# **"WORLD CLASS" ENGINES**

# 349, 371 & 427

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With the advent of the new World Man O' War<sup>™</sup> replacement block for 289/302/351 Ford engines, it enabled the company to develop a series of highly desirable "crate motors" that feature components far superior to OEM Ford parts. As with all other World Products engines, the use of generous displacements contributes to impressive horsepower and torque numbers, without sacrificing reliability. The 349 and 371 c.i.d. engines are bolt-in replacements for "302" or 5.0L engines, while the 427 replaces a 351 Windsor/Cleveland.

These engines are individually assembled by skilled technicians using only the finest aftermarket components. Each engine is carefully broken-in, then run on the dyno to certify that performance levels meet or exceed published specifications. And as a testimony to their durability, each World Class engine is backed by a 2-year warranty issued by an independent insurance carrier. It doesn't get any better than this!

### **BUILD SHEET**

Block: World Man O' War 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: 349 c.i.d. = 4.000" x 3.500" 371c.i.d. = 4.125" x 3.500" 427 c.i.d. = 4.125" x 4.000" Bearings: Clevite H-bearings Camshaft: Hardcore hvdraulic Timing Chain: Hardcore double roller Cylinder Heads: World Windsor Sr. (cast iron or aluminum) Valves: Manley Street Master (2.020" 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: Edelbrock single plane Carburetor: Hardcore 870 cfm (4150 type) Distributor: HEI Fuel: Pump gas

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PRODUCTS

World Class Small Block Ford Street Engines							
Part #	C.I.D.	HP	Torque	Block	Decl	Heads	
102035	349	395	385 ft. lbs.	Man O' War cast iron	8.200	World Windsor Sr. cast iron	
102036	349	415	405 ft. lbs.	Man O' War cast iron	8.200	World Windsor Sr. aluminum	
102040	371	425	425 ft. lbs.	Man O' War cast iron	8.200	World Windsor Sr. cast iron	
102041	371	455	445 ft.lbs.	Man O' War cast iron	8.200	World Windsor Sr. aluminum	
102045	427	475	465 ft. lbs.	Man O'War cast iron	9.500	World Windsor Sr. cast iron	
102046	427	495	485 ft. lbs.	Man O' War cast iron	9.500	World Windsor Sr. aluminum	

# **"HARDCORE" ENGINES**

# 427 Man War

The "Hardcore" series of engines takes street-driven powerplants up a notch. To raise horsepower and torque, these big-inch engines utilize a high-flowing single plane intake manifold, 1050 cfm "Dominator" carburetor and a solid-lifter cam for more aggressive valve action. Even though you can obtain nearly 500 horsepower with the largest version, they have a nominal compression ratio of 9.5:1 and run on ordinary pump gas. Needless to say, this kind of power can lead to one awesome street machine! This engine is based on a 9.500" deck height Man O' War block, and is a bolt-in replacement for Ford 351 "Windsor" or "Cleveland" engines. Using it in Mustangs, etc. originally equipped with a 302-style engine will require a different exhaust system, etc.

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These engines are individually assembled by skilled technicians using only the finest aftermarket components. Each engine is carefully broken-in, then run on the dyno to certify that performance levels meet or exceed published specifications. And as a testimony to their durability, each Hardcore engine is backed by a 2-year warranty issued by an independent insurance carrier. You won't find anything like this from the "blue oval" boys!

### **BUILD SHEET**

Block: World Man O' War 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: 10.1:1 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 Windsor Sr. (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: Single plane Carburetor: Hardcore 1050 cfm (4500 type) Distributor: HEI Fuel: Pump gas

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#### Hardcore Small Block Ford Street Engines

PRODUCTS

Part #	C.I.D.	HP	Torque	Block	Heads
102060	427	500	490 ft. lbs.	Man O'War cast iron	World Windsor Sr. cast iron
102061	427	525	505 ft. lbs.	Man O'War cast iron	World Windsor Sr. aluminum

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# **"LIMITED EDITION" ENGINES**



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How'd you like to match the biggest big block Ford ever made in terms of displacement, and have it in a small block package that can easily fit into a Mustang, Cobra or most any FoMoCo vehicle. It's all possible because of World's new Man O' War™ block, which can accommodate the 4.155" x 4.250" bore/stroke combination that produces a whopping 460 cubic inches. Conservatively rated at 600 horsepower, this big-inch engine utilizes a highflowing single plane intake manifold, 1050 cfm "Dominator" carburetor and a roller lifter cam for more aggressive valve action. All that, and a nominal compression ratio of 10.0:1 so you can run on ordinary pump gas. Needless to say, this kind of major league power translates into one awesome ride!

These engines are individually assembled by skilled technicians using only the finest aftermarket components. Each engine is carefully broken-in, then run on the dyno to certify that performance levels meet or exceed published specifications. And as a testimony to their durability, each Hardcore engine is backed by a 2-year warranty issued by an independent insurance carrier. You won't find anything like this from the "blue oval" boys!



### **BUILD SHEET**

Block: World Man O' War cast iron billet caps Crankshaft: Eagle 4340 crankshaft Balancer: ATI Connecting Rods: Eagle H-beam 4340 L-19 bolts Pistons: Mahle/Manley Piston Rings: Total Seal Compression: 10.5:1 Bore/Stroke: 460 c.i.d. = 4.155" x 4.250" Bearings: Clevite H-bearings Camshaft: Hardcore solid roller lifter Timing Chain: Hardcore double roller Cylinder Heads: World Windsor Sr. (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: Single plane Carburetor: Hardcore 1050 cfm (4500 type) Distributor: HEI Fuel: Pump gas

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PRODUCTS

Limited Edition Small Block Ford Street Engines						
Part #	C.I.D.	HP	Torque	Block	Heads	
102075	460	600	575	Man O' War cast iron	World Windsor Sr. aluminum	

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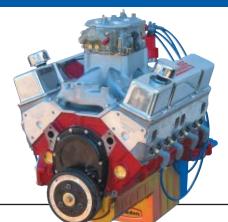
# DRAG RACE ENGINES

### 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 dynocertified 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

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

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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!

### Big Block Chevy Drag Racing Engines

#### 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 4.250" 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 Cnevy 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.
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### 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!

PRODUCTS

#### 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.

REV 2/07





# **"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

# **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



### **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

PRODUCTS

#### **PARTIAL ENGINE:**

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



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.



**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

COMPLETE ENGINE: 302 c.i.d. Dyno Tested & Warranted #102015 COMPLETE ENGINE: 302 c.i.d. 302 c.i

# **351 SMALL BLOCK**

**BUILD SHEET:** Man O' War 9.500 block, Eagle forged crank, Eagle I-beam 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:

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



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# **"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

### **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



### **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 870cfm blueprinted carburetor, HEI ignition. Completely balanced and dyno-tested.

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

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<b>509 c.i.d.</b> <i>Dyno Tested</i> <i>&amp; Warranted</i> #107050	51	<b>5H</b>	

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?

**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 #102025



**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

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PRODUCTS

