

“WORLD CLASS” ENGINES

MOTOWN

2 YEAR
LIMITED
WARRANTY

STREET SMALL BLOCK CHEVY



**OPTIONAL
ALL-ALUMINUM
MOTOWN™ ENGINE
WEIGHS ONLY 355 LBS.**

415 & 427

The “World Class” series of engines represents an ideal powerplant for many muscle cars and street machines—as well as for street rodders who appreciate performance, without sacrificing ease of maintenance. They come in hefty 415 and 427 cubic inch displacements, and generate excellent torque and power. Horsepower ranges from 425 to 475, which is far more than comparable factory crate engines. Hydraulic lifter cams are employed so you won’t be popping the valve covers often to adjust valve lash.

Each “World Class” engine is individually assembled by skilled technicians who utilize the same procedures used for building racing engines. Upon completion, each is properly broken-in, then dyno-tested to ensure that it meets or exceeds published specifications. A dyno sheet accompanies each engine—as does a 2-year warranty issued by an independent insurance carrier—further underscoring its total reliability.

BUILD SHEET

Block: **World Motown cast iron**
 Crankshaft: **Eagle 4340 crankshaft**
 Balancer: **ProRace internal**
 Connecting Rods: **Eagle H-beam 4340 L-19 bolt**
 Pistons: **Mahle coated/Manley**
 Piston Rings: **Total Seal**
 Compression: **9.5:1**
 Bore/Stroke: **415 c.i.d. = 4.125" x 3.875"**
 427 c.i.d. = 4.125" x 4.000"
 Bearings: **Clevite H-bearings**
 Camshaft: **Hardcore hydraulic**
 Timing Chain: **Hardcore double roller**
 Cylinder Heads: **World Motown**
 (cast iron or aluminum)
 Valves: **Manley Street Master**
 (2.080" intake, 1.600" exhaust)
 Valve Springs: **Hardcore**
 Retainers: **Manley**
 Valve Locks: **Manley**
 Valve Seals: **Hardcore**
 Rocker Arm Studs: **Hardcore**
 Pushrods: **Hardcore 4340 1 pc.**
 Pushrod Guide Plates: **Hardcore**
 Rocker Arms: **Scorpion aluminum rollers**
 Oil Pan: **Milodon/Canton**
 Oil Pump: **Melling**
 Assembly Components: **Stainless hardware**
 Intake Manifold: **Motown single plane**
 Carburetor: **Hardcore 870 cfm (4150 type)**
 Distributor: **HEI**
 Fuel: **Pump gas**

World Class Small Block Chevrolet Street Engines

Part #	C.I.D.	HP	Torque	Block	Heads
101000	415	460	440 ft. lbs.	Motown cast iron	Motown 220 cast iron
101001	415	475	455 ft. lbs.	Motown cast iron	Motown 220 aluminum
1010019	415	475	455 ft. lbs.	Motown aluminum	Motown 220 aluminum
101005	427	495	475 ft. lbs.	Motown cast iron	Motown 220 cast iron
101006	427	520	495 ft. lbs.	Motown cast iron	Motown 220 aluminum
1010069	427	520	495 ft. lbs.	Motown aluminum	Motown 220 aluminum

CRATE ENGINES

REV 2/07

WORLD
PRODUCTS

“HARDCORE” ENGINES

MOTOWN

2 YEAR
LIMITED
WARRANTY

STREET SMALL BLOCK CHEVY



Engine shown with optional ignition and oil pan.

**OPTIONAL
ALL-ALUMINUM
MOTOWN™ ENGINE
WEIGHS ONLY 355 LBS.**

427

BUILD SHEET

Block: **World Motown cast iron**
 Crankshaft: **Eagle 4340 crankshaft**
 Balancer: **Pro Race**
 Connecting Rods: **Eagle H-beam 4340 L-19 bolt**
 Pistons: **Mahle coated/Manley**
 Piston Rings: **Total Seal**
 Compression: **10.1:1**
 Bore/Stroke: **427 c.i.d. = 4.125" x 4.000"**
 Bearings: **Clevite H-bearings**
 Camshaft: **Hardcore solid lifter**
 Timing Chain: **Hardcore double roller**
 Cylinder Heads: **World Motown (cast iron or aluminum)**
 Valves: **Manley Race Master (2.080 intake, 1.600" exhaust)**
 Valve Springs: **Hardcore**
 Retainers: **Manley**
 Valve Locks: **Manley**
 Valve Seals: **Hardcore**
 Rocker Arm Studs: **Hardcore**
 Pushrods: **Hardcore**
 Pushrod Guide Plates: **Hardcore**
 Rocker Arms: **Scorpion aluminum rollers**
 Oil Pan: **Milodon/Canton**
 Oil Pump: **Melling**
 Assembly Components: **Stainless hardware**
 Intake Manifold: **Motown single plane**
 Carburetor: **Hardcore 1050 cfm (4500 type)**
 Distributor: **HEI**
 Fuel: **Pump gas**

For those small block Chevy enthusiasts who want more power than what's available with World's hydraulic-cammed "Cruiser" and "World Class" series engines, this "Hardcore" model with a solid lifter camshaft and larger 4500-series "Dominador" carburetor raises the bar to just over 500 ponies. Yes, it has excellent low and mid-range torque...but it also pulls very strongly on the top end thanks to the cam and carb upgrades.

Like all other "street" crate motors we offer, each engine is individually assembled by skilled technicians who utilize the same procedures used for building racing engines. Upon completion, each is properly broken-in, then dyno-tested to ensure that it meets or exceeds published specifications. A dyno QC sheet accompanies each engine—as does a 2-year warranty issued by an independent insurance carrier—further underscoring its total reliability. For a small block that runs with the big blocks, this is the one!

Hardcore Small Block Chevrolet Street Engines

Part #	C.I.D.	HP	Torque	Block	Heads
101008	427	530	515 ft. lbs.	Motown cast iron	Motown 220 cast iron
101009	427	550	525 ft. lbs.	Motown cast iron	Motown 220 aluminum
1010099	427	550	525 ft. lbs.	Motown Lite aluminum	Motown 220 aluminum

"LIMITED EDITION" ENGINES

MOTOWN



STREET SMALL BLOCK CHEVY



454

This is truly "The Mouse That Roared!" With a big 454 cubic inch displacement, Motown cylinder heads with high volume/flow 220 cfm intake ports and a new Motown intake manifold that out-performs all others on the market, it's one potent package. You get 600 dyno-tested horsepower, and it is still backed by a 2-year limited warranty (issued by an independent insurance carrier). Reliability is another one of the important attributes of the hot "Limited Edition" engines from World Products. This engine powers Bill Mitchell's awesome 1934 Ford coupe, and has proven its durability on the Hot Rod magazine Power Tour and other cruises. The "secret" to getting major horsepower with excellent reliability is cubic inches! Other contributing factors to the engine's major power include a roller cam, highly effective new Motown intake, and a big 1050 cfm Hardcore blueprinted Dominator carburetor.

BUILD SHEET

Block: **World Motown cast iron billet caps**
 Crankshaft: **Eagle 4340 crankshaft**
 Balancer: **ATI**
 Connecting Rods: **Eagle H-beam 4340 L-19 bolt**
 Pistons: **Mahle coated/Manley**
 Piston Rings: **Total Seal**
 Compression: **10.5:1**
 Bore/Stroke: **454 c.i.d. = 4.250" x 4.000"**
 Bearings: **Clevite H-bearings**
 Camshaft: **Hardcore solid roller lifter**
 Timing Chain: **Hardcore double roller**
 Cylinder Heads: **World Motown 220 (aluminum)**
 Valves: **Manley Severe Duty® (2.080" intake, 1.600" exhaust)**
 Valve Springs: **Hardcore**
 Retainers: **Manley**
 Valve Locks: **Manley**
 Valve Seals: **Hardcore**
 Rocker Arm Studs: **Manley**
 Pushrods: **Hardcore 4340 1 pc.**
 Pushrod Guide Plates: **Hardcore**
 Rocker Arms: **Scorpion aluminum rollers**
 Oil Pan: **Milodon/Canton**
 Oil Pump: **Melling**
 Assembly Components: **Stainless hardware**
 Intake Manifold: **Motown single plane**
 Carburetor: **Hardcore 1050 cfm (4500 type)**
 Distributor: **HEI**
 Fuel: **Pump gas**

Limited Edition Small Block Chevrolet Street Engines

Part #	C.I.D.	HP	Torque	Block	Heads
101011	454	600	575	Motown cast iron	Motown Lite 220 aluminum

CRATE ENGINES

REV 2/07



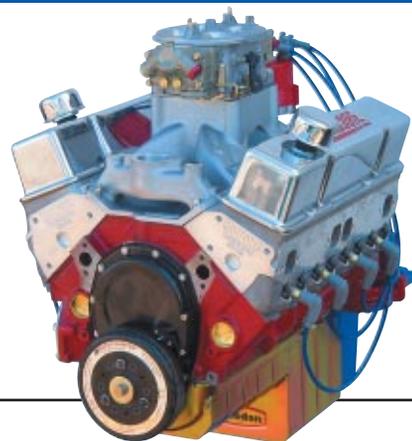
DRAG RACE ENGINES

SMALL BLOCK CHEVY

Here's a small block that can comfortably run with big blocks. It's got a healthy 427" displacement and puts out nearly 600 ft. lbs. of torque. The World Motown block is reinforced in all critical areas to provide superior dependability. Take your pick from iron or aluminum-headed combinations that produce 625 and 650 dyno-certified HP respectively. You won't find a better overall value in drag race small blocks than these offerings from the Hardcore engine shop!

BUILD SHEET

Block: **World Motown cast iron**
 Crankshaft: **Eagle 4340**
 Balancer: **ATI Super Damper**
 Connecting Rods: **Eagle H-beam 4340**
 Pistons: **Mahle**
 Compression: **13.5:1**
 Bore/Stroke: **427 c.i.d. = 4.125" x 4.000"**
 Camshaft: **Hardcore solid roller lifter**
 Cylinder Heads: **World Motown (iron & alum.)**
 Rocker Arms: **Scorpion aluminum rollers**
 Intake Manifold: **Motown single plane**
 Carburetor: **Hardcore 1050 cfm (4500 type)**
 Distributor: **MSD**
 Oil Pan: **Moroso**



Small Block Chevy Drag Racing Engines

Part #	Block	Displacement	Cylinder Heads	Fuel Type	HP	Torque
101020	World Motown cast iron	427 c.i.d.	Cast Iron	Racing Gas	600	575 ft. lbs.
101021	World Motown cast iron	427 c.i.d.	Aluminum	Racing Gas	625	575 ft. lbs.
1010219	World Motown aluminum	427 c.i.d.	Aluminum	Racing Gas	625	575 ft. lbs.

BIG BLOCK CHEVY

In the world of Super Gas and Super Comp Eliminator, Bill Mitchell's Hardcore big blocks have earned a reputation for delivering solid power with great round-to-round consistency. They're proven race-winners for the likes of all-time "Super" standout Scotty Richardson and many others. Now available in three sizes, you can choose between 540, 572 and 632" powerplants. Each engine is carefully broken-in and dyno-tested to ensure that they're ready to be installed and win!

BUILD SHEET

Block: **World Merlin cast iron**
 Crankshaft: **Eagle 4340 (Callies on 632)**
 Connecting Rods: **Eagle 4340**
 Pistons: **Mahle**
 Compression: **13.5:1**
 Bore/Stroke: **540 c.i.d. = 4.500" x 4.250"**
 572 c.i.d. = 4.500" x 4.500"
 632 c.i.d. = 4.600" x 4.750"
 Camshaft: **Hardcore solid roller lifter**
 Cylinder Heads: **World Merlin (iron & alum.)**
 Rocker Arms: **Aluminum Rollers**
 Intake Manifold: **Merlin-X Single plane**
 Carburetor: **Hardcore 1050 cfm (4500 type)**
 Distributor: **MSD**



Big Block Chevy Drag Racing Engines

Part #	Block	Displacement	Cylinder Heads	Fuel Type	HP	Torque
108080	World Merlin III cast iron	540 c.i.d.	Cast Iron	Racing Gas	775	665 ft. lbs.
108081	World Merlin III cast iron	540 c.i.d.	Aluminum	Racing Gas	825	685 ft. lbs.
1080819	World Merlin III aluminum	540 c.i.d.	Aluminum	Racing Gas	825	685 ft. lbs.
108086	World Merlin III cast iron	572 c.i.d.	Aluminum	Racing Gas	850	700 ft. lbs.
1080869	World Merlin III aluminum	572 c.i.d.	Aluminum	Racing Gas	850	700 ft. lbs.
108090	World Merlin III cast iron	632 c.i.d.	Aluminum	Racing Gas	900	725 ft. lbs.

SMALL BLOCK FORD

The latest race engine to emerge from the Hardcore race shop is based on World's new Man O' War block and raises the bar in terms of Ford power, consistency and reliability. With a big 427 c.i.d. displacement, this is one "small block" that launches like a big block! It's got 625 naturally aspirated horses. Think of what a little "squeeze" will do! This dyno-certified powerhouse is perfect for many applications, and liable to start a new trend among Ford racers!

BUILD SHEET

Block: **World Man O' War cast iron**
 Crankshaft: **Eagle 4340**
 Balancer: **ATI Super Damper**
 Connecting Rods: **Eagle H-beam 4340**
 Pistons: **Mahle**
 Compression: **13.5:1**
 Bore/Stroke: **427 c.i.d. = 4.125" x 4.000"**
 Camshaft: **Hardcore solid roller lifter**
 Cylinder Heads: **World Windsor Sr.**
 Rocker Arms: **Scorpion aluminum rollers**
 Intake Manifold: **Single plane**
 Carburetor: **Hardcore 1050 cfm (4500 type)**
 Distributor: **MSD**
 Oil Pan: **Moroso**



Small Block Ford Drag Racing Engines

Part #	Block	Displacement	Cylinder Heads	Fuel Type	HP	Torque
102091	World Man O' War cast iron	427 c.i.d.	Aluminum	Racing Gas	625	565 ft. lbs.
102090	World Man O' War cast iron	427 c.i.d.	Cast Iron	Racing Gas	600	575 ft. lbs.

"DAILY DRIVER" ENGINES

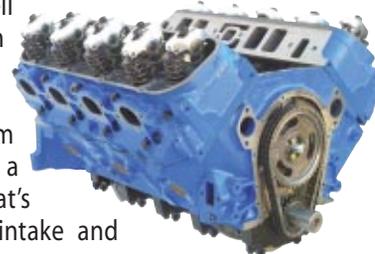


This new series of engines developed by World Products is an alternative to factory crate motors that will provide you with true high performance components and incredible dependability. They all feature brand new World cast iron blocks—which have proven to be far superior to OEM offerings for a variety of reasons. They are reinforced in all critical areas, and should you ever decide to opt for power-adders, they are ready for the task at hand.

Internal components are likewise a level above factory parts. Connecting rods are 4340 forged steel H-beams with 200,000 psi bolts. Pistons are forged (not cast) and equipped with moly rings. Bearings are likewise high performance Clevite models. You also

get new World Products cylinder heads equipped with Manley stainless steel valves, an aftermarket dual plane intake and a 870 cfm "blueprinted" Bill Mitchell Hardcore carburetor and a high performance Milodon oil pan.

Should you want to use some existing system components, you can purchase a partial engine assembly that's ready to go, just add your intake and ignition systems, plus an oil pan.



350 SMALL BLOCK CHEVROLET

BUILD SHEET: Motown block, Eagle forged crank, Eagle I-beam connecting rods, Clevite H-bearings, hydraulic camshaft, S/R Torquer cylinder heads, stamped steel rockers, Milodon oil pan, dual plane manifold, Hardcore 870 carburetor, bore/stroke 4.000 x 3.480, compression 9.0:1, fuel - pump gas

PARTIAL ENGINE:

Includes all the components in the complete engine, less intake system, oil pan and ignition.....#101500

COMPLETE ENGINE:

350 c.i.d.

Dyno Tested & Warranted

350HP

302 SMALL BLOCK FORD

BUILD SHEET: Man O' War 8.200 block, Eagle forged crank, Eagle I-beam connecting rods, Clevite H-bearings, hydraulic camshaft, Windsor Jr. cylinder heads, stamped rockers, Milodon oil pan, dual plane manifold, Hardcore 870 carb, bore/stroke 4.000 x 3.000, compression 9.0:1, fuel - pump gas

PARTIAL ENGINE:

Includes all the components in the complete engine, less intake system, oil pan and ignition.....#102000

COMPLETE ENGINE:

302 c.i.d.

Dyno Tested & Warranted

302HP

454 BIG BLOCK CHEVROLET

BUILD SHEET: Merlin III block, Eagle forged crank, Eagle I-beam connecting rods, Clevite H-bearings, hydraulic camshaft, Merlin 269 oval port cylinder heads, stamped rockers, Milodon oil pan, dual plane manifold, Hardcore 870 carb, bore/stroke 4.250 x 4.000, compression 9.0:1, fuel - pump gas

PARTIAL ENGINE:

Includes all the components in the complete engine, less intake system, oil pan and ignition.....#108500

COMPLETE ENGINE:

454 c.i.d.

Dyno Tested & Warranted

454HP

351 SMALL BLOCK FORD

BUILD SHEET: Man O' War 9.500 block, Eagle forged crank, Eagle I-beam connecting rods, Clevite H-bearings, hydraulic camshaft, Windsor Jr. cylinder heads, stamped rockers, Milodon oil pan, dual plane manifold, Hardcore 870 carb, bore/stroke 4.000 x 3.500, compression 9.0:1, fuel - pump gas

PARTIAL ENGINE:

Includes all the components in the complete engine, less intake system, oil pan and ignition.....#102010

COMPLETE ENGINE:

351 c.i.d.

Dyno Tested & Warranted

351HP

"CRUISER POWER" ENGINES



Responding to street rodders and muscle car owners who are more into cruising than all-out performance, World Products has developed another new series of engines. Called "Cruiser Power," this family of engines has the same beefy bottom end as the more potent powerplants, but features cylinder heads with smaller runners (designed more for velocity than flow), dual plane intake manifolds and 870 cfm carburetors. The net result is an engine with outstanding bottom-end torque, and a very broad power curve. Even with a dyno-certified output of 1-horsepower-per-cubic-inch, World's "Cruiser Power" engines exhibit excellent fuel economy.

The foundation for these engines are World's Motown, Merlin

and new Man O' War cast iron blocks, coupled with the appropriate World cast iron cylinder heads.

There are many compelling reasons why World "Cruiser Power" engines represent your best investment when compared to factory "crate engines." First, there's the fact that the block and heads are far superior to OEM pieces in terms of design, construction and manufacturing accuracy. Each engine is individually assembled by skilled technicians who maintain super-close racing tolerances. The engines are broken-in, thoroughly dyno-tested, and certified to meet specified performance levels. And it's backed by a 2-year warranty. Who else gives you all of this?

415 SMALL BLOCK CHEVROLET

BUILD SHEET: World Motown cast iron block, Eagle 4340 crank, Eagle 4340 forged steel H-beam connecting rods, Clevite H-bearings, hydraulic camshaft, World Motown cylinder heads, Scorpion rockers, Milodon oil pan, dual plane intake manifold, Hardcore 870 blueprinted carburetor, HEI ignition. Completely balanced and dyno tested.

Bore: 4.000"
Stroke: 3.875"
Compression Ratio: 9.0:1
Fuel: pump gas

415 c.i.d.
Dyno Tested & Warranted **435HP**
.....#100050

349 SMALL BLOCK FORD

BUILD SHEET: World Man O' War 8.200 deck cast iron block, Eagle 4340 crank, Eagle 4340 forged steel H-beam connecting rods, Clevite H-bearings, hydraulic camshaft, Windsor Sr. cylinder heads, Scorpion rockers, Milodon oil pan, dual plane intake manifold, Hardcore 870 cfm blueprinted carburetor, HEI ignition. Completely balanced and dyno tested.

Bore: 4.000"
Stroke: 3.470"
Compression Ratio: 9.0:1
Fuel: pump gas

349 c.i.d.
Dyno Tested & Warranted **370HP**
.....#102025

509 BIG BLOCK CHEVROLET

BUILD SHEET: World Merlin III cast iron block, Eagle 4340 crank, Eagle 4340 forged steel H-beam connecting rods, Clevite H-bearings, hydraulic camshaft, Merlin 269 oval port cylinder heads, roller rockers, Milodon oil pan, dual plane manifold, Hardcore 870 cfm blueprinted carburetor, HEI ignition. Completely balanced and dyno-tested.

Bore: 4.500"
Stroke: 4.000"
Compression Ratio: 9.0:1
Fuel: pump gas

509 c.i.d.
Dyno Tested & Warranted **515HP**
.....#107050

427 SMALL BLOCK FORD

BUILD SHEET: World Man O' War 9.500 deck cast iron block, Eagle 4340 crank, Eagle 4340 forged steel H-beam rods, Clevite H-bearings, hydraulic camshaft, Windsor Sr. cylinder heads, Scorpion rockers, Milodon oil pan, dual plane manifold, Hardcore 870 cfm blueprinted carburetor, HEI ignition. Completely balanced and dyno-tested.

Bore: 4.125"
Stroke: 4.000"
Compression Ratio: 9.0:1
Fuel: pump gas

427 c.i.d.
Dyno Tested & Warranted **450HP**
.....#102030