminum Roller	1.6 Ratio	Requires 3/8 H/D screw-in studs
	RR-7003R	Aluminum Roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
	RR-7020R	Stainless Steel Roller	1.5 Ratio	Requires 3/8 H/D screw-in studs
	RR-7022R	Stainless Steel Roller	1.5 Ratio	Requires 7/16 H/D screw-in stud
	RR-7023R	Stainless Steel Roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
Rocker Arm Pivot Ball				
	MR-1822	4 Groove		Anti-gall

VALVETRAIN COMPONENTS



Chevrolet Small Block - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
283; 302; 305; 327; 350; 400 Engines - cont'd.				
Rocker Adjustment Locks				
	MR-1858PL	3/8 Stud Diameter		For roller rockers
	MR-1860PL	3/8 Stud Diameter		For stock style ball pivot rockers
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1752	.003 Oversize Press-In		For stock rockers
	MR-1863RS	3/8 H/D Screw-In		For stock style ball pivot or roller rockers; Polylocks
	MR-1865RS	3/8 H/D Screw-In		For stock style ball pivot rockers
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth
	MR-1868RS	7/16 - 14 mounting threads; 7/16 - 20 stud threads		Special universal rocker arm stud
	MR-1910RS	7/16 H/D Screw-In		For roller rockers; .725 head end depth
Complete Timing Sets				
	CTS-1100NR	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam
	CTS-1100R	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam; When depleted use CTS-1100NR
	CTS-1145R	Performance Roller; .250" Double Roller	3 Keyway	Factory roller cam
	CTS-3500TX9R	Billet Roller; .250" Double Roller	9 Keyway	Incl. roller thrust brg.; Exc. Factory roller cam
	CTS-3545X9R	Billet Roller; .250" Double Roller	9 Keyway	Factory roller cam
	CTS-3600TX9R	Competition Roller; Premium .250" Double Roller	9 Keyway	Incl. roller thrust brg.; Exc. Factory roller cam
	CTS-3645X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	Factory roller cam

PERFORMANCE PISTONS



Chevrolet Big Block

SPEED-PRO Hypereutectic Piston Sets with Rings

454 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH625CP 30	Hypereutectic	H625CP	8	30-40-60
		E-233K	1	
COMPRESSION RATIO: 8.5:1 w/107cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston				

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH426CP 30	Hypereutectic	H426CP	8	30-40-60
		E-233K	1	
COMPRESSION RATIO: 9.37:1 w/107cc heads DOME DESIGN: .100 dome; 1 relief FEATURES: DUROSHIELD® skirt coated piston				

SPEED-PRO POWERFORGED Piston Sets with Rings

396 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2240NF 30	POWERFORGED	L-2240NF	8	30-60
		E-243K	1	
COMPRESSION RATIO: 9.09:1 w/107cc heads DOME DESIGN: .182 dome FEATURES: DUROSHIELD® skirt coated piston				

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Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Piston Sets with Rings				
454 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2399NF 30	POWERFORGED	L-2399NF E-233K	8 1	30-60
COMPRESSION RATIO: 9.7:1 w/107cc heads DOME DESIGN: .095 dome FEATURES: DUROSHIELD® skirt coated piston				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2465F 30	POWERFORGED	L-2465F E-233K	8 1	30-60
COMPRESSION RATIO: 10.68:1 w/107cc heads DOME DESIGN: .226 dome FEATURES: DUROSHIELD® skirt coated piston. 60 oversize has .215 dome				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2377F 30	POWERFORGED	L-2377F E-233K	8 1	30-40-60
COMPRESSION RATIO: 8.36:1 w/107cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston				

SPEED-PRO Hypereutectic Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)

Dome Shape: Flat; 2 reliefs
Con Rod Length (in): 6.135
Compression Distance (in): 1.640
Deck Clearance (in): .025
Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
Pin Style: Press or Float ▲
Pin Diameter (in): 0.990
Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	H625CP	8.77	8.40	8.26	7.86	7.75	7.52	641	-2.0	E-233K	R-9905	R-9590 5	Yes	Included
458	H625CP 20	8.84	8.47	8.32	7.92	7.81	7.57	651	-2.0	E-233K 20	--	--	Yes	Included
461	H625CP 30	8.88	8.50	8.36	7.95	7.84	7.60	656	-2.0	E-233K 30	R-9905 30	R-9590 35	Yes	Included
463	H625CP 40	8.91	8.54	8.39	7.98	7.87	7.63	661	-2.0	E-233K 40	--	--	Yes	Included
467	H625CP 60	8.98	8.60	8.46	8.04	7.94	7.69	671	-2.0	E-233K 60	R-9905 60	R-9590 65	Yes	Included
476	H625CP 100	9.13	8.74	8.59	8.17	8.06	7.81	691	-2.0	E-424K 30	--	R-9224 35	Yes	Included
Single Piston Part #														
454	WH625CP	8.77	8.40	8.26	7.86	7.75	7.52	641	-2.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
458	WH625CP 20	8.84	8.47	8.32	7.92	7.81	7.57	651	-2.0				Yes	Included
461	WH625CP 30	8.88	8.50	8.36	7.95	7.84	7.60	656	-2.0				Yes	Included
463	WH625CP 40	8.91	8.54	8.39	7.98	7.87	7.63	661	-2.0				Yes	Included
467	WH625CP 60	8.98	8.60	8.46	8.04	7.94	7.69	671	-2.0				Yes	Included
476	WH625CP 100	9.13	8.74	8.59	8.17	8.06	7.81	691	-2.0				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO Hypereutectic Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)



Dome Shape: .100 dome; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	H426CP	9.72	9.26	9.08	8.58	8.46	8.17	659	10.5	E-233K	R-9905	R-9590 5	Yes	Included
458	H426CP 20	9.80	9.33	9.15	8.65	8.52	8.23	669	10.5	E-233K 20	--	--	Yes	Included
461	H426CP 30	9.84	9.37	9.19	8.69	8.56	8.27	674	10.5	E-233K 30	R-9905 30	R-9590 35	Yes	Included
463	H426CP 40	9.88	9.41	9.22	8.72	8.59	8.30	679	10.5	E-233K 40	--	--	Yes	Included
467	H426CP 60	9.96	9.48	9.30	8.79	8.66	8.36	689	10.5	E-233K 60	R-9905 60	R-9590 65	Yes	Included
476	H426CP 100	10.11	9.63	9.44	8.93	8.79	8.49	709	10.5	E-424K 30	--	R-9224 35	Yes	Included

Singe Piston Part

454	WH426CP	9.72	9.26	9.08	8.58	8.46	8.17	659	10.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	Included
458	WH426CP 20	9.80	9.33	9.15	8.65	8.52	8.23	669	10.5		Yes	Included
461	WH426CP 30	9.84	9.37	9.19	8.69	8.56	8.27	674	10.5		Yes	Included
463	WH426CP 40	9.88	9.41	9.22	8.72	8.59	8.30	679	10.5		Yes	Included
467	WH426CP 60	9.96	9.48	9.30	8.79	8.66	8.36	689	10.5		Yes	Included
476	WH426CP 100	10.11	9.63	9.44	8.93	8.79	8.49	709	10.5		Yes	Included

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: .230 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	H693CP	10.78	10.20	9.97	9.37	9.21	8.87	708	22.0	E-233K	R-9905	R-9590 5	Yes	Included
458	H693CP 20	10.86	10.28	10.05	9.44	9.29	8.94	718	22.0	E-233K 20	--	--	Yes	Included
461	H693CP 30	10.91	10.32	10.09	9.48	9.32	8.97	723	22.0	E-233K 30	R-9905 30	R-9590 35	Yes	Included
463	H693CP 40	10.95	10.36	10.13	9.52	9.36	9.01	728	22.0	E-233K 40	--	--	Yes	Included
467	H693CP 60	11.04	10.44	10.22	9.59	9.43	9.08	738	20.0	E-233K 60	R-9905 60	R-9590 65	Yes	Included
476	H693CP 100	11.21	10.61	10.38	9.75	9.58	9.22	758	20.0	E-424K 30	--	R-9224 35	Yes	Included

Singe Piston Part

454	WH693CP	10.78	10.20	9.97	9.37	9.21	8.87	708	22.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.	Yes	Included
458	WH693CP 20	10.86	10.28	10.05	9.44	9.29	8.94	718	22.0		Yes	Included
461	WH693CP 30	10.91	10.32	10.09	9.48	9.32	8.97	723	22.0		Yes	Included
463	WH693CP 40	10.95	10.36	10.13	9.52	9.36	9.01	728	22.0		Yes	Included
467	WH693CP 60	11.04	10.44	10.22	9.59	9.43	9.08	738	20.0		Yes	Included
476	WH693CP 100	11.21	10.61	10.38	9.75	9.58	9.22	758	20.0		Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; 60 and 100 O/S have .210 dome

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Chevrolet Big Block - cont'd.

SPEED-PRO Hypereutectic Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)

Dome Shape: .230 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
461	H118CP 30	10.91	10.32	10.09	9.48	9.32	8.97	725	22.0	--	R-9904 30	R-9745 35	Yes	Included
467	H118CP 60	11.04	10.44	10.22	9.59	9.43	9.08	740	20.0	--	R-9904 60	R-9745 65	Yes	Included

Single Piston Part

461	WH118CP 30	10.91	10.32	10.09	9.48	9.32	8.97	725	22.0	--	--	--	Yes	Included
467	WH118CP 60	11.04	10.44	10.22	9.59	9.43	9.08	740	20.0	--	WR-9904 60	--	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined; 60 O/S has .210 dome; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .340 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	H581CP	11.67	10.99	10.73	10.02	9.84	9.44	725	33.0	E-233K	R-9905	R-9590 5	Yes	Included
458	H581CP 20	12.15	11.41	11.13	10.37	10.18	9.75	735	33.0	E-233K 20	--	--	Yes	Included
461	H581CP 30	12.20	11.46	11.17	10.41	10.22	9.79	740	33.0	E-233K 30	R-9905 30	R-9590 35	Yes	Included
463	H581CP 40	12.25	11.50	11.22	10.45	10.26	9.83	745	33.0	E-233K 40	--	--	Yes	Included
467	H581CP 60	11.96	11.25	10.98	10.26	10.08	9.66	755	30.5	E-233K 60	R-9905 60	R-9590 65	Yes	Included
476	H581CP 100	12.54	11.78	11.49	10.70	10.51	10.06	775	30.5	E-424K 30	--	R-9224 35	Yes	Included

Single Piston Part

454	WH581CP	11.67	10.99	10.73	10.02	9.84	9.44	725	33.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
458	WH581CP 20	12.15	11.41	11.13	10.37	10.18	9.75	735	33.0				Yes	Included
461	WH581CP 30	12.20	11.46	11.17	10.41	10.22	9.79	740	33.0				Yes	Included
463	WH581CP 40	12.25	11.50	11.22	10.45	10.26	9.83	745	33.0				Yes	Included
467	WH581CP 60	11.96	11.25	10.98	10.26	10.08	9.66	755	30.5				Yes	Included
476	WH581CP 100	12.54	11.78	11.49	10.70	10.51	10.06	775	30.5				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; 60 and 100 O/S have .300 dome

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO Hypereutectic Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)



Dome Shape: .340 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
461	H110CP 30	12.13	11.40	11.12	10.37	10.17	9.75	691	33.0	--	R-9904 30	R-9745 35	Yes	Included
467	H110CP 60	11.89	11.20	10.93	10.22	10.03	9.63	703	30.5	--	R-9904 60	R-9745 65	Yes	Included
Single Piston Part #														
461	WH110CP 30	12.13	11.40	11.12	10.37	10.17	9.75	691	33.0	--	--	--	Yes	Included
467	WH110CP 60	11.89	11.20	10.93	10.22	10.03	9.63	703	30.5	--	WR-9904 60	--	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston; CNC machined; 60 O/S has .300 dome; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

454 Based Engines 4.250" Stroker Combinations (4.250" Bore)



Dome Shape: .100 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.525
 Deck Clearance (in): .015
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
489	H552CP 30	10.62	10.10	9.90	9.34	9.20	8.88	633	11.2	E-233K 30	R-9905 30	R-9590 35	Yes	Included
496	H552CP 60	10.75	10.22	10.02	9.45	9.31	8.98	651	11.2	E-233K 60	R-9905 60	R-9590 65	Yes	Included
506	H552CP 100	10.93	10.39	10.18	9.61	9.46	9.13	675	11.2	E-424K 30	--	R-9224 35	Yes	Included
Single Piston Part #														
489	WH552CP 30	10.62	10.10	9.90	9.34	9.20	8.88	633	11.2	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
496	WH552CP 60	10.75	10.22	10.02	9.45	9.31	8.98	651	11.2				Yes	Included
506	WH552CP 100	10.93	10.39	10.18	9.61	9.46	9.13	675	11.2				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Chevrolet Big Block - cont'd.

SPEED-PRO Hypereutectic Pistons

454 Based Engines 4.250" Stroker Combinations (4.250" Bore)

Dome Shape: .245 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.525
 Deck Clearance (in): .015
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
496	H603CP 60	11.82	11.17	10.92	10.25	10.07	9.69	677	21.0	E-233K 60	R-9905 60	R-9590 65	Yes	Included
506	H603CP 100	12.02	11.36	11.10	10.41	10.24	9.84	701	21.0	E-424K 30	--	R-9224 35	Yes	Included
Single Piston Part #														
496	WH603CP 60	11.82	11.17	10.92	10.25	10.07	9.69	677	21.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
506	WH603CP 100	12.02	11.36	11.10	10.41	10.24	9.84	701	21.0				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

502 Based Engines (4.466 Bore x 4.000 Stroke)

Dome Shape: .100 dome; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0015

Rings: 2.0MM, 1.5MM, 4.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
502	H144CP	10.31	9.83	9.64	9.13	8.99	8.70	709	6.2	E-648K	--	R-10575 5	Yes	Included
509	H144CP 30	10.43	9.94	9.75	9.23	9.10	8.79	773	6.2	--	--	--	Yes	Included
511	H144CP 60	10.55	10.05	9.86	9.34	9.20	8.90	788	6.2	--	--	--	Yes	Included
Single Piston Part #														
509	WH144CP 30	10.43	9.94	9.75	9.23	9.10	8.79	773	6.2	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

396 Based Engines (4.094 Bore x 3.766 Stroke)



Dome Shape: .182 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.760
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
396	L-2240NF	7.95	7.61	7.48	7.11	7.02	--	703	21.0	E-232K	--	--	Yes	N/R
402	L-2240NF 30	8.05	7.70	7.57	7.20	7.10	--	718	21.0	E-232K 30	--	R-9210 35 (L)	Yes	N/R
404	L-2240NF 40	8.08	7.73	7.60	7.23	7.13	--	723	21.0	E-232K 40	--	--	Yes	N/R
408	L-2240NF 60	8.15	7.80	7.66	7.29	7.19	--	733	21.0	E-232K 60	--	R-9210 65 (L)	Yes	N/R
Single Piston Part #														
396	WL-2240NF	7.95	7.61	7.48	7.11	7.02	--	703	21.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
402	WL-2240NF 30	8.05	7.70	7.57	7.20	7.10	--	718	21.0				Yes	N/R
404	WL-2240NF 40	8.08	7.73	7.60	7.23	7.13	--	723	21.0				Yes	N/R
408	WL-2240NF 60	8.15	7.80	7.66	7.29	7.19	--	733	21.0				Yes	N/R

Application Notes: w/Piston dome removed; DUROSHIELD® skirt coated piston



Dome Shape: .182 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.760
 Deck Clearance (in): .025
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
396	L-2240NF	9.48	8.98	8.78	8.26	8.13	7.83	703	21.0	E-232K	--	--	Yes	N/R
402	L-2240NF 30	9.59	9.09	8.89	8.36	8.23	7.92	718	21.0	E-232K 30	--	R-9210 35 (L)	Yes	N/R
404	L-2240NF 40	9.63	9.12	8.93	8.40	8.26	7.96	723	21.0	E-232K 40	--	--	Yes	N/R
408	L-2240NF 60	9.71	9.20	9.00	8.47	8.33	8.02	733	21.0	E-232K 60	--	R-9210 65 (L)	Yes	N/R
Single Piston Part #														
396	WL-2240NF	9.48	8.98	8.78	8.26	8.13	7.83	703	21.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
402	WL-2240NF 30	9.59	9.09	8.89	8.36	8.23	7.92	718	21.0				Yes	N/R
404	WL-2240NF 40	9.63	9.12	8.93	8.40	8.26	7.96	723	21.0				Yes	N/R
408	WL-2240NF 60	9.71	9.20	9.00	8.47	8.33	8.02	733	21.0				Yes	N/R

Application Notes: 1965-69 325/350HP; Closed chamber heads; DUROSHIELD® skirt coated piston

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Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

396 Based Engines (4.094 Bore x 3.766 Stroke)

Dome Shape: .335 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.765
 Deck Clearance (in): .020
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
402	L-2242NF 30	--	--	10.58	--	--	--	668	38.3	E-232K 30	--	R-9210 35 (L)	Yes	N/R
404	L-2242NF 40	--	--	10.58	--	--	--	672	37.9	E-232K 40	--	--	Yes	N/R
408	L-2242NF 60	--	--	10.58	--	--	--	681	37.1	E-232K 60	--	R-9210 65 (L)	Yes	N/R
Single Piston Part #														
402	WL-2242NF 30	--	--	10.58	--	--	--	668	38.3	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
404	WL-2242NF 40	--	--	10.58	--	--	--	672	37.9				Yes	N/R
408	WL-2242NF 60	--	--	10.58	--	--	--	681	37.1				Yes	N/R

Application Notes: 1965-69 375HP; Closed chamber heads; 40 O/S has .330 dome; 60 O/S has .319 dome; DUROSHIELD® skirt coated piston

402 Based Engines (4.125 Bore x 3.766 Stroke)

Dome Shape: .110 dome; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.770
 Deck Clearance (in): .015
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
408	L-2383F 30	8.29	7.93	7.78	7.40	7.29	--	715	13.9	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
410	L-2383F 40	8.32	7.96	7.82	7.43	7.32	--	720	13.9	E-243K 40	--	--	Yes	N/R
414	L-2383F 60	8.34	7.98	7.86	7.45	7.34	--	730	13.9	E-243K 60	R-10374 60	R-5879 65	Yes	N/R
Single Piston Part #														
408	WL-2383F 30	8.29	7.93	7.78	7.40	7.29	--	715	13.9	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
410	WL-2383F 40	8.32	7.96	7.82	7.43	7.32	--	720	13.9				Yes	N/R
414	WL-2383F 60	8.34	7.98	7.86	7.45	7.34	--	730	13.9				Yes	N/R

Application Notes: w/Piston dome removed; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

402 Based Engines (4.125 Bore x 3.766 Stroke)



Dome Shape: .110 dome; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.770
 Deck Clearance (in): .015
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
408	L-2383F 30	9.29	8.83	8.65	8.16	8.03	--	715	13.9	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
410	L-2383F 40	9.33	8.86	8.68	8.19	8.06	--	720	13.9	E-243K 40	--	--	Yes	N/R
414	L-2383F 60	9.35	8.88	8.70	8.21	8.08	--	730	13.9	E-243K 60	R-10374 60	R-5879 65	Yes	N/R
Single Piston Part #														
408	WL-2383F 30	9.29	8.83	8.65	8.16	8.03	--	715	13.9	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
410	WL-2383F 40	9.33	8.86	8.68	8.19	8.06	--	720	13.9				Yes	N/R
414	WL-2383F 60	9.35	8.88	8.70	8.21	8.08	--	730	13.9				Yes	N/R

Application Notes: 1970-72 350HP; Closed chamber heads; DUROSHIELD® skirt coated piston



Dome Shape: .319 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.765
 Deck Clearance (in): .020
 Skirt Clearance (in): .0030

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
408	L-2328NF 30	--	10.81	10.53	--	--	--	680	36.6	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
414	L-2328NF 60	--	10.95	10.66	--	--	--	697	36.6	E-243K 60	R-10374 60	R-5879 65	Yes	N/R
Single Piston Part #														
408	WL-2328NF 30	--	10.81	10.53	--	--	--	680	36.6	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
414	WL-2328NF 60	--	10.95	10.66	--	--	--	697	36.6				Yes	N/R

Application Notes: 1969-70; Closed chamber heads; DUROSHIELD® skirt coated piston

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Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

427 Based Engines (4.250 Bore x 3.766 Stroke)

Dome Shape: .140 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.767
 Deck Clearance (in): .018
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
427	L-2300NF	8.57	8.20	8.05	7.65	7.54	7.31	777	16.8	E-233K	R-9905	R-9590 5	Yes	N/R
433	L-2300NF 30	8.67	8.29	8.15	7.74	7.63	7.39	794	16.8	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
435	L-2300NF 40	8.71	8.33	8.18	7.77	7.66	7.42	800	16.8	E-233K 40	--	--	Yes	N/R
439	L-2300NF 60	8.78	8.39	8.24	7.83	7.72	7.48	810	16.8	E-233K 60	R-9905 60	R-9590 65	Yes	N/R
Single Piston Part #														
427	WL-2300NF	8.57	8.20	8.05	7.65	7.54	7.31	777	16.8	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
433	WL-2300NF 30	8.67	8.29	8.15	7.74	7.63	7.39	794	16.8				Yes	N/R
435	WL-2300NF 40	8.71	8.33	8.18	7.77	7.66	7.42	800	16.8				Yes	N/R
439	WL-2300NF 60	8.78	8.39	8.24	7.83	7.72	7.48	810	16.8				Yes	N/R

Application Notes: w/Piston dome removed; DUROSHIELD® skirt coated piston

Dome Shape: .140 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.767
 Deck Clearance (in): .018
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
427	L-2300NF	9.86	9.35	9.16	8.62	8.48	8.18	777	16.8	E-233K	R-9905	R-9590 5	Yes	N/R
433	L-2300NF 30	9.98	9.46	9.27	8.73	8.59	8.28	794	16.8	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
435	L-2300NF 40	10.02	9.50	9.30	8.76	8.62	8.31	800	16.8	E-233K 40	--	--	Yes	N/R
439	L-2300NF 60	10.10	9.58	9.38	8.83	8.69	8.37	810	16.8	E-233K 60	R-9905 60	R-9590 65	Yes	N/R
Single Piston Part #														
427	WL-2300NF	9.86	9.35	9.16	8.62	8.48	8.18	777	16.8	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
433	WL-2300NF 30	9.98	9.46	9.27	8.73	8.59	8.28	794	16.8				Yes	N/R
435	WL-2300NF 40	10.02	9.50	9.30	8.76	8.62	8.31	800	16.8				Yes	N/R
439	WL-2300NF 60	10.10	9.58	9.38	8.83	8.69	8.37	810	16.8				Yes	N/R

Application Notes: 1966-69 335HP/390HP; Closed chamber heads; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

427 Based Engines (4.250 Bore x 3.766 Stroke)



Dome Shape: .266 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.765
 Deck Clearance (in): .020
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
433	L-2268NF 30	--	11.25	--	10.18	9.99	--	705	35.5	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
439	L-2268NF 60	--	11.23	--	10.18	9.99	--	719	34.2	E-233K 60	R-9905 60	R-9590 65	Yes	N/R

Single Piston Part

439	WL-2268NF 60	--	11.23	--	10.18	9.99	--	719	34.2	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
-----	--------------	----	-------	----	-------	------	----	-----	------	---	--	--	-----	-----

Application Notes: 1966-69 425HP/435HP; Closed chamber heads; DUROSHIELD® skirt coated piston; 60 O/S has .255 dome



Dome Shape: .585 dome; 2 reliefs
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.760
 Deck Clearance (in): .025
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
433	L-2308AF 30	--	--	--	11.66	11.39	10.82	748	50.0	--	R-9904 30	R-9344 35 (L)	Yes	Included
439	L-2308AF 60	--	--	--	11.79	11.53	10.95	764	50.0	--	R-9904 60	R-9344 65 (L)	Yes	Included

Single Piston Part

433	WL-2308AF 30	--	--	--	11.66	11.39	10.82	748	50.0	--	--	--	Yes	Included
439	WL-2308AF 60	--	--	--	11.79	11.53	10.95	764	50.0	--	WR-9904 60	--	Yes	Included

Application Notes: Dome machining req'd w/closed chamber heads; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

427 Based Engines (4.250 Bore x 3.766 Stroke)

Dome Shape: Dish
 Con Rod Length (in): 6.260
 Compression Distance (in): 1.640
 Deck Clearance (in): .020
 Skirt Clearance (in): .0060

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
427	L-2453F	8.06	7.73	7.60	7.25	7.16	6.95	668	-7.9	E-233K	R-9905	R-9590 5	Yes	Included
433	L-2453F 30	8.15	7.82	7.69	7.33	7.24	7.03	686	-7.9	E-233K 30	R-9905 30	R-9590 35	Yes	Included
439	L-2453F 60	8.25	7.91	7.78	7.42	7.32	7.11	704	-7.9	E-233K 60	R-9905 60	R-9590 65	Yes	Included
Single Piston Part #														
427	WL-2453F	8.06	7.73	7.60	7.25	7.16	6.95	668	-7.9	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
433	WL-2453F 30	8.15	7.82	7.69	7.33	7.24	7.03	686	-7.9				Yes	Included
439	WL-2453F 60	8.25	7.91	7.78	7.42	7.32	7.11	704	-7.9				Yes	Included

Application Notes: Supercharged; w/.125 longer rods; DUROSHIELD® skirt coated piston

454 Based Engines (4.250 Bore x 4.000 Stroke)

Dome Shape: Dish
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0060

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2453F	8.44	8.10	7.96	7.59	7.50	--	668	-7.9	E-233K	R-9905	R-9590 5	Yes	Included
460	L-2453F 30	8.54	8.19	8.06	7.68	7.58	--	686	-7.9	E-233K 30	R-9905 30	R-9590 35	Yes	Included
467	L-2453F 60	8.64	8.29	8.15	7.77	7.67	--	704	-7.9	E-233K 60	R-9905 60	R-9590 65	Yes	Included
Single Piston Part #														
454	WL-2453F	8.44	8.10	7.96	7.59	7.50	--	668	-7.9	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
460	WL-2453F 30	8.54	8.19	8.06	7.68	7.58	--	686	-7.9				Yes	Included
467	WL-2453F 60	8.64	8.29	8.15	7.77	7.67	--	704	-7.9				Yes	Included

Application Notes: Supercharged or turbocharged; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)



Dome Shape: Flat; 2 reliefs; Chamfer
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0030

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2377F	8.62	8.26	8.12	7.74	7.64	--	717	-4.9	E-233K	R-9905	R-9590 5	Yes	N/R
458	L-2377F 20	8.69	8.33	8.19	7.80	7.70	--	728	-4.9	E-233K 20	--	--	Yes	N/R
460	L-2377F 30	8.72	8.36	8.22	7.83	7.73	--	733	-4.9	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
463	L-2377F 40	8.76	8.40	8.25	7.86	7.76	--	738	-4.9	E-233K 40	--	--	Yes	N/R
467	L-2377F 60	8.83	8.46	8.32	7.92	7.82	--	749	-4.9	E-233K 60	R-9905 60	R-9590 65	Yes	N/R
Single Piston Part #														
454	WL-2377F	8.62	8.26	8.12	7.74	7.64	--	717	-4.9	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
458	WL-2377F 20	8.69	8.33	8.19	7.80	7.70	--	728	-4.9				Yes	N/R
460	WL-2377F 30	8.72	8.36	8.22	7.83	7.73	--	733	-4.9				Yes	N/R
463	WL-2377F 40	8.76	8.40	8.25	7.86	7.76	--	738	-4.9				Yes	N/R
467	WL-2377F 60	8.83	8.46	8.32	7.92	7.82	--	749	-4.9				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston



Dome Shape: .095 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2399NF	10.10	9.60	9.40	8.87	8.73	--	661	13.8	E-233K	R-9905	R-9590 5	Yes	Included
460	L-2399NF 30	10.23	9.71	9.52	8.98	8.84	--	678	13.8	E-233K 30	R-9905 30	R-9590 35	Yes	Included
462	L-2399NF 40	10.35	9.83	9.63	9.09	8.94	--	683	13.8	E-233K 40	--	--	Yes	Included
467	L-2399NF 60	10.41	9.89	9.69	9.13	8.99	--	695	13.8	E-233K 60	R-9905 60	R-9590 65	Yes	Included
Single Piston Part #														
454	WL-2399NF	10.10	9.60	9.40	8.87	8.73	--	661	13.8	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
460	WL-2399NF 30	10.23	9.71	9.52	8.98	8.84	--	678	13.8				Yes	Included
462	WL-2399NF 40	10.35	9.83	9.63	9.09	8.94	--	683	13.8				Yes	Included
467	WL-2399NF 60	10.41	9.89	9.69	9.13	8.99	--	695	13.8				Yes	Included

Application Notes: 1971 LS6; Open chamber heads; DUROSHIELD® skirt coated piston

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Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)

Dome Shape: .200 dome; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0035

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 141



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	LW-2465NF 30	10.72	10.15	9.94	9.34	9.19	8.85	657	18.3	--	--	R-10703 35	Yes	Included
467	LW-2465NF 60	10.85	10.28	10.06	9.46	9.30	8.96	661	18.3	--	--	R-10703 65	Yes	Included

Application Notes: Open chamber heads; DUROSHIELD® skirt coated piston

Dome Shape: .270 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.640
 Deck Clearance (in): .025
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2465F	11.34	10.69	10.44	9.78	9.60	--	651	27.1	E-233K	R-9905	R-9590 5	Yes	N/R
460	L-2465F 30	11.31	10.68	10.44	9.78	9.61	--	655	25.7	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
467	L-2465F 60	11.29	10.67	10.43	9.78	9.61	--	666	24.3	E-233K 60	R-9905 60	R-9590 65	Yes	N/R

Single Piston Part

454	WL-2465F	11.34	10.69	10.44	9.78	9.60	--	651	27.1	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
460	WL-2465F 30	11.31	10.68	10.44	9.78	9.61	--	655	25.7				Yes	N/R
467	WL-2465F 60	11.29	10.67	10.43	9.78	9.61	--	666	24.3				Yes	N/R

Application Notes: Open chamber heads; 30 O/S has .226 dome; 60 O/S has .215 dome; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

454 Based Engines (4.250 Bore x 4.000 Stroke)



Dome Shape: .265 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.990
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2349F	11.90	11.18	10.91	10.18	9.99	--	656	30.6	E-233K	R-9905	R-9590 5	Yes	N/R
460	L-2349F 30	11.89	11.18	10.91	10.19	10.01	--	661	29.4	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
467	L-2349F 60	11.84	11.15	10.89	10.18	10.00	--	674	27.9	E-233K 60	R-9905 60	R-9590 65	Yes	N/R

Single Piston Part

454	WL-2349F	11.90	11.18	10.91	10.18	9.99	--	656	30.6	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
460	WL-2349F 30	11.89	11.18	10.91	10.19	10.01	--	661	29.4				Yes	N/R
467	WL-2349F 60	11.84	11.15	10.89	10.18	10.00	--	674	27.9				Yes	N/R

Application Notes: 1970 LS6; Closed chamber heads; 30 O/S has .221 dome; 60 O/S has .210 dome; DUROSHIELD® skirt coated piston



Dome Shape: .580 dome
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 175

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
454	L-2307AF	--	--	--	12.35	12.06	11.44	719	50.0	--	R-9904	R-9344 5 (L)	Yes	Included
460	L-2307AF 30	--	--	--	12.50	12.21	11.58	735	50.0	--	R-9904 30	R-9344 35 (L)	Yes	Included
467	L-2307AF 60	--	--	--	12.65	12.36	11.72	751	50.0	--	R-9904 60	R-9344 65 (L)	Yes	Included
Single Piston Part #														
454	WL-2307AF	--	--	--	12.35	12.06	11.44	719	50.0	--	--	--	Yes	Included
460	WL-2307AF 30	--	--	--	12.50	12.21	11.58	735	50.0	--	--	--	Yes	Included
467	WL-2307AF 60	--	--	--	12.65	12.36	11.72	751	50.0	--	WR-9904 60	--	Yes	Included

Application Notes: Closed chamber heads require dome modification; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

454 Based Engines (4.250 Bore x 4.250 Stroke)

Dome Shape: .202 dome; 1 relief
 Con Rod Length (in): 6.385
 Compression Distance (in): 1.270
 Deck Clearance (in): .020
 Skirt Clearance (in): .0035

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 141



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
489	LW-2643F 30	11.85	11.19	10.94	10.25	10.07	9.68	597	23	--	--	R-10703 35	Yes	Included
496	LW-2643F 60	12.00	11.33	11.07	10.38	10.20	9.80	601	23	--	--	R-10703 65	Yes	Included

Application Notes: Open chamber heads; DUROSHIELD® skirt coated piston

454 Based Engines (4.500" Bore Combinations)

Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.135
 Compression Distance (in): 1.645
 Deck Clearance (in): .020
 Skirt Clearance (in): .0060

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 167



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
509	L-2513F	--	9.35	9.18	8.73	8.61	--	690	-2.4	--	R-10595	R-10451 5 (L)	Yes	Included
516	L-2513F 30	--	9.45	9.29	8.83	8.71	--	705	-2.4	--	--	R-10451 35 (L)	Yes	Included
522	L-2513F 60	--	9.55	9.39	8.92	8.80	--	721	-2.4	--	R-10595 60	R-10441 5 (L)	Yes	Included

Application Notes: 4.000" stroke; CNC machined; DUROSHIELD® skirt coated piston

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.385
 Compression Distance (in): 1.270
 Deck Clearance (in): .020
 Skirt Clearance (in): .0060

Rings: .043, .043, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 150



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
540	LW-2633F	--	9.86	9.69	9.20	9.08	--	578	-2.4	--	--	R-20113 5	Yes	Included
548	LW-2633F 30	--	9.97	9.9.79	9.30	9.18	--	594	-2.4	--	--	R-20113 35	Yes	Included
555	LW-2633F 60	--	10.09	9.91	9.42	9.29	--	610	-2.4	--	--	--	Yes	Included

Application Notes: 4.250" stroke; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Chevrolet Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

454 Based Engines (4.500" Bore Combinations)



Dome Shape: .450 dome
 Con Rod Length (in): 6.385
 Compression Distance (in): 1.270
 Deck Clearance (in): .020
 Skirt Clearance (in): .0060

Rings: .043, .043, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.990
 Pin Weight (grams): 150

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		100.9	106.9	109.4	116.9	119.0	124.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
540	LW-2634F	--	14.41	14.01	12.96	12.69	--	650	40.0	--	--	R-20113 5	Yes	Included
548	LW-2634F 30	--	14.58	14.18	13.11	12.84	--	665	40.0	--	--	R-20113 35	Yes	Included

Application Notes: 4.250" stroke; CNC machined; Tapered lightweight pin; DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
396; 402; 427; 454 Engines					
Rod Set					
	O.E. Replacement	8-3190A	A-Series aluminum bearings		Std-1-10-20-30-40-60
	Competition Series	8-7200CH	Super Duty Alloy	Chamfer	Std-1-1X-9-10-11-20-21-30
	Competition Series	C8-7200CH	Super Duty Alloy	Chamfer; Coated	Std-1-1X-10-20
	Competition Series	8-7200CHA	Super Duty Alloy	Chamfer; Dowel hole	Std-1-1X-9-10
	Competition Series	C8-7200CHA	Super Duty Alloy	Chamfer; Dowel hole; Coated	Std-1X-10
	Competition Series	8-7310CHA	Super Duty Alloy	Chamfer; 409 dimensions	Std-1-1X
	Competition Series	8-7315CH	Super Duty Alloy	Chamfer; 409 dimensions;	
	Supercharged Alcohol Engines	8-7200SHA	Babbitt	Narrow OAL Chamfer; Dowel hole	Std-1-1X Std Only
Main Set					
	O.E. Replacement	4400MA	A-Series aluminum bearings		Std-1-2-10-20-30-40
	Supercharged Alcohol Engines	136M	Babbitt	3/4 Groove	Std-10
	Competition Series	141M	Super Duty Alloy	3/4 Groove	Std-1-1X-9-10-11-19-20-21-30
	Competition Series	162M	Super Duty Alloy	3/4 Groove; 409 dimensions	Std Only
	Competition Series	C141M	Super Duty Alloy	3/4 Groove; Coated	Std-1-1X-10-20
Cam Set					
	O.E. Replacement; 1966-70	1404M	Babbitt		Std Only
	O.E. Replacement; 1965-66 Only	1255M	Babbitt	Grooved	Std Only
	Competition Series; Exc. 1965-66	2101M	H/D Babbitt	Full round design	Std Only
	Bowtie CNC Blocks	1874M	Babbitt	All 5 bearings are identical	Std Only
Pin Bushing					
		2304VNH	Bronze	For floating pin conversion; No oil hole	

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
396; 402; 427; 454 Engines			
Oil Pump			
	O.E. Replacement	224-4154G	"Short" pump; '85 & up; Check for adequate main cap and crankshaft clearance
	O.E. Replacement	224-4154	Check for main cap clearance
	High Volume	224-121R	Check for main cap clearance; 3/4" inlet; High Performance; 25% more volume than stock pump
	High Volume	224-4153	Check for main cap clearance; Street Performance

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OIL PUMPS AND ACCESSORIES

Chevrolet Big Block - cont'd.

PRODUCT	FEATURES	P/N	NOTES
396; 402; 427; 454 Engines - cont'd.			
Oil Pump Screen	O.E. Replacement	224-43620	
Pump Shaft	O.E. Replacement	224-6154A	Use w/Nylon shaft guide
	Heavy Duty Pump Shaft	224-6154	w/Integral steel guide; For 224-4153 pump
	Shaft Guide	224-43343	Nylon



PERFORMANCE CAMS

396, 402, 427, 454 Engines

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1004R	KC-1004R	Pro-1500	Smooth	1000-3500	190/200	260/272	.439	.464	110	46
CS-1029R	KC-1029R	Pro-2000	Smooth	1200-3800	204/208	298/299	.459	.459	112	68
CS-1088R	KC-1088R	Pro-2000	Smooth	1500-4000	204/214	282/292	.476	.501	112	51
CS-1167R		Pro-3000	Smooth	1500-4200	214/214	292/292	.501	.501	114	52
CS-1015R	KC-1015R	Pro-3000	Good	2000-4500	214/224	292/302	.501	.527	112	61
CS-175R	KC-175R	Pro-3000	Fair	2200-5500	222/235	306/322	.500	.505	115	88
CS-1139R		Pro-3000	Fair	2200-5500	224/232	302/304	.527	.553	114	63
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-1581							
		RETAINER	VSR-7003R							
		LOCKS	VK-138R							
CS-1224R		Pro-5000	Rough	2800-5800	230/230	288/288	.544	.544	109	74
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		VALVE SPRING	VS-1581							
		RETAINER	VSR-7015R							
		LOCKS	VK-338R							
Marine; 396, 402, 427, 454 Engines										
CS-1093M		Marine	Smooth		214/218	289/302	.476	.496	115	64
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		APPLICATION NOTES: GM No. 3883986; Std. rotation; 300/330/340/350 H.P. 454; Chain drive cam								
CS-1047M		Marine	Smooth		224/224	293/293	.510	.510	115	62
Hydraulic		LIFTERS	HT-817 (Std.)	HT-817R (Race)						
		APPLICATION NOTES: GM No. 14096209; Std. rotation; 300 H.P. 454; 390/400 H.P. 502; Chain drive cam								
396, 402, 427, 454 Engines										
CS-1072R	KC-1072R	Pro-3000	Good	2000-5500	216/228	288/300	.502	.510	112	70
Hydraulic Retro Roller		LIFTERS	HT-5010RA (Std.)							
		VALVE SPRING	VS-1581							
		RETAINER	VSR-7003R							
		LOCKS	VK-138R							
		APPLICATION NOTES: Cam & Lifter Kit incl. cam, lifters, special length push rods, and thrust button								
CS-165R	KC-165R	Pro-4000	Fair	3200-6500	242/242	309/295	.520	.520	114	98
Mechanical		LIFTERS	AT-992 (Std.)							
		VALVE SPRING	VS-1581							
		RETAINER	VSR-7015R							
		LOCKS	VK-338R							
		APPLICATION NOTES: 454-465 HP LS-7; GM Part No. 3904362								

PERFORMANCE CAMS



Chevrolet Big Block - cont'd.

396, 402, 427, 454 Engines - cont'd.

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1137R		Pro-4000	Rough	2200-6500	246/246	288/288	.623	.623	110	
Mechanical Roller		LIFTERS	AT-6028RA (Race)							
		VALVE SPRING	VS-1526							
		RETAINER	VSR-7020							
		LOCKS	VK-275							
APPLICATION NOTES: Steel; Requires bronze distributor gear										
CS-1135R		Pro-4000	Rough	3500-6500	261/271	296/306	.680	.680	108	
Mechanical Roller		LIFTERS	AT-6028RA (Race)							
		VALVE SPRING	VS-1604							
		RETAINER	VSR-7020							
		LOCKS	VK-275							
APPLICATION NOTES: Steel; Requires bronze distributor gear										

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
396; 402; 427; 454 Engines							
Exhaust							
	1.720	V-1911	.3718	5.355	45	21-4N	1966-76; Exc. Hi-Perf., Corvette
	1.720	V-1989X	.3716	5.355	45	21-4N	1971-85; Truck; Stellite face
	1.720	V-2450X	.3716	5.355	45	Nimonic	1985-94; Truck; Stellite face
	1.874	V-1861	.3703	5.362	45	21-4N	1969 H/D
Intake							
	2.065	V-1912	.3720	5.230	45	SIL-1	1966-76; Exc. Hi-Perf., Corvette
	2.189	V-1905	.3720	5.228	45	SIL-XBE	Hi-Perf.
POWERFORGED Stainless Steel Valve							
Exhaust							
	1.874	V-8005R	.3710	5.362	45	21-2N	
Intake							
	2.191	V-8007R	.3719	5.239	45	21-4N	
	2.250	V-8008R	.3710	5.238	45	21-2N	
POWERFORGED Competition Series Stainless Steel Valve							
Exhaust							
	1.875	V-2053R	.3718	5.349	45	21-2N	
Intake							
	2.250	V-2464R	.3720	5.230	45	422	
	2.300	V-2056R	.3719	5.225	45	422	
POWERFORGED Competition Series Stainless Steel Valve - With High Flow Undercut Stem							
Exhaust							
	1.945	V-2485R	.3718	5.357	45	21-4N	
Intake							
	2.190	V-2481R	.3720	5.225	45	422	
Valve Guide - Manganese Bronze							
Exhaust							
		VG-7006R	.3435	2.875			Straight; Used as liner
Intake							
		VG-7006R	.3435	2.875			Straight; Used as liner
Exhaust							
		VG-7504R	.3730	2.562			Stepped; .620 O.D.; Replaces O.E. guide in Cast Iron heads
		VG-7505R	.3735	2.421			Stepped; .625 O.D.; Replaces O.E. guide in Alum. Heads
Intake							
		VG-7505R	.3735	2.421			Stepped; .625 O.D.; Replaces O.E. guide in most heads

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PERFORMANCE VALVES

Chevrolet Big Block - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Guide - Manganese Bronze							
396; 402; 427; 454 Engines							
Exhaust		VG-7007R	.3725	2.625			Straight; .502 O.D.; Used as liner
Intake		VG-7007R	.3725	2.625			Straight; .502 O.D.; Used as liner
Valve Stem Seal							
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2014	.3710				Rubber/PTFE insert; .500 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
396; 402; 427; 454 Engines				
Guide Plates				
	MR-1893	Hardened Stamped Steel	For 3/8 Push Rods	
	MR-1894	Hardened Stamped Steel	For 7/16 Push Rods	
Push Rods				
	RP-3254	Hardened Stock Type	5/16 dia.	Exh.
	RP-3255	Hardened Stock Type	5/16 dia.	Int.
	RP-3215R	Chrome Moly	3/8 dia.	Exh.
	RP-3216R	Chrome Moly	3/8 dia.	Int.
	RP-3217R	Chrome Moly	7/16 dia.	Int.
	RP-3218R	Chrome Moly	7/16 dia.	Exh.
	RP-3266R	Hardened Chrome Moly	3/8 dia.	Int.; For hydraulic roller cam installations
	RP-3267R	Hardened Chrome Moly	3/8 dia.	Exh.; For hydraulic roller cam installations
	RP-7002R	Hardened Chrome Moly; One Piece	3/8 dia.	Exh.
	RP-7002R 100	Hardened Chrome Moly; One Piece	3/8 dia.	Exh.; + .100 in length
	RP-7002R 400	Hardened Chrome Moly; One Piece	3/8 dia.	Exh.; + .400 in length; For tall deck blocks
	RP-7003R	Hardened Chrome Moly; One Piece	3/8 dia.	Int.
	RP-7003R 100	Hardened Chrome Moly; One Piece	3/8 dia.	Int.; + .100 in length
	RP-7003R 400	Hardened Chrome Moly; One Piece	3/8 dia.	Int.; + .400 in length; For tall deck blocks
	RP-7501R	Hardened Chrome Moly; One Piece	7/16 dia.	Exh.
Push Rod Set				
	RP-5002RK	Hardened; Black Oxide Coated	3/8 dia.	1984 & earlier Eng.
Rocker Arms				
	R-866R	Stamped Long Slot	1.7 Ratio	
	RR-7004R	Aluminum Roller	1.7 Ratio	Requires 7/16 H/D screw-in stud
	RR-7024R	Stainless Steel Roller	1.7 Ratio	Requires 7/16 H/D screw-in stud
Rocker Adjustment Locks				
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1864RS	7/16 H/D Screw-In		For stock or roller rockers
	MR-1866RS	7/16 H/D Screw-In		Aluminum head; exhaust; 1.685 thread depth in head
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth

VALVETRAIN COMPONENTS



Chevrolet Big Block - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
396; 402; 427; 454 Engines - cont'd.				
Complete Timing Sets				
	CTS-1110NR	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam; Exc. Merlin & Vortec
	CTS-1110R	Performance Roller; .250" Double Roller	3 Keyway	Exc. Factory roller cam; Exc. Merlin & Vortec; When depleted use CTS-1110NR
	CTS-1110TR	Performance Roller; .250" Double Roller	3 Keyway	Incl. roller thrust brg.; Exc. Factory roller cam; Exc. Merlin & Vortec
	CTS-3510TX9R	Billet Roller; .250" Double Roller	9 Keyway	Incl. roller thrust brg.; w/o Factory roller cam; Exc. Merlin & Vortec
	CTS-3610TX9R	Competition Roller; Premium .250" Double Roller	9 Keyway	Incl. roller thrust brg.; w/o Factory roller cam; Exc. Merlin & Vortec

PERFORMANCE PISTONS



Chrysler Small Block

SPEED-PRO Hypereutectic Piston Sets with Rings

360 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH116CP 30	Hypereutectic	H116CP E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.5:1 w/68cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; CNC machined				

PERFORMANCE PISTONS



SPEED-PRO Hypereutectic Pistons

360 Engines (4.000 Bore x 3.578 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 6.123
 Compression Distance (in): 1.637
 Deck Clearance (in): .050
 Skirt Clearance (in): .0015
 Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.984
 Pin Weight (grams): 154

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		57.3	60.6	63.0	65.0	68.4	71.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
360	H405CP	--	--	9.00	8.83	8.56	--	581	-10.0	E-251K	R-9903	R-9343 5	Yes	N/R
364	H405CP 20	--	--	9.08	8.90	8.63	--	591	-10.0	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
365	H405CP 30	--	--	9.11	8.94	8.66	--	596	-10.0	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
367	H405CP 40	--	--	9.15	8.97	8.70	--	601	-10.0	E-251K 40	--	R-9343 45	Yes	N/R
371	H405CP 60	--	--	9.22	9.04	8.77	--	611	-10.0	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
360	WH405CP	--	--	9.00	8.83	8.56	--	581	-10.0	WE-251K	--	--	Yes	N/R
364	WH405CP 20	--	--	9.08	8.90	8.63	--	591	-10.0	--	--	--	Yes	N/R
365	WH405CP 30	--	--	9.11	8.94	8.66	--	596	-10.0	WE-251K 30	--	WR-9343 35	Yes	N/R
367	WH405CP 40	--	--	9.15	8.97	8.70	--	601	-10.0	WE-251K 40	--	--	Yes	N/R
371	WH405CP 60	--	--	9.22	9.04	8.77	--	611	-10.0	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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Chrysler Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

360 Engines (4.000 Bore x 3.578 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.123
 Compression Distance (in): 1.660
 Deck Clearance (in): .027
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.984
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		57.3	60.6	63.0	65.0	68.4	71.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
360	H116CP	--	--	9.94	9.72	9.39	9.15	567	-5.0	E-251K	R-9903	R-9343 5	Yes	Included
364	H116CP 20	--	--	10.02	9.81	9.46	9.22	577	-5.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
365	H116CP 30	--	--	10.06	9.85	9.50	9.26	582	-5.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
367	H116CP 40	--	--	10.10	9.89	9.54	9.62	587	-5.0	E-251K 40	--	R-9343 45	Yes	Included
371	H116CP 60	--	--	10.19	9.97	9.62	9.38	597	-5.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included

Single Piston Part

360	WH116CP	--	--	9.94	9.72	9.39	9.15	567	-5.0	WE-251K	--	--	Yes	Included
364	WH116CP 20	--	--	10.02	9.81	9.46	9.22	577	-5.0	--	--	--	Yes	Included
365	WH116CP 30	--	--	10.06	9.85	9.50	9.26	582	-5.0	WE-251K 30	--	WR-9343 35	Yes	Included
367	WH116CP 40	--	--	10.10	9.89	9.54	9.62	587	-5.0	WE-251K 40	--	--	Yes	Included
371	WH116CP 60	--	--	10.19	9.97	9.62	9.38	597	-5.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; CNC machined; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

SPEED-PRO POWERFORGED Pistons

340 Engines (4.040 Bore x 3.313 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.123
 Compression Distance (in): 1.840
 Deck Clearance (in): -.018
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.984
 Pin Weight (grams): 154



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		57.3	60.6	63.0	65.0	68.4	71.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
343	L-2316F 20	--	--	10.30	10.06	9.68	9.41	724	-7.5	E-251K 60	R-9903 60	R-9343 65	Yes	Included
345	L-2316F 30	--	--	10.35	10.11	9.73	9.46	729	-7.5	E-286K 30	--	--	Yes	Included
346	L-2316F 40	--	--	10.40	10.16	9.77	9.50	734	-7.5	E-286K 40	--	--	Yes	Included
350	L-2316F 60	--	--	10.50	10.25	9.86	9.59	745	-7.5	E-286K 60	--	--	Yes	Included

Single Piston Part

343	WL-2316F 20	--	--	10.30	10.06	9.68	9.41	724	-7.5	WE-251K 60	--	--	Yes	Included
345	WL-2316F 30	--	--	10.35	10.11	9.73	9.46	729	-7.5	--	--	--	Yes	Included
346	WL-2316F 40	--	--	10.40	10.16	9.77	9.50	734	-7.5	--	--	--	Yes	Included
350	WL-2316F 60	--	--	10.50	10.25	9.86	9.59	745	-7.5	--	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE ENGINE BEARINGS



Chrysler Small Block - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
318; 340 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-2130CP 8-7125CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-1-10-20-30-40-50 Std-1X-10
Main Set					
	O.E. Replacement; 318, 340 1957-73; Exc. truck O.E. Replacement; 318 1974-78 Pass; 1959-87 Truck O.E. Replacement; 318 1979-89 Pass; 1988-02 Truck	4923MA 5024MA 5095MA	A-Series aluminum bearings A-Series aluminum bearings A-Series aluminum bearings		Std-1-10-20-30-40-50-60 Std-1-10-20-30 Std-10-20-30
Cam Set					
	O.E. Replacement; .760 length center bearings O.E. Replacement; .615 length center bearings	1451M 1484M	Babbitt Babbitt		Std Only Std Only
Pin Bushing					
	O.E. Replacement	2134Y			
360 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-2130CP 8-7125CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-1-10-20-30-40-50 Std-1X-10
Main Set					
	O.E. Replacement; 1971-73 O.E. Replacement; 1974-93 Competition Series	4948MA 4999MA 120M	A-Series aluminum bearings A-Series aluminum bearings Super Duty Alloy		Std-10-20-30 Std-1-10-20-30 Std-10
Cam Set					
	O.E. Replacement; .760 length center bearings O.E. Replacement; .615 length center bearings	1451M 1484M	Babbitt Babbitt		Std Only Std Only
Pin Bushing					
	O.E. Replacement	2134Y			

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
318; 340; 360 Engines			
Oil Pump			
	O.E. Replacement High Volume	224-4166 224-4166V	
Oil Pump Screen			
	O.E. Replacement	224-14239	
Pump Shaft			
	O.E. Replacement	224-6166	

PERFORMANCE CAMS



318, 340, 360 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-644	KC-644	Pro-3000	Good	1500-4500	210/220	279/290	.429	.442	114	51
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-2011 (Std.) VS-678 VSR-7015R See notes	HT-2011R (Race)	APPLICATION NOTES: 340-275 HP; Chrysler Part No. 2899206; VK-174R 4 groove; VK-66R 2 groove; VK-138R 1 groove					

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PERFORMANCE CAMS

Chrysler Small Block - cont'd.

318, 340, 360 Engines - cont'd.										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1006R CS-1019R	KC-1006R KC-1019R	Pro-2000 Pro-3000	Smooth Fair	1500-4000 2200-5200	204/204 214/224	278/278 288/298	.420 .443	.420 .465	110 112	50 61
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-2011 (Std.) VS-678 VSR-7015R See notes	HT-2011R (Race)	APPLICATION NOTES: VK-174R 4 groove; VK-66R 2 groove; VK-138R 1 groove					



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
318 Engines							
Exhaust							
	1.500	V-2029	.3715	5.002	43	21-4N	1967-78; 4 groove stem
	1.500	V-2141	.3715	4.982	45	21-4N	1979-89; Exc.'81-89 w/4 Bbl. Carb; H/D; Police; 4 groove stem
	1.517	V-2154	.3716	4.994	45	21-4N	1979-88; L/D; 2 groove stem
	1.517	V-3951	.3717	4.994	45	21-4N	1989-91
	1.624	V-2654	.3115	4.920	44	21-4N	1992-94
Intake							
	1.780	V-1722	.3725	4.979	45	SIL-1	1969-91; Exc.'81-89 w/4 Bbl. Carb; H/D.; Police; 2 groove stem
	1.880	V-1908	.3725	4.981	45	SIL-1	1981-89; H/D; Police w/4 Bbl. Carb.
	1.920	V-3954	.3115	4.905	44	SIL-1	1992-94
340 Engines							
Exhaust							
	1.600	V-3925	.3715	5.005	43	21-4N	1968-73
Intake							
	1.880	V-1908	.3725	4.981	45	SIL-1	1972-73; 2 groove stem
	2.020	V-1864	.3725	4.986	45	SIL-XBE	
360 Engines							
Exhaust							
	1.600	V-2113	.3715	5.005	43	21-2N	1977-78; 2 groove stem
	1.617	V-2556	.3716	4.995	45	21-4N	1979-88; 2 groove stem
	1.617	V-2556	.3716	4.995	45	21-4N	1989-91; 2 groove stem
	1.624	V-2654	.3115	4.920	44	21-4N	1992-94
Intake							
	1.880	V-1908	.3725	4.981	45	SIL-1	1971-76; 1980-91; 2 groove stem
	1.920	V-3954	.3115	4.905	44	SIL-1	1992-94
POWERFORGED Stainless Steel Valve							
318; 340; 360 Engines							
Exhaust							
	1.600	V-8009R	.3715	5.008	45	21-2N	
Intake							
	2.020	V-8010R	.3725	5.000	45	21-2N	
POWERFORGED Competition Series Stainless Steel Valve - With High Flow Undercut Stem							
Intake							
	2.020	V-2486R	.3725	5.008	45	422	
Valve Guide - Manganese Bronze							
		VG-7004R	.3725	2.375	Straight; Cut-to-length; .502 O.D.		
		VG-7503R	.3725	2.500	Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal		

PERFORMANCE VALVES



Chrysler Small Block - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Stem Seal							
318; 340; 360 Engines							
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
273; 318; 340, 360 Engines				
Complete Timing Sets				
	CTS-1103R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3503X9R	Billet Roller; .250" Double Roller	9 Keyway	
	CTS-3603X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	
318; 340, 360 Engines				
Push Rods				
	RP-3159	Stock Type	5/16 dia.	Use w/Adj. ball & socket type rocker arms
	RP-3194	Stock Type	5/16 dia.	Non-adj.
	RP-3219R 100	Chrome Moly	5/16 dia.	For use with adj. valvetrain; .100 shorter length
Rocker Arms				
	R-862	O.E. Right		Non-adj.; Use RP-3194 Push Rods
	R-861	O.E. Left		Non-adj.; Use RP-3194 Push Rods
Rocker Shaft				
	RS-626	Stock Type		

PERFORMANCE PISTONS



Chrysler Big Block

SPEED-PRO POWERFORGED Piston Sets with Rings

440 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2266F 30	POWERFORGED	L-2266F E-424K	8 1	30-40-60
COMPRESSION RATIO: 8.66:1 w/88cc heads DOME DESIGN: Flat FEATURES: DUROSHIELD® skirt coated piston				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2355F 30	POWERFORGED	L-2355F E-424K	8 1	30-40-60
COMPRESSION RATIO: 9.37:1 w/88cc heads DOME DESIGN: Flat FEATURES: DUROSHIELD® skirt coated piston				

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Chrysler Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

383 Engines (4.250 Bore x 3.375 Stroke)

Dome Shape: Flat
 Con Rod Length (in): 6.385
 Compression Distance (in): 1.920
 Deck Clearance (in): .012
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.220
 Pin Weight (grams): 218



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		78.5	88.0	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
389	L-2315NF 30	9.77	8.94	--	--	--	--	781	0.0	E-233K 30	R-9905 30	R-9590 35	Yes	N/R
391	L-2315NF 40	9.81	8.98	--	--	--	--	787	0.0	E-233K 40	--	--	Yes	N/R
394	L-2315NF 60	9.84	9.01	--	--	--	--	800	0.0	E-233K 60	R-9905 60	R-9590 65	Yes	N/R

Single Piston Part

389	WL-2315NF 30	9.77	8.94	--	--	--	--	781	0.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
391	WL-2315NF 40	9.81	8.98	--	--	--	--	787	0.0				Yes	N/R

Application Notes: Closed chamber - 78.5cc; Open chamber - 88cc; DUROSHIELD® skirt coated piston

440 Engines (4.320 Bore x 3.750 Stroke)

Dome Shape: Flat
 Con Rod Length (in): 6.670
 Compression Distance (in): 1.991
 Deck Clearance (in): .089
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.220
 Pin Weight (grams): 218



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		78.5	88.0	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
440	L-2266F	9.23	8.58	--	--	--	--	835	0.0	E-424K	--	--	Yes	N/R
446	L-2266F 30	9.33	8.66	--	--	--	--	855	0.0	E-424K 30	--	R-9224 35	Yes	N/R
448	L-2266F 40	9.36	8.69	--	--	--	--	862	0.0	E-424K 40	--	--	Yes	N/R
452	L-2266F 60	9.42	8.75	--	--	--	--	875	0.0	E-424K 60	--	R-9224 65	Yes	N/R

Single Piston Part

440	WL-2266F	9.23	8.58	--	--	--	--	835	0.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
446	WL-2266F 30	9.33	8.66	--	--	--	--	855	0.0				Yes	N/R
448	WL-2266F 40	9.36	8.69	--	--	--	--	862	0.0				Yes	N/R
452	WL-2266F 60	9.42	8.75	--	--	--	--	875	0.0				Yes	N/R

Application Notes: Closed chamber - 78.5cc; Open chamber - 88cc; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Chrysler Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

440 Engines (4.320 Bore x 3.750 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 6.670
 Compression Distance (in): 2.061
 Deck Clearance (in): .019
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.220
 Pin Weight (grams): 218

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		78.5	88.0	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
440	L-2355F	10.05	9.26	--	--	--	--	859	-7.0	E-424K	--	--	Yes	N/R
446	L-2355F 30	10.17	9.37	--	--	--	--	879	-7.0	E-424K 30	--	R-9224 35	Yes	N/R
448	L-2355F 40	10.21	9.41	--	--	--	--	886	-7.0	E-424K 40	--	--	Yes	N/R
452	L-2355F 60	10.29	9.48	--	--	--	--	899	-7.0	E-424K 60	--	R-9224 65	Yes	N/R
Single Piston Part #														
440	WL-2355F	10.05	9.26	--	--	--	--	859	-7.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
446	WL-2355F 30	10.17	9.37	--	--	--	--	879	-7.0				Yes	N/R
448	WL-2355F 40	10.21	9.41	--	--	--	--	886	-7.0				Yes	N/R
452	WL-2355F 60	10.29	9.48	--	--	--	--	899	-7.0				Yes	N/R

Application Notes: 1970-72 "Six-Pack"; DUROSHIELD® skirt coated piston



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 6.768
 Compression Distance (in): 2.067
 Deck Clearance (in): .015
 Skirt Clearance (in): .0035

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.094
 Pin Weight (grams): 190

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		78.5	88.0	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
446	LW-2355NF 30	10.35	9.52	--	--	--	--	690	-5.6	--	--	R-10704 35	Yes	Included
448	LW-2355NF 40	10.39	9.56	--	--	--	--	694	-5.6	--	--	R-10704 65	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston

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Chrysler Big Block - cont'd.

SPEED-PRO POWERFORGED Pistons

440 Engines (4.320 Bore x 3.750 Stroke)

Dome Shape: .140 dome
 Con Rod Length (in): 6.670
 Compression Distance (in): 2.029
 Deck Clearance (in): .051
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.094
 Pin Weight (grams): 191



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		78.5	88.0	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
446	L-2295F 30	11.34	10.34	--	--	--	--	826	12.1	--	--	R-9278 35 (L)	Yes	Included
452	L-2295F 60	11.34	10.34	--	--	--	--	836	11.1	--	--	R-9278 65 (L)	Yes	Included
Single Piston Part #														
446	WL-2295F 30	11.34	10.34	--	--	--	--	826	12.1	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
452	WL-2295F 60	11.34	10.34	--	--	--	--	836	11.1				Yes	Included

Application Notes: Closed chamber - 78.5cc; Open chamber - 88cc; 60 O/S has .125 dome; DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
383; 400 Engines					
Rod Set					
	O.E. Replacement	8-2320CP	Overplated Copper-Lead Alloy		Std-10-20-30-40-50
Main Set					
	O.E. Replacement; 1961-78	4094M	Overplated Copper-Lead Alloy		Std-10-20-30-40-60
Cam Set					
	O.E. Replacement	1453M	Babbitt	Full round design	Std Only
	Competition Series	2111M	H/D Babbitt	Full round design	Std Only
426; 440 Engines					
Rod Set					
	O.E. Replacement	8-2320CP	Overplated Copper-Lead Alloy		Std-10-20-30-40-50
	Competition Series	8-7135CH	Super Duty Alloy		Std-10
	Competition Series	8-7300CHA	Super Duty Alloy	Chamfer; Dowel hole; Top Fuel & Funny Car	Std-10
	Competition Series	8-7300SHA	Babbitt	Chamfer; Dowel hole; Top Fuel & Funny Car	Std-1-10
Flange Set					
	Competition Series	7133SHC	Babbitt	Flange bearing only; Top Fuel & Funny Car	Std Only
Main Set					
	O.E. Replacement; 1972-73 Truck	4095M	Overplated Copper-Lead Alloy	Full groove	Std-10-20-30-40
	O.E. Replacement; 1963-74 Passenger	4924MA	A-Series aluminum bearings	Partial groove	Std-10-20-30
	O.E. Replacement; 1974-79	5025MA	A-Series aluminum bearings	Partial groove	Std-10-20-30
	Competition Series	119M	Super Duty Alloy	3/4 Groove	Std-10
	Competition Series	142M	Super Duty Alloy	3/4 Groove; Top Fuel	Std-1-10
Cam Set					
	O.E. Replacement	1453M	Babbitt	Full round design	Std Only
	Competition Series	2111M	H/D Babbitt	Full round design	Std Only

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE ENGINE BEARINGS



Chrysler Big Block - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
488; Viper V10 Engines					
Main Set					
	Competition Series	156M	Super Duty Alloy	3/4 Groove	Std-1-1X

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
383; 400; 426; 440 Engines			
Oil Pump	O.E. Replacement High Volume High Pressure	224-4174 224-4174V 224-43366A	
Pump Shaft	O.E. Replacement	224-6174	

PERFORMANCE CAMS



Big Block										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-661	KC-661	Pro-3000	Good	2000-4500	214/225	292/309	.449	.464	115	46
CS-1098R		Pro-2000	Smooth	1500-4000	204/214	278/288	.420	.443	112	51
CS-1148R		Pro-3000	Good	2000-5500	224/224	289/289	.455	.455	112	48
Hydraulic		LIFTERS	HT-976 (Std.) HT-2011R (Race)							
		VALVE SPRING	VS-865R							
		RETAINER	VSR-7003R							
		LOCKS	See notes							
APPLICATION NOTES: VK-174R 4 groove; VK-66R 2 groove; VK-138R 1 groove										

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES	
O.E. Replacement Valve								
383; 400; 413; 426; 440 Engines								
Exhaust								
	1.598	V-1339	.3715	4.890	45	21-2N	1966-67; 4 groove stem	
	1.740	V-1900	.3717	4.884	45.30	21-4N	1968-76; 4 groove stem	
Intake								
	2.080	V-1386	.3725	4.868	45	SIL-1	All Exc. '70-71 w/3-2 Bbl. Carbs.; 2 groove stem	
	2.080	V-2065	.3721	4.878	45	SIL-XBE	2 groove stem	
POWERFORGED Stainless Steel Valve								
Exhaust								
	1.740	V-8036R	.3720	4.894	45	21-2N		
	1.811	V-8011R	.3720	4.894	45	21-4N		
Intake								
	2.079	V-8012R	.3724	4.884	45	21-4N		
	2.140	V-8013R	.3720	4.882	45	21-2N		
Valve Guide - Manganese Bronze								
		VG-7004R	.3725	2.375				Straight; Cut-to-length; .502 O.D.
		VG-7503R	.3725	2.500				Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal

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PERFORMANCE VALVES

Chrysler Big Block - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Stem Seal							
383; 400; 413; 426; 440 Engines							
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
361; 383; 400; 413; 426; 440 Engines				
Complete Timing Sets				
	CTS-1104R	Performance Roller; .250" Double Roller	3 Keyway	1 bolt cam
	CTS-1125R	Performance Roller; .250" Double Roller	3 Keyway	3 bolt cam
	CTS-3525TX9R	Billet Roller; .250" Double Roller	9 Keyway	3 bolt cam; Incl. roller thrust brg.
	CTS-3625TX9R	Competition Roller; Premium .250" Double Roller	9 Keyway	3 bolt cam; Incl. roller thrust brg.
383; 400; 413; 426; 440 Engines				
Push Rods				
	RP-3031	Stock Type	5/16 dia.	383; 1959-67
	RP-3221R	Chrome Moly	5/16 dia.	440; 1968-79
	RP-3320R	Hardened Chrome Moly	3/8 dia.	426 Wedge
Rocker Arms				
	R-828	O.E. Right Hand		Non-adj.
	R-829	O.E. Left Hand		Non-adj.
Rocker Shaft				
	RS-612	Stock Type		



PERFORMANCE ENGINE BEARINGS

Ford L4

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
1.6L Engines					
Rod Set					
	O.E. Replacement	4-2785CP	Overplated Copper-Lead Alloy		Std-10-20-30
Main Set					
	O.E. Replacement	4865M	Overplated Copper-Lead Alloy		Std-10-20
Cam Set					
	O.E. Replacement	1459M	Babbitt		Std Only
Pin Bushing					
	O.E. Replacement	2789Y20			
2.0L Engines					
Cam Set					
	O.E. Replacement	1412M	Babbitt		Std Only
2.0L Zetec DOHC Engines					
Main Set					
	Competition Series	158M	Super Duty Alloy	3/4 Groove	Std Only
2.3L OHC Engines					
Rod Set					
	O.E. Replacement	4-3545A	A-Series aluminum bearings		Std-.25-.50-.75-1.00MM
	Competition Series	4-7180CH	Super Duty Alloy		Std-1-1X-10

PERFORMANCE ENGINE BEARINGS



Ford L4 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
2.3L OHC Engines - cont'd.					
Main Set					
	O.E. Replacement; Through 1988 Competition Series	4979M 127M	Overplated Copper-Lead Alloy Super Duty Alloy	3/4 Groove	Std-.25-.50-.75-1.00MM Std-10
Cam Set					
	O.E. Replacement	1443M	Babbitt		Std Only
Aux. Shaft Set					
	O.E. Replacement	1460M	Babbitt		Std Only

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
2.3L OHC Engines			
Oil Pump			
	O.E. Replacement	224-41160	Before 4/08/85; Exc. turbo
	O.E. Replacement	224-43405	w/Turbo
	High Volume	224-41160V	Not for use w/Aluminum oil pan
Oil Pump Screen			
	O.E. Replacement	224-12160	Exc. Pinto, Bobcat, Mustang II
	O.E. Replacement	224-11160	Pinto, Bobcat, Mustang II
Pump Shaft			
	O.E. Replacement	224-61160	

PERFORMANCE CAMS



140 (2.3L) Engines											
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP	
					.050 LIFT	.006 LIFT	INT.	EXH.			
CS-1156R		Pro-3000	Good	1500-5000	220/220	282/282	.454	.454	112	46	
Hydraulic		LIFTERS	HT-2012 (Std.)								
		VALVE SPRING	VS-857								
		LOCKS	See notes								
APPLICATION NOTES: VK-205 4 groove; VK-315R 1 groove											

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
2.3L Engines							
Intake							
	1.735	V-2170	.3419	4.787	45	SIL-1	
POWERFORGED Competition Series Stainless Steel Valve							
Exhaust							
	1.590	V-2423R	.3410	4.848	+0.050	21-4N	For small base circle cams; Shorten for stock cams

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
2.3L Engines				
Follower				
	R-873	Stock Type		

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Ford L4 - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
2.3L Engines - cont'd.				
Timing Components				
	222-14		Timing Belt	

PERFORMANCE PISTONS

Ford Modular V8

SPEED-PRO Hypereutectic Piston Sets with Rings

4.6L 2V Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH591CP .50MM	Hypereutectic	H591CP E-916K	8 1	.50-.75-1.00MM
COMPRESSION RATIO: 9.45:1 w/63cc heads DOME DESIGN: .152 dish FEATURES: DUROSHIELD® skirt coated piston				

PERFORMANCE PISTONS

SPEED-PRO Hypereutectic Pistons

4.6L (281) Engines (3.551 Bore x 3.542 Stroke)

Dome Shape: .152 x 2.70" dia. Dish
 Con Rod Length (in): 5.933
 Compression Distance (in): 1.214
 Deck Clearance (in): .001
 Skirt Clearance (in): .0006
 Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press
 Pin Diameter (in): 0.866
 Pin Weight (grams): 107



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
281	H591CP	10.36	9.31	--	--	--	--	349	-10.5	E-916K	--	--	Yes	N/R
282	H591CP .25MM	10.42	9.35	--	--	--	--	353	-10.5	--	--	--	Yes	N/R
284	H591CP .50MM	10.47	9.45	--	--	--	--	357	-10.5	E-916K .50MM	--	R-10596 .64MM	Yes	N/R
285	H591CP .75MM	10.52	9.49	--	--	--	--	361	-10.5	E-916K .75MM	--	R-10596 .89MM	Yes	N/R
287	H591CP 1.00MM	10.57	9.54	--	--	--	--	365	-10.5	E-916K 1.00MM	--	R-10596 1.14MM	Yes	N/R
Single Piston Part #														
281	WH591CP	10.36	9.31	--	--	--	--	349	-10.5	WE-916K	--	--	Yes	N/R
282	WH591CP .25MM	10.42	9.35	--	--	--	--	353	-10.5	--	--	--	Yes	N/R
284	WH591CP .50MM	10.47	9.45	--	--	--	--	357	-10.5	--	--	--	Yes	N/R
285	WH591CP .75MM	10.52	9.49	--	--	--	--	361	-10.5	--	--	--	Yes	N/R
287	WH591CP 1.00MM	10.57	9.54	--	--	--	--	365	-10.5	--	--	--	Yes	N/R

Application Notes: 2 valve; 1991-95; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Ford Modular V8 - cont'd.

SPEED-PRO Hypereutectic Pistons

4.6L (281) Engines (3.551 Bore x 3.542 Stroke)



Dome Shape: .060 x 2.68" dia. dish
 Con Rod Length (in): 5.933
 Compression Distance (in): 1.214
 Deck Clearance (in): .001
 Skirt Clearance (in): .0006

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.866
 Pin Weight (grams): 107

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
281	H614CP	11.67	10.32	--	--	--	--	349	-3.0	E-916K	--	--	Yes	Included
284	H614CP .50MM	11.79	10.50	--	--	--	--	357	-3.0	E-916K .50MM	--	R-10596 64MM	Yes	Included
285	H614CP .75MM	11.84	10.55	--	--	--	--	361	-3.0	E-916K .75MM	--	R-10596 89MM	Yes	Included
287	H614CP 1.00MM	11.90	10.60	--	--	--	--	365	-3.0	E-916K 1.00MM	--	R-10596 114MM	Yes	Included
Single Piston Part #														
281	WH614CP	11.67	10.32	--	--	--	--	349	-3.0	WE-916K	--	--	Yes	Included
284	WH614CP .50MM	11.79	10.50	--	--	--	--	357	-3.0	--	--	--	Yes	Included
285	WH614CP .75MM	11.84	10.55	--	--	--	--	361	-3.0	--	--	--	Yes	Included
287	WH614CP 1.00MM	11.90	10.60	--	--	--	--	365	-3.0	--	--	--	Yes	Included

Application Notes: 4 valve; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

SPEED-PRO POWERFORGED Pistons

4.6L (281) Engines (3.551 Bore x 3.542 Stroke)



Dome Shape: Dish
 Con Rod Length (in): 5.933
 Compression Distance (in): 1.214
 Deck Clearance (in): .012
 Skirt Clearance (in): .0035

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.866
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	54.0	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
281	L-2623F	9.77	8.84	8.61	--	--	--	336	-13.5	E-916K	--	--	Yes	Included
284	L-2623F .50MM	9.87	8.93	8.70	--	--	--	343	-13.5	E-916K .50MM	--	R-10596 .64MM	Yes	Included
285	L-2623F .75MM	9.92	8.97	8.74	--	--	--	347	-13.5	E-916K .75MM	--	R-10596 .89MM	Yes	Included
Single Piston Part #														
281	WL-2623F	9.77	8.84	8.61	--	--	--	336	-13.5	WE-916K	--	--	Yes	Included

Application Notes: Cobra 4 valve, DOHC Supercharged; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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Ford Modular V8 - cont'd.

SPEED-PRO POWERFORGED Pistons

4.6L (281) Engines (3.551 Bore x 3.542 Stroke)

Dome Shape: .150 x 2.70" dia. dish
 Con Rod Length (in): 5.933
 Compression Distance (in): 1.214
 Deck Clearance (in): .001
 Skirt Clearance (in): .0030

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.866
 Pin Weight (grams): 107



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
281	L-2608F	10.41	9.35	--	--	--	--	333	-10.2	E-916K	--	--	Yes	Included
284	L-2608F .50MM	10.51	9.44	--	--	--	--	341	-10.2	E-916K .50MM	--	R-10596 .64MM	Yes	Included
285	L-2608F .75MM	10.56	9.48	--	--	--	--	345	-10.2	E-916K .75MM	--	R-10596 .89MM	Yes	Included
Single Piston Part #														
281	WL-2608F	10.41	9.35	--	--	--	--	333	-10.2	WE-916K	--	--	Yes	Included
284	WL-2608F .50MM	10.51	9.44	--	--	--	--	341	-10.2	--	--	--	Yes	Included
285	WL-2608F .75MM	10.56	9.48	--	--	--	--	345	-10.2	--	--	--	Yes	Included

Application Notes: 2 valve; Replacement for 1991-95 applications; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: .060 x 2.680" dia. dish
 Con Rod Length (in): 5.933
 Compression Distance (in): 1.214
 Deck Clearance (in): .001
 Skirt Clearance (in): .0030

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.866
 Pin Weight (grams): 107



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
284	L-2609F .50MM	11.88	10.50	--	--	--	--	365	-2.8	E-916K .50MM	--	R-10596 .64MM	Yes	Included

Application Notes: 4 valve; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Ford Modular V8 - cont'd.

SPEED-PRO POWERFORGED Pistons

5.4L (330) Engines (3.551 Bore x 4.160 Stroke)



Dome Shape: Dish
 Con Rod Length (in): 6.657
 Compression Distance (in): 1.221
 Deck Clearance (in): .118
 Skirt Clearance (in): .0035

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.866
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		44.0	51.8	--	--	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
330	L-2622F	8.53	7.93	--	--	--	--	320	-20.5	E-916K	--	--	Yes	Included
333	L-2622F .50MM	8.60	7.99	--	--	--	--	327	-20.5	E-916K .50MM	--	R-10596 .64MM	Yes	Included
335	L-2622F .75MM	8.63	8.03	--	--	--	--	331	-20.5	E-916K .75MM	--	R-10596 .89MM	Yes	Included
Single Piston Part #														
335	WL-2622F 75MM	8.63	8.03	--	--	--	--	331	-20.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included

Application Notes: Lightning; 2 valve; SOHC Supercharged; DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
4.6L Engines					
Rod Set					
	Competition Series	8-7250CH	Super Duty Alloy		Std-.026-.026X-.25MM
Main Set					
	Competition Series	148M	Super Duty Alloy	SOHC	Std-.026MM
	Competition Series	149M	Super Duty Alloy	DOHC; Cobra	Std-.026-.026X-.25MM
5.4L Engines					
Rod Set					
	Competition Series	8-7250CH	Super Duty Alloy		Std-.026-.026X-.25MM
Main Set					
	Competition Series	153M	Super Duty Alloy		Std-.026-.026X-.25MM

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
4.6L; 5.4L Engines				
Complete Timing Sets				
	CTS-3676X9R	Competition Roller; Premium .250" Double Roller 9 Keyway		4V; Incl. secondary sprockets w/chain

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Ford Small Block

SPEED-PRO Hypereutectic Piston Sets with Rings

302 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH273CP 30	Hypereutectic	H273CP E-251K	8 1	30-40-60
COMPRESSION RATIO: 8.6:1 w/63cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KH120CP 30	Hypereutectic	H120CP R-8902	8 1	30
COMPRESSION RATIO: 9.09:1 w/63cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston; CNC machined				

SPEED-PRO POWERFORGED Piston Sets with Rings

302 Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2482F 30	POWERFORGED	L-2482F E-251K	8 1	30-40-60
COMPRESSION RATIO: 9.13:1 w/63cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2488F 30	POWERFORGED	L-2488F E-458K	8 1	30-40
COMPRESSION RATIO: 9.53:1 w/63cc heads DOME DESIGN: Flat; 4 reliefs FEATURES: DUROSHIELD® skirt coated piston				

351W Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2446F 30	POWERFORGED	L-2446F E-251K	8 1	30-40
COMPRESSION RATIO: 9.06:1 w/63cc heads DOME DESIGN: .110 dish FEATURES: DUROSHIELD® skirt coated piston				

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

289 Engines (4.000 Bore x 2.870 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.155
 Compression Distance (in): 1.605
 Deck Clearance (in): .011
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 152

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
289	H273CP	9.00	8.62	8.41	8.18	7.69	--	579	-8.0	E-251K	R-9903	R-9343 5	Yes	Included
291	H273CP 20	9.08	8.69	8.48	8.25	7.75	--	589	-8.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
293	H273CP 30	9.12	8.73	8.52	8.28	7.79	--	594	-8.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
294	H273CP 40	9.16	8.77	8.55	8.32	7.82	--	599	-8.0	E-251K 40	--	R-9343 45	Yes	Included
297	H273CP 60	9.24	8.84	8.63	8.39	7.89	--	609	-8.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
289	WH273CP	9.00	8.62	8.41	8.18	7.69	--	579	-8.0	WE-251K	--	--	Yes	Included
291	WH273CP 20	9.08	8.69	8.48	8.25	7.75	--	589	-8.0	--	--	--	Yes	Included
293	WH273CP 30	9.12	8.73	8.52	8.28	7.79	--	594	-8.0	WE-251K 30	--	WR-9343 35	Yes	Included
294	WH273CP 40	9.16	8.77	8.55	8.32	7.82	--	599	-8.0	WE-251K 40	--	--	Yes	Included
297	WH273CP 60	9.24	8.84	8.63	8.39	7.89	--	609	-8.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

302 Engines; 1968-72; '77-Later Block With 8.206 Deck Height (4.000 Bore x 3.000 Stroke)



Dome Shape: .060 dish; 2 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.615
 Deck Clearance (in): .001
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
306	H132CP 30	9.02	8.66	8.46	8.23	7.76	--	514	-15.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
307	H132CP 40	9.06	8.69	8.49	8.27	7.80	--	519	-15.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
Single Piston Part #														
306	WH132CP 30	9.02	8.66	8.46	8.23	7.76	--	514	-15.0	--	WR-9902 30	WR-9771 35	Yes	Included
307	WH132CP 40	9.06	8.69	8.49	8.27	7.80	--	519	-15.0	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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Ford Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

302 Engines; 1968-72; '77-Later Block With 8.206 Deck Height (4.000 Bore x 3.000 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.605
 Deck Clearance (in): .011
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 152



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	H273CP	9.36	8.96	8.74	8.50	7.99	--	579	-8.0	E-251K	R-9903	R-9343 5	Yes	Included
305	H273CP 20	9.44	9.04	8.82	8.57	8.06	--	589	-8.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
306	H273CP 30	9.49	9.08	8.86	8.61	8.09	--	594	-8.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
307	H273CP 40	9.53	9.12	8.90	8.65	8.13	--	599	-8.0	E-251K 40	--	R-9343 45	Yes	Included
311	H273CP 60	9.61	9.20	8.97	8.72	8.20	--	609	-8.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
302	WH273CP	9.36	8.96	8.74	8.50	7.99	--	579	-8.0	WE-251K	--	--	Yes	Included
305	WH273CP 20	9.44	9.04	8.82	8.57	8.06	--	589	-8.0	--	--	--	Yes	Included
306	WH273CP 30	9.49	9.08	8.86	8.61	8.09	--	594	-8.0	WE-251K 30	--	WR-9343 35	Yes	Included
307	WH273CP 40	9.53	9.12	8.90	8.65	8.13	--	599	-8.0	WE-251K 40	--	--	Yes	Included
311	WH273CP 60	9.61	9.20	8.97	8.72	8.20	--	609	-8.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.615
 Deck Clearance (in): .002
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 121



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
306	H120CP 30	10.09	9.62	9.37	9.09	8.51	--	560	-5.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
Single Piston Part #														
305	WH120CP 20	10.04	9.58	9.33	9.05	8.47	--	555	-5.0	--	--	--	Yes	Included
306	WH120CP 30	10.09	9.62	9.37	9.09	8.51	--	560	-5.0	--	WR-9902 30	WR-9771 35	Yes	Included

Application Notes: CNC machined; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

302 Engines; 1973-76 Block With 8.229 Deck Height (4.000 Bore x 3.000 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.605
 Deck Clearance (in): .034
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 152

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	H273CP	8.86	8.51	8.31	8.09	7.64	--	579	-8.0	E-251K	R-9903	R-9343 5	Yes	Included
305	H273CP 20	8.93	8.58	8.38	8.16	7.70	--	589	-8.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
306	H273CP 30	8.97	8.61	8.41	8.19	7.73	--	594	-8.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
307	H273CP 40	9.00	8.64	8.45	8.22	7.76	--	599	-8.0	E-251K 40	--	R-9343 45	Yes	Included
311	H273CP 60	9.08	8.71	8.51	8.29	7.82	--	609	-8.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
302	WH273CP	8.86	8.51	8.31	8.09	7.64	--	579	-8.0	WE-251K	--	--	Yes	Included
305	WH273CP 20	8.93	8.58	8.38	8.16	7.70	--	589	-8.0	--	--	--	Yes	Included
306	WH273CP 30	8.97	8.61	8.41	8.19	7.73	--	594	-8.0	WE-251K 30	--	WR-9343 35	Yes	Included
307	WH273CP 40	9.00	8.64	8.45	8.22	7.76	--	599	-8.0	WE-251K 40	--	--	Yes	Included
311	WH273CP 60	9.08	8.71	8.51	8.29	7.82	--	609	-8.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

347 Stroker; 302 Engines Using a 3.400" Crank (4.000 Bore x 3.400 Stroke)



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.400
 Compression Distance (in): 1.090
 Deck Clearance (in): .016
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 110

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
342	H139CL	10.82	10.34	10.07	9.77	9.16	--	393	-5.0	--	--	--	Yes	Included
345	H139CL 20	10.91	10.43	10.16	9.86	9.24	--	401	-5.0	--	--	--	Yes	Included
347	H139CL 30	10.96	10.47	10.20	9.90	9.28	--	405	-5.0	--	R-9968 30	R-9342 35	Yes	Included
349	H139CL 40	11.01	10.52	10.24	9.94	9.32	--	409	-5.0	--	R-9968 40	R-9342 45	Yes	Included
352	H139CL 60	11.10	10.61	10.33	10.03	9.40	--	417	-5.0	--	R-9968 60	R-9342 65	Yes	Included
Single Piston Part #														
347	WH139CL 30	10.96	10.47	10.20	9.90	9.28	--	405	-5.0	--	--	WR-9342 35	Yes	Included
349	WH139CL 40	11.01	10.52	10.24	9.94	9.32	--	409	-5.0	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Ford Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

347 Stroker; 302 Engines Using a 3.400" Crank (4.000 Bore x 3.400 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.400
 Compression Distance (in): 1.090
 Deck Clearance (in): .016
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 114



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
342	H146CL	10.82	10.34	10.07	9.77	9.16	--	410	-5.0	--	--	--	Yes	Included
345	H146CL 20	10.91	10.43	10.16	9.86	9.24	--	419	-5.0	--	--	--	Yes	Included
347	H146CL 30	10.96	10.47	10.20	9.90	9.28	--	423	-5.0	--	R-9968 30	R-9342 35	Yes	Included
349	H146CL 40	11.01	10.52	10.24	9.94	9.32	--	427	-5.0	--	R-9968 40	R-9342 45	Yes	Included
Single Piston Part #														
342	WH146CL	10.82	10.34	10.07	9.77	9.16	--	410	-5.0	--	--	--	Yes	Included
347	WH146CL 30	10.96	10.47	10.20	9.90	9.28	--	423	-5.0	--	--	WR-9342 35	Yes	Included

Application Notes: CNC machined; Lightweight; Tapered lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

351 Windsor Based Engines; 1973 & later block with 9.503 deck height (4.000 Bore x 3.500 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.956
 Compression Distance (in): 1.772
 Deck Clearance (in): .026
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 152



CID	Piston Set Part #	Compression Ratio by Cyl Head CC							Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2	Moly Rings			Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings			
351	H336CP	--	--	9.08	8.80	8.33	--	619	-12.0	E-251K	R-9903	R-9343 5	Yes	Included	
356	H336CP 20	--	--	9.11	8.88	8.40	--	629	-12.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included	
357	H336CP 30	--	--	9.14	8.91	8.43	--	634	-12.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included	
359	H336CP 40	--	--	9.18	8.95	8.47	--	639	-12.0	E-251K 40	--	R-9343 45	Yes	Included	
362	H336CP 60	--	--	9.26	9.03	8.54	--	649	-12.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included	
Single Piston Part #															
351	WH336CP	--	--	9.08	8.80	8.33	--	619	-12.0	WE-251K	--	--	Yes	Included	
356	WH336CP 20	--	--	9.11	8.88	8.40	--	629	-12.0	--	--	--	Yes	Included	
357	WH336CP 30	--	--	9.14	8.91	8.43	--	634	-12.0	WE-251K 30	--	WR-9343 35	Yes	Included	
359	WH336CP 40	--	--	9.18	8.95	8.47	--	639	-12.0	WE-251K 40	--	--	Yes	Included	
362	WH336CP 60	--	--	9.26	9.03	8.54	--	649	-12.0	WE-251K 60	--	--	Yes	Included	

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO Hypereutectic Pistons

393; 3.85" Stroker; 351W Engines Using a 3.850" Crank (4.00 Bore x 3.850 Stroke)



Dome Shape: .060 dish; 2 reliefs
 Con Rod Length (in): 5.956
 Compression Distance (in): 1.615
 Deck Clearance (in): .007
 Skirt Clearance (in): .0015

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
393	H132CP 30	11.13	10.68	10.43	10.15	9.56	--	514	-15.0	R-8902 30	R-9902 30	R-9771 35	Yes	Included
395	H132CP 40	11.18	10.72	10.47	10.19	9.61	--	519	-15.0	R-8902 40	R-9902 40	R-9771 45	Yes	Included
Single Piston Part #														
393	WH132CP 30	11.13	10.68	10.43	10.15	9.56	--	514	-15.0	--	WR-9902 30	WR-9771 35	Yes	Included
395	WH132CP 40	11.18	10.72	10.47	10.19	9.61	--	519	-15.0	--	--	--	Yes	Included

Application Notes: CNC machined; Lightweight pin; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

SPEED-PRO POWERFORGED Pistons

289 Engines (4.000 Bore x 2.870 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.155
 Compression Distance (in): 1.605
 Deck Clearance (in): .011
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
289	L-2482F	9.62	9.18	8.94	8.67	8.11	--	598	-2.7	E-251K	R-9903	R-9343 5	Yes	N/R
291	L-2482F 20	9.70	9.26	9.01	8.74	8.18	--	608	-2.7	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
293	L-2482F 30	9.75	9.30	9.05	8.78	8.22	--	613	-2.7	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
294	L-2482F 40	9.79	9.34	9.09	8.82	8.25	--	618	-2.7	E-251K 40	--	R-9343 45	Yes	N/R
297	L-2482F 60	9.87	9.42	9.17	8.89	8.32	--	628	-2.7	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
289	WL-2482F	9.62	9.18	8.94	8.67	8.11	--	598	-2.7	WE-251K	--	--	Yes	N/R
291	WL-2482F 20	9.70	9.26	9.01	8.74	8.18	--	608	-2.7	--	--	--	Yes	N/R
293	WL-2482F 30	9.75	9.30	9.05	8.78	8.22	--	613	-2.7	WE-251K 30	--	WR-9343 35	Yes	N/R
294	WL-2482F 40	9.79	9.34	9.09	8.82	8.25	--	618	-2.7	WE-251K 40	--	--	Yes	N/R
297	WL-2482F 60	9.87	9.42	9.17	8.89	8.32	--	628	-2.7	WE-251K 60	--	--	Yes	N/R

Application Notes: 1963-67 289 "Hi-Po"; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

302 Engines; 1968-72; '77-Later Block With 8.206 Deck Height (4.000 Bore x 3.000 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.600
 Deck Clearance (in): .016
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 131



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
306	LW-2616NF 30	9.73	9.30	9.07	8.80	8.26	--	528	-5.5	E-921K 30	--	R-10701 35	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.605
 Deck Clearance (in): .011
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	L-2482F	10.01	9.55	9.30	9.02	8.44	--	598	-2.7	E-251K	R-9903	R-9343 5	Yes	N/R
305	L-2482F 20	10.10	9.63	9.38	9.09	8.51	--	608	-2.7	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
306	L-2482F 30	10.14	9.67	9.42	9.13	8.55	--	613	-2.7	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
307	L-2482F 40	10.19	9.72	9.46	9.17	8.58	--	618	-2.7	E-251K 40	--	R-9343 45	Yes	N/R
311	L-2482F 60	10.27	9.80	9.54	9.25	8.66	--	628	-2.7	E-251K 60	R-9903 60	R-9343 65	Yes	N/R

Single Piston Part

302	WL-2482F	10.01	9.55	9.30	9.02	8.44	--	598	-2.7	WE-251K	--	--	Yes	N/R
305	WL-2482F 20	10.10	9.63	9.38	9.09	8.51	--	608	-2.7	--	--	--	Yes	N/R
306	WL-2482F 30	10.14	9.67	9.42	9.13	8.55	--	613	-2.7	WE-251K 30	--	WR-9343 35	Yes	N/R
307	WL-2482F 40	10.19	9.72	9.46	9.17	8.58	--	618	-2.7	WE-251K 40	--	--	Yes	N/R
311	WL-2482F 60	10.27	9.80	9.54	9.25	8.66	--	628	-2.7	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

302 Engines; 1968-72; '77-Later Block With 8.206 Deck Height (4.000 Bore x 3.000 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.619
 Deck Clearance (in): -.003
 Skirt Clearance (in): .0018

Rings: 1.5MM, 1.5MM, 4.0MM
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	L-2488F	10.51	9.99	9.72	9.41	8.77	--	583	-2.0	E-458K	R-10471	R-10470 5	Yes	N/R
305	L-2488F 20	10.60	10.09	9.80	9.49	8.85	--	593	-2.0	E-458K 20	--	--	Yes	N/R
306	L-2488F 30	10.65	10.13	9.85	9.53	8.89	--	598	-2.0	E-458K 30	R-10471 30	R-10472 35	Yes	N/R
307	L-2488F 40	10.70	10.18	9.89	9.58	8.93	--	603	-2.0	E-458K 40	R-10471 40	R-10472 45	Yes	N/R
311	L-2488F 60	10.80	10.27	9.98	9.66	9.01	--	613	-2.0	E-458K 60	--	--	Yes	N/R
Single Piston Part #														
302	WL-2488F	10.51	9.99	9.72	9.41	8.77	--	583	-2.0	--	--	--	Yes	N/R
305	WL-2488F 20	10.60	10.09	9.80	9.49	8.85	--	593	-2.0	WE-458K 20	--	--	Yes	N/R
306	WL-2488F 30	10.65	10.13	9.85	9.53	8.89	--	598	-2.0	WE-458K 30	--	--	Yes	N/R
307	WL-2488F 40	10.70	10.18	9.89	9.58	8.93	--	603	-2.0	WE-458K 40	--	--	Yes	N/R

Application Notes: 1985-87; 5.0L HO; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.619
 Deck Clearance (in): -.003
 Skirt Clearance (in): .0018

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
307	LW-2488F 40	10.70	10.18	9.89	9.58	8.93	--	577	-2.0	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
Single Piston Part #														
307	WLW-2488F 40	10.70	10.18	9.89	9.58	8.93	--	577	-2.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston

Speed-Pro pistons are sold in weight matched engine sets. Due to ongoing improvements, some images may not be representative. Before selecting or installing parts, thoroughly read the Engine Builders Guidelines and Product Selection Guidelines sections of the Speed-Pro Performance Engine Parts paper or on-line catalog. Some pistons may require professional installation and/or machining (see Application Notes).

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

302 Engines; 1973-76 Block With 8.229 Deck Height (4.000 Bore x 3.000 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.605
 Deck Clearance (in): .034
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	L-2482F	9.43	9.02	8.80	8.55	8.04	--	598	-2.7	E-251K	R-9903	R-9343 5	Yes	N/R
305	L-2482F 20	9.50	9.10	8.87	8.62	8.10	--	608	-2.7	E-251K 20	R-9903 20	R-9343 25	Yes	N/R
306	L-2482F 30	9.54	9.13	8.91	8.66	8.13	--	613	-2.7	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
307	L-2482F 40	9.58	9.17	8.94	8.69	8.17	--	618	-2.7	E-251K 40	--	R-9343 45	Yes	N/R
311	L-2482F 60	9.66	9.24	9.01	8.76	8.23	--	628	-2.7	E-251K 60	R-9903 60	R-9343 65	Yes	N/R
Single Piston Part #														
302	WL-2482F	9.43	9.02	8.80	8.55	8.04	--	598	-2.7	WE-251K	--	--	Yes	N/R
305	WL-2482F 20	9.50	9.10	8.87	8.62	8.10	--	608	-2.7	--	--	--	Yes	N/R
306	WL-2482F 30	9.54	9.13	8.91	8.66	8.13	--	613	-2.7	WE-251K 30	--	WR-9343 35	Yes	N/R
307	WL-2482F 40	9.58	9.17	8.94	8.69	8.17	--	618	-2.7	WE-251K 40	--	--	Yes	N/R
311	WL-2482F 60	9.66	9.24	9.01	8.76	8.23	--	628	-2.7	WE-251K 60	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.619
 Deck Clearance (in): .020
 Skirt Clearance (in): .0018

Rings: 1.5MM, 1.5MM, 4.0MM
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	L-2488F	9.86	9.41	9.17	8.90	8.34	--	583	-2.0	E-458K	R-10471	R-10470 5	Yes	N/R
305	L-2488F 20	9.94	9.49	9.25	8.97	8.41	--	593	-2.0	E-458K 20	--	--	Yes	N/R
306	L-2488F 30	9.99	9.53	9.29	9.01	8.44	--	598	-2.0	E-458K 30	R-10471 30	R-10472 35	Yes	N/R
307	L-2488F 40	10.03	9.57	9.32	9.05	8.48	--	603	-2.0	E-458K 40	R-10471 40	R-10472 45	Yes	N/R
311	L-2488F 60	10.11	9.65	9.40	9.12	8.55	--	613	-2.0	E-458K 60	--	--	Yes	N/R
Single Piston Part #														
302	WL-2488F	9.86	9.41	9.17	8.90	8.34	--	583	-2.0	--	--	--	Yes	N/R
305	WL-2488F 20	9.94	9.49	9.25	8.97	8.41	--	593	-2.0	WE-458K 20	--	--	Yes	N/R
306	WL-2488F 30	9.99	9.53	9.29	9.01	8.44	--	598	-2.0	WE-458K 30	--	--	Yes	N/R
307	WL-2488F 40	10.03	9.57	9.32	9.05	8.48	--	603	-2.0	WE-458K 40	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

302 Engines; 1973-76 Block With 8.229 Deck Height (4.000 Bore x 3.000 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.619
 Deck Clearance (in): .020
 Skirt Clearance (in): .0018

Rings: 1/16, 1/16, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 121

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
307	LW-2488F 40	10.03	9.57	9.32	9.05	8.48	--	577	-2.0	R-8902 40	R-9902 40	R-9401 45 (L)	Yes	Included
Single Piston Part #														
307	WLW-2488F 40	10.03	9.57	9.32	9.05	8.48	--	577	-2.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston



Dome Shape: Dish
 Con Rod Length (in): 5.090
 Compression Distance (in): 1.560
 Deck Clearance (in): .079
 Skirt Clearance (in): .0050

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 159

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
302	L-2441F	7.12	6.90	6.78	6.64	6.35	--	546	-21.1	E-251K	R-9903	R-9343 5	Yes	Included
305	L-2441F 30	7.20	6.98	6.85	6.72	6.42	--	561	-21.1	E-251K 30	R-9903 30	R-9343 35	Yes	Included
Single Piston Part #														
302	WL-2441F	7.12	6.90	6.78	6.64	6.35	--	546	-21.1	WE-251K	--	--	Yes	Included
305	WL-2441F 30	7.20	6.98	6.85	6.72	6.42	--	561	-21.1	WE-251K 30	--	WR-9343 35	Yes	Included

Application Notes: Chevy piston; DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

332 Stroker; 302 Engines Using a 3.250" Crank (4.000 Bore x 3.250 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.400
 Compression Distance (in): 1.170
 Deck Clearance (in): .011
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 131



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
332	LW-2639NF 30	10.60	10.12	9.86	9.57	8.96	--	425	-5.5	E-921K 30	--	R-10701 35	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston

347 Stroker; 302 Engines Using a 3.400" Crank (4.000 Bore x 3.400 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.400
 Compression Distance (in): 1.090
 Deck Clearance (in): .016
 Skirt Clearance (in): .0025

Rings: 1.5MM, 1.5MM, 3.0MM
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.927
 Pin Weight (grams): 131



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
347	LW-2642F 30	10.89	10.41	10.14	9.85	9.23	--	411	-5.5	E-921K 30	--	R-10701 35	Yes	Included
349	LW-2642F 40	10.94	10.45	10.18	9.89	9.27	--	415	-5.5	E-921K 30	--	R-10701 35	Yes	Included

Application Notes: Lightweight; DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Ford Small Block - cont'd.

SPEED-PRO POWERFORGED Pistons

351 Windsor Based Engines; 1973 & later block with 9.503 deck height (4.000 Bore x 3.500 Stroke)



Dome Shape: .110 dish
 Con Rod Length (in): 5.956
 Compression Distance (in): 1.772
 Deck Clearance (in): .026
 Skirt Clearance (in): .0025

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		54.5	58.2	60.4	63.0	69.0	76.2			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
351	L-2446F	--	--	9.19	8.95	8.46	--	639	-13.2	E-251K	R-9903	R-9343 5	Yes	N/R
357	L-2446F 30	--	--	9.30	9.06	8.56	--	655	-13.2	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
359	L-2446F 40	--	--	9.34	9.10	8.60	--	660	-13.2	E-251K 40	--	R-9343 45	Yes	N/R
Single Piston Part #														
351	WL-2446F	--	--	9.19	8.95	8.46	--	639	-13.2	WE-251K	--	--	Yes	N/R
357	WL-2446F 30	--	--	9.30	9.06	8.56	--	655	-13.2	WE-251K 30	--	WR-9343 35	Yes	N/R
359	WL-2446F 40	--	--	9.34	9.10	8.60	--	660	-13.2	WE-251K 40	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
289; 302 Engines					
Rod Set					
	Competition Series	7025CH	Super Duty Alloy	Chevy V6 2.000" journal	Std Only
	O.E. Replacement	8-2600CP	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
	Competition Series	8-7160CH	Super Duty Alloy		Std-1X-10
	Competition Series	C8-7160CH	Super Duty Alloy	Coated	Std-10
Main Set					
	O.E. Replacement	4125M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
	Competition Series	129M	Super Duty Alloy	3/4 Groove	Std-1-1X-10
	Competition Series	C129M	Super Duty Alloy	3/4 Groove; Coated	Std-1X-10
Cam Set					
	O.E. Replacement	1204M	Babbitt	Full round design	Std-10
	Competition Series	2102M	H/D Babbitt	Full round design	Std Only
351M; 400 Engines					
Main Set					
	Competition Series	C130M	Super Duty Alloy	3/4 Groove; Coated	Std-1X-10
351W Engines					
Rod Set					
	O.E. Replacement	8-3380CPA	Overplated Copper-Lead Alloy		Std-10-20-30-40
	Competition Series	8-7155CH	Super Duty Alloy		Std-10
	Competition Series	C8-7155CH	Super Duty Alloy	Coated	Std-10
Main Set					
	O.E. Replacement; 1977-1998	5078M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
	O.E. Replacement; 1969-76	5107M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40
	Competition Series; 1977-98	130M	Super Duty Alloy	3/4 Groove	Std-1-1X-10-20
	Competition Series; 1977-98	C130M	Super Duty Alloy	3/4 Groove; Coated	Std-1X-10
	Competition Series	144M	Super Duty Alloy	For use w/145M SEMI, 147M SEMI	Std-10

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PERFORMANCE ENGINE BEARINGS

Ford Small Block - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
351W Engines - cont'd.					
Spacer Set					
	Competition Series	145M SEMI	Bearing Spacer	351 SVO M6303-E351 crank, in 351 Windsor block	SEMI
	Competition Series	147M SEMI	Bearing Spacer	Use w/factory 351C crank, in 351 Windsor block	SEMI
Cam Set					
	O.E. Replacement	1204M	Babbitt	Full round design	Std-10
	Competition Series	2102M	H/D Babbitt	Full round design	Std Only



OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
289; 302 Engines			
Oil Pump			
	O.E. Replacement	224-41118	Incl. 224-61118 shaft
	High Volume	224-41128	
	High Pressure	224-43370	
Oil Pump Screen			
	O.E. Replacement	224-11118	'80 & earlier; Exc. Fairmont, Zephyr
	O.E. Replacement	224-14118	
Pump Shaft			
	O.E. Replacement	224-61118	
351W Engines			
Oil Pump			
	O.E. Replacement	224-41143	Requires 224-61143 shaft; High Performance; 25% more volume than stock pump
	High Volume	224-123R	
	High Volume	224-41143V	Requires 224-61143 shaft; Street Performance
Oil Pump Screen			
	O.E. Replacement	224-11143	
Pump Shaft			
	O.E. Replacement	224-61143	



PERFORMANCE CAMS

289, 302, 351W Engines											
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP	
					.050 LIFT	.006 LIFT	INT.	EXH.			
CS-1158R	KC-1158R	Pro-1500	Stock	1000-4000	194/204	270/280	.424	.448	110	45	
Hydraulic		LIFTERS	HT-900 (Std.)	HT-900R (Race)							
		VALVE SPRING	See notes								
		RETAINER	VSR-7017R								
		LOCKS	VK-115R								
APPLICATION NOTES: 302 firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82											
CS-1066R	KC-1066R	Pro-2000	Smooth	1000-4000	197/209	280/293	.416	.444	114	60	
Hydraulic		LIFTERS	HT-900 (Std.)	HT-900R (Race)							
		VALVE SPRING	See notes								
		RETAINER	VSR-7017R								
		LOCKS	VK-115R								
APPLICATION NOTES: 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82; Ford 302 HO; Part No. D30Z-6250A											

PERFORMANCE CAMS



Ford Small Block - cont'd.

289, 302, 351W Engines - cont'd.										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1084R	KC-1084R	Pro-2000	Smooth	1500-4000	204/214	280/290	.448	.472	112	51
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-115R	HT-900R (Race)	APPLICATION NOTES: 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82; SVO Part No. M-6250-A332					
CS-1217R		Pro-2000	Smooth	1500-4000	204/214	280/290	.448	.472	112	51
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-115R	HT-900R (Race)	APPLICATION NOTES: 302 firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82					
CS-1020R	KC-1020R	Pro-3000	Good	2000-4500	214/224	290/300	.472	.496	112	71
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-315R	HT-900R (Race)	APPLICATION NOTES: 302 firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82; SVO Part No. M-6250-312					
CS-1231R		Pro-3000	Good	2000-4500	214/224	290/300	.472	.496	112	61
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-315R	HT-900R (Race)	APPLICATION NOTES: 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82					
CS-108R	KC-108R	Pro-3000	Good	2000-4500	218/218	298/298	.460	.460	113	62
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-315R	HT-900R (Race)	APPLICATION NOTES: 302 firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82; 289-225 HP; Ford Part No. C90Z-6250-C					
CS-1063R	KC-1063R	Pro-3000	Good	2000-4500	218/224	297/304	.458	.464	110	73
CS-1064R	KC-1064R	Pro-3000	Fair	2200-5500	218/230	297/307	.458	.483	110	81
CS-193R		Pro-3000	Rough	2800-6000	224/224	304/304	.466	.466	110	84
CS-1141R	KC-1141R	Pro-3000	Fair	3000-6000	224/234	300/310	.496	.520	112	71
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-315R	HT-900R (Race)	APPLICATION NOTES: 302 firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82					
CS-1162R		Pro-3000	Rough	3000-6000	224/234	300/310	.496	.520	110	75
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) See notes VSR-7017R VK-315R	HT-900R (Race)	APPLICATION NOTES: 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82					
CS-760	KC-760	Pro-3000	Smooth	1500-5000	210/210	279/279	.445	.445	115	49
CS-195R	KC-195R	Pro-3000	Good	2000-5500	212/222	289/299	.493	.510	112	60
Hydraulic Roller		LIFTERS VALVE SPRING RETAINER LOCKS	HT-2205 (Std.) See notes VSR-7017R VK-115R		APPLICATION NOTES: 1985-93 5.0L HO Eng.; 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82					

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PERFORMANCE CAMS

Ford Small Block - cont'd.

289, 302, 351W Engines - cont'd.

CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1177R		Pro-3000	Fair	2500-6000	222/232	299/309	.510	.534	112	70
Hydraulic Roller		LIFTERS	HT-2205 (Std.)							
		VALVE SPRING	See notes							
		RETAINER	VSR-7017R							
		LOCKS	VK-315R							
APPLICATION NOTES: 5.0L H.O Output Eng.s.; 351W firing order; Installed heights VS-896R - 1.70, VS-1555 - 1.82										



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES	
O.E. Replacement Valve								
289 Engines								
Exhaust								
	1.450	V-1710	.3420	4.863	45	21-4N	1963-66	
	1.450	V-1784	.3415	4.873	45	21-4N	1966-68	
Intake								
	1.669	V-1711	.3420	4.863	45	1047	1963-64	
	1.774	V-1785	.3420	4.863	45	SIL-1	1966-68	
	1.780	V-1783	.3420	4.863	45	8645	1964-66	
302 Engines								
Exhaust								
	1.450	V-1784	.3415	4.873	45	21-4N	1968-69	
	1.457	V-2429	.3414	4.942	45	21-4N	1986	
	1.460	V-1961	.3415	5.070	45	21-4N	1978-85; 1987-92; 1993-94 Mustang Exc. Cobra	
Intake								
	1.774	V-1785	.3420	4.863	45	SIL-1	1968-69	
	1.777	V-2430	.3420	4.942	45	SIL-1	1986	
	1.781	V-1932	.3420	5.050	45	SIL-1	1969-78; w/Ball pivot rockers	
	1.782	V-2045	.3420	5.070	45	SIL-1	1978-85; 1987-92; 1993-94 Mustang Exc. Cobra	
351W Engines								
Exhaust								
	1.460	V-1961	.3415	5.070	45	21-4N	1978-91; w/Stamped steel fulcrum style rockers	
	1.461	V-2044	.3414	5.070	45	21-2N	1975-78; w/Cast iron ball pivot rockers	
	1.540	V-1893	.3415	5.070	45	21-4N	1969-74	
Intake								
	1.782	V-2045	.3420	5.070	45	SIL-1	1975-87; 1987-89 HO	
	1.842	V-3926	.3420	5.070	45	SIL-1	1969-74	
POWERFORGED Stainless Steel Valve								
289; 302; 351W Engines								
Exhaust								
	1.465	V-8014R	.3415	5.085	45	21-2N	.395 tip length; 1969-94	
	1.550	V-8015R	.3415	5.085	45	21-2N	.395 tip length; 1969-94	
	1.600	V-8016R	.3415	5.085	45	21-2N	.395 tip length; 1969-94	
Intake								
	1.850	V-8018R	.3420	5.093	45	21-2N	.395 tip length; 1969-94	
	1.941	V-8019R	.3420	5.091	45	21-2N	.395 tip length; 1969-94	
Valve Guide - Manganese Bronze								
		VG-7002R	.3435	2.375				Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600				Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
Valve Stem Seal								
		ST-2001	.3410					Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410					Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410					PTFE; .531 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS



Ford Small Block - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
289; 302; 351W Engines				
Guide Plates				
	MR-1897	Hardened Stamped Steel	For 5/16 Push Rods	
Push Rods				
	RP-3165	Stock Type	5/16 dia.	289; 6.801 length
	RP-3222R	Hardened Chrome Moly	5/16 dia.	289; 6.804 length
	RP-3223R	Hardened Chrome Moly	5/16 dia.	302; 1969-84; 1985 w/Flat tappet cams
	RP-3225R	Hardened Chrome Moly	5/16 dia.	351W; Use w/cast rockers
	RP-3323R	Hardened Chrome Moly	5/16 dia.	351W; Use w/stamped rockers
	RP-3329R	Hardened Chrome Moly	5/16 dia.	302; 1985 w/O.E. roller cam; 1986-94
Rocker Arms				
	R-1091R	Stamped Steel Roller	1.6 Ratio	1978-1/2 to 94; Exc. Cobra
	R-836	H/D Cast w/o Rails	1.6 Ratio	Use .240 tip valves; guide plates; screw-in studs
	R-847	Cast "Rail Type"	1.6 Ratio	1968 to 78-1/2
	R-879	Stamped Steel	1.6 Ratio	1978-1/2 to 94; Exc. Cobra
	RR-7007R	Aluminum Roller	1.6 Ratio	Requires 3/8 H/D screw-in studs; Guide plates
	RR-7008R	Aluminum Roller	1.6 Ratio	Requires 7/16 H/D screw-in studs; Guide plates
	RR-7013R	Aluminum Roller	1.6 Ratio	1978-1/2 to 94; Exc. Cobra
	RR-7014R	Aluminum Roller	1.7 Ratio	
	RR-7026R	Stainless Steel Roller	1.6 Ratio	Requires 7/16 H/D screw-in studs; Guide plates
Rocker Adjustment Locks				
	MR-1858PL	3/8 Stud Diameter		For roller rockers
	MR-1860PL	3/8 Stud Diameter		For stock style ball pivot rockers
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1862RS	3/8 H/D Screw-In		For stock or roller rockers
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth
	MR-1910RS	7/16 H/D Screw-In		For roller rockers; .725 head end depth
Complete Timing Sets				
	CTS-1111R	Economy Double Roller	3 Keyway	1963-84, 1-piece eccentric; When depleted use CTS-1135NR
	CTS-1119R	Economy Double Roller	3 Keyway	1984 & UP, 2-piece eccentric; When depleted use CTS-1138NR
	CTS-1135NR	Performance Roller; .250" Double Roller	3 Keyway	1963-84; 289 Exc. HO, 302 HO, 351W Exc. HO; 351W HO to 03/21/1984; Factory 1-piece fuel pump eccentric
	CTS-1138NR	Performance Roller; .250" Double Roller	3 Keyway	1972-01; 302 Exc. HO, 302 HO from 03/21/1984, 351W Exc. HO; Factory 2-piece fuel pump eccentric
	CTS-3535X9R	Billet Roller; .250" Double Roller	9 Keyway	1963-84; 289 Exc. HO, 302 HO, 351W Exc. HO, 351W HO to 03/21/1984; Factory 1-piece fuel pump eccentric
	CTS-3635X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	1963-84; 289 Exc. HO, 302 HO, 351W Exc. HO, 351W HO to 03/21/1984; Factory 1-piece fuel pump eccentric
Boss 302 Engines				
Push Rods				
	RP-3187	Hardened Stock Type	5/16 dia.	
	RP-3224R	Hardened Chrome Moly	5/16 dia.	
Rocker Arms				
	RR-7009R	Aluminum Roller	1.73 Ratio	Requires 7/16 H/D screw-in studs; Guide plates
Rocker Adjustment Locks				
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth
	MR-1910RS	7/16 H/D Screw-In		For roller rockers; .725 head end depth

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Ford Cleveland/Modified V8

SPEED-PRO POWERFORGED Piston Sets with Rings

351C Engines

PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2379F 30	POWERFORGED	L-2379F E-251K	8 1	30-40
COMPRESSION RATIO: 8.9:1 w/76cc heads DOME DESIGN: Flat; 2 reliefs FEATURES: DUROSHIELD® skirt coated piston				

Ford Cleveland/Modified

SPEED-PRO Hypereutectic Pistons

351 Cleveland Engines (4.000 Bore x 3.500 Stroke)

Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.780
 Compression Distance (in): 1.645
 Deck Clearance (in): .031
 Skirt Clearance (in): .0010

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.912
 Pin Weight (grams): 152



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.6	63.0	67.0	76.2	78.4	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
351	H555CP	10.51	9.99	9.56	8.72	--	--	569	-2.0	E-251K	R-9903	R-9343 5	Yes	Included
355	H555CP 20	10.60	10.07	9.64	8.79	--	--	579	-2.0	E-251K 20	R-9903 20	R-9343 25	Yes	Included
357	H555CP 30	10.64	10.11	9.68	8.83	--	--	584	-2.0	E-251K 30	R-9903 30	R-9343 35	Yes	Included
359	H555CP 40	10.69	10.15	9.72	8.86	--	--	589	-2.0	E-251K 40	--	R-9343 45	Yes	Included
362	H555CP 60	10.77	10.24	9.80	8.93	--	--	599	-2.0	E-251K 60	R-9903 60	R-9343 65	Yes	Included
Single Piston Part #														
351	WH555CP	10.51	9.99	9.56	8.72	--	--	569	-2.0	WE-251K	--	--	Yes	Included
355	WH555CP 20	10.60	10.07	9.64	8.79	--	--	579	-2.0	--	--	--	Yes	Included
357	WH555CP 30	10.64	10.11	9.68	8.83	--	--	584	-2.0	WE-251K 30	--	WR-9343 35	Yes	Included
359	WH555CP 40	10.69	10.15	9.72	8.86	--	--	589	-2.0	WE-251K 40	--	--	Yes	Included
362	WH555CP 60	10.77	10.24	9.80	8.93	--	--	599	-2.0	WE-251K 60	--	--	Yes	Included

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Ford Cleveland/Modified - cont'd.

SPEED-PRO POWERFORGED Pistons

351 Cleveland Engines (4.000 Bore x 3.500 Stroke)



Dome Shape: Flat; 2 reliefs
 Con Rod Length (in): 5.780
 Compression Distance (in): 1.647
 Deck Clearance (in): .029
 Skirt Clearance (in): .0015

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.912
 Pin Weight (grams): 143

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		58.6	63.0	67.0	76.2	78.4	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
351	L-2379F	10.63	10.09	9.66	8.79	--	--	608	-1.5	E-251K	R-9903	R-9343 5	Yes	N/R
357	L-2379F 30	10.76	10.22	9.78	8.90	--	--	623	-1.5	E-251K 30	R-9903 30	R-9343 35	Yes	N/R
359	L-2379F 40	10.80	10.26	9.82	8.94	--	--	627	-1.5	E-251K 40	--	R-9343 45	Yes	N/R
Single Piston Part #														
351	WL-2379F	10.63	10.09	9.66	8.79	--	--	608	-1.5	WE-251K	--	--	Yes	N/R
357	WL-2379F 30	10.76	10.22	9.78	8.90	--	--	623	-1.5	WE-251K 30	--	WR-9343 35	Yes	N/R
359	WL-2379F 40	10.80	10.26	9.82	8.94	--	--	627	-1.5	WE-251K 40	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
351C Engines					
Rod Set					
	O.E. Replacement Competition Series	8-3400CP 8-7175CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-1-10-20-30-40 10
Main Set					
	O.E. Replacement Competition Series	4925M 146M	Overplated Copper-Lead Alloy Super Duty Alloy	3/4 Groove	Std-10-20-30 Std-1-1X-10-20
Cam Set					
	O.E. Replacement	1403M	Babbitt	Full round design	Std Only
351M; 400 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-3400CP 8-7175CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-1-10-20-30-40 10
Main Set					
	Competition Series O.E. Replacement; 1977-82 O.E. Replacement; 1971-76	130M 5078M 5107M	Super Duty Alloy Overplated Copper-Lead Alloy Overplated Copper-Lead Alloy	3/4 Groove	Std-1-1X-10-20 Std-1-10-20-30-40 Std-1-10-20-30-40
Cam Set					
	O.E. Replacement	1403M	Babbitt	Full round design	Std Only

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
351C; 351M; 400 Engines			
Oil Pump	O.E. Replacement High Volume	224-41166 224-41166V	
Oil Pump Screen	O.E. Replacement	224-11166	

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OIL PUMPS AND ACCESSORIES

Ford Cleveland/Modified - cont'd.

PRODUCT	FEATURES	P/N	NOTES
351C; 351M; 400 Engines - cont'd.			
Pump Shaft	O.E. Replacement	224-61166	



PERFORMANCE CAMS

351C, 351M, 400 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-650	KC-650	Pro-2000	Smooth	1000-4000	206/221	287/307	.481	.490	115	63
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) VS-1555 VSR-7018R VK-115R	HT-900R (Race)	APPLICATION NOTES: 1971-72 351; CJ w/4Bbl. Carb.; Ford Part No. D2ZZ-6250-B					
CS-1161R	KC-1010R KC-1021R KC-173R	Pro-1500	Stock	1000-4000	194/204	272/282	.458	.484	110	45
CS-1085R		Pro-2000	Smooth	1500-4000	204/214	282/292	.484	.510	112	51
CS-1010R		Pro-2000	Smooth	1500-4000	208/208	284/284	.484	.484	111	62
CS-1021R		Pro-3000	Good	2000-4500	214/224	292/302	.510	.536	112	61
CS-173R		Pro-3000	Fair	2500-5500	219/219	308/308	.505	.505	114	62
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-900 (Std.) VS-1555 VSR-7018R VK-115R	HT-900R (Race)	APPLICATION NOTES: Use VK-205R and VSR-7015R w/Multigroove valve stems					



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
351C Engines							
Exhaust							
	1.655	V-2030	.3414	5.050	45	21-4N	w/2 Bbl. Carb.
	1.710	V-1879	.3415	5.050	45	21-2N	w/4 Bbl. Carb.
Intake							
	2.041	V-2075	.3420	5.231	45	SIL-1	w/2 Bbl. Carb.
351M; 400 Engines							
Exhaust							
	1.655	V-2030	.3414	5.050	45	21-4N	1975-77
	1.656	V-2095	.3414	5.050	45	21-4N	1978-82
Intake							
	2.040	V-2142	.3420	5.231	45	SIL-1	1978-82; 1 groove stem
	2.041	V-2075	.3420	5.231	45	SIL-1	1975-78; 4 groove stem
POWERFORGED Stainless Steel Valve							
351C; 351M; 400 Engines							
Exhaust							
	1.710	V-8020R	.3415	5.056	45	21-2N	
Intake							
	2.190	V-8021R	.3415	5.246	45	21-2N	
POWERFORGED Competition Series Stainless Steel Valve - With High Flow Undercut Stem							
Exhaust							
	1.710	V-2491R	.3415	5.054	45	21-2N	

PERFORMANCE VALVES



Ford Cleveland/Modified - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
Valve Guide - Manganese Bronze							
351C; 351M; 400 Engines							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D. Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
		VG-7501R	.3415	2.600			
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
351C; 351M; 400 Engines				
Push Rods				
	RP-3186	Stock Type	5/16 dia.	351M; 400
	RP-3226R	Hardened Chrome Moly	5/16 dia.	351C; Hydraulic lifters
	RP-3322R	Hardened Chrome Moly	5/16 dia.	351C; Solid lifters
Rocker Arms				
	R-1033	Stock Type	1.73 Ratio	Adj., Ball pivot type
	R-855	Stock Type	1.73 Ratio	Non-adj.; Fulcrum type
	RR-7009R	Aluminum Roller	1.73 Ratio	Requires 7/16 H/D screw-in studs; Guide plates 1978-1/2 to 94; Exc. Cobra
	RR-7014R	Aluminum Roller	1.7 Ratio	
Rocker Adjustment Locks				
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1867RS	7/16 H/D Screw-In		For roller rockers; .750 head end depth
Complete Timing Sets				
	CTS-1121R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3521X9R	Billet Roller; .250" Double Roller	9 Keyway	
	CTS-3621X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	

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Ford 390; 427; 428

SPEED-PRO POWERFORGED Pistons

390 Engines (4.050 Bore x 3.780 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 6.490
 Compression Distance (in): 1.776
 Deck Clearance (in): .015
 Skirt Clearance (in): .0020

Rings: 5/64, 3/32, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.975
 Pin Weight (grams): 151



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		67.1	68.0	71.0	74.0	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
390	L-2291F	9.87	9.78	9.50	9.24	--	--	633	-10.0	E-180K	--	--	Yes	Included
393	L-2291F 20	9.91	9.83	9.55	9.28	--	--	644	-10.0	E-180K 20	--	--	Yes	Included
396	L-2291F 30	10.00	9.91	9.62	9.36	--	--	650	-10.0	E-180K 30	--	R-9220 35	Yes	Included
398	L-2291F 40	10.04	9.95	9.66	9.40	--	--	656	-10.0	E-180K 40	--	--	Yes	Included
402	L-2291F 60	10.12	10.03	9.75	9.48	--	--	667	-10.0	E-180K 60	--	--	Yes	Included

Single Piston Part

390	WL-2291F	9.87	9.78	9.50	9.24	--	--	633	-10.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
393	WL-2291F 20	9.91	9.83	9.55	9.28	--	--	644	-10.0				Yes	Included
396	WL-2291F 30	10.00	9.91	9.62	9.36	--	--	650	-10.0				Yes	Included
398	WL-2291F 40	10.04	9.95	9.66	9.40	--	--	656	-10.0				Yes	Included
402	WL-2291F 60	10.12	10.03	9.75	9.48	--	--	667	-10.0				Yes	Included

Application Notes: DUROSHIELD® skirt coated piston

428 Engines (4.130 Bore x 3.980 Stroke)

Dome Shape: .085 dish; 4 reliefs
 Con Rod Length (in): 6.490
 Compression Distance (in): 1.674
 Deck Clearance (in): .017
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.975
 Pin Weight (grams): 151



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		67.1	68.0	71.0	74.0	--	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
428	L-2303NF	--	10.52	10.22	9.94	--	--	672	-10.3	E-261K	--	--	Yes	Included
433	L-2303NF 30	--	10.66	10.35	10.07	--	--	689	-10.3	E-261K 30	--	--	Yes	Included
435	L-2303NF 40	--	10.70	10.40	10.11	--	--	695	-10.3	E-261K 40	--	--	Yes	Included
439	L-2303NF 60	--	10.79	10.48	10.19	--	--	706	-10.3	E-261K 60	--	--	Yes	Included

Single Piston Part

428	WL-2303NF	--	10.52	10.22	9.94	--	--	672	-10.3	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
433	WL-2303NF 30	--	10.66	10.35	10.07	--	--	689	-10.3				Yes	Included
435	WL-2303NF 40	--	10.70	10.40	10.11	--	--	695	-10.3				Yes	Included
439	WL-2303NF 60	--	10.79	10.48	10.19	--	--	706	-10.3				Yes	Included

Application Notes: Cobra Jet; DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE ENGINE BEARINGS



Ford 390; 427; 428 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
390; 427; 428 Engines					
Rod Set					
	O.E. Replacement	8-3230CP	Overplated Copper-Lead Alloy		Std-10-20-30-40-50
	Competition Series	8-7170CH	Super Duty Alloy		Std-1-10-20
Main Set					
	O.E. Replacement; 1961-63	4020M	Overplated Copper-Lead Alloy		Std-10
	O.E. Replacement; 1964-75	4261M	Overplated Copper-Lead Alloy		Std-1-10-20-30-40-50-60
	Competition Series	125M	Super Duty Alloy	3/4 Groove	Std-10
Cam Set					
	O.E. Replacement; Exc. side oiler	1445M	Babbitt		Std Only
	Aftermarket Genesis Block	1268M	Babbitt		Std Only
Pin Bushing					
	O.E. Replacement	2304V			

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
390; 427; 428 Engines			
Oil Pump			
	O.E. Replacement	224-41173	
	High Volume	224-41177	
	High Pressure	224-43365A	
Oil Pump Screen			
	O.E. Replacement	224-14158	
Pump Shaft			
	O.E. Replacement	224-61114	

PERFORMANCE CAMS



390; 427; 428 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1102R	KC-1011R KC-1025R	Pro-2000	Smooth	1500-4000	204/214	282/292	.484	.510	112	51
CS-1011R		Pro-3000	Smooth	1500-4000	214/214	292/292	.510	.510	110	60
CS-1025R		Pro-3000	Good	2000-4500	214/224	292/302	.510	.536	112	61
Hydraulic		LIFTERS	HT-2083 (Std.)							
		VALVE SPRING	VS-1554							
		RETAINER	VSR-7003R							
		LOCKS	VK-138R							

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
390; 427; 428 Engines							
Exhaust							
	1.558	V-1853	.3715	5.436	45	21-4N	
	1.652	V-1875	.3705	5.426	45	21-2N	428CJ & SCJ
Intake							
	2.027	V-1539	.3716	5.446	45	SIL-1	
	2.087	V-1876	.3710	5.447	30	SIL-1	428CJ & SCJ

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PERFORMANCE VALVES

Ford 390; 427; 428 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
POWERFORGED Stainless Steel Valve							
390; 427; 428 Engines							
Exhaust							
	1.556	V-8023R	.3715	5.439	45	21-2N	
	1.654	V-8024R	.3710	5.437	45	21-2N	428CJ & SCJ
Intake							
	2.027	V-8025R	.3715	5.440	45	21-2N	
	2.090	V-8026R	.3715	5.446	30	21-2N	428CJ & SCJ
Valve Guide - Manganese Bronze							
		VG-7004R	.3725	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7503R	.3725	2.500			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2004 seal
Valve Stem Seal							
		ST-2004	.3710				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2019R	.3720				PTFE; .531 guide dia.; Installation requires valve guide machining



VALVETRAIN COMPONENTS

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
390; 427; 428 Engines				
Push Rods				
	RP-3227R	Chrome Moly	3/8 dia.	Use w/Non-adj. rockers
	RP-3230R	Chrome Moly	3/8 dia.	Use w/Adj. rockers
Rocker Arms				
	R-814	Stock Type	1.73 Ratio	Non-adj.; Use RP-3227R Push Rods
Rocker Shaft				
	RS-621	Stock Type		Not for racing use
Ford 352; 360; 390; 427; 428				
352; 360; 390; 427; 428 Engines				
Complete Timing Sets				
	CTS-1108R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3608X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	



PERFORMANCE PISTONS

Ford 429; 460

SPEED-PRO POWERFORGED Piston Sets with Rings				
429 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2366F 30	POWERFORGED	L-2366F	8	30-40
		E-296K	1	
COMPRESSION RATIO: 10.26:1 w/77cc heads				
DOME DESIGN: Flat; 1 relief				
FEATURES: DUROSHIELD® skirt coated piston				

PERFORMANCE PISTONS



Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Piston Sets with Rings				
460 Engines				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2404F 30	POWERFORGED	L-2404F E-296K	8 1	30-40-60
COMPRESSION RATIO: 9.02:1 w/77cc heads DOME DESIGN: .180 dish FEATURES: DUROSHIELD® skirt coated piston				
PART NUMBER	PISTON TYPE	COMPONENT	COMPONENT QTY	AVAILABLE SIZES
8KL2443NF 30	POWERFORGED	L-2443NF E-296K	8 1	30-60
COMPRESSION RATIO: 10.55:1 w/92cc heads DOME DESIGN: .400 dome FEATURES: DUROSHIELD® skirt coated piston				

PERFORMANCE PISTONS



SPEED-PRO Hypereutectic Pistons														
460 Engines (4.360 Bore x 3.850 Stroke)														
				Dome Shape: Flat; 2 reliefs Con Rod Length (in): 6.605 Compression Distance (in): 1.752 Deck Clearance (in): .040 Skirt Clearance (in): .0015					Rings: 5/64, 5/64, 3/16 Pin Style: Press Pin Diameter (in): 1.040 Pin Weight (grams): 229					
CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	H535CP	10.69	10.54	10.22	9.04	8.71	--	753	-4.2	E-296K	--	--	Yes	N/R
464	H535CP 20	10.77	10.62	10.29	9.11	8.77	--	763	-4.2	E-296K 20	--	--	Yes	N/R
466	H535CP 30	10.81	10.66	10.33	9.14	8.81	--	768	-4.2	E-296K 30	--	--	Yes	N/R
468	H535CP 40	10.85	10.70	10.37	9.17	8.84	--	773	-4.2	E-296K 40	--	--	Yes	N/R
473	H535CP 60	10.93	10.78	10.45	9.24	8.91	--	783	-4.2	E-296K 60	--	--	Yes	N/R
Single Piston Part #														
460	WH535CP	10.69	10.54	10.22	9.04	8.71	--	753	-4.2	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
464	WH535CP 20	10.77	10.62	10.29	9.11	8.77	--	763	-4.2				Yes	N/R
466	WH535CP 30	10.81	10.66	10.33	9.14	8.81	--	768	-4.2				Yes	N/R
468	WH535CP 40	10.85	10.70	10.37	9.17	8.84	--	773	-4.2				Yes	N/R
473	WH535CP 60	10.93	10.78	10.45	9.24	8.91	--	783	-4.2				Yes	N/R
Application Notes: 1972-90; Late model heads are 92-97cc; DUROSHIELD® skirt coated piston														

Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Pistons

429 Engines (4.360 Bore x 3.590 Stroke)

Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.890
 Deck Clearance (in): .032
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
429	L-2366F	10.65	10.49	10.15	8.91	8.57	--	807	-1.5	E-296K	--	--	Yes	Included
435	L-2366F 30	10.77	10.61	10.26	9.01	8.67	--	822	-1.5	E-296K 30	--	--	Yes	Included
437	L-2366F 40	10.81	10.65	10.30	9.05	8.70	--	828	-1.5	E-296K 40	--	--	Yes	Included
Single Piston Part #														
429	WL-2366F	10.65	10.49	10.15	8.91	8.57	--	807	-1.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
435	WL-2366F 30	10.77	10.61	10.26	9.01	8.67	--	822	-1.5				Yes	Included
437	WL-2366F 40	10.81	10.65	10.30	9.05	8.70	--	828	-1.5				Yes	Included

Application Notes: 1972-87; Late model heads are 92-97cc; DUROSHIELD® skirt coated piston

Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.890
 Deck Clearance (in): .020
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
429	L-2366F	10.97	10.80	10.43	9.13	8.77	--	807	-1.5	E-296K	--	--	Yes	Included
435	L-2366F 30	11.10	10.93	10.56	9.23	8.87	--	822	-1.5	E-296K 30	--	--	Yes	Included
437	L-2366F 40	11.14	10.97	10.60	9.27	8.90	--	828	-1.5	E-296K 40	--	--	Yes	Included
Single Piston Part #														
429	WL-2366F	10.97	10.80	10.43	9.13	8.77	--	807	-1.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
435	WL-2366F 30	11.10	10.93	10.56	9.23	8.87	--	822	-1.5				Yes	Included
437	WL-2366F 40	11.14	10.97	10.60	9.27	8.90	--	828	-1.5				Yes	Included

Application Notes: 1970 1/2-71; DUROSHIELD® skirt coated piston

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE PISTONS



Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Pistons

429 Engines (4.360 Bore x 3.590 Stroke)



Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.890
 Deck Clearance (in): .010
 Skirt Clearance (in): .0035

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
429	L-2366F	11.26	11.08	10.69	9.31	8.94	--	807	-1.5	E-296K	--	--	Yes	Included
435	L-2366F 30	11.39	11.21	10.82	9.43	9.05	--	822	-1.5	E-296K 30	--	--	Yes	Included
437	L-2366F 40	11.44	11.26	10.86	9.46	9.08	--	828	-1.5	E-296K 40	--	--	Yes	Included
Single Piston Part #														
429	WL-2366F	11.26	11.08	10.69	9.31	8.94	--	807	-1.5	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
435	WL-2366F 30	11.39	11.21	10.82	9.43	9.05	--	822	-1.5				Yes	Included
437	WL-2366F 40	11.44	11.26	10.86	9.46	9.08	--	828	-1.5				Yes	Included

Application Notes: 1968-70 1/2; DUROSHIELD® skirt coated piston

460 Engines (4.360 Bore x 3.850 Stroke)



Dome Shape: .180 dish
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .036
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	L-2404F	9.26	9.15	8.91	8.03	7.78	--	790	-22.0	E-296K	--	--	Yes	N/R
466	L-2404F 30	9.37	9.26	9.02	8.12	7.86	--	809	-22.0	E-296K 30	--	--	Yes	N/R
468	L-2404F 40	9.40	9.29	9.05	8.15	7.89	--	815	-22.0	E-296K 40	--	--	Yes	N/R
473	L-2404F 60	9.47	9.36	9.12	8.21	7.95	--	827	-22.0	E-296K 60	--	--	Yes	N/R
Single Piston Part #														
460	WL-2404F	9.26	9.15	8.91	8.03	7.78	--	790	-22.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
466	WL-2404F 30	9.37	9.26	9.02	8.12	7.86	--	809	-22.0				Yes	N/R
468	WL-2404F 40	9.40	9.29	9.05	8.15	7.89	--	815	-22.0				Yes	N/R
473	WL-2404F 60	9.47	9.36	9.12	8.21	7.95	--	827	-22.0				Yes	N/R

Application Notes: 1972-90; Late model heads are 92-97cc; DUROSHIELD® skirt coated piston

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Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Pistons

460 Engines (4.360 Bore x 3.850 Stroke)

Dome Shape: .180 dish
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .024
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	L-2404F	9.48	9.37	9.12	8.19	7.92	--	790	-22.0	E-296K	--	--	Yes	N/R
466	L-2404F 30	9.59	9.48	9.22	8.28	8.01	--	809	-22.0	E-296K 30	--	--	Yes	N/R
468	L-2404F 40	9.63	9.51	9.26	8.31	8.04	--	815	-22.0	E-296K 40	--	--	Yes	N/R
473	L-2404F 60	9.70	9.59	9.33	8.38	8.11	--	827	-22.0	E-296K 60	--	--	Yes	N/R
Single Piston Part #														
460	WL-2404F	9.48	9.37	9.12	8.19	7.92	--	790	-22.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
466	WL-2404F 30	9.59	9.48	9.22	8.28	8.01	--	809	-22.0				Yes	N/R
468	WL-2404F 40	9.63	9.51	9.26	8.31	8.04	--	815	-22.0				Yes	N/R
473	WL-2404F 60	9.70	9.59	9.33	8.38	8.11	--	827	-22.0				Yes	N/R

Application Notes: 1970 1/2-71; DUROSHIELD® skirt coated piston

Dome Shape: .180 dish
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .014
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
460	L-2404F	9.67	9.55	9.29	8.32	8.05	--	790	-22.0	E-296K	--	--	Yes	N/R
466	L-2404F 30	9.79	9.67	9.40	8.42	8.14	--	809	-22.0	E-296K 30	--	--	Yes	N/R
468	L-2404F 40	9.83	9.71	9.44	8.45	8.18	--	815	-22.0	E-296K 40	--	--	Yes	N/R
473	L-2404F 60	9.90	9.78	9.51	8.52	8.24	--	827	-22.0	E-296K 60	--	--	Yes	N/R
Single Piston Part #														
460	WL-2404F	9.67	9.55	9.29	8.32	8.05	--	790	-22.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
466	WL-2404F 30	9.79	9.67	9.40	8.42	8.14	--	809	-22.0				Yes	N/R
468	WL-2404F 40	9.83	9.71	9.44	8.45	8.18	--	815	-22.0				Yes	N/R
473	WL-2404F 60	9.90	9.78	9.51	8.52	8.24	--	827	-22.0				Yes	N/R

Application Notes: 1968-70 1/2; DUROSHIELD® skirt coated piston

PERFORMANCE PISTONS



Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Pistons

460 Engines (4.360 Bore x 3.850 Stroke)



Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .036
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
466	LW-2602NF 30	10.94	10.79	10.45	9.23	8.89	--	678	-3.9	E-296K 30	--	--	Yes	Included
473	LW-2602NF 60	11.07	10.91	10.57	9.33	8.99	--	695	-3.9	E-296K 60	--	--	Yes	Included

Application Notes: Lightweight; 1972-90; DUROSHIELD® skirt coated piston



Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .024
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
466	LW-2602NF 30	11.16	11.01	10.66	9.41	9.07	--	678	-3.9	E-296K 30	--	--	Yes	Included
473	LW-2602NF 60	11.29	11.13	10.78	9.52	9.17	--	695	-3.9	E-296K 60	--	--	Yes	Included

Application Notes: Lightweight; 1970 1/2-71; DUROSHIELD® skirt coated piston



Dome Shape: Flat; 1 relief
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .014
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
466	LW-2602NF 30	11.49	11.34	10.98	9.70	9.34	--	678	-3.9	E-296K 30	--	--	Yes	Included
473	LW-2602NF 60	11.63	11.46	11.10	9.80	9.44	--	695	-3.9	E-296K 60	--	--	Yes	Included

Application Notes: Lightweight; 1968-70 1/2; DUROSHIELD® skirt coated piston

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Ford 429; 460 - cont'd.

SPEED-PRO POWERFORGED Pistons

460 Engines (4.360 Bore x 3.850 Stroke)

Dome Shape: .350 dome
 Con Rod Length (in): 6.605
 Compression Distance (in): 1.756
 Deck Clearance (in): .036
 Skirt Clearance (in): .0040

Rings: 5/64, 5/64, 3/16
 Pin Style: Press or Float ▲
 Pin Diameter (in): 1.040
 Pin Weight (grams): 182



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		72.0	73.5	77.0	92.0	97.0	--			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
466	L-2443NF 30	--	--	12.49	10.73	10.26	--	741	14.0	E-296K 30	--	--	Yes	Included
473	L-2443NF 60	--	--	12.63	10.85	10.38	--	759	14.0	E-296K 60	--	--	Yes	Included
Single Piston Part #														
466	WL-2443NF 30	--	--	12.49	10.73	10.26	--	741	14.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	Included
473	WL-2443NF 60	--	--	12.63	10.85	10.38	--	759	14.0				Yes	Included

Application Notes: 1972-90; Dome machining may be req'd w/heads 77cc or less; DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
429; 460 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-3360CPA 8-7185CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-1-10-20-30-40 Std-10-20
Main Set					
	O.E. Replacement Competition Series	4907M 134M	Overplated Copper-Lead Alloy Super Duty Alloy	3/4 Groove	Std-1-10-20-30-40 Std-1X-10-20
Cam Set					
	O.E. Replacement Competition Series	1414M 2104M	Babbitt H/D Babbitt	Full round design Full round design	Std Only Std Only

OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
429; 460 Engines			
Oil Pump			
	O.E. Replacement High Volume	224-41139 224-41139V	Exc. CJ, SCJ; Use w/Press-in screen Use w/Bolt-on screen
Oil Pump Screen			
	O.E. Replacement	224-14230	"Long" style bolt on
	O.E. Replacement	224-14160	CJ, SCJ; Bolt-on
	O.E. Replacement	224-12139	Exc. CJ, SCJ; Press-in
Pump Shaft			
	O.E. Replacement	224-61127	

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▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

PERFORMANCE CAMS



Ford 429; 460 - cont'd.

429; 460 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1155R	KC-1155R	Pro-1500	Stock	1000-3500	194/204	272/282	.458	.484	110	45
CS-1086R	KC-1086R	Pro-2000	Smooth	1500-4000	204/214	282/292	.484	.510	112	51
CS-1159R	KC-1159R	Pro-3000	Good	1500-4500	214/224	292/302	.510	.536	112	61
CS-196R	KC-196R	Pro-3000	Good	2000-4500	218/218	299/299	.495	.495	110	79
Hydraulic		LIFTERS	HT-900 (Std.)	HT-900R (Race)						
		VALVE SPRING	VS-1605R							
		RETAINER	VSR-7017R							
		LOCKS	VK-115R							

PERFORMANCE VALVES



ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
429 Engines							
Exhaust							
	1.653	V-1984	.3419	4.983	45	21-4N	1973
	1.654	V-1849	.3420	5.083	45	21-2N	1968-72; Exc. Police, Cobra Jet
	1.725	V-1933	.3420	5.068	45	SIL-746	1970-71; Police, Cobra Jet
Intake							
	2.083	V-1850	.3420	5.288	45	SIL-1	1968-72; Exc. Police, Cobra Jet
	2.083	V-3929	.3419	5.198	45	SIL-1	1973
460 Engines							
Exhaust							
	1.653	V-1984	.3419	4.983	45	21-4N	1973-86; Exc. Police
	1.654	V-1849	.3420	5.083	45	21-2N	1968-72
	1.654	V-4371X	.3419	4.983	45	X750	1987-94; Stellite face
Intake							
	1.977	V-2452	.3419	5.180	45	SIL-1	1987-92
	2.083	V-1850	.3420	5.288	45	SIL-1	1968-72
	2.083	V-3929	.3419	5.198	45	SIL-1	1973-86; Exc. 1973-74 Police
POWERFORGED Stainless Steel Valve							
429; 460 Engines							
Exhaust							
	1.650	V-8034R	.3414	5.074	45	21-2N	
	1.752	V-8027R	.3415	5.079	45	21-2N	
Intake							
	2.080	V-8035R	.3415	5.296	45	21-2N	
	2.190	V-8028R	.3415	5.296	45	21-2N	
Valve Guide - Manganese Bronze							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining

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Ford 429; 460 - cont'd.

ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
429; 460 Engines				
Push Rods				
	RP-3185	Stock Type	5/16 dia.	429; 460 From 4/01/69-1971; Exc. CJ, SCJ, Police
	RP-3160 RP-3164	Hardened Stock Type Hardened Stock Type	5/16 dia. 5/16 dia.	1972-93; 1970-71 CJ, SCJ, Police 429; Before 4/01/69
	RP-3251R	Hardened Chrome Moly	5/16 dia.	1972-93; 1970-71 CJ, SCJ, Police
Rocker Arms				
	R-855 R-1033	Stock Type Stock Type	1.73 Ratio 1.73 Ratio	Non-adj.; Fulcrum type Adj., Ball pivot type
	RR-7009R RR-7015R	Aluminum Roller Aluminum Roller	1.73 Ratio 1.73 Ratio	Requires 7/16 H/D screw-in studs; Guide plates Fits '72-93, Incl. mounting hardware
Rocker Adjustment Locks				
	MR-1859PL MR-1861PL	7/16 Stud Diameter 7/16 Stud Diameter		For roller rockers For stock style ball pivot rockers
Rocker Studs				
	MR-1867RS	7/16 H/D Screw-In		CJ, SCJ; For roller rockers; .750 head end depth
Complete Timing Sets				
	CTS-1122R	Performance Roller; .250" Double Roller	3 Keyway	1968-71 429, 460; Factory timing TDC
	CTS-3522X9R	Billet Roller; .250" Double Roller	9 Keyway	1968-71 429, 460; Factory timing TDC
	CTS-3622X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	1968-71 429, 460; Factory timing TDC

Oldsmobile V8

SPEED-PRO POWERFORGED Pistons

350 Engines (4.057 Bore x 3.385 Stroke)

Dome Shape: .076 x 2.44" dia. Dish
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.612
 Deck Clearance (in): .025
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.980
 Pin Weight (grams): 194



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		62.5	64.0	70.0	72.0	75.0	80.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
355	L-2321F 30	9.83	9.67	9.09	8.91	8.66	8.28	621	-5.8	E-297K 30	--	--	Yes	N/R
Single Piston Part #														
355	WL-2321F 30	9.83	9.67	9.09	8.91	8.66	8.28	621	-5.8	--	--	--	Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston; The ring sets listed for the "Piston Set" part numbers also service the single pistons.

PERFORMANCE PISTONS



Oldsmobile V8 - cont'd.

SPEED-PRO POWERFORGED Pistons

350 Engines (4.057 Bore x 3.385 Stroke)



Dome Shape: Flat
 Con Rod Length (in): 6.000
 Compression Distance (in): 1.612
 Deck Clearance (in): .025
 Skirt Clearance (in): .0025

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.980
 Pin Weight (grams): 194

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		62.5	64.0	70.0	72.0	75.0	80.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
350	L-2320F	10.36	10.18	9.53	9.33	9.05	8.62	641	0.0	E-297K	--	--	Yes	N/R
355	L-2320F 30	10.49	10.31	9.64	9.44	9.16	8.73	655	0.0	E-297K 30	--	--	Yes	N/R

Single Piston Part

350	WL-2320F	10.36	10.18	9.53	9.33	9.05	8.62	641	0.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
355	WL-2320F 30	10.49	10.31	9.64	9.44	9.16	8.73	655	0.0				Yes	N/R

Application Notes: 1968-70 w/Outside Air Induction; W-31; DUROSHIELD® skirt coated piston

455 Engines (4.125 Bore x 4.250 Stroke)



Dome Shape: .142 dish
 Con Rod Length (in): 6.735
 Compression Distance (in): 1.735
 Deck Clearance (in): .030
 Skirt Clearance (in): .0030

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.980
 Pin Weight (grams): 187

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		62.5	64.0	70.0	72.0	75.0	80.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
455	L-2323F	10.70	10.55	10.00	9.83	9.58	9.21	674	-18.0	E-243K	--	R-5879 5	Yes	N/R
461	L-2323F 30	10.83	10.68	10.12	9.95	9.70	9.32	690	-18.0	E-243K 30	R-10374 30	R-5879 35	Yes	N/R
463	L-2323F 40	10.88	10.73	10.16	9.99	9.74	9.36	696	-18.0	E-243K 40	--	--	Yes	N/R
468	L-2323F 60	10.97	10.81	10.25	10.07	9.82	9.43	707	-18.0	E-243K 60	R-10374 60	R-5879 65	Yes	N/R

Single Piston Part

455	WL-2323F	10.70	10.55	10.00	9.83	9.58	9.21	674	-18.0	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
461	WL-2323F 30	10.83	10.68	10.12	9.95	9.70	9.32	690	-18.0				Yes	N/R
463	WL-2323F 40	10.88	10.73	10.16	9.99	9.74	9.36	696	-18.0				Yes	N/R
468	WL-2323F 60	10.97	10.81	10.25	10.07	9.82	9.43	707	-18.0				Yes	N/R

Application Notes: DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
350; 403 Engines					
Rod Set					
	O.E. Replacement	8-3045A	A-Series aluminum bearings		Std-10-20-30-40
Main Set					
	O.E. Replacement	4281M	Overplated Copper-Lead Alloy		Std-1-10-20-30
Cam Set					
	O.E. Replacement; 1968-77	1234M	Babbitt		Std Only
	O.E. Replacement; 1978-80	1466M	Babbitt	Full round design	Std Only

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PERFORMANCE ENGINE BEARINGS

Oldsmobile V8 - cont'd.

ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
400; 455 Engines					
Rod Set	Competition Series	8-7040CH	Super Duty Alloy		Std-10
Main Set	Competition Series	108M	Super Duty Alloy	1/2 Groove	Std-10-20
Cam Set	O.E. Replacement	1234M	Babbitt	Full round design	Std Only



OIL PUMPS AND ACCESSORIES

PRODUCT	FEATURES	P/N	NOTES
350; 389; 400; 455 Engines			
Oil Pump	O.E. Replacement High Volume	224-41203 224-41203V	Use 224-11203V screen
Oil Pump Screen	O.E. Replacement O.E. Replacement O.E. Replacement	224-11203 224-11203V 224-12203	Exc. Toronado Screen for 224-41203V Toronado
Oil Pump Shaft	O.E. Replacement	224-61203	



PERFORMANCE CAMS

350; 455 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1024R CS-1023R	KC-1024R KC-1023R	Pro-2000 Pro-3000	Smooth Good	1500-4000 2000-4500	204/214 214/224	280/290 290/300	.448 .472	.472 .496	112 112	51 61
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-951 (Std.) VS-896R VSR-7017R VK-115R	HT-951R (Race)						
CS-198R		Pro-3000	Fair	2500-5500	224/234	300/310	.496	.520	112	71
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-951 (Std.) VS-896R VSR-7017R VK-315R	HT-951R (Race)						
CS-176R		Pro-5000	Fair	3000-6200	232/232	322/322	.474	.474	113	82
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-951 (Std.) VS-896R VSR-7017R VK-315R	HT-951R (Race)						
APPLICATION NOTES: W-30; GM Part No. 402194										

PERFORMANCE VALVES



Oldsmobile V8 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
350 Engines							
Exhaust							
	1.502	V-2061	.3423	4.688	30	21-4N	1977-80
	1.562	V-1770	.3422	4.728	44	21-2N	1968-71; w/o Outside Air Induction
	1.622	V-1942	.3423	4.708	30	21-2N	1972
	1.622	V-2028	.3423	4.675	30	21-2N	1973-76
	1.624	V-1772	.3422	4.695	45	21-4N	1968-71; w/Outside Air Induction
Intake							
	1.875	V-1995	.3428	4.667	44	1547	1973-80
	1.876	V-1773	.3425	4.738	45	EN-52	1968-71; w/o Outside Air Induction; 1972
	1.992	V-1775	.3430	4.709	44	SIL-1	1968-71; w/Outside Air Induction
400 Engines							
Exhaust							
	1.624	V-1772	.3422	4.695	45	21-4N	1965-69
Intake							
	1.992	V-1775	.3430	4.709	44	SIL-1	1966-69
	2.063	V-1776	.3427	4.718	30	1047	1966-69
455 Engines							
Exhaust							
	1.622	V-2028	.3423	4.675	30	21-2N	1973 w/TH400 trans; '74 w/o Outside Air Induction
	1.624	V-1772	.3422	4.695	45	21-4N	1968-71; '72-74 w/M/T or Outside Air Induction
	1.684	V-1943	.3423	4.675	30	21-2N	Exc. M/T; w/Outside Air Induction
Intake							
	1.992	V-1775	.3430	4.709	44	SIL-1	1968-74 w/o Outside Air Induction or Hi-Perf.; 1975-76 all
	2.063	V-1776	.3427	4.718	30	1047	1968-74; w/Outside Air Induction or Hi-Perf
Valve Guide - Manganese Bronze							
350; 400; 455 Engines							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining

VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
350; 400; 455 Engines				
Push Rods				
	RP-3174	Stock Type	5/16 dia.	350, 403; 1973-79
	RP-3205	Stock Type	5/16 dia.	350; 1980
	RP-3112	Stock Type	5/16 dia.	400; 1965-66; 9.421 length
	RP-3171	Stock Type	5/16 dia.	400; 1965-66; 9.594 length
	RP-3197	Stock Type	5/16 dia.	400 1968-69; 455
	RP-3228R	Chrome Moly	5/16 dia.	400 1968-69; 455
Rocker Arms				
	R-856	Stock Type	Rocker/Pivot Kit	Exc. 1980 350; Incl. 2 rockers, 1 pivot
	R-882	Stock Type	Rocker/Pivot Kit	1980 350; Incl. 2 rockers, 1 pivot
Rocker Arm Pivot				
	MR-1903	Stock Type	One Piece Design	
Complete Timing Sets				
	CTS-1113R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3513X9R	Billet Roller; .250" Double Roller	9 Keyway	

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Pontiac V8

SPEED-PRO POWERFORGED Pistons

400 Engines (4.120 Bore x 3.750 Stroke)

Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 6.625
 Compression Distance (in): 1.714
 Deck Clearance (in): .021
 Skirt Clearance (in): .0020

Rings: 5/64, 5/64, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.980
 Pin Weight (grams): 194



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		69.0	72.0	87.0	96.0	111.0	114.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
400	L-2262F	10.11	9.82	8.59	8.01	7.21	7.07	589	-6.7	E-299K	--	--	Yes	N/R
404	L-2262F 20	10.22	9.92	8.68	8.09	7.28	7.14	599	-6.7	E-299K 20	--	--	Yes	N/R
406	L-2262F 30	10.24	9.94	8.70	8.11	7.30	7.16	604	-6.7	E-299K 30	--	R-9228 35	Yes	N/R
408	L-2262F 40	10.28	9.98	8.74	8.14	7.33	7.19	609	-6.7	E-299K 40	--	--	Yes	N/R
412	L-2262F 60	10.37	10.07	8.81	8.21	7.39	7.25	620	-6.7	E-299K 60	--	--	Yes	N/R
Single Piston Part #														
400	WL-2262F	10.11	9.82	8.59	8.01	7.21	7.07	589	-6.7	The ring sets listed for the "Piston Set" part numbers also service the single pistons.			Yes	N/R
404	WL-2262F 20	10.22	9.92	8.68	8.09	7.28	7.14	599	-6.7				Yes	N/R
406	WL-2262F 30	10.24	9.94	8.70	8.11	7.30	7.16	604	-6.7				Yes	N/R
408	WL-2262F 40	10.28	9.98	8.74	8.14	7.33	7.19	609	-6.7				Yes	N/R
412	WL-2262F 60	10.37	10.07	8.81	8.21	7.39	7.25	620	-6.7				Yes	N/R

Application Notes: 1971-79 w/4 Bbl. Carb.; 1967-70 w/2 Bbl. Carb.; DUROSHIELD® skirt coated piston

Dome Shape: .225 dome
 Con Rod Length (in): 6.625
 Compression Distance (in): 1.715
 Deck Clearance (in): .020
 Skirt Clearance (in): .0050

Rings: 1/16, 1/16, 1/8
 Pin Style: Press or Float ▲
 Pin Diameter (in): 0.980
 Pin Weight (grams): 194



CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		69.0	72.0	87.0	96.0	111.0	114.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
406	L-2279NF 30	12.39	11.94	10.14	9.31	8.23	8.05	589	10.0	--	--	R-9255 35 (L)	Yes	Included
412	L-2279NF 60	12.37	11.93	10.15	9.34	8.26	8.08	605	8.9	--	--	--	Yes	Included

Application Notes: 60 O/S has .190 dome; DUROSHIELD® skirt coated piston

Unless otherwise indicated, parts listed in this catalog are not intended for use in emission controlled vehicles that must comply with federal, state, and/or local emission regulations. Replacement parts for emission certified O.E. engine combinations are listed in the Sealed Power standard replacement parts catalog.

▲ "Float or Press" pins are floated and include lock rings. Floated pins can also be pressed.

(L) Low Tension Plasma-Moly File Fit Rings.

PERFORMANCE PISTONS



Pontiac V8 - cont'd.

SPEED-PRO POWERFORGED Pistons

455 Engines (4.151 Bore x 4.210 Stroke)



Dome Shape: Flat; 4 reliefs
 Con Rod Length (in): 6.625
 Compression Distance (in): 1.497
 Deck Clearance (in): .008
 Skirt Clearance (in): .0030

Rings: 5/64, 1/16, 3/16
 Pin Style: Press
 Pin Diameter (in): 0.980
 Pin Weight (grams): 194

CID	Piston Set Part #	Compression Ratio by Cyl Head CC						Piston Weight (grams)	Dome Volume (cc)	SPEED-PRO Ring Set Part #			Fitted Pin	Lock Ring
		69.0	72.0	87.0	96.0	111.0	114.0			Moly Rings	Plasma-Moly Direct Fit Rings	Plasma-Moly File Fit Rings		
455	L-2359NF	11.72	11.37	9.89	9.18	8.23	8.07	580	-6.7	E-300K	--	--	Yes	N/R
463	L-2359NF 30	11.87	11.51	10.01	9.30	8.34	8.17	595	-6.7	E-300K 30	--	--	Yes	N/R
465	L-2359NF 40	11.93	11.56	10.05	9.34	8.37	8.20	600	-6.7	E-300K 40	--	--	Yes	N/R
469	L-2359NF 60	12.03	11.66	10.14	9.42	8.44	8.27	609	-6.7	E-300K 60	--	--	Yes	N/R

Application Notes: 1970-76 Exc. Super Duty; DUROSHIELD® skirt coated piston

PERFORMANCE ENGINE BEARINGS



ENGINE	APPLICATION	P/N	MATERIAL	FEATURES	SIZES
350; 389; 400 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-1555CPA 8-7050CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-10-20-30-40 Std-10-20
Main Set					
	O.E. Replacement Competition Series	4040M 113M	Overplated Copper-Lead Alloy Super Duty Alloy	1/2 Groove 3/4 Groove	Std-1-10-20-30 Std-10-20
Cam Set					
	O.E. Replacement	1220M	Babbitt		Std Only
421; 428; 455 Engines					
Rod Set					
	O.E. Replacement Competition Series	8-1555CPA 8-7050CH	Overplated Copper-Lead Alloy Super Duty Alloy		Std-10-20-30-40 Std-10-20
Main Set					
	O.E. Replacement; 1961-76 Competition Series	4221M 151M	Overplated Copper-Lead Alloy Super Duty Alloy	1/2 Groove 3/4 Groove	Std-10-20-30 Std-10
Cam Set					
	O.E. Replacement; 1961-62 O.E. Replacement; 1963-76	1146M 1220M	Babbitt Babbitt		Std Only Std Only

OIL PUMPS AND ACCESSORIES



PRODUCT	FEATURES	P/N	NOTES
350; 389; 400; 455 Engines			
Oil Pump			
Pump Shaft	High Pressure	224-43364S	Incl. screen
	O.E. Replacement	224-61236	

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PERFORMANCE CAMS

Pontiac V8 - cont'd.

350, 400, 455 Engines										
CAM P/N	CAM & LIFTER KIT	CAM SERIES	IDLE QUALITY	POWER RANGE	DURATION		VALVE LIFT		LOBE C/L	OVERLAP
					.050 LIFT	.006 LIFT	INT.	EXH.		
CS-1038R CS-1022R	KC-1038R KC-1022R	Pro-2000 Pro-3000	Smooth Good	1500-4000 2000-4500	204/214 214/224	278/288 288/298	.420 .443	.443 .465	110 112	55 61
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-951 (Std.) VS-890R VSR-7018R VK-115R	HT-951R (Race)						
CS-1175R	KC-1175R	Pro-3000	Fair	2500-5500	224/234	298/308	.465	.488	112	71
Hydraulic		LIFTERS VALVE SPRING RETAINER LOCKS	HT-951 (Std.) VS-1606 VSR-7018R VK-115R	HT-951R (Race)						



PERFORMANCE VALVES

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
350 Engines							
Exhaust							
1.660		V-1823	.3410	5.082	45	21-2N	1968; w/4 Bbl. Carb.; w/M/T
1.660		V-1832	.3405	4.984	44	21-2N	1968-70 w/2 Bbl. Carb.; 1971-72
1.661		V-1963	.3410	4.961	44	21-2N	1973 Exc. WH, YH, YJ, YW; 1974-77 Exc. 1975 Y, D
1.772		V-1902	.3411	4.976	45	21-4N	1973; WH, YH, YJ, YW
Intake							
1.960		V-1824	.3415	5.089	29	1047	1968; w/M/T
1.960		V-1964	.3415	4.980	44	1047	1971-74
2.110		V-1903	.3420	4.982	29	1047	1975-77
389 Engines							
Exhaust							
1.640		V-1813	.3410	4.876	45	21-4N	1965-66; 10.5:1 C.R.
Intake							
1.882		V-1532	.3409	4.854	30	EN-52	1961-62 Exc. 425A; 1963-64 10.5:1 C.R.
1.919		V-1743	.3407	4.894	30	1047	1965-66; 10.5:1 C.R.
400 Engines							
Exhaust							
1.640		V-1813	.3410	4.876	45	21-4N	1967; 10.5:1 C.R.; Exc. Firebird
1.660		V-1823	.3410	5.082	45	21-2N	1968-69 10.5:1 C.R. w/2 Bbl. Carb.; 1970 w/4 Bbl. Carb. WE, YD, XY, XZ
1.660		V-1832	.3405	4.984	44	21-2N	1968-72; w/2 Bbl. Carb.; 8.6:1 C.R.
1.661		V-1963	.3410	4.961	44	21-2N	1973 Exc. WH, YH, YS, YW; 1974-79
1.772		V-1902	.3411	4.976	45	21-4N	1973; WH, YH, YJ, YW
1.772		V-3923	.3409	5.091	44	21-4N	1968-69 w/4 Bbl. Carb.; 1970 Ram Air III w/M/T
1.775		V-1946	.3409	5.051	45	21-4N	1970; w/4 Bbl. Carb.; Exc. Ram Air
Intake							
1.919		V-1743	.3407	4.894	30	EN-52	1967; 10.5:1 C.R.
1.960		V-1824	.3415	5.089	29	1047	1968-69; w/2 Bbl. Carb.; w/M/T
1.960		V-1964	.3415	4.980	44	1047	1970-74; w/2 Bbl. Carb.
2.110		V-1826	.3415	5.098	30	8645	1967 10.75:1 C.R.; 1968-70 Ram Air III w/4 Bbl. Carb.
2.110		V-1903	.3420	4.982	29	1047	1971-74 w/4 Bbl. Carb.; 1975-76
POWERFORGED Stainless Steel Valve							
Exhaust							
1.770		V-8030R	.3410	5.090	44	21-2N	
Intake							
2.110		V-8031R	.3415	5.097	29	21-2N	

PERFORMANCE VALVES



Pontiac V8 - cont'd.

ENGINE	HEAD DIA.	P/N	STEM DIA.	LENGTH	ANGLE	MATERIAL	NOTES
O.E. Replacement Valve							
455 Engines							
Exhaust							
	1.660	V-1832	.3405	4.984	44	21-2N	1970; YH Eng.
	1.660	V-1967	.3410	4.870	44	21-2N	1971 w/2 Bbl. Carb.; 1972-74 Exc. Super Duty
	1.772	V-1902	.3411	4.976	45	21-4N	1970 Exc. YH Eng.; 1971-72 HO
Intake							
	1.960	V-1964	.3415	4.980	44	1047	1970; YH Eng.
	2.110	V-1903	.3420	4.982	29	1047	1970 Exc. YH Eng.; 1971-72 HO
	2.110	V-1920	.3415	4.880	29	1047	1971-74; w/4 Bbl. Carb. Exc. HO, Super Duty
Valve Guide - Manganese Bronze							
350; 400; 455 Engines							
		VG-7002R	.3435	2.375			Straight; Cut-to-length; .502 O.D.
		VG-7501R	.3415	2.600			Flanged; Cut-to-length; .502 O.D.; Pre-cut for ST-2003 seal
Valve Stem Seal							
		ST-2001	.3410				Rubber/PTFE insert; .562 guide dia.; Installation requires valve guide machining
		ST-2003	.3410				Rubber/PTFE insert; .531 guide dia.; Installation requires valve guide machining
		ST-2018R	.3410				PTFE; .531 guide dia.; Installation requires valve guide machining

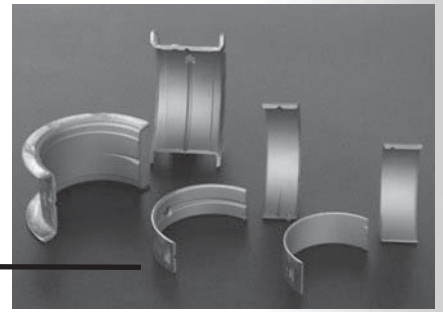
VALVETRAIN COMPONENTS



ENGINE	P/N	MATERIAL	SPECIFICATIONS	NOTES
350; 389; 400; 455 Engines				
Complete Timing Sets				
	CTS-1112R	Performance Roller; .250" Double Roller	3 Keyway	
	CTS-3512X9R	Billet Roller; .250" Double Roller	9 Keyway	
	CTS-3612X9R	Competition Roller; Premium .250" Double Roller	9 Keyway	
350; 400; 455 Engines				
Push Rods				
	RP-3213R	Hardened Chrome Moly	5/16 dia.	389; 1960-66
	RP-3229R	Hardened Chrome Moly	5/16 dia.	400, 455; 1968-76; Use w/guide plates
Rocker Arms				
	R-1032	Stock Type	1.5 Ratio	400, 455; 1968-76; Exc. Ram Air IV
	R-848	Stock Type	1.5 Ratio	389; 1959-66
	R-850	Stock Type	1.65 Ratio	Ram Air IV; Use w/7/16 H/D screw-in studs
	RR-7008R	Aluminum Roller	1.6 Ratio	Requires 7/16 H/D screw-in studs; Guide plates
Rocker Adjustment Locks				
	MR-1859PL	7/16 Stud Diameter		For roller rockers
	MR-1861PL	7/16 Stud Diameter		For stock style ball pivot rockers
Rocker Studs				
	MR-1867RS	7/16 H/D Screw-In		For polylocks; .750 head end depth

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BEARINGS



Bearing Technology

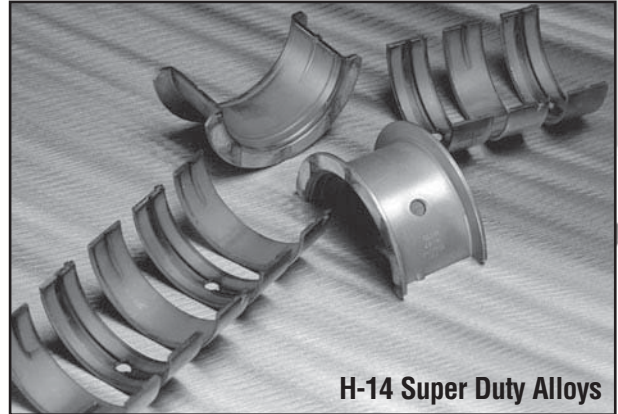
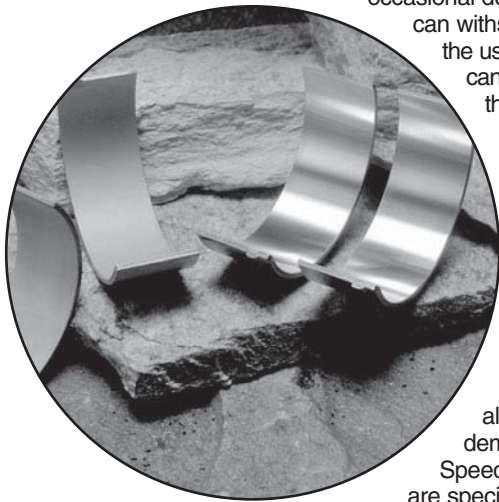
Material Selection for Performance

When selecting bearings, engine builders commonly focus on getting the proper clearances and maintaining adequate oil pressure. Durability is expected from any bearing that is chosen, and the advantages of different lining materials may not be considered. When an engine's operating conditions are considered, and bearing materials are chosen accordingly, the likelihood of success is greater.

In street driven applications there are a number of materials that will do an excellent job. Each material has advantages in terms of resistance to corrosion, rate of wear, and fatigue strength. The latter characteristic is most critical in racing engines that operate under high loads, generate considerable heat, and may be subjected to

occasional detonation. No bearing can withstand detonation, but the use of superior materials can improve the bearing's load carrying capability.

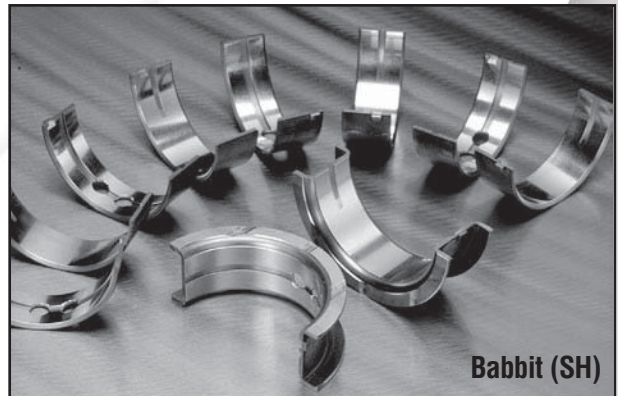
Federal-Mogul heritage of industry leading technology is reflected in the Sealed Power and Speed-Pro engine bearing product lines. We offer unique materials and alloys engineered for demanding applications. Speed-Pro engine bearings are specifically tailored to withstand punishing racing conditions.



H-14 Super Duty Alloys

Copper-Lead (CP)

This material is referred to as H-24, and is noted for its desirable fatigue resistance and strength characteristics. It provides the embedability and conformability required in many applications. This is our standard material, and is easily comparable to many competitor's performance bearings. Suitable for both street and moderate competitive use, but not as durable as our H-14 Alloy in racing usage.



Babbitt (SH)

Material Descriptions:

H-14 Super Duty Alloy (CH)

Our unique high performance H-14 lining material is bonded to a high strength AK1020 steel backing for unparalleled bearing durability in high load racing engines. This material will outperform competitor products by a wide margin in virtually any application from street performance to all out racing. We highly recommend this material for any performance use. (Except for blown race applications, which use our Babbitt bearings)

Babbitt (SH)

Intended for applications which require high embedability and conformability, such as blown fuel or alcohol engines. Not recommended in engines that are intended for longer service life.

Aluminum (AP)

Provides excellent fatigue resistance and conformability, along with the corrosion resistant properties associated with aluminum. Primarily street use along with mild competition.

SPEED PRO®

Aluminum Alloy (RA)

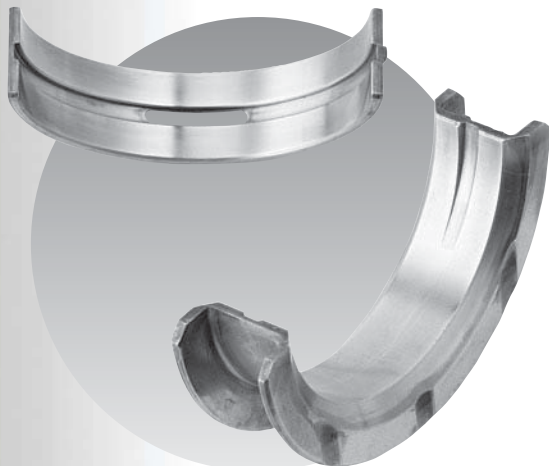
Specified for applications where a high degree of corrosion and wear resistance is desired. Street use only.

H-14 Alloy – Speed-Pro Engine Bearings (when strong is better than pretty!)

The unique H-14 lining material found in Speed-Pro bearings was specifically designed for high performance, and has a far greater load capacity than any other material. We bond this lining to an extra high strength steel backing, creating the best performance bearing in the industry. These materials are Federal-Mogul exclusives, and are not available from any other source.

One key to reducing fatigue wear in a bearing is to keep the overplate thickness to a minimum. The thinner material will be less susceptible to repeated deformation under load. The only downside to the very thin overplate layer is a reduction in embedability – the bearing surface is more susceptible to damage from debris. Frequent oil changes and religious maintenance are mandatory when using Speed-Pro bearings, a small price to pay for the increase in durability.

Speed-Pro bearings have an unusual appearance. They lack the traditional white/gray color because the flash tin plate process has been eliminated. Flash tin plating enhances cosmetic appearance and provides a measure of break-in protection, but the tin may migrate across the steel back under racing conditions and cause undesirable high spots on the I.D. of the bearing. These high spots can intrude into the oil clearance and become concentrated load areas susceptible to premature fatigue. The tin may also migrate into the lining material, reducing its strength. As an added benefit, elimination of the flash tin plate allows greater dimensional accuracy. If your engine will be used in competition, or for high performance street use, we highly recommend that you select Speed-Pro rod bearing and main bearing sets.



Design Features – Crush, Chamfer, Dowel Holes, and Oil Grooves

The basic design parameters for engine bearings are normally dependent on the engine and rotating component manufacturers. The width and diameter of the crankshaft journals, rod “big ends,” and block housing bores are selected to provide adequate bearing surface area and acceptable component strength. Within these limitations, Federal-Mogul engineers work with a variety of design features to create the optimal bearing for any given application.

Crush

Crush refers to the press fit that results from having a small section of the bearing extended above the housing bore when the bearing half is in set in place. Federal-Mogul's performance bearings have additional crush built into the design. This “extra” material helps to force the outside diameter of the bearing against the rod or main bore when the assembly is torqued to specification. By increasing the surface contact between the bearing and its bore, crush helps to compensate for bore distortion and aids in heat transfer. This is critical because the lubricating oil will break down and cause bearing failure if the area gets too hot.

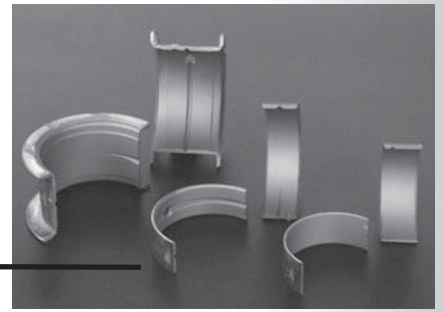
Chamfer

Performance engines often require added crankshaft strength, which mandates special bearings. Racing crankshafts employ a larger diameter “fillet radius” in the area where the rod journal meets the counterweight. This rounded inside corner increases crankshaft strength, but can interfere with the rod bearing. Many of our performance rod bearings feature a “chamfer” which provides the side clearance necessary for these cranks. The chamfer is only on the edge of the bearing that is alongside the crankshaft counterweight, thus maintaining as much bearing surface area as possible. Even when using our chamfered bearings, it is advisable to check for adequate clearance in the chamfer area, as different aftermarket crankshaft manufacturers incorporate various fillet radius diameters into their designs. Inadequate clearance in the fillet radius area will cause “edge loading” on the side of the bearing, resulting in premature wear and eventual failure.

Dowel Holes

Several of our racing bearings incorporate a dowel hole. In drag racing applications that utilize aluminum connecting rods, a dowel pin is utilized to positively locate the rod bearing. Without this locating pin, the bore distortion and thermal expansion inherent in aluminum rods would reduce the bearing's crush, and may allow it to spin in the rod's bore. The pin fits into a hole located on the lower shell of the bearing, and is not usually required with steel connecting rods. Since the lower shell is not as highly loaded as is the upper, the dowel hole does not affect bearing performance – even when left unused.

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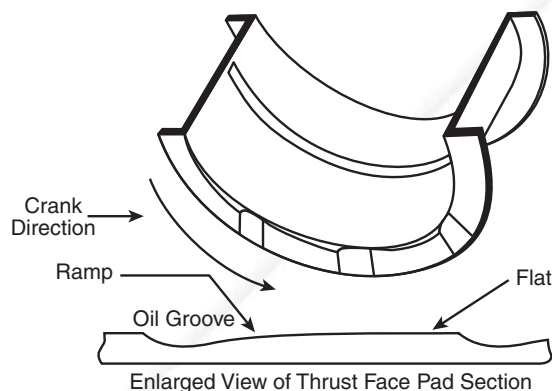


3/4 Oil Grooves – the best solution for race engine durability

There are many schools of thought on the correct type and size of oil grooves in a bearing. Common variations include everything from no grooves at all, to “full grooves”, which are machined around the internal circumference of the entire bearing. Arguments center around the relative importance of main bearing surface area available for load capacity versus adequate oil supply to the rod bearing. The greater the surface area, the more load a bearing can handle. Without adequate oiling, the rod bearings will fail. Federal-Mogul’s solution to this problem is the 3/4 groove, which maintains the full surface area in the most highly loaded portion of the main bearing, while permitting improved oil flow to the rod bearing. This unique design gives the best of both worlds – ultimate high strength with outstanding lubrication characteristics. Speed-Pro main bearing sets featuring the 3/4 groove design are now available for a wide variety of GM, Ford, and Chrysler engines.

Contoured Flange design – doubles thrust load capacity

Federal-Mogul’s Speed-Pro main bearing sets incorporate a unique “ramp and flat” flange bearing design, which greatly increases the thrust load capacity of the bearings under high stress operating conditions. This patented design uses a series of formed “ramp and flat” hydrodynamic profiles, which channel oil onto the surface of the thrust face. Race applications using high clutch loads, or frequent “on and off” throttle transitions will greatly benefit from this innovation. You can recognize bearings featuring the contoured flange by the three vertical grooves machined into the flange surface, compared to the common “thumbnail” shaped oil reliefs found on standard passenger car bearings.



Manufacturing Technology – Bored versus Broached

Federal-Mogul has recently invested in new CNC technology to change the way many of our racing bearings are manufactured. The broaching process that had been used produces an excellent quality part – but the new CNC boring technology delivers even greater dimensional accuracy, and insures more consistent sizing and geometry over the entire production run. Bearings manufactured with the new CNC boring process can be readily identified by the fine pattern of machined “grooves” that run around the bearing’s inside diameter.

Clearances

The clearance specifications shown in this catalog are arithmetic ranges showing the clearances possible with parts meeting factory specifications. These are not clearance recommendations! Performance machinists often desire clearances different than those suggested by the engine’s O.E. manufacturer. If in doubt, always use the O.E. specifications. Most racing engine builders target a clearance range between .0025”-.003”. Larger bearing clearances are not normally recommended. They will result in lower oil pressure, and may dictate use of a high volume oil pump. Current professional race teams are actually leaning toward reduced clearances, due to greater machining accuracy and better internal oil control. Bearing clearances can be measured using Plastigage, but quality performance oriented machinists will use a dial bore gage for greater accuracy. In either case, clearances must be measured “vertically,” since the bearing’s wall thickness will vary as you move closer to the parting line.

Oil Pressure

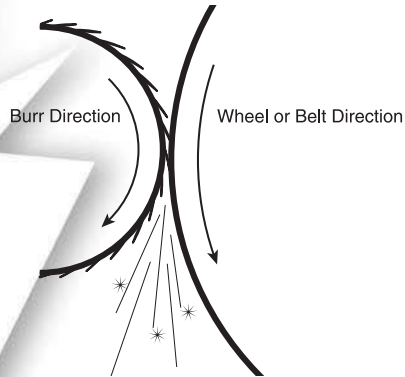
A commonly accepted reference is to maintain a minimum oil pressure of 10 lbs. per 1000 RPM. Many engine builders prefer to have more pressure than a stock oil pump will provide, particularly at lower engine speeds. Larger bearing clearances will result in reduced oil pressure, particularly at low engine speeds. Other causes of low oil pressure include worn lifter bores, excessive cam bearing clearance, air leaks or restrictions in the oil pump inlet tube or screen, and excessive internal clearances in the oil pump itself. A high volume oil pump will increase oil pressure up to the point where the relief valve opens.

Coatings

DUROSHIELD® coating is a polymer matrix enhanced with moly and tungsten disulphide. The polymer is hydrophylic – it actually absorbs and holds oil. The coated bearings deliver added insurance for extreme use. They may be “burnished” with a clean shop cloth and oil – but no abrasives.

SPEED PRO®

Crankshaft Grinding and Polishing



When ground, the surface of a crankshaft will develop microscopic peaks which are “tipped” in the direction that the sparks spray during grinding (see the illustration above). This is particularly true of cast iron crankshafts – including many “new” cranks from offshore suppliers. If these peaks point toward the oil film area when the engine is running, lubrication is interrupted, and the bearing will show premature wear. It is important that the crankshaft be ground and final polished so that these peaks are tipped opposite the direction that the crank rotates when it is installed in the engine, this is referred to as the “favorable” direction.

We recommend grinding the crank in the “favorable” direction, followed by a multi-step polishing process using progressively finer paper. The first polishing operation uses 280 grit paper with the shaft rotating in the reverse direction – this helps to “knock off” some of the raised material left over from grinding. The second polishing process uses 320 grit paper, and the crank should be rotating in the “favorable” direction. A third step polish with a very fine (400 grit) paper is optional, but should again be done in the “favorable” direction. If the thrust surface was contacted during the resizing operation it must also be polished.

Specialty Tools and Supplies

Federal-Mogul supplies a variety of tools and supplies that will make your rebuilding job go more smoothly, and will enhance the durability of finished engines.

Plastigage

A quick and easy device for checking bearing clearances. Available in three ranges to cover most applications.

Ten strips per package, a measurement gauge is printed on each wrapper.



SPG-1 (green) .001-.002 measurement range

SPR-1 (red) .002-.003 measurement range

SPB-1 (blue) .003-.004 measurement range

Bolt Protectors

BP-1

These flexible rubber covers install over the rod bolts, and protect the crankshaft from damage during engine assembly. (100 per box)

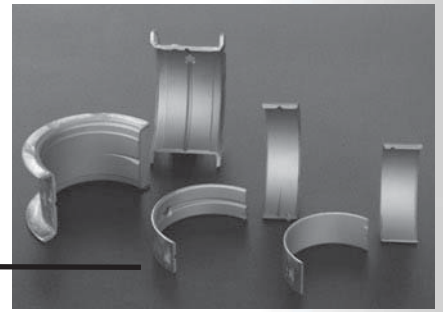


Assembly Lube

55400

The ideal assembly lubricant for all engine components. Provides excellent break in protection, then dissolves completely in oil once the engine is running. 4 ounce bottles provide enough lube for a complete engine assembly.

BEARINGS



Installation Guidelines

When installing new bearings there are certain items that require careful attention.

1. All rods, rod caps, and main caps should be marked before disassembly, so that they may be reinstalled in their original positions. Permanent ink or machinist dye markings are preferable, as hammer type stamps can add potential stress risers and may cause deformation of connecting rods and main caps.
2. Rod and main bearing bores should be inspected with a dial bore gauge to check for out of round or taper conditions that would shorten the service life of the new bearings. Any housing bore that measures out of specifications should be resized. Many professional machinists will recondition all connecting rods and align hone the block as part of their regular engine rebuilding procedure.
3. The crankshaft's journals must be carefully measured and be within manufacturer's tolerances, they must be smooth, and free of burrs. Everything must be spotlessly clean.
4. NEVER use any kind of abrasive pad, cloth, or paper on the bearing surface prior to installation. The overplate layer on an engine bearing may be as thin as .0005", any abrasive used will reduce bearing life.
5. Coated bearings may be "burnished" with engine oil and CLEAN shop cloth.
6. The bearings should be positioned in the rods or main saddles dry, and the bearing surfaces should be lubricated before crankshaft installation.
7. Exercise extreme care when installing the rods. Use our bolt protectors on the rod bolts to prevent nicks to the crankshaft.
8. Bolt threads should be clean and lightly lubricated.
9. Check bearing clearances with Plastigage or a dial bore gage.
10. All bolts must be properly torqued to the manufacturer's specifications.
11. The engine should be prelubricated before it is started. Many newer engine designs use a crankshaft driven oil pump that can't be driven by a drill motor.

Engine Bearings – Numerical Listing



BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS									
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length		
107M	Performance Main Set		Buick	V6			Super Duty Alloy	3/4 Groove				
7116CH	Main Brg.	1-3	2.4990	2.5000	2.6870	2.6880	.0005	.0030	.0935	.8690		
7117CH	Flange	2	2.4990	2.5000	2.6870	2.6880	.0005	.0030	.0935	1.0580		
7118CH	Main Brg.	4	2.4990	2.5000	2.6870	2.6880	.0005	.0030	.0935	.8690		
108M	Performance Main Set		Oldsmobile	V8			Super Duty Alloy	3/4 Groove				
7042CH	Main Brg.	2-4	2.9993	3.0003	3.1880	3.1890	.0005	.0035	.0936	.9800		
7042CHA	Main Brg.	1	2.9993	3.0003	3.1880	3.1890	.0005	.0035	.0936	.9800		
7043CH	Flange	3	2.9993	3.0003	3.1880	3.1890	.0005	.0035	.0936	1.1950		
7044CH	Main Brg.	5	2.9993	3.0003	3.1880	3.1890	.0013	.0043	.0932	1.6290		
113M	Performance Main Set		Pontiac	V8			Super Duty Alloy	3/4 Groove				
7121CHA	Main Brg.	1-2-3	2.9990	3.0000	3.1880	3.1890	.0016	.0036	.0932	.9430		
7122CHA	Flange	4	2.9990	3.0000	3.1880	3.1890	.0006	.0036	.0937			
7123CHA	Main Brg.	5	2.9990	3.0000	3.1880	3.1890	.0016	.0036	.0932	1.5850		
119M	Performance Main Set		Chrysler	Big Block			Super Duty Alloy	3/4 Groove				
7146CH	Main Brg.		2.7495	2.7505	2.9425	2.9430	.0008	.0033	.0956	.8750		
7148CH	Flange	3	2.7495	2.7505	2.9425	2.9430	.0008	.0033	.0956	1.2240		
120M	Performance Main Set		Chrysler	Small Block			Super Duty Alloy	3/4 Groove				
7149CHA	Main Brg.	1-2-4	2.8095	2.8106	3.0025	3.0030	.0005	.0027	.0959	.8870		
7151CHA	Flange	3	2.8095	2.8105	3.0025	3.0030	.0005	.0027	.0959	1.1520		
7152CHA	Main Brg.	5	2.8095	2.8105	3.0025	3.0030	.0005	.0027	.0959	1.2590		
125M	Performance Main Set		Ford	390, 427, 428			Super Duty Alloy	3/4 Groove				
7171CHA	Plain	1-2-4-5	2.7484	2.7492	2.9412	2.9420	.0005	.0026	.0960	.9120		
7172CHA	Flange	3	2.7484	2.7492	2.9412	2.9420	.0005	.0026	.0960	1.1180		
127M	Performance Main Set		Ford	L4			Super-Duty Alloy	3/4 Groove				
7181CHA	Plain	1-2-4-5	2.3982	2.3990	2.5902	2.5910	.0005	.0026	.0956	.9500		
7182CHA	Flange	3	2.3982	2.3990	2.5902	2.5910	.0005	.0026	.0951	1.1950		
129M	Performance Main Set		Ford	Small Block			Super-Duty Alloy	3/4 Groove				
7184CHA	Flange	3	2.2482	2.2490	2.4412	2.4420	.0005	.0026	.0961	1.1330		
7183CHA	Main Brg.		2.2482	2.2490	2.4412	2.4420	.0005	.0026	.0961	.8900		
C129M	Performance Main Set		Ford	Small Block			Super-Duty Alloy; Coated	3/4 Groove				
7184CHA	Flange	3	2.2482	2.2490	2.4412	2.4420	.0005	.0026	.0961	1.1330		
7183CHA	Main Brg.		2.2482	2.2490	2.4412	2.4420	.0005	.0026	.0961	.8900		
130M	Performance Main Set		Ford	Small Block			Super-Duty Alloy; Coated	3/4 Groove				
7156CHB	Flange	3	2.9994	3.0002	3.1922	3.1930	.0005	.0026	.0965	.8400		
7157CHA	Main Brg.		2.9994	3.0002	3.1922	3.1930	.0005	.0026	.0965	1.133		
C130M	Performance Main Set		Ford	Small Block			Super-Duty Alloy; Coated	3/4 Groove				
7156CHB	Flange	3	2.9994	3.0002	3.1922	3.1930	.0005	.0026	.0965	.8400		
7157CHA	Main Brg.		2.9994	3.0002	3.1922	3.1930	.0005	.0026	.0965	1.133		
134M	Performance Main Set		Ford	429, 460			Super-Duty Alloy	3/4 Groove				
7186CH	Main Brg.		2.9994	3.0002	3.1922	3.1930	.0005	.0026	.0960	.9500		
7187CH	Flange	3	2.9994	3.0002	3.1922	3.1930	.0005	.0030	.0958	1.1200		
136M	Performance Main Set		Chevrolet	Big Block			Babbitt	3/4 Groove				
7058SH	Main Brg.		2.7482	2.7492	2.9370	2.9380	.0006	.0032	.0936	1.0070		
7059SH	Flange	5	2.7482	2.7492	2.9370	2.9380	.0006	.0032	.0936	1.8110		
139M	Performance Main Set		Chevrolet	Small Block			Super Duty Alloy	3/4 Groove				
7081CHB	Main Brg.		2.4479	2.4488	2.6406	2.6415	.0010	.0038	.0954	.8070		
7082CHB	Flange	5	2.4479	2.4488	2.6406	2.6415	.0010	.0038	.0954	1.7180		
C139M	Performance Main Set		Chevrolet	Small Block			Super Duty Alloy; Coated	3/4 Groove				
7081CHB	Main Brg.		2.4479	2.4488	2.6406	2.6415	.0010	.0038	.0954	.8070		
7082CHB	Flange	5	2.4479	2.4488	2.6406	2.6415	.0010	.0038	.0954	1.7180		
140M	Performance Main Set		Chevrolet	Small Block			Super Duty Alloy	3/4 Groove				
7091CHA	Main Brg.		2.6484	2.6493	2.8406	2.8415	.0005	.0031	.0955	.8070		
7092CHA	Flange	5	2.6479	2.6488	2.8406	2.8415	.0008	.0036	.0955	1.7180		
C140M	Performance Main Set		Chevrolet	Small Block			Super Duty Alloy; Coated	3/4 Groove				
7091CHA	Main Brg.		2.6484	2.6493	2.8406	2.8415	.0005	.0031	.0955	.8070		
7092CHA	Flange	5	2.6479	2.6488	2.8406	2.8415	.0008	.0036	.0955	1.7180		
141M	Performance Main Set		Chevrolet	Big Block			Super Duty Alloy	3/4 Groove				
7058CHA	Main Brg.		2.7482	2.7492	2.9370	2.9380	.0005	.0034	.0937	1.0070		
7059CHA	Flange	5	2.7482	2.7492	2.9370	2.9380	.0005	.0034	.0937	1.8110		
C141M	Performance Main Set		Chevrolet	Big Block			Super Duty Alloy; Coated	3/4 Groove				
7058CHA	Main Brg.		2.7482	2.7492	2.9370	2.9380	.0005	.0034	.0937	1.0070		
7059CHA	Flange	5	2.7482	2.7492	2.9370	2.9380	.0005	.0034	.0937	1.8110		
142M	Performance Main Set		Chrysler	426, 440			Babbitt	3/4 Groove; Top fuel				
7131SHC	Main Brg.		2.7495	2.7505	2.9425	2.9430	.0005	.0025	.0958	.9420		



Engine Bearings – Numerical Listing

BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
142M 7133SHC	Performance Main Set Flange	3	Chrysler 2.7495	426, 440 2.7505	2.9425	Babbitt 2.9430		3/4 Groove; Top fuel .0005 .0025	.0958	1.2240
144M 7176CHC	Performance Main Set Main Brg.	1-5	Ford 2.7484	Small Block 2.7492	2.9417	Super Duty Alloy 2.9425	.0005	.0027	.0962	.8400
145M SEMI 3701CA 3702CA	Performance Main Set Performance Main Spacers 1-2-4-5 Performance Main Spacers 3		Ford	Small Block		Bearing Spacers		351 SVO M6303-E351 crank in 351 Windsor block		
146M 7176CHB 7177CHB	Performance Main Set Plain Flange	1-2-4-5 3	Ford 2.7484 2.7484	Cleveland/Modified V8 2.7492 2.7492	2.9417 2.9417	Super Duty Alloy 2.9425 2.9425	.0005 .0005	.0027 .0027	.0962 .0962	.8800 1.1180
147M SEMI 3701CA 3701CAA	Performance Main Set Performance Main Spacers 1-2-4-5 Performance Main Spacers 3		Ford	Small Block		Bearing Spacers		Use w/Factory 351 C crank in 351 Windsor block		
148M 1987W 7251CH 7252CH	Performance Main Set Thrust Washer Plain Flange	T.W.5 1-2-3-4 5	Ford 2.6568 2.6568	4.6L SOHC 2.6576 2.6576	2.8505 2.8505	Super Duty Alloy 2.8512 2.8512	.0005 .0005	.0026 .0025	.0940 .0962 .0960	.7200 .8890
149M 1987W 7253CH 7254CH	Performance Main Set Thrust Washer Plain Flange	T.W.5 1-2-3-4 5	Ford 2.6568 2.6568	4.6L DOHC 2.6576 2.6576	2.8505 2.8505	Super Duty Alloy 2.8512 2.8512	.0005 .0005	.0019 .0019	.0940 .0968 .0968	.7580 .8910
151M 7196CH 7197CH 7198CH	Performance Main Set Plain Flange Plain	1-2-3 4 5	Pontiac 3.2495 3.2495 3.2495	V8 3.2500 3.2500 3.2500	3.4380 3.4380 3.4380	Super Duty Alloy 3.4385 3.4385 3.4385	.0006 .0006 .0006	.0026 .0026 .0026	.0937 .0937 .0937	.9430 1.1950 1.5950
152M 7203CH 7204CH	Performance Main Set Plain Flange	1-2-4-5 3	Chevrolet 2.5588 2.5588	Small Block 2.5593 2.5593	2.7509 2.7509	Super Duty Alloy 2.7515 2.7514	.0006 .0006	.0023 .0023	.0950 .0950	.8050 1.0270
153M 153M 153M 153M	Performance Main Set Thrust Washer Main Brg. Main Brg.	5 1 2-3-4-5	Ford 2.6567 2.6567	Modular V8 2.6577 2.6577	2.8504 2.8504	Super Duty Alloy 2.8512 2.8512	.0005 .0005	.0026 .0026	.1151 .0962 .0962	2.9250 .7580 .7870
156M 7102CH 7103CH	Performance Main Set Main Brg. Flange	1-2-4-5 3	Chrysler 2.9996 2.9996	Viper V10 3.0004 3.0004	3.1925 3.1925	Super Duty Alloy 3.1930 3.1930	.0005 .0005	.0028 .0028	.0958 .0958	.8770 1.1520
157M 7261CH 7262CH 7263CH	Performance Main Set Main Brg. Flange Main Brg.	1-2-4 3 5	Buick 3.2495 3.2495 3.2495	V8 455 3.2505 3.2505 3.2505	3.4380 3.4380 3.4380	Super Duty Alloy 3.4390 3.4390 3.4390	.0005 .0005 .0005	.0035 .0035 .0035	.0935 .0935 .0935	.8690 1.0580 1.1480
158M 7306CH 7307CH	Performance Main Set Plain Flange	1-2-4-5 3	Ford 2.2827 2.2827	L4 DOHC Zetec 2.2835 2.2835	2.4520 2.4520	Super-Duty Alloy 2.4528 2.4528	.0006 .0006	.0032 .0032	.0834 .0839	.7710 .9730
159M 7194CH	Performance Main Set Main Brg.		Honda 2.1644	L4 DOHC 2.1652	2.3230	Super-Duty Alloy 2.3238	.0005	.0024	.0790	.7870
162M 7311CH 7312CH	Performance Main Set Plain Flange	1-2-3-4 5	Chevrolet 2.4980 2.4980	Big Block 2.4990 2.4990	2.6870 2.6870	Super Duty Alloy 2.6880 2.6880	.0006 .0014	.0034 .0044	.0937 .0933	1.0470 1.8110
4020M 2301CP 2303CP	Main Set Main Brg. Flange	3	Ford 2.7484 2.7484	390, 427, 428 2.7492 2.7492	2.9412 2.9412	Overplated Copper-Lead Alloy 2.9420 2.9420	.0005 .0005	.0026 .0026	.0960 .0960	.9120 1.1200
4040M 2336CP 2337CP 2339CP	Main Set Main Brg. Flange Main Brg.	4 5	Pontiac 2.9990 2.9990 2.9990	V8 3.0000 3.0000 3.0000	3.1880 3.1880 3.1880	Overplated Copper-Lead Alloy 3.1890 3.1890 3.1890	.0005 .0005 .0005	.0035 .0035 .0035	.0938 .0937 .0938	.9380 1.1350 1.5900
4094M 2321CP 2322CP	Main Set Main Brg. Flange	3	Chrysler 2.6245 2.6245	Big Block 2.6255 2.6255	2.8175 2.8175	Overplated Copper-Lead Alloy 2.8180 2.8180	.0008 .0008	.0033 .0033	.0956 .0956	.9490 1.2240
4095M 2331CP 2333CP	Main Set Main Brg. Flange	3	Chrysler 2.7495 2.7495	Big Block 2.7505 2.7505	2.9425 2.9425	Overplated Copper-Lead Alloy 2.9430 2.9430	.0008 .0008	.0033 .0033	.0956 .0956	.9490 1.2240
4124MA 2556RA 2558RA	Main Set Main Brg. Flange	7	Chevrolet 2.2983 2.2983	L6 2.2993 2.2993	2.4906 2.4906	A-Series aluminum bearings 2.4916 2.4916	.0005 .0005	.0029 .0029	.0955 .0955	.8070 1.0090

Engine Bearings – Numerical Listing



BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
4125M	Main Set		Ford	Small Block			Overplated Copper-Lead Alloy			
2601CP	Main Brg.		2.2482	2.2490	2.4412	2.4420	.0005	.0024	.0962	.8800
2603CP	Flange	3	2.2482	2.2490	2.4412	2.4420	.0005	.0024	.0962	1.1330
4221M	Main Set		Pontiac	V8			Overplated Copper-Lead Alloy 1/2 Groove			
2901AP	Main Brg.		3.2495	3.2500	3.4380	3.4385	.0005	.0025	.0938	.9430
2902CP	Flange	4	3.2495	3.2500	3.4380	3.4385	.0006	.0026	.0937	1.1950
2903AP	Main Brg.	5	3.2495	3.2500	3.4380	3.4385	.0005	.0025	.0938	1.5950
4261M	Main Set		Ford	390, 427, 428			Overplated Copper-Lead Alloy			
2301CP	Main Brg.		2.7484	2.7492	2.9412	2.9420	.0005	.0026	.0960	.9120
2304CP	Flange	3	2.7484	2.7492	2.9412	2.9420	.0005	.0026	.0960	1.1180
4281M	Main Set		Oldsmobile	V8			A-Series aluminum bearings			
3046RA	Main Brg.	2-4	2.4983	2.4993	2.6870	2.6880	.0005	.0035	.0936	.9800
3046RAA	Main Brg.	1	2.4983	2.4993	2.6870	2.6880	.0005	.0035	.0936	.9800
3047RA	Flange	3	2.4983	2.4993	2.6870	2.6880	.0005	.0035	.0936	1.1950
3048RA	Main Brg.	5	2.4983	2.4993	2.6870	2.6880	.0013	.0043	.0932	1.6300
4400MA	Main Set		Chevrolet	Big Block			A-Series aluminum bearings			
3191CP	Main Brg.		2.7485	2.7495	2.9370	2.9380	.0005	.0031	.0937	1.0470
3192CP	Flange	5	2.7478	2.7488	2.9370	2.9380	.0005	.0031	.0937	1.8110
4418M	Main Set		Buick	V8			Overplated Copper-Lead Alloy			
3206CP	Main Brg.		2.9995	3.0005	3.1880	3.1890	.0005	.0035	.0935	.8690
3207CP	Flange	3	2.9995	3.0005	3.1880	3.1890	.0005	.0035	.0935	1.0580
3208CP	Main Brg.	5	2.9995	3.0005	3.1880	3.1890	.0005	.0035	.0935	.8690
4663M	Main Set		Chevrolet	Small Block			Overplated Copper-Lead Alloy			
3201CP	Main Brg.		2.4484	2.4493	2.6406	2.6415	.0005	.0029	.0956	.8070
3202CP	Flange	5	2.4479	2.4488	2.6406	2.6415	.0006	.0034	.0956	1.7170
4664M	Main Set		Buick	V8			Overplated Copper-Lead Alloy			
3321CP	Main Brg.		3.2495	3.2505	3.4380	3.4390	.0005	.0035	.0935	.8690
3322CP	Flange	3	3.2495	3.2505	3.4380	3.4390	.0005	.0035	.0935	1.0580
3323CP	Main Brg.	5	3.2495	3.2505	3.4380	3.4390	.0005	.0035	.0935	1.1480
4865M	Main Set		Ford	L4			Overplated Copper-Lead Alloy			
2786CP	Main Brg.		2.1253	2.1261	2.2710	2.2715	.0005	.0028	.0722	1.0050
4907M	Main Set		Ford	429, 460			Overplated Copper-Lead Alloy			
3361CP	Main Brg.		2.9994	3.0002	3.1922	3.1930	.0005	.0030	.0958	.9500
3362CP	Flange	3	2.9994	3.0002	3.1922	3.1930	.0005	.0030	.0958	1.1200
4923MA	Main Set		Chrysler	Small Block			A-Series aluminum bearings			
2131RAA	Main Brg.		2.4995	2.5005	2.6925	2.6930	.0006	.0027	.0957	.8770
2132RAA	Flange	3	2.4995	2.5005	2.6925	2.6930	.0006	.0027	.0957	1.1520
2143RAA	Main Brg.	4	2.4995	2.5005	2.6925	2.6930	.0006	.0027	.0957	1.3270
4924MA	Main Set		Chrysler	Big Block			A-Series aluminum bearings Partial Groove			
2332RA	Main Brg.		2.7495	2.7505	2.9425	2.9430	.0006	.0027	.0957	.9490
2333RA	Flange	3	2.7495	2.7505	2.9425	2.9430	.0006	.0027	.0957	1.2240
4925M	Main Set		Ford	Cleveland/Modified V8			A-Series aluminum bearings			
3401RA	Main Brg.		2.7484	2.7492	2.9417	2.9425	.0005	.0023	.0962	.8800
3402RA	Flange	3	2.7484	2.7492	2.9417	2.9425	.0005	.0023	.0962	1.1180
4926MA	Main Set		Chevrolet	Small Block			A-Series aluminum bearings			
3426RA	Main Brg.		2.6484	2.6493	2.8406	2.8415	.0005	.0027	.0955	.8070
3427RA	Flange	5	2.6479	2.6488	2.8406	2.8415	.0008	.0032	.0955	1.7180
4948MA	Main Set		Chrysler	Small Block			A-Series aluminum bearings			
3451RAA	Main Brg.		2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	.8770
3452RA	Flange	3	2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	1.1520
3453RA	Main Brg.	5	2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	1.2590
4950M	Main Set		AMC	V8			Overplated Copper-Lead Alloy			
3311CPB	Main Brg.		2.7482	2.7489	2.9410	2.9420	.0005	.0028	.0958	.9460
3312CPA	Flange	3	2.7482	2.7489	2.9410	2.9420	.0005	.0028	.0958	1.2700
4979M	Main Set		Ford	L4			Overplated Copper-Lead Alloy			
3546CP	Main Brg.		2.3982	2.3990	2.5902	2.5910	.0005	.0026	.0956	.9500
3547CP	Flange	3	2.3982	2.3990	2.5902	2.5910	.0005	.0026	.0956	1.1950
4999MA	Main Set		Chrysler	Small Block			A-Series aluminum bearings			
3451RAA	Main Brg.		2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	.8770
3452RAA	Flange	3	2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	1.1520
3453RAA	Main Brg.	5	2.8095	2.8105	3.0025	3.0030	.0005	.0023	.0959	1.2590
5024MA	Main Set		Chrysler	Small Block			A-Series aluminum bearings			
2131RAA	Main Brg.		2.4995	2.5005	2.6925	2.6930	.0006	.0027	.0957	.8770
2132RAB	Flange	3	2.4995	2.5005	2.6925	2.6930	.0006	.0027	.0957	1.1520



Engine Bearings – Numerical Listing

BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
5024MA 2143RAA	Main Set Main Brg.	5	Chrysler 2.4995	Small Block 2.5005	2.6925	A-Series aluminum bearings 2.6930 .0006 .0027 .0957 1.3270				
5025MA 2332RA 2333RA	Main Set Main Brg. Flange	3	Chrysler 2.7495 2.7495	Big Block 2.7505 2.7505	2.9425 2.9425	A-Series aluminum bearings Partial Groove 2.9430 .0006 .0027 .0957 .9490 2.9430 .0006 .0027 .0957 1.2240				
5037M 3311CPA 3312CPA	Main Set Main Brg. Flange	3	AMC 2.7482 2.7482	V8 2.7489 2.7489	2.9410 2.9410	Overplated Copper-Lead Alloy 2.9420 .0005 .0028 .0958 .9280 2.9420 .0005 .0028 .0958 1.2700				
5078M 3701CP 3702CP	Main Set Main Brg. Flange	3	Ford 2.9994 2.9994	Small Block 3.0002 3.0002	3.1922 3.1922	Overplated Copper-Lead Alloy 3.1930 .0005 .0026 .0960 .8400 3.1930 .0005 .0026 .0960 1.1330				
5085M 3201CP 3202CP	Main Set Main Brg. Flange	4	Chevrolet 2.4484 2.4479	V6 2.4493 2.4488	2.6406 2.6406	Overplated Copper-Lead Alloy 2.6415 .0005 .0029 .0956 .8070 2.6415 .0006 .0034 .0956 1.7170				
5090MA 3766RA 3767RA 3768RA 3769RA	Main Set Main Brg. Main Brg. Flange Main Brg.	1 2 3 4	Chevrolet 2.4937 2.4937 2.4937 2.4937	V6 2.4946 2.4946 2.4946 2.4946	2.6870 2.6870 2.6870 2.6870	A-Series aluminum bearings 2.6879 .0008 .0033 .0958 .9700 2.6879 .0008 .0033 .0958 .7420 2.6879 .0008 .0033 .0958 .9420 2.6879 .0011 .0035 .0956 1.2480				
5095MA 2131RAA 2131RAB 2132RAB 2143RAA	Main Set Main Brg. Main Brg. Flange Main Brg.	2-4 1 3 5	Chrysler 2.4995 2.4995 2.4995 2.4995	Small Block 2.5005 2.5005 2.5005 2.5005	2.6925 2.6925 2.6925 2.6925	A-Series aluminum bearings 2.6930 .0006 .0027 .0957 .8770 2.6930 .0006 .0027 .0957 .8770 2.6930 .0006 .0027 .0957 1.1520 2.6930 .0006 .0027 .0957 1.3270				
5107M 3381CPA 3382CPB	Main Set Main Brg. Flange	3	Ford 2.9994 2.9994	Small Block 3.0002 3.0002	3.1922 3.1922	Overplated Copper-Lead Alloy 3.1930 .0005 .0026 .0960 .8400 3.1930 .0005 .0026 .0960 1.1330				
7144MA 3111APA 3112APA 3113APA	Main Set Main Brg. Flange Main Brg.	2 4	Buick 2.4988 2.4988 2.4988	V6 2.4998 2.4998 2.4998	2.6870 2.6870 2.6870	A-Series aluminum bearings 2.6880 .0008 .0029 .0932 .8690 2.6880 .0008 .0029 .0932 1.0580 2.6880 .0008 .0029 .0932 .8690				
7298MA 4511A 4512A	Main Set Main Brg. Flange	1-2-4-5 3	Chevrolet 2.5588 2.5588	Small Block 2.5593 2.5593	2.7509 2.7509	A-Series aluminum bearings 2.7514 .0006 .0023 .0955 .8050 2.7514 .0006 .0023 .0955 1.0270				
994M 2023CPA 2556RA	Main Set Flange Main Brg.	5	Chevrolet 2.2978 2.2983	Small Block 2.2988 2.2993	2.4906 2.4906	A-Series aluminum bearings 2.4916 .0006 .0036 .0956 1.7180 2.4916 .0005 .0029 .0955 .8070				
1145M 2021DR 2022DR 2023DR 2024DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg.	1 2 3-4 5	Chevrolet 1.8682 1.8682 1.8682 1.8682	Small Block 1.8692 1.8692 1.8692 1.8692	2.0190 2.0090 1.9990 2.0090	Babbitt Full Round Design 2.0210 .0007 .0043 .0744 .7400 2.0110 .0010 .0052 .0694 .7450 2.0010 .0007 .0043 .0644 .7400 2.0110 .0007 .0043 .0694 .9400				
1146M 1557DR 1559DR	Cam Set Cam Brg. Cam Brg.	1	Pontiac 1.8992 1.8992	V8 1.8997 1.8997	2.0297 2.0297	Babbitt Full Round Design 2.0317 .0012 .0033 .0644 1.0600 2.0317 .0012 .0033 .0644 .6800				
1204M 2601DR 2602DR 2603DR 2603DRI 2604DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg. Cam Brg.	1 2 3 4 5	Ford 2.0805 2.0655 2.0505 2.0355 2.0205	Small Block 2.0815 2.0665 2.0515 2.0365 2.0215	2.2030 2.1880 2.1730 2.1580 2.1430	Babbitt Full Round Design 2.2050 .0005 .0039 .0602 .6600 2.1900 .0005 .0039 .0602 .6600 2.1750 .0005 .0039 .0602 .6600 2.1600 .0005 .0039 .0602 .6600 2.1450 .0005 .0039 .0602 .6600				
1220M 1559DR	Cam Set Cam Brg.		Pontiac 1.8992	V8 1.8997	2.0297	Babbitt Full Round Design 2.0317 .0012 .0033 .0644 .6800				
1234M 3046DR 3047DR 3048DR 3048DRI 3049DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg. Cam Brg.	1 2 3 4 5	Oldsmobile 2.0365 2.0165 1.9965 1.9765 1.9565	V8 2.0373 2.0173 1.9973 1.9773 1.9573	2.1680 2.1480 2.1280 2.1080 2.0880	Babbitt Full Round Design 2.1695 .0015 .0050 .0646 .6930 2.1495 .0012 .0050 .0646 .6880 2.1295 .0012 .0050 .0646 .6880 2.1095 .0012 .0050 .0646 .6880 2.0895 .0012 .0050 .0646 .6880				
1235M 2021DR 2022DR 2023DR	Cam Set Cam Brg. Cam Brg. Cam Brg.	1 2-5 3-4	Chevrolet 1.8682 1.8682 1.8682	Small Block 1.8692 1.8692 1.8692	2.0190 2.0090 1.9990	Babbitt Full Round Design 2.0210 .0007 .0043 .0744 .7400 2.0110 .0010 .0052 .0694 .7450 2.0010 .0007 .0043 .0644 .7400				
1255M 3191DRI	Cam Set Cam Brg.	1	Chevrolet 1.9487	Big Block 1.9497	2.1395	Babbitt Grooved 2.1405 .0005 .0031 .0941 .8700				

Engine Bearings – Numerical Listing



BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
1255M	Cam Set		Chevrolet	Big Block		Babbitt		Grooved		
3192DRI	Cam Brg.	2	1.9487	1.9497	2.1295	2.1305	.0005	.0030	.0891	.9900
3193DRI	Cam Brg.	3-4	1.9487	1.9497	2.1195	2.1205	.0005	.0031	.0841	.9900
3194DR	Cam Brg.	5	1.9487	1.9497	2.1295	2.1305	.0007	.0033	.0894	.9900
1268M	Cam Set		Ford	390, 427, 428		Babbitt		Full Round Design		
2301DRA	Cam Brg.	1	2.1238	2.1248	2.3095	2.3105	.0023	.0049	.0913	.6250
3208DR	Cam Brg.	2,3,4	2.1238	2.2148	2.3095	2.3105	.0021	.0053	.0913	.5650
3209DR	Cam Brg.	5	2.1238	2.2148	2.3095	2.3105	.0021	.0053	.0913	.5650
1401M	Cam Set		AMC	V8		Babbitt		Full Round Design		
3311DRI	Cam Brg.	1	2.1195	2.1205	2.2455	2.2465	.0005	.0030	.0620	.9200
3312DR	Cam Brg.	2	2.0895	2.0905	2.2155	2.2165	.0006	.0032	.0622	.6400
3313DR	Cam Brg.	3	2.0595	2.0605	2.1855	2.1865	.0005	.0030	.0620	.6400
3313DRI	Cam Brg.	4	2.0295	2.0305	2.1555	2.1565	.0005	.0030	.0620	.6400
3314DR	Cam Brg.	5	1.9995	2.0005	2.1255	2.1265	.0005	.0030	.0620	.6400
1403M	Cam Set		Ford	Cleveland/Modified V8		Babbitt		Full Round Design		
2601DRI	Cam Brg.	1	2.1238	2.1248	2.2490	2.2510	.0007	.0043	.0616	.6650
2602DR	Cam Brg.	2	2.0655	2.0665	2.1880	2.1900	.0005	.0039	.0602	.6600
2603DR	Cam Brg.	3	2.0505	2.0515	2.1730	2.1750	.0005	.0039	.0602	.6600
2603DRI	Cam Brg.	4	2.0355	2.0365	2.1580	2.1600	.0005	.0039	.0602	.6600
2604DR	Cam Brg.	5	2.0205	2.0215	2.1430	2.1450	.0005	.0039	.0602	.6600
1404M	Cam Set		Chevrolet	Big Block		Babbitt		Full Round Design		
3191DRI	Cam Brg.	1	1.9487	1.9497	2.1395	2.1405	.0005	.0031	.0941	.8700
3192DRI	Cam Brg.	2-5	1.9487	1.9497	2.1295	2.1305	.0005	.0030	.0891	.9900
3193DRI	Cam Brg.	3-4	1.9487	1.9497	2.1195	2.1205	.0005	.0031	.0841	.9900
1412M	Cam Set		Ford	L4		Babbitt		Full Round Design		
3366DR	Cam Brg.	1	1.6531	1.6539	1.7750	1.7760	.0011	.0035	.0800	.7900
3367DR	Cam Brg.	2	1.7563	1.7571	1.8780	1.8790	.0009	.0033	.0800	.6700
3368DRA	Cam Brg.	3	1.7712	1.7720	1.8930	1.8940	.0010	.0034	.0800	.6250
1414M	Cam Set		Ford	429, 460		Babbitt		Full Round Design		
3361DRI	Cam Brg.		2.1238	2.1248	2.2495	2.2505	.0007	.0033	.0620	.5850
1422M	Cam Set		Buick	V8		Babbitt		Full Round Design		
3466DR	Cam Brg.	1	2.1300	2.1310	2.2590	2.2600	.0014	.0040	.0630	1.3800
3467DR	Cam Brg.		2.1300	2.1310	2.2590	2.2600	.0014	.0040	.0630	1.0000
1443M	Cam Set		Ford	L4		Babbitt		Full Round Design		
3547DR	Cam Brg.		1.7713	1.7720	1.9006	1.9016	.0010	.0039	.0638	.6880
1445M	Cam Set		Ford	390, 427, 428		Babbitt		Full Round Design		
2301DRA	Cam Brg.	1	2.1238	2.1248	2.3095	2.3105	.0023	.0049	.0913	.6250
2302DR	Cam Brg.	2	2.1238	2.1248	2.2945	2.2955	.0015	.0047	.0841	.6250
2303DR	Cam Brg.	3	2.1238	2.1248	2.2795	2.2805	.0013	.0039	.0766	.6200
2303DRI	Cam Brg.	4	2.1238	2.1248	2.2645	2.2655	.0013	.0039	.0691	.6200
2304DR	Cam Brg.	5	2.1238	2.1248	2.2495	2.2505	.0013	.0039	.0616	.5600
1451M	Cam Set		Chrysler	Small Block		Babbitt		Full Round Design		
1841DRI	Cam Brg.	1	1.9980	1.9990	2.1295	2.1305	.0015	.0041	.0645	.8650
2132DR	Cam Brg.	2	1.9820	1.9830	2.1135	2.1145	.0015	.0041	.0645	.7600
2133DR	Cam Brg.	4	1.9510	1.9520	2.0825	2.0835	.0015	.0041	.0645	.7600
2133DRI	Cam Brg.	3	1.9670	1.9680	2.0985	2.0995	.0015	.0041	.0645	.7600
2134DR	Cam Brg.	5	1.5605	1.5615	1.6920	1.6930	.0015	.0041	.0645	.9400
1453M	Cam Set		Chrysler	Big Block		Babbitt		Full Round Design		
2321DRI	Cam Brg.	1	1.9980	1.9990	2.1295	2.1305	.0015	.0041	.0645	.7500
2322DR	Cam Brg.	2	1.9820	1.9830	2.1135	2.1145	.0015	.0041	.0645	.7500
2323DR	Cam Brg.	3	1.9670	1.9680	2.0985	2.0995	.0015	.0041	.0645	.6700
2323DRI	Cam Brg.	4	1.9510	1.9520	2.0825	2.0835	.0015	.0041	.0645	.7470
2324DR	Cam Brg.	5	1.7480	1.7490	1.8795	1.8805	.0015	.0041	.0645	.7500
1459M	Cam Set		Ford	L4		Babbitt		Full Round Design		
2786DRA	Cam Brg.	1	1.5597	1.5605	1.6885	1.6895	.0014	.0038	.0633	.7900
2787DRA	Cam Brg.	2	1.5597	1.5605	1.6885	1.6895	.0014	.0038	.0633	.6850
2788DRA	Cam Brg.	3	1.5597	1.5605	1.6885	1.6895	.0014	.0038	.0633	.7900
1463M	Cam Set		Chevrolet	V6		Babbitt		Full Round Design		
2021DR	Cam Brg.	1	1.8682	1.8692	2.0190	2.0210	.0007	.0043	.0744	.7400
2022DR	Cam Brg.	2-4	1.8682	1.8692	2.0090	2.0110	.0010	.0052	.0694	.7450
2023DR	Cam Brg.	3	1.8682	1.8692	1.9990	2.0010	.0007	.0043	.0644	.7400
1466M	Cam Set		Oldsmobile	V8		Babbitt		Full Round Design		
3046DRI	Cam Brg.	1	2.0365	2.0373	2.1680	2.1695	.0015	.0044	.0646	.6930
3047DR	Cam Brg.	2	2.0165	2.0173	2.1480	2.1495	.0012	.0050	.0646	.6880
3048DR	Cam Brg.	3	1.9965	1.9973	2.1280	2.1295	.0012	.0050	.0646	.6880
3048DRI	Cam Brg.	4	1.9765	1.9773	2.1080	2.1095	.0012	.0050	.0646	.6880



Engine Bearings – Numerical Listing

BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
1466M 3049DR	Cam Set Cam Brg.	5	Oldsmobile 1.9565	V8 1.9573	2.0880	Babbitt 2.0895		Full Round Design .0012 .0050	.0646	.6880
1484M 1841DRI 2134DR 3451DR 3452DR 3453DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg. Cam Brg.	1 5 2 3 4	Chrysler 1.9980 1.5605 1.9820 1.9670 1.9510	Small Block 1.9990 1.5615 1.9830 1.9680 1.9520	2.1295 1.6920 2.1135 2.0985 2.0825	Babbitt 2.1305 1.6930 2.1145 2.0995 2.0835	.0015 .0015 .0015 .0015 .0015	Full Round Design .0041 .0041 .0041 .0041 .0041	.0645 .0645 .0645 .0645 .0645	.8650 .9400 .6250 .6150 .6150
1755M 2556DR	Cam Set Cam Brg.		Buick 1.8682	V6 1.8692	1.9990	Babbitt 2.0010		Full Round Design .0010 .0052	.0644	.7200
1874M 3193DRI	Cam Set Cam Brg.	1-5	Chevrolet 1.9487	Big Block 1.9497	2.1195	Babbitt 2.1205		Bowtie Blocks .0005 .0031	.0841	.9900
1888M 4511DR 4512DR 4513DR	Cam Set Cam Brg. Cam Brg. Cam Brg.	1-5 2-4 3	Chevrolet 2.1650 2.1650 2.1650	Small Block 2.1669 2.1669 2.1669	2.3276 2.3177 2.3079	Babbitt 2.3295 2.3197 2.3098	.0010 .0010 .0010	Full Round Design .0038 .0038 .0038	.0801 .0752 .0702	.6300 .6300 .6300
1898M 4509DR 4511DR 4513DR	Cam Set Cam Brg. Cam Brg. Cam Brg.	1-5 2-4 3	Chevrolet 2.165 2.165 2.165	346 LS1 2.1669 2.1669 2.1669	2.3473 2.3276 2.3079	Babbitt 2.3492 2.3295 2.3098	.0004 .001 .001	Full Round Design .0063 .0038 .0038	.0899 .0801 .0702	.6496 .6300 .6300
2100M 7105DR 7106DR 7107DR	Cam Set Cam Brg. Cam Brg. Cam Brg.	1 2-5 3-4	Chevrolet 1.8682 1.8682 1.8682	Small Block 1.8692 1.8692 1.8692	2.0190 2.0090 2.0000	H/D Babbitt 2.0210 2.0010 2.0010	.0007 .0010 .0007	Full Round Design .0043 .0052 .0043	.0744 .0694 .0644	.7400 .7450 .7400
2101M 7108DR 7109DR 7110DR	Cam Set Cam Brg. Cam Brg. Cam Brg.	1 2-5 3-4	Chevrolet 1.9487 1.9487 1.9487	Big Block 1.9497 1.9497 1.9497	2.1395 2.1295 2.1195	H/D Babbitt 2.1405 2.1305 2.1205	.0005 .0005 .0005	Full Round Design .0031 .0031 .0031	.0941 .0891 .0841	.8600 .9900 .9900
2102M 7112DR 7113DR 7114DR 7115DR 7118DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg. Cam Brg.	2 3 4 5 1	Ford 2.0805 2.0805 2.0805 2.0805 2.0805	Small Block 2.0815 2.0815 2.0815 2.0815 2.0815	2.1880 2.1730 2.1580 2.1430 2.2035	H/D Babbitt 2.1890 2.1740 2.1590 2.1440 2.2050	.0050 .0050 .0050 .0050 .0050	Full Round Design .0095 .0095 .0095 .0095 .0095	.0602 .0602 .0602 .0602 .0602	.6600 .6600 .6600 .6600 .6600
2104M 7116DR	Cam Set Cam Brg.	1-5	Ford 2.1238	429, 460 2.1248	2.2495	H/D Babbitt 2.2505		Full Round Design .0007 .0033	.0620	.5850
2106M 7107DR	Cam Set Cam Brg.	1-5	Chevrolet 1.8682	Small Block 1.8692	2.0000	H/D Babbitt 2.0010		Full Round Design .0007 .0043	.0644	.7400
2111M 7128DR 7129DR 7130DR 7131DR 7132DR	Cam Set Cam Brg. Cam Brg. Cam Brg. Cam Brg. Cam Brg.	1 2 3 4 5	Chrysler 1.9980 1.9820 1.9670 1.9510 1.7480	Big Block 1.9990 1.9830 1.9680 1.9520 1.7490	2.1295 2.1135 2.0985 2.0825 1.8795	H/D Babbitt 2.1305 2.1145 2.0995 2.0835 1.8805	.0015 .0015 .0015 .0015 .0015	Full Round Design .0041 .0041 .0041 .0041 .0041	.0645 .0645 .0645 .0645 .0645	.7500 .7500 .6700 .7470 .7500
8-1555CPA 1555CPA	Rod Set Rod Brg.		Pontiac 2.2488	V8 2.2498	2.3745	Overplated Copper-Lead Alloy 2.3750		Full Round Design .0009 .0034	.0619	.8860
8-2020CP 2020CP	Rod Set Rod Brg.		Chevrolet 1.9990	Small Block 2.0000	2.1247	Overplated Copper-Lead Alloy 2.1252		Full Round Design .0005 .0032	.0621	.8420
8-2130CP 2130CP	Rod Set Rod Brg.		Chrysler 2.1240	Small Block 2.1250	2.2500	Overplated Copper-Lead Alloy 2.2507		Full Round Design .0005 .0029	.0624	.8480
8-2320CP 2320CP	Rod Set Rod Brg.		Chrysler 2.3740	Big Block 2.3750	2.5000	Overplated Copper-Lead Alloy 2.5005		Full Round Design .0005 .0029	.0623	.9320
8-2500RAA 2500RAA	Rod Set Rod Brg.		Buick 1.9995	V8 2.0005	2.1247	A-Series aluminum bearings 2.1252		Full Round Design .0005 .0028	.0620	.7420
8-2555CP 2555CP	Rod Set Rod Brg.		Chevrolet 2.0990	Small Block 2.1000	2.2247	Overplated Copper-Lead Alloy 2.2252		Full Round Design .0005 .0028	.0622	.8420
8-2600CP 2600CP	Rod Set Rod Brg.		Ford 2.1228	Small Block 2.1236	2.2390	Overplated Copper-Lead Alloy 2.2398		Full Round Design .0005 .0022	.0577	.7260
8-3045A 3045A	Rod Set Rod Brg.		Oldsmobile 2.1238	V8 2.1248	2.2495	A-Series aluminum bearings 2.2500		Full Round Design .0009 .0039	.0619	.8310
8-3190A 3190A	Rod Set Rod Brg.		Chevrolet 2.1990	Big Block 2.2000	2.3247	A-Series aluminum bearings 2.3252		Full Round Design .0005 .0028	.0622	.8920

Engine Bearings – Numerical Listing



BEARING SET DATA		SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							Max. Wall	Max. Length
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance		
8-3230CP 3230CP	Rod Set Rod Brg.	Ford	390, 427, 428 2.4380	2.4388	2.5907	Overplated Copper-Lead Alloy 2.5915	.0005	.0025	.0755	.7340
8-3310CPA 3310CPA	Rod Set Rod Brg.	AMC	290, 304, 343, 360 2.0948	2.0955	2.2080	Overplated Copper-Lead Alloy 2.2085	.0005	.0027	.0560	.8370
8-3320CP 3320CP	Rod Set Rod Brg.	Buick	V8 2.2490	2.2500	2.3740	Overplated Copper-Lead Alloy 2.3745	.0005	.0027	.0619	.8260
8-3360CPA 3360CPA	Rod Set Rod Brg.	Ford	429, 460 2.4992	2.5000	2.6522	Overplated Copper-Lead Alloy 2.6530	.0005	.0024	.0762	.8660
8-3380CPA 3380CPA	Rod Set Rod Brg.	Ford	Small Block 2.3103	2.3111	2.4265	Overplated Copper-Lead Alloy 2.4273	.0005	.0026	.0577	.7260
8-3385CP 3385CP	Rod Set Rod Brg.	AMC	V8 2.2485	2.2492	2.3745	Overplated Copper-Lead Alloy 2.3750	.0007	.0029	.0623	.8050
8-3400CP 3400CP	Rod Set Rod Brg.	Ford	Cleveland/Modified V8 2.3103	2.3111	2.4361	Overplated Copper-Lead Alloy 2.4369	.0005	.0026	.0625	.7260
4-3545A 3545A	Rod Set Set Only	Ford	2.3L OHC 2.0465	2.0472	2.1720	A-Series aluminum bearings 2.1728	.0005	.0026	.0624	.8000
4-2785CP 2785CP	Rod Set Rod Brg.	Ford	L4 1.9370	1.9375	2.0825	Overplated Copper-Lead Alloy 2.0830	.0005	.0024	.0723	.8800
6-2500RAA 2500RAA	Rod Set Rod Brg.	Buick	V6 1.9995	2.0005	2.1247	A-Series aluminum bearings 2.1252	.0005	.0028	.0620	.7420
6-3760A 3760A	Rod Set Rod Brg.	Buick	V6 2.2487	2.2495	2.3740	A-Series aluminum bearings 2.3745	.0007	.0030	.0619	.7210
7025CH Rod Brg.	Rod Pair Rod Brg.	Chevrolet	V6 1.9984	1.9993	2.1245	Super Duty Alloy 2.1255	.0014	.0037	.0618	.7185
4-7180CH 7180CH	Performance Rod Set Set Only	Ford	L4 2.0465	2.0472	2.1720	Super Duty Alloy 2.1728	.0005	.0026	.0624	.8000
6-7085CH Set only	Performance Rod Set Set only	Chevrolet	V6 2.2492	2.2497	2.3747	Super Duty Alloy 2.3757	.0010	.0035	.0620	.7530
6-7120CH Set only	Performance Rod Set Set only	Buick	V6 2.2487	2.2495	2.3738	Super Duty Alloy 2.3745	.0005	.0030	.0619	.7350
8-7040CH Set only	Performance Rod Set Set only	Oldsmobile	V8 2.4988	2.4998	2.6243	Super Duty Alloy 2.6250	.0005	.0032	.0620	.8310
8-7050CH Set only	Performance Rod Set Set only	Pontiac	V8 2.2488	2.2498	2.3745	Super Duty Alloy 2.3750	.0009	.0034	.0619	.8860
8-7065CH Set only	Performance Rod Set Set only	Chevrolet	Small Block 1.9990	2.0000	2.1247	Super Duty Alloy 2.1252	.0005	.0030	.0621	.7950
8-7065CHA Set only	Performance Rod Set Set only	Chevrolet	Small Block 1.9990	2.0000	2.1247	Super Duty Alloy 2.1252	.0005	.0030	.0621	.7950
C8-7065CH C87065CH	Performance Rod Set Set only	Chevrolet	Small Block 1.9990	2.0000	2.1247	Super Duty Alloy; Coated 2.1252	.0005	.0030	.0621	.7950
C8-7065CHA C87065CHA	Performance Rod Set Set only	Chevrolet	Small Block 1.9990	2.0000	2.1247	Super Duty Alloy; Coated 2.1252	.0005	.0030	.0621	.7950
8-7095CH Set only	Performance Rod Set Set only	Chevrolet	Small Block 2.0990	2.1000	2.2247	Super Duty Alloy 2.2252	.0005	.0028	.0622	.8420
8-7100CH Set only	Performance Rod Set Set only	Chevrolet	Small Block 2.0990	2.1000	2.2247	Super Duty Alloy 2.2252	.0005	.0028	.0622	.8420
8-7100CHA Set only	Performance Rod Set Set only	Chevrolet	Small Block 2.0990	2.1000	2.2247	Super Duty Alloy 2.2252	.0005	.0028	.0622	.8420
C8-7100CH C87100CH	Performance Rod Set Set only	Chevrolet	Small Block 2.0990	2.1000	2.2247	Super Duty Alloy; Coated 2.2252	.0005	.0028	.0621	.8420
C8-7100CHA C87100CHA	Performance Rod Set Set only	Chevrolet	Small Block 2.0990	2.1000	2.2247	Super Duty Alloy; Coated 2.2252	.0005	.0028	.0621	.8420
8-7125CH Set Only	Performance Rod Set Set Only	Chrysler	Small Block 2.1240	2.1250	2.2500	Super Duty Alloy 2.5070	.0005	.0029	.0624	.8475
7133SHC Flange	Performance Rod Bearing Flange	Chrysler	Big Block 2.7495	2.7505	2.9425	Babbitt 2.9430	.0005	.0025	.0958	1.2240
8-7135CH Set only	Performance Rod Set Set only	Chrysler	Big Block 2.3740	2.3750	2.5000	Super Duty Alloy 2.5005	.0004	.0029	.0623	.9090
8-7155CH Set only	Performance Rod Set Set only	Ford	Small Block 2.3103	2.3111	2.4265	Super Duty Alloy 2.4273	.0005	.0026	.0577	.7210



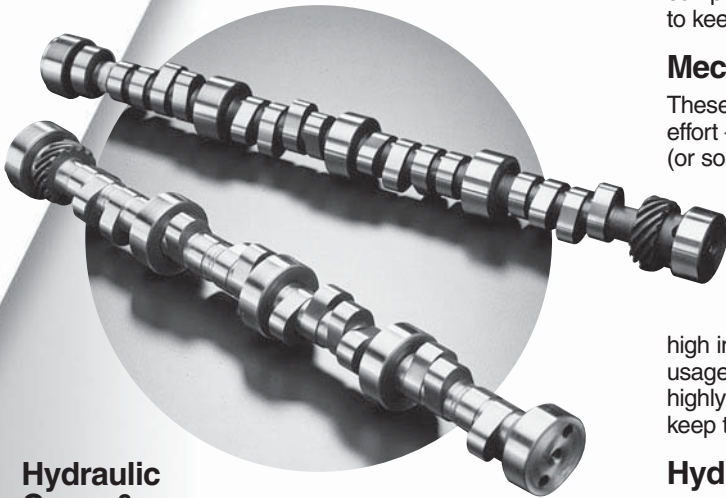
Engine Bearings – Numerical Listing

BEARING SET DATA			SHAFT, HOUSING, and CLEARANCE SPECIFICATIONS for STANDARD BEARINGS							
P/N	Set Contents	Pos.	Min. Shaft	Max. Shaft	Min. Housing	Max. Housing	Min. Clearance	Max. Clearance	Max. Wall	Max. Length
C8-7155CH C87155CH	Performance Rod Set Set only		Ford 2.3103	Small Block 2.3111	2.4265	Super Duty Alloy; Coated 2.4273		.0005 .0018	.0577	.7210
8-7160CH 7160CH	Performance Rod Set Set only		Ford 2.1228	Small Block 2.1236	2.2390	Super Duty Alloy 2.2398		.0008 .0037	.0568	.7210
C8-7160CH C87160CH	Performance Rod Set Set only		Ford 2.1228	Small Block 2.1236	2.2390	Super Duty Alloy; Coated 2.2398		.0008 .0037	.0568	.7210
8-7170CH Set only	Performance Rod Set Set only		Ford 2.4380	390, 427, 428 2.4388	2.5907	Super Duty Alloy 2.5915		.0009 .0035	.0755	.7340
8-7175CH Set only	Performance Rod Set Set only		Ford 2.3103	Cleveland/Modified V8 2.3111	2.4261	Super Duty Alloy 2.4269		.0005 .0026	.0625	.7260
8-7185CH Set only	Performance Rod Set Set only		Ford 2.4992	429, 460 2.5000	2.6522	Super Duty Alloy 2.6530		.0005 .0026	.0761	.8660
8-7190CH 7190CH	Performance Rod Set Set only		Chevrolet 1.8885	Small Block 1.8890	2.0150	Super Duty Alloy 2.0155		.0006 .0026	.0627	.7270
4-7195CH 7195CH	Performance Rod Set Set only		Honda 1.8880	2.2L SOHC, DOHC 1.8897	2.0079	Super Duty Alloy 2.0087		.0005 .0022	.0594	.7470
8-7195CH 7195CH	Performance Rod Set Set only		Chevrolet 1.8880	Small Block 1.8897	2.0079	Super Duty Alloy 2.0087	Honda	.0005 .0022	.0594	.7470
C8-7195CH C87195CH	Performance Rod Set Set only		Chevrolet 1.8880	Small Block 1.8897	2.0079	Super Duty Alloy; Coated 2.0087	Honda	.0005 .0022	.0594	.7470
8-7200CH 7200CH	Performance Rod Set Set only		Chevrolet 2.1988	Big Block 2.1998	2.3247	Super Duty Alloy 2.3252		.0009 .0034	.0620	.8650
8-7200CHA 7200CHA	Performance Rod Set Set only		Chevrolet 2.1988	Big Block 2.1998	2.3247	Super Duty Alloy 2.3252	Chamfer; Dowel	.0009 .0034	.0620	.8650
8-7200SHA 7200SHA	Performance Rod Set Set only		Chevrolet 2.1988	Big Block 2.1998	2.3247	Babbitt 2.3252	Chamfer; Dowel	.0009 .0034	.0620	.8650
C8-7200CH C87200CH	Performance Rod Set Set only		Chevrolet 2.1988	Big Block 2.1998	2.3247	Super Duty Alloy; Coated 2.3252		.0009 .0034	.0620	.8650
C8-7200CHA C87200CHA	Performance Rod Set Set only		Chevrolet 2.1988	Big Block 2.1998	2.3247	Super Duty Alloy; Coated 2.3252		.0009 .0034	.0620	.8650
8-7250CH 7250CH	Performance Rod Set Set only		Ford 2.0860	4.6L 2.0867	2.2388	Super Duty Alloy 2.2396		.0001 .0026	.0760	.8260
8-7260CH 7260CH	Performance Rod Set Set only		Buick 2.2490	V8 455 2.2500	2.3740	Super Duty Alloy 2.3745		.0005 .0027	.0619	.8260
8-7300CHA 7300CHA	Performance Rod Set Set only		Chrysler 2.3740	Big Block 2.3750	2.5000	Super Duty Alloy 2.5005	Chamfer; Dowel	.0014 .0035	.0618	.8890
8-7300SHA 7300SHA	Performance Rod Set Set only		Chrysler 2.3740	Big Block 2.3750	2.5000	Babbitt 2.5005	Chamfer; Dowel	.0014 .0035	.0618	.8840
8-7310CHA 7310CHA	Performance Rod Set Set only		Chevrolet 1.8885	Big Block 1.8890	2.0150	Super Duty Alloy 2.0155		.0006 .0026	.0627	.8960
8-7315CH 7315CH	Performance Rod Set Set only		Chevrolet 1.8885	Big Block 1.8890	2.0150	Super Duty Alloy 2.0155		.0006 .0026	.0627	.7920
1460M 3548DR 3549DR	Aux. Shaft Set Aux Brg. Aux Brg.	1 2	Ford 1.6520 1.6520	L4 1.6530 1.6530	1.7970 1.7770	Babbitt 1.7980 1.7780	Full Round Design	.0012 .0012 .0044 .0044	.0714 .0614	.5050 .5050
1834V20NH	Pin Bushing		Chevrolet	Small Block		Bronze	No Oil Hole; Extra Material			
2134Y	Pin Bushing		Chrysler	Small Block		Bronze				
2304V	Pin Bushing		Ford	390, 427, 428		Bronze				
2304VNH	Pin Bushing		Chevrolet	Big Block		Bronze	No Oil Hole			
2789Y20	Pin Bushing		Ford	L4		Bronze				

SPEED PRO®

Design Characteristics

Speed-Pro provides a broad selection of precision engineered performance camshafts. Although there are some pretty serious racing cams in our line, our primary focus is on entry level racing and street performance. Speed-Pro has cam profiles that will deliver added “grunt” for a tow vehicle, add some extra “snap” to your daily driver, or generate maximum power for racing applications. We offer a wide variety of camshaft lifter designs as well – hydraulic, solid, hydraulic roller, and solid roller. Each cam is specifically designed to work with the specified lifter type – they cannot be interchanged. Below we will list the various types of cams available, their particular advantages, and their recommended uses.



Hydraulic Cams & Lifters

These are direct replacements for the cam and lifters that originally come in the vast majority of passenger cars and trucks. The greatest single advantage of hydraulic lifters is that they are self adjusting to eliminate valvetrain noise. They are inexpensive and reliable. Installation is usually quite straight-forward, with a simple initial adjustment to provide .040-.060 of lifter preload, and little or no maintenance afterward. Cams intended for use with hydraulic lifters reflect the characteristics of the lifter's design, with an emphasis on low end and mid-range performance. Most cams targeted for street and RV performance are of the hydraulic lifter design.

The only downside to traditional hydraulic lifter cams lies in the inherent RPM limitations which they are subject to. Traditional hydraulic lifters lose their ability to maintain valve adjustment and control beyond 6000 RPM. Speed-Pro offers special race hydraulic lifters that extend the functional operating range beyond 6500 RPM.

Mechanical (Solid) Lifter Cams

The advantages of mechanical (or solid) lifter cams over comparable hydraulic cams are an extended operating RPM range, and the potential for more aggressive cam profiles. Mechanical lifters are not subject to the RPM limitations associated with hydraulic cams, but are equally inexpensive, thus many racing applications will use them. Mechanical lifter camshafts will usually feature wilder profiles than hydraulics, to better utilize the high RPM capabilities the lifters provide. Negatives associated with mechanical lifters include the fact that they require some form of valvetrain lash adjustment to maintain a given amount of “lash”, or clearance. These cams will also be comparatively noisy, and will require regular maintenance to keep lash within specifications.

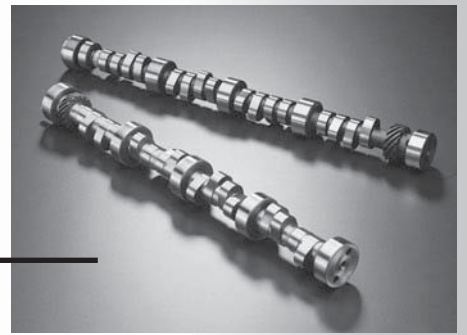
Mechanical Roller Cams & Lifters

These are the products of choice for professional racing effort – where the rules permit their use. Mechanical (or solid) roller lifters offer extremely high RPM potential when accompanied with the correct valvetrain hardware. The roller design also accommodates lift and duration profiles unobtainable with flat bottomed lifters. Negatives that accompany mechanical roller lifter combinations are the same as those for standard mechanical lifters, along with a high initial cost. An added downside has more to do with usage of these cams – these combinations tend to be very highly stressed, and must have frequent maintenance to keep them at peak efficiency.

Hydraulic Roller Cams & Lifters

This combination is the result of continued effort to realize efficiency improvements in valvetrain componentry by the Original Equipment Manufacturers. By incorporating the roller concept used in racing applications to reduce friction, and adding to it the hydraulic lifter's ability to operate quietly without frequent maintenance, we have what is likely the best possible combination for a street driven vehicle. Hydraulic Roller combinations are quiet, and require little or no service after the initial installation. Due to the roller design, these cams can offer lift and duration profiles unobtainable with non-roller type lifters. The roller design gives a significant reduction in friction, resulting in a power and mileage increase independent of the cam's profile. The few downsides for the performance customer are a rather high initial cost and a low RPM ceiling due to the hydraulic lifter's weight and design.

CAMSHAFTS



Speed-Pro Camshaft Performance Codes and Selection Guidelines

Speed-Pro Performance Camshafts are power coded in order to make cam selection easier. Each camshaft has been assigned a category which describes its operating characteristics when installed in a particular engine. The categories start with Pro-1500, and extend through Pro-5000 in order of relative power potential.

The Pro-1500, Pro-2000, and Pro-3000 series of cams are specifically designed for street use. These cams will deliver a significant power increase when compared to most stock camshafts. They will allow the use of most power accessories, give acceptable idle quality, and perform well in day to day driving. These are the components recommended for use in a tow vehicle, a street rod, or a muscle car. When matched with the recommended Speed-Pro and Sealed Power parts from this catalog these cams will deliver reliable performance without the added maintenance and headaches associated with "all out" racing cams.

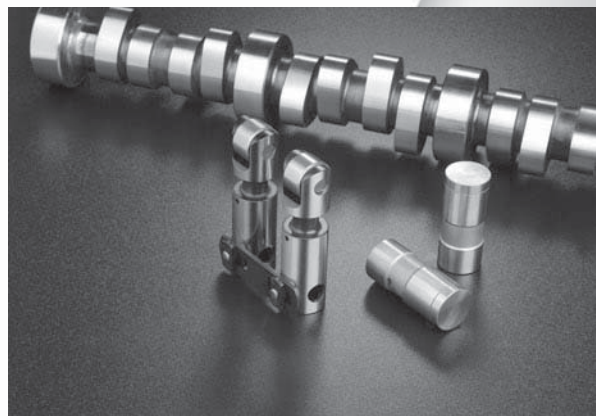
Select camshafts within this group have been granted an E.O. number, making them legal for carbureted, emission controlled applications. This legality does not mean that they will work with all computer controlled vehicles – aftermarket tuning aids such as PROM "chips" may be required to attain good driveability in certain cases – particularly with speed density type vehicle computer systems.

Pro-4000 series cams are for dual purpose, street/strip applications, as well as for limited racing applications. These are not legal for vehicles subject to emission control legislation. These cams are usually tractable enough to use in cars that see limited street duty, but are not intended for regular daily use. They will have a decidedly rough idle, and will generate lower manifold vacuum that may not allow for power accessories. As with any racing component, more frequent inspection of the valvetrain becomes necessary when using these parts.

Pro-5000 is our designation for "Competition Series" cams – these are true racing camshafts. Included are radical hydraulic and solid lifter grinds intended for bracket racing, oval track, and limited use street vehicles; along with high RPM roller lifter profiles that deliver the horsepower needed to win at the track. The uses of these cams require that the rest of the engine be upgraded to match their RPM and power capabilities. Most of these cannot be used with vacuum driven accessories such as power brakes. These parts are not emission legal and are not intended for street use. Pro-Street type vehicles can make use of these cams, but frequent valve lash and spring inspection will be necessary, and idle quality may be marginal.

A few general rules to follow:

- 1) A larger displacement engine is less sensitive to idle and low end torque problems associated with large cams. As an example: if a 283 and a 350 used the same cam, the 350 would idle better.
- 2) A heavier vehicle should use a smaller cam to enhance low end torque and acceleration.
- 3) A solid lifter cam will idle better than a hydraulic having similar specs, a roller will be better yet.
- 4) Use the matching springs and retainers for each application. We do not recommend the use of Rotocoils or valve rotating devices for performance applications.
- 5) Always check for valve spring coil bind. You must have at least .060" of additional spring travel available at maximum valve lift.
- 6) Always check piston to valve clearance, you must have a minimum of .100" in all directions.
- 7) Always follow recommended break in procedures, and use Sealed Power's 55400 Assembly Lube. On flat tappet cams using double valve springs for increased pressure, we recommend breaking in the cam with the outer springs only and then installing the inners afterward.
- 8) If you are undecided between two camshafts, pick the smaller one. You'll always be better off!



SPEED PRO®

Performance Camshaft Codes

Pro-1500

Idle Quality: Stock
Power Range: 1000-3500 rpm
(cruise @ 1600-2200 rpm)
Axle Ratio: Stock up to 3.60
Exhaust: Headers and/or
Dual Exhaust Optional
Carburetion: Small 4 bbl. Optional
Compression: 9.0:1 or less
Transmission: Stock Automatic or Manual
Application: Computer OK, Good for Towing,
"One Step Up" from Most
Stock-Cams

Pro-2000

Idle Quality: Good
Power Range: 1500-4500 rpm
(cruise @ 1800-2600 rpm)
Axle Ratio: 3.00 to 4.00
Exhaust: Small Tube Headers and
Dual Exhaust Recommended
Carburetion: Larger 2 bbl. or
Small 4 bbl. Recommended
Compression: 9.5:1 or less
Transmission: Stock Automatic or Manual
Application: Computer OK, May Require
Aftermarket "Chip"
2-4 in. Vacuum Loss,
Good Street Performance

Pro-3000

Idle Quality: Good to Fair
Power Range: 2000-4800 rpm
(cruise @ 2400-3200 rpm)
Axle Ratio: 3.20 to 4.20
Exhaust: Headers and Dual
Exhaust Recommended
Carburetion: 4 bbl. Recommended
Compression: 9.0:1 to 10.3:1
Transmission: Automatic (Aftermarket Converter
Optional) or Manual
Application: Computer Will Require
Aftermarket "Chip"
3-6 in. Vacuum Loss, Good
Street/Strip Performance

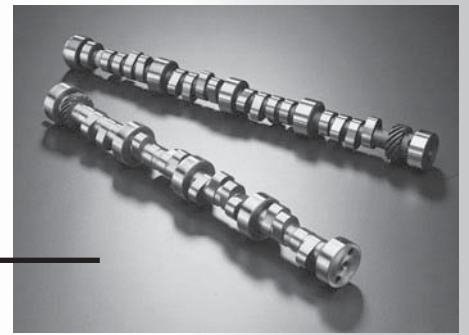
Pro-4000

Idle Quality: Fair to Moderately Rough
Power Range: 3200-6500 rpm
(cruise @ 3800-5000 rpm)
Axle Ratio: 3.70 to 4.60
Exhaust: Headers and Dual Exhaust
Required
Carburetion: 4 bbl. Required
Compression: 10.0:1 to 11.0:1
Transmission: Modified Automatic w/2500+
Stall Converter, or Manual
Application: Significant Vacuum Loss, May Not
Run Power Accessories,
Limited High Performance
Street/Strip Usage, Bracket Racing

Pro-5000

Idle Quality: Rough
Power Range: 3200-6500 rpm
Axle Ratio: 4.00 or Higher
Exhaust: Headers and Low Restriction
Exhaust Required
Carburetion: Larger CFM 4 bbl. or
Two 4bbls. Required
Compression: 10.5:1 or Higher
Transmission: Race Automatic w/3500+
Stall Converter, or Manual
Application: Valvetrain and Engine Must Be
Modified for High RPM Use
Used in Drag Racing, Oval Track

CAMSHAFTS



Emission Legal Performance Cams

Speed-Pro has released a series of high performance cams designed for performance enthusiasts looking to add a little extra power to their daily transportation.

Speed-Pro uses the latest computer generated cam lobe profiles to significantly increase horsepower, while still retaining low end torque and drivability, making these camshafts ideal for your daily driver, or for a tow vehicle.

We have seven grinds available – select the one which best meets your needs. Shorter duration cams are recommended for heavier vehicles and for smaller displacement engines. When installed per our recommendations, these cams are compatible with most carbureted vehicle's computer and emission control equipment. Aftermarket computer "chips" may be required to optimize performance.

The camshafts listed below have received Executive Order D-292-1 from the California Air Reasearch Board, making them legal for street use in '87 & earlier carbureted vehicles with small block Chevrolet engines (262-400 ci.d.).

Speed-Pro P/N	Valve Lift		Duration @ .050		Lobe Center
	intake	exhaust	intake	exhaust	
CS1103R stock idle, good low end torque	.398	.420	194	204	112
CS1107R stock idle, good low end torque	.398	.443	194	214	112
CS1104R stock idle, good low end torque	.414	.414	209	209	110
CS1014R stock idle, good low end torque	.420	.442	204	214	112
CS1105R stock idle, good low end torque	.435	.455	209	216	112
CS1028R good idle, good low to midrange torque	.444	.444	214	214	112
CS1106R good idle, good low to midrange torque	.443	.465	214	224	112

How To "Degree" a Camshaft

Most performance camshafts do not have to be degreed in order to work. Degreeding is a procedure used by engine builders to optimize engine output. It is a useful way to verify correct engine assembly, and to fine tune a racing combination. If you change the cam timing, be sure to recheck piston to valve clearance. The minimum clearance is .100".

Tools Required

The degreeding procedure requires a degree wheel, a pointer, a dial indicator, and a piston stop. The degree wheel and dial indicator are machine shop tools which must be purchased. The pointer may be purchased or fabricated from a piece of wire rod. The piston stop may also be fabricated.

The crankshaft, camshaft, timing chain, and the rod and piston for the number one cylinder must be installed in order to degree the cam. Mount the degree wheel to the front of the crankshaft. Install the pointer on the engine so that it points to the zero on the degree wheel when the number one piston is at the approximate top of its travel. This initial mounting location is only used to get "in the ballpark", the exact Top Dead Center position will be determined in our next step.

Establishing Top Center

The first task is to accurately locate the Top Dead Center (TDC) of piston travel in the number one cylinder. Although it is possible to do this with the heads on the engine, it is more easily done before they have been installed. Install the piston "stop" on the number one cylinder, and rotate the crankshaft until the piston contacts the stop. Mark this spot on the degree wheel, and then rotate the crankshaft in the opposite direction until it contacts the stop again. Note the degree wheel reading. Add up the number of degrees in the narrow angle separating the two points where the stop was reached, and divide the number by two. This number of degrees will tell you where to locate the center point in between the two positions. This center point position is the actual Top Dead Center (TDC). Mark this position on the degree wheel. Remove the piston stop and rotate the crankshaft until the TDC mark lines up with the pointer. Loosen the bolt holding the degree wheel, reposition the wheel so that the zero mark is perfectly lined up with the pointer, and tighten the mounting bolt.

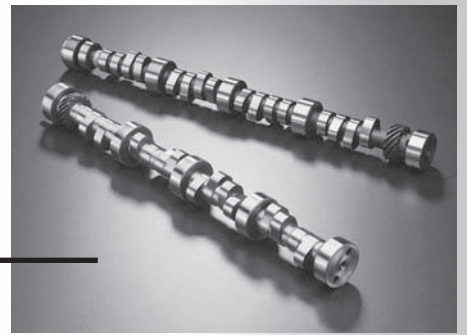
Measuring the Relationship of the Camshaft to the Crankshaft

Once we have located Top Dead Center, we can compare the position of the camshaft to that of the crankshaft. Camshafts are designed so that the valves open and close at specific intervals as the crankshaft rotates. The relationship between the two shafts is expressed as the variance from designed specifications, in degrees. (Note – Most camshaft specifications are expressed in "crankshaft degrees." The crankshaft rotates twice for each single turn of the camshaft .)

The reference point used for comparison is the intake lobe centerline of the cam. This spot, on the cam's number one intake lobe, is located through a similar procedure to that used to find Top Dead Center. A solid lifter is placed on the number one cylinder's intake cam lobe. A steel ball, the same diameter as the pushrod end is set into the lifter. A dial indicator is set up against the ball, to read the lifter's vertical movement as the cam rotates. Set the indicator to read near zero at a point close to the maximum lift position of the cam lobe. Rotate the cam through the high part of the lobe, noting on the degree wheel the two spots where a reading of .050 below maximum lift appear on the dial indicator, once on the lifter's way "up" on the lobe, the other on the way "down." The lobe's centerline will be located in the exact center of the two equal indicator reading points. (Note – This may not correspond to the point of maximum lift.) This centerline's position, as indicated on the degree wheel, can be compared to specifications.

A camshaft which specifies the intake centerline to be at 108 degrees after TDC, but which is at 104 degrees after TDC when checked, is considered four degrees "Advanced." If the same cam checked out at 110 degrees after TDC, it would be two degrees "Retarded." Advancing the cam from specifications will improve lower RPM performance at the cost of high speed power. Retarding the cam will enhance top end power, but will sacrifice low speed torque. While cam timing adjustment can be a useful tuning aid, it is not a substitute for correct camshaft selection. Speed-Pro offers timing sets featuring multiple keyways, which permit altering the cam timing without the use of fragile offset keys or bushings.

CAMSHAFTS

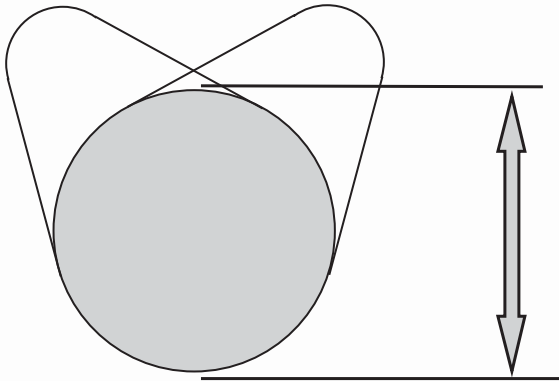


Basic Camshaft Terminology and Definitions

Base Circle

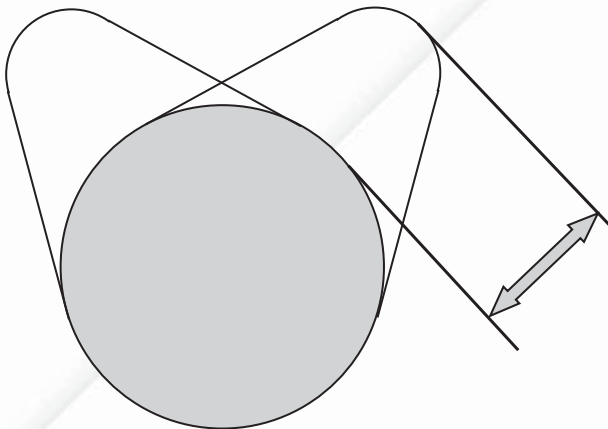
The assumed diameter of the cam lobe if there were zero lift

Cam Lift and Valve Lift



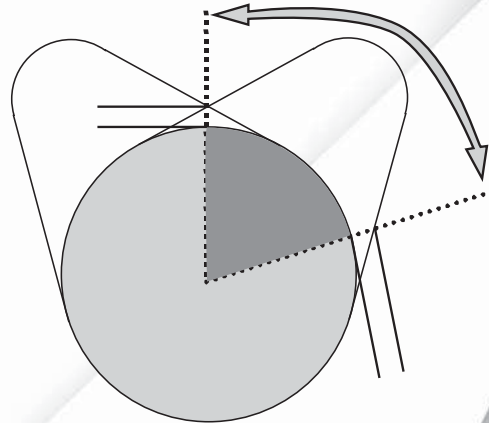
Cam Lift is the difference in dimension from the base circle-to the "tip" of the cam lobe.

Valve Lift is the height that the valve moves off of its seat. Valve lift is calculated by multiplication of cam lift by the rocker arm ratio, minus valve lash (clearance). Maximum lift is usually limited by valve spring dimensions and by clearance between the valve and the piston.



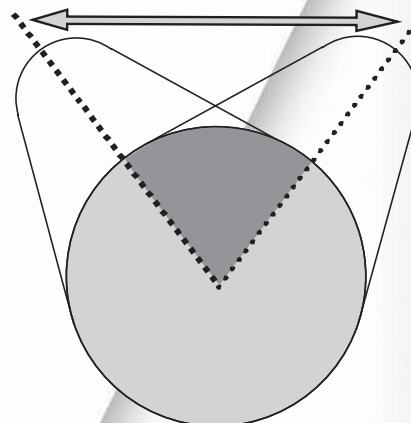
Duration and Overlap

Duration is the amount of time, expressed in crankshaft degrees, that the valve is held open. Duration is always measured at some amount of lift, commonly .050". Longer duration camshafts generally perform better at high RPM. Valve overlap is a term describing the amount of time in degrees that both valves are open simultaneously. Cams with more overlap are also intended for high RPM use.



Lobe Separation Angle

Expressed in degrees, the lobe separation angle determines idle quality and torque characteristics. Tighter (108° - 110°) makes more power, but idles rougher.



Performance Cams – Numerical Listing



P/N	Mfgr.	Engine	Lifter Type	Cam Lift		Valve Lift		Duration		Lobe C/L	Over-lap	Cam Series
				Int.	Exh.	Int.	Exh.	.050 Lift	.006 Lift			
CS-108R	Ford	Small Block	HYD	.288	.288	.460	.460	218/218	298/298	113	62	Pro-3000
CS-112R	Chevrolet	Small Block	HYD	.291	.291	.436	.436	224/224	300/300	108	84	Pro-3000
CS-113R	Chevrolet	Small Block	MECH	.2625	.2665	.395	.401	228/230	270/270	110	66	Pro-5000
CS-118R	Chevrolet	Small Block	MECH	.3227	.3227	.485	.485	254/254	295/295	114	86	Pro-4000
CS-165R	Chevrolet	Big Block	MECH	.306	.306	.520	.520	242/242	309/295	114	98	Pro-4000
CS-173R	Ford	Cleveland	HYD	.292	.292	.505	.505	219/219	308/308	114	62	Pro-3000
CS-175R	Chevrolet	Big Block	HYD	.2941	.2971	.500	.505	222/235	306/322	115	88	Pro-3000
CS-176R	Oldsmobile	V8	HYD	.2964	.2964	.474	.474	232/232	322/322	113	82	Pro-5000
CS-179R	Chevrolet	Small Block	HYD	.298	.298	.447	.447	222/222	290/290	114	78	Pro-3000
CS-184R	Chevrolet	Small Block	HYD	.286	.286	.429	.429	218/218	295/295	110	75	Pro-3000
CS-185R	Chevrolet	Small Block	HYD	.302	.302	.453	.453	230/230	304/304	114	55	Pro-4000
CS-186R	Chevrolet	Small Block	HYD	.320	.320	.480	.480	230/230	287/287	109	74	Pro-5000
CS-187R	Chevrolet	Small Block	HYD	.340	.340	.510	.510	244/244	318/318	108	94	Pro-5000
CS-189R	Chevrolet	Small Block	MECH	.3863	.3863	.557	.557	274/274	312/312	110	92	Pro-5000
CS-191R	Chevrolet	Big Block	HYD	.339	.339	.576	.576	246/246	304/304	110	84	Pro-4000
CS-193R	Ford	Small Block	HYD	.291	.291	.466	.466	224/224	304/304	110	84	Pro-3000
CS-195R	Ford	Small Block	HROL	.308	.319	.493	.510	212/222	289/299	112	60	Pro-3000
CS-196R	Ford	429, 460	HYD	.2862	.2862	.495	.495	218/218	299/299	110	79	Pro-3000
CS-198R	Oldsmobile	V8	HYD	.310	.325	.496	.520	224/234	300/310	112	71	Pro-3000
CS-644	Chrysler	Small Block	HYD	.2861	.295	.429	.442	210/220	279/290	114	51	Pro-3000
CS-650	Ford	Cleveland	HYD	.278	.283	.481	.490	206/221	287/307	115	63	Pro-2000
CS-661	Chrysler	Big Block	HYD	.299	.309	.449	.464	214/225	292/309	115	46	Pro-3000
CS-760	Ford	Small Block	HROL	.278	.278	.445	.445	210/210	279/279	115	49	Pro-3000
CS-1004R	Chevrolet	Big Block	HYD	.258	.273	.439	.464	190/200	260/272	110	46	Pro-1500
CS-1006R	Chrysler	Small Block	HYD	.280	.280	.420	.420	204/204	278/278	110	50	Pro-2000
CS-1010R	Ford	Cleveland	HYD	.280	.280	.484	.484	208/208	284/284	111	62	Pro-2000
CS-1011R	Ford	390, 427, 428	HYD	.295	.295	.510	.510	214/214	292/292	110	60	Pro-3000
CS-1013R	Chevrolet	Small Block	HYD	.295	.310	.443	.465	214/224	288/298	112	69	Pro-3000
CS-1014R	Chevrolet	Small Block	HYD	.280	.295	.420	.443	204/214	278/288	112	51	Pro-2000
CS-1015R	Chevrolet	Big Block	HYD	.295	.310	.501	.527	214/224	292/302	112	61	Pro-3000
CS-1016R	Buick	V6	HYD	.280	.295	.448	.472	204/214	280/290	112	51	Pro-2000
CS-1019R	Chrysler	Small Block	HYD	.295	.310	.443	.465	214/224	288/298	112	61	Pro-3000
CS-1020R	Ford	Small Block	HYD	.295	.310	.472	.496	214/224	290/300	112	71	Pro-3000
CS-1021R	Ford	Cleveland	HYD	.295	.310	.510	.536	214/224	292/302	112	61	Pro-3000
CS-1022R	Pontiac	V8	HYD	.295	.310	.443	.465	214/224	288/298	112	61	Pro-3000
CS-1023R	Oldsmobile	V8	HYD	.295	.310	.472	.496	214/224	290/300	112	61	Pro-3000
CS-1024R	Oldsmobile	V8	HYD	.280	.295	.448	.472	204/214	280/290	112	51	Pro-2000
CS-1025R	Ford	390, 427, 428	HYD	.295	.310	.510	.536	214/224	292/302	112	61	Pro-3000
CS-1026R	AMC	V8	HYD	.280	.295	.448	.472	204/214	280/290	110	55	Pro-2000
CS-1029R	Chevrolet	Big Block	HYD	.270	.270	.459	.459	204/208	298/299	112	68	Pro-2000
CS-1030R	Chevrolet	V6	HYD	.273	.273	.410	.410	202/213	269/284	113	52	Pro-2000
CS-1032R	Chevrolet	V6	HYD	.280	.280	.420	.420	208/208	280/280	110	60	Pro-2000
CS-1033R	Chevrolet	L6; 230, 250	HYD	.265	.280	.464	.490	194/204	272/282	110	45	Pro-1500
CS-1038R	Pontiac	V8	HYD	.280	.295	.420	.443	204/214	278/288	110	55	Pro-2000
CS-1043M	Chevrolet	Small Block	HYD	.2671	.2733	.400	.410	202/213	269/284	110	58	Marine
CS-1047M	Chevrolet	Big Block	HYD	.300	.300	.510	.510	224/224	293/293	115	62	Marine
CS-1049M	Chevrolet	V6	HYD	.269	.2764	.404	.414	202/207	269/271	112	45	Marine
CS-1051M	Chevrolet	V6	HROL	.269	.273	.404	.410	202/213	270/284	112	55	Marine
CS-1062R	Chevrolet	Small Block	HYD	.312	.320	.468	.480	220/231	304/287	110	80	Pro-3000
CS-1063R	Ford	Small Block	HYD	.2862	.2907	.458	.464	218/224	297/304	110	73	Pro-3000
CS-1064R	Ford	Small Block	HYD	.286	.302	.458	.483	218/230	297/307	110	81	Pro-3000
CS-1066R	Ford	Small Block	HYD	.260	.278	.416	.444	197/209	280/293	114	60	Pro-2000
CS-1068M	Chevrolet	L4 181 Marine	HYD	.2529	.2529	.443	.443	204/204	281/281	109	57	Marine
CS-1069R	AMC	L6	HYD	.280	.280	.421	.421	208/208	280/280	112	56	Pro-2000
CS-1072R	Chevrolet	Big Block	HROL	.295	.300	.502	.510	216/228	288/300	112	70	Pro-3000
CS-1075R	Chevrolet	Big Block	HROL	.330	.340	.561	.578	236/246	316/324	110	100	Pro-5000
CS-1079R	Chevrolet	Small Block	HROL	.290	.308	.433	.462	198/210	273/288	112	57	Pro-2000
CS-1080R	Chevrolet	Small Block	HROL	.308	.313	.462	.470	210/215	288/284	110	68	Pro-3000
CS-1081R	Chevrolet	Small Block	HROL	.320	.320	.480	.480	230/230	306/306	108	90	Pro-5000
CS-1084R	Ford	Small Block	HYD	.280	.295	.448	.472	204/214	280/290	112	51	Pro-2000
CS-1085R	Ford	Cleveland	HYD	.280	.295	.484	.510	204/214	282/292	112	51	Pro-2000
CS-1086R	Ford	429, 460	HYD	.280	.295	.484	.510	204/214	282/292	112	51	Pro-2000
CS-1087R	Chevrolet	V6	HYD	.281	.296	.420	.444	204/214	278/288	112	51	Pro-2000
CS-1088R	Chevrolet	Big Block	HYD	.280	.295	.476	.501	204/214	282/292	112	51	Pro-2000
CS-1093M	Chevrolet	Big Block	HYD	.281	.296	.476	.496	214/218	289/302	115	64	Marine
CS-1095R	Chevrolet	Small Block	HYD	.300	.307	.450	.460	224/224	291/287	114	60	Pro-3000
CS-1098R	Chrysler	Big Block	HYD	.280	.295	.420	.443	204/214	278/288	112	51	Pro-2000
CS-1102R	Ford	390, 427, 428	HYD	.280	.295	.484	.510	204/214	282/292	112	51	Pro-2000
CS-1103R	Chevrolet	Small Block	HYD	.265	.280	.398	.420	194/204	268/278	112	41	Pro-1500
CS-1104R	Chevrolet	Small Block	HYD	.276	.276	.414	.414	209/209	273/273	110	45	Pro-2000
CS-1105R	Chevrolet	Small Block	HYD	.290	.303	.435	.455	209/216	283/286	112	51	Pro-2000



Performance Cams – Numerical Listing

P/N	Mfgr.	Engine	Lifter Type	Cam Lift		Valve Lift		Duration		Lobe C/L	Over-lap	Cam Series
				Int.	Exh.	Int.	Exh.	.050 Lift	.006 Lift			
CS-1106R	Chevrolet	Small Block	HYD	.295	.310	.443	.465	214/224	288/298	112	61	Pro-3000
CS-1107R	Chevrolet	Small Block	HYD	.265	.295	.398	.443	194/214	268/288	112	46	Pro-1500
CS-1127R	Chevrolet	Small Block	ROLL	.420	.420	.630	.630	256/258	292/296	106		Pro-5000
CS-1135R	Chevrolet	Big Block	ROLL	.400	.400	.680	.680	261/271	296/306	108		Pro-4000
CS-1137R	Chevrolet	Big Block	ROLL	.366	.366	.623	.623	246/246	288/288	110		Pro-4000
CS-1138R	Chevrolet	Small Block	HYD	.310	.310	.465	.465	224/224	298/298	112	66	Pro-3000
CS-1139R	Chevrolet	Big Block	HYD	.310	.325	.527	.553	224/232	302/304	114	63	Pro-3000
CS-1141R	Ford	Small Block	HYD	.310	.325	.496	.520	224/234	300/310	112	71	Pro-3000
CS-1145R	Chevrolet	Small Block	MECH	.306	.323	.459	.485	242/254	295/310	116	90	Pro-4000
CS-1146R	Chevrolet	Small Block	HYD	.340	.355	.510	.533	244/254	318/328	112	91	Pro-5000
CS-1148R	Chrysler	Big Block	HYD	.303	.303	.455	.455	224/224	289/289	112	48	Pro-3000
CS-1150R	Chevrolet	Small Block	HYD	.265	.280	.398	.420	194/204	268/278	104	57	Pro-1500
CS-1151R	Chevrolet	Small Block	HYD	.280	.295	.420	.443	204/214	278/288	110	55	Pro-2000
CS-1152R	Chevrolet	Small Block	HROL	.319	.334	.479	.501	222/232	297/307	114	67	Pro-3000
CS-1155R	Ford	429, 460	HYD	.265	.280	.458	.484	194/204	272/282	110	45	Pro-1500
CS-1156R	Ford	L4	HYD	.270	.270	.454	.454	220/220	282/282	112	46	Pro-3000
CS-1158R	Ford	Small Block	HYD	.265	.280	.424	.448	194/204	270/280	110	45	Pro-1500
CS-1159R	Ford	429, 460	HYD	.295	.310	.510	.536	214/224	292/302	112	61	Pro-3000
CS-1161R	Ford	Cleveland	HYD	.265	.280	.458	.484	194/204	272/282	110	45	Pro-1500
CS-1162R	Ford	Small Block	HYD	.310	.325	.496	.520	224/234	300/310	110	75	Pro-3000
CS-1165R	Buick	V8	HYD	.295	.310	.469	.493	214/224	290/300	112	61	Pro-3000
CS-1167R	Chevrolet	Big Block	HYD	.295	.295	.501	.501	214/214	292/292	114	52	Pro-3000
CS-1168R	Chevrolet	Small Block	HYD	.325	.325	.488	.488	232/234	300/308	108	80	Pro-5000
CS-1169R	Chevrolet	Small Block	HYD	.305	.305	.458	.458	218/218	292/292	110	64	Pro-3000
CS-1171R	Chevrolet	Small Block	HYD	.310	.325	.465	.488	224/234	298/308	112	71	Pro-3000
CS-1175R	Pontiac	V8	HYD	.310	.325	.465	.488	224/234	298/308	112	71	Pro-3000
CS-1177R	Ford	Small Block	HROL	.319	.334	.510	.534	222/232	299/309	112	70	Pro-3000
CS-1178R	Chevrolet	Small Block	HYD	.307	.307	.461	.461	232/232	303/303	114	74	Pro-5000
CS-1217R	Ford	Small Block	HYD	.280	.295	.448	.472	204/214	280/290	112	51	Pro-2000
CS-1224R	Chevrolet	Big Block	HYD	.320	.320	.544	.544	230/230	288/288	109	74	Pro-5000
CS-1226R	Chevrolet	Small Block	MECH	.330	.345	.495	.518	244/254	289/299	106	91	Pro-4000
CS-1227R	Chevrolet	Small Block	MECH	.345	.360	.518	.540	254/264	316/326	106	109	Pro-4000
CS-1231R	Ford	Small Block	HYD	.295	.310	.472	.496	214/224	290/300	112	61	Pro-3000

LIFTERS

SPEED PRO®



Selection Guidelines

Conventional Hydraulic Lifters

Speed-Pro hydraulic lifters are precision manufactured to maintain precise valve timing under all operating conditions. A precision metering valve provides precise oil metering to the overhead valvetrain. Check valves are lightweight, allowing high speeds and more uniform operation.

The lifters listed on the facing page are intended for use with both O.E.M. and aftermarket "stock" camshafts. Also recommended for use with hydraulic performance camshafts with RPM limitations of between 5500 and 6000 RPM.

Conventional hydraulic lifters can be identified by the prefix "HT." Listed on the facing page are the conventional hydraulic lifters that are shown in the alphabetical section of this catalog. Additional listings can be found in the master engine parts catalog.

Hi-Rev Hydraulic Lifters

Speed-Pro Hi-Rev (commonly called anti-pump-up) hydraulic lifters feature the same quality material and construction as the conventional hydraulic lifter. A special high strength, steel retainer is used to precisely limit the travel of the plunger during operation. With plunger travel limited, adjustable rocker arms must be used to effect a lash adjustment of .000/.002". This then allows the valve train to perform more like a mechanical system, thus allowing high RPM operation. Because of the high RPM capability and the elimination of frequent lash adjustments (which are required with mechanical lifters), Hi-Rev hydraulic lifters are the best choice for all-around performance engines.

Hi-Rev hydraulic lifters can be identified by the prefix "HT" and the suffix "R."



Lash Adjustment Directions for Hi-Rev Hydraulic Lifters

These racing hydraulic lifters are designed to eliminate so called lifter "pump-up" at high RPM. In order for the lifters to perform this function the valve lash is critical and must be performed as follows:

1. The preliminary lash adjustment on engine buildup requires the lifter to be on the base circle of the camshaft (valve closed position) and then to just remove all rocker arm to push rod clearance. This can be determined by rotating and/or moving the push rod while tightening the adjusting nut. When resistance to turning or movement is felt, the lash is satisfactory for engine start-up.
2. After the engine is running and has been warmed up, the final lash adjustment can be made, preferably at hot idle. Set the valve lash at .002". If obvious valve click is heard at this setting, tighten down adjusting nut until click just disappears.
3. For Pontiac engines there is a washer and self-locking nut included with these lifters. They must be used to perform the above adjustment. If washer is included, install the washer and then the nut in the place of the stock nut. DO NOT use these washers and nuts on Oldsmobile engines.

Mechanical Lifters

Speed-Pro mechanical (fixed) lifters are manufactured from high quality hardenable iron alloys to withstand design stresses and normal engine contamination. Material and design excellence provide a lifter that is lightweight yet exhibits superior strength. A patented oil metering system limits the amount of oil that reaches the overhead. This keeps as much oil in the crankcase as possible while still providing adequate lubrication to the overhead.

Heat treated push rod seats are used to eliminate wear from push rods in racing engines with high valve spring pressures.

Speed-Pro mechanical lifters are intended for use with cast iron camshaft billets only and can be identified by the prefix "AT."

Hydraulic Roller Lifters

Speed-Pro's hydraulic roller lifter provides significant friction reduction while greatly increasing horsepower and fuel economy at the same time. Valves open more quickly from a fully closed to a fully opened position with a hydraulic roller lifter when compared to a conventional flat lifter. This then provides for enhanced performance, quieter engine operation, more horsepower and still allows for proper vacuum and idling capabilities.

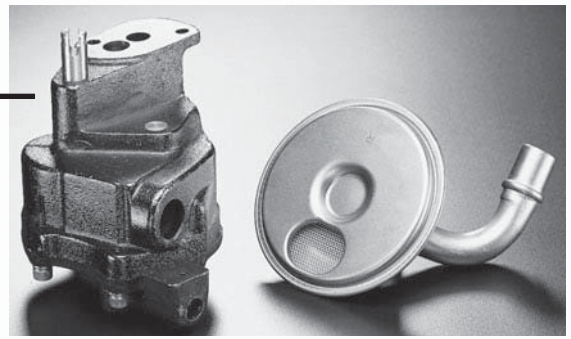


Performance Lifters – Numerical Listing

P/N	Mfgr.	Engine	Application Notes
Hydraulic Lifters			
HT-817	Chevrolet	V6	O.E. Replacement
	Chevrolet	Small Block	O.E. Replacement
	Chevrolet	Big Block	O.E. Replacement
	Chevrolet	L6	O.E. Replacement
HT-817R	Chevrolet	Small Block	Race
	Chevrolet	Big Block	Race
HT-900	Ford	429, 460	O.E. Replacement
	Ford	Small Block	O.E. Replacement
	Ford	Cleveland	O.E. Replacement
HT-900R	Ford	429, 460	Race
	Ford	Small Block	Race
	Ford	Cleveland	Race
HT-951	Oldsmobile	V8	O.E. Replacement
	Pontiac	V8	O.E. Replacement
HT-951R	Oldsmobile	V8	Race; Hardware packaged w/lifter not required
	Pontiac	V8	Race; Requires hardware packaged w/lifter
HT-969	Buick	231, 400, 455	O.E. Replacement
HT-969R	Buick	V8	O.E. Replacement
HT-976	Chrysler	Big Block	O.E. Replacement
HT-2011	Chrysler	Small Block	O.E. Replacement
	AMC	V8	O.E. Replacement
HT-2011R	AMC	V8	Race
	Chrysler	Small Block	Race
	Chrysler	Big Block	Race
HT-2012	Ford	140	O.E. Replacement
HT-2083	Ford	390, 427, 428	O.E. Replacement
HT-2095	Chevrolet	V6	O.E. Replacement
Hydraulic Roller Lifters			
HT-2148	Chevrolet	Small Block	O.E. Replacement
HT-2205	Ford	Small Block	O.E. Replacement
HT-5000RA	Chevrolet	Small Block	Retro-Fit Performance; Pair of lifters w/link bar
HT-5010RA	Chevrolet	Big Block	Retro-Fit Performance; Pair of lifters w/link bar
Solid Lifters			
AT-992	Chevrolet	Small Block, Big Block	O.E. Replacement
AT-2000	Ford	Small Block	O.E. Replacement
	Ford	Cleveland	O.E. Replacement
Solid Roller Lifters			
AT-6027RA	Chevrolet	Small Block	Race; Pair of lifters w/link bar
AT-6028RA	Chevrolet	Big Block	Race; Pair of lifters w/link bar
AT-6031RA	Ford	429, 460	Race; Pair of lifters w/link bar

OIL PUMPS

SPEED PRO

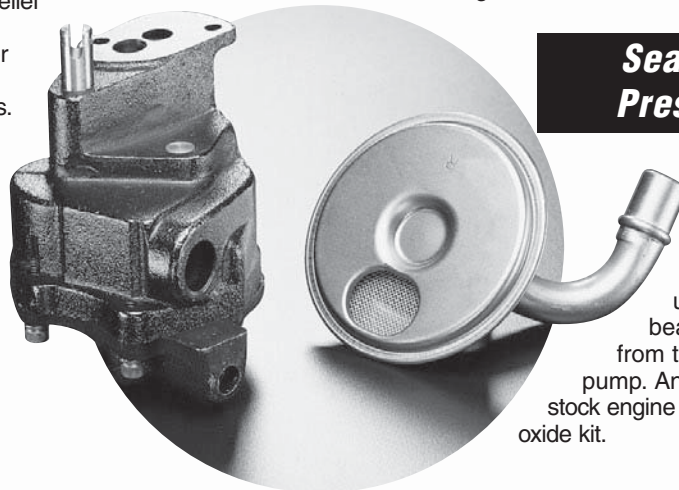


Selection Guidelines

Adequate oil supply is crucial for engine durability under high stress conditions. Oil pressure keeps bearings “separated” from the crankshaft, preventing costly damage. All Sealed Power and Speed-Pro oil pumps are tested for proper rotation and pressure prior to shipment, ensuring dependable performance and long life.

Pumps deliver a given volume of oil based upon design, pump cavity size and RPM. Enlarging the pump cavity increases volume – high volume pumps are visibly bigger. Working the volume of pumped oil against an “orifice” creates oil pressure. This orifice is the combined area of all the engine clearances: rod, main, and cam bearings, lifter to lifter bore, and valvetrain components. Increased clearances will result in lower oil pressure all RPM levels (until the bypass point is reached).

At high RPM, oil pumps deliver more volume and pressure than required. A bypass valve in the pump determines maximum oil pressure. The valve works against spring pressure to open a relief passage. High pressure pumps have a stiffer relief spring. High volume pumps provide greater pressure at any RPM until the bypass opens. The traditional “standard” for minimum oil pressure is 10 p.s.i. per 1000 RPM. Once you attain enough pressure to prevent engine damage, adding more has limited value.



Sealed Power Stock Replacement Oil Pumps

These oil pumps are designed to meet or exceed O.E standards for delivery volume and pressure. With cast iron pump bodies and precision machining, these pumps can be relied upon for adequate lubrication in most stock and mild performance rebuilds.

Sealed Power High Volume Oil Pumps

The extra volume these pumps provide helps maintain adequate oil pressure in engines with larger clearances. They take a bit more power to run, but the difference is nominal – the benefits outweigh the cost. Many high volume pumps also have a higher pressure relief setting as well, for increased oil pressure. High volume pumps are recommended in high output engine rebuilds. A high strength intermediate shaft is required.

Sealed Power High Pressure Oil Pumps

High pressure maintains oil film thickness under extreme loads, enhancing durability in otherwise marginal applications. Engines operating under heavy loads, using stock bearing clearances may benefit from the addition of a high-pressure pump. An example would be an otherwise stock engine with a supercharger or nitrous oxide kit.



Oil Pumps – Numerical Listing

P/N	Mfgr.	Engine	Description	Features
Oil Pumps and Oil Pump Kits				
224-121R	Chevrolet	Big Block	High Volume Oil Pump	High Performance; 25% more volume than stock pump
224-123R	Ford	Small Block	High Volume	Incl. 224-61143 shaft; High Performance; 25% more volume than stock pump
224-518	Buick	V6, V8	O.E. Replacement	
224-518V	Buick	V6, V8	High Volume	
224-518TP	Buick	V6 & V8	Thrust Plate Kit	Incl. screws, gaskets, and instructions
224-519	Buick	V8	O.E. Replacement	Use O.E. relief spring P/N 1233892 for Stage 1
224-4143	Chevrolet	Small Block	High Volume	Requires 224-6146E shaft
224-4146	Chevrolet	Small Block	O.E. Replacement	
224-4146A	Chevrolet	Small Block	High Pressure	Z-28 style pump
224-4147	Chevrolet	L6	O.E. Replacement	
224-4148	Chevrolet	V6	O.E. Replacement	
224-4148V	Chevrolet	V6	High Volume	S-10; Pass. 2.8-1, 2.8S
224-4153	Chevrolet	Big Block	High Volume Oil Pump	Street Performance
224-4154	Chevrolet	Big Block	O.E. Replacement	Fits most pre '87 applications
224-4154G	Chevrolet	Big Block	O.E. Replacement	Short pump; '87-95
224-4157	Chevrolet	L6	High Volume	
224-4166	Chrysler	Small Block	O.E. Replacement	
224-4166V	Chrysler	Small Block	High Volume	
224-4174	Chrysler	Big Block	O.E. Replacement	
224-4174V	Chrysler	Big Block	High Volume	
224-41118	Ford	Small Block	O.E. Replacement	
224-41128	Ford	Small Block	High Volume	Incl. 224-61118 shaft
224-41139	Ford	429, 460	O.E. Replacement	Exc. CJ, SCJ; Use w/Press-in screen
224-41139V	Ford	429, 460	High Volume	Angled screen mount; Bolt on
224-41143	Ford	Small Block	O.E. Replacement	
224-41143V	Ford	Small Block	High Volume	Incl. 224-61143 shaft; Street Performance
224-41160	Ford	L4	O.E. Replacement	Before 4/08/85; Exc. turbo
224-41160V	Ford	L4	High Volume	Exc. Turbo
224-41166	Ford	Cleveland	O.E. Replacement	
224-41166V	Ford	Cleveland	High Volume	
224-41173	Ford	390, 427, 428	O.E. Replacement	
224-41177	Ford	390, 427, 428	High Volume	
224-41203	Oldsmobile	V8	O.E. Replacement	
224-41203V	Oldsmobile	V8	High Volume	Requires 224-11203V screen
224-43364S	Pontiac	V8	High Pressure	Incl. screen
224-43365A	Ford	390, 427, 428	High Pressure	
224-43366A	Chrysler	Big Block	High Pressure	
224-43370	Ford	Small Block	High Pressure	
224-43389V	Chevrolet	V6	High Volume	Pass.; Exc. 2.8-1; Incl. shaft and screen
224-43405	Ford	L4	O.E. Replacement	w/Turbo
224-43469V	Chevrolet	Small Block	High Volume	'93 and later; 3/4" inlet; Street Performance
224-51285	AMC	V8	O.E. Replacement	
Oil Pump Screens				
224-128	Buick	V6	O.E. Replacement	Compare to O.E. screen for correct application
224-1146	Chevrolet	Small Block	O.E. Replacement	'62-64; '67 Chevelle
224-1148	Chevrolet	V6	O.E. Replacement	Pass.; Exc. 2.8-1, 2.8S
224-1246	Chevrolet	Small Block	O.E. Replacement	'65 & Up; Exc. Corvette; '67 Chevelle
224-1348	Chevrolet	V6	O.E. Replacement	1988-86; S-10 2WD
224-11118	Ford	Small Block	O.E. Replacement	'80 & Earlier; Exc. Fairmont, Zephyr
224-11143	Ford	Small Block	O.E. Replacement	
224-11160	Ford	L4	O.E. Replacement	Pinto, Bobcat, Mustang II
224-11166	Ford	Cleveland	O.E. Replacement	
224-11203	Oldsmobile	V8	O.E. Replacement	Exc. Toronado
224-11203V	Oldsmobile	V8	O.E. Replacement	Use w/224-41203V pump
224-12139	Ford	429, 460	O.E. Replacement	Exc. CJ, SCJ; Press-in
224-12160	Ford	L4	O.E. Replacement	Exc. Pinto, Bobcat, Mustang II
224-12203	Oldsmobile	V8	O.E. Replacement	Toronado
224-14118	Ford	Small Block	O.E. Replacement	'81 & Up
224-14158	Ford	390, 427, 428	O.E. Replacement	
224-14160	Ford	429, 460	O.E. Replacement	CJ, SCJ; Press-in; Bolt on
224-14161	AMC	V8	O.E. Replacement	
224-14227	Chevrolet	Small Block	O.E. Replacement	Corvette
224-14230	Ford	429, 460	O.E. Replacement	Long bolt on
224-14232	Chevrolet	V6	O.E. Replacement	1986-88 4WD S-10; Pass. Exc. 2.8-1, 2.8S
224-14239	Chrysler	Small Block	O.E. Replacement	
224-14258	Chevrolet	Small Block	O.E. Replacement	'93 and later; Exc. Corvette
224-43620	Chevrolet	Big Block	O.E. Replacement	

Oil Pumps – Numerical Listing



P/N	Mfgr.	Engine	Description	Features
Oil Pump Drive Shafts				
224-6146	Chevrolet	Small Block	O.E. Replacement	Use w/nylon shaft guide
224-6146E	Chevrolet	V6	O.E. Replacement	Heavy Duty; w/Integral steel guide
224-6148	Chevrolet	Small Block	Heavy Duty Pump Shaft	w/Integral steel guide for 224-4143 pump
224-6154	Chevrolet	V6	O.E. Replacement	
224-6154	Chevrolet	Big Block	Heavy Duty Pump Shaft	w/Integral steel guide for 224-4153 pump
224-6154A	Chevrolet	Big Block	O.E. Replacement	Use w/nylon shaft guide
224-6166	Chrysler	Small Block	O.E. Replacement	
224-6174	Chrysler	Big Block	O.E. Replacement	
224-61114	Ford	390, 427, 428	O.E. Replacement	
224-61118	Ford	Small Block	O.E. Replacement	
224-61127	Ford	429, 460	O.E. Replacement	
224-61143	Ford	Small Block	O.E. Replacement	
224-61160	Ford	L4	O.E. Replacement	
224-61166	Ford	Cleveland	O.E. Replacement	
224-61203	Oldsmobile	V8	O.E. Replacement	
224-61236	Pontiac	V8	O.E. Replacement	
Shaft Guides				
224-43343	Chevrolet	V8	Shaft Guide	Nylon

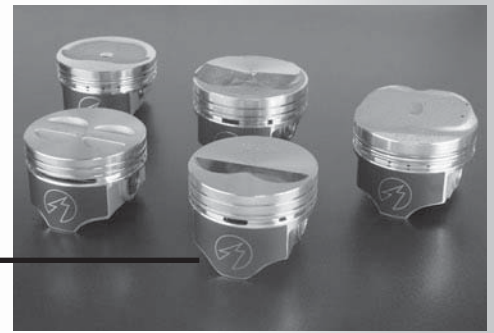
Piston Pin Lock Rings – Numerical Listing



P/N	Type	* O.D.	Thickness	Groove O.D.	Groove Width	Notes
LR-194	Lock Ring	1.041	0.042	1.000	0.051	
LR-260	Spirolox	1.013	0.042	1.000	0.046	Can replace LR-194
LR-261	Spirolox	1.072	0.050	1.053	0.064	Can replace LR-186
LR-262	Spirolox	1.015	0.082			
LR-N540098	Lock Ring	1.120	0.050	1.053	0.061	

* - Approximate dimension when uninstalled

PISTONS



Piston Technology

There are numerous issues to consider when selecting pistons for a high performance application. Choices are made through comparison of cost, design, material, and compression ratio. The relative importance of these features is dictated by the intended use of the engine. The requirements for a Saturday night boulevard cruiser are not the same as those of a dedicated race vehicle. Isolating each of these characteristics will help establish some guidelines for proper piston selection.

The most important question an engine builder must answer is: *What will this engine be used for?* This is a case where the racer has an advantage, because they know the conditions that their vehicle will operate under, the fuel they will be using, and modifications are often limited by sanctioning body rules. The street oriented enthusiast must consider the quality of the fuel available, the level of performance expected of the vehicle, and the possibility of future additions such as nitrous oxide systems, turbos, or superchargers. Any modification that increases the potential for detonation must be carefully considered before making a selection.

Piston Material and Manufacturing Process Selection

POWERFORGED

Speed-Pro POWERFORGED® pistons set the standard for the performance industry, with material and design superiority that has been proven in every form of racing. The forging process has inherent advantages in terms of density, ultimate strength and durability. Forging eliminates porosity in the metal, improves ductility, and will allow the piston to run cooler than a comparable cast unit. POWERFORGED pistons start from a "near net shape" forging, with a desirable horizontal grain flow and tightly controlled head thickness. This minimizes piston weight without compromising strength. These pistons are better able to withstand the high cylinder pressures and skirt loads imposed by racing use, and are more likely to survive limited detonation and valve piston contact which may occur during a race. If your vehicle is to be used for endurance racing, faster classes of drag racing, or extreme duty street performance, you should probably select a forged piston. Engines with very high compression ratios (11:1 and over), high boost superchargers, nitrous oxide, or which operate under conditions approaching detonation will benefit from the powerforged piston's characteristics.



4032 alloy is used in most popular POWERFORGED pistons. This alloy contains approximately 11% silicon. As in the hypereutectic alloys, the silicon provides for reduced ring groove wear and enhanced scuff resistance. These alloys are ideal for both street use and many racing applications. Horsepower benefits have often claimed by those who favor one piston material over another. A wise decision will be based on intended application and usage, not on theoretical power improvements. The actual power differences between alloys and manufacturing processes are nominal at best. We supply a full range of design and material alternatives, so that you can choose the one that best suited to your needs.

Perfectly Matched Pins



Each Speed-Pro POWERFORGED piston includes a perfectly matched pin that is manufactured alongside the piston. Each piston is uniquely bored to match the corresponding pin, whether it is a floating pin or pressed pin design. In addition, each pin is perfectly finished and manufactured to the most stringent tolerances.

SPEED PRO®

Design Criteria

HYPEREUTECTIC

Federal-Mogul utilizes two manufacturing processes for the production of high performance pistons: Speed-Pro Hypereutectic pistons are cast in permanent molds, while Speed-Pro POWERFORGED pistons are extruded from aluminum bar stock. Each has advantages in certain applications, but there are cases where the choice is not an easy one. An honest evaluation of your needs will yield the most satisfactory results.



Speed-Pro's exclusive FM244 hypereutectic alloy is the result of extensive testing and development, and has several unique characteristics. Unlike competitive products, this optimized metallurgy allows our hypereutectic pistons to operate perfectly with standard ring end gaps, and conventional ring land locations. When compared to traditional cast pistons, which are not designed for performance use, the hypereutectics are significantly stronger, particularly in the highly loaded ring land, skirt and pin bore areas. Our FM244 Alloy contains 16.5% silicon, and has excellent tensile and fatigue strength. This material's improved thermal characteristics, it's greater hardness, and the increased resistance to scuffing permit tight bore clearances which help minimize noise on cold engine start up. This quiet operation, along with a lower cost are the primary advantages over a comparable forged piston. These pistons are an excellent choice for street performance, for "claimer" oval track engines, and for bracket racing use. They will also work well in moderate supercharged applications, and are especially suitable for towing and marine use.

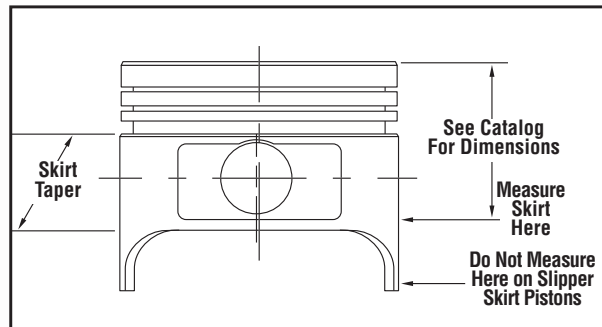
Both the Hypereutectic and the POWERFORGED pistons are available in a variety of configurations to meet the needs of an engine builder. The areas which get the most attention are head design, compression ratio, skirt strength, weight, and pin retention method.

Piston Head Design

Piston head design is dictated by the desired compression ratio, the shape and volume of the combustion chamber, and by the desired number, size, and location of valve reliefs. Pistons with four equal sized valve reliefs are usually designed to work in all cylinders of an engine, while still allowing a built in pin offset. Pistons with two different sized valve reliefs can be used only in one half of the cylinders of engines having siamesed valve arrangements, such as the small block Chevrolet. Such combinations require two piston part numbers, dedicated to specific cylinders in the engine. Engines such as the big block Chevrolet, which alternate the intake and exhaust valves across the head, can use a single two relief piston part number for the entire engine – if piston pins are not offset.

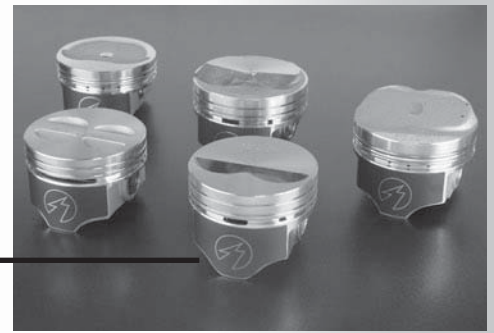
A dome on a piston is considered detrimental to flame travel and airflow within the cylinder, but is often the only way to achieve a desired compression ratio when using large volume heads. A flat top piston with a smaller chamber volume is generally more desirable. Several race engine builders have gone to a reverse dome configuration, where the piston top mirrors the combustion chamber.

Speed-Pro's line of CNC machined pistons utilize the latest in machining equipment technology to generate dome profiles with outstanding dimensional and volume accuracy. These pistons are ideal for race applications, delivering extremely consistent compression ratios, lighter weight, and reducing the need for extensive machine shop work.



Some domed pistons can be modified into a flat top, to lower compression ratio, but this is not a job for the home engine builder. A minimum head thickness of .180" for forgings, or .220" for hypereutectics must be maintained, with greater thickness required for endurance, nitrous, or blower use. Many pistons cannot be modified – if you are not sure contact Federal-Mogul Technical Service! These same cautions apply to valve relief modification.

PISTONS



Design Criteria

Piston to Valve and Cylinder Head Clearances

Piston to valve clearance should be a minimum of .100". This clearance will be changed if heads or block have been machined, and must be checked at assembly. While some people claim to "get away" with less clearance, there are many others that have bent valves and broken engines trying to do so. When using steel rods, the minimum clearance between the piston and the cylinder head should be around .040"; aluminum rods require an additional .010 – .020" due to their tendency to stretch at higher engine speeds. Many engines use a flat "quench" area on the piston, which creates beneficial turbulence within the combustion chamber by coming into close contact with the bottom of the cylinder head. In applications having this "quench" design the clearance between the piston and the head should not exceed .060" in this area, or destructive detonation may occur. This is the reason that stacking head gaskets to lower the compression ratio usually delivers poor results.

Piston Skirt Design and Bore Clearances

Piston skirt strength and required bore clearance depend on material, skirt cross section shape, oil ring groove drainback design, and where the clearance is measured on the piston. Stock replacement and moderate performance type pistons, whether forged or cast, use slots to return oil that is scraped from the cylinder walls by the oil ring. This design allows the skirt to be more flexible, and permits the tighter cold bore clearances. Forged pistons with the slot design can be set up at nearly the same clearances as cast pistons. A high performance race type piston will use machined "windows" or drilled holes for oil return. The drilled hole design adds significant structural strength to the skirt of the piston, but requires greater cold bore clearances since the skirt is less flexible and the amount of heat transferred from the piston head is increased.

Contrary to statements from other manufacturers, the greater clearances do not cause ring sealing problems, as the working clearances are nearly the same once the piston reaches normal operating temperatures. These piston skirts are specially shaped to reach optimal clearances once warmed up, through careful attention to skirt cross section design and piston growth patterns. When cold, all Speed-Pro pistons exhibit an oblong or "cam" shape around the skirt area. While a drilled oil return style forged piston may exhibit some noise when cold, it would be rare to hear a racer complain about it. Also important is the place where measurements are taken. Since piston diameter varies from the pin bore to the bottom of the skirt, it is possible to have two pistons with different specifications but identical operating clearances.

DUROSHIELD® Skirt Coating



Speed-Pro was the first supplier to the performance market to provide production pistons with a moly-graphite skirt coating. Proven in both OEM and racing applications, this unique coating delivers greater durability, reduced friction, and allows the pistons to be installed with tighter cylinder bore clearances. The benefits that can be realized by optimizing an engine combination around this unique feature include quieter operation, lower emissions, better fuel economy, and more power. The coating is applied in our manufacturing facility using a sophisticated process, and is then cured in place – it will not wear or flake off. The exclusive DUROSHIELD coating is now standard equipment on Speed-Pro POWERFORGED and hypereutectic pistons.

Compression Ratio Determination

Choosing the correct compression ratio (C.R.) for an application is a major key to success. Too high a ratio will cause far more problems than will one that is a bit low, so be conservative in your selection. Fuel quality and intended usage are the primary limiting factors. Detonation is caused by excessively high compression, lean fuel mixtures, or overly advanced timing. Detonation will damage your engine, and must be avoided. Compression ratio calculation programs for personal computers are available from a number of sources, and are highly recommended.

Don't get hung up on an exact compression ratio number – target a relevant range that will meet your needs. Street driven vehicles should be limited to a C.R. between 9 and 10 to 1, which approaches the practical limit for pump premium fuels. Oval track applications using gasoline should normally be built with a maximum of 12.5 to 13.25, depending upon the type of car, the track size, and on the fuel used. Drag racing applications often use higher compression ratios, with fuel type as the limiting factor. The use of alcohol based fuels permits higher compression ratios than are practical with gasoline. Engines using aluminum cylinder heads, smaller bore diameters,

SPEED PRO®

and flat or dished pistons are less susceptible to detonation, and can run slightly higher compression with a given fuel. The compression ratios and deck clearances shown in our catalog are based upon the published standard block deck height and the Fel-Pro head gasket volume for each engine family, and can be directly compared to one another. The ratios shown are for comparative reference only, as your heads and block are likely to differ from the published data. Cylinder head chamber volume and block deck clearance will have a direct effect upon actual compression ratio, and must be checked. Factory cylinder heads can vary considerably from published specifications. You cannot accurately determine your compression ratio without measuring the chamber volume.

Piston Weight

Piston weight has recently become a very high profile topic in the performance media. Realistically, a reduction in piston weight has only a modest impact on horsepower or vehicle acceleration. The true value of reduced weight lies in the potential for higher RPM as a result of the reduced loads on components such as connecting rods and bearings. Optimizing the engine combination for these higher RPM levels will certainly carry the potential for more power.

Speed-Pro has introduced a number of fully machined Competition Series pistons, with several benefits for the serious enthusiast. These pistons are forged or cast to a shape very close to the desired finished configuration, and then all working surfaces are precision CNC machined. This gives very tight control of head thickness, and allows light weight without sacrificing durability. A great deal of information has been circulated concerning the comparative weights of POWERFORGED pistons to those of other manufacturers, both cast and forged. The facts are that we offer a far greater variety of pistons than does anyone else, and many choose to compare our O.E. replacement forgings to their lightest race versions. An "apples to apples" comparison will show our products to be comparable to any in the market in terms of weight. Others compare their products to ours because we set the industry standards for performance, durability, and variety.

Pin Type

In a traditional engine rebuild, the original engine manufacturer dictates the pin retention method. Engines produced with press fit pins can be converted to the "floating" type providing that the piston has provisions for a lock ring retainer. Many POWERFORGED and Hypereutectic pistons are designed to accommodate either style pin. The horsepower difference – if any exists, between pressed and floating pins is extremely small. Floating pins are preferred by most engine builders for ease of assembly, but many

races have been won with press fit pins. Don't automatically discount pressed pins for moderate performance use, the benefits of converting to floating pins may not justify the cost.

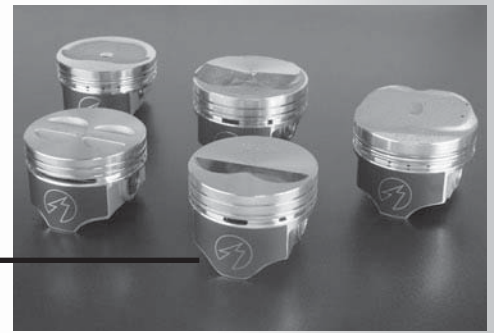
Speed-Pro has introduced a new line of tapered wall, lightweight piston pins. As standard equipment in select POWERFORGED and hypereutectic pistons, they offer the advantage of significantly reduced weight, while maintaining excellent strength and wear resistance. These benefits are available at a relatively low cost, which makes the Speed-Pro tapered pin an attractive upgrade for many performance applications. Unlike the short lived, drag race only style pins sold by competitors, Speed-Pro tapered, lightweight pins are designed for reliable, long-term use in street, oval track and bracket racing applications. Speed-Pro lightweight, tapered piston pins feature chamfered ends to work in concert with our round wire retainer lock ring.

Pin Retainer Lock Rings

Pistons using floating pins require some means to retain the pin in the piston. The traditional methods used single or double Tru-Arc or Spirolox style clips. A recent Speed-Pro innovation has been the use of round wire style retainers. While they at first appear to be very simple, the round wire has many advantages over the other designs. When coupled with a large chamfer on the end of the pin, the round wire spreads loads laterally across the entire pin boss area of the piston. The lock ring groove machined in the piston for a round wire retainer has no sharp edges – eliminating those areas otherwise susceptible to concentrated stress. As an added bonus, round wire retaining rings are easy to install and remove – a welcome improvement.



PISTONS



Ring Grooves

The ring grooves are often overlooked, but critical elements to a successful performance combination. They are combustion sealing surfaces for the piston rings, and must be smooth, accurate, and precisely located. Speed-Pro pistons feature CNC machined ring grooves that have a small degree of "vertical uptilt", which compensates for the changes in piston growth at elevated temperatures. We machine a small radius at the inner "corners" of each ring groove. This radius reduces the potential for stress concentration, making the ring lands stronger under high load conditions. Select Speed-Pro pistons also include accumulator grooves between the top and second rings, and undercut second ring lands. These additional features help reduce inter ring pressure buildup, and enhance top ring sealing at high RPM.



Cost

Hypereutectic cast pistons have a cost advantage over POWERFORGED pistons due to the manufacturing processes involved. Coupled with their quiet operation, this makes them ideal for the budget conscious enthusiast. The POWERFORGED parts offer greater durability in high stress applications, and are available in a greater number of specialized configurations. There are cases where the decision to use one or the other is not clear cut, and either type will do the job. If future plans call for continued modifications to your vehicle it is best to consider them when making your selection. The final decision is yours, weighing the benefits of each type against your performance needs.

Application Codes

	Not normally used for this application
	May be marginal due to high cost or ultimate strength
	Will work, but exercise caution with timing/mixture
	The best choice for this application

GENERAL GUIDELINES: Modifications which dramatically increase cylinder pressure, such as: very high compression, blowers or nitrous usually require drilled type forgings. Engines that see only occasional wide open throttle use, as in towing or moderate street performance, are best off with hypereutectics. Applications which fall between these extremes can use either piston type, with the decision based on cost, desired strength, and future plans for the vehicle.

Piston Selection Guidelines

Piston Type	Application							
	Standard Service	Light Truck & Towing	Moderate Street Perf.	Oval Track "Claimers"	High Perf. Street/Strip	Pro Street & Brackets	Blowers & Nitrous	Fast Ovals and Drags
Cast								
Hypereutectic								
Forged – with slotted oil groove								
Forged – with drilled oil groove								

POWERFORGED and Hypereutectic Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
H100CP	Chevrolet	Small Block	4.000	1.560	556	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H100CP 30	Chevrolet	Small Block	4.030	1.560	571	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H100CP 40	Chevrolet	Small Block	4.040	1.560	576	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H100CP 60	Chevrolet	Small Block	4.060	1.560	586	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H101CP 30	Chevrolet	Small Block	4.030	1.560	606	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H101CP 40	Chevrolet	Small Block	4.040	1.560	611	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H101CP 60	Chevrolet	Small Block	4.060	1.560	621	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H102CP 30	Chevrolet	Small Block	4.030	1.560	629	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H102CP 40	Chevrolet	Small Block	4.040	1.560	634	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H102CP 60	Chevrolet	Small Block	4.060	1.560	644	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H106CP 30	Chevrolet	Small Block	4.030	1.425	546	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H106CP 40	Chevrolet	Small Block	4.040	1.425	551	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H106CP 60	Chevrolet	Small Block	4.060	1.425	561	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H107CP 30	Chevrolet	Small Block	4.155	1.425	576	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H107CP 40	Chevrolet	Small Block	4.165	1.425	581	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
H110CP 30	Chevrolet	Big Block	4.280	1.640	691	33.0	.340 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
H110CP 60	Chevrolet	Big Block	4.310	1.640	703	30.5	.300 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
H116CP	Chrysler	Small Block	4.000	1.660	567	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
H116CP 20	Chrysler	Small Block	4.020	1.660	577	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
H116CP 30	Chrysler	Small Block	4.030	1.660	582	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
H116CP 40	Chrysler	Small Block	4.040	1.660	587	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
H116CP 60	Chrysler	Small Block	4.060	1.660	597	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
H118CP 30	Chevrolet	Big Block	4.280	1.640	725	22.0	.230 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
H118CP 60	Chevrolet	Big Block	4.310	1.640	740	20.0	.210 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
H120CP 30	Ford	Small Block	4.030	1.615	560	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.912	121
8-H122CL 30	Chevrolet	Small Block	4.155	1.130	457	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H122CL 60	Chevrolet	Small Block	4.185	1.130	469	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H123CL 30	Chevrolet	Small Block	4.155	1.260	470	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
8-H123CL 40	Chevrolet	Small Block	4.165	1.260	484	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
8-H124CL 20	Chevrolet	Small Block	4.020	1.130	428	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H124CL 30	Chevrolet	Small Block	4.030	1.130	432	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H124CL 40	Chevrolet	Small Block	4.040	1.130	436	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H124CL 60	Chevrolet	Small Block	4.060	1.130	444	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H125CL 30	Chevrolet	Small Block	4.155	1.260	514	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	114
H132CP 30	Ford	Small Block	4.030	1.615	514	-15.0	.060 dish; 2 reliefs	1/16	1/16	3/16	F	0.912	121
H132CP 40	Ford	Small Block	4.040	1.615	519	-15.0	.060 dish; 2 reliefs	1/16	1/16	3/16	F	0.912	121
8-H134CL	Chevrolet	Small Block	4.000	1.130	432	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H134CL 20	Chevrolet	Small Block	4.020	1.130	440	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H134CL 30	Chevrolet	Small Block	4.030	1.130	444	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8-H134CL 40	Chevrolet	Small Block	4.040	1.130	448	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	114
H137CL 30	Chevrolet	Small Block	4.030	1.425	515	-12.0	Dish; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H137CL 40	Chevrolet	Small Block	4.040	1.425	520	-12.0	Dish; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H137CL 60	Chevrolet	Small Block	4.060	1.425	530	-12.0	Dish; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H138CL 30	Chevrolet	Small Block	4.030	1.425	534	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H138CL 40	Chevrolet	Small Block	4.040	1.425	539	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H138CL 60	Chevrolet	Small Block	4.060	1.425	549	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
H139CL	Ford	Small Block	4.000	1.090	393	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
H139CL 20	Ford	Small Block	4.020	1.090	401	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
H139CL 30	Ford	Small Block	4.030	1.090	405	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
H139CL 40	Ford	Small Block	4.040	1.090	409	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
H139CL 60	Ford	Small Block	4.060	1.090	417	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
H140CL	Chevrolet	Small Block	4.000	1.260	454	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H140CL 20	Chevrolet	Small Block	4.020	1.260	464	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H140CL 30	Chevrolet	Small Block	4.030	1.260	469	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H140CL 40	Chevrolet	Small Block	4.040	1.260	474	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H140CL 60	Chevrolet	Small Block	4.060	1.260	484	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H141CL	Chevrolet	Small Block	4.000	1.260	476	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H141CL 30	Chevrolet	Small Block	4.030	1.260	491	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H141CL 40	Chevrolet	Small Block	4.040	1.260	496	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H141CL 60	Chevrolet	Small Block	4.060	1.260	506	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H142CL	Chevrolet	Small Block	4.000	1.260	498	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H142CL 30	Chevrolet	Small Block	4.030	1.260	513	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H142CL 40	Chevrolet	Small Block	4.040	1.260	518	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



POWERFORGED and Hypereutectic Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
H142CL 60	Chevrolet	Small Block	4.060	1.260	528	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
H144CP	Chevrolet	Big Block	4.466	1.645	709	6.2	.100 dome; 1 relief	2.0MM	1.5MM	4.0MM	F	0.990	175
H144CP 30	Chevrolet	Big Block	4.496	1.645	773	6.2	.100 dome; 1 relief	2.0MM	1.5MM	4.0MM	F	0.990	175
H144CP 60	Chevrolet	Big Block	4.526	1.645	788	6.2	.100 dome; 1 relief	2.0MM	1.5MM	4.0MM	F	0.990	175
H146CL	Ford	Small Block	4.000	1.090	410	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
H146CL 20	Ford	Small Block	4.020	1.090	419	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
H146CL 30	Ford	Small Block	4.030	1.090	423	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
H146CL 40	Ford	Small Block	4.040	1.090	427	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
H273CP	Ford	Small Block	4.000	1.605	579	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H273CP 20	Ford	Small Block	4.020	1.605	589	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H273CP 30	Ford	Small Block	4.030	1.605	594	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H273CP 40	Ford	Small Block	4.040	1.605	599	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H273CP 60	Ford	Small Block	4.060	1.605	609	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H336CP	Ford	Small Block	4.000	1.772	619	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H336CP 20	Ford	Small Block	4.020	1.772	629	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H336CP 30	Ford	Small Block	4.030	1.772	634	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H336CP 40	Ford	Small Block	4.040	1.772	639	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H336CP 60	Ford	Small Block	4.060	1.772	649	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
H345DCP	Chevrolet	Small Block	4.000	1.548	529	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H345DCP 20	Chevrolet	Small Block	4.020	1.548	539	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H345DCP 30	Chevrolet	Small Block	4.030	1.548	544	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H345DCP 40	Chevrolet	Small Block	4.040	1.548	549	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H345DCP 60	Chevrolet	Small Block	4.060	1.548	559	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H392NCP	Buick	V8	4.312	1.985	771	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
H392NCP 30	Buick	V8	4.342	1.985	786	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
H392NCP 40	Buick	V8	4.352	1.985	791	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
H392NCP 60	Buick	V8	4.372	1.985	801	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
H400CP	Chevrolet	Small Block	4.125	1.560	610	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H400CP 20	Chevrolet	Small Block	4.145	1.560	620	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H400CP 30	Chevrolet	Small Block	4.155	1.560	625	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H400CP 40	Chevrolet	Small Block	4.165	1.560	630	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H400CP 60	Chevrolet	Small Block	4.185	1.560	640	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H405CP	Chrysler	Small Block	4.000	1.637	581	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
H405CP 20	Chrysler	Small Block	4.020	1.637	591	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
H405CP 30	Chrysler	Small Block	4.030	1.637	596	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
H405CP 40	Chrysler	Small Block	4.040	1.637	601	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
H405CP 60	Chrysler	Small Block	4.060	1.637	611	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
H423DCP	Chevrolet	Small Block	4.000	1.548	512	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H423DCP 20	Chevrolet	Small Block	4.020	1.548	521	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H423DCP 30	Chevrolet	Small Block	4.030	1.548	526	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H423DCP 40	Chevrolet	Small Block	4.040	1.548	531	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H423DCP 60	Chevrolet	Small Block	4.060	1.548	541	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H423NP 20	Chevrolet	Small Block	4.020	1.540	531	-10.0	.100 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	149
H426CP	Chevrolet	Big Block	4.250	1.640	659	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H426CP 20	Chevrolet	Big Block	4.270	1.640	669	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H426CP 30	Chevrolet	Big Block	4.280	1.640	674	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H426CP 40	Chevrolet	Big Block	4.290	1.640	679	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H426CP 60	Chevrolet	Big Block	4.310	1.640	689	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H426CP 100	Chevrolet	Big Block	4.350	1.640	709	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
H471CP 30	Buick	V6	3.995	1.808	577	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
H471CP 40	Buick	V6	4.005	1.808	582	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
H471CP 60	Buick	V6	4.025	1.808	592	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
H521ACP	Buick	V6	3.800	1.800	506	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
H521ACP 20	Buick	V6	3.820	1.800	516	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
H521ACP 30	Buick	V6	3.830	1.800	521	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
H521ACP 40	Buick	V6	3.840	1.800	526	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
H521ACP 60	Buick	V6	3.860	1.800	536	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
H522CP	Buick	V6	3.800	1.855	547	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
H522CP 30	Buick	V6	3.830	1.855	562	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
H522CP 40	Buick	V6	3.840	1.855	567	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
H534CP	Chevrolet	Small Block	3.736	1.560	472	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H534CP 20	Chevrolet	Small Block	3.756	1.560	482	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H534CP 30	Chevrolet	Small Block	3.766	1.560	487	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H534CP 40	Chevrolet	Small Block	3.776	1.560	492	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H534CP 60	Chevrolet	Small Block	3.796	1.560	502	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

● Available late 2014.

POWERFORGED and Hypereutectic Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
H535CP	Ford	429, 460	4.360	1.752	753	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
H535CP 20	Ford	429, 460	4.380	1.752	763	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
H535CP 30	Ford	429, 460	4.390	1.752	768	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
H535CP 40	Ford	429, 460	4.400	1.752	773	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
H535CP 60	Ford	429, 460	4.420	1.752	783	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
H552CP 30	Chevrolet	Big Block	4.280	1.525	633	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H552CP 60	Chevrolet	Big Block	4.310	1.525	651	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H552CP 100	Chevrolet	Big Block	4.350	1.525	675	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H555CP	Ford	Cleveland	4.000	1.645	569	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
H555CP 20	Ford	Cleveland	4.020	1.645	579	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
H555CP 30	Ford	Cleveland	4.030	1.645	584	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
H555CP 40	Ford	Cleveland	4.040	1.645	589	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
H555CP 60	Ford	Cleveland	4.060	1.645	599	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
H581CP	Chevrolet	Big Block	4.250	1.640	725	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H581CP 20	Chevrolet	Big Block	4.270	1.640	735	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H581CP 30	Chevrolet	Big Block	4.280	1.640	740	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H581CP 40	Chevrolet	Big Block	4.290	1.640	745	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H581CP 60	Chevrolet	Big Block	4.310	1.640	755	30.5	.300 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H581CP 100	Chevrolet	Big Block	4.350	1.640	775	30.5	.300 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H591CP	Ford	4.6L	3.551	1.214	349	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
H591CP .25MM	Ford	4.6L	3.561	1.214	353	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
H591CP .50MM	Ford	4.6L	3.571	1.214	357	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
H591CP .75MM	Ford	4.6L	3.581	1.214	361	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
H591CP 1.00MM	Ford	4.6L	3.591	1.214	365	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
H601P	Chevrolet	Small Block	4.125	1.560	597	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H601P 20	Chevrolet	Small Block	4.145	1.560	607	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H601P 30	Chevrolet	Small Block	4.155	1.560	612	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H601P 40	Chevrolet	Small Block	4.165	1.560	617	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H601P 60	Chevrolet	Small Block	4.185	1.560	627	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H603CP 60	Chevrolet	Big Block	4.310	1.525	677	21.0	.245 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H603CP 100	Chevrolet	Big Block	4.350	1.525	701	21.0	.245 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H614CP	Ford	4.6L	3.551	1.214	349	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
H614CP .50MM	Ford	4.6L	3.571	1.214	357	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
H614CP .75MM	Ford	4.6L	3.581	1.214	361	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
H614CP 1.00MM	Ford	4.6L	3.591	1.214	365	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
H615CP	Chevrolet	Small Block	4.125	1.425	569	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H615CP 20	Chevrolet	Small Block	4.145	1.425	574	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H615CP 30	Chevrolet	Small Block	4.155	1.425	579	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H615CP 40	Chevrolet	Small Block	4.165	1.425	584	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H615CP 60	Chevrolet	Small Block	4.185	1.425	594	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H616CP	Chevrolet	Small Block	4.125	1.425	578	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H616CP 20	Chevrolet	Small Block	4.145	1.425	588	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H616CP 30	Chevrolet	Small Block	4.155	1.425	593	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H616CP 40	Chevrolet	Small Block	4.165	1.425	598	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H616CP 60	Chevrolet	Small Block	4.185	1.425	608	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
H617CP	Chevrolet	Small Block	4.000	1.560	601	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H617CP 30	Chevrolet	Small Block	4.030	1.560	616	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H617CP 40	Chevrolet	Small Block	4.040	1.560	621	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H617CP 60	Chevrolet	Small Block	4.060	1.560	631	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H618CP	Chevrolet	Small Block	4.000	1.560	581	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H618CP 20	Chevrolet	Small Block	4.020	1.560	591	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H618CP 30	Chevrolet	Small Block	4.030	1.560	596	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H618CP 40	Chevrolet	Small Block	4.040	1.560	601	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H618CP 60	Chevrolet	Small Block	4.060	1.560	611	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H623CP 30	Chevrolet	Small Block	4.155	1.425	564	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H623CP 40	Chevrolet	Small Block	4.165	1.425	569	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H623CP 60	Chevrolet	Small Block	4.185	1.425	579	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H624CP 30	Chevrolet	Small Block	4.030	1.425	521	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H624CP 40	Chevrolet	Small Block	4.040	1.425	526	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H624CP 60	Chevrolet	Small Block	4.060	1.425	536	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H625CP	Chevrolet	Big Block	4.250	1.640	641	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H625CP 20	Chevrolet	Big Block	4.270	1.640	651	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H625CP 30	Chevrolet	Big Block	4.280	1.640	656	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H625CP 40	Chevrolet	Big Block	4.290	1.640	661	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H625CP 60	Chevrolet	Big Block	4.310	1.640	671	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



POWERFORGED and Hypereutectic Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
H625CP 100	Chevrolet	Big Block	4.350	1.640	691	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H631CP	Chevrolet	Small Block	4.000	1.560	552	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H631CP 20	Chevrolet	Small Block	4.020	1.560	562	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H631CP 30	Chevrolet	Small Block	4.030	1.560	567	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H631CP 40	Chevrolet	Small Block	4.040	1.560	572	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H631CP 60	Chevrolet	Small Block	4.060	1.560	582	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H634CP 30	Chevrolet	Small Block	4.155	1.425	586	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H634CP 40	Chevrolet	Small Block	4.165	1.425	591	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H634CP 60	Chevrolet	Small Block	4.185	1.425	601	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H635CP 30	Chevrolet	Small Block	4.030	1.425	536	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H635CP 40	Chevrolet	Small Block	4.040	1.425	541	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H635CP 60	Chevrolet	Small Block	4.060	1.425	551	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H645ACP 20	Chevrolet	Small Block	4.020	1.548	539	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645ACP 30	Chevrolet	Small Block	4.030	1.548	544	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645ACP 40	Chevrolet	Small Block	4.040	1.548	549	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645DCP 20	Chevrolet	Small Block	4.020	1.548	539	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645DCP 30	Chevrolet	Small Block	4.030	1.548	544	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645DCP 40	Chevrolet	Small Block	4.040	1.548	549	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
H645NCP	Chevrolet	V6	4.000	1.560	536	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H645NCP 20	Chevrolet	V6	4.020	1.560	546	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H645NCP 30	Chevrolet	V6	4.030	1.560	551	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H645NCP 40	Chevrolet	V6	4.040	1.560	556	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H645NCP 60	Chevrolet	V6	4.060	1.560	566	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
H660CP	Chevrolet	Small Block	4.000	1.675	587	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H660CP 20	Chevrolet	Small Block	4.020	1.675	597	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H660CP 30	Chevrolet	Small Block	4.030	1.675	602	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H660CP 40	Chevrolet	Small Block	4.040	1.675	607	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H660CP 60	Chevrolet	Small Block	4.060	1.675	617	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
H669DCP	Chevrolet	Small Block	4.000	1.560	549	-6.9	Flat; 4 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	149
H669DCP 30	Chevrolet	Small Block	4.030	1.560	563	-6.9	Flat; 4 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	149
H669DCP 40	Chevrolet	Small Block	4.040	1.560	568	-6.9	Flat; 4 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	149
H669DCP 60	Chevrolet	Small Block	4.060	1.560	577	-6.9	Flat; 4 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	149
H693CP	Chevrolet	Big Block	4.250	1.640	708	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H693CP 20	Chevrolet	Big Block	4.270	1.640	718	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H693CP 30	Chevrolet	Big Block	4.280	1.640	723	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H693CP 40	Chevrolet	Big Block	4.290	1.640	728	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H693CP 60	Chevrolet	Big Block	4.310	1.640	738	20.0	.210 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H693CP 100	Chevrolet	Big Block	4.350	1.640	758	20.0	.210 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
H859CP	Chevrolet	Small Block	4.000	1.425	496	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H859CP 20	Chevrolet	Small Block	4.020	1.425	506	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H859CP 30	Chevrolet	Small Block	4.030	1.425	511	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H859CP 40	Chevrolet	Small Block	4.040	1.425	516	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H859CP 60	Chevrolet	Small Block	4.060	1.425	526	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H860CP	Chevrolet	Small Block	4.000	1.425	515	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H860CP 20	Chevrolet	Small Block	4.020	1.425	525	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H860CP 30	Chevrolet	Small Block	4.030	1.425	530	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H860CP 40	Chevrolet	Small Block	4.040	1.425	535	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H860CP 60	Chevrolet	Small Block	4.060	1.425	545	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H868CP	Chevrolet	Gen III V8	3.897	1.328	447	0.0	Flat	1.5MM	1.5MM	3.0MM	P	0.945	151
H868CP .25MM	Chevrolet	Gen III V8	3.917	1.328	451	0.0	Flat	1.5MM	1.5MM	3.0MM	P	0.945	151
H869CP	Chevrolet	Small Block	4.125	1.560	577	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H869CP 30	Chevrolet	Small Block	4.155	1.560	592	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H869CP 40	Chevrolet	Small Block	4.165	1.560	597	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H869CP 60	Chevrolet	Small Block	4.185	1.560	607	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H870CP 30	Chevrolet	Small Block	4.155	1.560	602	3.5	.120 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H870CP 40	Chevrolet	Small Block	4.165	1.560	607	3.5	.120 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H870CP 60	Chevrolet	Small Block	4.185	1.560	617	3.5	.120 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	133
H890CP	Chevrolet	Small Block	4.000	1.425	504	-25.0	Dish	5/64	5/64	3/16	F	0.927	133
H890CP 30	Chevrolet	Small Block	4.030	1.425	519	-25.0	Dish	5/64	5/64	3/16	F	0.927	133
H890CP 40	Chevrolet	Small Block	4.040	1.425	524	-25.0	Dish	5/64	5/64	3/16	F	0.927	133
H890CP 60	Chevrolet	Small Block	4.060	1.425	534	-25.0	Dish	5/64	5/64	3/16	F	0.927	133
L-2165F	Chevrolet	Small Block	4.000	1.671	600	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2165F 20	Chevrolet	Small Block	4.020	1.671	609	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2165F 30	Chevrolet	Small Block	4.030	1.671	614	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2165F 40	Chevrolet	Small Block	4.040	1.671	619	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

● Available late 2014..

POWERFORGED and Hypereutectic Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
L-2165F 60	Chevrolet	Small Block	4.060	1.671	628	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2166NF	Chevrolet	Small Block	4.000	1.675	576	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
L-2166NF 20	Chevrolet	Small Block	4.020	1.675	585	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
L-2166NF 30	Chevrolet	Small Block	4.030	1.675	590	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
L-2166NF 40	Chevrolet	Small Block	4.040	1.675	595	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
L-2166NF 60	Chevrolet	Small Block	4.060	1.675	603	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
L-2210AF 30	Chevrolet	Small Block	4.030	1.805	631	15.4	.430 dome	1/16	1/16	1/8	F	0.927	159
L-2210AF 60	Chevrolet	Small Block	4.060	1.805	647	15.2	.410 dome	1/16	1/16	1/8	F	0.927	159
L-2240NF	Chevrolet	Big Block	4.094	1.760	703	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
L-2240NF 30	Chevrolet	Big Block	4.124	1.760	718	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
L-2240NF 40	Chevrolet	Big Block	4.134	1.760	723	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
L-2240NF 60	Chevrolet	Big Block	4.154	1.760	733	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
L-2242NF 30	Chevrolet	Big Block	4.124	1.765	668	38.3	.335 dome	5/64	5/64	3/16	P	0.990	154
L-2242NF 40	Chevrolet	Big Block	4.134	1.765	672	37.9	.330 dome	5/64	5/64	3/16	P	0.990	154
L-2242NF 60	Chevrolet	Big Block	4.154	1.765	681	37.1	.319 dome	5/64	5/64	3/16	P	0.990	154
L-2252YF 30	Chevrolet	Small Block	4.030	1.560	601	11.0	.220 dome	1/16	1/16	1/8	F	0.927	159
L-2252YF 40	Chevrolet	Small Block	4.040	1.560	606	10.6	.213 dome	1/16	1/16	1/8	F	0.927	159
L-2252YF 60	Chevrolet	Small Block	4.060	1.560	617	10.2	.200 dome	1/16	1/16	1/8	F	0.927	159
L-2256F	Chevrolet	Small Block	4.000	1.563	596	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2256F 20	Chevrolet	Small Block	4.020	1.563	603	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2256F 30	Chevrolet	Small Block	4.030	1.563	607	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2256F 40	Chevrolet	Small Block	4.040	1.563	611	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2256F 60	Chevrolet	Small Block	4.060	1.563	618	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
L-2262F	Pontiac	V8	4.120	1.714	589	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
L-2262F 20	Pontiac	V8	4.140	1.714	599	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
L-2262F 30	Pontiac	V8	4.150	1.714	604	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
L-2262F 40	Pontiac	V8	4.160	1.714	609	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
L-2262F 60	Pontiac	V8	4.180	1.714	620	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
L-2266F	Chrysler	Big Block	4.320	1.991	835	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2266F 30	Chrysler	Big Block	4.350	1.991	855	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2266F 40	Chrysler	Big Block	4.360	1.991	862	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2266F 60	Chrysler	Big Block	4.380	1.991	875	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2268NF 30	Chevrolet	Big Block	4.280	1.765	705	35.5	.266 dome	5/64	5/64	3/16	P	0.990	154
L-2268NF 60	Chevrolet	Big Block	4.310	1.765	719	34.2	.255 dome	5/64	5/64	3/16	P	0.990	154
L-2279NF 30	Pontiac	V8	4.151	1.715	589	10.0	.225 dome	1/16	1/16	1/8	F	0.980	194
L-2279NF 60	Pontiac	V8	4.181	1.715	605	8.9	.190 dome	1/16	1/16	1/8	F	0.980	194
L-2291F	Ford	390, 427, 428	4.050	1.776	633	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
L-2291F 20	Ford	390, 427, 428	4.070	1.776	644	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
L-2291F 30	Ford	390, 427, 428	4.080	1.776	650	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
L-2291F 40	Ford	390, 427, 428	4.090	1.776	656	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
L-2291F 60	Ford	390, 427, 428	4.110	1.776	667	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
L-2295F 30	Chrysler	Big Block	4.350	2.029	826	12.1	.140 dome	1/16	1/16	3/16	F	1.094	191
L-2295F 60	Chrysler	Big Block	4.380	2.029	836	11.1	.125 dome	1/16	1/16	3/16	F	1.094	191
L-2300NF	Chevrolet	Big Block	4.250	1.767	777	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
L-2300NF 30	Chevrolet	Big Block	4.280	1.767	794	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
L-2300NF 40	Chevrolet	Big Block	4.290	1.767	800	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
L-2300NF 60	Chevrolet	Big Block	4.310	1.767	810	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
L-2303NF	Ford	390, 427, 428	4.130	1.674	672	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
L-2303NF 30	Ford	390, 427, 428	4.160	1.674	689	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
L-2303NF 40	Ford	390, 427, 428	4.170	1.674	695	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
L-2303NF 60	Ford	390, 427, 428	4.190	1.674	706	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
L-2304F	Chevrolet	Small Block	4.000	1.560	571	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159
L-2304F 30	Chevrolet	Small Block	4.030	1.560	583	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159
L-2304F 60	Chevrolet	Small Block	4.060	1.560	597	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159
L-2307AF	Chevrolet	Big Block	4.250	1.645	719	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
L-2307AF 30	Chevrolet	Big Block	4.280	1.645	735	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
L-2307AF 60	Chevrolet	Big Block	4.310	1.645	751	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
L-2308AF 30	Chevrolet	Big Block	4.280	1.760	748	50.0	.585 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
L-2308AF 60	Chevrolet	Big Block	4.310	1.760	764	50.0	.585 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
L-2315NF 30	Chrysler	Big Block	4.280	1.920	781	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2315NF 40	Chrysler	Big Block	4.290	1.920	787	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2315NF 60	Chrysler	Big Block	4.310	1.920	800	0.0	Flat	5/64	5/64	3/16	P	1.220	218
L-2316F 20	Chrysler	Small Block	4.060	1.840	724	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
L-2316F 30	Chrysler	Small Block	4.070	1.840	729	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



POWERFORGED and Hypereutectic Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
L-2316F 40	Chrysler	Small Block	4.080	1.840	734	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
L-2316F 60	Chrysler	Small Block	4.100	1.840	745	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
L-2320F	Oldsmobile	V8	4.057	1.612	641	0.0	Flat	5/64	5/64	3/16	P	0.980	194
L-2320F 30	Oldsmobile	V8	4.087	1.612	655	0.0	Flat	5/64	5/64	3/16	P	0.980	194
L-2321F 30	Oldsmobile	V8	4.087	1.612	621	-5.8	.076 x 2.44" dia. dish	5/64	5/64	3/16	P	0.980	194
L-2323F	Oldsmobile	V8	4.125	1.735	674	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
L-2323F 30	Oldsmobile	V8	4.155	1.735	690	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
L-2323F 40	Oldsmobile	V8	4.165	1.735	696	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
L-2323F 60	Oldsmobile	V8	4.185	1.735	707	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
L-2328NF 30	Chevrolet	Big Block	4.155	1.765	680	36.6	.319 dome	5/64	5/64	3/16	P	0.990	154
L-2328NF 60	Chevrolet	Big Block	4.185	1.765	697	36.6	.319 dome	5/64	5/64	3/16	P	0.990	154
L-2349F	Chevrolet	Big Block	4.250	1.645	656	30.6	.265 dome	5/64	5/64	3/16	P	0.990	154
L-2349F 30	Chevrolet	Big Block	4.280	1.645	661	29.4	.221 dome	5/64	5/64	3/16	P	0.990	154
L-2349F 60	Chevrolet	Big Block	4.310	1.645	674	27.9	.210 dome	5/64	5/64	3/16	P	0.990	154
L-2352F 30	Chevrolet	Small Block	4.155	1.555	620	-14.0	.083 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	159
L-2352F 40	Chevrolet	Small Block	4.165	1.555	624	-14.0	.083 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	159
L-2352F 60	Chevrolet	Small Block	4.185	1.555	633	-14.0	.083 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	159
L-2353F 30	Buick	V8	4.342	1.975	762	-27.8	.156 x 3.610" dia. dish	5/64	5/64	3/16	P	0.999	223
L-2353F 40	Buick	V8	4.352	1.975	768	-27.8	.156 x 3.610" dia. dish	5/64	5/64	3/16	P	0.999	223
L-2355F	Chrysler	Big Block	4.320	2.061	859	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
L-2355F 30	Chrysler	Big Block	4.350	2.061	879	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
L-2355F 40	Chrysler	Big Block	4.360	2.061	886	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
L-2355F 60	Chrysler	Big Block	4.380	2.061	899	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
L-2359NF	Pontiac	V8	4.151	1.497	580	-6.7	Flat; 4 reliefs	5/64	1/16	3/16	P	0.980	194
L-2359NF 30	Pontiac	V8	4.181	1.497	595	-6.7	Flat; 4 reliefs	5/64	1/16	3/16	P	0.980	194
L-2359NF 40	Pontiac	V8	4.191	1.497	600	-6.7	Flat; 4 reliefs	5/64	1/16	3/16	P	0.980	194
L-2359NF 60	Pontiac	V8	4.211	1.497	609	-6.7	Flat; 4 reliefs	5/64	1/16	3/16	P	0.980	194
L-2366F	Ford	429, 460	4.360	1.890	807	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
L-2366F 30	Ford	429, 460	4.390	1.890	822	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
L-2366F 40	Ford	429, 460	4.400	1.890	828	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
L-2377F	Chevrolet	Big Block	4.250	1.640	717	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
L-2377F 20	Chevrolet	Big Block	4.270	1.640	728	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
L-2377F 30	Chevrolet	Big Block	4.280	1.640	733	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
L-2377F 40	Chevrolet	Big Block	4.290	1.640	738	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
L-2377F 60	Chevrolet	Big Block	4.310	1.640	749	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
L-2379F	Ford	Cleveland	4.000	1.647	608	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
L-2379F 30	Ford	Cleveland	4.030	1.647	623	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
L-2379F 40	Ford	Cleveland	4.040	1.647	627	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
L-2380NF 30	AMC	V8	4.195	1.505	605	-27.5	.170 dish	5/64	5/64	3/16	P	1.000	173
L-2380NF 40	AMC	V8	4.205	1.505	610	-27.5	.170 dish	5/64	5/64	3/16	P	1.000	173
L-2383F 30	Chevrolet	Big Block	4.155	1.770	715	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
L-2383F 40	Chevrolet	Big Block	4.165	1.770	720	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
L-2383F 60	Chevrolet	Big Block	4.185	1.770	730	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
L-2399NF	Chevrolet	Big Block	4.250	1.645	661	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
L-2399NF 30	Chevrolet	Big Block	4.280	1.645	678	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
L-2399NF 40	Chevrolet	Big Block	4.290	1.645	683	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
L-2399NF 60	Chevrolet	Big Block	4.310	1.645	695	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
L-2404F	Ford	429, 460	4.360	1.756	790	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
L-2404F 30	Ford	429, 460	4.390	1.756	809	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
L-2404F 40	Ford	429, 460	4.400	1.756	815	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
L-2404F 60	Ford	429, 460	4.420	1.756	827	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
L-2441F	Chevrolet	Small Block	4.000	1.560	546	-21.1	Dish	5/64	5/64	3/16	F	0.927	159
L-2441F 30	Chevrolet	Small Block	4.030	1.560	561	-21.1	Dish	5/64	5/64	3/16	F	0.927	159
L-2443NF 30	Ford	429, 460	4.390	1.756	741	14.0	.350 dome	5/64	5/64	3/16	F	1.040	182
L-2443NF 60	Ford	429, 460	4.420	1.756	759	14.0	.350 dome	5/64	5/64	3/16	F	1.040	182
L-2446F	Ford	Small Block	4.000	1.772	639	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
L-2446F 30	Ford	Small Block	4.030	1.772	655	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
L-2446F 40	Ford	Small Block	4.040	1.772	660	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
L-2453F	Chevrolet	Big Block	4.251	1.640	668	-7.9	Dish	5/64	5/64	3/16	F	0.990	175
L-2453F 30	Chevrolet	Big Block	4.280	1.640	686	-7.9	Dish	5/64	5/64	3/16	F	0.990	175
L-2453F 60	Chevrolet	Big Block	4.310	1.640	704	-7.9	Dish	5/64	5/64	3/16	F	0.990	175
L-2465F	Chevrolet	Big Block	4.251	1.640	651	27.1	.270 dome	5/64	5/64	3/16	P	0.990	154
L-2465F 30	Chevrolet	Big Block	4.281	1.640	655	25.7	.226 dome	5/64	5/64	3/16	P	0.990	154

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

● Available late 2014.

POWERFORGED and Hypereutectic Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
L-2465F 60	Chevrolet	Big Block	4.311	1.640	666	24.3	.215 dome	5/64	5/64	3/16	P	0.990	154
L-2481F	Buick	V6	3.800	1.825	558	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
L-2481F 30	Buick	V6	3.830	1.825	574	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
L-2481F 40	Buick	V6	3.840	1.825	578	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
L-2482F	Ford	Small Block	4.000	1.605	598	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
L-2482F 20	Ford	Small Block	4.020	1.605	608	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
L-2482F 30	Ford	Small Block	4.030	1.605	613	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
L-2482F 40	Ford	Small Block	4.040	1.605	618	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
L-2482F 60	Ford	Small Block	4.060	1.605	628	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
L-2488F	Ford	Small Block	4.000	1.619	583	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
L-2488F 20	Ford	Small Block	4.020	1.619	593	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
L-2488F 30	Ford	Small Block	4.030	1.619	598	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
L-2488F 40	Ford	Small Block	4.040	1.619	603	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
L-2488F 60	Ford	Small Block	4.060	1.619	613	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
L-2490NF	Chevrolet	Small Block	4.000	1.565	478	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2490NF 30	Chevrolet	Small Block	4.030	1.565	490	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2490NF 60	Chevrolet	Small Block	4.060	1.565	503	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2491NF	Chevrolet	Small Block	4.000	1.430	465	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2491NF 30	Chevrolet	Small Block	4.030	1.430	477	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2491NF 40	Chevrolet	Small Block	4.040	1.430	481	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2491NF 60	Chevrolet	Small Block	4.060	1.430	490	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
L-2513F	Chevrolet	Big Block	4.500	1.645	690	-2.4	Flat; 1 relief	1/16	1/16	3/16	F	0.990	167
L-2513F 30	Chevrolet	Big Block	4.530	1.645	705	-2.4	Flat; 1 relief	1/16	1/16	3/16	F	0.990	167
L-2513F 60	Chevrolet	Big Block	4.560	1.645	721	-2.4	Flat; 1 relief	1/16	1/16	3/16	F	0.990	167
L-2608F	Ford	4.6L	3.551	1.214	333	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
L-2608F .50MM	Ford	4.6L	3.580	1.214	341	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
L-2608F .75MM	Ford	4.6L	3.590	1.214	345	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
L-2609F .50MM	Ford	4.6L	3.570	1.214	365	-2.8	.060 x 2.680" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
L-2622F	Ford	Modular V8	3.551	1.221	320	-20.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2622F .50MM	Ford	Modular V8	3.571	1.221	327	-20.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2622F .75MM	Ford	Modular V8	3.581	1.221	331	-20.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2623F	Ford	Modular V8	3.551	1.214	336	-13.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2623F .50MM	Ford	Modular V8	3.571	1.214	343	-13.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2623F .75MM	Ford	Modular V8	3.581	1.214	347	-13.5	Dish	1.5MM	1.5MM	3.0MM	F	0.866	121
L-2640F 30	Chevrolet	Gen III V8	4.000	1.328	474	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	P	0.945	151
L-2640F 40	Chevrolet	Gen III V8	4.000	1.328	479	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	P	0.945	151
L-2640F 60	Chevrolet	Gen III V8	4.000	1.328	489	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	P	0.945	151
LW-2256F 30	Chevrolet	Small Block	4.030	1.563	554	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
LW-2256F 40	Chevrolet	Small Block	4.040	1.563	559	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
LW-2256F 60	Chevrolet	Small Block	4.060	1.563	566	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
LW-2304F 40	Chevrolet	Small Block	4.030	1.560	542	2.4	.100 dome	1/16	1/16	3/16	F	0.927	133
LW-2355NF 30	Chrysler	Big Block	4.350	2.067	690	-5.6	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	1.094	190
LW-2355NF 40	Chrysler	Big Block	4.360	2.067	694	-5.6	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	1.094	190
LW-2465NF 30	Chevrolet	Big Block	4.280	1.645	657	18.3	.200 dome; 1 relief	1.5MM	1.5MM	3.0MM	F	0.990	141
LW-2465NF 60	Chevrolet	Big Block	4.310	1.645	661	18.3	.200 dome; 1 relief	1.5MM	1.5MM	3.0MM	F	0.990	141
LW-2488F 40	Ford	Small Block	4.040	1.619	577	-2.0	Flat; 4 reliefs	1/16	1/16	3/16	F	0.912	121
8LW-2503F 30	Chevrolet	Small Block	4.030	1.550	528	14.3	.350 dome	1/16	1/16	3/16	F	0.927	114
8LW-2503F 40	Chevrolet	Small Block	4.040	1.550	555	14.3	.350 dome	1/16	1/16	3/16	F	0.927	114
8LW-2503F 60	Chevrolet	Small Block	4.060	1.550	540	14.3	.350 dome	1/16	1/16	3/16	F	0.927	114
8LW-2505F 30	Chevrolet	Small Block	4.030	1.550	493	-5.9	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
8LW-2505F 60	Chevrolet	Small Block	4.060	1.550	508	-5.9	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
LW-2505NF 30	Chevrolet	Small Block	4.030	1.550	521	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2505NF 40	Chevrolet	Small Block	4.040	1.550	525	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
8LW-2509F 30	Chevrolet	Small Block	4.030	1.250	453	14.3	.350 dome	1/16	1/16	3/16	F	0.927	114
8LW-2509F 60	Chevrolet	Small Block	4.060	1.250	465	14.3	.350 dome	1/16	1/16	3/16	F	0.927	114
LW-2509NF 30	Chevrolet	Small Block	4.030	1.250	501	6.02	.190 Dome; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2509NF 40	Chevrolet	Small Block	4.040	1.250	505	6.02	.190 Dome; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
8LW-2511F 60	Chevrolet	Small Block	4.060	1.250	415	-5.9	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
LW-2511NF 30	Chevrolet	Small Block	4.030	1.250	470	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2511NF 40	Chevrolet	Small Block	4.040	1.250	474	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2511NF 60	Chevrolet	Small Block	4.060	1.250	485	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
8LW-2515F 30	Chevrolet	Small Block	4.155	1.430	536	5.3	.150 dome	1/16	1/16	3/16	F	0.927	114

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



POWERFORGED and Hypereutectic Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
8LW-2517F 30	Chevrolet	Small Block	4.155	1.430	513	-5.7	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	114
LW-2602NF 30	Ford	429, 460	4.390	1.756	678	-3.9	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
LW-2602NF 60	Ford	429, 460	4.420	1.756	695	-3.9	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
LW-2603F 30	Chevrolet	Small Block	4.030	1.550	488	-10.9	Dish	1/16	1/16	3/16	F	0.927	114
LW-2603F 60	Chevrolet	Small Block	4.060	1.550	503	-10.9	Dish	1/16	1/16	3/16	F	0.927	114
LW-2606F 60	Chevrolet	Small Block	4.185	1.425	550	-16.2	Dish	1/16	1/16	3/16	F	0.927	126
LW-2616NF 30●	Ford	Small Block	4.030	1.600	528	-5.5	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.912	131
LW-2617NF 30	Chevrolet	Small Block	4.030	1.125	442	-18.53	.115 Dish; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2617NF 40	Chevrolet	Small Block	4.040	1.125	446	-18.53	.115 Dish; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2624F	Chevrolet	Gen III V8	3.897	1.125	372	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2624F .25MM	Chevrolet	Gen III V8	3.907	1.125	372	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2625F	Chevrolet	Gen III V8	4.000	1.125	402	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2625F 30	Chevrolet	Gen III V8	4.000	1.125	415	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2625F 60	Chevrolet	Gen III V8	4.000	1.125	428	-5.0	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2626F 30	Chevrolet	Small Block	4.030	1.260	472	2.4	.100 dome	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2626F 40	Chevrolet	Small Block	4.040	1.260	477	2.4	.100 dome	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2626F 60	Chevrolet	Small Block	4.060	1.260	486	2.4	.100 dome	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2627NF 30	Chevrolet	Small Block	4.030	1.125	461	1.0	.088 Dome; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2627NF 40	Chevrolet	Small Block	4.040	1.125	465	1.0	.088 Dome; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2627NF 60	Chevrolet	Small Block	4.060	1.125	476	1.0	.088 Dome; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2629F 40	Chevrolet	Small Block	4.165	1.125	475	-16.2	Dish	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2629F 60	Chevrolet	Small Block	4.185	1.125	486	-16.2	Dish	1.5MM	1.5MM	3.0MM	F	0.927	114
LW-2632F 30	Chevrolet	Small Block	4.155	1.425	504	-25.0	Dish	1/16	1/16	3/16	F	0.927	114
LW-2632F 60	Chevrolet	Small Block	4.185	1.425	519	-25.0	Dish	1/16	1/16	3/16	F	0.927	114
LW-2633F	Chevrolet	Big Block	4.500	1.270	578	-2.4	Flat; 2 reliefs	.043	.043	3.0MM	F	0.990	150
LW-2633F 30	Chevrolet	Big Block	4.560	1.270	594	-2.4	Flat; 2 reliefs	.043	.043	3.0MM	F	0.990	150
LW-2633F 60	Chevrolet	Big Block	4.560	1.270	610	-2.4	Flat; 2 reliefs	.043	.043	3.0MM	F	0.990	150
LW-2634F	Chevrolet	Big Block	4.500	1.270	650	40.0	.450 dome	.043	.043	3.0MM	F	0.990	150
LW-2634F 30	Chevrolet	Big Block	4.560	1.270	665	40.0	.450 dome	.043	.043	3.0MM	F	0.990	150
LW-2637NF 30	Chevrolet	Small Block	4.030	1.125	445	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2637NF 40	Chevrolet	Small Block	4.040	1.125	449	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2637NF 60	Chevrolet	Small Block	4.060	1.125	460	-4.86	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	133
LW-2639NF 30●	Ford	Small Block	4.030	1.170	425	-5.5	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	131
LW-2642F 30●	Ford	Small Block	4.030	1.090	411	-5.5	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	131
LW-2642F 40●	Ford	Small Block	4.040	1.090	415	-5.5	Flat; 2 reliefs	1.5MM	1.5MM	3.0MM	F	0.927	131
LW-2643F 30●	Chevrolet	Big Block	4.280	1.270	597	23	.202 dome; 1 relief	1.5MM	1.5MM	3.0MM	F	0.990	141
LW-2643F 60●	Chevrolet	Big Block	4.310	1.270	601	23	.202 dome; 1 relief	1.5MM	1.5MM	3.0MM	F	0.990	141

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● Available late 2014.

Single Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
WH100CP	Chevrolet	Small Block	4.000	1.560	556	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH100CP 30	Chevrolet	Small Block	4.030	1.560	571	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH100CP 40	Chevrolet	Small Block	4.040	1.560	576	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH100CP 60	Chevrolet	Small Block	4.060	1.560	586	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH101CP 30	Chevrolet	Small Block	4.030	1.560	606	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH101CP 40	Chevrolet	Small Block	4.040	1.560	611	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH101CP 60	Chevrolet	Small Block	4.060	1.560	621	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH102CP 30	Chevrolet	Small Block	4.030	1.560	629	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH102CP 40	Chevrolet	Small Block	4.040	1.560	634	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH102CP 60	Chevrolet	Small Block	4.060	1.560	644	11.8	.240 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH106CP 30	Chevrolet	Small Block	4.030	1.425	546	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH106CP 40	Chevrolet	Small Block	4.040	1.425	551	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH106CP 60	Chevrolet	Small Block	4.060	1.425	561	9.5	.200 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH107CP 30	Chevrolet	Small Block	4.155	1.425	576	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH107CP 40	Chevrolet	Small Block	4.165	1.425	581	3.5	.100 dome; 2 reliefs	1/16	1/16	3/16	F	0.927	159
WH110CP 30	Chevrolet	Big Block	4.280	1.640	691	33.0	.340 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WH110CP 60	Chevrolet	Big Block	4.310	1.640	703	30.5	.300 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WH116CP	Chrysler	Small Block	4.000	1.660	567	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WH116CP 20	Chrysler	Small Block	4.020	1.660	577	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WH116CP 30	Chrysler	Small Block	4.030	1.660	582	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WH116CP 40	Chrysler	Small Block	4.040	1.660	587	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WH116CP 60	Chrysler	Small Block	4.060	1.660	597	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WH118CP 30	Chevrolet	Big Block	4.280	1.640	725	22.0	.230 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WH118CP 60	Chevrolet	Big Block	4.310	1.640	740	20.0	.210 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WH120CP 20	Ford	Small Block	4.020	1.615	555	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.912	121
WH120CP 30	Ford	Small Block	4.030	1.615	560	-5.0	Flat; 2 reliefs	1/16	1/16	3/16	F	0.912	121
WH132CP 30	Ford	Small Block	4.030	1.615	514	-15.0	.060 dish; 2 reliefs	1/16	1/16	3/16	F	0.912	121
WH132CP 40	Ford	Small Block	4.040	1.615	519	-15.0	.060 dish; 2 reliefs	1/16	1/16	3/16	F	0.912	121
WH139CL 30	Ford	Small Block	4.030	1.090	405	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
WH139CL 40	Ford	Small Block	4.040	1.090	409	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.912	110
WH140CL	Chevrolet	Small Block	4.000	1.260	454	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH140CL 30	Chevrolet	Small Block	4.030	1.260	469	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH140CL 40	Chevrolet	Small Block	4.040	1.260	474	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH140CL 60	Chevrolet	Small Block	4.060	1.260	484	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH141CL 30	Chevrolet	Small Block	4.030	1.260	491	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH141CL 40	Chevrolet	Small Block	4.040	1.260	496	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH141CL 60	Chevrolet	Small Block	4.060	1.260	506	3.5	.120 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH142CL 30	Chevrolet	Small Block	4.030	1.260	513	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH142CL 40	Chevrolet	Small Block	4.040	1.260	518	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH142CL 60	Chevrolet	Small Block	4.060	1.260	528	11.8	.285 dome; 2 reliefs	1/16	1/16	1/8	F	0.927	126
WH144CP 30	Chevrolet	Big Block	4.496	1.645	773	6.2	.100 dome, 1 relief	2.0MM	1.5MM	4.0MM	F	0.990	175
WH146CL	Ford	Small Block	4.000	1.090	410	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
WH146CL 30	Ford	Small Block	4.030	1.090	423	-5.0	Flat; 2 reliefs	1/16	1/16	1/8	F	0.927	114
WH273CP	Ford	Small Block	4.000	1.605	579	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH273CP 20	Ford	Small Block	4.020	1.605	589	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH273CP 30	Ford	Small Block	4.030	1.605	594	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH273CP 40	Ford	Small Block	4.040	1.605	599	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH273CP 60	Ford	Small Block	4.060	1.605	609	-8.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH336CP	Ford	Small Block	4.000	1.772	619	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH336CP 20	Ford	Small Block	4.020	1.772	629	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH336CP 30	Ford	Small Block	4.030	1.772	634	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH336CP 40	Ford	Small Block	4.040	1.772	639	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH336CP 60	Ford	Small Block	4.060	1.772	649	-12.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.912	152
WH345DCP	Chevrolet	Small Block	4.000	1.548	529	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH345DCP 20	Chevrolet	Small Block	4.020	1.548	539	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH345DCP 30	Chevrolet	Small Block	4.030	1.548	544	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH345DCP 40	Chevrolet	Small Block	4.040	1.548	549	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH345DCP 60	Chevrolet	Small Block	4.060	1.548	559	-6.9	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH392NCP	Buick	V8	4.312	1.985	771	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
WH392NCP 30	Buick	V8	4.342	1.985	786	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
WH392NCP 40	Buick	V8	4.352	1.985	791	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
WH392NCP 60	Buick	V8	4.372	1.985	801	-23.0	.130 dish; 4 reliefs	5/64	5/64	3/16	P	0.999	223
WH400CP	Chevrolet	Small Block	4.125	1.560	610	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



Single Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
WH400CP 20	Chevrolet	Small Block	4.145	1.560	620	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH400CP 30	Chevrolet	Small Block	4.155	1.560	625	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH400CP 40	Chevrolet	Small Block	4.165	1.560	630	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH400CP 60	Chevrolet	Small Block	4.185	1.560	640	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH405CP	Chrysler	Small Block	4.000	1.637	581	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
WH405CP 20	Chrysler	Small Block	4.020	1.637	591	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
WH405CP 30	Chrysler	Small Block	4.030	1.637	596	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
WH405CP 40	Chrysler	Small Block	4.040	1.637	601	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
WH405CP 60	Chrysler	Small Block	4.060	1.637	611	-10.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.984	154
WH423DCP	Chevrolet	Small Block	4.000	1.548	512	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH423DCP 20	Chevrolet	Small Block	4.020	1.548	521	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH423DCP 30	Chevrolet	Small Block	4.030	1.548	526	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH423DCP 40	Chevrolet	Small Block	4.040	1.548	531	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH423DCP 60	Chevrolet	Small Block	4.060	1.548	541	-12.3	.098 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	149
WH426CP	Chevrolet	Big Block	4.250	1.640	659	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH426CP 20	Chevrolet	Big Block	4.270	1.640	669	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH426CP 30	Chevrolet	Big Block	4.280	1.640	674	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH426CP 40	Chevrolet	Big Block	4.290	1.640	679	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH426CP 60	Chevrolet	Big Block	4.310	1.640	689	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH426CP 100	Chevrolet	Big Block	4.350	1.640	709	10.5	.100 dome; 1 relief	5/64	5/64	3/16	F	0.990	175
WH471CP 30	Buick	V6	3.995	1.808	577	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
WH471CP 40	Buick	V6	4.005	1.808	582	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
WH471CP 60	Buick	V6	4.025	1.808	592	-30.0	.276 dish	5/64	5/64	3/16	P	0.939	165
WH521ACP	Buick	V6	3.800	1.800	506	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
WH521ACP 20	Buick	V6	3.820	1.800	516	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
WH521ACP 30	Buick	V6	3.830	1.800	521	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
WH521ACP 40	Buick	V6	3.840	1.800	526	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
WH521ACP 60	Buick	V6	3.860	1.800	536	-24.0	.255 dish	5/64	5/64	3/16	P	0.939	156
WH522CP	Buick	V6	3.800	1.855	547	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
WH522CP 30	Buick	V6	3.830	1.855	562	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
WH522CP 40	Buick	V6	3.840	1.855	567	-14.0	.190 dish; 4 reliefs	5/64	5/64	3/16	P	0.939	156
WH534CP	Chevrolet	Small Block	3.736	1.560	472	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH534CP 20	Chevrolet	Small Block	3.756	1.560	482	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH534CP 30	Chevrolet	Small Block	3.766	1.560	487	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH534CP 40	Chevrolet	Small Block	3.776	1.560	492	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH534CP 60	Chevrolet	Small Block	3.796	1.560	502	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH535CP	Ford	429, 460	4.360	1.752	753	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
WH535CP 20	Ford	429, 460	4.380	1.752	763	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
WH535CP 30	Ford	429, 460	4.390	1.752	768	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
WH535CP 40	Ford	429, 460	4.400	1.752	773	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
WH535CP 60	Ford	429, 460	4.420	1.752	783	-4.2	Flat; 2 reliefs	5/64	5/64	3/16	P	1.040	229
WH552CP 30	Chevrolet	Big Block	4.280	1.525	633	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH552CP 60	Chevrolet	Big Block	4.310	1.525	651	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH552CP 100	Chevrolet	Big Block	4.350	1.525	675	11.2	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH555CP	Ford	Cleveland	4.000	1.645	569	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
WH555CP 20	Ford	Cleveland	4.020	1.645	579	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
WH555CP 30	Ford	Cleveland	4.030	1.645	584	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
WH555CP 40	Ford	Cleveland	4.040	1.645	589	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
WH555CP 60	Ford	Cleveland	4.060	1.645	599	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.912	152
WH581CP	Chevrolet	Big Block	4.250	1.640	725	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH581CP 20	Chevrolet	Big Block	4.270	1.640	735	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH581CP 30	Chevrolet	Big Block	4.280	1.640	740	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH581CP 40	Chevrolet	Big Block	4.290	1.640	745	33.0	.340 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH581CP 60	Chevrolet	Big Block	4.310	1.640	755	30.5	.300 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH581CP 100	Chevrolet	Big Block	4.350	1.640	775	30.5	.300 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH591CP	Ford	4.6L	3.551	1.214	349	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
WH591CP .25MM	Ford	4.6L	3.561	1.214	353	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
WH591CP .50MM	Ford	4.6L	3.571	1.214	357	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
WH591CP .75MM	Ford	4.6L	3.581	1.214	361	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
WH591CP 1.00MM	Ford	4.6L	3.591	1.214	365	-10.5	.152 x 2.70" dia. Dish	1.5MM	1.5MM	3.0MM	P	0.866	107
WH601P	Chevrolet	Small Block	4.125	1.560	597	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH601P 20	Chevrolet	Small Block	4.145	1.560	607	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH601P 30	Chevrolet	Small Block	4.155	1.560	612	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH601P 40	Chevrolet	Small Block	4.165	1.560	617	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH601P 60	Chevrolet	Small Block	4.185	1.560	627	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	P	0.927	144

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

Single Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
WH603CP 60	Chevrolet	Big Block	4.310	1.525	677	21.0	.245 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH603CP 100	Chevrolet	Big Block	4.350	1.525	701	21.0	.245 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH614CP	Ford	4.6L	3.551	1.214	349	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WH614CP .50MM	Ford	4.6L	3.571	1.214	357	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WH614CP .75MM	Ford	4.6L	3.581	1.214	361	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WH614CP 1.00MM	Ford	4.6L	3.591	1.214	365	-3.0	.060 x 2.68" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WH615CP	Chevrolet	Small Block	4.125	1.425	569	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH615CP 20	Chevrolet	Small Block	4.145	1.425	574	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH615CP 30	Chevrolet	Small Block	4.155	1.425	579	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH615CP 40	Chevrolet	Small Block	4.165	1.425	584	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH615CP 60	Chevrolet	Small Block	4.185	1.425	594	-12.5	.115 dish; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH616CP	Chevrolet	Small Block	4.125	1.425	578	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH616CP 20	Chevrolet	Small Block	4.145	1.425	588	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH616CP 30	Chevrolet	Small Block	4.155	1.425	593	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH616CP 40	Chevrolet	Small Block	4.165	1.425	598	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH616CP 60	Chevrolet	Small Block	4.185	1.425	608	-6.0	Flat; 4 reliefs	5/64	5/64	3/16	F	0.927	159
WH617CP	Chevrolet	Small Block	4.000	1.560	601	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH617CP 30	Chevrolet	Small Block	4.030	1.560	616	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH617CP 40	Chevrolet	Small Block	4.040	1.560	621	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH617CP 60	Chevrolet	Small Block	4.060	1.560	631	11.8	.275 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH618CP	Chevrolet	Small Block	4.000	1.560	581	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH618CP 20	Chevrolet	Small Block	4.020	1.560	591	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH618CP 30	Chevrolet	Small Block	4.030	1.560	596	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH618CP 40	Chevrolet	Small Block	4.040	1.560	601	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH618CP 60	Chevrolet	Small Block	4.060	1.560	611	3.5	.125 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH623CP 30	Chevrolet	Small Block	4.155	1.425	564	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH623CP 40	Chevrolet	Small Block	4.165	1.425	569	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH623CP 60	Chevrolet	Small Block	4.185	1.425	579	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH624CP 30	Chevrolet	Small Block	4.030	1.425	521	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH624CP 40	Chevrolet	Small Block	4.040	1.425	526	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH624CP 60	Chevrolet	Small Block	4.060	1.425	536	3.5	.100 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH625CP	Chevrolet	Big Block	4.250	1.640	641	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH625CP 20	Chevrolet	Big Block	4.270	1.640	651	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH625CP 30	Chevrolet	Big Block	4.280	1.640	656	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH625CP 40	Chevrolet	Big Block	4.290	1.640	661	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH625CP 60	Chevrolet	Big Block	4.310	1.640	671	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH625CP 100	Chevrolet	Big Block	4.350	1.640	691	-2.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH631CP	Chevrolet	Small Block	4.000	1.560	552	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH631CP 20	Chevrolet	Small Block	4.020	1.560	562	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH631CP 30	Chevrolet	Small Block	4.030	1.560	567	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH631CP 40	Chevrolet	Small Block	4.040	1.560	572	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH631CP 60	Chevrolet	Small Block	4.060	1.560	582	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH634CP 30	Chevrolet	Small Block	4.155	1.425	586	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH634CP 40	Chevrolet	Small Block	4.165	1.425	591	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH634CP 60	Chevrolet	Small Block	4.185	1.425	601	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH635CP 30	Chevrolet	Small Block	4.030	1.425	536	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH635CP 40	Chevrolet	Small Block	4.040	1.425	541	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH635CP 60	Chevrolet	Small Block	4.060	1.425	551	9.5	.200 dome; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH645NCP	Chevrolet	V6	4.000	1.560	536	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH645NCP 20	Chevrolet	V6	4.020	1.560	546	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH645NCP 30	Chevrolet	V6	4.030	1.560	551	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH645NCP 40	Chevrolet	V6	4.040	1.560	556	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH645NCP 60	Chevrolet	V6	4.060	1.560	566	-5.0	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WH660CP	Chevrolet	Small Block	4.000	1.675	587	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH660CP 20	Chevrolet	Small Block	4.020	1.675	597	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH660CP 30	Chevrolet	Small Block	4.030	1.675	602	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH660CP 40	Chevrolet	Small Block	4.040	1.675	607	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH660CP 60	Chevrolet	Small Block	4.060	1.675	617	-4.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	159
WH693CP	Chevrolet	Big Block	4.250	1.640	708	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH693CP 20	Chevrolet	Big Block	4.270	1.640	718	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH693CP 30	Chevrolet	Big Block	4.280	1.640	723	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH693CP 40	Chevrolet	Big Block	4.290	1.640	728	22.0	.230 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH693CP 60	Chevrolet	Big Block	4.310	1.640	738	20.0	.210 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH693CP 100	Chevrolet	Big Block	4.350	1.640	758	20.0	.210 dome; 2 reliefs	5/64	5/64	3/16	F	0.990	175
WH859CP	Chevrolet	Small Block	4.000	1.425	496	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



Single Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
WH859CP 20	Chevrolet	Small Block	4.020	1.425	506	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH859CP 30	Chevrolet	Small Block	4.030	1.425	511	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH859CP 40	Chevrolet	Small Block	4.040	1.425	516	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH859CP 60	Chevrolet	Small Block	4.060	1.425	526	-12.0	.110 dish; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH860CP	Chevrolet	Small Block	4.000	1.425	515	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH860CP 20	Chevrolet	Small Block	4.020	1.425	525	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH860CP 30	Chevrolet	Small Block	4.030	1.425	530	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH860CP 40	Chevrolet	Small Block	4.040	1.425	535	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH860CP 60	Chevrolet	Small Block	4.060	1.425	545	-5.0	Flat; 2 reliefs	5/64	5/64	3/16	F	0.927	133
WH868CP	Chevrolet	Gen III V8	3.897	1.328	447	0.0	Flat	1.5MM	1.5MM	3.0MM	P	0.945	151
WH868CP .25MM	Chevrolet	Gen III V8	3.917	1.328	451	0.0	Flat	1.5MM	1.5MM	3.0MM	P	0.945	151
WH890CP 60	Chevrolet	Small Block	4.060	1.425	534	-25.0	Dish	5/64	5/64	3/16	F	0.927	133
WL-2165F	Chevrolet	Small Block	4.000	1.671	600	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2165F 20	Chevrolet	Small Block	4.020	1.671	609	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2165F 30	Chevrolet	Small Block	4.030	1.671	614	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2165F 40	Chevrolet	Small Block	4.040	1.671	619	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2165F 60	Chevrolet	Small Block	4.060	1.671	628	-5.4	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2166NF	Chevrolet	Small Block	4.000	1.675	576	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2166NF 20	Chevrolet	Small Block	4.020	1.675	585	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2166NF 30	Chevrolet	Small Block	4.030	1.675	590	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2166NF 40	Chevrolet	Small Block	4.040	1.675	595	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2166NF 60	Chevrolet	Small Block	4.060	1.675	603	5.3	.125 dome; 2 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2210AF 30	Chevrolet	Small Block	4.030	1.805	631	15.4	.430 dome	1/16	1/16	1/8	F	0.927	159
WL-2210AF 60	Chevrolet	Small Block	4.060	1.805	647	15.2	.410 dome	1/16	1/16	1/8	F	0.927	159
WL-2240NF	Chevrolet	Big Block	4.094	1.760	703	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
WL-2240NF 30	Chevrolet	Big Block	4.124	1.760	718	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
WL-2240NF 40	Chevrolet	Big Block	4.134	1.760	723	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
WL-2240NF 60	Chevrolet	Big Block	4.154	1.760	733	21.0	.182 dome	5/64	5/64	3/16	P	0.990	154
WL-2242NF 30	Chevrolet	Big Block	4.124	1.765	668	38.3	.335 dome	5/64	5/64	3/16	P	0.990	154
WL-2242NF 40	Chevrolet	Big Block	4.134	1.765	672	37.9	.330 dome	5/64	5/64	3/16	P	0.990	154
WL-2242NF 60	Chevrolet	Big Block	4.154	1.765	681	37.1	.319 dome	5/64	5/64	3/16	P	0.990	154
WL-2252YF 30	Chevrolet	Small Block	4.030	1.560	601	11.0	.220 dome	1/16	1/16	1/8	F	0.927	159
WL-2252YF 60	Chevrolet	Small Block	4.060	1.560	617	10.2	.200 dome	1/16	1/16	1/8	F	0.927	159
WL-2256F	Chevrolet	Small Block	4.000	1.563	596	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2256F 20	Chevrolet	Small Block	4.020	1.563	603	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2256F 30	Chevrolet	Small Block	4.030	1.563	607	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2256F 40	Chevrolet	Small Block	4.040	1.563	611	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2256F 60	Chevrolet	Small Block	4.060	1.563	618	-6.1	Flat; 4 reliefs	5/64	5/64	3/16	P	0.927	144
WL-2262F	Pontiac	V8	4.120	1.714	589	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
WL-2262F 20	Pontiac	V8	4.140	1.714	599	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
WL-2262F 30	Pontiac	V8	4.150	1.714	604	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
WL-2262F 40	Pontiac	V8	4.160	1.714	609	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
WL-2262F 60	Pontiac	V8	4.180	1.714	620	-6.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.980	194
WL-2266F	Chrysler	Big Block	4.320	1.991	835	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2266F 30	Chrysler	Big Block	4.350	1.991	855	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2266F 40	Chrysler	Big Block	4.360	1.991	862	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2266F 60	Chrysler	Big Block	4.380	1.991	875	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2268NF 60	Chevrolet	Big Block	4.310	1.765	719	34.2	.255 dome	5/64	5/64	3/16	P	0.990	154
WL-2291F	Ford	390, 427, 428	4.050	1.776	633	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
WL-2291F 20	Ford	390, 427, 428	4.070	1.776	644	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
WL-2291F 30	Ford	390, 427, 428	4.080	1.776	650	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
WL-2291F 40	Ford	390, 427, 428	4.090	1.776	656	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
WL-2291F 60	Ford	390, 427, 428	4.110	1.776	667	-10.0	Flat; 4 reliefs	5/64	3/32	3/16	F	0.975	151
WL-2295F 30	Chrysler	Big Block	4.350	2.029	826	12.1	.140 dome	1/16	1/16	3/16	F	1.094	191
WL-2295F 60	Chrysler	Big Block	4.380	2.029	836	11.1	.125 dome	1/16	1/16	3/16	F	1.094	191
WL-2300NF	Chevrolet	Big Block	4.250	1.767	777	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
WL-2300NF 30	Chevrolet	Big Block	4.280	1.767	794	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
WL-2300NF 40	Chevrolet	Big Block	4.290	1.767	800	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
WL-2300NF 60	Chevrolet	Big Block	4.310	1.767	810	16.8	.140 dome	5/64	5/64	3/16	P	0.990	154
WL-2303NF	Ford	390, 427, 428	4.130	1.674	672	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
WL-2303NF 30	Ford	390, 427, 428	4.160	1.674	689	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
WL-2303NF 40	Ford	390, 427, 428	4.170	1.674	695	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
WL-2303NF 60	Ford	390, 427, 428	4.190	1.674	706	-10.3	.085 dish; 4 reliefs	5/64	5/64	3/16	F	0.975	151
WL-2304F	Chevrolet	Small Block	4.000	1.560	571	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

Single Pistons – Numerical Listing



Part Number	Engine		Bore Dia.	Comp. Dist.	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfg.	Family											
WL-2304F 30	Chevrolet	Small Block	4.030	1.560	583	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159
WL-2304F 60	Chevrolet	Small Block	4.060	1.560	597	2.4	.100 dome	5/64	5/64	3/16	P	0.927	159
WL-2307AF	Chevrolet	Big Block	4.250	1.645	719	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
WL-2307AF 30	Chevrolet	Big Block	4.280	1.645	735	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
WL-2307AF 60	Chevrolet	Big Block	4.310	1.645	751	50.0	.580 dome	1/16	1/16	3/16	F	0.990	175
WL-2308AF 30	Chevrolet	Big Block	4.280	1.760	748	50.0	.585 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WL-2308AF 60	Chevrolet	Big Block	4.310	1.760	764	50.0	.585 dome; 2 reliefs	1/16	1/16	3/16	F	0.990	175
WL-2315NF 30	Chrysler	Big Block	4.280	1.920	781	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2315NF 40	Chrysler	Big Block	4.290	1.920	787	0.0	Flat	5/64	5/64	3/16	P	1.220	218
WL-2316F 20	Chrysler	Small Block	4.060	1.840	724	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WL-2316F 30	Chrysler	Small Block	4.070	1.840	729	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WL-2316F 40	Chrysler	Small Block	4.080	1.840	734	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WL-2316F 60	Chrysler	Small Block	4.100	1.840	745	-7.5	Flat; 2 reliefs	5/64	5/64	3/16	F	0.984	154
WL-2320F	Oldsmobile	V8	4.057	1.612	641	0.0	Flat	5/64	5/64	3/16	P	0.980	194
WL-2320F 30	Oldsmobile	V8	4.087	1.612	655	0.0	Flat	5/64	5/64	3/16	P	0.980	194
WL-2321F 30	Oldsmobile	V8	4.087	1.612	621	-5.8	.076 x 2.44" dia. dish	5/64	5/64	3/16	P	0.980	194
WL-2323F	Oldsmobile	V8	4.125	1.735	674	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
WL-2323F 30	Oldsmobile	V8	4.155	1.735	690	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
WL-2323F 40	Oldsmobile	V8	4.165	1.735	696	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
WL-2323F 60	Oldsmobile	V8	4.185	1.735	707	-18.0	.142 dish	5/64	5/64	3/16	P	0.980	187
WL-2328NF 30	Chevrolet	Big Block	4.155	1.765	680	36.6	.319 dome	5/64	5/64	3/16	P	0.990	154
WL-2328NF 60	Chevrolet	Big Block	4.185	1.765	697	36.6	.319 dome	5/64	5/64	3/16	P	0.990	154
WL-2349F	Chevrolet	Big Block	4.250	1.645	656	30.6	.265 dome	5/64	5/64	3/16	P	0.990	154
WL-2349F 30	Chevrolet	Big Block	4.280	1.645	661	29.4	.221 dome	5/64	5/64	3/16	P	0.990	154
WL-2349F 60	Chevrolet	Big Block	4.310	1.645	674	27.9	.210 dome	5/64	5/64	3/16	P	0.990	154
WL-2352F 30	Chevrolet	Small Block	4.155	1.555	620	-14.0	.083 dish, 4 reliefs	5/64	5/64	3/16	P	0.927	159
WL-2352F 40	Chevrolet	Small Block	4.165	1.555	624	-14.0	.083 dish, 4 reliefs	5/64	5/64	3/16	P	0.927	159
WL-2353F 30	Buick	V8	4.342	1.975	762	-27.8	.156 x 3.610" dia. dish	5/64	5/64	3/16	P	0.999	223
WL-2353F 40	Buick	V8	4.352	1.975	768	-27.8	.156 x 3.610" dia. dish	5/64	5/64	3/16	P	0.999	223
WL-2355F	Chrysler	Big Block	4.320	2.061	859	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
WL-2355F 30	Chrysler	Big Block	4.350	2.061	879	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
WL-2355F 40	Chrysler	Big Block	4.360	2.061	886	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
WL-2355F 60	Chrysler	Big Block	4.380	2.061	899	-7.0	Flat; 4 reliefs	5/64	5/64	3/16	P	1.220	218
WL-2366F	Ford	429, 460	4.360	1.890	807	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
WL-2366F 30	Ford	429, 460	4.390	1.890	822	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
WL-2366F 40	Ford	429, 460	4.400	1.890	828	-1.5	Flat; 1 relief	5/64	5/64	3/16	F	1.040	182
WL-2377F	Chevrolet	Big Block	4.250	1.640	717	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
WL-2377F 20	Chevrolet	Big Block	4.270	1.640	728	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
WL-2377F 30	Chevrolet	Big Block	4.280	1.640	733	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
WL-2377F 40	Chevrolet	Big Block	4.290	1.640	738	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
WL-2377F 60	Chevrolet	Big Block	4.310	1.640	749	-4.9	Flat; 2 reliefs; Chamfer	5/64	5/64	3/16	P	0.990	154
WL-2379F	Ford	Cleveland	4.000	1.647	608	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2379F 30	Ford	Cleveland	4.030	1.647	623	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2379F 40	Ford	Cleveland	4.040	1.647	627	-1.5	Flat; 2 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2383F 30	Chevrolet	Big Block	4.155	1.770	715	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
WL-2383F 40	Chevrolet	Big Block	4.165	1.770	720	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
WL-2383F 60	Chevrolet	Big Block	4.185	1.770	730	13.9	.110 dome; 1 relief	5/64	5/64	3/16	P	0.990	154
WL-2399NF	Chevrolet	Big Block	4.250	1.645	661	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
WL-2399NF 30	Chevrolet	Big Block	4.280	1.645	678	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
WL-2399NF 40	Chevrolet	Big Block	4.290	1.645	683	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
WL-2399NF 60	Chevrolet	Big Block	4.310	1.645	695	13.8	.095 dome	5/64	5/64	3/16	F	0.990	175
WL-2404F	Ford	429, 460	4.360	1.756	790	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
WL-2404F 30	Ford	429, 460	4.390	1.756	809	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
WL-2404F 40	Ford	429, 460	4.400	1.756	815	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
WL-2404F 60	Ford	429, 460	4.420	1.756	827	-22.0	.180 dish	5/64	5/64	3/16	P	1.040	182
WL-2441F	Chevrolet	Small Block	4.000	1.560	546	-21.1	Dish	5/64	5/64	3/16	F	0.927	159
WL-2441F 30	Chevrolet	Small Block	4.030	1.560	561	-21.1	Dish	5/64	5/64	3/16	F	0.927	159
WL-2443NF 30	Ford	429, 460	4.390	1.756	741	14.0	.350 dome	5/64	5/64	3/16	F	1.040	182
WL-2443NF 60	Ford	429, 460	4.420	1.756	759	14.0	.350 dome	5/64	5/64	3/16	F	1.040	182
WL-2446F	Ford	Small Block	4.000	1.772	639	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
WL-2446F 30	Ford	Small Block	4.030	1.772	655	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
WL-2446F 40	Ford	Small Block	4.040	1.772	660	-13.2	.110 dish	5/64	5/64	3/16	P	0.912	143
WL-2453F	Chevrolet	Big Block	4.251	1.640	668	-7.9	Dish	5/64	5/64	3/16	F	0.990	175

(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.



Single Pistons – Numerical Listing

Part Number	Engine		Bore Dia.	Comp. Dist	Weight (grams)	Dome Volume	Dome Shape	Top Ring	2nd Ring	Oil Ring	Pin Style (S)	Pin Dia.	Pin Weight
	Mfgr.	Family											
WL-2453F 30	Chevrolet	Big Block	4.280	1.640	686	-7.9	Dish	5/64	5/64	3/16	F	0.990	175
WL-2453F 60	Chevrolet	Big Block	4.310	1.640	704	-7.9	Dish	5/64	5/64	3/16	F	0.990	175
WL-2465F	Chevrolet	Big Block	4.251	1.640	651	27.1	.270 dome	5/64	5/64	3/16	P	0.990	154
WL-2465F 30	Chevrolet	Big Block	4.281	1.640	655	25.7	.226 dome	5/64	5/64	3/16	P	0.990	154
WL-2465F 60	Chevrolet	Big Block	4.311	1.640	666	24.3	.215 dome	5/64	5/64	3/16	P	0.990	154
WL-2481F	Buick	V6	3.800	1.825	558	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
WL-2481F 30	Buick	V6	3.830	1.825	574	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
WL-2481F 40	Buick	V6	3.840	1.825	578	-24.5	.245 dish	5/64	5/64	3/16	P	0.939	156
WL-2482F	Ford	Small Block	4.000	1.605	598	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2482F 20	Ford	Small Block	4.020	1.605	608	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2482F 30	Ford	Small Block	4.030	1.605	613	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2482F 40	Ford	Small Block	4.040	1.605	618	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2482F 60	Ford	Small Block	4.060	1.605	628	-2.7	Flat; 4 reliefs	5/64	5/64	3/16	P	0.912	143
WL-2488F	Ford	Small Block	4.000	1.619	583	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
WL-2488F 20	Ford	Small Block	4.020	1.619	593	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
WL-2488F 30	Ford	Small Block	4.030	1.619	598	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
WL-2488F 40	Ford	Small Block	4.040	1.619	603	-2.0	Flat; 4 reliefs	1.5MM	1.5MM	4.0MM	P	0.912	143
WL-2490NF 30	Chevrolet	Small Block	4.030	1.565	490	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
WL-2490NF 60	Chevrolet	Small Block	4.060	1.565	503	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
WL-2491NF 30	Chevrolet	Small Block	4.030	1.430	477	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
WL-2491NF 60	Chevrolet	Small Block	4.060	1.430	490	-3.4	Flat; 2 reliefs	1/16	1/16	3/16	F	0.927	133
WL-2608F	Ford	4.6L	3.551	1.214	333	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WL-2608F .50MM	Ford	4.6L	3.580	1.214	341	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WL-2608F .75MM	Ford	4.6L	3.590	1.214	345	-10.2	.150 x 2.70" dia. dish	1.5MM	1.5MM	3.0MM	F	0.866	107
WLW-2256F 30	Chevrolet	Small Block	4.030	1.563	554	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
WLW-2256F 40	Chevrolet	Small Block	4.040	1.563	559	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
WLW-2256F 60	Chevrolet	Small Block	4.060	1.563	566	-6.1	Flat; 4 reliefs	1/16	1/16	3/16	F	0.927	126
WLW-2488F 40	Ford	Small Block	4.040	1.619	577	-2.0	Flat; 4 reliefs	1/16	1/16	3/16	F	0.912	121
WLW-2603F 30	Chevrolet	Small Block	4.030	1.550	488	-10.9	Dish	1/16	1/16	3/16	F	0.927	114
WLW-2603F 60	Chevrolet	Small Block	4.060	1.550	503	-10.9	Dish	1/16	1/16	3/16	F	0.927	114
WLW-2606F 30	Chevrolet	Small Block	4.155	1.425	535	-16.2	Dish	1/16	1/16	3/16	F	0.927	126
WLW-2606F 60	Chevrolet	Small Block	4.185	1.425	550	-16.2	Dish	1/16	1/16	3/16	F	0.927	126

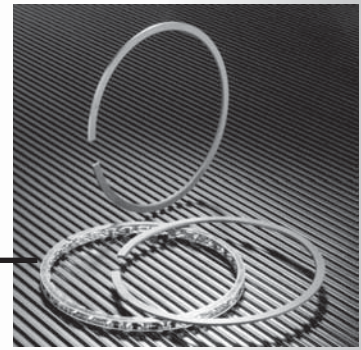
(S) Pin style is F = Floated or P = Pressed. Floated pins include lock rings. Floated pins can also be pressed.

Piston Sets With Rings – Numerical Listing



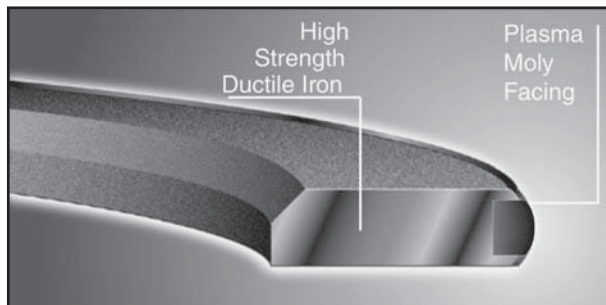
P/N	Engine			Available Oversizes	Piston Set P/N	Piston Qty.	Ring Set P/N	Ring Set Qty.	Dome Shape
	Mfr.	Family	CID						
Hypereutectic									
8KH100CP 30	Chevrolet	Small Block	350	30-60	H100CP	8	R-8902	1	Flat; 2 reliefs
8KH116CP 30	Chrysler	Small Block	360	30-40-60	H116CP	8	E-251K	1	Flat; 2 reliefs
8KH120CP 30	Ford	Small Block	302	30	H120CP	8	R-8902	1	Flat; 2 reliefs
8KH124CL 30	Chevrolet	Small Block	383	30-60	H124CL	8	R-8902	1	Flat; 2 reliefs
8KH137CL 30	Chevrolet	Small Block	383	30	H137CL	8	R-8902	1	Dish
8KH273CP 30	Ford	Small Block	302	30-40-60	H273CP	8	E-251K	1	Flat; 4 reliefs
8KH345DCP 30	Chevrolet	Small Block	383	30-40-60	H345DCP	8	E-251K	1	Flat; 4 reliefs
8KH345DCP 30	Chevrolet	Small Block	350	30-40-60	H345DCP	8	E-251K	1	Flat; 4 reliefs
8KH423DCP30	Chevrolet	Small Block	383	30-40-60	H423DCP	8	E-251K	1	.098 Dish; 4 reliefs
8KH423DCP30	Chevrolet	Small Block	350	30-40-60	H423DCP	8	E-251K	1	.098 Dish; 4 reliefs
8KH426CP 30	Chevrolet	Big Block	454	30-40-60	H426CP	8	E-233K	1	.100 dome; 1 relief
8KH591CP .50MM	Ford	Modular V8	4.6L 2V	.50-.75-1.00MM	H591CP	8	E-916K	1	.152 dish
8KH616CP 30	Chevrolet	Small Block	400	30-40-60	H616CP	8	E-243K	1	Flat; 4 reliefs
8KH618CP 30	Chevrolet	Small Block	350	30-40-60	H618CP	8	E-251K	1	.125 dome; 2 reliefs
8KH625CP 30	Chevrolet	Big Block	454	30-40-60	H625CP	8	E-233K	1	Flat; 2 reliefs
8KH631CP	Chevrolet	Small Block	350	30-40-60	H631CP	8	E-251K	1	Flat; 2 reliefs
8KH669DCP 30	Chevrolet	Small Block	350	30	H669DCP	8	E-921K	1	Flat; 4 reliefs
8KH669DCP 30	Chevrolet	Small Block	383	30	H669DCP	8	E-921K	1	Flat; 4 reliefs
8KH859CP	Chevrolet	Small Block	383	30-40-60	H859CP	8	E-251K	1	.110 dish; 2 reliefs
8KH860CP	Chevrolet	Small Block	383	30-40-60	H860CP	8	E-251K	1	Flat; 2 reliefs
POWERFORGED									
8KL2165F 30	Chevrolet	Small Block	327	30-40-60	L-2165F	8	E-251K	1	Flat; 4 reliefs
8KL2166NF 30	Chevrolet	Small Block	327	30-40-60	L-2166NF	8	E-251K	1	.125 dome
8KL2240NF 30	Chevrolet	Big Block	396	30-60	L-2240NF	8	E-243K	1	.182 dome
8KL2256F 30	Chevrolet	Small Block	350	30-40-60	L-2256F	8	E-251K	1	Flat; 4 reliefs
8KL2266F 30	Chrysler	Big Block	440	30-40-60	L-2266F	8	E-424K	1	Flat
8KL2304F 30	Chevrolet	Small Block	350	30-60	L-2304F	8	E-251K	1	.100 dome
8KL2352F 30	Chevrolet	Small Block	400	30-40	L-2352F	8	E-243K	1	.083 dish; 4 reliefs
8KL2355F 30	Chrysler	Big Block	440	30-40-60	L-2355F	8	E-424K	1	Flat
8KL2366F 30	Ford	429; 460	429	30-40	L-2366F	8	E-296K	1	Flat; 1 relief
8KL2377F 30	Chevrolet	Big Block	454	30-40-60	L-2377F	8	E-233K	1	Flat; 2 reliefs
8KL2379F 30	Ford	Cleveland/Modified V8	351C	30-40	L-2379F	8	E-251K	1	Flat; 2 reliefs
8KL2399NF 30	Chevrolet	Big Block	454	30-60	L-2399NF	8	E-233K	1	.095 dome
8KL2404F 30	Ford	429; 460	460	30-40-60	L-2404F	8	E-296K	1	.180 dish
8KL2441F 30	Chevrolet	Small Block	350	30	L-2441F	8	E-251K	1	Dish
8KL2443NF 30	Ford	429; 460	460	30-60	L-2443NF	8	E-296K	1	.400 dome
8KL2446F 30	Ford	Small Block	351W	30-40	L-2446F	8	E-251K	1	.110 dish
8KL2465F 30	Chevrolet	Big Block	454	30-60	L-2465F	8	E-233K	1	.226 dome
8KL2482F 30	Ford	Small Block	302	30-40-60	L-2482F	8	E-251K	1	Flat; 4 reliefs
8KL2488F 30	Ford	Small Block	302	30-40	L-2488F	8	E-458K	1	Flat; 4 reliefs
8KL2490NF 30	Chevrolet	Small Block	350	30-60	L-2490NF	8	R-8902	1	Flat; 2 reliefs
8KL2491NF 30	Chevrolet	Small Block	383	30-60	L-2491NF	8	R-8902	1	Flat; 2 reliefs
8KLW2256F 30	Chevrolet	Small Block	350	30-60	LW-2256F	8	R-8902	1	Flat; 4 reliefs

PISTON RINGS



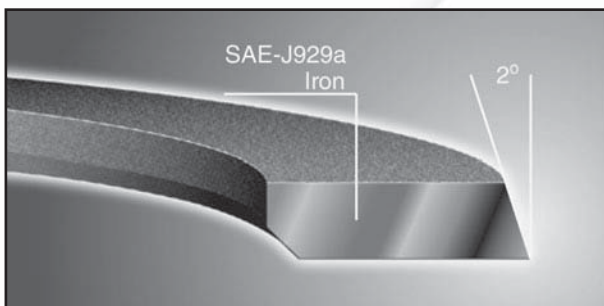
Piston Ring Technology

Speed-Pro piston rings dominate the racing industry with technically advanced design, dedicated research, and superior quality. We don't rely on advertised gimmicks and "trick of the week" designs. Our rings deliver optimal cylinder sealing under true operating conditions, and provide maximum oil control. Speed-Pro piston rings deliver superior performance under grueling race conditions every weekend, on oval tracks and drag strips world wide. Put our performance heritage, racing experience, and engineering superiority to work in your car!



Top compression ring

Reliable compression sealing, maximizing power output, and controlling "blow by" are the responsibility of the Speed-Pro top ring. Speed-Pro's top rings are engineered for instant seating, superior cylinder sealing, and optimum durability. Material choices include cast iron, high strength ductile iron, steel, and the new hardened and tempered "HellFire" alloy. Our premium ring sets feature moly or plasma-moly facings for enhanced performance under demanding conditions. The inherent strength of our materials allow Speed-Pro rings to maintain sealing integrity at extreme pressures and rpm. We supply rings for all popular high performance applications – street, strip, oval track, and off-road.



Second ring

Speed-Pro second rings are manufactured from SAE – j929a iron, providing excellent durability and superior oil control. The primary function of the second ring is oil control. Our tapered face design allows the second ring to work as a "scraper", reducing the potential for oil migration into the combustion chamber.

The race proven open gap design intentionally allows an escape path for residual combustion gases, reducing inter-ring pressure and keeping the top ring seated against its groove. Without this escape path, trapped pressure will unseat the top ring, causing ring flutter and reduced cylinder sealing at high rpm. Our one piece second rings are far more effective and reliable than are competitive designs that attempt to retain combustion pressure lost through ineffective top rings. Beware – cylinder leakage tests are steady state – they do not account for time, temperature, piston movement, or true operating pressures.

Pro-Series

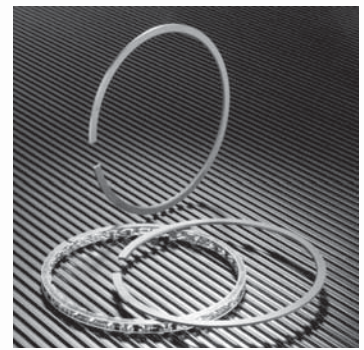
Professional racing trends have focused on lowering ring thickness and weight, and on reducing ring tension in an effort to minimize cylinder wall drag. Pro-Series ring sets are designed for serious racing, and offer several features which maximize horsepower potential. These rings sets are not normally recommended for street use. Most Pro-Series sets incorporate reduced radial wall thickness top and second rings for lower tension and enhanced sealing. They also include a very low tension, thin profile oil rings.

No other supplier can offer the horsepower, oil control, and durability we engineer into every set. If you want to join the winning team – choose Speed-Pro!

Honing Check List

- Torque main bearing caps to specified value.
- Attach torque plate and head gasket, torquing head bolts in proper sequence to the specified value.
- Check for satisfactory mounting of boring equipment on torque plate.
- Bore or rough hone cylinder to .003" less than desired finished size.
- Saturate cylinder and honing stones with honing lubricant.
- Hone with continuous supply of coolant.
- Hone with firm cutting pressure.
- Adjust rpm and reciprocation to insure proper crosshatch pattern.
- Conclude honing operation by allowing stones to cut at reduced pressure for several strokes to produce desirable plateaus.
- Clean thoroughly using hot soapy water and a non-metallic bristle brush.
- Wipe bores with paper towels.
- Oil cylinder bores to prevent rust.
- Gap rings with torque plate attached.
- Oil bores, rings and pistons prior to assembly.

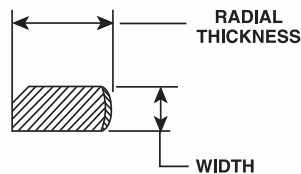
SPEED PRO



Reference To Sunnen Stone Numbers

Approx. Microfinish	Grit size	CV616 automatic stone set number	Hand operated stone set number	Approx. Microfinish	Grit size	CV616 automatic stone set number	Hand operated stone set number
85-105	70	EHU-133		15-20	280		AN-501
135-170	70		AN-101	8-13	400	JHU-820	
25-40	150		AN-201	5-10	400		N-37-J85
25-35	220	EHU-525		4-8	600	C-30-C03-81	
20-25	220		AN-301	3-5	600		NN40-C05
14-23	280	JHU-625					

Design, Features, and Installation Guidelines



Radial thickness

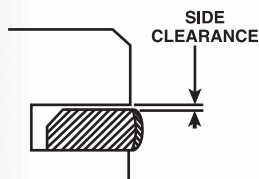
Most piston rings in the Speed-Pro line are manufactured to the Society of Automotive Engineers (SAE) D-wall specification for proper fit and easy installation. The radial thickness (front to back) of these compression rings can be determined using the following formula:

Radial thickness = bore diameter divided by 22

Example for a 4.00" bore:

$$4.00/22 = .182 \text{ radial thickness}$$

Pressure back ("dykes") and most Pro-Series rings are manufactured with reduced radial wall thickness, to deliver greater bore conformability, and race winning performance in professionally prepared engines. Radial wall thickness dimensions for these unique rings are referenced in the appropriate catalog sections.



Side (lateral) clearance

Side clearance or lateral clearance is the measurement of space between the sides of the piston groove and the ring. Major piston and ring manufacturers have adopted the Society of Automotive Engineers specifications for ring and groove widths. This combination of specifications results in a side clearance standard of .002"/.004".

Racing engine builders that desire reduced side clearance may machine the top groove to a specification less than the SAE standard, but should maintain a side clearance of .001" minimum.

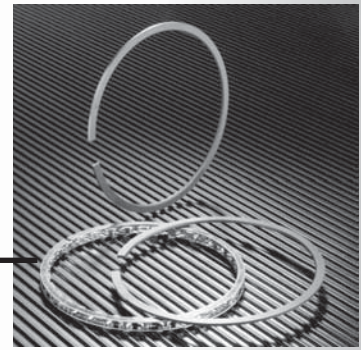
Compression ring end gaps in high performance engines

File fitting piston ring end gaps is not normally required for regular usage, but is a common procedure in racing applications. Most Speed-Pro rings are available in +.005" oversizes. Professional engine builders know that precisely setting the ring end gaps by "file fitting" is well worth the time and effort.

Comparative testing on a small block Chevrolet engine documented reduced blowby and increased horsepower as top ring end gaps were decreased. Blowby was reduced by approximately 50 percent, and horsepower increases ranged from 5 to 13 percent. The baseline test was run with top ring gaps set at .024". In the second test, top ring gaps were reduced to .016". An additional test was made with the top ring gaps set to .010". In this final test, the results again showed a reduction in blowby; but a noticeable loss of horsepower was observed at higher speeds. Examination of the rings indicated that the top rings were butting. Running with ring gaps butted will result in scuffing of cylinder walls and/or flaking of moly from the ring face.

Running with "ideal" top ring end gaps is certainly the goal. This test shows that it is better to have slight additional clearance than to have too little – and risk scuffing. When fitting rings to cylinder bores, every .001" change in bore diameter changes the end gap by approximately .003". (diameter changes affect the gap by the factor of pi...3.1416"). Example: an increase in bore diameter of .002" increases the ring gap by .002" x 3.1416" = .00628"

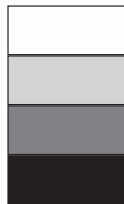
PISTON RINGS



Piston Ring Selection Guidelines

Piston Type	Application								
	Standard Service	Light Truck & Towing	Moderate Street Perf.	Oval Track "Claimers"	High Perf. Street/Strip	Dirt Track & Off Road	Pro Street & Brackets	Fast Ovals and Drags	Blowers & Nitrous
E-Series	Black	Black	Light Gray	White	White	White	White	White	White
Claimer Series	Light Gray	Light Gray	Black	Black	Light Gray	White	White	White	White
Plasma-Moly Standard Gap	White	White	Black	Black	Black	White	White	White	White
Chrome File Fit	White	White	White	White	White	Black	White	White	White
Plasma-Moly File Fit	White	White	Light Gray	Light Gray	Black	Black	Black	Black	Light Gray
Pro Series	White	White	White	White	White	White	Black	Black	Light Gray
HellFire Rings	White	White	White	White	White	White	Black	Black	Black

Application Codes



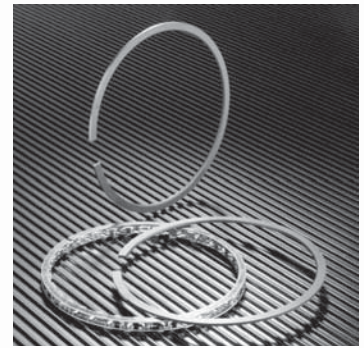
Not normally used for this application

May be marginal due to high cost or ultimate strength

Will work, but exercise caution with timing/mixture

The best choice for this application

SPEED PRO®



High Performance Ring End Gap Recommendation Guide

A “ring dynamics approach” has lead to new 2nd ring gap recommendations.

We now recommend that the 2nd ring should have a larger gap than the top ring. The key objective is to keep the top ring seated and sealed throughout the power stroke. This new direction has been proven effective in both O.E. vehicles and in racing environments. The larger gap recommendations are noted in the reference chart.

To aid in filing ring gaps, we offer the following hints:

- Place the butt end of a small sharp file in a vise. If several sets of rings are going to be filed, you may want to consider purchasing our ring gap filer – part no. MT-135.
- File from outside face toward inside diameter to avoid chipping the face coating or leaving burrs on O.D. edges.
- Filing only one end of the ring allows you to use the other end as a reference – to verify that the gap remains straight and parallel.
- Remove sharp corners by stoning all gap edges.

There is some controversy as to the effect of coolant temperatures on ring end gaps. Some engine builders feel that if coolant temperature is low, they can narrow up on ring gaps – this is not true! Piston and ring temperatures

remain the same whether the coolant temperature is high or low. If you consider thermal growth or expansion, the engine with higher coolant temperature would have bigger bores. The engine with the lower temperature would have smaller bores. The chart was developed for “normal” engine temperatures. If your engine coolant temperature tends to be low, you should run a larger ring end gap – to compensate for the smaller bores.

Installation Guidelines

- Always install Speed-Pro compression rings with pip marks (top of ring indicators) toward the top of the piston
- Always stagger end gaps on each of the ring grooves, oil rails, and expander
- Always use a ring expander when installing rings
- Always lubricate new rings with clean engine oil – no dry starts!
- Do not “spiral” the rings onto the pistons.
 - results in ring deformation after installation, causing poor sealing
- Do not over-expand the rings. Over-expansion can lead to:
 - ring breakage opposite the gap when using cast rings
 - ring distortion when using ductile iron rings

End Gap Recommendation Chart

Speed-Pro top rings (ductile iron, 4" bore)

Moderate performance	.016 - .018	(.004 per inch of bore diameter)
Drag racing, oval track	.018 - .020	(.0045 per inch of bore diameter)
Nitrous oxide – street	.020 - .022	(.005 per inch of bore diameter)
Nitrous oxide – drag	.028 - .030	(.007 per inch of bore diameter)
Supercharged	.024 - .026	(.006 per inch of bore diameter)

Speed-Pro 2nd rings (cast iron, 4" bore)

Moderate performance	.020 - .022	(.005 per inch of bore diameter)
Oval track	.022 - .024	(.0055 per inch of bore diameter)
Nitrous oxide – street	.024 - .026	(.006 per inch of bore diameter)
Nitrous oxide – drag	.028 - .030	(.007 per inch of bore diameter)
Supercharged	.024 - .026	(.006 per inch of bore diameter)

Notes: Use the chart as a guide to normal ring end gaps. The “ideal” end gap will be somewhat different for each engine. Piston rings should be file fitted to the desired end gap with the torque plate attached. In worn cylinders, make sure that ring gaps are checked at bottom of ring travel. In seeking the optimum end gap for your particular engine, choose the proper application in the chart and gap the rings to the high limit. If the ring's end surfaces show shiny spots after use, it is evidence of ring butting. This means that your rings are operating at a higher than average temperature and require additional gap. If there is no indication of butting, then the end gap can be narrowed until you reach the “ideal” condition. Remember, stay on the safe side!



PISTON RING SET APPLICATIONS

Engine	Notes	Bore	Ring Set Type	Set P/N	Top	2nd	Oil	Tension	Available Sizes
AMC									
390 8 Cyl.		4.165	Plasma-Moly File Fit	R-9349	1/16	1/16	3/16	Low	5-35
401 8 Cyl.		4.165	Plasma-Moly File Fit	R-9349	1/16	1/16	3/16	Low	5-35
Buick									
231 6 Cyl.	1975-88	3.800	Plasma-Moly Plasma-Moly File Fit Plasma-Moly File Fit	R-10499 R-10437 R-9985	5/64 5/64 1/16	5/64 5/64 1/16	3/16 3/16 3/16	Std. Std. Low	Std-30 35 5-15-25-35
400 8 Cyl.		4.040	Plasma-Moly File Fit	R-9357	1/16	1/16	3/16	Low	35
455 8 Cyl.	1970-76	4.313	Plasma-Moly File Fit	R-5883	5/64	5/64	3/16	Std.	35
Chevrolet									
140 4 Cyl.	Vega	3.500	Plasma-Moly File Fit	R-9840	1/16	1/16	3/16	Low	35
283 8 Cyl.		3.875	Plasma-Moly File Fit Plasma-Moly Plasma-Moly File Fit Plasma-Moly Plasma-Moly File Fit Dykes File Fit	R-9621 R-9967 R-9211 R-9968 R-9342 R-9941	1/16 1/16 1/16 1/16 1/16 .031	1/16 1/16 1/16 1/16 1/16 1/16	3/16 1/8 1/8 1/8 1/8 3/16	Low Std. Low Std. Std. Low	35-65 60 65 30-40-60 35-45-65 65
302 8 Cyl.	1968-70	4.000	Plasma-Moly Plasma-Moly File Fit Claimer Claimer - Moly Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit Moly Top & 2nd Rings Plasma-Moly Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit Dykes File Fit	R-9903 R-9343 R-6902 R-8902 R-9902 R-9771 R-9401 R-10277 R-9968 R-9342 R-10393 R-9786 R-9941	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 .043 .043 .031	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16	3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 1/8 1/8 3/16 3/16 3/16	Std. Std. Std. Std. Std. Std. Low Low Std. Std. Std. Low Low	Std-20-30-60 5-25-35-45-65 Std-30-60 Std-30-40-60 Std-20-30-40-60 5-25-35-45-65 5-10-25-35-45-65 35 30-40-60 35-45-65 35 5-35-65 65
305 8 Cyl.	1976-92	3.736	Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit	R-10434 R-10473 R-10294	5/64 5/64 1/16	5/64 5/64 1/16	3/16 3/16 3/16	Std. Low Std.	35 35-65 35
307 8 Cyl.		3.875	Plasma-Moly File Fit Plasma-Moly Plasma-Moly File Fit	R-9621 R-9967 R-9211	1/16 1/16 1/16	1/16 1/16 1/16	3/16 1/8 1/8	Low Std. Low	35-65 60 65
327 8 Cyl.	1962-69	4.000	Plasma-Moly Plasma-Moly File Fit Claimer Claimer - Moly Plasma-Moly Plasma-Moly File Fit Moly Top & 2nd Rings Chrome File Fit Plasma-Moly File Fit Moly Top & 2nd Rings Plasma-Moly Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit Dykes File Fit	R-9903 R-9343 R-6902 R-8902 R-9902 R-9771 R-10144 R-9772 R-9401 R-10277 R-9968 R-9342 R-10393 R-9786 R-9941	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 .043 .043 .031	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16	3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 1/8 1/8 3/16 3/16 3/16	Std. Std. Std. Std. Std. Std. Std. Std. Low Low Std. Std. Std. Low Low	Std-20-30-60 5-25-35-45-65 Std-30-60 Std-30-40-60 Std-20-30-40-60 5-25-35-45-65 35 35 5-10-25-35-45-65 35 30-40-60 35-45-65 35 5-35-65 65
347 LS1 (99.0mm) 8 Cyl.		3.897	Plasma-Moly File Fit	R-10598	1.5mm	1.5mm	3.0mm	Std.	.13-.38MM
350 8 Cyl.	1967-85	4.000	Plasma-Moly Plasma-Moly File Fit Claimer Claimer - Moly Plasma-Moly Plasma-Moly File Fit Moly Top & 2nd Rings Chrome File Fit Plasma-Moly File Fit Moly Top & 2nd Rings Plasma-Moly Plasma-Moly File Fit Plasma-Moly File Fit Plasma-Moly File Fit Dykes File Fit	R-9903 R-9343 R-6902 R-8902 R-9902 R-9771 R-10144 R-9772 R-9401 R-10277 R-9968 R-9342 R-10393	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 .043	5/64 5/64 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16 1/16	3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 3/16 1/8 1/8 3/16 3/16	Std. Std. Std. Std. Std. Std. Std. Std. Low Low Std. Std. Std. Low	Std-20-30-60 5-25-35-45-65 Std-30-60 Std-30-40-60 Std-20-30-40-60 5-25-35-45-65 35 35 5-10-25-35-45-65 35 30-40-60 35-45-65 35

PISTON RING SET APPLICATIONS



Engine	Notes	Bore	Ring Set Type	Set P/N	Top	2nd	Oil	Tension	Available Sizes	
Chevrolet (Cont'd)										
350 8 Cyl. (Cont'd)		4.000	Plasma-Moly File Fit	R-9786	.043	1/16	3/16	Low	5-35-65	
			Plasma-Moly File Fit	R-10701	1.5mm	1.5mm	3.0mm	Std.	5-35-45-65	
			Dykes File Fit	R-9941	.031	1/16	3/16	Low	65	
396 8 Cyl.	1965-70	4.094	Plasma-Moly File Fit	R-9210	5/64	5/64	3/16	Low	35-65	
400 8 Cyl.	1970-77	4.125	Plasma-Moly	R-10374	5/64	5/64	3/16	Std.	30-60	
			Plasma-Moly File Fit	R-5879	5/64	5/64	3/16	Std.	5-35-65	
				Claimer	R-6375	1/16	1/16	3/16	Std.	30-40
				Claimer - Moly	R-8375	1/16	1/16	3/16	Std.	30-40-60
				Plasma-Moly	R-10375	1/16	1/16	3/16	Std.	Std-30-40
				Plasma-Moly File Fit	R-10248	1/16	1/16	3/16	Std.	5-25-35-45-65
				Plasma-Moly File Fit	R-9346	1/16	1/16	3/16	Low	5-25-35-45-65
				Moly Top & 2nd Rings	R-10279	1/16	1/16	3/16	Low	5
				Plasma-Moly File Fit	R-10202	1/16	1/16	1/8	Std.	35-45
				Plasma-Moly File Fit	R-10206	1/16	1/16	1/8	Low	35
				Plasma-Moly File Fit	R-9787	.043	1/16	3/16	Low	5-35-65
				Plasma-Moly File Fit	R-10702	1.5mm	1.5mm	3.0mm	Std.	5-35-45-65
				Dykes File Fit	R-9681	.031	1/16	3/16	Low	35
402 8 Cyl.	1970-72	4.125	Plasma-Moly File Fit	R-5879	5/64	5/64	3/16	Std.	5-35-65	
			Claimer	R-6375	1/16	1/16	3/16	Std.	30-40	
			Claimer - Moly	R-8375	1/16	1/16	3/16	Std.	30-40-60	
			Plasma-Moly	R-10375	1/16	1/16	3/16	Std.	Std-30-40	
			Moly Top & 2nd Rings	R-10279	1/16	1/16	3/16	Low	5	
			Plasma-Moly File Fit	R-9787	.043	1/16	3/16	Low	5-35-65	
427 8 Cyl.	1966-69	4.250	Plasma-Moly	R-9905	5/64	5/64	3/16	Std.	Std-30-60	
			Plasma-Moly File Fit	R-9590	5/64	5/64	3/16	Std.	5-35-65	
				Plasma-Moly	R-9904	1/16	1/16	3/16	Std.	Std-20-30-60
				Plasma-Moly File Fit	R-9745	1/16	1/16	3/16	Std.	35-65
				Plasma-Moly File Fit	R-9344	1/16	1/16	3/16	Low	5-35-65
				Plasma-Moly File Fit	R-9788	.043	1/16	3/16	Low	35-65
				Dykes File Fit	R-10177	.031	1/16	3/16	Low	65
				Plasma-Moly File Fit	R-9799	1/16	1/16	3/16	Std.	5
				Plasma-Moly File Fit	R-9278	1/16	1/16	3/16	Low	5-35-65
				Plasma-Moly File Fit	R-9406	1/16	1/16	3/16	Low	5
				Plasma-Moly File Fit	R-9789	.043	1/16	3/16	Low	5
				Dykes File Fit	R-10306	.031	1/16	3/16	Low	5
	454 8 Cyl.	1970-76	4.250	Plasma-Moly	R-9905	5/64	5/64	3/16	Std.	Std-30-60
Plasma-Moly File Fit				R-9590	5/64	5/64	3/16	Std.	5-35-65	
				Plasma-Moly	R-9904	1/16	1/16	3/16	Std.	Std-20-30-60
				Plasma-Moly File Fit	R-9745	1/16	1/16	3/16	Std.	35-65
				Plasma-Moly File Fit	R-9344	1/16	1/16	3/16	Low	5-35-65
				Plasma-Moly File Fit	R-9788	.043	1/16	3/16	Low	35-65
				Plasma-Moly File Fit	R-10703	1.5mm	1.5mm	3.0mm	Std.	5-35-65
				Dykes File Fit	R-10177	.031	1/16	3/16	Low	65
				Plasma-Moly File Fit	R-9799	1/16	1/16	3/16	Std.	5
				Plasma-Moly File Fit	R-9278	1/16	1/16	3/16	Low	5-35-65
				Plasma-Moly File Fit	R-9406	1/16	1/16	3/16	Low	5
				Dykes File Fit	R-10306	.031	1/16	3/16	Low	5
502 8 Cyl.			4.466	Plasma-Moly File Fit	R-10575	2.0mm	1.5mm	4.0mm	Std.	5
Race Blocks 8 Cyl.		4.440	Plasma-Moly File Fit	R-10133	1/16	1/16	3/16	Std.	5-35	
		4.500	Plasma-Moly File Fit	R-10451	1/16	1/16	3/16	Std.	5-35	
		4.563	Plasma-Moly File Fit	R-10441	1/16	1/16	3/16	Std.	5	
		4.625	Plasma-Moly File Fit	R-10433	1/16	1/16	3/16	Std.	5	
		4.500	Plasma-Moly	R-10595	1/16	1/16	3/16	Std.	Std-60	
		4.440	Plasma-Moly File Fit	R-9332	1/16	1/16	3/16	Low	5	
		4.500	Plasma-Moly File Fit	R-10317	1/16	1/16	3/16	Low	5-35	
		4.563	Plasma-Moly File Fit	R-10319	1/16	1/16	3/16	Low	5	
		4.500	Plasma-Moly File Fit	R-10452	.043	1/16	3/16	Std.	5	
		4.563	Plasma-Moly File Fit	R-10450	.043	1/16	3/16	Std.	5-45	
		4.500	Plasma-Moly File Fit	R-10316	.043	1/16	3/16	Low	5-35	
		4.563	Plasma-Moly File Fit	R-10318	.043	1/16	3/16	Low	5-45	
		4.625	Plasma-Moly File Fit	R-10339	.047	1/16	3/16	Std.	5	
		4.500	Plasma-Moly File Fit	R-10706	1.5mm	1.5mm	3.0mm	Std.	5-35-65	
	Chrysler									
273 8 Cyl.		3.625	Plasma-Moly File Fit	R-9637	1/16	1/16	3/16	Low	5	
340 8 Cyl.		4.040	Plasma-Moly File Fit	R-9357	1/16	1/16	3/16	Low	35	
360 8 Cyl.	1971-80	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60	



PISTON RING SET APPLICATIONS

Engine	Notes	Bore	Ring Set Type	Set P/N	Top	2nd	Oil	Tension	Available Sizes
Chrysler (Cont'd)									
360 8 Cyl. (Cont'd)	1971-80	4.000	Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65
			Claimer	R-6902	1/16	1/16	3/16	Std.	Std-30-60
			Claimer - Moly	R-8902	1/16	1/16	3/16	Std.	Std-30-40-60
			Plasma-Moly	R-9902	1/16	1/16	3/16	Std.	Std-20-30-40-60
			Plasma-Moly File Fit	R-9771	1/16	1/16	3/16	Std.	5-25-35-45-65
			Moly Top & 2nd Rings	R-10144	1/16	1/16	3/16	Std.	35
			Chrome File Fit	R-9772	1/16	1/16	3/16	Std.	35
			Plasma-Moly File Fit	R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65
			Moly Top & 2nd Rings	R-10277	1/16	1/16	3/16	Low	35
			Plasma-Moly File Fit	R-9786	.043	1/16	3/16	Low	5-35-65
Dykes File Fit	R-9941	.031	1/16	3/16	Low	65			
383 8 Cyl.	1959-71 1959-71	4.250	Plasma-Moly	R-9905	5/64	5/64	3/16	Std.	Std-30-60
			Plasma-Moly File Fit	R-9590	5/64	5/64	3/16	Std.	5-35-65
			Plasma-Moly	R-9904	1/16	1/16	3/16	Std.	Std-20-30-60
			Plasma-Moly File Fit	R-9745	1/16	1/16	3/16	Std.	35-65
			Plasma-Moly File Fit	R-9344	1/16	1/16	3/16	Low	5-35-65
426 8 Cyl.	1965-71 1965-71	4.250	Plasma-Moly	R-9905	5/64	5/64	3/16	Std.	Std-30-60
			Plasma-Moly File Fit	R-9590	5/64	5/64	3/16	Std.	5-35-65
			Plasma-Moly File Fit	R-9788	.043	1/16	3/16	Low	35-65
			Dykes File Fit	R-10177	.031	1/16	3/16	Low	65
426 Hemi 8 Cyl.		4.250	Plasma-Moly	R-9904	1/16	1/16	3/16	Std.	Std-20-30-60
			Plasma-Moly File Fit	R-9745	1/16	1/16	3/16	Std.	35-65
			Plasma-Moly File Fit	R-9344	1/16	1/16	3/16	Low	5-35-65
			Dykes File Fit	R-10177	.031	1/16	3/16	Low	65
440 8 Cyl.	1966-78	4.320	Plasma-Moly File Fit	R-9224	5/64	5/64	3/16	Std.	35-65
			Plasma-Moly File Fit	R-9798	1/16	1/16	3/16	Std.	5-35-65
			Plasma-Moly File Fit	R-9278	1/16	1/16	3/16	Low	5-35-65
			Plasma-Moly File Fit	R-10704	1.5mm	1.5mm	3.0mm	Std.	5-35-65
Ford									
1.6L 4 Cyl.		3.188	Plasma-Moly File Fit	R-10230	1/16	5/64	5/32	Low	5
2.0L 4 Cyl.	1971-74	3.575	Plasma-Moly File Fit	R-9602	1/16	1/16	1/8	Low	5
2.3L OHC 4 Cyl.	1974-84	96.0mm	Plasma-Moly File Fit	R-10576	1/16	1/16	3/16	Low	35
			Plasma-Moly	R-10515	2.0mm	2.0mm	3/16	Std.	30
281 (90.2mm) 4.6L 8 Cyl.		3.5512	Plasma-Moly File Fit	R-10596	1.5mm	1.5mm	3.0mm	Std.	.64-.89-1.14MM
289 8 Cyl.	1963-68 1963-68	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60
			Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65
			Claimer	R-6902	1/16	1/16	3/16	Std.	Std-30-60
			Claimer - Moly	R-8902	1/16	1/16	3/16	Std.	Std-30-40-60
			Plasma-Moly File Fit	R-9771	1/16	1/16	3/16	Std.	5-25-35-45-65
			Moly Top & 2nd Rings	R-10144	1/16	1/16	3/16	Std.	35
			Plasma-Moly	R-9902	1/16	1/16	3/16	Std	Std-20-30-40-60
			Plasma-Moly File Fit	R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65
			Moly Top & 2nd Rings	R-10277	1/16	1/16	3/16	Low	35
			Plasma-Moly	R-9968	1/16	1/16	1/8	Std.	30-40-60
			Plasma-Moly File Fit	R-9342	1/16	1/16	1/8	Std.	35-45-65
			Plasma-Moly File Fit	R-9786	.043	1/16	3/16	Low	5-35-65
			Dykes File Fit	R-9941	.031	1/16	3/16	Low	65
			302 8 Cyl.	1968-84 1968-84	4.000	Plasma-Moly	R-9903	5/64	5/64
Plasma-Moly File Fit	R-9343	5/64				5/64	3/16	Std.	5-25-35-45-65
Claimer	R-6902	1/16				1/16	3/16	Std.	Std-30-60
Claimer - Moly	R-8902	1/16				1/16	3/16	Std.	Std-30-40-60
Plasma-Moly File Fit	R-9771	1/16				1/16	3/16	Std.	5-25-35-45-65
Moly Top & 2nd Rings	R-10144	1/16				1/16	3/16	Std.	35
Plasma-Moly	R-9902	1/16				1/16	3/16	Std	Std-20-30-40-60
Plasma-Moly File Fit	R-9401	1/16				1/16	3/16	Low	5-10-25-35-45-65
Moly Top & 2nd Rings	R-10277	1/16				1/16	3/16	Low	35
Plasma-Moly	R-9968	1/16				1/16	1/8	Std.	30-40-60
Plasma-Moly File Fit	R-9342	1/16				1/16	1/8	Std.	35-45-65
Plasma-Moly File Fit	R-10393	.043				1/16	3/16	Std.	35
Plasma-Moly File Fit	R-9786	.043				1/16	3/16	Low	5-35-65
Plasma-Moly File Fit	R-10701	1.5mm				1.5mm	3.0mm	Std.	5-35-45-65
1986-94	Plasma-Moly	R-10471	1.5mm	1.5mm	4.0mm	Std.	Std-30-40		
1986-94	Plasma-Moly File Fit	R-10472	1.5mm	1.5mm	4.0mm	Std.	35-45		
1986-94	Plasma-Moly File Fit	R-10470	1.5mm	1.5mm	4.0mm	Low	5		
	Dykes File Fit	R-9941	.031	1/16	3/16	Low	65		

PISTON RING SET APPLICATIONS



Engine	Notes	Bore	Ring Set Type	Set P/N	Top	2nd	Oil	Tension	Available Sizes		
Ford (Cont'd)											
351C 8 Cyl.	1970-74 1970-74	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60		
			Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65		
	Claimer		R-6902	1/16	1/16	3/16	Std.	Std-30-60			
	Claimer - Moly		R-8902	1/16	1/16	3/16	Std.	Std-30-40-60			
	Plasma-Moly		R-9902	1/16	1/16	3/16	Std.	Std-20-30-40-60			
	Plasma-Moly File Fit		R-9771	1/16	1/16	3/16	Std.	5-25-35-45-65			
	Moly Top & 2nd Rings		R-10144	1/16	1/16	3/16	Std.	35			
	Chrome File Fit		R-9772	1/16	1/16	3/16	Std.	35			
	Plasma-Moly File Fit		R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65			
	Moly Top & 2nd Rings		R-10277	1/16	1/16	3/16	Low	35			
	Plasma-Moly		R-9968	1/16	1/16	1/8	Std.	30-40-60			
	Plasma-Moly File Fit		R-9342	1/16	1/16	1/8	Std.	35-45-65			
	Plasma-Moly File Fit		R-10393	.043	1/16	3/16	Std.	35			
	Plasma-Moly File Fit		R-9786	.043	1/16	3/16	Low	5-35-65			
	Dykes File Fit		R-9941	.031	1/16	3/16	Low	65			
351M, 400 8 Cyl.	1971-79 1971-79	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60		
			Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65		
	Claimer		R-6902	1/16	1/16	3/16	Std.	Std-30-60			
	Claimer - Moly		R-8902	1/16	1/16	3/16	Std.	Std-30-40-60			
	Plasma-Moly		R-9902	1/16	1/16	3/16	Std.	Std-20-30-40-60			
	Moly Top & 2nd Rings		R-10144	1/16	1/16	3/16	Std.	35			
	Chrome File Fit		R-9772	1/16	1/16	3/16	Std.	35			
	Plasma-Moly File Fit		R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65			
	Moly Top & 2nd Rings		R-10277	1/16	1/16	3/16	Low	35			
	351W 8 Cyl.		1969-92 1969-92	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60
Plasma-Moly File Fit		R-9343			5/64	5/64	3/16	Std.	5-25-35-45-65		
Claimer		R-6902	1/16		1/16	3/16	Std.	Std-30-60			
Claimer - Moly		R-8902	1/16		1/16	3/16	Std.	Std-30-40-60			
Plasma-Moly		R-9902	1/16		1/16	3/16	Std.	Std-20-30-40-60			
Plasma-Moly File Fit		R-9771	1/16		1/16	3/16	Std.	5-25-35-45-65			
Moly Top & 2nd Rings		R-10144	1/16		1/16	3/16	Std.	35			
Plasma-Moly File Fit		R-9401	1/16		1/16	3/16	Low	5-10-25-35-45-65			
Moly Top & 2nd Rings		R-10277	1/16		1/16	3/16	Low	35			
Plasma-Moly		R-9968	1/16		1/16	1/8	Std.	30-40-60			
Plasma-Moly File Fit		R-9342	1/16		1/16	1/8	Std.	35-45-65			
Plasma-Moly File Fit		R-9786	.043		1/16	3/16	Low	5-35-65			
Dykes File Fit		R-9941	.031		1/16	3/16	Low	65			
390 8 Cyl.		1966-71 1966-71	4.050		Plasma-Moly File Fit	R-9219	5/64	5/64	3/16	Std.	35
					Plasma-Moly File Fit	R-9220	5/64	3/32	3/16	Std.	35
	Plasma-Moly File Fit			R-9281	1/16	1/16	3/16	Low	35		
406 8 Cyl.	1962-63	4.130	Plasma-Moly File Fit	R-9345	1/16	1/16	1/8	Low	35		
427 8 Cyl.		4.233	Plasma-Moly File Fit	R-9767	1/16	1/16	3/16	Low	35		
428 8 Cyl.		4.130	Plasma-Moly File Fit	R-9280	1/16	1/16	3/16	Low	5-35		
			Plasma-Moly File Fit	R-9345	1/16	1/16	1/8	Low	35		
429 8 Cyl.		4.360	Plasma-Moly File Fit	R-9374	1/16	1/16	3/16	Low	5-35		
460 8 Cyl.		4.360	Plasma-Moly File Fit	R-10601	1/16	1/16	3/16	Std.	5-35-65		
			Plasma-Moly File Fit	R-9374	1/16	1/16	3/16	Low	5-35		
			Plasma-Moly File Fit	R-10705	1.5mm	1.5mm	3.0mm	Std.	5-35-65		
Race Blocks 8 Cyl.		4.500	Plasma-Moly File Fit	R-10451	1/16	1/16	3/16	Std.	5-35		
		4.563	Plasma-Moly File Fit	R-10441	1/16	1/16	3/16	Std.	5		
		4.625	Plasma-Moly File Fit	R-10433	1/16	1/16	3/16	Std.	5		
		4.500	Plasma-Moly File Fit	R-10317	1/16	1/16	3/16	Low	5-35		
		4.563	Plasma-Moly File Fit	R-10319	1/16	1/16	3/16	Low	5		
		4.500	Plasma-Moly File Fit	R-10452	.043	1/16	3/16	Std.	5		
		4.563	Plasma-Moly File Fit	R-10450	.043	1/16	3/16	Std.	5-45		
		4.500	Plasma-Moly File Fit	R-10316	.043	1/16	3/16	Low	5-35		
		4.563	Plasma-Moly File Fit	R-10318	.043	1/16	3/16	Low	5-45		
		4.625	Plasma-Moly File Fit	R-10339	.047	1/16	3/16	Std.	5		
		4.500	Plasma-Moly File Fit	R-10706	1.5mm	1.5mm	3.0mm	Std.	5-35-65		
Honda											
1.6L 4 Cyl.		75mm	Plasma-Moly File Fit	R-10599	1.0mm	1.2mm	2.8mm	Std.	.13-.64MM		
1.8L 4 Cyl.		81mm	Plasma-Moly File Fit	R-10600	1.0mm	1.2mm	2.8mm	Std.	.13-.64MM		
Oldsmobile											
400 8 Cyl.	1965-70	4.000	Plasma-Moly	R-9903	5/64	5/64	3/16	Std.	Std-20-30-60		



PISTON RING SET APPLICATIONS

Engine	Notes	Bore	Ring Set Type	Set P/N	Top	2nd	Oil	Tension	Available Sizes
Oldsmobile (Cont'd)									
400 8 Cyl. (Cont'd)	1965-70	4.000	Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65
			Claimer	R-6902	1/16	1/16	3/16	Std.	Std-30-60
			Claimer - Moly	R-8902	1/16	1/16	3/16	Std.	Std-30-40-60
			Plasma-Moly	R-9902	1/16	1/16	3/16	Std.	Std-20-30-40-60
			Plasma-Moly File Fit	R-9771	1/16	1/16	3/16	Std.	5-25-35-45-65
			Moly Top & 2nd Rings	R-10144	1/16	1/16	3/16	Std.	35
			Chrome File Fit	R-9772	1/16	1/16	3/16	Std.	35
			Plasma-Moly File Fit	R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65
Moly Top & 2nd Rings	R-10277	1/16	1/16	3/16	Low	35			
455 8 Cyl.	1968-76	4.125	Plasma-Moly	R-10374	5/64	5/64	3/16	Std.	30-60
	1968-76		Plasma-Moly File Fit	R-5879	5/64	5/64	3/16	Std.	5-35-65
			Claimer	R-6375	1/16	1/16	3/16	Std.	30-40
			Claimer - Moly	R-8375	1/16	1/16	3/16	Std.	30-40-60
			Plasma-Moly	R-10375	1/16	1/16	3/16	Std.	Std-30-40
			Plasma-Moly File Fit	R-9346	1/16	1/16	3/16	Low	5-25-35-45-65
Plasma-Moly File Fit	R-9787	.043	1/16	3/16	Low	5-35-65			
DRCE Blocks 8 Cyl.		4.500	Plasma-Moly File Fit	R-10451	1/16	1/16	3/16	Std.	5-35
		4.563	Plasma-Moly File Fit	R-10441	1/16	1/16	3/16	Std.	5
		4.500	Plasma-Moly File Fit	R-10317	1/16	1/16	3/16	Low	5-35
		4.563	Plasma-Moly File Fit	R-10319	1/16	1/16	3/16	Low	5
		4.500	Plasma-Moly File Fit	R-10452	.043	1/16	3/16	Std.	5
		4.563	Plasma-Moly File Fit	R-10450	.043	1/16	3/16	Std.	5-45
		4.500	Plasma-Moly File Fit	R-10316	.043	1/16	3/16	Low	5-35
		4.563	Plasma-Moly File Fit	R-10318	.043	1/16	3/16	Low	5-45
		4.625	Plasma-Moly File Fit	R-10339	.047	1/16	3/16	Std.	5
		4.500	Plasma-Moly File Fit	R-10706	1.5mm	1.5mm	3.0mm	Std.	5-35-65
Pontiac									
301 8 Cyl.	1977-81	4.000	Plasma-Moly File Fit	R-9343	5/64	5/64	3/16	Std.	5-25-35-45-65
			Plasma-Moly File Fit	R-9771	1/16	1/16	3/16	Std.	5-25-35-45-65
			Plasma-Moly File Fit	R-9401	1/16	1/16	3/16	Low	5-10-25-35-45-65
350 8 Cyl.		3.875	Plasma-Moly	R-9967	1/16	1/16	1/8	Std.	60
			Plasma-Moly File Fit	R-9211	1/16	1/16	1/8	Low	65
400 8 Cyl.	1967-79	4.120	Plasma-Moly File Fit	R-9228	5/64	5/64	3/16	Std.	35
			Plasma-Moly File Fit	R-9255	1/16	1/16	1/8	Low	35
428 8 Cyl.	1967-69	4.120	Plasma-Moly File Fit	R-9228	5/64	5/64	3/16	Std.	35
			Plasma-Moly File Fit	R-9255	1/16	1/16	1/8	Low	35
455 8 Cyl.		4.151	Plasma-Moly File Fit	R-9548	1/16	1/16	3/16	Low	65

Piston Ring Sets by Bore Diameter – Numerical Listing



Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
HellFire Ring Sets						
HellFire rings are now available in complete ring sets. The now famous HellFire top rings are combined with a SPEED-PRO reverse twist second ring and a Standard Tension oil ring for exceptional oil control.						
75mm		R-19200	4 Cyl.	Top Ring Second Ring Oil Ring	Standard Fit HellFire Standard Tension	Std-.50MM
	1.0mm	BR-19-124				
	1.2mm	BT-10-531				
	2.8mm	SS-50U-3957				
81mm		R-19201	4 Cyl.	Top Ring Second Ring Oil Ring	Standard Fit HellFire Standard Tension	Std-.50MM
	1.0mm	BR-19-125				
	1.2mm	BT-10-556				
	2.8mm	SS-50U-3995				
84mm		R-19202	4 Cyl.	Top Ring Second Ring Oil Ring	Standard Fit HellFire Standard Tension	Std Only
	1.0mm	BR-19-126				
	1.2mm	BT-10-640				
	2.8mm	SS-50U-3767				
84.8mm		R-19206	4 Cyl.	Top Ring Second Ring Oil Ring	Standard Fit HellFire Standard Tension	Std-.50MM
	1.5mm	BR-19-128				
	1.75mm	RBT-10-2994				
	3.0mm	SS-50U-3677				
90.2mm		R-19115	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Standard Tension	.13-.64-.89-1.14MM
	1.5mm	BR-19-130				
	1.5mm	RBT-10-227				
	3.0mm	SS-50U-3923				
99.0mm		R-19114	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Standard Tension	.13-.38MM
	1.5mm	BR-19-129				
	1.5mm	RBT-10-303				
	3.0mm	SS-50U-3721				
4.000		R-19100	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	5-35-45-65
	1/16	BR-19-111				
	1/16	RBT-10-072				
	3/16	SS-50U-2800				
4.000		R-19112	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Standard Tension	5-35-65
	1.5mm	BR-19-131				
	1.5mm	RBT-10-209				
	3.0mm	SS-50U-3687				
4.125		R-19101	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	5-35-45-65
	1/16	BR-19-112				
	1/16	RBT-10-096				
	3/16	SS-50U-462				
4.125		R-19113	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Standard Tension	65
	1.5mm	BR-19-132				
	1.5mm	RBT-10-283				
	3.0mm	SS-50U-3771				
4.250		R-19102	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	35-65
	1/16	BR-19-113				
	1/16	RBT-10-075				
	3/16	SS-50U-619				
4.320		R-19103	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	35
	1/16	BR-19-114				
	1/16	RBT-10-076				
	3/16	SS-50U-424				
4.360		R-19104	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	35
	1/16	BR-19-115				
	1/16	RBT-10-089				
	3/16	SS-50U-639				
4.375		R-19105	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	5
	1/16	BR-19-116				
	1/16	RBT-10-077				
	3/16	SS-50U-705				
4.440		R-19106	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit HellFire Standard Tension	5
	1/16	BR-19-117				
	1/16	RBT-10-107				
	3/16	SS-50U-632				



Piston Ring Sets by Bore Diameter – Numerical Listing

Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
HellFire Ring Sets - cont'd.						
4.500	1/16	R-19107 BR-19-118	8 Cyl.	Top Ring	File Fit HellFire	5-35-65
	1/16	RBT-10-180		Second Ring		
	3/16	SS-50U-787		Oil Ring	Standard Tension	
4.500	.043	R-19117 BR-19-119	8 Cyl.	Top Ring	File Fit HellFire	5-65
	.043	RBT-10-317		Second Ring		
	3.0mm	SS-99U-2023		Oil Ring	Low Tension	
4.600	1/16	R-19109 BR-19-108	8 Cyl.	Top Ring	File Fit HellFire	5
	1/16	RBT-10-212		Second Ring		
	3/16	SS-50U-2704		Oil Ring	Standard Tension	
4.600	.043	R-19108 BR-19-102	8 Cyl.	Top Ring	File Fit HellFire	5
	1/16	RBT-10-212		Second Ring		
	3/16	SS-50U-2704		Oil Ring	Standard Tension	
4.600	.043	R-19118 BR-19-102	8 Cyl.	Top Ring	File Fit HellFire	5-30
	.043	RBT-10-233		Second Ring		
	3.0mm	SS-99U-2011		Oil Ring	Low Tension	
4.675	.043	R-19110 BR-19-104	8 Cyl.	Top Ring	File Fit HellFire	5
	1/16	RBT-10-194		Second Ring		
	3/16	SS-50U-1680		Oil Ring	Standard Tension	
Claimer Series Ring Sets						
A new series of piston ring sets, featuring race proven designs combined with outstanding value. Beveled 1/16" top rings deliver enhanced high RPM sealing. Claimer Series sets are also available with a moly faced top ring, for greater durability. All of these sets utilize a tapered iron second ring, which provides improved oil control under race conditions. Although economically priced, Claimer Series sets still include our famous SS50U oil ring.						
4.000	1/16	R-6902 BT-10-557	8 Cyl.	Top Ring	Standard Fit Standard	Std-30-60
	1/16	RBT-10-102		Second Ring		
	3/16	SS-50U-5029		Oil Ring	Standard Tension	
4.000	1/16	R-8902 BR-10PF-177	8 Cyl.	Top Ring	Standard Fit Moly	Std-30-40-60
	1/16	RBT-10-102		Second Ring		
	3/16	SS-50U-5029		Oil Ring	Standard Tension	
4.125	1/16	R-6375 BT-10-059	8 Cyl.	Top Ring	Standard Fit Standard	30-40
	1/16	RBT-10-084		Second Ring		
	3/16	SS-50U-640		Oil Ring	Standard Tension	
4.125	1/16	R-8375 BRI-10Y-093	8 Cyl.	Top Ring	Standard Fit Moly	30-40-60
	1/16	RBT-10-084		Second Ring		
	3/16	SS-50U-640		Oil Ring	Standard Tension	
Plasma-Moly Standard Gap Ring Sets						
These sets include all of the features of SPEED-PRO's file fit plasma-moly sets, without the need for file fitting. The face of the top rings are filled with the latest generation Plasma Moly. Improved bond strength of this applied coating provides excellent resistance to flaking. The controlled porosity of the coating results in improved top ring lubrication. Due to the high melting point of moly, this ring set is highly resistant to scuffing. Recommended for street use, marine use, and for racing where file fitting is not necessary.						
3.780	5/64	R-10515 BR-18PF-161	4 Cyl.	Top Ring	Standard Gap Plasma-Moly	30
	5/64	RBT-10-098		Second Ring		
	3/16	SS-50U-5026		Oil Ring	Standard Tension	
3.800	5/64	R-10499 BR-18PF-159	6 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-30
	5/64	RBT-10-035		Second Ring		
	3/16	SS-50U-267		Oil Ring	Standard Tension	
3.875	1/16	R-9967 BR-18PF-060	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	60
	1/16	RBT-10-033		Second Ring		
	1/8	SS-50U-1880		Oil Ring	Standard Tension	

Piston Ring Sets by Bore Diameter – Numerical Listing



Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly Standard Gap Ring Sets - cont'd.						
4.000	5/64	R-9903 BR-18PF-063	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-20-30-60
	5/64	RBT-10-022		Second Ring		
	3/16	SS-50U-5029		Oil Ring	Standard Tension	
4.000	1/16	R-9902 BR-18PF-062	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-20-30-40-60
	1/16	RBT-10-102		Second Ring		
	3/16	SS-50U-5029		Oil Ring	Standard Tension	
4.000	1/16	R-9968 BR-18PF-062	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	30-40-60
	1/16	RBT-10-102		Second Ring		
	1/8	SS-50U-1856		Oil Ring	Standard Tension	
4.000	1.5mm	R-10471 BR-18PF-150	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-30-40
	1.5mm	RBT-10-201		Second Ring		
	4.0mm	SS-50U-5066		Oil Ring	Standard Tension	
4.125	5/64	R-10374 BR-18PF-131	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	30-60
	5/64	RBT-10-028		Second Ring		
	3/16	SS-50U-462		Oil Ring	Standard Tension	
4.125	1/16	R-10375 BR-18PF-132	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-30-40
	1/16	RBT-10-193		Second Ring		
	3/16	SS-50U-462		Oil Ring	Standard Tension	
4.250	5/64	R-9905 BR-18PF-065	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-30-60
	5/64	RBT-10-024		Second Ring		
	3/16	SS-50U-619		Oil Ring	Standard Tension	
4.250	1/16	R-9904 BR-18PF-064	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-20-30-60
	1/16	RBT-10-103		Second Ring		
	3/16	SS-50U-619		Oil Ring	Standard Tension	
4.360	1/16	R-10593 BR-18PF-188	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	30
	1/16	RBT-10-289		Second Ring		
	3/16	SS-50U-639		Oil Ring	Standard Tension	
4.500	1/16	R-10595 BR-18PF-191	8 Cyl.	Top Ring	Standard Gap Plasma-Moly	Std-60
	1/16	RBT-10-302		Second Ring		
	3/16	SS-50U-787		Oil Ring	Standard Tension	
Plasma-Moly File Fit Ring Sets						
SPEED-PRO's engineering expertise delivers superior quality piston ring sets with numerous advantages. The face of the top rings are filled with the latest generation Plasma Moly. Improved bond strength of this applied coating provides excellent resistance to flaking. The controlled porosity of the coating results in improved top ring lubrication. Due to the high melting point of moly, this ring set is highly resistant to scuffing. Recommended use for all racing applications, where file fitting the ring end gap will deliver maximum power.						
75mm	1.0mm	R-10599 RF-18PF-194	4 Cyl.	Top Ring	File Fit Plasma-Moly	.13-.64MM
	1.2mm	RBT-10-309		Second Ring		
	2.8mm	SS-50U-3957		Oil Ring	Standard Tension	
81mm	1.0mm	R-10600 RF-18PF-195	4 Cyl.	Top Ring	File Fit Plasma-Moly	.13-.64MM
	1.2mm	RBT-10-310		Second Ring		
	2.8mm	SS-50U-3962		Oil Ring	Standard Tension	
3.188	1/16	R-10230 BR-18PF-001	4 Cyl.	Top Ring	File Fit Plasma-Moly	5
	5/64	RBT-10-063		Second Ring		
	4.0mm	SS-50U-5046		Oil Ring	Low Tension	
3.500	1/16	R-9840 BR-18PF-054	4 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-101		Second Ring		
	3/16	SS-50U-707		Oil Ring	Low Tension	



Piston Ring Sets by Bore Diameter – Numerical Listing

Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly File Fit Ring Sets - cont'd.						
3.551 (90.2mm)	1.5mm	R-10596 RF-13PF-025	8 Cyl.	Top Ring	File Fit Plasma-Moly	.64-.89-1.14MM
	1.5mm	RBT-10-227		Second Ring	Standard Tension	
	3.0mm	SS-50U-3923		Oil Ring		
3.575	1/16	R-9602 BR-18PF-002	4 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-073		Second Ring	Low Tension	
	1/8	SS-50U-1848		Oil Ring		
3.625	1/16	R-9637 BR-18PF-003	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-061		Second Ring	Low Tension	
	3/16	SS-50U-5006		Oil Ring		
3.736	5/64	R-10434 BR-18PF-143	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	5/64	RBT-10-203		Second Ring	Standard Tension	
	3/16	SS-50U-757		Oil Ring		
3.736	5/64	R-10473 BR-18PF-143	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	5/64	RBT-10-203		Second Ring	Low Tension	
	3/16	SS-50U-5049		Oil Ring		
3.736	1/16	R-10294 BR-18PF-110	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-178		Second Ring	Standard Tension	
	3/16	SS-50U-757		Oil Ring		
3.736	1/16	R-10295 BR-18PF-110	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-178		Second Ring	Low Tension	
	3/16	SS-50U-5049		Oil Ring		
3.780	1/16	R-10576 BR-18PF-173	4 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-236		Second Ring	Low Tension	
	3/16	SS-50U-585		Oil Ring		
3.800	5/64	R-10437 BR-18PF-144	6 Cyl.	Top Ring	File Fit Plasma-Moly	35
	5/64	RBT-10-204		Second Ring	Standard Tension	
	3/16	SS-50U-267		Oil Ring		
3.800	1/16	R-9985 BR-18PF-076	6 Cyl.	Top Ring	File Fit Plasma-Moly	5-15-25-35
	1/16	RBT-10-109		Second Ring	Low Tension	
	3/16	SS-50U-5034		Oil Ring		
3.875	1/16	R-9621 BR-18PF-007	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	1/16	RBT-10-079		Second Ring	Low Tension	
	3/16	SS-50U-573		Oil Ring		
3.875	1/16	R-9211 BR-18PF-007	8 Cyl.	Top Ring	File Fit Plasma-Moly	65
	1/16	RBT-10-079		Second Ring	Low Tension	
	1/8	SS-50U-1853		Oil Ring		
3.897	1.5mm	R-10598 RF-13PF-026	8 Cyl.	Top Ring	File Fit Plasma-Moly	.13-.38MM
	1.5mm	RBT-10-303		Second Ring	Standard Tension	
	3.0mm	SS-50U-3721		Oil Ring		
4.000	5/64	R-9343 BR-18PF-013	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-25-35-45-65
	5/64	RBT-10-022		Second Ring	Standard Tension	
	3/16	SS-50U-5029		Oil Ring		
4.000	1/16	R-9771 BR-18PF-012	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-25-35-45-65
	1/16	RBT-10-072		Second Ring	Standard Tension	
	3/16	SS-50U-5029		Oil Ring		
4.000	1/16	R-10144 BR-18PF-012	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10PF-001		Second Ring	Plasma-Moly	
	3/16	SS-50U-5029		Oil Ring		

Piston Ring Sets by Bore Diameter – Numerical Listing



Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly File Fit Ring Sets - cont'd.						
4.000	1/16	R-9401 BR-18PF-012	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-10-25-35-45-65
	1/16	RBT-10-072		Second Ring		
	3/16	SS-50U-567		Oil Ring	Low Tension	
4.000	1/16	R-10277 BR-18PF-012	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10PF-001		Second Ring	Plasma-Moly	
	3/16	SS-50U-567		Oil Ring	Low Tension	
4.000	1/16	R-9342 BR-18PF-012	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-45-65
	1/16	RBT-10-072		Second Ring		
	1/8	SS-50U-1856		Oil Ring	Standard Tension	
4.000	.043	R-10393 BR-18PF-044	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-072		Second Ring		
	3/16	SS-50U-5029		Oil Ring	Standard Tension	
4.000	.043	R-9786 BR-18PF-044	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-072		Second Ring		
	3/16	SS-50U-567		Oil Ring	Low Tension	
4.000	1.5mm	R-10603 BR-18PF-168	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-25-35-45-65
	1.5mm	RBT-10-209		Second Ring		
	3.0mm	SS-50U-3687		Oil Ring	Standard Tension	
4.000	1.5mm	R-10701 BT-18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-45-65
	1.5mm	THG-10		Second Ring		
	3.0mm	SS-99U		Oil Ring	Standard Tension	
4.000	1.5mm	R-10472 BR-18PF-151	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-45
	1.5mm	RBT-10-209		Second Ring		
	4.0mm	SS-50U-5066		Oil Ring	Standard Tension	
4.000	1.5mm	R-10470 BR-18PF-151	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1.5mm	RBT-10-209		Second Ring		
	4.0mm	SS-50U-5067		Oil Ring	Low Tension	
4.040	1/16	R-9357 BR-18PF-014	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-085		Second Ring		
	3/16	SS-50U-588		Oil Ring	Low Tension	
4.050	5/64	R-9219 BR-18PF-016	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	5/64	RBT-10-032		Second Ring		
	3/16	SS-50U-413		Oil Ring	Standard Tension	
4.050	5/64	R-9220 BR-18PF-016	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	3/32	RBT-10-016		Second Ring		
	3/16	SS-50U-413		Oil Ring	Standard Tension	
4.050	1/16	R-9281 BR-18PF-015	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-081		Second Ring		
	3/16	SS-50U-565		Oil Ring	Low Tension	
4.094	5/64	R-9210 BR-18PF-020	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	5/64	RBT-10-023		Second Ring		
	3/16	SS-50U-562		Oil Ring	Low Tension	
4.120	5/64	R-9228 BR-18PF-040	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	5/64	RBT-10-037		Second Ring		
	3/16	SS-50U-649		Oil Ring	Standard Tension	
4.120	1/16	R-9255 BR-18PF-041	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-097		Second Ring		
	1/8	SS-50U-1864		Oil Ring	Low Tension	



Piston Ring Sets by Bore Diameter – Numerical Listing

Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly File Fit Ring Sets - cont'd.						
4.125	5/64	R-5879 BR-18PF-022	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	5/64	RBT-10-050		Second Ring	Standard Tension	
	3/16	SS-50U-462		Oil Ring		
4.125	1/16	R-10248 BR-18PF-021	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-25-35-45-65
	1/16	RBT-10-096		Second Ring	Standard Tension	
	3/16	SS-50U-462		Oil Ring		
4.125	1/16	R-9346 BR-18PF-021	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-25-35-45-65
	1/16	RBT-10-096		Second Ring	Low Tension	
	3/16	SS-50U-563		Oil Ring		
4.125	1/16	R-10279 BR-18PF-021	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10PF-002		Second Ring	Plasma-Moly	
	3/16	SS-50U-563		Oil Ring		
4.125	1/16	R-10202 BR-18PF-021	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-45
	1/16	RBT-10-096		Second Ring	Standard Tension	
	1/8	SS-50U-2007		Oil Ring		
4.125	1/16	R-10206 BR-18PF-021	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-096		Second Ring	Low Tension	
	1/8	SS-50U-5043		Oil Ring		
4.125	.043	R-9787 BR-18PF-045	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-096		Second Ring	Low Tension	
	3/16	SS-50U-563		Oil Ring		
4.125	1.5mm	R-10604 BR-18PF-187	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-45-65
	1.5mm	RBT-10-283		Second Ring	Standard Tension	
	3.0mm	SS-50U-3771		Oil Ring		
4.125	1.5mm	R-10702 BT-18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-45-65
	1.5mm	THG-10		Second Ring	Standard Tension	
	3.0mm	SS-99U		Oil Ring		
4.130	1/16	R-9280 BR-18PF-023	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35
	1/16	RBT-10-084		Second Ring	Low Tension	
	3/16	SS-50U-580		Oil Ring		
4.130	1/16	R-9345 BR-18PF-023	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-084		Second Ring	Low Tension	
	1/8	SS-50U-1867		Oil Ring		
4.151	1/16	R-9548 BR-18PF-025	8 Cyl.	Top Ring	File Fit Plasma-Moly	65
	1/16	RBT-10-086		Second Ring	Low Tension	
	3/16	SS-50U-5010		Oil Ring		
4.165	1/16	R-9349 BR-18PF-026	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35
	1/16	RBT-10-087		Second Ring	Low Tension	
	3/16	SS-50U-583		Oil Ring		
4.233	1/16	R-9767 BR-18PF-027	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	1/16	RBT-10-088		Second Ring	Low Tension	
	3/16	SS-50U-597		Oil Ring		
4.250	5/64	R-9590 BR-18PF-030	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	5/64	RBT-10-024		Second Ring	Standard Tension	
	3/16	SS-50U-619		Oil Ring		
4.250	1/16	R-9745 BR-18PF-029	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	1/16	RBT-10-075		Second Ring	Standard Tension	
	3/16	SS-50U-619		Oil Ring		

Piston Ring Sets by Bore Diameter – Numerical Listing



Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly File Fit Ring Sets - cont'd.						
4.250	1/16	R-9344 BR-18PF-029	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-075		Second Ring		
	3/16	SS-50U-559		Oil Ring	Low Tension	
4.250	.043	R-9788 BR-18PF-046	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	1/16	RBT-10-075		Second Ring		
	3/16	SS-50U-559		Oil Ring	Low Tension	
4.250	1.5mm	R-10703 BT18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1.5mm	THG10		Second Ring		
	3.0mm	SS99U		Oil Ring	Standard Tension	
4.313	5/64	R-5883 BR-18PF-031	8 Cyl.	Top Ring	File Fit Plasma-Moly	35
	5/64	RBT-10-036		Second Ring		
	3/16	SS-50U-623		Oil Ring	Standard Tension	
4.320	5/64	R-9224 BR-18PF-033	8 Cyl.	Top Ring	File Fit Plasma-Moly	35-65
	5/64	RBT-10-004		Second Ring		
	3/16	SS-50U-424		Oil Ring	Standard Tension	
4.320	1/16	R-9798 BR-18PF-032	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-076		Second Ring		
	3/16	SS-50U-424		Oil Ring	Standard Tension	
4.320	1/16	R-9278 BR-18PF-032	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-076		Second Ring		
	3/16	SS-50U-579		Oil Ring	Low Tension	
4.320	1.5mm	R-10704 BT18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1.5mm	THG10		Second Ring		
	3.0mm	SS99U		Oil Ring	Standard Tension	
4.360	1/16	R-10601 BR-18PF-034	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1/16	RBT-10-089		Second Ring		
	3/16	SS-50U-639		Oil Ring	Standard Tension	
4.360	1/16	R-9374 BR-18PF-034	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35
	1/16	RBT-10-089		Second Ring		
	3/16	SS-50U-589		Oil Ring	Low Tension	
4.360	1.5mm	R-10705 BT18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35-65
	1.5mm	THG10		Second Ring		
	3.0mm	SS99U		Oil Ring	Standard Tension	
4.375	1/16	R-9799 BR-18PF-035	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-077		Second Ring		
	3/16	SS-50U-705		Oil Ring	Standard Tension	
4.375	1/16	R-9406 BR-18PF-035	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-077		Second Ring		
	3/16	SS-50U-576		Oil Ring	Low Tension	
4.375	.043	R-9789 BR-18PF-047	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-077		Second Ring		
	3/16	SS-50U-576		Oil Ring	Low Tension	
4.440	1/16	R-10133 BR-18PF-069	8 Cyl.	Top Ring	File Fit Plasma-Moly	5-35
	1/16	RBT-10-107		Second Ring		
	3/16	SS-50U-632		Oil Ring	Standard Tension	
4.440	1/16	R-9332 BR-18PF-069	8 Cyl.	Top Ring	File Fit Plasma-Moly	5
	1/16	RBT-10-107		Second Ring		
	3/16	SS-50U-577		Oil Ring	Low Tension	



Piston Ring Sets by Bore Diameter – Numerical Listing

Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Plasma-Moly File Fit Ring Sets - cont'd.						
4.466	2.0mm	R-10575 BR-18PF-172	8 Cyl.	Top Ring	File Fit Plasma-Moly Plasma-Moly Standard Tension	5
	1.5mm	RBT-10PF-026		Second Ring		
	4.0mm	SS-50U-2499		Oil Ring		
4.500	1/16	R-10451 BR-18PF-084	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5-35
	1/16	RBT-10-180		Second Ring		
	3/16	SS-50U-787		Oil Ring		
4.500	1/16	R-10317 BR-18PF-084	8 Cyl.	Top Ring	File Fit Plasma-Moly Low Tension	5-35
	1/16	RBT-10-180		Second Ring		
	3/16	SS-50U-1626		Oil Ring		
4.500	.043	R-10452 BR-18PF-107	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5
	1/16	RBT-10-180		Second Ring		
	3/16	SS-50U-787		Oil Ring		
4.500	.043	R-10316 BR-18PF-107	8 Cyl.	Top Ring	File Fit Plasma-Moly Low Tension	5-35
	1/16	RBT-10-180		Second Ring		
	3/16	SS-50U-1626		Oil Ring		
4.500	1.5mm	R-10706 BT18PF	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5-35-65
	1.5mm	THG10		Second Ring		
	3.0mm	SS99U		Oil Ring		
4.563	1/16	R-10441 BR-18PF-095	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5
	1/16	RBT-10-181		Second Ring		
	3/16	SS-50U-2703		Oil Ring		
4.563	1/16	R-10319 BR-18PF-095	8 Cyl.	Top Ring	File Fit Plasma-Moly Low Tension	5
	1/16	RBT-10-181		Second Ring		
	3/16	SS-50U-1627		Oil Ring		
4.563	.043	R-10450 BR-18PF-096	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5-45
	1/16	RBT-10-181		Second Ring		
	3/16	SS-50U-2703		Oil Ring		
4.563	.043	R-10318 BR-18PF-096	8 Cyl.	Top Ring	File Fit Plasma-Moly Low Tension	5-45
	1/16	RBT-10-181		Second Ring		
	3/16	SS-50U-1627		Oil Ring		
4.625	1/16	R-10433 BR-18PF-140	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5
	1/16	RBT-10-182		Second Ring		
	3/16	SS-50U-1667		Oil Ring		
4.625	.047	R-10339 BR-18PF-097	8 Cyl.	Top Ring	File Fit Plasma-Moly Standard Tension	5
	1/16	RBT-10-182		Second Ring		
	3/16	SS-50U-1667		Oil Ring		
4.675	1/16	BR-18PF-134	8 Cyl.	Top Ring	File Fit Standard Tension	
	1/16	RBT-10-194		Second Ring		
	3/16	SS-50U-1680		Oil Ring		
4.675	.043	BR-18PF-174	8 Cyl.	Top Ring	File Fit Standard Tension	
	1/16	RBT-10-194		Second Ring		
	3/16	SS-50U-1680		Oil Ring		
4.750	.047	BR-18PF-175	8 Cyl.	Top Ring	File Fit Standard Tension	
	1/16	RBT-10-241		Second Ring		
	3/16	SS-50U-2754		Oil Ring		
4.800	.047	BR-18PF-176	8 Cyl.	Top Ring	File Fit Standard Tension	
	1/16	RBT-10-243		Second Ring		
	3/16	SS-50U-2755		Oil Ring		

Piston Ring Sets by Bore Diameter – Numerical Listing



Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
Chrome File Fit Ring Sets						
The face of the top ring is electroplated with chromium to provide a surface that is resistant to abrasive wear. The base material and design are the same as used in SPEED-PRO Plasma Moly ring sets, only the face coating is changed. Being chrome, the face coating will not flake off, even when exposed to high vibration and detonation. Being harder and less porous than a moly ring, chrome rings provide increased life in engines that are operated in a dusty or dirty environment. Recommended for use when running on dirt tracks and for offroad racing.						
4.000	1/16 1/16 3/16	R-9772 BR-18U-016 RBT-10-072 SS-50U-5029	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Chrome Standard Tension	35
Pro-Series Plasma-Moly File Fit Ring Sets						
Pro-Series ring sets are designed for serious racing, with several features that maximize horsepower potential. These rings are not recommended for street use! Most Pro Series sets incorporate reduced radial wall thickness rings for lower tension and enhanced sealing. They also use a very low tension, thin profile version of the SS50U, which includes a wire latch mechanism to simplify installation. This ring combination gives dependable sealing and allows maximum power production. A system creating a vacuum in the crankcase is highly recommended.						
4.000	1/16 1/16 3.0mm	R-20107 BR-18PF-012 RBT-10-072 SS-50U-3569	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly, Std. Wall Std. Wall Light Tension	35-45-65
4.000	.043 .043 3/16	R-20101 BR-18PF-169 RBT-10-231 SS-50U-2725	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly, Std. Wall Std. Wall Light Tension	5
4.000	.043 .043 3.0mm	R-20100 BR-18PF-169 RBT-10-231 SS-50U-3569	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Light Tension	5-35-45-65-125-135
4.000	1.5mm 1.5mm 3.0mm	R-20102 BR-18PF-168 RBT-10-230 SS-50U-3569	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Light Tension	45-130
4.125	1/16 1/16 3.0mm	R-20108 BR-18PF-021 RBT-10-096 SS-50U-3619	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly, Std. Wall Std. Wall Light Tension	5
4.125	.043 .043 3.0mm	R-20109 BR-18PF-186 RBT-10-282 SS-50U-3619	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Light Tension	5-35-45
4.250	.043 .043 3.0mm	R-20112 BR-18PF-192 RBT-10-306 SS-50U-3731	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Light Tension	5
4.500	.043 .043 3.0mm	R-20113 BR-18PF-197 RBT-10-317 SS-99U-2023	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Standard Tension	5-35
4.600	.043 .043 3/16	R-20105 BR-18PF-170 RBT-10-233 SS-50U-2731	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Low Tension	5
4.600	.043 .043 3.0mm	R-20104 BR-18PF-170 RBT-10-233 SS-50U-3583	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Low Tension	5
4.675	.043 .043 3.0mm	R-20106 BR-18PF-174 RBT-10-237 SS-50U-3608	8 Cyl.	Top Ring Second Ring Oil Ring	File Fit Plasma-Moly Low Tension	5-10-30



Piston Ring Sets by Bore Diameter – Numerical Listing

Bore Dia.	Width	Ring Set P/N	Cyl.	Position	Specifications	Available Oversizes
.031 Dykes						
Pressure Back (referred to as .031 Dykes) top rings feature a 1/16" wide face and a .031" step. These rings are dependant upon gas loading to provide satisfactory sealing. Low R.P.M. sealing is sacrificed for improved sealing in the higher R.P.M. ranges. The reduced weight of Pressure Back rings make them especially desirable in high R.P.M. long stroke engines. Dykes ring's radial thickness is .170" regardless of diameter. Dykes rings are not recommended for street engines. Pressure Back rings feature a Plasma Moly coating, which provides long life and superior bonding of the moly to the base material.						
4.000		R-9941	8 Cyl.		.031 Dykes	65
	1/16	PB-18PF-003		Top Ring	Plasma-Moly	
	1/16	RBT-10-072		Second Ring		
	3/16	SS-50U-567	Oil Ring	Low Tension		
4.125		R-9681	8 Cyl.		.031 Dykes	35
	1/16	PB-18PF-006		Top Ring	Plasma-Moly	
	1/16	RBT-10-096		Second Ring		
	3/16	SS-50U-563	Oil Ring	Low Tension		
4.250		R-10177	8 Cyl.		.031 Dykes	65
	1/16	PB-18PF-001		Top Ring	Plasma-Moly	
	1/16	RBT-10-075		Second Ring		
	3/16	SS-50U-559	Oil Ring	Low Tension		
4.375		R-10306	8 Cyl.		.031 Dykes	5
	1/16	PB-18PF-013		Top Ring	Plasma-Moly	
	1/16	RBT-10-077		Second Ring		
	3/16	SS-50U-576	Oil Ring	Low Tension		

Open Stock - Individual Piston Rings

.017 Dykes HellFire Rings For Supercharged Engines

The .017 Pressure Back rings listed below are available as open stock rings only. Since they are not packaged in a ring set, second and oil control rings must be ordered separately from the open stock listings.

Bore Dia.	Width	Open Stock P/N		
4.125	.017 Dykes	PB-19-100		5-65
4.250	.017 Dykes	PB-19-101		5-65
4.375	.017 Dykes	PB-19-102		5
4.440	.017 Dykes	PB-19-103		5-30
4.500	.017 Dykes	PB-19-105		5

.017 Pressure Back (Dykes) Plasma-Moly File Fit Rings

The .017 Pressure Back rings listed below are available as open stock rings only. Since they are not packaged in a ring set, second and oil control rings must be ordered separately from the open stock listings found throughout this section.

Bore Dia.	Width	Open Stock P/N	Face Material	Available Oversizes
4.000	.017 Dykes	PB-18PF-015	Plasma-Moly	35-65
4.125	.017 Dykes	PB-18PF-019	Plasma-Moly	5-65
4.250	.017 Dykes	PB-18PF-014	Plasma-Moly	5-65
4.375	.017 Dykes	PB-18PF-028	Plasma-Moly	5
4.440	.017 Dykes	PB-18PF-016	Plasma-Moly	10-35

.031 Pressure Back (Dykes) Plasma-Moly File Fit Rings

The .031 Pressure Back rings listed below are available as open stock rings only. Since they are not packaged in a ring set, second and oil control rings must be ordered separately from the open stock listings found throughout this section.

Bore Dia.	Width	Open Stock P/N	Face Material	Available Oversizes
3.736	.031 Dykes	PB-18PF-027	Plasma-Moly	45-65
3.875	.031 Dykes	PB-18PF-002	Plasma-Moly	35-65
4.320	.031 Dykes	PB-18PF-007	Plasma-Moly	5-35-65
4.400	.031 Dykes	PB-18PF-026	Plasma-Moly	5-35
4.563	.031 Dykes	PB-18PF-024	Plasma-Moly	45

.043 HellFire Top Rings

The .043 rings listed below are available individually as open stock. Since they are not packaged in a ring set, second and oil control rings must be ordered separately.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.000	.043	BR-19-100		.187	5-35-65-100
4.125	.043	BR-19-101		.192	5-35-45-65
4.500	.043	BR-19-109		.210	5
4.500	.043	BR-19-119		.175	5-35-65
4.563	.043	BR-19-110		.210	5
4.563	.043	BR-19-120		.175	5-25-65
4.600	.043	BR-19-102		.175	5-15-30-50
4.600	.043	BR-19-103		.210	5-30-50
4.675	.043	BR-19-104		.175	5-30
4.675	.043	BR-19-105		.210	5
4.675	.043	BR-19PF-200	Plasma-Moly	.175	5-10-30

.043 Wide Plasma-Moly File Fit Top Rings

The .043 rings listed below are available individually as open stock rings only. Since they are not packaged in a ring set, second and oil control rings must be ordered separately from the open stock listings found throughout this section.

Bore Dia.	Width	Open Stock P/N	Face Material	Available Oversizes
4.063	.043	BR-18PF-083	Plasma-Moly	25
4.100	.043	BR-18PF-050	Plasma-Moly	Std Only
4.440	.043	BR-18PF-108	Plasma-Moly	5

.047 HellFire Top Rings

The .047 rings listed below are available individually as open stock. Since they are not packaged in a ring set, second and oil control rings must be ordered separately.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.750	.047	BR-19-106		.210	5
4.750	.047	BR-19PF-201	Plasma-Moly	.210	5
4.800	.047	BR-19-107		.210	5
4.800	.047	BR-19PF-202	Plasma-Moly	.210	5

1.2mm Plasma-Moly File Fit Top Rings

The 1.2mm wide rings listed below are available individually as open stock only. Since they are not packaged in a ring set, second and oil control rings must be ordered separately from the open stock listings found throughout this section.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.000	1.2mm	BR-18PF-181	Plasma-Moly	.155	5-15-25-35-45-55-65-85-95-105-120
4.125	1.2mm	BR-18PF-182	Plasma-Moly	.155	Std-5-15-25-35-45-65



Open Stock - Individual Piston Rings

1/16" HellFire Top Rings

The 1/16" rings listed below are available individually as open stock. If they are not packaged in a ring set, second and oil control rings must be ordered separately.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.000	1/16	BR-19-111		.187	5-35-45-65
4.125	1/16	BR-19-112		.192	5-35-45-65
4.250	1/16	BR-19-113		.198	35-65
4.320	1/16	BR-19-114		.201	35
4.360	1/16	BR-19-115		.203	35
4.375	1/16	BR-19-116		.204	5
4.440	1/16	BR-19-117		.207	5
4.500	1/16	BR-19-118		.210	5-35-65
4.600	1/16	BR-19-108		.210	5-30

Plasma Moly Second Rings

The plain iron, Plasma Moly, reverse twist rings listed below provide all the benefits of the race-proven SPEED-PRO second ring with the added advantages of improved ring life and scuff resistance. These rings will result in longer life for high horsepower, high heat drag race engines and oval track engines used in long distance events. Unlike competitive moly second rings, the SPEED-PRO Plasma Moly second ring is made of regular ring iron providing low cylinder wall loading and reduced internal engine friction. Additionally, a reverse twist design is employed to further improve oil control. Top and oil rings must be ordered separately.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.125	1/16	RBT-10PF-002			5-35
4.500	1/16	RBT-10PF-015			5
4.675	.043	RBT-10PF-028			5-10-30

Pressure Back (Dykes) Ring Groove Spacers

Ring Groove Spacers permit the installation of .031 Dykes rings into stock 5/64" ring grooves. Since piston modifications are not required for this combination, it is legal for use in NHRA stock eliminator classes.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Spacer Dimensions
3.736 - 3.796	5/64	PBS-13-015			Std Only
4.000 - 4.060	5/64	PBS-13-002			Std Only
4.250 - 4.310	5/64	PBS-13-005			Std Only

Special Light Tension SS50U Oil Ring Assemblies

Low tension piston ring sets have evolved from the racer's quest to reduce internal engine friction. This is desirable as a reduction in the force required to rotate the engine assembly which means that more power will be available. Oil ring assemblies are an important member of the low tension ring set. The SS-50U oil rings shown in the preceding ring set listings are identified as being either Standard (19-22 lbs.) or Low (15-18 lbs.) tangential tension. These oil ring assemblies are available individually (referred to as Open Stock) as well as in complete engine sets. The use of oil ring assemblies with less than 15lbs. tangential tension would normally result in excessive oil passing the rings and entering the combustion chamber. However the development of vacuum oil control systems (which create a vacuum in the crankcase to assist the oil ring in controlling oil) have allowed the use of oil ring tensions below 15lbs. Listed below are special oil ring assemblies that produce 5-10 lbs. tangential tension for the ultimate in reduced ring drag. These assemblies are not intended for street use and should be used only with an effective vacuum oil control system.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
3.875	3/16	SS-50U-5019			60
4.000	3/16	SS-50U-5020			Std-20-30-60
4.040	3/16	SS-50U-5023			Std Only
4.125	3/16	SS-50U-5021			Std-30
4.250	3/16	SS-50U-5022			30-60

Special SS-99U Series Oil Rings

These are unique oil ring sets developed for use in high RPM oval track and drag race engines using 3.0mm rings.

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.000	3.0mm	SS-99U-2000			Std-20-30-40-60-80
4.125	3.0mm	SS-99U-2006			Std-20-30-40-60
4.600	3.0mm	SS-99U-2011			Std-25-45
4.675	3.0mm	SS-99U-2014			Std-10-25

Special Top Fuel Oil Rings

Bore Dia.	Width	Open Stock P/N	Face Material	Radial Wall	Available Oversizes
4.187	3/16	SS-50U-1695			Std Only
4.250	3/16	SS-50U-1624			Std-30

Open Stock - Individual Piston Rings



Thin Wall, Light Tension (Back Cut) Second Rings

Field testing of drag racing engines has shown that a further reduction of internal engine friction can be achieved when using second compression rings with a reduced radial thickness. The lighter tension second rings listed below have a radial wall thickness (measured from front to back of the ring) that is approximately -.030" less than conventional SPEED-PRO second rings. These thin wall (back-cut) second rings result in less cylinder wall loading and reduced internal engine friction, yet providing adequate oil control assistance. Not intended for street use and should be used only in conjunction with an effective vacuum oil control system. Available only as individual rings (Open Stock) in the sizes shown below. Top and oil control rings must be ordered separately from the open stock rings found throughout this section.

Bore Dia.	Width	Open Stock P/N	Available Oversizes
3.875	1/16	RBT-10-128	35
4.000	1/16	RBT-10-131	5-25-65
4.000	5/64	RBT-10-132	5-35-65
4.125	5/64	RBT-10-143	5-35
4.125	1/16	RBT-10-144	5-35-65
4.250	1/16	RBT-10-149	5-35-65
4.250	5/64	RBT-10-202	5-35-65



Piston Ring Sets – Numerical Listing with Specifications

Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-5879 BR-18PF-022 RBT-10-050 SS-50U-462	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	5-35-65
R-5883 BR-18PF-031 RBT-10-036 SS-50U-623	4.313	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35
R-6375 BT-10-059 RBT-10-084 SS-50U-640	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Fit Standard Standard Tension	30-40
R-6902 BT-10-557 RBT-10-102 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Fit Standard Standard Tension	Std-30-60
R-8375 BRI-10Y-093 RBT-10-084 SS-50U-640	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Fit Moly Standard Tension	30-40-60
R-8902 BR-10PF-177 RBT-10-102 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Fit Moly Standard Tension	Std-30-40-60
R-9210 BR-18PF-020 RBT-10-023 SS-50U-562	4.094	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Low Tension	35-65
R-9211 BR-18PF-007 RBT-10-079 SS-50U-1853	3.875	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Low Tension	65
R-9219 BR-18PF-016 RBT-10-032 SS-50U-413	4.050	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35
R-9220 BR-18PF-016 RBT-10-016 SS-50U-413	4.050	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 3/32 3/16	File Fit Plasma-Moly Standard Tension	35
R-9224 BR-18PF-033 RBT-10-004 SS-50U-424	4.320	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35-65
R-9228 BR-18PF-040 RBT-10-037 SS-50U-649	4.120	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35
R-9255 BR-18PF-041 RBT-10-097 SS-50U-1864	4.120	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Low Tension	35
R-9278 BR-18PF-032 RBT-10-076 SS-50U-579	4.320	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35-65
R-9280 BR-18PF-023 RBT-10-084 SS-50U-580	4.130	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35
R-9281 BR-18PF-015 RBT-10-081 SS-50U-565	4.050	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35

Piston Ring Sets – Numerical Listing with Specifications



Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-9332 BR-18PF-069 RBT-10-107 SS-50U-577	4.440	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5
R-9342 BR-18PF-012 RBT-10-072 SS-50U-1856	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Standard Tension	35-45-65
R-9343 BR-18PF-013 RBT-10-022 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	5-25-35-45-65
R-9344 BR-18PF-029 RBT-10-075 SS-50U-559	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35-65
R-9345 BR-18PF-023 RBT-10-084 SS-50U-1867	4.130	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Low Tension	35
R-9346 BR-18PF-021 RBT-10-096 SS-50U-563	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-25-35-45-65
R-9349 BR-18PF-026 RBT-10-087 SS-50U-583	4.165	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35
R-9357 BR-18PF-014 RBT-10-085 SS-50U-588	4.040	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35
R-9374 BR-18PF-034 RBT-10-089 SS-50U-589	4.360	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35
R-9401 BR-18PF-012 RBT-10-072 SS-50U-567	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-10-25-35-45-65
R-9406 BR-18PF-035 RBT-10-077 SS-50U-576	4.375	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5
R-9548 BR-18PF-025 RBT-10-086 SS-50U-5010	4.151	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	65
R-9590 BR-18PF-030 RBT-10-024 SS-50U-619	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	5-35-65
R-9602 BR-18PF-002 RBT-10-073 SS-50U-1848	3.575	4 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Low Tension	5
R-9621 BR-18PF-007 RBT-10-079 SS-50U-573	3.875	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35-65
R-9637 BR-18PF-003 RBT-10-061 SS-50U-5006	3.625	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5



Piston Ring Sets – Numerical Listing with Specifications

Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-9681 PB-18PF-006 RBT-10-096 SS-50U-563	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	.031 Dykes Plasma-Moly Low Tension	35
R-9745 BR-18PF-029 RBT-10-075 SS-50U-619	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	35-65
R-9767 BR-18PF-027 RBT-10-088 SS-50U-597	4.233	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35
R-9771 BR-18PF-012 RBT-10-072 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-25-35-45-65
R-9772 BR-18U-016 RBT-10-072 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Chrome Standard Tension	35
R-9786 BR-18PF-044 RBT-10-072 SS-50U-567	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35-65
R-9787 BR-18PF-045 RBT-10-096 SS-50U-563	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35-65
R-9788 BR-18PF-046 RBT-10-075 SS-50U-559	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	35-65
R-9789 BR-18PF-047 RBT-10-077 SS-50U-576	4.375	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	5
R-9798 BR-18PF-032 RBT-10-076 SS-50U-424	4.320	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-35-65
R-9799 BR-18PF-035 RBT-10-077 SS-50U-705	4.375	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5
R-9840 BR-18PF-054 RBT-10-101 SS-50U-707	3.500	4 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35
R-9902 BR-18PF-062 RBT-10-102 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Gap Plasma-Moly Standard Tension	Std-20-30-40-60
R-9903 BR-18PF-063 RBT-10-022 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	Standard Gap Plasma-Moly Standard Tension	Std-20-30-60
R-9904 BR-18PF-064 RBT-10-103 SS-50U-619	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Gap Plasma-Moly Standard Tension	Std-20-30-60
R-9905 BR-18PF-065 RBT-10-024 SS-50U-619	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	Standard Gap Plasma-Moly Standard Tension	Std-30-60

Piston Ring Sets – Numerical Listing with Specifications



Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-9941 PB-18PF-003 RBT-10-072 SS-50U-567	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	.031 Dykes Plasma-Moly Low Tension	65
R-9967 BR-18PF-060 RBT-10-033 SS-50U-1880	3.875	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	Standard Gap Plasma-Moly Standard Tension	60
R-9968 BR-18PF-062 RBT-10-102 SS-50U-1856	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	Standard Gap Plasma-Moly Standard Tension	30-40-60
R-9985 BR-18PF-076 RBT-10-109 SS-50U-5034	3.800	6 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-15-25-35
R-10133 BR-18PF-069 RBT-10-107 SS-50U-632	4.440	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-35
R-10144 BR-18PF-012 RBT-10PF-001 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Plasma-Moly Standard Tension	35
R-10177 PB-18PF-001 RBT-10-075 SS-50U-559	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	.031 Dykes Plasma-Moly Low Tension	65
R-10202 BR-18PF-021 RBT-10-096 SS-50U-2007	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Standard Tension	35-45
R-10206 BR-18PF-021 RBT-10-096 SS-50U-5043	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 1/8	File Fit Plasma-Moly Low Tension	35
R-10230 BR-18PF-001 RBT-10-063 SS-50U-5046	3.188	4 Cyl.	Top Ring Second Ring Oil Ring	1/16 5/64 4.0mm	File Fit Plasma-Moly Low Tension	5
R-10248 BR-18PF-021 RBT-10-096 SS-50U-462	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-25-35-45-65
R-10277 BR-18PF-012 RBT-10PF-001 SS-50U-567	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Plasma-Moly Low Tension	35
R-10279 BR-18PF-021 RBT-10PF-002 SS-50U-563	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Plasma-Moly Low Tension	5
R-10294 BR-18PF-110 RBT-10-178 SS-50U-757	3.736	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	35
R-10295 BR-18PF-110 RBT-10-178 SS-50U-5049	3.736	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35
R-10306 PB-18PF-013 RBT-10-077 SS-50U-576	4.375	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	.031 Dykes Plasma-Moly Low Tension	5



Piston Ring Sets – Numerical Listing with Specifications

Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-10316 BR-18PF-107 RBT-10-180 SS-50U-1626	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35
R-10317 BR-18PF-084 RBT-10-180 SS-50U-1626	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5-35
R-10318 BR-18PF-096 RBT-10-181 SS-50U-1627	4.563	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Low Tension	5-45
R-10319 BR-18PF-095 RBT-10-181 SS-50U-1627	4.563	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	5
R-10339 BR-18PF-097 RBT-10-182 SS-50U-1667	4.625	8 Cyl.	Top Ring Second Ring Oil Ring	.047 1/16 3/16	File Fit Plasma-Moly Standard Tension	5
R-10374 BR-18PF-131 RBT-10-028 SS-50U-462	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	Standard Gap Plasma-Moly Standard Tension	30-60
R-10375 BR-18PF-132 RBT-10-193 SS-50U-462	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Gap Plasma-Moly Standard Tension	Std-30-40
R-10393 BR-18PF-044 RBT-10-072 SS-50U-5029	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Standard Tension	35
R-10433 BR-18PF-140 RBT-10-182 SS-50U-1667	4.625	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5
R-10434 BR-18PF-143 RBT-10-203 SS-50U-757	3.736	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35
R-10437 BR-18PF-144 RBT-10-204 SS-50U-267	3.800	6 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Standard Tension	35
R-10441 BR-18PF-095 RBT-10-181 SS-50U-2703	4.563	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5
R-10450 BR-18PF-096 RBT-10-181 SS-50U-2703	4.563	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-45
R-10451 BR-18PF-084 RBT-10-180 SS-50U-787	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-35
R-10452 BR-18PF-107 RBT-10-180 SS-50U-787	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	File Fit Plasma-Moly Standard Tension	5
R-10470 BR-18PF-151 RBT-10-209 SS-50U-5067	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 4.0mm	File Fit Plasma-Moly Low Tension	5

Piston Ring Sets – Numerical Listing with Specifications



Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-10471 BR-18PF-150 RBT-10-201 SS-50U-5066	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 4.0mm	Standard Gap Plasma-Moly Standard Tension	Std-30-40
R-10472 BR-18PF-151 RBT-10-209 SS-50U-5066	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 4.0mm	File Fit Plasma-Moly Standard Tension	35-45
R-10473 BR-18PF-143 RBT-10-203 SS-50U-5049	3.736	8 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	File Fit Plasma-Moly Low Tension	35-65
R-10499 BR-18PF-159 RBT-10-035 SS-50U-267	3.800	6 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	Standard Gap Plasma-Moly Standard Tension	Std-30
R-10515 BR-18PF-161 RBT-10-098 SS-50U-5026	3.780	4 Cyl.	Top Ring Second Ring Oil Ring	5/64 5/64 3/16	Standard Gap Plasma-Moly Standard Tension	30
R-10575 BR-18PF-172 RBT-10PF-026 SS-50U-2499	4.466	8 Cyl.	Top Ring Second Ring Oil Ring	2.0mm 1.5mm 4.0mm	File Fit Plasma-Moly Plasma-Moly Standard Tension	5
R-10576 BR-18PF-173 RBT-10-236 SS-50U-585	3.780	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Low Tension	35
R-10593 BR-18PF-188 RBT-10-289 SS-50U-639	4.360	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Gap Plasma-Moly Standard Tension	30
R-10595 BR-18PF-191 RBT-10-302 SS-50U-787	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	Standard Gap Plasma-Moly Standard Tension	Std-60
R-10596 RF-13PF-025 RBT-10-227 SS-50U-3923	3.551	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	.64-.89-1.14MM
R-10598 RF-13PF-026 RBT-10-303 SS-50U-3721	99mm	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	.13-.38MM
R-10599 RF-18PF-194 RBT-10-309 SS-50U-3957	75mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.0mm 1.2mm 2.8mm	File Fit Plasma-Moly Standard Tension	.13-.64MM
R-10600 RF-18PF-195 RBT-10-310 SS-50U-3962	81mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.0mm 1.0mm 2.8mm	File Fit Plasma-Moly Standard Tension	.13-.64MM
R-10601 BR-18PF-034 RBT-10-089 SS-50U-639	4.360	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	File Fit Plasma-Moly Standard Tension	5-35-65
R-10603 BR-18PF-168 RBT-10-209 SS-50U-3687	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-25-35-45-65
R-10604 BR-18PF-187 RBT-10-283 SS-50U-3771	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-45-65



Piston Ring Sets – Numerical Listing with Specifications

Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-10701 BT-18PF THG-10 SS-99U	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-45-65
R-10702 BT-18PF THG-10 SS-99U	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-45-65
R-10703 BT-18PF THG-10 SS-99U	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-65
R-10704 BT-18PF THG-10 SS-99U	4.320	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-65
R-10705 BT-18PF THG-10 SS-99U	4.360	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-65
R-10706 BT-18PF THG-10 SS-99U	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	File Fit Plasma-Moly Standard Tension	5-35-65
R-19100 BR-19-111 RBT-10-072 SS-50U-2800	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5-35-45-65
R-19101 BR-19-112 RBT-10-096 SS-50U-462	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5-35-45-65
R-19102 BR-19-113 RBT-10-075 SS-50U-619	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	35-65
R-19103 BR-19-114 RBT-10-076 SS-50U-424	4.320	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	35
R-19104 BR-19-115 RBT-10-089 SS-50U-639	4.360	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	35
R-19105 BR-19-116 RBT-10-077 SS-50U-705	4.375	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5
R-19106 BR-19-117 RBT-10-107 SS-50U-632	4.440	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5
R-19107 BR-19-118 RBT-10-180 SS-50U-787	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5-35-65
R-19108 BR-19-102 RBT-10-212 SS-50U-2704	4.600	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	HellFire HellFire Standard Tension	5
R-19109 BR-19-108 RBT-10-212 SS-50U-2704	4.600	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3/16	HellFire HellFire Standard Tension	5

Piston Ring Sets – Numerical Listing with Specifications



Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-19110 BR-19-104 RBT-10-194 SS-50U-1680	4.675	8 Cyl.	Top Ring Second Ring Oil Ring	.043 1/16 3/16	HellFire HellFire Standard Tension	5
R-19112 BR-19-131 RBT-10-209 SS-50U-3687	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	HellFire HellFire Standard Tension	5-35-65
R-19113 BR-19-132 RBT-10-283 SS-50U-3771	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	HellFire HellFire Standard Tension	65
R-19114 BR-19-129 RBT-10-303 SS-50U-3721	3.897	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	HellFire HellFire Standard Tension	.13-.38MM
R-19115 BR-19-130 RBT-10-227 SS-50U-3923	3.551	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	HellFire HellFire Standard Tension	.13-.64-.89-1.14MM
R-19117 BR-19-119 RBT-10-317 SS-99U-2023	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	HellFire HellFire Low Tension	5-65
R-19118 BR-19-102 RBT-10-233 SS-99U-2011	4.600	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	HellFire HellFire Low Tension	5-30
R-19200 BR-19-124 BT-10-531 SS-50U-3957	75mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.0mm 1.2mm 2.8mm	HellFire HellFire Standard Tension	Std-.50MM
R-19201 BR-19-125 BT-10-556 SS-50U-3995	81mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.0mm 1.2mm 2.8mm	HellFire HellFire Standard Tension	Std-.50MM
R-19202 BR-19-126 BT-10-640 SS-50U-3767	84mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.0mm 1.2mm 2.8mm	HellFire HellFire Standard Tension	Std Only
R-19206 BR-19-128 RBT-10-2994 SS-50U-3677	84.8mm	4 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.75mm 3.0mm	HellFire HellFire Standard Tension	Std-.50MM
R-20100 BR-18PF-169 RBT-10-231 SS-50U-3569	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series Plasma-Moly Light Tension	5-35-45-65-125-135
R-20101 BR-18PF-169 RBT-10-231 SS-50U-2725	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3/16	Pro-Series Plasma-Moly Light Tension	5
R-20102 BR-18PF-168 RBT-10-230 SS-50U-3569	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1.5mm 1.5mm 3.0mm	Pro-Series Plasma-Moly Light Tension	45-130
R-20104 BR-18PF-170 RBT-10-233 SS-50U-3583	4.600	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series Plasma-Moly Low Tension	5
R-20105 BR-18PF-170 RBT-10-233 SS-50U-2731	4.600	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3/16	Pro-Series Plasma-Moly Low Tension	5



Piston Ring Sets – Numerical Listing with Specifications

Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
R-20106 BR-18PF-174 RBT-10-237 SS-50U-3608	4.675	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series Plasma-Moly Low Tension	5-10-30
R-20107 BR-18PF-012 RBT-10-072 SS-50U-3569	4.000	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3.0mm	Pro-Series Plasma-Moly Light Tension	35-45-65
R-20108 BR-18PF-021 RBT-10-096 SS-50U-3619	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	1/16 1/16 3.0mm	Pro-Series Plasma-Moly Light Tension	5
R-20109 BR-18PF-186 RBT-10-282 SS-50U-3619	4.125	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series Plasma-Moly Light Tension	5-35-45
R-20112 BR-18PF-192 RBT-10-306 SS-50U-3731	4.250	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series Plasma-Moly Light Tension	5
R-20113 BR-19-111 RBT-10-317 SS-99U-2023	4.500	8 Cyl.	Top Ring Second Ring Oil Ring	.043 .043 3.0mm	Pro-Series HellFire Standard Tension	5-35

Single Piston Ring Sets – Numerical Listing with Specifications



Single Ring Set P/N	Bore Dia.	Cyl.	Position	Width	Specifications	Available Oversizes
WR-9342	4.000	8 Cyl.			File Fit	35
BR-18PF-012			Top Ring	1/16	Plasma-Moly	
RBT-10-072			Second Ring	1/16		
SS-50U-1856			Oil Ring	1/8	Standard Tension	
WR-9343	4.000	8 Cyl.			File Fit	35
BR-18PF-013			Top Ring	5/64	Plasma-Moly	
RBT-10-022			Second Ring	5/64		
SS-50U-5029			Oil Ring	3/16	Standard Tension	
WR-9771	4.000	8 Cyl.			File Fit	35
BR-18PF-012			Top Ring	1/16	Plasma-Moly	
RBT-10-072			Second Ring	1/16		
SS-50U-5029			Oil Ring	3/16	Standard Tension	
WR-9902	4.000	8 Cyl.			Standard Gap	30
BR-18PF-062			Top Ring	1/16	Plasma-Moly	
RBT-10-102			Second Ring	1/16		
SS-50U-5029			Oil Ring	3/16	Standard Tension	
WR-9904	4.250	8 Cyl.			Standard Gap	60
BR-18PF-064			Top Ring	1/16	Plasma-Moly	
RBT-10-103			Second Ring	1/16		
SS-50U-619			Oil Ring	3/16	Standard Tension	

VALVES



Material Selection

When choosing valves for a performance engine, the most misunderstood subject is that of material selection. Speed-Pro offers valves in a variety of materials to meet the requirements of virtually any engine. Some companies only sell one or two materials, and claim that their limited selections are the best for all uses. An understanding of the environment in which valves must function will prove these claims to be false, as a single material cannot meet all operating requirements.

The materials available for performance valve applications include carbon steel alloys, stainless steels, inconel, and titanium. Steel alloys such as Silchrome 1 (Sil 1) are used in most intake valves due to their strength at intake valve operating temperatures, relatively low cost, and the fact that they can be hardened at the valve tip for durability. Exhaust valves are made of 21-2N or 21-4N stainless steel, which offers greater high temperature strength and corrosion resistance. These alloys are also used for some intake valves. Our 422 stainless is a special alloy developed for intake valve applications, and is stronger than 21-2N or 21-4N at the working temperature of an intake valve. Since stainless steel alloys are not hardenable, a hardened tip must be welded onto the stem. Inconel is a nickel alloy rarely used in automotive engines, though it may be required for extremely high temperatures such as those found in turbocharged vehicles. Titanium is a strong, lightweight, but expensive material used in maximum output racing engines. The main benefit of titanium is a reduction in valve weight, allowing higher engine speeds.

The key difference between intake and exhaust valves is the temperature at which they operate. The exhaust valve is regularly subjected to highly corrosive exhaust gases at temperatures that may exceed 1400 degrees Fahrenheit. In comparison, the intake valves are cooled by the incoming fuel/air mixture, and do not reach such high temperatures. The lower cost steel alloys may actually be stronger than exhaust valve stainless when they are compared at the lower operating temperature of an intake valve.



Head Design

Valve head shape and size are critical to engine performance. Key areas are head diameter, seat angle, and underhead finish. Valve head diameter has a direct impact on airflow and engine power. Ideally the valve should be large enough so that it is not a restriction to airflow through the cylinder head. Larger valves can be installed in many cylinder heads for improved power potential. Increasing the diameter does have a down side, as a significantly larger valve will lessen low end throttle response and torque. Proper size selection is a compromise between low RPM performance and top

end power, with the intended use of the engine being the determining factor. Intake valves are normally about 25% greater in diameter than are exhaust valves (in non supercharged engines).

Valve seat angles are usually determined by the engine manufacturer, although they are easily altered by the engine builder. Unless you have access to a flow bench, it is best to follow the factory recommendations, as the seat angle can have a dramatic impact on performance. Focus your efforts on accuracy when machining the valve seat on the cylinder head. Use multiple angles to locate the cylinder head seat contact area at the proper point on the valve face and maintain minimum seat widths of .045 on the intake, and .060 on

the exhaust. A professional job will yield major performance improvements.

The underhead shape and finish of the valve will also influence airflow. Many of our performance valves feature a machined underhead with a precisely formed radius to the valve stem and a finish designed to enhance both flow and valve strength. One area of continued development has been in the replacement of the older "swirl polish" finish with a CNC machining process, this eliminates potential stress risers. Many of our performance valves now employ this technology.

SPEED PRO®

Stem Design

The valve stem must serve as a bearing area for the valve guide, its tip must be durable enough to survive constant rocker arm contact, and it must have a groove for retention of the valve spring locks. Stem diameter is determined by the desired strength and weight characteristics.

Flash chrome or chrome plating improves valve stem durability in situations where lubrication is marginal. This is particularly important on the exhaust side where high temperatures are present. To assist engine builders now using aggressive oil control techniques, we plate virtually all of our performance valves. Stem to guide clearances will differ depending on stem diameter, engine application, guide material, and on the type of stem seal selected. Stems that are too "tight" will cause more damage than will those on the "loose" side of specifications. Clearances of .0015-.0025 on the intakes, and .002-.003 for exhausts are common.

The most common lock style is the single rectangular groove type, a design which has been proven in competition for decades. Parts for this design are available in a variety of materials and angles to meet any need. Multi-groove type locks have been used in O.E. engines for several years. These allow the valve to rotate independent of the valve spring and retainer, keeping the seating surfaces clean of debris and promoting valve longevity. While street driven vehicles use multi-groove locks without problems, we recommend the single groove style for performance applications. Recently the single radius type groove has been introduced to the U.S. market. This is not a new design, as it has been used in Europe for many years. While eliminating the "corners" of a rectangular groove, radius grooves are only needed for very small stem diameter valves that have marginal strength. It is rare for an automotive valve of any type to fail in the keeper groove area.

Tip Design

The tip of the valve stem must be quite hard to withstand constant moving contact with the rocker arm. The stainless steel valves cannot be hardened to a enough to meet this demand, and thus must use either a welded on "hard tip" or a removable lash cap. The non stainless alloys are hardenable and do not require tips or lash caps. Valves using the multi-groove keeper design must be hardened through the entire keeper groove area, thus requiring welded stems when used with stainless head materials.

Weight

Valve weight can be an RPM limiting factor in racing engines, and should be considered when building an engine for high speed use. The intake valve gets the most attention in this area due to its larger size and mass. Titanium valves, though costly, offer dramatic weight savings, extended RPM capability and enhanced valve spring life.

Piston to Valve Clearances

No valve can withstand piston contact. If you experience valve head breakage it is almost guaranteed that the cause was piston to valve interference. We recommend a minimum of .100 clearance, which may sound like a lot. While you may know someone that got away with a lot less, we've heard from plenty of racers that didn't – so check it and run on the safe side. You can't win if you don't finish the race.

Cost

Each valve material has benefits and detriments. Stainless is the material of choice for exhaust valves, but may not be optimal for intake valve use. Alloy steels offer good characteristics for most street and racing intake valve applications. We offer stainless intake valves, which are excellent for street performance vehicles. Titanium intake valves are the choice for maximum performance. Weigh the benefits of each type against your performance needs.

Performance Valve Materials:

These materials are selected to meet specific engine requirements. The definition of "stainless steel" is generally accepted to be a steel alloy containing at least 10% chromium in its composition. As can be seen below, Sil 1 approaches this level while maintaining many of the favorable characteristics and lower costs associated with the inexpensive carbon steel alloys. Sil XB, 21-2N, and 21-4N are true stainless steel alloys.

- 1541:** Carbon steel with added manganese for improved corrosion resistance.
- 8440:** Medium to heavy duty steel alloy with a higher chromium content for than 3140 to enhance high temperature strength.
- Sil 1:** Heavy duty steel alloy with an 8.5% chromium content for excellent high temperature performance. Used for most high performance intake valves.
- Sil XB:** A ferritic stainless steel alloy, with a 20% chromium content and 1.3% nickel. Used in heavy duty intake valves.
- Ti-6:** Titanium is a lightweight, nonferrous material used in high RPM racing applications. It is 40% lighter than steel and maintains its strength at high temperatures.
- 21-2N:** Austenitic stainless steel with 21% chromium and 2% nickel. As the most popular exhaust valve material, it has excellent performance characteristics at elevated temperatures.
- 21-4N:** An austenitic stainless steel similar to 21-2N, except for a greater nickel content (4%), used as a heavy duty alternate to 21-2N.



Performance Valves – Numerical Listing

P/N	Mfgr.	Engine	Position	Head Dia.	Stem Dia.	Length	Angle	Finish	Tip Length	Groove	Material
O.E. Replacement Valves											
V-1199	Chevrolet	Small Block	Exhaust	1.500	.3415	4.928	45			1 groove + Seal groove	21-4N
V-1339	Chrysler	Big Block	Exhaust	1.598	.3715	4.890	45			4 groove	21-2N
V-1386	Chrysler	Big Block	Intake	2.080	.3725	4.868	45			2 groove	SIL-1
V-1532	Pontiac	V8	Intake	1.882	.3409	4.854	30			1 groove	EN-52
V-1539	Ford	390, 427, 428	Intake	2.027	.3716	5.446	45			1 groove	SIL-1
V-1612	Chevrolet	Small Block	Intake	1.940	.3410	4.880	45			1 groove + Seal groove	SIL-1
V-1710	Ford	Small Block	Exhaust	1.450	.3420	4.863	45			1 groove	21-4N
V-1711	Ford	Small Block	Intake	1.669	.3420	4.863	45			1 groove	1047
V-1722	Chrysler	Small Block	Intake	1.780	.3725	4.979	45			2 groove	SIL-1
V-1743	Pontiac	V8	Intake	1.919	.3407	4.894	30			1 groove + Seal groove	EN-52
V-1755	Chevrolet	Small Block	Exhaust	1.600	.3415	4.903	45	Swirl Polish		1 groove + Seal groove	21-4N
V-1756	Chevrolet	Small Block	Intake	2.020	.3415	4.880	45	Machined		1 groove + Seal groove	SIL-1
V-1770	Oldsmobile	V8	Exhaust	1.562	.3422	4.728	44			1 groove	21-2N
V-1772	Oldsmobile	V8	Exhaust	1.624	.3422	4.695	45			1 groove	21-4N
V-1773	Oldsmobile	V8	Intake	1.876	.3425	4.738	45			1 groove	EN-52
V-1775	Oldsmobile	V8	Intake	1.992	.3430	4.709	44			1 groove	SIL-1
V-1776	Oldsmobile	V8	Intake	2.063	.3427	4.718	30			1 groove	1047
V-1783	Ford	Small Block	Intake	1.780	.3420	4.863	45			1 groove	8645
V-1784	Ford	Small Block	Exhaust	1.450	.3415	4.873	45			1 groove	21-4N
V-1785	Ford	Small Block	Intake	1.774	.3420	4.863	45			1 groove	SIL-1
V-1799	Buick	V8	Exhaust	1.625	.3725	5.162	45			1 groove; Wide groove	21-2N
V-1800	Buick	V8	Intake	2.000	.3725	5.137	45			1 groove; Wide groove	1047
V-1813	Pontiac	V8	Exhaust	1.640	.3410	4.876	45			1 groove + Seal groove	21-4N
V-1823	Pontiac	V8	Exhaust	1.660	.3410	5.082	45			1 groove + Seal groove	21-2N
V-1824	Pontiac	V8	Intake	1.960	.3415	5.089	29			1 groove + Seal groove	1047
V-1826	Pontiac	V8	Intake	2.110	.3415	5.098	30			1 groove + Seal groove	8645
V-1830	AMC	V8	Exhaust	1.625	.3710	4.918	45			1 groove	21-2N
V-1831	AMC	V8	Intake	2.015	.3715	4.899	29			1 groove	8645
V-1832	Pontiac	V8	Exhaust	1.660	.3405	4.984	44			1 groove + Seal groove	21-2N
V-1849	Ford	429, 460	Exhaust	1.654	.3420	5.083	45			1 groove	21-2N
V-1850	Ford	429, 460	Intake	2.083	.3420	5.288	45			1 groove	SIL-1
V-1853	Ford	390, 427, 428	Exhaust	1.558	.3715	5.436	45			1 groove	21-4N
V-1861	Chevrolet	Big Block	Exhaust	1.874	.3703	5.362	45			1 groove	21-4N
V-1864	Chrysler	Small Block	Intake	2.020	.3725	4.986	45			4 groove	SIL-XBE
V-1875	Ford	390, 427, 428	Exhaust	1.652	.3705	5.426	45			1 groove	21-2N
V-1876	Ford	390, 427, 428	Intake	2.087	.3710	5.447	30			1 groove	SIL-1
V-1879	Ford	Cleveland	Exhaust	1.710	.3415	5.050	45			4 groove	21-2N
V-1893	Ford	Small Block	Exhaust	1.540	.3415	5.070	45			1 groove	21-4N
V-1900	Chrysler	Big Block	Exhaust	1.740	.3717	4.884	45.30			4 groove	21-4N
V-1902	Pontiac	V8	Exhaust	1.772	.3411	4.976	45			1 groove + Seal groove	21-4N
V-1903	Pontiac	V8	Intake	2.110	.3420	4.982	29			1 groove + Seal groove	1047
V-1904	Chevrolet	Small Block	Exhaust	1.500	.3414	4.928	45			1 groove + Seal groove	21-4N
V-1905	Chevrolet	Big Block	Intake	2.189	.3720	5.228	45			1 groove	SIL XBE
V-1908	Chrysler	Small Block	Intake	1.880	.3725	4.981	45			1 groove	SIL-1
V-1911	Chevrolet	Big Block	Exhaust	1.720	.3718	5.355	45			1 groove	21-4N
V-1912	Chevrolet	Big Block	Intake	2.065	.3720	5.230	45			1 groove	SIL-1
V-1920	Pontiac	V8	Intake	2.110	.3415	4.880	29			1 groove + Seal groove	1047
V-1926	Chevrolet	Small Block	Intake	1.940	.3414	4.880	45			1 groove + Seal groove	SIL-1
V-1927	Chevrolet	Small Block	Intake	1.720	.3413	4.917	45			1 groove + Seal groove	SIL-1
V-1932	Ford	Small Block	Intake	1.781	.3420	5.050	45			1 groove	SIL-1
V-1933	Ford	429, 460	Exhaust	1.725	.3420	5.068	45			1 groove	SIL-746
V-1942	Oldsmobile	V8	Exhaust	1.622	.3423	4.708	30			1 groove	21-2N
V-1943	Oldsmobile	V8	Exhaust	1.684	.3423	4.675	30			1 groove	21-2N
V-1946	Pontiac	V8	Exhaust	1.775	.3409	5.051	45			1 groove + Seal groove	21-4N
V-1961	Ford	Small Block	Exhaust	1.460	.3415	5.070	45			1 groove	21-4N
V-1963	Pontiac	V8	Exhaust	1.661	.3410	4.961	44			1 groove + Seal groove	21-2N
V-1964	Pontiac	V8	Intake	1.960	.3415	4.980	44			1 groove + Seal groove	1047
V-1967	Pontiac	V8	Exhaust	1.660	.3410	4.870	44			1 groove + Seal groove	21-2N
V-1979	AMC	V8	Intake	2.026	.3719	4.898	30			4 groove	EN-52
V-1980	AMC	V8	Exhaust	1.680	.3710	4.929	44			1 groove	21-2N
V-1981	AMC	V8	Intake	1.787	.3720	4.899	29			1 groove	SIL-1
V-1984	Ford	429, 460	Exhaust	1.653	.3419	4.983	45			1 groove	21-4N
V-1989X	Chevrolet	Big Block	Exhaust	1.720	.3716	5.355	45			1 groove	21-4N
V-1995	Oldsmobile	V8	Intake	1.875	.3428	4.667	44			1 groove	1547
V-2023	AMC	V8	Exhaust	1.406	.3720	4.892	44			4 groove	21-4N
V-2024	AMC	V8	Exhaust	1.680	.3721	4.909	44			4 groove	21-4N
V-2028	Oldsmobile	V8	Exhaust	1.622	.3423	4.675	30			1 groove	21-2N
V-2029	Chrysler	Small Block	Exhaust	1.500	.3715	5.002	43			4 groove	21-4N
V-2030	Ford	Cleveland	Exhaust	1.655	.3414	5.050	45			4 groove	21-4N

Performance Valves – Numerical Listing



P/N	Mfgr.	Engine	Position	Head Dia.	Stem Dia.	Length	Angle	Finish	Tip Length	Groove	Material
O.E. Replacement Valves - cont'd.											
V-2044	Ford	Small Block	Exhaust	1.461	.3414	5.070	45			1 groove	21-2N
V-2045	Ford	Small Block	Intake	1.782	.3420	5.070	45			1 groove	SIL-1
V-2061	Oldsmobile	V8	Exhaust	1.502	.3423	4.688	30			1 groove	21-4N
V-2065	Chrysler	440	Intake	2.080	.3721	4.878	45			2 groove	SIL-XBE
V-2075	Ford	Cleveland	Intake	2.041	.3420	5.231	45			4 groove	SIL-1
V-2095	Ford	Cleveland	Exhaust	1.656	.3414	5.050	45			1 groove	21-4N
V-2113	Chrysler	Small Block	Exhaust	1.600	.3715	5.005	43			2 groove	21-2N
V-2117	Buick	V6	Intake	1.710	.3407	4.713	45			1 groove	SIL-1
V-2141	Chrysler	Small Block	Exhaust	1.500	.3715	4.982	45			4 groove	21-4N
V-2142	Ford	Cleveland	Intake	2.040	.3420	5.231	45			1 groove	SIL-1
V-2143	Chevrolet	Small Block	Intake	1.839	.3410	4.912	45			1 groove + Seal groove	SIL-1
V-2154	Chrysler	Small Block	Exhaust	1.517	.3716	4.994	45			2 groove	21-4N
V-2170	Ford	L4	Intake	1.735	.3419	4.787	45			4 groove	SIL-1
V-2173	Chevrolet	V6	Intake	1.598	.3410	4.697	45			1 groove + Seal groove	1547
V-2205	AMC	L6	Exhaust	1.406	.3720	4.892	44			1 groove	21-2N
V-2206	AMC	L6	Intake	1.787	.3720	4.899	30			1 groove	1547
V-2290	Chevrolet	V6	Exhaust	1.425	.3413	4.736	45			1 groove + Seal groove	21-4N
V-2291	Chevrolet	V6	Intake	1.718	.3413	4.705	45			1 groove + Seal groove	SIL-1
V-2429	Ford	Small Block	Exhaust	1.457	.3414	4.942	45			1 groove	21-4N
V-2430	Ford	Small Block	Intake	1.777	.3420	4.942	45			1 groove	SIL-1
V-2431	Chevrolet	V6	Exhaust	1.425	.3136	4.736	45			1 groove	21-4N
V-2432	Chevrolet	V6	Intake	1.718	.3140	4.705	45			1 groove	SIL-1
V-2450X	Chevrolet	Big Block	Exhaust	1.720	.3716	5.355	45			1 groove	NIMONIC 80A
V-2452	Ford	429, 460	Intake	1.977	.3419	5.180	45			1 groove	SIL-1
V-2556	Chrysler	Small Block	Exhaust	1.617	.3716	4.995	45			2 groove	21-4N
V-2654	Chrysler	Small Block	Exhaust	1.624	.3115	4.920	44			1 groove	21-4N
V-3923	Pontiac	V8	Exhaust	1.772	.3409	5.091	44			1 groove + Seal groove	21-4N
V-3925	Chrysler	Small Block	Exhaust	1.600	.3715	5.005	43			4 groove	21-4N
V-3926	Ford	Small Block	Intake	1.842	.3420	5.070	45			1 groove	SIL-1
V-3929	Ford	429, 460	Intake	2.083	.3419	5.198	45			1 groove	SIL-1
V-3951	Chrysler	Small Block	Exhaust	1.517	.3717	4.994	45			2 groove	21-4N
V-3954	Chrysler	Small Block	Intake	1.920	.3115	4.905	44			1 groove	SIL-1
V-4168	Buick	V6	Exhaust	1.500	.3408	4.718	45			1 groove	21-4N
V-4231	Chevrolet	Small Block	Exhaust	1.600	.3407	4.900	45	Machined		2 groove	21-4N
V-4371X	Ford	429, 460	Exhaust	1.654	.3419	4.983	45			1 groove	NIMONIC 80A
POWERFORGED Competition Series Stainless Steel Valves											
V-2051R	Chevrolet	Small Block	Exhaust	1.600	.3415	4.905	45	Swirl Polish	.289	1 groove	21-2N
V-2053R	Chevrolet	Big Block	Exhaust	1.875	.3718	5.349	45	Swirl Polish	.220	1 groove	21-2N
V-2054R	Chevrolet	Small Block	Intake	2.020	.3415	4.897	45	Swirl Polish	.259	1 groove	422
V-2056R	Chevrolet	Big Block	Intake	2.300	.3719	5.225	45	Swirl Polish	.220	1 groove	422
V-2057R	Chevrolet	Small Block	Intake	1.940	.3414	4.897	45	Swirl Polish	.259	1 groove	422
V-2289R	Chevrolet	Small Block	Intake	2.080	.3413	4.956	45	Machined	.259	1 groove	SIL 1
V-2464R	Chevrolet	Big Block	Intake	2.250	.3720	5.230	45	Swirl Polish	.220	1 groove	422
POWERFORGED Competition Series Stainless Steel Valves - with undercut stems											
V-2423R	Ford	L4	Exhaust	1.590	.3410	4.848	45	Swirl Polish	.408	1 groove	21-4N
V-2473R	Chevrolet	Small Block	Intake	1.940	.3410	4.898	45	Swirl Polish	.260	1 groove	422
V-2474R	Chevrolet	Small Block	Intake	2.020	.3410	4.898	45	Swirl Polish	.260	1 groove	422
V-2475R	Chevrolet	Small Block	Intake	2.050	.3413	4.942	45	Swirl Polish	.259	1 groove	422
V-2476R	Chevrolet	Small Block	Intake	2.080	.3413	4.956	45	Swirl Polish	.259	1 groove	422
V-2477R	Chevrolet	Small Block	Exhaust	1.500	.3415	4.911	45	Swirl Polish	.289	1 groove	21-2N
V-2478R	Chevrolet	Small Block	Exhaust	1.600	.3415	4.912	45	Swirl Polish	.289	1 groove	21-2N
V-2480R	Chevrolet	Small Block	Exhaust	1.600	.3415	5.012	45	Swirl Polish	.289	1 groove	21-2N
V-2481R	Chevrolet	Big Block	Intake	2.190	.3720	5.225	45	Swirl Polish	.220	1 groove	422
V-2485R	Chevrolet	Big Block	Exhaust	1.945	.3718	5.357	45	Swirl Polish	.220	1 groove	21-4N
V-2486R	Chrysler	Small Block	Intake	2.020	.3725	5.008	45	Swirl Polish	.220	1 groove	422
V-2491R	Ford	Cleveland	Exhaust	1.710	.3415	5.054	45	Swirl Polish	.268	1 groove	21-2N
POWERFORGED Stainless Steel Valves											
V-8000R	Chevrolet	Small Block	Exhaust	1.500	.3415	4.915	45	Swirl Polish	.290	1 groove	21-2N
V-8001R	Chevrolet	Small Block	Exhaust	1.600	.3415	4.915	45	Swirl Polish	.290	1 groove	21-4N
V-8001R 100	Chevrolet	Small Block	Exhaust	1.600	.3415	5.016	45	Swirl Polish	.290	1 groove	21-4N
V-8002R	Chevrolet	Small Block	Intake	1.937	.3415	4.915	45	Swirl Polish	.290	1 groove	21-4N
V-8003R	Chevrolet	Small Block	Intake	2.020	.3415	4.915	45	Swirl Polish	.290	1 groove	21-4N
V-8003R 100	Chevrolet	Small Block	Intake	2.020	.3415	5.015	45	Swirl Polish	.290	1 groove	21-2N
V-8004R	Chevrolet	Small Block	Intake	2.055	.3415	4.915	45	Swirl Polish	.290	1 groove	21-2N
V-8004R 100	Chevrolet	Small Block	Intake	2.055	.3415	5.015	45	Swirl Polish	.290	1 groove	21-2N
V-8005R	Chevrolet	Big Block	Exhaust	1.874	.3710	5.362	45	Swirl Polish	.250	1 groove	21-2N



Performance Valves – Numerical Listing

P/N	Mfgr.	Engine	Position	Head Dia.	Stem Dia.	Length	Angle	Finish	Tip Length	Groove	Material
POWERFORGED Stainless Steel Valves - cont'd.											
V-8007R	Chevrolet	Big Block	Intake	2.191	.3719	5.239	45	Swirl Polish	.250	1 groove	21-4N
V-8008R	Chevrolet	Big Block	Intake	2.250	.3710	5.238	45	Swirl Polish	.250	1 groove	21-2N
V-8009R	Chrysler	Small Block	Exhaust	1.600	.3715	5.008	45	Swirl Polish	.214	1 groove	21-2N
V-8010R	Chrysler	Small Block	Intake	2.020	.3725	5.000	45	Swirl Polish	.204	1 groove	21-2N
V-8011R	Chrysler	Big Block	Exhaust	1.811	.3720	4.894	45	Swirl Polish	.275	1 groove	21-4N
V-8012R	Chrysler	Big Block	Intake	2.079	.3724	4.884	45	Swirl Polish	.181	1 groove	21-4N
V-8013R	Chrysler	Big Block	Intake	2.140	.3720	4.882	45	Swirl Polish	.275	1 groove	21-2N
V-8014R	Ford	Small Block	Exhaust	1.465	.3415	5.085	45	Swirl Polish	.395	1 groove	21-2N
V-8015R	Ford	Small Block	Exhaust	1.550	.3415	5.085	45	Swirl Polish	.395	1 groove	21-2N
V-8016R	Ford	Small Block	Exhaust	1.600	.3415	5.085	45	Swirl Polish	.395	1 groove	21-2N
V-8018R	Ford	Small Block	Intake	1.850	.3420	5.093	45	Swirl Polish	.395	1 groove	21-2N
V-8019R	Ford	Small Block	Intake	1.940	.3420	5.091	45	Swirl Polish	.250	1 groove	21-2N
V-8020R	Ford	Cleveland	Exhaust	1.710	.3415	5.056	45	Swirl Polish	.220	1 groove	21-2N
V-8021R	Ford	Cleveland	Intake	2.190	.3415	5.246	45	Swirl Polish	.250	1 groove	21-2N
V-8023R	Ford	390, 427, 428	Exhaust	1.556	.3715	5.439	45	Swirl Polish	.321	1 groove	21-2N
V-8024R	Ford	390, 427, 428	Exhaust	1.654	.3710	5.437	45	Swirl Polish	.321	1 groove	21-2N
V-8025R	Ford	390, 427, 428	Intake	2.027	.3715	5.440	45	Swirl Polish	.321	1 groove	21-2N
V-8026R	Ford	390, 427, 428	Intake	2.090	.3715	5.446	30	Swirl Polish	.321	1 groove	21-2N
V-8027R	Ford	429, 460	Exhaust	1.752	.3415	5.079	45	Swirl Polish	.400	1 groove	21-2N
V-8028R	Ford	429, 460	Intake	2.190	.3415	5.296	45	Swirl Polish	.340	1 groove	21-2N
V-8030R	Pontiac	V8	Exhaust	1.770	.3410	5.090	44	Swirl Polish	.220	1 groove	21-2N
V-8031R	Pontiac	V8	Intake	2.110	.3415	5.097	29	Swirl Polish	.220	1 groove	21-2N
V-8034R	Ford	429, 460	Exhaust	1.650	.3414	5.074	45	Swirl Polish	.400	1 groove	21-2N
V-8035R	Ford	429, 460	Intake	2.089	.3415	5.296	45	Swirl Polish	.340	1 groove	21-2N
V-8036R	Chrysler	Big Block	Exhaust	1.740	.3720	4.894	45	Swirl Polish	.275	1 groove	21-2N

Performance Valves - Progressive Size Chart



Head Dia.	Length	Stem Dia.	Angle	Groove	Tip Length	Material	Finish	Position	P/N
O.E. Replacement Valves									
1.406	4.892	.3720	44	1 groove		21-2N		Exhaust	V-2205
1.406	4.892	.3720	44	4 groove		21-4N		Exhaust	V-2023
1.425	4.736	.3136	45	1 groove		21-4N		Exhaust	V-2431
1.425	4.736	.3413	45	1 groove + Seal groove		21-4N		Exhaust	V-2290
1.450	4.863	.3420	45	1 groove		21-4N		Exhaust	V-1710
1.450	4.873	.3415	45	1 groove		21-4N		Exhaust	V-1784
1.457	4.942	.3414	45	1 groove		21-4N		Exhaust	V-2429
1.460	5.070	.3415	45	1 groove		21-4N		Exhaust	V-1961
1.461	5.070	.3414	45	1 groove		21-2N		Exhaust	V-2044
1.500	4.718	.3408	45	1 groove		21-4N		Exhaust	V-4168
1.500	4.928	.3414	45	1 groove + Seal groove		21-4N		Exhaust	V-1904
1.500	4.928	.3415	45	1 groove + Seal groove		21-4N		Exhaust	V-1199
1.500	4.982	.3715	45	4 groove		21-4N		Exhaust	V-2141
1.500	5.002	.3715	43	4 groove		21-4N		Exhaust	V-2029
1.502	4.688	.3423	30	1 groove		21-4N		Exhaust	V-2061
1.517	4.994	.3716	45	2 groove		21-4N		Exhaust	V-2154
1.517	4.994	.3717	45	2 groove		21-4N		Exhaust	V-3951
1.540	5.070	.3415	45	1 groove		21-4N		Exhaust	V-1893
1.558	5.436	.3715	45	1 groove		21-4N		Exhaust	V-1853
1.562	4.728	.3422	44	1 groove		21-2N		Exhaust	V-1770
1.598	4.697	.3410	45	1 groove + Seal groove		1547		Intake	V-2173
1.598	4.890	.3715	45	4 groove		21-2N		Exhaust	V-1339
1.600	4.900	.3407	45	2 groove		21-4N	Machined	Exhaust	V-4231
1.600	4.903	.3415	45	1 groove + Seal groove		21-4N	Swirl Polish	Exhaust	V-1755
1.600	5.005	.3715	43	2 groove		21-2N		Exhaust	V-2113
1.600	5.005	.3715	43	4 groove		21-4N		Exhaust	V-3925
1.617	4.995	.3716	45	2 groove		21-4N		Exhaust	V-2556
1.622	4.675	.3423	30	1 groove		21-2N		Exhaust	V-2028
1.622	4.708	.3423	30	1 groove		21-2N		Exhaust	V-1942
1.624	4.695	.3422	45	1 groove		21-4N		Exhaust	V-1772
1.624	4.920	.3115	44	1 groove		21-4N		Exhaust	V-2654
1.625	4.918	.3710	45	1 groove		21-2N		Exhaust	V-1830
1.625	5.162	.3725	45	1 groove; Wide groove		21-2N		Exhaust	V-1799
1.640	4.876	.3410	45	1 groove + Seal groove		21-4N		Exhaust	V-1813
1.652	5.426	.3705	45	1 groove		21-2N		Exhaust	V-1875
1.653	4.983	.3419	45	1 groove		21-4N		Exhaust	V-1984
1.654	4.983	.3419	45	1 groove		NIMONIC 80A		Exhaust	V-4371X
1.654	5.083	.3420	45	1 groove		21-2N		Exhaust	V-1849
1.655	5.050	.3414	45	4 groove		21-4N		Exhaust	V-2030
1.656	5.050	.3414	45	1 groove		21-4N		Exhaust	V-2095
1.660	4.870	.3410	44	1 groove + Seal groove		21-2N		Exhaust	V-1967
1.660	4.984	.3405	44	1 groove + Seal groove		21-2N		Exhaust	V-1832
1.660	5.082	.3410	45	1 groove + Seal groove		21-2N		Exhaust	V-1823
1.661	4.961	.3410	44	1 groove + Seal groove		21-2N		Exhaust	V-1963
1.669	4.863	.3420	45	1 groove		1047		Intake	V-1711
1.680	4.909	.3721	44	4 groove		21-4N		Exhaust	V-2024
1.680	4.929	.3710	44	1 groove		21-2N		Exhaust	V-1980
1.684	4.675	.3423	30	1 groove		21-2N		Exhaust	V-1943
1.710	4.713	.3407	45	1 groove		SIL-1		Intake	V-2117
1.710	5.050	.3415	45	4 groove		21-2N		Exhaust	V-1879
1.718	4.705	.3140	45	1 groove		SIL-1		Intake	V-2432
1.718	4.705	.3413	45	1 groove + Seal groove		SIL-1		Intake	V-2291
1.720	4.917	.3413	45	1 groove + Seal groove		SIL-1		Intake	V-1927
1.720	5.355	.3716	45	1 groove		21-4N		Exhaust	V-1989X
1.720	5.355	.3716	45	1 groove		NIMONIC 80A		Exhaust	V-2450X
1.720	5.355	.3718	45	1 groove		21-4N		Exhaust	V-1911
1.725	5.068	.3420	45	1 groove		SIL-746		Exhaust	V-1933
1.735	4.787	.3419	45	4 groove		SIL-1		Intake	V-2170
1.740	4.884	.3717	45.30	4 groove		21-4N		Exhaust	V-1900
1.772	4.976	.3411	45	1 groove + Seal groove		21-4N		Exhaust	V-1902
1.772	5.091	.3409	44	1 groove + Seal groove		21-4N		Exhaust	V-3923
1.774	4.863	.3420	45	1 groove		SIL-1		Intake	V-1785
1.775	5.051	.3409	45	1 groove + Seal groove		21-4N		Exhaust	V-1946
1.777	4.942	.3420	45	1 groove		SIL-1		Intake	V-2430
1.780	4.863	.3420	45	1 groove		8645		Intake	V-1783
1.780	4.979	.3725	45	2 groove		SIL-1		Intake	V-1722
1.781	5.050	.3420	45	1 groove		SIL-1		Intake	V-1932
1.782	5.070	.3420	45	1 groove		SIL-1		Intake	V-2045
1.787	4.899	.3720	29	1 groove		SIL-1		Intake	V-1981



Performance Valves - Progressive Size Chart

Head Dia.	Length	Stem Dia.	Angle	Groove	Tip Length	Material	Finish	Position	P/N
O.E. Replacement Valves - cont'd.									
1.787	4.899	.3720	30	1 groove		1547		Intake	V-2206
1.839	4.912	.3410	45	1 groove + Seal groove		SIL-1		Intake	V-2143
1.842	5.070	.3420	45	1 groove		SIL-1		Intake	V-3926
1.874	5.362	.3703	45	1 groove		21-4N		Exhaust	V-1861
1.875	4.667	.3428	44	1 groove		1547		Intake	V-1995
1.876	4.738	.3425	45	1 groove		EN-52		Intake	V-1773
1.880	4.981	.3725	45	1 groove		SIL-1		Intake	V-1908
1.882	4.854	.3409	30	1 groove		EN-52		Intake	V-1532
1.919	4.894	.3407	30	1 groove + Seal groove		EN-52		Intake	V-1743
1.920	4.905	.3115	44	1 groove		SIL-1		Intake	V-3954
1.940	4.880	.3410	45	1 groove + Seal groove		SIL-1		Intake	V-1612
1.940	4.880	.3414	45	1 groove + Seal groove		SIL-1		Intake	V-1926
1.960	4.980	.3415	44	1 groove + Seal groove		1047		Intake	V-1964
1.960	5.089	.3415	29	1 groove + Seal groove		1047		Intake	V-1824
1.977	5.180	.3419	45	1 groove		SIL-1		Intake	V-2452
1.992	4.709	.3430	44	1 groove		SIL-1		Intake	V-1775
2.000	5.137	.3725	45	1 groove; Wide groove		1047		Intake	V-1800
2.015	4.899	.3715	29	1 groove		8645		Intake	V-1831
2.020	4.880	.3415	45	1 groove + Seal groove		SIL-1	Machined	Intake	V-1756
2.020	4.986	.3725	45	4 groove		SIL-XBE		Intake	V-1864
2.026	4.898	.3719	30	4 groove		EN-52		Intake	V-1979
2.027	5.446	.3716	45	1 groove		SIL-1		Intake	V-1539
2.040	5.231	.3420	45	1 groove		SIL-1		Intake	V-2142
2.041	5.231	.3420	45	4 groove		SIL-1		Intake	V-2075
2.063	4.718	.3427	30	1 groove		1047		Intake	V-1776
2.065	5.230	.3720	45	1 groove		SIL-1		Intake	V-1912
2.080	4.868	.3725	45	2 groove		SIL-1		Intake	V-1386
2.080	4.878	.3721	45	2 groove		SIL-XBE		Intake	V-2065
2.083	5.198	.3419	45	1 groove		SIL-1		Intake	V-3929
2.083	5.288	.3420	45	1 groove		SIL-1		Intake	V-1850
2.087	5.447	.3710	30	1 groove		SIL-1		Intake	V-1876
2.110	4.880	.3415	29	1 groove + Seal groove		1047		Intake	V-1920
2.110	4.982	.3420	29	1 groove + Seal groove		1047		Intake	V-1903
2.110	5.098	.3415	30	1 groove + Seal groove		8645		Intake	V-1826
2.189	5.228	.3720	45	1 groove		SIL XBE		Intake	V-1905
POWERFORGED Competition Series Stainless Steel Valves									
1.600	4.905	.3415	45	1 groove	.289	21-2N	Swirl Polish	Exhaust	V-2051R
1.875	5.349	.3718	45	1 groove	.220	21-2N	Swirl Polish	Exhaust	V-2053R
1.940	4.897	.3414	45	1 groove	.259	422	Swirl Polish	Intake	V-2057R
2.020	4.897	.3415	45	1 groove	.259	422	Swirl Polish	Intake	V-2054R
2.080	4.956	.3413	45	1 groove	.259	SIL 1	Machined	Intake	V-2289R
2.250	5.230	.3720	45	1 groove	.220	422	Swirl Polish	Intake	V-2464R
2.300	5.225	.3719	45	1 groove	.220	422	Swirl Polish	Intake	V-2056R
POWERFORGED Competition Series Stainless Steel Valves - with undercut stems									
1.500	4.911	.3415	45	1 groove	.289	21-2N	Swirl Polish	Exhaust	V-2477R
1.590	4.848	.3410	45	1 groove	.408	21-4N	Swirl Polish	Exhaust	V-2423R
1.600	4.912	.3415	45	1 groove	.289	21-2N	Swirl Polish	Exhaust	V-2478R
1.600	5.012	.3415	45	1 groove	.289	21-2N	Swirl Polish	Exhaust	V-2480R
1.710	5.054	.3415	45	1 groove	.268	21-2N	Swirl Polish	Exhaust	V-2491R
1.940	4.898	.3410	45	1 groove	.260	422	Swirl Polish	Intake	V-2473R
1.945	5.357	.3718	45	1 groove	.220	21-4N	Swirl Polish	Exhaust	V-2485R
2.020	4.898	.3410	45	1 groove	.260	422	Swirl Polish	Intake	V-2474R
2.020	5.008	.3725	45	1 groove	.220	422	Swirl Polish	Intake	V-2486R
2.050	4.942	.3413	45	1 groove	.259	422	Swirl Polish	Intake	V-2475R
2.080	4.956	.3413	45	1 groove	.259	422	Swirl Polish	Intake	V-2476R
2.190	5.225	.3720	45	1 groove	.220	422	Swirl Polish	Intake	V-2481R
POWERFORGED Stainless Steel Valves									
1.465	5.085	.3415	45	1 groove	.395	21-2N	Swirl Polish	Exhaust	V-8014R
1.500	4.915	.3415	45	1 groove	.290	21-2N	Swirl Polish	Exhaust	V-8000R
1.550	5.085	.3415	45	1 groove	.395	21-2N	Swirl Polish	Exhaust	V-8015R
1.556	5.439	.3715	45	1 groove	.321	21-2N	Swirl Polish	Exhaust	V-8023R
1.600	4.915	.3415	45	1 groove	.290	21-4N	Swirl Polish	Exhaust	V-8001R
1.600	5.008	.3715	45	1 groove	.214	21-2N	Swirl Polish	Exhaust	V-8009R
1.600	5.016	.3415	45	1 groove	.290	21-4N	Swirl Polish	Exhaust	V-8001R 100
1.600	5.085	.3415	45	1 groove	.395	21-2N	Swirl Polish	Exhaust	V-8016R
1.650	5.074	.3414	45	1 groove	.400	21-2N	Swirl Polish	Exhaust	V-8034R

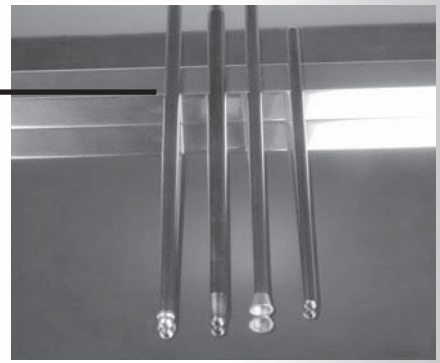
Performance Valves - Progressive Size Chart



Head Dia.	Length	Stem Dia.	Angle	Groove	Tip Length	Material	Finish	Position	P/N
POWERFORGED Stainless Steel Valves - cont'd.									
1.654	5.437	.3710	45	1 groove	.321	21-2N	Swirl Polish	Exhaust	V-8024R
1.710	5.056	.3415	45	1 groove	.220	21-2N	Swirl Polish	Exhaust	V-8020R
1.740	4.894	.3720	45	1 groove	.275	21-2N	Swirl Polish	Exhaust	V-8036R
1.752	5.079	.3415	45	1 groove	.400	21-2N	Swirl Polish	Exhaust	V-8027R
1.770	5.090	.3410	44	1 groove	.220	21-2N	Swirl Polish	Exhaust	V-8030R
1.811	4.894	.3720	45	1 groove	.275	21-4N	Swirl Polish	Exhaust	V-8011R
1.850	5.093	.3420	45	1 groove	.395	21-2N	Swirl Polish	Intake	V-8018R
1.874	5.362	.3710	45	1 groove	.250	21-2N	Swirl Polish	Exhaust	V-8005R
1.937	4.915	.3415	45	1 groove	.290	21-4N	Swirl Polish	Intake	V-8002R
1.940	5.091	.3420	45	1 groove	.250	21-2N	Swirl Polish	Intake	V-8019R
2.020	4.915	.3415	45	1 groove	.290	21-4N	Swirl Polish	Intake	V-8003R
2.020	5.000	.3725	45	1 groove	.204	21-2N	Swirl Polish	Intake	V-8010R
2.020	5.015	.3415	45	1 groove	.290	21-2N	Swirl Polish	Intake	V-8003R 100
2.027	5.440	.3715	45	1 groove	.321	21-2N	Swirl Polish	Intake	V-8025R
2.055	4.915	.3415	45	1 groove	.290	21-2N	Swirl Polish	Intake	V-8004R
2.055	5.015	.3415	45	1 groove	.290	21-2N	Swirl Polish	Intake	V-8004R 100
2.079	4.884	.3724	45	1 groove	.181	21-4N	Swirl Polish	Intake	V-8012R
2.089	5.296	.3415	45	1 groove	.340	21-2N	Swirl Polish	Intake	V-8035R
2.090	5.446	.3715	30	1 groove	.321	21-2N	Swirl Polish	Intake	V-8026R
2.110	5.097	.3415	29	1 groove	.220	21-2N	Swirl Polish	Intake	V-8031R
2.140	4.882	.3720	45	1 groove	.275	21-2N	Swirl Polish	Intake	V-8013R
2.190	5.246	.3415	45	1 groove	.250	21-2N	Swirl Polish	Intake	V-8021R
2.190	5.296	.3415	45	1 groove	.340	21-2N	Swirl Polish	Intake	V-8028R
2.191	5.239	.3719	45	1 groove	.250	21-4N	Swirl Polish	Intake	V-8007R
2.250	5.238	.3710	45	1 groove	.250	21-2N	Swirl Polish	Intake	V-8008R

PUSHRODS

SPEED PRO



Selection Guidelines

Speed-Pro offers a wide variety of high performance pushrods, designed to meet any engine building need. We have new value priced pushrods sold as sets for many popular applications. These pushrods provide many features usually found in parts costing much more. Speed-Pro's chrome-moly racing pushrods are sold individually, in two performance levels. The traditional Speed-Pro line delivers excellent performance for race and street applications, while the Competition Series feature one piece, centerless ground construction, with .065 or .080 wall thicknesses – ideal for professional racing use. Each series of pushrods is described in greater detail below.

Speed-Pro Pushrod Sets

Speed-Pro's new line of performance pushrod sets are ideal for the budget conscious performance enthusiast. They have many features normally found in more expensive pushrods, and are sold in economically priced sets to complete a professional engine rebuild. These pushrods are made in the USA, from high quality 1010 steel. They are hardened to make them guide plate compatible, tumble polished to remove surface imperfections, and black oxide coated for corrosion protection and a professional appearance. Part numbers are laser etched on each pushrod for positive identification.

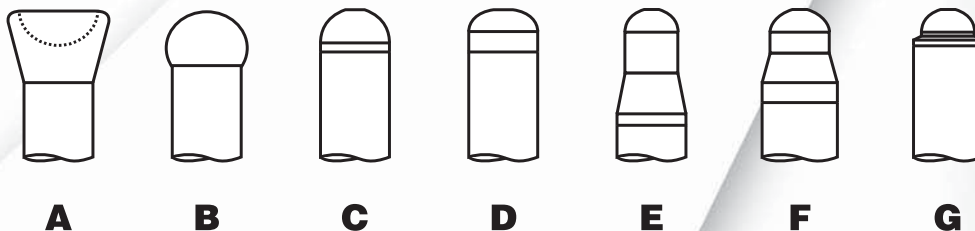
Speed-Pro Chrome-Moly Pushrods

Manufactured from genuine 4140 Chrome-Moly tubing, these pushrods are ideal for most high performance street and moderate racing applications. Pushrods are available for a vast array of applications, using one and three piece designs to meet the needs of each engine. Each pushrod is centerless ground, surface hardened where necessary for guide plate compatibility, and final checked for correct overall length and straightness. Chrome-Moly Cut-to-Fit pushrod kits are also available in a variety of lengths to meet special requirements. These pushrods deliver race quality features at a reasonable price, and are an excellent value for the engine builder looking for insurance against potential problems.

Speed-Pro Competition Series Chrome-Moly Pushrods

Our newly expanded line of Competition Series pushrods are intended for professional racing applications. These are one piece forged end pushrods manufactured from premium quality .080" wall, 4180 chrome-moly tubing. Wall thickness of the tubing is carefully controlled throughout the pushrod – including the tip. Ball ends are precision formed, with careful attention to maintaining consistent dimensions, insuring rocker arm and lifter compatibility. Each pushrod is hardened for guide plate use, centerless ground to guarantee concentricity, and black oxide coated for corrosion resistance and a professional appearance. Pushrods are available in lengths to cover applications ranging from stock 302 Fords to tall deck race engines. Part numbers and length are laser etched on each pushrod for quick, positive identification.

Pushrod End Types



A

B

C

D

E

F

G

Pushrods – Numerical Listing



P/N	Mfgr.	Engine	Description	Dia.	Length	Ends	Oil Hole
O. E. Replacement Push Rods							
RP-3031	Chrysler	Big Block	Stock type	5/16 dia.	8.645	C-E	
RP-3112	Oldsmobile	V8	Stock type	5/16 dia.	9.421	C-C	Yes
RP-3159	Chrysler	Small Block	Stock type; w/Adj. rocker arms	5/16 dia.	7.572	C-A	
RP-3160	Ford	429, 460	Hardened; Stock type	5/16 dia.	8.550	B-B	Yes
RP-3164	Buick	V6	Hardened; Stock type	5/16 dia.	8.693	B-B	Yes
	Ford	429, 460	Hardened; Stock type	5/16 dia.	8.693	B-B	Yes
RP-3164 35	Buick	V6	Stock type	5/16 dia.	8.728	B-B	Yes
RP-3164 60	Buick	V6	Stock type	5/16 dia.	8.753	B-B	Yes
RP-3165	Ford	Small Block	Stock type	5/16 dia.	6.801	B-B	Yes
RP-3171	Oldsmobile	V8	Stock type	5/16 dia.	9.594	B-B	Yes
RP-3174	Oldsmobile	V8	Stock type	5/16 dia.	8.234	B-B	Yes
RP-3179	Buick	455	Stock type	5/16 dia.	9.378	B-B	Yes
RP-3185	Ford	429, 460	Stock type	5/16 dia.	8.648	B-B	Yes
RP-3186	Ford	Cleveland	Stock type	5/16 dia.	9.500	B-B	Yes
RP-3187	Ford	Boss 302	Hardened; Stock type	5/16 dia.	7.601	B-B	Yes
RP-3194	Chrysler	Small Block	Stock type; w/Non adj. rocker arms	5/16 dia.	7.500	B-B	
RP-3197	Oldsmobile	V8	Stock type	5/16 dia.	9.546	B-B	Yes
RP-3205	Oldsmobile	V8	Stock type	5/16 dia.	8.248	B-B	Yes
RP-3207	Chevrolet	2.8L	Hardened; Stock type	5/16 dia.	6.163	B-B	Yes
RP-3254	Chevrolet	Big Block	Hardened; Stock type	5/16 dia.	9.202	B-B	Yes
RP-3255	Chevrolet	Big Block	Hardened; Stock type	5/16 dia.	8.227	B-B	Yes
Chrome Moly Push Rods							
RP-3212R	AMC	V8	Hardened	5/16 dia.	7.790	C-C	Yes
	Chevrolet	Small Block	Hardened	5/16 dia.	7.790	C-C	Yes
	Chevrolet	V6	Hardened	5/16 dia.	7.790	C-C	Yes
RP-3212R 100	AMC	V8	Hardened	5/16 dia.	7.890	C-C	Yes
	Chevrolet	Small Block	Hardened	5/16 dia.	7.890	C-C	Yes
	Chevrolet	V6	Hardened	5/16 dia.	7.890	C-C	Yes
RP-3212R 150	AMC	V8	Hardened	5/16 dia.	7.940	C-C	Yes
	Chevrolet	Small Block	Hardened	5/16 dia.	7.940	C-C	Yes
RP-3212R 200	AMC	V8	Hardened	5/16 dia.	7.990	C-C	Yes
	Chevrolet	Small Block	Hardened	5/16 dia.	7.990	C-C	Yes
RP-3213R	Buick	V6	Hardened	5/16 dia.	8.690	C-C	Yes
RP-3214R	Buick	350	Hardened	5/16 dia.	9.680	C-C	Yes
	Chevrolet	L6	Hardened	5/16 dia.	9.680	C-C	Yes
RP-3215R	Chevrolet	Big Block		3/8 dia.	9.252	F-F	Yes
RP-3216R	Chevrolet	Big Block		3/8 dia.	8.280	F-F	Yes
RP-3217R	Chevrolet	Big Block		7/16 dia.	8.280	F-F	Yes
RP-3218R	Chevrolet	Big Block		7/16 dia.	9.252	F-F	Yes
RP-3219R 100	Chrysler	Small Block		5/16 dia.	7.390	A-D	
RP-3221R	Chrysler	Big Block		5/16 dia.	9.295	C-C	Yes
RP-3222R	Ford	Small Block	Hardened	5/16 dia.	6.804	C-C	Yes
RP-3223R	Ford	Small Block	Hardened	5/16 dia.	6.885	C-C	Yes
RP-3224R	Ford	Boss 302	Hardened	5/16 dia.	7.605	C-C	Yes
RP-3225R	Ford	Small Block	Hardened	5/16 dia.	8.144	C-C	Yes
RP-3226R	Ford	Cleveland	Hardened	5/16 dia.	8.410	C-C	Yes
RP-3227R	Ford	390, 427, 428		5/16 dia.	9.595	B-B	
RP-3228R	Oldsmobile	V8		5/16 dia.	9.550	C-C	Yes
RP-3229R	Pontiac	V8	Hardened	5/16 dia.	9.130	C-C	Yes
RP-3230R	Ford	390, 427, 428		5/16 dia.	9.330	A-B	
RP-3251R	Ford	429, 460	Hardened	5/16 dia.	8.550	C-C	Yes
RP-3264R	Chevrolet	Small Block	Hardened	5/16 dia.	7.290	C-C	Yes
RP-3266R	Chevrolet	Big Block	Hardened	3/8 dia.	7.785	E-E	Yes
RP-3267R	Chevrolet	Big Block	Hardened	3/8 dia.	8.756	E-E	Yes
RP-3320R	Chrysler	Big Block	Hardened	3/8 dia.	9.357	A-G	
RP-3322R	Ford	Cleveland	Hardened	5/16 dia.	8.492	C-C	Yes
RP-3323R	Ford	Small Block	Hardened	5/16 dia.	8.182	C-C	Yes
RP-3329R	Ford	Small Block	Hardened	5/16 dia.	6.250	C-C	Yes
Competition Series, Hardened Chrome Moly, One Piece Design							
RP-7001R	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.796	C-C	Yes
RP-7001R 100	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.896	C-C	Yes
RP-7001R 150	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.946	C-C	Yes
RP-7001R 200	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.996	C-C	Yes
RP-7002R	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	9.250	E-E	Yes
RP-7002R 100	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	9.350	E-E	Yes
RP-7002R 400	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	9.650	E-E	Yes
RP-7003R	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	8.280	E-E	Yes



Pushrods – Numerical Listing

P/N	Mfgr.	Engine	Description	Dia.	Length	Ends	Oil Hole
Competition Series, Hardened Chrome Moly, One Piece Design - cont'd.							
RP-7003R 100	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	8.380	E-E	Yes
RP-7003R 400	Chevrolet	Big Block	Hardened; 1-piece	3/8 dia.	8.680	E-E	Yes
RP-7500R 100	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.896	C-C	Yes
RP-7500R 150	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.946	C-C	Yes
RP-7500R 200	Chevrolet	Small Block	Hardened; 1-piece	5/16 dia.	7.996	C-C	Yes
RP-7501R	Chevrolet	Big Block	Hardened; 1-piece	7/16 dia.	9.252	E-E	Yes
RP-7625R	Ford	Small Block	Black oxide coated; Late model; Stock	3/8 dia.	6.250	C-C	Yes
RP-7635R			Black oxide coated	3/8 dia.	6.350	C-C	Yes
RP-7685R			Black oxide coated	3/8 dia.	6.850	C-C	Yes
RP-7695R			Black oxide coated	3/8 dia.	6.950	C-C	Yes
RP-7785R	Chevrolet	Small Block	Black oxide coated; +.050	3/8 dia.	7.850	C-C	Yes
RP-7855R	Ford	429, 460	Black oxide coated; Stock length	3/8 dia.	8.550	C-C	Yes
Push Rod Sets							
RP-5000RK	Chevrolet	Small Block	Hardened; Black oxide coated	5/16 dia.	7.815	B-B	Yes
RP-5000RK 100	Chevrolet	Small Block	Hardened; Black oxide coated	5/16 dia.	7.915	B-B	Yes
RP-5002RK	Chevrolet	Big Block	Hardened; Black oxide; Int.	3/8 dia.	9.256	B-B	Yes
	Chevrolet	Big Block	Hardened; Black oxide; Exh.	3/8 dia.	8.305	B-B	Yes

Pushrods – Progressive Size Chart



Length	Diameter	Ends	Oil Hole	Description	P/N
O. E. Replacement Push Rods					
6.163	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3207
6.801	5/16 dia.	B-B	Yes	Stock type	RP-3165
7.500	5/16 dia.	B-B		Stock type; w/Non adj. rocker arms	RP-3194
7.572	5/16 dia.	C-A		Stock type; w/Adj. rocker arms	RP-3159
7.601	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3187
8.227	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3255
8.234	5/16 dia.	B-B	Yes	Stock type	RP-3174
8.248	5/16 dia.	B-B	Yes	Stock type	RP-3205
8.550	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3160
8.645	5/16 dia.	C-E		Stock type	RP-3031
8.648	5/16 dia.	B-B	Yes	Stock type	RP-3185
8.693	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3164
8.728	5/16 dia.	B-B	Yes	Stock type	RP-3164 35
8.753	5/16 dia.	B-B	Yes	Stock type	RP-3164 60
9.202	5/16 dia.	B-B	Yes	Hardened; Stock type	RP-3254
9.378	5/16 dia.	B-B	Yes	Stock type	RP-3179
9.421	5/16 dia.	C-C	Yes	Stock type	RP-3112
9.500	5/16 dia.	B-B	Yes	Stock type	RP-3186
9.546	5/16 dia.	B-B	Yes	Stock type	RP-3197
9.594	5/16 dia.	B-B	Yes	Stock type	RP-3171
Chrome Moly Push Rods					
6.250	5/16 dia.	C-C	Yes	Hardened	RP-3329R
6.804	5/16 dia.	C-C	Yes	Hardened	RP-3222R
6.885	5/16 dia.	C-C	Yes	Hardened	RP-3223R
7.290	5/16 dia.	C-C	Yes	Hardened	RP-3264R
7.390	5/16 dia.	A-D			RP-3219R 100
7.605	5/16 dia.	C-C	Yes	Hardened	RP-3224R
7.785	3/8 dia.	E-E	Yes	Hardened	RP-3266R
7.790	5/16 dia.	C-C	Yes	Hardened	RP-3212R
7.890	5/16 dia.	C-C	Yes	Hardened	RP-3212R 100
7.940	5/16 dia.	C-C	Yes	Hardened	RP-3212R 150
7.990	5/16 dia.	C-C	Yes	Hardened	RP-3212R 200
8.144	5/16 dia.	C-C	Yes	Hardened	RP-3225R
8.182	5/16 dia.	C-C	Yes	Hardened	RP-3323R
8.280	3/8 dia.	F-F	Yes		RP-3216R
8.280	7/16 dia.	F-F	Yes		RP-3217R
8.410	5/16 dia.	C-C	Yes	Hardened	RP-3226R
8.492	5/16 dia.	C-C	Yes	Hardened	RP-3322R
8.550	5/16 dia.	C-C	Yes	Hardened	RP-3251R
8.690	5/16 dia.	C-C	Yes	Hardened	RP-3213R
8.756	3/8 dia.	E-E	Yes	Hardened	RP-3267R
9.130	5/16 dia.	C-C	Yes	Hardened	RP-3229R
9.252	3/8 dia.	F-F	Yes		RP-3215R
9.252	7/16 dia.	F-F	Yes		RP-3218R
9.295	5/16 dia.	C-C	Yes		RP-3221R
9.330	5/16 dia.	A-B			RP-3230R
9.357	3/8 dia.	A-G		Hardened	RP-3320R
9.550	5/16 dia.	C-C	Yes		RP-3228R
9.595	5/16 dia.	B-B			RP-3227R
9.680	5/16 dia.	C-C	Yes	Hardened	RP-3214R
Competition Series, Hardened Chrome Moly, One Piece Design					
6.250	3/8 dia.	C-C	Yes	Black oxide coated; Late model; Stock	RP-7625R
6.350	3/8 dia.	C-C	Yes	Black oxide coated	RP-7635R
6.850	3/8 dia.	C-C	Yes	Black oxide coated	RP-7685R
6.950	3/8 dia.	C-C	Yes	Black oxide coated	RP-7695R
7.796	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7001R
7.850	3/8 dia.	C-C	Yes	Black oxide coated; +.050	RP-7785R
7.896	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7001R 100
7.896	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7500R 100
7.946	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7001R 150
7.946	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7500R 150
7.996	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7001R 200
7.996	5/16 dia.	C-C	Yes	Hardened; 1-piece	RP-7500R 200
8.280	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7003R
8.380	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7003R 100
8.550	3/8 dia.	C-C	Yes	Black oxide coated; Stock length	RP-7855R
8.680	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7003R 400

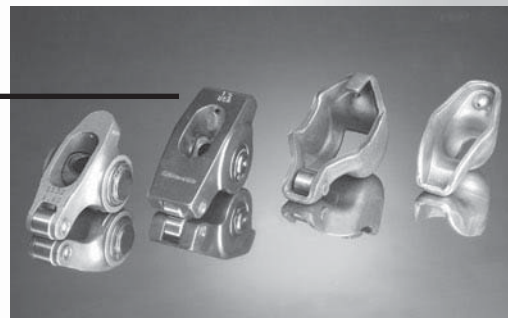


Pushrods – Progressive Size Chart

Length	Diameter	Ends	Oil Hole	Description	P/N
Competition Series, Hardened Chrome Moly, One Piece Design - cont'd.					
9.250	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7002R
9.252	7/16 dia.	E-E	Yes	Hardened; 1-piece	RP-7501R
9.350	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7002R 100
9.650	3/8 dia.	E-E	Yes	Hardened; 1-piece	RP-7002R 400
Push Rod Sets					
7.815	5/16 dia.	B-B	Yes	Hardened; Black oxide coated	RP-5000RK
7.915	5/16 dia.	B-B	Yes	Hardened; Black oxide coated	RP-5000RK 100
8.305	3/8 dia.	B-B	Yes	Hardened; Black oxide; Exh.	RP-5002RK
9.256	3/8 dia.	B-B	Yes	Hardened; Black oxide; Int.	RP-5002RK

ROCKER ARMS

SPEED PRO®



Selection Guidelines

Speed-Pro has a full selection of rockers for the performance engine builder. Options include everything from long slot versions of the original equipment part – allowing use of a larger than stock cam, to race quality roller rockers machined from a solid bar of extruded aluminum. We cover virtually all popular engine combinations, with many applications having optional ratios available for additional fine tuning.



High Performance Stamped Steel Rocker Arms

These rockers are similar in design to the ones originally used on most engines, but incorporate features and improvements which make them a useful upgrade for a budget conscious engine builder. Careful attention to detail in manufacturing insures accurate ratios. Hardened steel alloys deliver long life at the critical fulcrum, valve, and pushrod seat areas. Longer stud slots allow these rockers to work with higher lift cams. Optional ratios are available for popular engines, offering a low cost method of enhancing performance.

Speed-Pro Roller Tip Steel Rocker Arms

Steel roller rocker arms combine the proven ball stud mounting found in the stock style rockers with a roller tip to reduce valvetrain friction and minimize guide wear. The roller tip allows more precise control of the rocker arm ratio, with the resultant potential for increased power. Optional rocker arm ratios offer even greater horsepower gains by increasing effective valve lift – without changing cams. These rocker arms are a great alternative for the street performance vehicle owner who desires the benefits of roller rockers at a more reasonable cost. Speed-Pro supplies these rockers for small block Chevy, Big Block Chevy, and small block Ford applications.

Speed-Pro Competition Series Aluminum Roller Rockers

Speed-Pro's Aluminum Roller Rockers are ideal for racing use, as well as for high output street driven vehicles. Aluminum Roller Rockers are available for most popular engines, including those with stud and shaft style mountings.

Speed-Pro Aluminum Roller Rockers are sold in engine sets, complete with all required mounting hardware and high strength adjustment locks. Individual rocker arms and adjustment locks are also available, to service lost or damaged components. (The individual rocker arms do not include locks or hardware.)

The high strength rocker bodies are precision machined from a solid bar of extruded aluminum. They are then anodized for corrosion resistance and a professional appearance. Stud mounted rockers include friction reducing H.D. roller trunions for both 3/8" and 7/16" stud diameters. A hardened steel pushrod seat is also incorporated into the rocker's design. At the valve end of the rocker, a hardened and precision machined steel roller tip spins on a high strength steel axle, minimizing guide wear and further reducing valvetrain friction. The combined friction reduction and the superior ratio accuracy make significant horsepower gains possible. The availability of optional ratios to increase effective valve lift make even greater improvements attainable. Available for a wide array of engine applications, including a new kit to install aluminum roller rockers on Ford 5.0L engines without costly machining.

Speed-Pro Competition Series Stainless Steel Roller Rockers

Speed-Pro's Stainless Steel roller rockers are intended for severe stress racing use, though they can be used in any application which demands the ultimate in reliability. With many of the same friction reducing features and ratio options of our aluminum rocker, the stainless version adds an extremely strong body material, which may be required in certain oval track and endurance racing situations. Stainless Steel Roller Rockers are only sold individually, and come with the required adjustment locks.

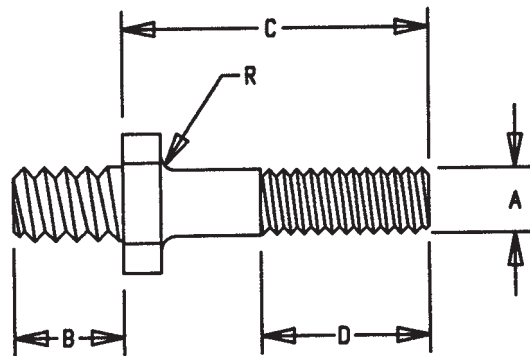
Rocker Arms And Sets – Numerical Listing

P/N	Mfg.	Engine	Description	Ratio	Notes
O.E. Style Rockers					
R-814	Ford	390, 427, 428	Stock type	1.73 Ratio	Non-adj.; Use RP-3227R push rod
R-828	Chrysler	Big Block	O.E. Right hand		Non-adj.
R-829	Chrysler	Big Block	O.E. Left Hand		Non-adj.
R-832	Chevrolet	L6	Stock type	1.7 Ratio	
R-836	Ford	Small Block	H/D cast w/o rails	1.6 Ratio	Use .240 tip valve; Guide plate
R-847	Ford	Small Block	Cast; Rail Type	1.6 Ratio	1968 to 78-1/2
R-848	Pontiac	V8	O.E. Positive stop	1.5 Ratio	389; 1959-66
R-850	Pontiac	V8	Stock type	1.65 Ratio	Ram Air IV; 7/16 stud req'd
R-855	Ford	V8	Stock Type	1.73 Ratio	Non-adj.
R-856	Oldsmobile	V8	Stock type	Rocker/pivot	Exc. 1980 350; 2 rockers, 1 pivot
R-861	Chrysler	Small Block	O.E. Left		Non-adj.; Use RP-3227R push rod
R-862	Chrysler	Small Block	O.E. Right		Non-adj.; Use RP-3227R push rod
R-865R	Chevrolet	Small Block	Stamped long slot	1.5 Ratio	1986 & earlier
R-866R	Chevrolet	Big Block	Stamped long slot	1.7 Ratio	
R-870	Buick	V6	Stock stamped type		Exh. 1-3-4-6; Int. 2-5
	Buick	V8	Stock stamped type		Exh. 1-4-5-8; Int. 2-3-6-7
R-873	Ford	2.3L	Stock type		
R-875	AMC	V8	Stock type		'73-78; 2 rockers, 2 pivots, 1 bridge
R-879	Ford	Small Block	Stamped Steel	1.6 Ratio	1978-1/2 to 94; Exc. Cobra
R-882	Oldsmobile	V8	Stock type	Rocker/pivot	1980 350; 2 rockers, 1 pivot
R-952R	Chevrolet	Small Block	Stamped long slot	1.6 Ratio	1986 & earlier
R-1022R	Chevrolet	Small Block	Stamped long slot	1.5 Ratio	1987 & up
R-1023R	Chevrolet	Small Block	Stamped long slot	1.6 Ratio	1987 & up
R-1032	Pontiac	V8	O.E. Positive stop	1.5 Ratio	400, 455; '68-76; Exc. Ram Air IV
R-1033	Ford	429, 460	Stock type	1.73 Ratio	Adj.
Stamped Steel Roller Rockers					
R-1024R	Chevrolet	Small Block	Stamped steel roller	1.5 Ratio	1986 & earlier
R-1025R	Chevrolet	Small Block	Stamped steel roller	1.6 Ratio	1986 & earlier
R-1091R	Ford	Small Block	Stamped steel roller	1.6 Ratio	1978-1/2 to 94; Exc. Cobra
Aluminum Roller Rocker Arms					
RR-7000R	Chevrolet	Small Block	Aluminum roller	1.5 Ratio	Requires 3/8 H/D screw-in stud
RR-7001R	Chevrolet	Small Block	Aluminum roller	1.5 Ratio	Requires 7/16 H/D screw-in stud
RR-7002R	Chevrolet	Small Block	Aluminum roller	1.6 Ratio	Requires 3/8 H/D screw-in stud
RR-7003R	Chevrolet	Small Block	Aluminum roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
RR-7004R	Chevrolet	Big Block	Aluminum roller	1.7 Ratio	Requires 7/16 H/D screw-in stud
RR-7007R	Ford	Small Block	Aluminum roller	1.6 Ratio	3/8 stud; Guide plate req'd
RR-7008R	Ford	Small Block	Aluminum roller	1.6 Ratio	7/16 stud; Guide plate req'd
RR-7009R	Ford	429, 460	Aluminum roller	1.73 Ratio	7/16 stud; Guide plate req'd
	Ford	Cleveland	Aluminum roller	1.73 Ratio	7/16 stud; Guide plate req'd
RR-7013R	Ford	Small Block	Aluminum roller	1.6 Ratio	Fits '79-94; Incl. mounting hardware
RR-7014R	Ford	Small Block	Aluminum roller	1.7 Ratio	Fits '79-94; Incl. mounting hardware
RR-7015R	Ford	429, 460	Aluminum roller	1.73 Ratio	Fits '72-93; Incl. mounting hardware
Stainless Steel Roller Rockers					
RR-7020R	Chevrolet	Small Block	Stainless steel roller	1.5 Ratio	Requires 3/8 H/D screw-in stud
RR-7022R	Chevrolet	Small Block	Stainless steel roller	1.5 Ratio	Requires 7/16 H/D screw-in stud
RR-7023R	Chevrolet	Small Block	Stainless steel roller	1.6 Ratio	Requires 7/16 H/D screw-in stud
RR-7024R	Chevrolet	Big Block	Stainless steel roller	1.7 Ratio	Requires 7/16 H/D screw-in stud
RR-7026R	Ford	Small Block	Stainless steel roller	1.6 Ratio	7/16 stud; Guide plate req'd
Miscellaneous Valvetrain Components					
RS-612	Chrysler	Big Block	Rocker shaft		
RS-621	Ford	390, 427, 428	Rocker shaft		Not for racing use
RS-626	Chrysler	Small Block	Rocker shaft		
MR-1822			Pivot ball	3/8 Stud	4 groove; Anti-gall
MR-1829	Buick	V6, V8	Rocker arm retainer		Nylon
MR-1839	AMC	V8	Pivot		
MR-1840	AMC	V8	Bridge		
MR-1903	Oldsmobile	V8	Rocker pivot		1-piece design

Rocker Studs And Adjustment Locks – Numerical Listing



P/N	Rocker End			Head End		Application
	Thread (A)	Thread Length (D)	Height (C)	Thread	Depth (B)	
Rocker Adjustment Locks						
MR-1858PL	3/8-24		1.010			For roller rockers; 5/8 hex
MR-1859PL	7/16-20		1.010			For roller rockers; 5/8 hex
MR-1860PL	3/8-24		1.125			For stock style ball pivot rockers; 5/8 hex
MR-1861PL	7/16-20		1.325			For stock style ball pivot rockers; 11/16 hex
Rocker Studs						
MR-1752	3/8-24	.775	1.340		1.160	.003 oversize press-in; For stock rockers
MR-1862RS	3/8-24	1.000	1.875	7/16-14	.750	For stock or roller rockers
MR-1863RS	3/8-24	1.000	1.875	7/16-14	.750	For stock or roller rockers; Polylocks
MR-1864RS	7/16-20	1.000	1.875	7/16-14	.750	For stock or roller rockers
MR-1865RS	3/8-24	1.000	1.750	7/16-14	.625	For stock rockers
MR-1866RS	7/16-20	1.000	2.000	7/16-14	1.688	Aluminum head; Exh.; 1.688 thread depth
MR-1867RS	7/16-20	1.000	2.000	7/16-14	.750	For roller rockers
MR-1868RS	7/16-20	1.000	1.875	7/16-14	.625	For roller rockers
MR-1883	10mm		1.550	10mm	.700	For stock rockers
MR-1910RS	7/16-20	1.050	1.940	7/16-14	.725	For roller rockers





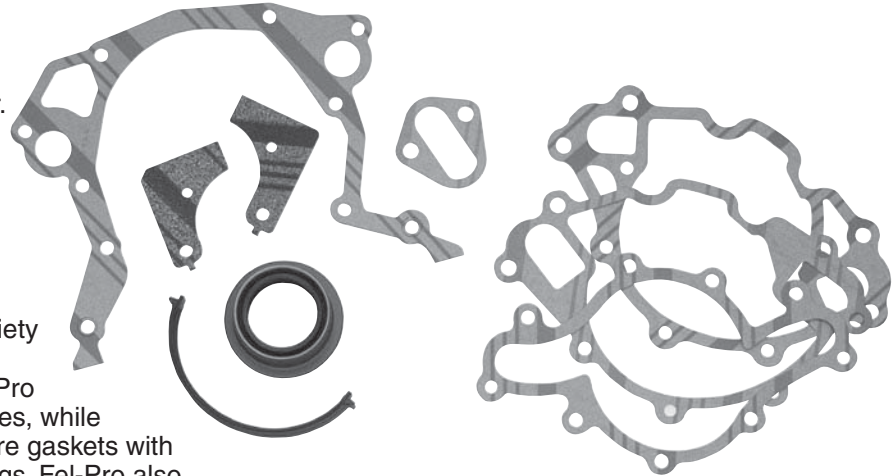
Timing Set Gaskets – Fel-Pro Quick Reference

Fel-Pro Timing Cover Gaskets (TCS)

Fel-Pro offers two types of standard timing cover gasket sets. Both sets include all the gaskets needed when removing and replacing the timing cover. One type includes a crankshaft front repair sleeve to seal a grooved hub or shaft – the other for simple replacement of the seal and related gaskets, offers timing cover gaskets without the repair sleeve.

Timing cover gaskets are made of a variety of materials based on the timing cover castings and sealing requirements. Fel-Pro Blue Stripe® is effective for many vehicles, while some require molded-rubber or solid core gaskets with a thicker design to accommodate castings. Fel-Pro also utilizes LEM (Liquid Elastomer Molded) technology to seal some plastic and metal timing covers.

Reference your Fel-Pro catalog or online catalog lookup for complete application information. In addition, the Fel-Pro Performance line offers specialized R.A.C.E.



Sets (Remainder to Assemble Complete Engine -2700) Series) for lower engine work. These sets include the gaskets that when used in conjunction with oil pan gasket sets, provide every gasket needed for complete lower engine service.

Engine	Displacement	Model Years	Standard Set	Set w/ Repair Sleeve	Oil Pan Set	
Chevrolet Straight L6	194	1962-67	TCS 13198	TCS 45264		
	215	1964-65	TCS 13198	TCS 45264		
	230	1963-70	TCS 13198	TCS 45264		
	250 (4.1L)	1965-79	TCS 13198	TCS 45264		
	250 (4.1L)	1980-84	TCS 13198-2	TCS 45264		
Chevrolet Small Block V6	292 (4.8L)	1963-89	TCS 13198	TCS 45264		
	200 (3.3L)	1978-79	TCS 45121	TCS 45265		
	229 (3.8L)	1980-84	TCS 45121	TCS 45265		
	262 (4.3L)	1985	TCS 45121	TCS 45265		
	262 (4.3L) VIN B, N, Z	1986-95	TCS 45121	TCS 45265	OS 34502R	
	262 (4.3L) VIN W, X, Z (Vortec) w/2.42" OD timing cover seal	1996-2006	TCS 46091		OS 30680R	
	262 (4.3L) VIN X (Vortec)	2007-2011	TCS 46100		OS 30786R	
	262 (4.3L) VIN W (Vortec)	1992-94	TCS 45947		OS 34502R	
	262 (4.3L) VIN W (Vortec) w/Plastic timing cover; w/2.42" OD timing cover seal	1995	TCS 46091		OS 34502R	
	262 (4.3L) VIN W (Vortec) w/o Plastic timing cover	1995	TCS 45947		OS 34502R	
	262 (4.3L) Turbo	1991-93	TCS 45121	TCS 45265	OS 34502R	
	262 (4.3L)	1975-76	TCS 45121	TCS 45265		
	265	1955-57	TCS 5124-1	TCS 45165		
	Chevrolet Small Block V8	265 (4.3L) VIN W (LT-1)	1994-96	TCS 45956		OS 34500R
		267 (4.4L)	1979-82	TCS 45121	TCS 45265	
283		1957-67	TCS 5124-1	TCS 45165		
293 (4.8L) VIN A, C, V (Vortec)		1999-2011	TCS 45993		OS 30693R	
302		1967-69	TCS 5124-1	TCS 45165		
305 (5.0L)		1976-85	TCS 45121	TCS 45265		
305 (5.0L)		1986-95	TCS 45121	TCS 45265	OS 34500R	
305 (5.0L) VIN H, M (Vortec) w/2.42" OD timing cover seal		1996-2002	TCS 46093		OS 34500R	
307		1968-73	TCS 5124-1	TCS 45165		
325 (5.3L) VIN C (LS-4)		2005-2009	TCS 45993		OS 30693R	
325 (5.3L) VIN B, J, L, M, P, T, Z, 0, 3, 4 (Vortec)		1999-2011	TCS 45993		OS 30693R	
327		1962-69	TCS 5124-1	TCS 45165		
346 (5.7L) VIN G (LS-1)		1997-2004	TCS 45993		OS 30693R	
346 (5.7L) VIN S (LS-6)		2001-2005	TCS 45993		OS 30693R	
350 (5.7L)		1967-74	TCS 5124-1	TCS 45165		
350 (5.7L) VIN E, H, J, L, M, P, T, V, W, X, Y, 4, 6, 8		1975-85	TCS 45121	TCS 45265		
350 (5.7L) VIN K, M, P, 6, 7, 8		1986-95	TCS 45121	TCS 45265	OS 34500R	
350 (5.7L) VIN K, R (Vortec) w/2.42" OD timing cover seal		1996-2002	TCS 46093		OS 34500R	
350 (5.7L) VIN P (LT-1)		1992-93	TCS 45953		OS 34500R	
350 (5.7L) VIN P (LT-1) Corvette, Camaro, Firebird		1994	TCS 45953		OS 34500R	
350 (5.7L) VIN P (LT-1) Caprice, Impala SS, Fleetwood, Roadmaster		1994	TCS 45956		OS 34500R	
350 (5.7L) VIN P (LT-1)		1995-97	TCS 45956		OS 34500R	
350 (5.7L) VIN 5 (LT-4)		1996	TCS 45956		OS 34500R	
364 (6.0L) VIN H (LS-2)		2005-2007	TCS 45993		OS 30693R	
364 (6.0L) VIN 2 (L77)		2011	TCS 45993		OS 30693R	
364 (6.0L) VIN H, J, K, N, U, Y, 5 (Vortec)		1999-2011	TCS 45993		OS 30693R	
378 (6.2L) VIN W (LS-3)		2008-2011	TCS 45993		OS 30693R	
378 (6.2L) VIN J (L99)		2010-2011	TCS 45993		OS 30693R	
378 (6.2L) VIN F, 8 (Vortec)		2007-2011	TCS 45993		OS 30693R	
400 (6.6L)		1970-74	TCS 5124-1	TCS 45165		
400 (6.6L)	1975-80	TCS 45121	TCS 45265			

Timing Set Gaskets – Fel-Pro Quick Reference



Engine	Displacement	Model Years	Standard Set	Set w/ Repair Sleeve	Oil Pan Set
Chevrolet Big Block V8	366 (6.0L)	1966-90	TCS 45060	TCS 45272	
	366 (6.0L) w/10-bolt timing cover	1991-96	TCS 45060	TCS 45272	OS 34407R
	366 (6.0L) w/6-bolt timing cover	1996-98	TCS 45969	TCS 45053	OS 34407R
	396	1965-69	TCS 45060	TCS 45272	
	402	1970-72	TCS 45060	TCS 45272	
	427 (7.0L)	1966-90	TCS 45060	TCS 45272	
	427 (7.0L) w/10-bolt timing cover	1991-96	TCS 45060	TCS 45272	OS 34407R
	427 (7.0L) w/6-bolt timing cover	1996-98	TCS 45969	TCS 45053	OS 34407R
	454 (7.4L)	1970-90	TCS 45060	TCS 45272	
	454 (7.4L)	1991-95	TCS 45060	TCS 45272	OS 34407R
	454 (7.4L) (Vortec)	1996-2000	TCS 45969	TCS 45053	OS 34407R
	Buick Small Block V6	181 (3.0L) VIN E	1982-84	TCS 45932	
181 (3.0L) VIN E w/14-bolt oil pan		1985	TCS 45932		
181 (3.0L) VIN E w/20-bolt oil pan		1985	TCS 45932		OS 30522R
196 (3.2L)		1978-79	TCS 45930		
225 w/Cover stamped 1358076		1964-66	TCS 13001		
225 w/Cover stamped 1375157		1966-67	TCS 45930		
231 (3.8L)		1975-83	TCS 45930		
231 (3.8L) VIN A w/14-bolt oil pan		1984	TCS 45930		
231 (3.8L) VIN A w/20-bolt oil pan		1984	TCS 45930		OS 30521R
231 (3.8L) VIN A		1985-87	TCS 45930		OS 30521R
231 (3.8L) VIN 3		1984	TCS 45932		
231 (3.8L) VIN 3 w/14-bolt oil pan		1985	TCS 45932		
231 (3.8L) VIN 3 w/20-bolt oil pan		1985	TCS 45932		OS 30522R
231 (3.8L) VIN B, 3		1986-88	TCS 45695		OS 30522R
231 Turbo (3.8L)		1978-83	TCS 45930		
231 Turbo (3.8L) w/14-bolt oil pan		1984	TCS 45930		
231 Turbo (3.8L) w/20-bolt oil pan		1984	TCS 45930		OS 30521R
231 Turbo (3.8L)		1985-89	TCS 45930		OS 30521R
252 (4.1L)		1980-85	TCS 45930		
Buick Small Block V8		215	1961-63	TCS 13001	
	215 Turbo	1962-63	TCS 13001		
	300 w/Cover stamped 1358076	1964-66	TCS 13001		
	300 w/Cover stamped 1375157	1966-67	TCS 45930		
	340 w/Cover stamped 1358076	1966	TCS 13001		
	340 w/Cover stamped 1375157	1966-67	TCS 45930		
	350 (5.7L)	1968-74	TCS 45930		
	350 (5.7L) VIN B, H, J, X	1975-81	TCS 45930		
	260 (4.3L) VIN F, 8	1975-82	TCS 13417	TCS 45270	
	307 (5.0L) VIN Y, 9	1980-90	TCS 13417	TCS 45270	
Oldsmobile V8	330	1964-67	TCS 13417	TCS 45270	
	350 (5.7L)	1968-74	TCS 13417	TCS 45270	
	350 (5.7L) VIN B, G, R, 8	1975-80	TCS 13417	TCS 45270	
	400	1965-69	TCS 13417	TCS 45270	
	403 (6.6L)	1977-79	TCS 13417	TCS 45270	
	425	1965-67	TCS 13417	TCS 45270	
	455 (7.5L)	1968-76	TCS 13417	TCS 45270	
	265 (4.3L)	1980-81	TCS 13383-3	TCS 45166	
	287.2 Car	1955	TCS 12681-1		
	288 Truck	1955	TCS 12681-1		
	301 (4.9L)	1977-81	TCS 13383-3	TCS 45166	
	301 Turbo (4.9L)	1980-81	TCS 13383-3	TCS 45166	
	316	1955-56	TCS 12681-1		
	326 w/4-stud water pump	1963	TCS 12681-2		
	326 w/8-stud water pump	1963-67	TCS 13383-3	TCS 45166	
	336.9	1958-59	TCS 12681-1		
	347	1957	TCS 12681-1		
	350 (5.7L)	1968-74	TCS 13383-3	TCS 45166	
350 (5.7L) VIN E, K, M, N, P, V	1975-77	TCS 13383-3	TCS 45166		
370	1958	TCS 12681-1			
389 w/4-stud water pump	1959-62	TCS 12681-1			
389 w/4-stud water pump	1963	TCS 12681-2			
389 w/8-stud water pump	1963-66	TCS 13383-3	TCS 45166		
400 (6.6L)	1967-79	TCS 13383-3	TCS 45166		
421 w/4-stud water pump	1961-62	TCS 12681-1			
421 w/4-stud water pump	1963	TCS 12681-2			
421 w/8-stud water pump	1963-66	TCS 13383-3	TCS 45166		
428	1967-69	TCS 13383-3	TCS 45166		
455 (7.5L)	1970-76	TCS 13383-3	TCS 45166		
Ford Straight L4	122 (2.3L) OHC engine	1983-86	TCS 45107		
	122 (2.3L) OHC engine	1987-88	TCS 45107		OS 34211R
	140 (2.3L) OHC engine Car To 02/19/86	1974-86	TCS 45107		
	140 (2.3L) OHC engine Car From 02/20/86	1986-90	TCS 45107		OS 34211R
	140 (2.3L) OHC engine Car	1991-92	TCS 45107		OS 30545R
	140 (2.3L) OHC engine Car	1993	TCS 45940		OS 30914R
	140 (2.3L) OHC engine Truck To 04/08/85	1977-85	TCS 45107		
	140 (2.3L) OHC engine Truck From 04/09/85	1985-92	TCS 45107		OS 30545R
	140 (2.3L) OHC engine Truck	1993-97	TCS 45940		OS 30914R
	140 Turbo (2.3L) OHC engine To 02/19/86	1979-86	TCS 45107		
	140 Turbo (2.3L) OHC engine From 02/20/86	1986-89	TCS 45107		OS 34211R
	Ford Small Block V8	221	1962-63	TCS 45008	TCS 45168
255 (4.2L)		1980-82	TCS 45449	TCS 45450	
260		1962-65	TCS 45008	TCS 45168	
289		1963-68	TCS 45008	TCS 45168	
302 (5.0L)		1968-78	TCS 45008	TCS 45168	
302 (5.0L) Car		1979-85	TCS 45449	TCS 45450	
302 (5.0L) Car		1986-95	TCS 45449	TCS 45450	OS 34508R
302 (5.0L) Truck		1979-87	TCS 45449	TCS 45450	
302 (5.0L) Truck		1988-2001	TCS 45449	TCS 45450	OS 34508R
351W (5.8L)		1969-78	TCS 45008	TCS 45168	
351W (5.8L) Car To 06/28/87		1979-87	TCS 45449	TCS 45450	
351W (5.8L) Car From 06/29/87		1987-91	TCS 45449	TCS 45450	OS 30616R
351W (5.8L) Truck To 06/29/87		1979-87	TCS 45449	TCS 45450	
351W (5.8L) Truck From 06/30/87		1987-93	TCS 45449	TCS 45450	OS 30616R
351W (5.8L) Truck		1994-98	TCS 45449	TCS 45450	OS 34506R

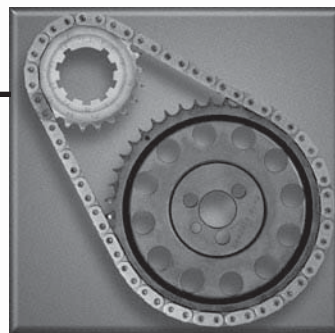


Timing Set Gaskets – Fel-Pro Quick Reference

Engine	Displacement	Model Years	Standard Set	Set w/ Repair Sleeve	Oil Pan Set
Ford FE Series V8	330 M/D (5.4L)	1964-72	TCS 13075-1	TCS 45167	
	330 M/D (5.4L)	1973-78	TCS 6688		
	330 H/D (5.4L)	1964-78	TCS 6688		
	332	1958-60	TCS 11700-1		
	332	1961-63	TCS 13075-1	TCS 45167	
	352	1957-60	TCS 11700-1		
	352	1961-67	TCS 13075-1	TCS 45167	
	359 (5.9L)	1973-78	TCS 6688		
	360 (5.9L)	1968-77	TCS 13075-1	TCS 45167	
	361 Car	1958-59	TCS 11700-1		
	361 Light Truck	1964-66	TCS 13075-1	TCS 45167	
	361 (5.9L) M/D and H/D Truck	1964-78	TCS 6688		
	389 (6.4L)	1973-78	TCS 6688		
	390 (6.4L)	1961-77	TCS 13075-1	TCS 45167	
	391 (6.4L)	1964-78	TCS 6688		
	406	1962-63	TCS 13075-1	TCS 45167	
	410	1966-67	TCS 13075-1	TCS 45167	
427 (7.0L)	1963-69	TCS 13075-1	TCS 45167		
428 (7.0L)	1966-70	TCS 13075-1	TCS 45167		
Ford Cleveland V8	351C (5.8L)	1970-74	TCS 45061	TCS 45283	
Ford Modified V8	351M (5.8L)	1975-82	TCS 45061	TCS 45283	
	400 (6.6L)	1971-82	TCS 45061	TCS 45283	
Ford Big Block V8	370 (6.1L)	1979-87	TCS 45222		
	370 (6.1L) To 03/30/89	1988-89	TCS 45880		
	370 (6.1L) From 03/31/89	1989-91	TCS 45880		OS 34600R
	429 (7.0L)	1968-73	TCS 45024	TCS 45279	
	429 (7.0L)	1979-87	TCS 45222		
	429 (7.0L) To 03/30/89	1988-89	TCS 45880		
	429 (7.0L) From 03/31/89	1989-94	TCS 45880		OS 34600R
	429 (7.0L)	1995-99	TCS 45880		OS 34507R
	460 (7.5L) To 03/11/85	1968-85	TCS 45024	TCS 45279	
	460 (7.5L) From 03/12/85 to 03/30/89	1985-89	TCS 45129	TCS 45881	
	460 (7.5L) From 03/31/89	1989-94	TCS 45129	TCS 45881	OS 34600R
460 (7.5L)	1995-98	TCS 45129	TCS 45881	OS 34507R	
Ford Modular V8	281 SOHC (4.6L) Car VIN W	1991-95	TCS 45869		
	281 SOHC (4.6L) Car VIN V, W, 9	1996-2011	TCS 45869-1		
	281 SOHC (4.6L) Car VIN X, 6	1996-98	TCS 45869-1		
	281 SOHC (4.6L) Car VIN X, 6	1999-2004	TCS 45869-2		
	281 SOHC (4.6L) Car VIN H	2005-2010	TCS 46072-1		
	281 DOHC (4.6L) Car VIN R, V	1993-2004	TCS 45980		
	281 DOHC Supercharged (4.6L) Car VIN Y	2003-2004	TCS 45980-1		
	281 SOHC (4.6L) Truck VIN W, 6	1997-98	TCS 45869-1		
	281 SOHC (4.6L) Truck VIN W, 6	1999-2001	TCS 45869-2		
	281 SOHC (4.6L) Truck VIN W, 6 Except Explorer/Mountaineer	2002-2003	TCS 45869-2		
	281 SOHC (4.6L) Truck VIN W Explorer/Mountaineer To 02/22/04	2002-2004	TCS 46064		
	281 SOHC (4.6L) Truck VIN W E150/E250	2004	TCS 45869-2		
	281 SOHC (4.6L) Truck VIN W Expedition/F150/F250	2004	TCS 45869-1		
	281 SOHC (4.6L) Truck VIN W Explorer/Mountaineer From 02/23/04	2004-2005	TCS 46065		
	281 SOHC (4.6L) Truck VIN V, W E150/E250/F150/F250	2005-2012	TCS 45869-1		
	281 SOHC (4.6L) Truck VIN 8	2006-2010	TCS 46096		
	281 DOHC (4.6L) Truck VIN A, H	2003-2005	TCS 45980		
	330 SOHC (5.4L) Truck VIN L, M, Z	1997-98	TCS 45982		
	330 SOHC (5.4L) Truck VIN L, M, W, Z	1999-2012	TCS 45982-1		
	330 SOHC (5.4L) Truck VIN V, 5	2004-2012	TCS 46078		
	330 SOHC Supercharged (5.4L) Truck VIN 3	1999-2004	TCS 45982-1		
330 DOHC (5.4L) Truck VIN A, R	1999-2002	TCS 46010			
330 DOHC (5.4L) Truck VIN A, R	2003-2005	TCS 46010-1			
Chrysler Small Block V6	239 (3.9L)	1986-91	TCS 45790	TCS 45789	
	239 (3.9L)	1992-96	TCS 45952	TCS 45949	OS 34503R
	239 (3.9L)	1997-2003	TCS 45996	TCS 45999	OS 34503R
Chrysler Small Block V8	270 (Dodge/Plymouth) Car	1956	TCS 6443-2		
	270 (Dodge/Plymouth) Truck (VT400 Series)	1955-56	TCS 6443-2		
	273	1964-69	TCS 6563-1	TCS 45284	
	277 (Plymouth)	1956-57	TCS 6563-1		
	301 (Plymouth)	1957	TCS 6563-1		
	303 (Plymouth)	1956-57	TCS 6563-1		
	313 (Plymouth)	1957-64	TCS 6563-1		
	315 (Dodge)	1956-59	TCS 6443-2		
	318 (5.2L)	1957-91	TCS 6563-1	TCS 45284	
	318 (5.2L)	1992-96	TCS 45952	TCS 45949	OS 34408R
	318 (5.2L)	1997-2003	TCS 45996	TCS 45999	OS 34408R
	325 (Dodge)	1957-58	TCS 6443-2		
	326 (Dodge)	1959	TCS 6563-1	TCS 45284	
	331 (Chrysler) Car	1956	TCS 6443-2		
	340	1968-73	TCS 6563-1	TCS 45284	
	353 (Dodge) Truck (VT400 Series)	1955-56	TCS 6443-2		
	354 (Chrysler) Car	1956-58	TCS 6443-2		
	360 (5.9L)	1971-91	TCS 6563-1	TCS 45284	
	360 (5.9L)	1992-96	TCS 45952	TCS 45949	OS 34409R
	360 (5.9L)	1997-2003	TCS 45996	TCS 45999	OS 34409R
392 (Chrysler)	1957-58	TCS 6443-2			
Chrysler Big Block V8	350	1958	TCS 12460-2		
	361	1958-77	TCS 12460-2		
	383	1959-71	TCS 12460-2		
	400 (6.6L)	1971-80	TCS 12460-2		
	413	1959-77	TCS 12460-2		
	426	1963-71	TCS 12460-2		
	440 (7.2L)	1966-80	TCS 12460-2		

TIMING SETS

SPEED PRO



Selection Guidelines

Specifically Engineered for Specific Performance

Speed-Pro offers a broad assortment of high performance timing sets engineered to meet your engine-building needs. Each set includes a high quality timing chain selected to meet each engine's particular design requirements, plus precision made-in-the USA sprockets that mesh precisely with the chain for optimum performance and long life. Sets are available in three levels to meet the widest variety of needs, from street performance to hardcore racer:

- Competition Roller – Series 3600
- Billet Roller – Series 3500
- Performance Roller – Series 1100

See which one is right for you.

RACE READY – Competition Roller Timing Sets (3600)



Speed-Pro Competition timing sets live up to their name. Both sprockets are machined from premium billet steel on state-of-the-art CNC equipment, then induction hardened and oil-quenched using a multi-stage heat treat process. The roller chain offers superior strength with full roller action. Side plates are cut and shaved from high-strength steel and heat-treated for maximum fatigue resistance. The .250" rollers are "cold rolled" and hardened to exacting standards, increasing load and RPM capabilities.

FEATURES

- Induction heat-treated, billet steel sprockets
- 9-keyway billet steel crank sprocket allows +/- 8°, adjustability in 2° increments
- Premium roller chain with .250" diameter rollers
- Hand matched to qualify center distance and control run-out
- Made in USA

PERFECT FOR THE WEEKEND RACER – Billet Roller Timing Sets (3500)



Speed-Pro Billet Roller timing sets offer greater advantages to the value-driven racer. Upgraded cam sprockets offer the strength of billet steel, plus critical functionality features. Combining billet steel durability, a 9-keyway induction-hardened crank sprocket, a .250" roller chain, and precise CNC machining, these sets provide quality and adjustability unmatched in their class.

FEATURES

- Billet steel cam sprocket
- Induction heat-treated, billet steel crank sprocket
- 9 keyways allow +/- 8 degrees
- Adjustability in 2 crank degree increments
- Roller chain with .250" diameter rollers
- Made in USA

PERFORMANCE AND VALUE – Performance Roller Timing Sets (1100)



Speed-Pro Performance timing sets feature cast-iron cam sprockets, 3-keyway induction-hardened billet steel crank sprockets, .250" roller chains and CNC-machined precision. The result is unbeatable performance and value.

FEATURES

- Cast-iron cam sprocket
- Induction heat-treated, billet steel crank sprocket
- 3-keyways allow +/- 4 degrees adjustability in 2 crank degree increments
- Roller chain with .250" diameter rollers
- Made in USA

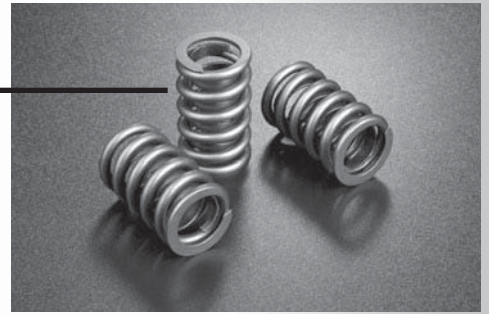


Timing Products – Numerical Listing

P/N	Mfr.	Engine	Series	Notes	Features
221-2528S	Chevrolet	230, 250 L6	Timing Gear Set	2 pc. Set; Incl. cam & crank gear; Single roller	1 keyway
222-14	Ford	2.3L L4	Timing Belt		
223-323	Buick	V6 231, 252	Timing Components	Crank Sprocket; Single roller	1 keyway
222-359	Buick	V6 231, 252	Timing Chain	Single roller	
KT3-359S	Buick	350	3 Piece Set	Incl. cam & crank sprockets and chain; Single roller	1 keyway
223-610	Buick	V6 231, 252	Timing Components	Cam sprocket	
CTS-1100NR	Chevrolet	V6; Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1100R	Chevrolet	V6; Small Block	Performance Roller; .250" Double Roller	When depleted use CTS-1100NR	3 keyway
CTS-1103R	Chrysler	Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1104R	Chrysler	Big Block	Performance Roller; .250" Double Roller	1 bolt cam	3 keyway
CTS-1108R	Ford	352, 360, 390, 427, 428	Performance Roller; .250" Double Roller		3 keyway
CTS-1110NR	Chevrolet	Big Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1110R	Chevrolet	Big Block	Performance Roller; .250" Double Roller	When depleted use CTS-1110NR	3 keyway
CTS-1110TR	Chevrolet	Big Block	Performance Roller; .250" Double Roller	Incl. roller thrust brg.	3 keyway
CTS-1111R	Ford	Small Block	Performance Roller; .250" Double Roller	When depleted use CTS-1135NR	3 keyway
CTS-1112R	Pontiac	V8	Performance Roller; .250" Double Roller		3 keyway
CTS-1113R	Oldsmobile	V8	Performance Roller; .250" Double Roller		3 keyway
CTS-1119R	Ford	Small Block	Performance Roller; .250" Double Roller	When depleted use CTS-1138NR	3 keyway
CTS-1121R	Ford	Cleveland/Modified	Performance Roller; .250" Double Roller		3 keyway
CTS-1122R	Ford	429, 460	Performance Roller; .250" Double Roller		3 keyway
CTS-1125R	Chrysler	Big Block	Performance Roller; .250" Double Roller	3 bolt cam	3 keyway
CTS-1132R	Buick	V6; Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1135NR	Ford	Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1138NR	Ford	Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-1145R	Chevrolet	V6; Small Block	Performance Roller; .250" Double Roller		3 keyway
CTS-3500TX9R	Chevrolet	V6; Small Block	Billet Roller; .250" Double Roller	Incl. roller thrust brg.	9 keyway
CTS-3503X9R	Chrysler	Small Block	Billet Roller; .250" Double Roller		9 keyway
CTS-3510TX9R	Chevrolet	Big Block	Billet Roller; .250" Double Roller	Incl. roller thrust brg.	9 keyway
CTS-3512X9R	Pontiac	V8	Billet Roller; .250" Double Roller		9 keyway
CTS-3513X9R	Oldsmobile	V8	Billet Roller; .250" Double Roller		9 keyway
CTS-3521X9R	Ford	Cleveland/Modified	Billet Roller; .250" Double Roller		9 keyway
CTS-3522X9R	Ford	429, 460	Billet Roller; .250" Double Roller		9 keyway
CTS-3525TX9R	Chrysler	Big Block	Billet Roller; .250" Double Roller	3 bolt cam; Incl. roller thrust brg.	9 Keyway
CTS-3532X9R	Buick	V6; Small Block	Billet Roller; .250" Double Roller		9 keyway
CTS-3535X9R	Ford	Small Block	Billet Roller; .250" Double Roller		9 keyway
CTS-3545X9R	Chevrolet	V6; Small Block	Billet Roller; .250" Double Roller		9 keyway
CTS-3600TX9R	Chevrolet	V6; Small Block	Competition Roller; Premium .250" Double Roller	3 bolt cam; Incl. roller thrust brg.	9 keyway
CTS-3603X9R	Chrysler	Small Block	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3608X9R	Ford	352, 360, 390, 427, 428	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3610TX9R	Chevrolet	Big Block	Competition Roller; Premium .250" Double Roller	Incl. roller thrust brg.	9 keyway
CTS-3612X9R	Pontiac	V8	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3621X9R	Ford	Cleveland/Modified	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3622X9R	Ford	429, 460	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3625TX9R	Chrysler	Big Block	Competition Roller; Premium .250" Double Roller	3 bolt cam; Incl. roller thrust brg.	9 Keyway
CTS-3635X9R	Ford	Small Block	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3645X9R	Chevrolet	V6; Small Block	Competition Roller; Premium .250" Double Roller		9 keyway
CTS-3676X9R	Ford	Modular 4V	Competition Roller; Premium .250" Double Roller		9 keyway

VALVE SPRINGS

SPEED PRO®



Selection Guidelines

Speed-Pro offers a vast array of high performance valve springs, specifically designed to meet most high performance and racing requirements. Our valve spring line covers the full spectrum – from simple upgrades to the original equipment parts, to maximum effort roller cam springs with nearly 1000 pounds of open pressure.

Speed-Pro valve springs are manufactured from premium quality, oil tempered chrome silicon valve spring wire. Each spring is coiled to precise dimensions, the ends are ground for squareness, and they are shot peened to eliminate surface flaws and to provide added stress relief. The springs are then heat set to minimize load loss, and are pressed “solid” once before checking for correct open and closed pressures.

The selection of the correct valve spring is crucial to attaining satisfactory engine performance. An engine builder needs to balance the need for adequate spring pressure with the dimensional limitations inherent in a given application. The single greatest danger of incorrect spring selection is “coil bind”. An absolute minimum of .060" in spring clearance must be maintained at maximum valve lift. If the spring goes into bind it is guaranteed that component breakage will result.

The easiest ways to increase available spring travel are through taller installed height, fewer coil windings, or thinner spring wire. Since a thinner wire would lower pressure (the opposite of what most racers want), the trend is to increase the spring diameter – which allows fewer windings of thicker wire. Large diameter springs mandate the use of matching retainers, and may require cylinder head machining. Taller installed heights are achieved by using longer valves, machining deeper spring pockets in the cylinder heads, and by altering retainer designs.

Speed-Pro offers a variety of multiple spring combinations – single, single with dampener, double, double with dampener, and triple. The double and triple springs deliver increased spring pressure within the same dimensional envelope. Spring dampeners are wound from flat wire, in the opposite direction of the spring itself. The dampeners are used to control valve spring harmonics – they do not significantly alter working pressures. When using multiple spring combinations, it is important to check the inner spring for coil bind potential. Multiple spring retainers normally index the inner spring to a .100" step, thus the inner may reach coil bind before the outer spring does.





Valve Springs – Numerical Listing

P/N	Type	Position	Outside Diameter	Max Lift	Closed Pressure		Open Pressure		Coil Bind	Approx.
					Lbs.	Height	Lbs.	Height	Height	Rate/inch
Performance Valve Springs										
VS-661	S/D		1.437	.562	89	@ 1.77	233	@ 1.38	1.208	168
VS-675	S/D		1.494	.520	100	@ 1.86	236	@ 1.36	1.280	272
VS-677	S		1.238	.490	76	@ 1.70	194	@ 1.25	1.150	262
VS-678	S/D		1.494	.490	91	@ 1.65	231	@ 1.22	1.100	326
VS-708	D	Assembly	1.508	.540	95	@ 1.88	309	@ 1.38	1.280	428
					26	@ 1.78	81	@ 1.28		110
					69	@ 1.88	228	@ 1.38		318
VS-717	S/D		1.522	.490	87	@ 1.82	299	@ 1.32	1.270	424
VS-718	S		1.420	.470	76	@ 1.78	215	@ 1.33	1.250	322
VS-739R	S/D		1.264	.480	104	@ 1.70	277	@ 1.21	1.160	365
VS-741R	D	Assembly	1.382	.593	127	@ 1.75	288	@ 1.20	1.097	307
					42	@ 1.65	108	@ 1.10		125
					85	@ 1.75	180	@ 1.20		182
VS-857	S		1.354	.420	71	@ 1.56	159	@ 1.16	1.080	230
VS-865R	S/D		1.522	.490	109	@ 1.82	323	@ 1.32	1.270	450
VS-890R	D	Assembly	1.500	.525	43	@ 2.06	202	@ 1.19	0.935	224
					14	@ 1.96	78	@ 1.09		
					29	@ 2.06	124	@ 1.19		
VS-892R	S/D	Assembly	1.536	.677	130	@ 1.94	287	@ 1.38	1.200	279
VS-896R	D	Assembly	1.444	.500	107	@ 1.67	282	@ 1.27	1.110	424
					31	@ 1.57	102	@ 1.11		157
					76	@ 1.67	180	@ 1.27		268
VS-919	S		1.404	.450	79	@ 1.60	209	@ 1.15	1.090	304
VS-1520	D/D	Assembly	1.549	.640	177	@ 1.90	448	@ 1.25	1.200	440
					40	@ 1.90	133	@ 1.25		151
					137	@ 1.90	315	@ 1.25		289
VS-1523	D/D	Assembly	1.532	.665	174	@ 1.90	445	@ 1.25	1.175	440
					22	@ 1.90	111	@ 1.25		145
					152	@ 1.90	334	@ 1.25		295
VS-1524	D/D	Assembly	1.555	.560	152	@ 1.88	491	@ 1.25	1.130	480
					47	@ 1.88	157	@ 1.28		193
					105	@ 1.88	334	@ 1.25		287
VS-1526	D/D	Assembly	1.553	.560	126	@ 1.88	357	@ 1.28	1.180	408
					29	@ 1.88	124	@ 1.28		168
					97	@ 1.88	233	@ 1.28		240
VS-1554	S/D		1.513		95	@ 1.80	235	@ 1.37	1.080	344
VS-1555	S/D		1.465		95	@ 1.85	257	@ 1.25	1.195	280
VS-1580	D	Assembly	1.449	.520	115	@ 1.82	310	@ 1.30	1.240	404
					40	@ 1.75	110	@ 1.23		131
					75	@ 1.72	200	@ 1.26		273
VS-1581	D/D	Assembly	1.446	.590	117	@ 1.88	335	@ 1.32	1.220	367
					35	@ 1.88	113	@ 1.32		137
					82	@ 1.88	212	@ 1.32		230
VS-1582	S/D		1.359	.430	78	@ 1.89	242	@ 1.45	1.400	373
VS-1589	D/D	Assembly	1.543	.665	145	@ 1.85	407	@ 1.30	1.125	418
					44	@ 1.77	154	@ 1.12		177
					101	@ 1.85	253	@ 1.30		241
VS-1590	D/D	Assembly	1.456	.560	117	@ 1.69	360	@ 1.09	1.070	413
					36	@ 1.59	119	@ 1.05		155
					81	@ 1.69	241	@ 1.09		258
VS-1591	S	Inner	.978	.640	38	@ 1.59	133	@ .99	.890	162
VS-1604	D/D	Assembly	1.532	.690	148	@ 1.90	414	@ 1.25	1.150	425
					49	@ 1.80	128	@ 1.15		127
					99	@ 1.90	286	@ 1.25		298
VS-1605R	D/D	Assembly	1.470	.620	136	@ 1.85	377	@ 1.25	1.170	411
					41	@ 1.78	120	@ 1.15		133
					95	@ 1.85	257	@ 1.25		278

Valve Springs – Numerical Listing



P/N	Type	Position	Outside Diameter	Max Lift	Closed Pressure		Open Pressure		Coil Bind	Approx.
					Lbs.	Height	Lbs.	Height	Height	Rate/inch
Performance Valve Springs - cont'd.										
VS-1606	D	Assembly	1.406	.540	86	@ 1.60	277	@ 1.06	1.000	326
		Inner			27	@ 1.58	125	@ 1.04		148
		Outer			59	@ 1.60	152	@ 1.06		178
VS-1612R	D/D	Assembly	1.639	.740	176	@ 1.95	562	@ 1.25	1.100	582
		Inner			26	@ 1.95	153	@ 1.25		191
		Outer			150	@ 1.95	409	@ 1.25		391
VS-1618R	S/D	Assembly	1.456	.560	81	@ 1.69	241	@ 1.09	1.070	267
Competition Series- H-11 Tool Steel Springs For Racing										
VS-1613R	D/D	Assembly	1.650	.760	209	@ 1.95	644	@ 1.20	1.080	612
		Inner			51	@ 1.95	181	@ 1.20		183
		Outer			158	@ 1.95	463	@ 1.20		429
Competition Series Pro Alloy Springs For Professional Racing										
VS-2000R	T	Assembly	1.665		250	@ 2.05	770	@ 1.30	1.145	
		Inner		82	@ 1.95	236	@ 1.15			
		Outer		125	@ 2.05	435	@ 1.35			
VS-2001R	T	Assembly	1.665		290	@ 2.07	835	@ 1.27	1.145	
		Inner		92	@ 1.97	245	@ 1.17			
		Outer		150	@ 2.07	455	@ 1.27			

VALVETRAIN

SPEED PRO[®]



Selection Guidelines

Speed-Pro offers a wide variety of high performance valvetrain components, each being precision manufactured to meet the unique demands of performance engine assembly. These components are carefully designed to complement Speed-Pro valves, valve springs, and rocker arms – assembled together as a complete performance valvetrain.

Speed-Pro Valve Spring Retainers



These high strength retainers are precision machined from 4140 chrome-moly steel. Designed to replace marginal strength, stamped steel O.E. parts, they will handle the RPM and spring pressures common in racing applications. We offer a variety of diameter, lock degree, and step configurations, allowing the engine builder to tailor the valvetrain combination to the particular needs of each engine.

Speed-Pro Valve Locks (Keepers)



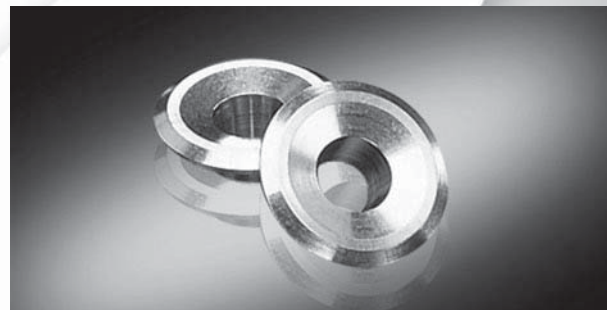
Available in 4140 stamped steel, or in ultra-high strength machined chrome-moly, Speed-Pro valve locks deliver positive retainer retention and consistent installed height. We have valve locks in both 7 and 10 degree designs, for all popular valve diameters. The 7 degree configuration matches both O.E. and popular aftermarket retainers, and delivers a strong, positive locking pressure. The 10 degree versions are very popular in high spring pressure applications due to easier disassembly and a wider retainer contact surface.

Speed-Pro Rocker Arm Studs



Machined from heat treated, high strength 4130 alloy, these premium quality rocker studs are perfect for upgrading O.E. press-in components, or for servicing aftermarket heads. They are available in a wide variety of lengths and diameters to accommodate most needs – including extra length versions for use with stud girdles and adjustment locks. They are designed with a precisely machined underhead area to positively locate a guideplate where required.

Speed-Pro Spring Seats



These hardened steel spring seats serve multiple purposes. The raised lip (either inner or outer) positively locates the valve spring for greater valvetrain stability. They also serve as shims to establish proper installed height. In addition, we offer an extra-thick spring seat to replace the valve rotators found on certain big block Chevrolet applications.

Speed-Pro Spring Shims

Intended to adjust valve spring installed height, these shims are a mandatory part of professional cylinder head assembly. They are available in a broad array of inner and outer diameters, in thicknesses of .015", .030", and .060". These premium quality shims are manufactured from hardened steel, and will withstand both high temperatures and high spring pressures.

Valve Guides - Manganese Bronze – Numerical Listing



P/N	Stem Dia.	Length	Guide Dia.	Seal Dia.	Lower Dia.	Notes
VG-5050	.373	2.500	.562	.531		Flanged; Pre cut for ST-2019R seal
VG-6001	.343	3.125	.373			Guide liner; Requires machining
VG-6002	.375	3.125	.405			Guide liner; Requires machining
VG-7000R	.312	1.875	.439			Straight; 5/16 stem; Cut-to-length
VG-7002R	.344	2.375	.502			Straight; Cut-to-length
VG-7004R	.373	2.375	.502			Straight; Cut-to-length
VG-7005R	.344	2.500	.502			Straight; Cut-to-length
VG-7006R	.344	2.875	.502			Straight; Cut-to-length
VG-7007R	.373	2.625	.502			Straight; Cut-to-length
VG-7501R	.342	2.600	.502	.531		Flanged; Cut-to-length; Pre-cut for ST-2003 seal
VG-7503R	.373	2.500	.502	.531		Flanged; Cut-to-length; Pre-cut for ST-2019R seal
VG-7504R	.373	2.562	.620	.615	.617	Stepped; Exh.; For big block Chevy iron heads
VG-7505R	.374	2.421	.625	.610		Stepped; Replacement; Big block Chevy heads

Valve Locks – Numerical Listing



P/N	Stem Dia.	Degree	Groove	Material	Notes
VK-115R	11/32	7	1 groove	Steel	
VK-315R	11/32	7	1 groove	Machined Chrome Moly	
VK-415R	11/32	7	1 groove	Machined Chrome Moly	Jumbo - large O.D. for 3/8 retainer
VK-205R	11/32	7	4 groove	Chrome Moly	
VK-274	11/32	10	1 groove	Machined Chrome Moly	
VK-138R	3/8	7	1 groove	Steel	
VK-97	3/8	7	1 wide groove	Steel	
VK-338R	3/8	7	1 groove	Machined Chrome Moly	
VK-66R	3/8	7	2 groove	Chrome Moly	
VK-204	3/8	7	3 groove	Chrome Moly	
VK-174R	3/8	7	4 groove	Chrome Moly	
VK-275	3/8	10	1 groove	Machined Chrome Moly	
VK-144R	5/16	7	1 groove	Steel	
VK-216	5/16	7	1 groove	Chrome Moly	
VK-225	5/16	7	4 groove	Chrome Moly	

Valve Spring Inserts – Numerical Listing



O.D.	I.D.	Thickness	P/N
1.250	.812	.015	259-203CHP
1.250	.812	.030	259-203BHP
1.250	.812	.060	259-203AHP
1.360	1.000	.015	259-102CHP
1.360	1.000	.030	259-102BHP
1.360	1.000	.060	259-102AHP
1.437	.645	.015	259-306CHP
1.437	.645	.030	259-306BHP
1.437	.645	.060	259-306AHP
1.437	.785	.015	259-305CHP
1.437	.785	.030	259-305BHP
1.437	.785	.060	259-305AHP
1.480	.703	.015	259-303CHP
1.480	.703	.030	259-303BHP
1.480	.703	.060	259-303AHP
1.500	1.031	.015	259-103CHP
1.500	1.031	.030	259-103BHP
1.500	1.031	.060	259-103AHP

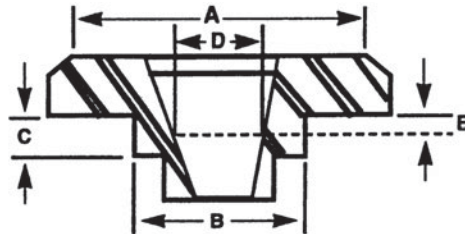
Valve Spring Retainers – Numerical Listing

P/N	Outside Dia.	Inner Spring Dia.	Step Height	Valve Stem Dia.	Gauge Dia.	Spring Seat to Gauge Dia.	Installed Height	Lock Degree	Material
VSR-7023R	1.240	.875	.125	.3438	.490		7	Chrome Moly	
VSR-7000R	1.250	0.778	.125	.343			+ .050	7	Chrome Moly
VSR-7008R	1.340	1.000	.125	.344	.4795		+ .025	7	Chrome Moly
VSR-7018R	1.370	1.060	.020	.344	.4795		7	Chrome Moly	
VSR-7017R	1.370	1.066	.100	.344	.4795	-.010	7	Chrome Moly	
VSR-7014R	1.370	1.075	.080	.344	.4795	.200	7	Chrome Moly	
VSR-7015R	1.370	1.066	.100	.375	.5095	.018	7	Chrome Moly	
VSR-7022R	1.400	1.060		.375			10	Chrome Moly	
VSR-7007R	1.400	1.025	.125	.375			7	Chrome Moly	
VSR-7006R	1.400	1.025	.125	.375			+ .080	7	Chrome Moly
VSR-7002R	1.440	1.060	.125	.375			7	Chrome Moly	
VSR-7020	1.494	1.120	.095	.462			10	Chrome Moly	
VSR-7003R	1.500	1.070	.125	.375			7	Chrome Moly	

Retainer Tech Tips:

Retainers can be used to vary spring installed heights when extra clearance is required. Some of our retainers, such as VSR 7000R, are designed to give a specific additional .050 or so. Others can be used for the same purpose by comparing the spring seat to gauge diameter measurement. Example - VSR7014R will give an additional .062 in installed height compared to VSR7015R.

- A - Outside Diameter
- B - Step Diameter
- C - Step Height
- D - Gauge Diameter
- E - Spring Seat to Gauge Diameter



Valve Spring Seats – Numerical Listing



P/N	I.D. (A)	Seat I.D. (B)	Seat O.D. (C)	Height (D)	Thickness (E)	Notes
VSS-7500R	0.625	1.440	1.55	0.18	0.07	
VSS-7501R	0.625	1.565	1.68	0.22	0.07	
VSS-7502R	0.625	1.510	1.63	0.22	0.07	
VSS-7504R	0.625	1.500	1.75	0.50	0.30	Replaces rotators on Big Block Chevrolets

Valve Stem Seals – Numerical Listing



P/N	Stem Dia.	Guide Dia.	Notes
ST-2001	.341	.562	Rubber/PTFE insert; Installation requires valve guide machining
ST-2002	.371	.625	Rubber/PTFE insert; no cutter required
ST-2003	.341	.531	Rubber/PTFE insert; Installation requires valve guide machining
ST-2004	.371	.562	Rubber/PTFE insert; Installation requires valve guide machining
ST-2005	.308	.500	Rubber/PTFE insert; Installation requires valve guide machining
ST-2011	.372	.594	Rubber/PTFE insert; no cutter required
ST-2012	.341	.505	Rubber/PTFE insert; Installation requires valve guide machining
ST-2014	.371	.500	Rubber/PTFE insert; Installation requires valve guide machining
ST-2015	.315	.427	Rubber/PTFE insert; Installation requires valve guide machining
ST-2017R	.312	.531	PTFE
ST-2018R	.341	.531	PTFE; Installation requires valve guide machining
ST-2019R	.372	.531	PTFE; Installation requires valve guide machining
ST-2020R	.343	.500	PTFE; Installation requires valve guide machining
ST-2021R	.375	.500	PTFE; Installation requires valve guide machining
ST-2022R	.312	.500	PTFE; Installation requires valve guide machining

Valve Train Miscellaneous – Numerical Listing



P/N	Mfgr.	Engine	Description	Material	Notes
Guide Plates					
MR-1891	Chevrolet	Small Block	Stepped	Hardened Stamped Steel	For 5/16 pushrods
MR-1892	Chevrolet	Small Block	Stepped	Hardened Stamped Steel	For 3/8 pushrods
MR-1893	Chevrolet	Big Block	Formed	Hardened Stamped Steel	For 3/8 pushrods
MR-1894	Chevrolet	Big Block	Formed	Hardened Stamped Steel	For 7/16 pushrods
MR-1896	Chevrolet	Small Block	Flat	Hardened Stamped Steel	For 5/16 pushrods
MR-1897	Ford	Small Block	Flat	Hardened Stamped Steel	For 5/16 pushrods
MR-1930	Chevrolet	Small Block	Flat	Hardened Stamped Steel	For 3/8 pushrods
Thrust Button					
MR-1870	Chevrolet	Big Block	Thrust Button	Bronze	
MR-1874	Buick	V6	Thrust Button	Stock Type	



Cylinder Head Identification and Chamber Volume Chart

Mfg.	CID	Casting or ID#	Application	Chamber CC's	Notes
AMC	290	3178453	1966-68	54.4	Rectangular exhaust
AMC	290	3178453	1969	52.2	Rectangular exhaust
AMC	304	3199517	1970	52.2	Dog Leg exhaust
AMC	304	3213947	1972	58.9	Dog Leg exhaust
AMC	304	3199517	Early 1971	52.2	Dog Leg exhaust
AMC	304	3212990	Late 1971	58.9	Dog Leg exhaust
AMC	343	3188558	1967-68	52.9	Rectangular exhaust
AMC	343	3188558	1969	50.6	Rectangular exhaust
AMC	360	3213948	1972	57.9	Dog Leg exhaust
AMC	360	3196291	Early 1970	50.6	Dog Leg exhaust
AMC	360	3196291	Early 1971	50.6	Dog Leg exhaust
AMC	360	3196291	Late 1970	50.6	Dog Leg exhaust
AMC	360	3212993	Late 1971	57.9	Dog Leg exhaust
AMC	390	3188558	1968-69	50.6	Rectangular exhaust
AMC	390	3188558	1969 SS AMX	58	Rectangular exhaust
AMC	390	3196291	1970 Rebel Machine	50.6	Dog Leg exhaust
AMC	390	3196291	Early 1970	50.6	Dog Leg exhaust
AMC	390	3196291	Late 1970	50.6	Dog Leg exhaust
AMC	401	3213948	1972	57.9	Dog Leg exhaust
AMC	401	3196291	Early 1971	50.6	Dog Leg exhaust
AMC	401	3212993	Late 1971	57.9	Dog Leg exhaust
Chevrolet	Small Block	041		64	Triangle
Chevrolet	Small Block	10088113		58	
Chevrolet	Small Block	14011034		64	
Chevrolet	Small Block	186		64	Double Hump
Chevrolet	Small Block	3991492		64	
Chevrolet	Small Block	441		73	
Chevrolet	Small Block	441X		80	
Chevrolet	Small Block	461		64	Double Hump
Chevrolet	Small Block	461X		64	Double Hump
Chevrolet	Small Block	462		64	Double Hump
Chevrolet	Small Block	462624		76	
Chevrolet	Small Block	493		76	
Chevrolet	Small Block	997		76	
Chevrolet	Small Block	624	1971-72 LT-1, 1973-79 L-82	76	
Chevrolet	Small Block	113	1986 + Corvette Aluminum	58	
Chevrolet	Small Block	14102193	1989	76	
Chevrolet	Small Block	1031	AFR	56-74	AFR 195 LT4
Chevrolet	Small Block	1034	AFR	68	AFR 195
Chevrolet	Small Block	1036	AFR	74	AFR 195
Chevrolet	Small Block	1038	AFR	74	AFR 195
Chevrolet	Small Block	1039	AFR	56-74	AFR 195 LT4
Chevrolet	Small Block	1040	AFR	68	AFR 195
Chevrolet	Small Block	1050	AFR	76	AFR 210
Chevrolet	Small Block	1051	AFR	76	AFR 210
Chevrolet	Small Block	1052	AFR	76	AFR 210
Chevrolet	Small Block	1054	AFR	76	AFR 210
Chevrolet	Small Block	1055	AFR	76	AFR 210, spread port exhaust
Chevrolet	Small Block	1056	AFR	76	AFR 210, spread port exhaust
Chevrolet	Small Block	1057	AFR	76	AFR 210 LT4
Chevrolet	Small Block	1058	AFR	76	AFR 210
Chevrolet	Small Block	1060	AFR	76	AFR 220
Chevrolet	Small Block	1061	AFR	76	AFR 220
Chevrolet	Small Block	1065	AFR	76	AFR 220, spread port exhaust
Chevrolet	Small Block	1066	AFR	76	AFR 220 LT4
Chevrolet	Small Block	1067	AFR	76	AFR 227
Chevrolet	Small Block	1068	AFR	76	AFR 227
Chevrolet	Small Block	1075	AFR	76	AFR 227, spread port exhaust
Chevrolet	Small Block	1076	AFR	76	AFR 227 LT4
Chevrolet	Small Block	1091	AFR	74	AFR 195
Chevrolet	Small Block	1094	AFR	74	AFR 195
Chevrolet	Small Block	1100	AFR	76	AFR 210
Chevrolet	Small Block	1101	AFR	76	AFR 210 LT4
Chevrolet	Small Block	1102	AFR	76	AFR 210
Chevrolet	Small Block	1104	AFR	76	AFR 210
Chevrolet	Small Block	1105	AFR	76	AFR 210, spread port exhaust
Chevrolet	Small Block	1110	AFR	76	AFR 220
Chevrolet	Small Block	1115	AFR	76	AFR 220, spread port exhaust
Chevrolet	Small Block	1116	AFR	76	AFR 220
Chevrolet	Small Block	1120	AFR	76	AFR 227
Chevrolet	Small Block	1121	AFR	76	AFR 227
Chevrolet	Small Block	1125	AFR	76	AFR 227, spread port exhaust

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Small Block	1126	AFR	76	AFR 227 LT4
Chevrolet	Small Block	1127	AFR	76	AFR 220 LT4
Chevrolet	Small Block	1173	AFR	76	AFR 210 LT4
Chevrolet	Small Block	1177	AFR	76	AFR 220 LT4
Chevrolet	Small Block	1190	AFR	76	AFR 227
Chevrolet	Small Block	1195	AFR	76	AFR 227, spread port exhaust
Chevrolet	Small Block	1196	AFR	76	AFR 227 LT4
Chevrolet	Small Block	1197	AFR	76	AFR 215 LT4 raised runner
Chevrolet	Small Block	1204	AFR	76	AFR 215
Chevrolet	Small Block	1205	AFR	76	AFR 215, spread port exhaust
Chevrolet	Small Block	1206	AFR	76	AFR 215
Chevrolet	Small Block	1207	AFR	76	AFR 215, spread port exhaust
Chevrolet	Small Block	1208	AFR	76	AFR 215
Chevrolet	Small Block	1209	AFR	76	AFR 215, spread port exhaust
Chevrolet	Small Block	1210	AFR	76	AFR 215 LT4 raised runner
Chevrolet	Small Block	1212	AFR	76	AFR 215 LT4 raised runner
Chevrolet	Small Block	1510	AFR	66	AFR 205 LS1
Chevrolet	Small Block	1520	AFR	66	AFR 205 LS1
Chevrolet	Small Block	1530	AFR	76	AFR 205 LS1
Chevrolet	Small Block	1540	AFR	76	AFR 205 LS1
Chevrolet	Small Block	1550	AFR	64	AFR 205 LS1
Chevrolet	Small Block	1550-1	AFR	66	AFR 205 LS1
Chevrolet	Small Block	1560	AFR	64	AFR 205 LS1
Chevrolet	Small Block	1560-1	AFR	66	AFR 205 LS1
Chevrolet	Small Block	1570	AFR	74	AFR 205 LS1
Chevrolet	Small Block	1570-1	AFR	76	AFR 205 LS1
Chevrolet	Small Block	1580	AFR	74	AFR 205 LS1
Chevrolet	Small Block	1580-1	AFR	76	AFR 205 LS1
Chevrolet	Small Block	1610	AFR	66	AFR 225 LS1
Chevrolet	Small Block	1620	AFR	66	AFR 225 LS1
Chevrolet	Small Block	1630	AFR	76	AFR 225 LS1
Chevrolet	Small Block	1640	AFR	76	AFR 225 LS1
Chevrolet	Small Block	1650	AFR	64	AFR 225 LS1
Chevrolet	Small Block	1650-1	AFR	66	AFR 225 LS1
Chevrolet	Small Block	1660	AFR	64	AFR 225 LS1
Chevrolet	Small Block	1660-1	AFR	66	AFR 225 LS1
Chevrolet	Small Block	1670	AFR	74	AFR 225 LS1
Chevrolet	Small Block	1670-1	AFR	76	AFR 225 LS1
Chevrolet	Small Block	1680	AFR	74	AFR 225 LS1
Chevrolet	Small Block	1680-1	AFR	76	AFR 225 LS1
Chevrolet	Small Block	908	AFR	56-74	AFR 180 LT1
Chevrolet	Small Block	909	AFR	56-74	AFR 180 LT1
Chevrolet	Small Block	911	AFR	68	AFR 180
Chevrolet	Small Block	912	AFR	74	AFR 180
Chevrolet	Small Block	913	AFR	74	AFR 180
Chevrolet	Small Block	916	AFR	74	AFR 180
Chevrolet	Small Block	917	AFR	68	AFR 180
Chevrolet	Small Block	918	AFR	74	AFR 180
Chevrolet	Small Block	985	AFR	74	AFR 180
Chevrolet	Small Block	988	AFR	74	AFR 180
Chevrolet	Small Block	989	AFR	74	AFR 180
Chevrolet	Small Block	990	AFR	74	AFR 195
Chevrolet	Small Block	-10	Brodirx	67	
Chevrolet	Small Block	-10X	Brodirx	56	
Chevrolet	Small Block	-11	Brodirx	67	
Chevrolet	Small Block	-11X	Brodirx	67	
Chevrolet	Small Block	-12 SP B	Brodirx	68	
Chevrolet	Small Block	-12 SP B MC	Brodirx	68	
Chevrolet	Small Block	-12 SP BS	Brodirx	68	
Chevrolet	Small Block	-12 SP BS MC	Brodirx	68	
Chevrolet	Small Block	-12 SP P	Brodirx	68	
Chevrolet	Small Block	-12 SP WB	Brodirx	68	
Chevrolet	Small Block	-12 SP WB MC	Brodirx	68	
Chevrolet	Small Block	12X12	Brodirx	67	
Chevrolet	Small Block	12X12RP	Brodirx	64	
Chevrolet	Small Block	18 SP X	Brodirx	68	
Chevrolet	Small Block	18 STD X	Brodirx	68	
Chevrolet	Small Block	-8	Brodirx	67	
Chevrolet	Small Block	-8 PRO	Brodirx	67	
Chevrolet	Small Block	-8 STD FSH PKG-1	Brodirx	67	
Chevrolet	Small Block	BD 2000	Brodirx	74	
Chevrolet	Small Block	CV SP	Brodirx	54	



Cylinder Head Identification and Chamber Volume Chart

Mfg.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Small Block	CV SP 330	Brodix	54	
Chevrolet	Small Block	FB 1000	Brodix	62	
Chevrolet	Small Block	FB 1001	Brodix	62	
Chevrolet	Small Block	GB 2000	Brodix	74	
Chevrolet	Small Block	M2 18 X	Brodix	68	
Chevrolet	Small Block	ST STD PKG-1	Brodix	67	
Chevrolet	Small Block	Track 1	Brodix	67	
Chevrolet	Small Block	Track 1X	Brodix	68	
Chevrolet	Small Block	WP SY WT-1	Brodix	67	
Chevrolet	Small Block	23500 65	Canfield	65	
Chevrolet	Small Block	23600 65	Canfield	65	
Chevrolet	Small Block	10021070	Dart	72	165cc Pro 1
Chevrolet	Small Block	10021171	Dart	72	165cc Pro 1
Chevrolet	Small Block	10110010	Dart	64	180cc Pro 1
Chevrolet	Small Block	10111111	Dart	64	180cc Pro 1
Chevrolet	Small Block	10111112	Dart	64	180cc Pro 1
Chevrolet	Small Block	10120010	Dart	64	180cc Pro 1
Chevrolet	Small Block	10121111	Dart	64	180cc Pro 1
Chevrolet	Small Block	10121112	Dart	64	180cc Pro 1
Chevrolet	Small Block	10210010	Dart	72	180cc Pro 1
Chevrolet	Small Block	10211111	Dart	72	180cc Pro 1
Chevrolet	Small Block	10211112	Dart	72	180cc Pro 1
Chevrolet	Small Block	10220010	Dart	72	180cc Pro 1
Chevrolet	Small Block	10221111	Dart	72	180cc Pro 1
Chevrolet	Small Block	10221112	Dart	72	180cc Pro 1
Chevrolet	Small Block	10310010	Dart	64	200cc Pro 1
Chevrolet	Small Block	10310020	Dart	64	200cc Pro 1
Chevrolet	Small Block	10310030	Dart	64	200cc Pro 1
Chevrolet	Small Block	10311111	Dart	64	200cc Pro 1
Chevrolet	Small Block	10311112	Dart	64	200cc Pro 1
Chevrolet	Small Block	10311122	Dart	64	200cc Pro 1
Chevrolet	Small Block	10311123	Dart	64	200cc Pro 1
Chevrolet	Small Block	10311133	Dart	64	200cc Pro 1
Chevrolet	Small Block	10320010	Dart	64	200cc Pro 1
Chevrolet	Small Block	10320020	Dart	64	200cc Pro 1
Chevrolet	Small Block	10320030	Dart	64	200cc Pro 1
Chevrolet	Small Block	10321111	Dart	64	200cc Pro 1
Chevrolet	Small Block	10321112	Dart	64	200cc Pro 1
Chevrolet	Small Block	10321122	Dart	64	200cc Pro 1
Chevrolet	Small Block	10321123	Dart	64	200cc Pro 1
Chevrolet	Small Block	10321133	Dart	64	200cc Pro 1
Chevrolet	Small Block	10410010	Dart	72	200cc Pro 1
Chevrolet	Small Block	10410020	Dart	72	200cc Pro 1
Chevrolet	Small Block	10410030	Dart	72	200cc Pro 1
Chevrolet	Small Block	10411111	Dart	72	200cc Pro 1
Chevrolet	Small Block	10411112	Dart	72	200cc Pro 1
Chevrolet	Small Block	10411122	Dart	72	200cc Pro 1
Chevrolet	Small Block	10411123	Dart	72	200cc Pro 1
Chevrolet	Small Block	10411133	Dart	72	200cc Pro 1
Chevrolet	Small Block	10420010	Dart	72	200cc Pro 1
Chevrolet	Small Block	10420020	Dart	72	200cc Pro 1
Chevrolet	Small Block	10420030	Dart	72	200cc Pro 1
Chevrolet	Small Block	10421111	Dart	72	200cc Pro 1
Chevrolet	Small Block	10421112	Dart	72	200cc Pro 1
Chevrolet	Small Block	10421123	Dart	72	200cc Pro 1
Chevrolet	Small Block	10421133	Dart	72	200cc Pro 1
Chevrolet	Small Block	10510020	Dart	64	215cc Pro 1
Chevrolet	Small Block	10510030	Dart	64	215cc Pro 1
Chevrolet	Small Block	10510040	Dart	64	215cc Pro 1
Chevrolet	Small Block	10510050	Dart	64	215cc Pro 1
Chevrolet	Small Block	10511122	Dart	64	215cc Pro 1
Chevrolet	Small Block	10511123	Dart	64	215cc Pro 1
Chevrolet	Small Block	10511133	Dart	64	215cc Pro 1
Chevrolet	Small Block	10511143	Dart	64	215cc Pro 1
Chevrolet	Small Block	10511153	Dart	64	215cc Pro 1
Chevrolet	Small Block	10520020	Dart	64	215cc Pro 1
Chevrolet	Small Block	10520030	Dart	64	215cc Pro 1
Chevrolet	Small Block	10520040	Dart	64	215cc Pro 1
Chevrolet	Small Block	10520050	Dart	64	215cc Pro 1
Chevrolet	Small Block	10521122	Dart	64	215cc Pro 1
Chevrolet	Small Block	10521123	Dart	64	215cc Pro 1



Cylinder Head Identification and Chamber Volume Chart

Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Small Block	11510040	Dart	64	215cc Pro 1
Chevrolet	Small Block	11510050	Dart	64	215cc Pro 1
Chevrolet	Small Block	11511122	Dart	64	215cc Pro 1
Chevrolet	Small Block	11511123	Dart	64	215cc Pro 1
Chevrolet	Small Block	11511133	Dart	64	215cc Pro 1
Chevrolet	Small Block	11511143	Dart	64	215cc Pro 1
Chevrolet	Small Block	11511153	Dart	64	215cc Pro 1
Chevrolet	Small Block	11520020	Dart	64	215cc Pro 1
Chevrolet	Small Block	11520030	Dart	64	215cc Pro 1
Chevrolet	Small Block	11520040	Dart	64	215cc Pro 1
Chevrolet	Small Block	11520050	Dart	64	215cc Pro 1
Chevrolet	Small Block	11521122	Dart	64	215cc Pro 1
Chevrolet	Small Block	11521123	Dart	64	215cc Pro 1
Chevrolet	Small Block	11521133	Dart	64	215cc Pro 1
Chevrolet	Small Block	11521143	Dart	64	215cc Pro 1
Chevrolet	Small Block	11521153	Dart	64	215cc Pro 1
Chevrolet	Small Block	11610020	Dart	72	215cc Pro 1
Chevrolet	Small Block	11610030	Dart	72	215cc Pro 1
Chevrolet	Small Block	11610040	Dart	72	215cc Pro 1
Chevrolet	Small Block	11611122	Dart	72	215cc Pro 1
Chevrolet	Small Block	11611123	Dart	72	215cc Pro 1
Chevrolet	Small Block	11611133	Dart	72	215cc Pro 1
Chevrolet	Small Block	11611143	Dart	72	215cc Pro 1
Chevrolet	Small Block	11611153	Dart	72	215cc Pro 1
Chevrolet	Small Block	11620020	Dart	72	215cc Pro 1
Chevrolet	Small Block	11620030	Dart	72	215cc Pro 1
Chevrolet	Small Block	11620040	Dart	72	215cc Pro 1
Chevrolet	Small Block	11620050	Dart	72	215cc Pro 1
Chevrolet	Small Block	11621122	Dart	72	215cc Pro 1
Chevrolet	Small Block	11621123	Dart	72	215cc Pro 1
Chevrolet	Small Block	11621133	Dart	72	215cc Pro 1
Chevrolet	Small Block	11621143	Dart	72	215cc Pro 1
Chevrolet	Small Block	11621153	Dart	72	215cc Pro 1
Chevrolet	Small Block	11710040	Dart	64	230cc Pro 1
Chevrolet	Small Block	11710050	Dart	64	230cc Pro 1
Chevrolet	Small Block	11711143	Dart	64	230cc Pro 1
Chevrolet	Small Block	11711153	Dart	64	230cc Pro 1
Chevrolet	Small Block	11720040	Dart	64	230cc Pro 1
Chevrolet	Small Block	11720050	Dart	64	230cc Pro 1
Chevrolet	Small Block	11721143	Dart	64	230cc Pro 1
Chevrolet	Small Block	11721153	Dart	64	230cc Pro 1
Chevrolet	Small Block	11810040	Dart	72	230cc Pro 1
Chevrolet	Small Block	11810050	Dart	72	230cc Pro 1
Chevrolet	Small Block	11811143	Dart	72	230cc Pro 1
Chevrolet	Small Block	11811153	Dart	72	230cc Pro 1
Chevrolet	Small Block	11820040	Dart	72	230cc Pro 1
Chevrolet	Small Block	11820050	Dart	72	230cc Pro 1
Chevrolet	Small Block	11821143	Dart	72	230cc Pro 1
Chevrolet	Small Block	11821153	Dart	72	230cc Pro 1
Chevrolet	Small Block	18 degree Race Series	Dart	67	
Chevrolet	Small Block	220cc Race Series	Dart	64	
Chevrolet	Small Block	60719	Edelbrock	70	
Chevrolet	Small Block	60739	Edelbrock	70	
Chevrolet	Small Block	60759	Edelbrock	70	
Chevrolet	Small Block	60859	Edelbrock	60	
Chevrolet	Small Block	60879	Edelbrock	60	
Chevrolet	Small Block	60899	Edelbrock	64	
Chevrolet	Small Block	60909	Edelbrock	64	
Chevrolet	Small Block	60979	Edelbrock	64	E-Tec
Chevrolet	Small Block	60989	Edelbrock	64	
Chevrolet	Small Block	60999	Edelbrock	64	
Chevrolet	Small Block	61049	Edelbrock	52	
Chevrolet	Small Block	61069	Edelbrock	52	
Chevrolet	Small Block	61089	Edelbrock	52	
Chevrolet	Small Block	61109	Edelbrock	65	
Chevrolet	Small Block	61129	Edelbrock	65	
Chevrolet	Small Block	61149	Edelbrock	65	
Chevrolet	Small Block	61159	Edelbrock	52	
Chevrolet	Small Block	61169	Edelbrock	52	
Chevrolet	Small Block	61179	Edelbrock	47	
Chevrolet	Small Block	61189	Edelbrock	65	
Chevrolet	Small Block	61199	Edelbrock	65	

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Small Block	61209	Edelbrock	71	
Chevrolet	Small Block	61229	Edelbrock	71	
Chevrolet	Small Block	61249	Edelbrock	71	
Chevrolet	Small Block	77569	Edelbrock	64	
Chevrolet	Small Block	77579	Edelbrock	64	
Chevrolet	Small Block	77589	Edelbrock	64	
Chevrolet	Small Block	77599	Edelbrock	64	
Chevrolet	Small Block	77619	Edelbrock	70	
Chevrolet	Small Block	77629	Edelbrock	70	
Chevrolet	Small Block	77639	Edelbrock	70	
Chevrolet	Small Block	77649	Edelbrock	70	
Chevrolet	Small Block	492	LT-1, Z-28	64	Fuel Injection
Chevrolet	Small Block	896	Power Pack (Late '50's)	59	
Chevrolet	Small Block	123 2000 00A	Pro Topline	72	
Chevrolet	Small Block	123 2000 20A	Pro Topline	72	
Chevrolet	Small Block	123 2000 35A	Pro Topline	72	
Chevrolet	Small Block	123 2000 80A	Pro Topline	72	
Chevrolet	Small Block	123 2600 20A	Pro Topline	72	
Chevrolet	Small Block	123 2600 35A	Pro Topline	72	
Chevrolet	Small Block	123 2622 20A	Pro Topline	72	
Chevrolet	Small Block	123 2622 35A	Pro Topline	76	
Chevrolet	Small Block	123 4000 00A	Pro Topline	64	
Chevrolet	Small Block	123 4000 20A	Pro Topline	64	
Chevrolet	Small Block	123 4000 35A	Pro Topline	64	
Chevrolet	Small Block	123 4000 80A	Pro Topline	64	
Chevrolet	Small Block	123 4600 20A	Pro Topline	64	
Chevrolet	Small Block	123 4600 35A	Pro Topline	64	
Chevrolet	Small Block	123 4622 20A	Pro Topline	64	
Chevrolet	Small Block	123 4622 35A	Pro Topline	64	
Chevrolet	Small Block	223 2000 00A	Pro Topline	72	
Chevrolet	Small Block	223 2000 20A	Pro Topline	72	
Chevrolet	Small Block	223 2000 35A	Pro Topline	72	
Chevrolet	Small Block	223 2000 80A	Pro Topline	72	
Chevrolet	Small Block	223 2600 20A	Pro Topline	72	
Chevrolet	Small Block	223 2600 35A	Pro Topline	72	
Chevrolet	Small Block	223 2622 20A	Pro Topline	72	
Chevrolet	Small Block	223 2622 35A	Pro Topline	72	
Chevrolet	Small Block	223 4000 00A	Pro Topline	64	
Chevrolet	Small Block	223 4000 20A	Pro Topline	64	
Chevrolet	Small Block	223 4000 35A	Pro Topline	64	
Chevrolet	Small Block	223 4000 80A	Pro Topline	64	
Chevrolet	Small Block	223 4600 20A	Pro Topline	64	
Chevrolet	Small Block	223 4600 35A	Pro Topline	64	
Chevrolet	Small Block	223 4622 20A	Pro Topline	64	
Chevrolet	Small Block	223 4622 35A	Pro Topline	64	
Chevrolet	Small Block	223 5000 00A	Pro Topline	50	
Chevrolet	Small Block	223 5000 20A	Pro Topline	50	
Chevrolet	Small Block	223 6494 083	Pro Topline	64	
Chevrolet	Small Block	223 6494 193	Pro Topline	64	
Chevrolet	Small Block	223 6494 906	Pro Topline	64	
Chevrolet	Small Block	223 6794 167T	Pro Topline	67	
Chevrolet	Small Block	223 7694 167T	Pro Topline	76	
Chevrolet	Small Block	223 7694 193	Pro Topline	76	
Chevrolet	Small Block	223 7694 217	Pro Topline	76	
Chevrolet	Small Block	TFS-30400001	Trick Flow	64	
Chevrolet	Small Block	TFS-30400001-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400002	Trick Flow	64	
Chevrolet	Small Block	TFS-30400002-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400003	Trick Flow	64	
Chevrolet	Small Block	TFS-30400003-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400005	Trick Flow	64	
Chevrolet	Small Block	TFS-30400005-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400006	Trick Flow	64	
Chevrolet	Small Block	TFS-30400006-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400007	Trick Flow	64	
Chevrolet	Small Block	TFS-30400007-CNC	Trick Flow	64	
Chevrolet	Small Block	TFS-30400012-CNC	Trick Flow	72	
Chevrolet	Small Block	TFS-30400013-CNC	Trick Flow	72	
Chevrolet	Small Block	TFS-31800001A	Trick Flow	56	18 Degree
Chevrolet	Small Block	TFS-3180T801	Trick Flow	56	18 Degree
Chevrolet	Small Block	TFS-3182B001	Trick Flow	56	18 Degree
Chevrolet	Small Block	TFS-32400006	Trick Flow	67	R Series big port



Cylinder Head Identification and Chamber Volume Chart

Mfg.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Small Block	TFS-32400007	Trick Flow	67	R Series big port
Chevrolet	Small Block	TFS-3240T006	Trick Flow	67	R Series big port
Chevrolet	Small Block	TFS-3240T007	Trick Flow	67	R Series big port
Chevrolet	Small Block	011150	World	64	Angle plug
Chevrolet	Small Block	011250	World	64	Straight plug
Chevrolet	Small Block	012150	World	72	Angle plug
Chevrolet	Small Block	012250	World	72	Straight plug
Chevrolet	Small Block	012260	World	72	'87 & later intake
Chevrolet	Small Block	014150	World	64	Angle plug
Chevrolet	Small Block	014250	World	64	Straight plug
Chevrolet	Small Block	014350	World	72	Angle plug
Chevrolet	Small Block	024150	World	64	Aluminum, angle plug
Chevrolet	Small Block	042650	World	58	305 replacement, Straight plug
Chevrolet	Small Block	042660	World	67	Straight plug
Chevrolet	Small Block	042670	World	76	Straight plug
Chevrolet	Small Block	042750	World	58	305 replacement, '87 & later intake
Chevrolet	Small Block	042770	World	76	'87 & later intake
Chevrolet	Small Block	043600	World	76	Straight plug
Chevrolet	Small Block	043610	World	67	Straight plug
Chevrolet	Small Block	043640	World	76	'87 & later intake
Chevrolet	Small Block	043650	World	67	'87 & later intake, center bolt valve covers
Chevrolet	Small Block	043700	World	67	'87 & later intake, center bolt valve covers
Chevrolet	396	3872702	1965-66	96.4	
Chevrolet	396	3873858	1965-66	106.9	
Chevrolet	396	3904390	1965-66	96.4	
Chevrolet	396	3904391	1965-66	106.9	
Chevrolet	396	3909802	1965-66	96.4	
Chevrolet	396	3856208	1965-66 H.P.	106.9	
Chevrolet	396	3846206	1965-68	96.4	
Chevrolet	396	3917215	1965-68	96.4	
Chevrolet	396	3856206	1965-69	96.4	
Chevrolet	396	3919840	1965-69	104.9	
Chevrolet	396	3931063	1965-69	96.4	
Chevrolet	396	3964280	1965-69	96.4	
Chevrolet	396	3964290	1965-69	96.4	
Chevrolet	396	3964291	1965-69	106.9	
Chevrolet	396	3873702	1966	96.4	
Chevrolet	396	3856260	1968		
Chevrolet	396	3919839	1968-69	104.9	
Chevrolet	396	3919842	1968-69	103.3	
Chevrolet	396	3965198	1968-69		
Chevrolet	396	3933148	1969	109	
Chevrolet	396	3964380	1969-69		
Chevrolet	396	3975950	1970 Truck		
Chevrolet	402	3975950	1970 Truck		
Chevrolet	402	3965198	1970-71		
Chevrolet	402	3856206	1970-72	96.4	
Chevrolet	402	3993820	1970-72	105	
Chevrolet	402	3999241	1971-72	105	
Chevrolet	402	6272290	1972-73 Truck		
Chevrolet	427	3872702	1965-66	96.4	
Chevrolet	427	3873858	1965-66	106.9	
Chevrolet	427	3904390	1965-66	96.4	
Chevrolet	427	3904391	1965-66	106.9	
Chevrolet	427	3856208	1965-66 H.P.	106.9	
Chevrolet	427	3917215	1965-68	96.4	
Chevrolet	427	3919840	1965-69	104.9	
Chevrolet	427	3931063	1965-69	96.4	
Chevrolet	427	3964291	1965-70	106.9	
Chevrolet	427	3856213	1965-76 Truck		
Chevrolet	427	3917219	1966-73 Truck	96.4	
Chevrolet	427	3904392	1967	103.3	
Chevrolet	427	3919839	1968-69	104.9	
Chevrolet	427	3919842	1968-69	103.3	
Chevrolet	427	3946074	1969	114.8	
Chevrolet	427	3986135	1969-73 Truck		
Chevrolet	427	336768	1973-76 Truck		
Chevrolet	454	3964291	1970	106.9	
Chevrolet	454	3964292	1970	106.9	
Chevrolet	454	3946074	1970-71	114.8	
Chevrolet	454	3964280	1970-72	96.4	
Chevrolet	454	3993820	1970-72	105	

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	454	3856206	1970-73	96.4	
Chevrolet	454	343783	1970-76		
Chevrolet	454	352625	1970-76		
Chevrolet	454	3964290	1970-76	96.4	
Chevrolet	454	3994026	1971	103.1	
Chevrolet	454	6258723	1971	103.1	
Chevrolet	454	6272990	1971	118	
Chevrolet	454	3999241	1971-72	105	
Chevrolet	454	353049	1973	110	
Chevrolet	454	336781	1974	110	
Chevrolet	454	346236	1975-76 Truck	112	
Chevrolet	Big Block	2000	AFR	121	AFR 315 Magnum
Chevrolet	Big Block	2001	AFR	121	AFR 335 Magnum
Chevrolet	Big Block	2010	AFR	121	AFR 357 Magnum
Chevrolet	Big Block	2100	AFR	119	AFR 305 Magnum
Chevrolet	Big Block	2100-1	AFR	121	AFR 305 Magnum
Chevrolet	Big Block	2101	AFR	119	AFR 325 Magnum
Chevrolet	Big Block	2101-1	AFR	121	AFR 325 Magnum
Chevrolet	Big Block	2110	AFR	119	AFR 345 Magnum
Chevrolet	Big Block	2110-1	AFR	121	AFR 345 Magnum
Chevrolet	Big Block	3050	AFR	119	AFR 305 Magnum
Chevrolet	Big Block	3050-1	AFR	121	AFR 305 Magnum
Chevrolet	Big Block	3150	AFR	121	AFR 315 Magnum
Chevrolet	Big Block	3250	AFR	119	AFR 325 Magnum
Chevrolet	Big Block	3250-1	AFR	121	AFR 325 Magnum
Chevrolet	Big Block	3250-1	AFR	121	AFR 345 Magnum
Chevrolet	Big Block	3350	AFR	121	AFR 335 Magnum
Chevrolet	Big Block	3450	AFR	119	AFR 345 Magnum
Chevrolet	Big Block	3570	AFR	121	AFR 357 Magnum
Chevrolet	Big Block	3600	AFR	119	AFR 265 oval port Magnum
Chevrolet	Big Block	3600-1	AFR	121	AFR 265 oval port Magnum
Chevrolet	Big Block	3610	AFR	119	AFR 265 oval port Magnum
Chevrolet	Big Block	3610-1	AFR	121	AFR 265 oval port Magnum
Chevrolet	Big Block	3620	AFR	119	AFR 265 oval port Magnum
Chevrolet	Big Block	3620-1	AFR	121	AFR 265 oval port Magnum
Chevrolet	Big Block	3630	AFR	119	AFR 290 oval port Magnum
Chevrolet	Big Block	3640	AFR	121	AFR 290 oval port Magnum
Chevrolet	Big Block	3650	AFR	121	AFR 290 oval port Magnum
Chevrolet	Big Block	14011077	Aluminum Service	118	Open chamber
Chevrolet	Big Block	3919842	Aluminum Service	107	Closed chamber
Chevrolet	Big Block	14044861	Bowtie	105	Open chamber
Chevrolet	Big Block	10051128	Bowtie - symmetrical port	72	Semi-open chamber
Chevrolet	Big Block	BB-1	Brodix	119	
Chevrolet	Big Block	BB-1 OEFI	Brodix	119	
Chevrolet	Big Block	BB-2	Brodix	119	
Chevrolet	Big Block	BB-2 Plus	Brodix	119	
Chevrolet	Big Block	BB-2 XTRA	Brodix	119	
Chevrolet	Big Block	BB-2X	Brodix	119	
Chevrolet	Big Block	BB-3	Brodix	119	
Chevrolet	Big Block	BB-4	Brodix	134	
Chevrolet	Big Block	BB-5	Brodix	108	
Chevrolet	Big Block	M2 BIG DUKE	Brodix	97	
Chevrolet	Big Block	PB 1800	Brodix	89	
Chevrolet	Big Block	PB 1801	Brodix	89	
Chevrolet	Big Block	PB 1802	Brodix	91	
Chevrolet	Big Block	PB 2005	Brodix	80	
Chevrolet	Big Block	245990 113	Canfield	113	CNC
Chevrolet	Big Block	245990 119	Canfield	119	CNC
Chevrolet	Big Block	245990 125	Canfield	125	CNC
Chevrolet	Big Block	265cc Race Series	Dart	119	
Chevrolet	Big Block	308cc Iron Eagle	Dart	119	
Chevrolet	Big Block	308cc Pro 1	Dart	119	
Chevrolet	Big Block	310cc Pro 1	Dart	119	
Chevrolet	Big Block	320cc Race Series	Dart	119	
Chevrolet	Big Block	325cc Pro 1	Dart	119	
Chevrolet	Big Block	335cc Pro 1 CNC	Dart	119	
Chevrolet	Big Block	345cc Iron Eagle	Dart	119	
Chevrolet	Big Block	345cc Pro 1	Dart	119	
Chevrolet	Big Block	355cc Pro 1 CNC	Dart	119	
Chevrolet	Big Block	360cc Race Series	Dart	119	
Chevrolet	Big Block	370cc Oval Race Series	Dart	119	
Chevrolet	Big Block	410cc Big M Race Series	Dart	119	



Cylinder Head Identification and Chamber Volume Chart

Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chevrolet	Big Block	020650	Edelbrock	119	
Chevrolet	Big Block	60409	Edelbrock	112	
Chevrolet	Big Block	60419	Edelbrock	112	
Chevrolet	Big Block	60429	Edelbrock	112	
Chevrolet	Big Block	60439	Edelbrock	112	
Chevrolet	Big Block	60449	Edelbrock	110	
Chevrolet	Big Block	60459	Edelbrock	110	
Chevrolet	Big Block	60469	Edelbrock	110	
Chevrolet	Big Block	60479	Edelbrock	110	
Chevrolet	Big Block	60489	Edelbrock	100	
Chevrolet	Big Block	60499	Edelbrock	100	
Chevrolet	Big Block	60549	Edelbrock	118	
Chevrolet	Big Block	60559	Edelbrock	118	
Chevrolet	Big Block	61459	Edelbrock	110	
Chevrolet	Big Block	61559	Edelbrock	118	
Chevrolet	Big Block	77609	Edelbrock	117	
Chevrolet	Big Block	77659	Edelbrock	133	
Chevrolet	Big Block	14096188	LS6/LS7 Crate Engine	118	Open chamber
Chevrolet	Big Block	6272990	LS6/LS7 Crate Engine	118	Open chamber
Chevrolet	Big Block	10045427	Pontiac Super Duty	91	Open chamber
Chevrolet	Big Block	10049875	Pontiac Super Duty	83	Open chamber
Chevrolet	Big Block	3964291	Service	108	Closed chamber
Chevrolet	Big Block	TFS-41400001	Trick Flow	122	R320
Chevrolet	Big Block	TFS-41400002	Trick Flow	122	R320
Chevrolet	Big Block	TFS-41400003	Trick Flow	122	R320
Chevrolet	Big Block	TFS-41400004	Trick Flow	122	R340
Chevrolet	Big Block	TFS-41400005	Trick Flow	122	R340
Chevrolet	Big Block	TFS-41400006	Trick Flow	122	R340
Chevrolet	Big Block	TFS-41400007	Trick Flow	122	R360
Chevrolet	Big Block	TFS-41400008	Trick Flow	122	R360
Chevrolet	Big Block	TFS-4140T001	Trick Flow	122	R320
Chevrolet	Big Block	TFS-4140T002	Trick Flow	122	R320
Chevrolet	Big Block	TFS-4140T003	Trick Flow	122	R320
Chevrolet	Big Block	TFS-4140T004	Trick Flow	122	R340
Chevrolet	Big Block	TFS-4140T005	Trick Flow	122	R340
Chevrolet	Big Block	TFS-4140T006	Trick Flow	122	R340
Chevrolet	Big Block	TFS-4140T007	Trick Flow	122	R360
Chevrolet	Big Block	TFS-4140T008	Trick Flow	122	R360
Chevrolet	Big Block	TFS-4140T808	Trick Flow	122	R360
Chevrolet	Big Block	020660	World	119	Merlin II; 350cc intake
Chrysler	318	2658920	1967	57	
Chrysler	318	2843675	1968-71	64	
Chrysler	318	2843675	1972	64	
Chrysler	318	2843675	1973-74	64	
Chrysler	318	3769973	1975	64	
Chrysler	318	3769973	1976	64	
Chrysler	318	4027163	1977-79	64	
Chrysler	318	4027593	1977-79	64	
Chrysler	318	4027163	1980	64	
Chrysler	318	4027593	1980	64	
Chrysler	318	4027163	1981-83	64	
Chrysler	318	4027593	1981-83	64	
Chrysler	318	4027596	1981-83 High Performance	68	
Chrysler	318	4071051	1981-83 High Performance	68	
Chrysler	318	302	1989-91 Swirl	60	
Chrysler	340	2531894	1968-71	68	
Chrysler	340	3418915	1970	68	
Chrysler	340	3418915	1972	68	
Chrysler	340	3671587	1973-74	68	
Chrysler	340		6-bbl. T/A Service	70	P4529493
Chrysler	360	3418915	1971	68	
Chrysler	360	3418915	1972	68	
Chrysler	360	3671587	1973 W/air pump	68	
Chrysler	360	3671587	1973-74	68	
Chrysler	360	3769974	1975	68	
Chrysler	360	3671587	1976	68	
Chrysler	360	3769974	1976	68	
Chrysler	360	4027596	1977-79	68	
Chrysler	360	4071051	1977-79	68	
Chrysler	360	4027596	1980	68	
Chrysler	360	4071051	1980	68	
Chrysler	360	308	1989-91 Swirl	68	

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Chrysler	383	2463200	1963		
Chrysler	383	2406516	1964-67		
Chrysler	383	2843906	1968-70	88	
Chrysler	383	3462346	1971-72	88	
Chrysler	413	2463200	1963		
Chrysler	426	2463209	1963 Max Wedge		
Chrysler	426	2406518	1964 Max Wedge		
Chrysler	440	2780915	1967 High Performance	78.5	
Chrysler	440	2843906	1968-70	88	
Chrysler	440	3462346	1971-73	88	
Chrysler	440	3751213	1973 Motor Home	88	
Chrysler	440	3769902	1974	88	
Chrysler	440	3769975	1975	88	
Chrysler	440	4006452	1976-78	88	
Chrysler	Small Block	60179	Edelbrock	65	
Chrysler	Small Block	60199	Edelbrock	65	
Chrysler	Small Block	60769	Edelbrock	63	
Chrysler	Small Block	60779	Edelbrock	63	
Chrysler	400	3462346	1971-73	88	
Chrysler	400	3751213	1973 Motor Home	88	
Chrysler	400	3769902	1974	88	
Chrysler	400	3769975	1975	88	
Chrysler	400	4006452	1976-78	88	
Chrysler	Small Block		Econo W2	71	P4529994
Chrysler	Small Block		W2	71	P4529446
Chrysler	Small Block		W5	59	P4452924
Chrysler	Big Block	B1	Brodix	68	
Chrysler	Big Block	B1 BA	Brodix	65	
Chrysler	Big Block	B1 BA MC	Brodix	67	
Chrysler	Big Block	B1 BS	Brodix	65	
Chrysler	Big Block	60149	Edelbrock	88	
Chrysler	Big Block	60189	Edelbrock	88	
Chrysler	Big Block	60919	Edelbrock	84	
Chrysler	Big Block	60929	Edelbrock	84	
Chrysler	Big Block	3614476	Stage IV		
Chrysler	Big Block	4286526V	Stage V		
Chrysler	Big Block		Stage VI	90	
Ford	260	C2OE-F	1962-63	54.5	
Ford	260	C3OE-B	1962-63	54.5	
Ford	260	C4OE-B	1964	54.5	
Ford	289	C3AE-F	1963-64	54.5	
Ford	289	C3OE-E	1963-64	54.5	
Ford	289	C3OE-F	1963-64	54.5	
Ford	289	C4AE-C	1963-64	54.5	
Ford	289	C4OE-B	1964-67 High Perf.	54.5	
Ford	289	C5AE-E	1964-67 High Perf.	54.5	
Ford	289	C5OE-A	1964-67 High Perf.	54.5	
Ford	289	C5OE-B	1965-67	54.5	
Ford	289	C6OE-C	1965-67	54.5	
Ford	289	C6OE-E	1965-67	54.5	
Ford	289	C6OE-G	1965-67	54.5	
Ford	289	C6OE-M	1965-67	54.5	
Ford	289	C7OE-A	1965-67	54.5	
Ford	289	C7OE-B	1965-67	54.5	
Ford	289	C7ZE-A	1965-67	54.5	
Ford	289	C8OE-D	1968	63	
Ford	289	C8OE-L	1968	63	
Ford	289	C8OE-M	1968	63	
Ford	302	F3ZE-AA		64.9	
Ford	302	C7OE-C	1968-70	63	
Ford	302	C7OE-G	1968-70	63	
Ford	302	C8AE-J	1968-70	63	
Ford	302	C8DE-F	1968-70	63	
Ford	302	C8OE-F	1968-70	53.5	
Ford	302	C8OE-J	1968-70	63	
Ford	302	C8OE-K	1968-70	63	
Ford	302	C8OE-L	1968-70	63	
Ford	302	C8OE-M	1968-70	63	
Ford	302	C9TE-C	1968-70	58.2	
Ford	302	D0OE-B	1968-70	58.2	



Cylinder Head Identification and Chamber Volume Chart

Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Ford	302	D1TZ-A	1971-74	58.2	
Ford	302	D2OE-BA	1971-74	58.2	
Ford	302	D5OE-A3A	1975-76	58.2	
Ford	302	D5OE-A3B	1975-76	58.2	
Ford	302	D5OE-GA	1975-76	58.2	
Ford	302	D7OE-DA	1977	69	
Ford	302	D8OE-AB	1978-80	69	
Ford	302	F0JE-AA	5.0L & 5.8L Marine	69	
Ford	302	F3JE-CA	5.0L & 5.8L Marine	69	
Ford	302	E5AE-CA	5.0L HO & passenger car(1985)	69	
Ford	302	E7TE-PA	5.0L HO (1987-95) & F-series truck	62.1	
Ford	302	E6AE-AA	5.0L HO(1986) & passenger car	64.4	
Ford	302	E7AE-AA	5.0L passenger car (non-HO)	64.4	
Ford	302	D9AE-AA	5.0L(1979), 5.0L HO(1982-84)	69	
Ford	302	F1ZE-AA	Cobra and HO Marine	62.1	
Ford	302	F3ZE-AA	Cobra and HO Marine	62.1	
Ford	302	F1ZE-AA	GT40 Explorer (1996-97)	64.9	
Ford	302		GT40 Truck	65	3 Vertical bars
Ford	302	F77E-AA	GT40P Explorer (1997 1/4 later)	59.8	
Ford	302	F77E-AA	GTP (Explorer)	60	4 Vertical bars
Ford	302 Boss	C9ZE-A	1969	63	
Ford	302 Boss	D0ZE-A	1970	58	
Ford	302 Boss	D1ZE-A	1970	58	
Ford	351C		1970 4 bbl.	63	Closed chamber
Ford	351C		1970-74 Exc. '70 4 bbl., Boss	76.2	
Ford	351C		1971 Boss 351	67	
Ford	351M		1975-81	78.4	
Ford	351W	C9OE-B	1969-74	60.4	
Ford	351W	C9OE-D	1969-74	60.4	
Ford	351W	D0OE-C	1969-74	60.4	
Ford	351W	D0OE-G	1969-74	60.4	
Ford	351W	D0OZ-C	1969-74	60.4	
Ford	351W	D5TE-EB	1975-77	60.4	
Ford	351W	D8OE-AB	1978-80	69	
Ford	352	C6AE-R	1966	74	
Ford	390	C6AE-A		74	
Ford	390	C6OE-AC		74	
Ford	390	C6OE-R		74	
Ford	390	C6OE-Y		74	
Ford	390	C7AE-A		74	
Ford	390	C8AE-H		69	
Ford	390	C0AE-E	1961-62 HP	61	
Ford	390	C2SE-A	1962-63 HP	67	
Ford	390	C4AE-G	1964-65	74	
Ford	390	C6AE-D	1966	74	
Ford	390	C6AE-J	1966	74	
Ford	390	C6AE-K	1966	74	
Ford	390	C6OE-H	1966	74	
Ford	390	C6TE-B	1966	74	
Ford	390	C6TE-G	1966	74	
Ford	390	C6AE-AA	1966-67	74	
Ford	390	C6AE-AB	1966-67	74	
Ford	390	C6OE-AB	1966-67	74	
Ford	390	C6OE-AA	1966-67 Fairlane	74	
Ford	390	C7AE-A	1967	74	
Ford	390	C8AE-A	1968	69	
Ford	390	C8AE-B	1968	69	
Ford	390	C8OE-A	1968	69	
Ford	390	C6AE-L	1968 Mercury	69	
Ford	390	C6AE-U	1968 Mercury	69	
Ford	390	C8OE-B	1969	69	
Ford	390	C8OE-F	1969	71	
Ford	390	D2TE-AA	1972-76	74	
Ford	390	D3TE-B	1972-76	74	
Ford	390	D3TE-C	1972-76	74	
Ford	390	D3TE-E	1972-76	74	
Ford	390	D3TE-F	1972-76	74	
Ford	390, 428	60059	Edelbrock	72	
Ford	390, 428	60069	Edelbrock	72	
Ford	390, 428	60079	Edelbrock	76	
Ford	390, 428	60089	Edelbrock	76	
Ford	4.6L	RFF6AE-6090-AE		51.77	SOHC

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#	Application	Chamber CC's	Notes
Ford	4.6L	RFF6AE-6090-CB		51.77	SOHC
Ford	4.6L	RFF6AE-6090-CC		51.77	SOHC
Ford	4.6L	RFXL3E-6090-CZO		43.95	SOHC
Ford	406	C2SE-B	1962	63	
Ford	406	C2SE-C	1962-63	66	
Ford	406	C3AE-C	1963	59	
Ford	428	C6AE-AA	1966-67	71	
Ford	428	C8OE-H	1968 CJ	74	
Ford	428	C8AE-F	1968-70	71	
Ford	428	C8OE-N	1968-70 CJ, SCJ	74	
Ford	429, 460	60669	Edelbrock	95	
Ford	429, 460	60679	Edelbrock	75	
Ford	429, 460	61649	Edelbrock	75	
Ford	429, 460	61659	Edelbrock	75	
Ford	429, 460	61669	Edelbrock	75	
Ford	429, 460	TFS-5441B001	Trick Flow	91	
Ford	429, 460	TFS-5441T801	Trick Flow	91	
Ford	429/460	C8SZ-B		76	
Ford	429/460	C8VE-E		76	
Ford	429/460	DOVE-C		76	
Ford	429/460	M6049B429		72	Motorsport
Ford	429/460	D3V8	1973-78	92	
Ford	Small Block	1387	AFR	61	AFR 185
Ford	Small Block	1388	AFR	58	AFR 185
Ford	Small Block	1396	AFR	61	AFR 165, 75cc exhaust port
Ford	Small Block	1396	AFR	61	AFR 185, 75cc exhaust port
Ford	Small Block	1397	AFR	58	AFR 165, 75cc exhaust port
Ford	Small Block	1397	AFR	58	AFR 185, 75cc exhaust port
Ford	Small Block	1398	AFR	61	AFR 165
Ford	Small Block	1399	AFR	58	AFR 165
Ford	Small Block	140	AFR	55	AFR 165
Ford	Small Block	1400	AFR	61	AFR 165
Ford	Small Block	1402	AFR	58	AFR 165
Ford	Small Block	142	AFR	55	AFR 185
Ford	Small Block	1420	AFR	61	AFR 185
Ford	Small Block	1422	AFR	58	AFR 185
Ford	Small Block	145	AFR	55	AFR 205
Ford	Small Block	1450	AFR	58	AFR 205
Ford	Small Block	1451	AFR	58	AFR 225
Ford	Small Block	1452	AFR	55	AFR 205, 75cc exhaust port
Ford	Small Block	146	AFR	53	AFR 225
Ford	Small Block	147	AFR	55	AFR 165
Ford	Small Block	1472	AFR	60	AFR 165
Ford	Small Block	149	AFR	55	AFR 185
Ford	Small Block	1492	AFR	60	AFR 185
Ford	Small Block	BF200	Brodix	46	
Ford	Small Block	BF201	Brodix	46	
Ford	Small Block	BF202	Brodix	46	
Ford	Small Block	BF300	Brodix	65	
Ford	Small Block	BF301	Brodix	65	
Ford	Small Block	M2 ST 5.0 R	Brodix	66	
Ford	Small Block	M2 Track 1 Ford	Brodix	68	
Ford	Small Block	ST 5.0	Brodix	60	
Ford	Small Block	ST 5.0 R	Brodix	60	
Ford	Small Block	Track 1 Ford	Brodix	68	
Ford	Small Block	20450	Canfield	58	as cast chamber
Ford	Small Block	20450 54	Canfield	54	CNC
Ford	Small Block	20450 58	Canfield	58	CNC
Ford	Small Block	20450 65	Canfield	65	CNC
Ford	Small Block	170cc Pro 1	Dart		170cc Pro 1
Ford	Small Block	195cc Pro 1	Dart		195cc Pro 1
Ford	Small Block	210cc Pro 1 CNC	Dart		210cc Pro 1 CNC
Ford	Small Block	225cc Pro 1 CNC	Dart		225cc Pro 1 CNC
Ford	Small Block	60229	Edelbrock	60	
Ford	Small Block	60259	Edelbrock	60	
Ford	Small Block	60269	Edelbrock	60	
Ford	Small Block	60279	Edelbrock	60	
Ford	Small Block	60289	Edelbrock	60	
Ford	Small Block	60299	Edelbrock	60	
Ford	Small Block	60329	Edelbrock	60	
Ford	Small Block	60359	Edelbrock	60	
Ford	Small Block	60379	Edelbrock	60	



Cylinder Head Identification and Chamber Volume Chart

Mfgr.	CID	Casting or ID#		Application	Chamber CC's	Notes
Ford	Small Block	60399		Edelbrock	60	
Ford	Small Block	61099		Edelbrock	56	
Ford	Small Block	61269		Edelbrock	65	
Ford	Small Block	61279		Edelbrock	65	
Ford	Small Block	61299		Edelbrock	60	
Ford	Small Block	77169		Edelbrock	60	
Ford	Small Block	77179		Edelbrock	60	
Ford	Small Block	77189		Edelbrock	60	
Ford	Small Block	77199		Edelbrock	60	
Ford	Small Block	77219		Edelbrock	47	
Ford	Small Block	77289		Edelbrock	48	
Ford	Small Block	77299		Edelbrock	58	
Ford	Small Block	77389		Edelbrock	70	
Ford	Small Block	TFS-51400002		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-51400003		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-51400010		Trick Flow	61	Track Heat
Ford	Small Block	TFS-51400011		Trick Flow	61	Track Heat
Ford	Small Block	TFS-51700001		Trick Flow	64	
Ford	Small Block	TFS-51700002		Trick Flow	64	
Ford	Small Block	TFS-51700700		Trick Flow	64	
Ford	Small Block	TFS-51700701		Trick Flow	64	
Ford	Small Block	TFS-5171B001		Trick Flow	64	
Ford	Small Block	TFS-5171B002		Trick Flow	64	
Ford	Small Block	TFS-52400003		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-52400004		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-52400005		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-52400006		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-5240T005		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-5240T006		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-5242B003		Trick Flow	61	Twisted wedge
Ford	Small Block	TFS-5242B004		Trick Flow	61	Twisted wedge
Ford	Small Block	023030		World	58	Aluminum
Ford	Small Block	053030		World	58	Straight plug
Ford	400			1971-82	78.4	
Ford	427	C3AE-K		1963 High Riser	75	
Ford	427	C3AE-D		1963 Low Riser	66	
Ford	427	C3AE-G		1963 Low Riser	74	
Ford	427	C3AE-H		1963 Low Riser	74	
Ford	427	C4AE-F		1964 High Riser	88	
Ford	427	C3AE-J		1964-65 Low Riser	74	
Ford	427	C5AE-F		1964-67 Medium Riser	88	
Ford	427	C5AE-R		1964-67 Medium Riser	88	
Ford	427	C8AE-J		1968 Low Riser	74	
Ford	427	C8AE-N		1968 Low Riser	74	
Ford	427	C7OE-K		Tunnel Port	88	
Ford	427	C8AX		Tunnel Port	88	
Oldsmobile	260	550362-10	10	1976	57	
Oldsmobile	260	554715-2A	2A	1977-81	57	
Oldsmobile	307	3317-5A	5A	1980-85	67	
Oldsmobile	307	0142-7A	7A	1985-91	64	
Oldsmobile	400, 455	60519		Edelbrock	77	
Oldsmobile	403	554717-4A	4A	1977-79	83	
Oldsmobile	425	389395-B	B	1966	80	
Oldsmobile	455	394548-C	C	1967-69	79-80	
Oldsmobile	455	400370-D	D	1968-69 W-30	72	
Oldsmobile	455	403686-E	E	1970	79-80	
Oldsmobile	455	404438-F	F	1970 W-30	79	
Oldsmobile	455	409160-H	H	1971 W-30	79	
Oldsmobile	455	409100-G	G	1971-72	80	
Oldsmobile	455	411783-J	J	1973-76	79	
Oldsmobile	455	413191-K	K	1973-76 Cutlass 442	80	
Oldsmobile	350	397742-5	5	1968-69	64	
Oldsmobile	350	397742-5	5	1968-69 W-31	62.5	2.00 Intake Valves
Oldsmobile	350	403859-6	6	1970	64	
Oldsmobile	350	403859-6	6	1970 W-31	62.5	2.00 Intake Valves
Oldsmobile	350	409147-7	7	1971	70	
Oldsmobile	350	409147-7	7	1972	70	4 Ribs @ end
Oldsmobile	350	411929-8	8	1973-76	79	
Oldsmobile	350	554716-3A	3A	1977-80	75	
Pontiac	389	9784212	93	1965-66 GTO	68	
Pontiac	400, 455	60579		Edelbrock	87	
Pontiac	400, 455	60599		Edelbrock	72	

Cylinder Head Identification and Chamber Volume Chart



Mfgr.	CID	Casting or ID#		Application	Chamber CC's	Notes
Pontiac	455	9799362	64	1970 H.O.	87	
Pontiac	455	483714	66	1971	114	
Pontiac	455	481758	191	1971 H.O.	111	
Pontiac	455	494995	7M5	1972	114	
Pontiac	455	485319	7F6	1972 H.O.	111	
Pontiac	455	485214	16	1973-74 S.D.	111	
Pontiac	400	9788067	670	1967	72	
Pontiac	400	9783657	72	1967 Ram Air	97	
Pontiac	400	9791559	62	1968	75	
Pontiac	400	9792700	37	1968 Ram Air I	72	
Pontiac	400	9794040	96	1968 Ram Air II	72	
Pontiac	400	9790118	16	1968-69	72	
Pontiac	400	9795043	48	1969 RA/H.O.	72	
Pontiac	400	9796721	722	1969 Ram Air IV	71	
Pontiac	400	9799497	13	1970	72	
Pontiac	400	9799496	12	1970 Ram Air III/H.O.	72	
Pontiac	400	9799498	614	1970 Ram Air IV	71	
Pontiac	400	481760	96	1971 GTO	96	
Pontiac	400	485316	7K3	1972	96	



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