World Products has been producing affordable high performance cast iron engine blocks and cylinder heads for twenty five years, beginning with a pioneering small block Chevrolet cylinder head and continually expanding the line to become a leading aftermarket manufacturer.

World Products aftermarket cast iron division was acquired by new ownership in October of 2012, shortly before the SEMA show. The first step was to immediately set about implementing a series of production improvements to ensure that the World Products brand will represent a quality product in every possible way. The foundry tooling was evaluated and freshened where necessary. World castings are made in the USA from high strength iron alloy. Machining operations have been moved to a new facility and utilize state-of-the-art CNC machining centers manned by experienced technicians. An all new, stringent quality control program has been implemented with hands-on monitoring and sophisticated CMM inspection procedures. Customer service is a top priority at World. Engine blocks and cylinder heads are kept in stock in World’s warehouse in order to facilitate fast delivery to virtually any part of the country.

At World Products we listen to what our customers needs are and we are constantly changing our products to keep up to date with the latest technology and engine combinations. We offer only high quality components, our products are suited to various performance levels from street, drag racing, oval track and professional venues.
Sales Policies & Procedures
We accept Visa® or Master Card. Method of shipping is UPS and Fed-Ex.

Return Policy
All returned merchandise must be authorized by World Products. A 15% restocking fee may apply. Merchandise must be in re-sellable condition to receive credit.

Warranty Policy
LIMITED ONE YEAR WARRANTY
World Products warrants to the original purchaser only that products sold by World Products under the name World Products are free from defects in material and workmanship, and against excessive wear under normal use for a period of one (1) year from the date of purchase. World’s obligation under this warranty is limited to the repair or replacement of covered products and only when the product has been returned, freight prepaid to 7301 Global Drive, Louisville, Ky 40258. EPW retains sole discretion in determining defective merchandise.

There are no warranties which extend beyond the description on the face hereof. It is the responsibility of the installer to ensure that all components are correct before installation. Proper assembly always requires that the installer measure all tolerances for proper clearance. World Products assumes no responsibility for any error made in tolerances, component selection or installation and this warranty does not cover any labor, diagnostics, removal, inconvenience, towing and/or any other damages or expenses. There is absolutely no warranty, implied or otherwise, on any product used in competition/racing applications, any product that has been physically altered, improperly installed, abused, or not used in conjunction with proper parts. There is no warranty, implied or otherwise, of merchantability or fitness for a particular purpose. Where required by law, implied warranties of merchantability and fitness are limited for a term of one (1) year from the date of original purchase. World Products will not be responsible for incidental and consequential damages, property damage or personal injury to the extent permitted by law. This limited warranty gives you specific legal rights. You may have other legal rights, which vary from state to state. This warranty shall apply only within the boundaries of the continental United States.

World Products reserves the right to make necessary changes in products it manufactures and markets at any time to improve product performance. These changes in products will be made without obligation to change or improve products that were previously manufactured.

WARNING:
Some products sold by World Products have been designed and are intended for Off-Highway application only. Installation on a vehicle intended for use on public roads may violate U.S., Canadian, State or Provincial laws and regulations including those related to emission requirements and motor vehicle safety standards. Purchaser bears full risk of any such violation.
Casting ID numbers are located under the valve cover cast into the head face. A guide plate or stud girdle may need to be removed to view. Casting numbers identify which head you may have. Use the Part Number to determine which version of the head you have. Part Numbers are located and stamped on the ends of the heads prior to 2005, then engraved on the ends of the heads after 2005. As of mid 2012 the Part Number was moved to the intake face just under the valve cover rail. Part Numbers may indicate original combustion chamber and intake runner sizes, but heads are often modified by users over the course of time. The best way to be sure of what you have is to have the heads measured by a qualified machine shop. If you were not the original purchaser of the heads this is the only way to be certain of what you have. Prior to 2013, there is no date of manufacture on the heads. World Products cannot verify any other numbers which may have been stamped on the heads by other parties who may have made modifications.

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<th>Casting No.</th>
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WORLD PRODUCTS
Has taken the tried and true SBC design and continued its evolution to improve on the previous design and greatly improve its capabilities.

Illustration 1)
World Products re-engineered the oiling system to improve lubrication and redirect it to critical areas. This new design incorporates priority main oiling which lubricates the main bearings first, then the camshaft and lifters. Another benefit of this new design is that the distributor is now at the end of the oiling cycle. This is a significant improvement because if the distributor is improperly fitted or if the O-rings are damaged or missing, an oil leak is inevitable. This leak would now happen only after all the other critical components have been lubricated instead of before as in the OE design.

A. Relocated cam journal oiling holes
B. Priority main oiling
C. Integral bosses front and rear for dry sump applications.

D. New 5 o'clock location of cam journal oiling holes replaces the inadequate OE position of 6 o'clock.
E. Cam journal can be machined to accommodate 55mm cam bearings.

Illustration 2)
The OE factory oiling holes in the cam journals, located at 6 o'clock, were moved in the new design to the 5 o'clock position. This was a necessity as camshafts requiring high spring pressures would force the camshaft down, effectively closing off the oiling hole when it was in the 6 o'clock position.

Illustration 3)
The oil restrictors are now located in the middle of the lifter valley to equalize oil distribution. An important advantage of this move is that you no longer need to remove the transmission, converter or clutch and flywheel to access the oil restrictors.

F. Oil restrictors are shown in their new location in the middle of the lifter valley. Their new location makes for easier access.
See Page 5

Man O’War Small Block Ford

- New 40,000psi Cast Iron Alloy - Strongest Production Block Available
- Increased Oil Drain-Back From Heads To Crankcase
- Six Head Bolts Per Cylinder - No Other SBF Block Has This Feature
- Now Uses Standard Head Bolts Or Studs
- Clearance for 3.500” Stroke @ 8.200” Deck or 4.250” Stroke @ 9.500” Deck
- 7/16” ARP Fasteners Increased Main Web Strength
- Cylinder Barrels Extended .500” Into Crankcase
- Low Restriction Priority Mains Oiling System
- Superior Piston Support With Long Strokes

See Page 10

Motown LS Small Block Chevy

- Uses High Flowing LS Style Heads On An SBC Block - Easy Swaps Into Classic Chassis
- Use A Distributor Or Crank Trigger Ignition
- 9.240” LS Deck Height Accepts Carburetor Intakes or LS Style EFI Manifolds
- LS Style Reverse Flow Cooling
- 55mm Cam Journal With +.134” Raised Cam Location Clears 4.000” Stroke w/ H-Beam Rods
- SBC Fuel Pump Oil Filter & Motor Mounts
- Low Restriction Priority Mains Oiling System
- Billet Or Nodular Slayed 4-Bolt Caps w/ ARP Fasteners 350 Chevy Mains

See Page 9

Motown II RC Small Block Chevy

- BBC or 50mm Cam Journal With +.134” Raised Cam Location - Clears 4.000” Stroke w/ H-Beam Rods
- Uses Standard SBC Oil Pan, Timing Cover, & Most Components - The Benefits Of A Raised Cam Without The Added Expenses

See Page 14

Sportsman II 50cc Small Block Chevy

- New Compact 50cc Combustion Chambers - Increased Compression w/ Flat Top Pistons
- Head Is Rolled 1° Valves Are Unshrouded For Improved Airflow
- High Flowing 200cc Intake Runners - Standard Port Location
- 50 States Emissions Legal E.O. #D-343-1
- Accepted By Most Sanctions As A Stock Replacement
MAN O’ WAR

No other 302/351 style Ford block compares to the ruggedness of World Products’ MAN O’WAR family of engine blocks. World has upgraded the iron to a 40,000 psi alloy and added material to the main webs. The front web is now .080” thicker and the center three are increased by .030”. World also changed from 1/2” main cap fasteners to 7/16” ARP fasteners, leaving more material in the webs in order to strengthen the main web structure further.

The Man O’War is the only SBF block with six head bolts per cylinder for secure gasket clamping and now uses standard head bolts or studs. The cylinder barrels are extended into the crankcase at the bottom by 1/2” to provide superior piston support with long stroke crankshafts. The 8.200” deck blocks have clearance for a 3.500” stroke crank and 9.500” deck blocks are cleared for a 4.250” stroke.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Deck Ht.</th>
<th>Bore</th>
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<th>Lifters</th>
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SBF Iron ENGINE BLOCKS

- NEW 40,000psi cast iron construction
- NEW Increased main web thickness
- NEW 7/16 fasteners increase web strength
- NEW low restriction priority main oiling
- 6 head bolts/cylinder - exclusive feature
- Now uses standard head bolts or studs
- 8.200” or 9.500” deck heights
- Expanded water jackets
- Bores to 4.200” (3.995” or 4.120” std.)
- Clearance for 3.500” crank w/8.200 Deck
- Clearance for 4.250” crank w/9.500 Deck
- Splayed 4-bolt main caps w/dowels & stepped register, ARP fasteners
- Improved oil drain back from heads
- Accepts standard SBF components
- Provision for dry sump
- OE style fuel pump & starter mounts
- Approximately 200 lbs.
MERLIN III

The Merlin block has earned a reputation for providing reliable big-inch power, and this 3rd edition has been refined from design, manufacturing and quality control standpoints. To ensure total customer satisfaction every block is subjected to stringent quality control standards. The MERLIN III can be bored to a maximum of 4.625” and 9.800 deck blocks are clearanced for a 4.375” stroke and 10.200 deck blocks are clearanced for a 4.750” crank. With a reinforced bottom end featuring 4-bolt splayed main caps, the MERLIN III can handle serious horsepower with complete reliability.

World’s new digital inspection equipment and quality verification procedures ensure dimensional accuracy and mean you can be assured of total quality and superior performance.

NEW 9.850 & 10.250 Deck Versions

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<th>Part No.</th>
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MERLIN GEN VI

World Products is offering a new Gen VI Big Block compatible design. This block uses a one-piece rear seal, and has the Gen VI style oil pan rail and front cover bolt pattern. The block can utilize either the OE type roller lifters or +.300” tall tie bar lifters. It also features a Mk IV style fuel pump boss and oil filter pad. The water jacket and deck surface will accommodate either Mk IV or Gen V-VI style cylinder heads, making this block extremely versatile.

Like all World’s blocks and heads, The Gen VI is American made. World’s new digital inspection equipment and quality verification procedures ensure dimensional accuracy and mean you can be assured of total quality and superior performance.

BBC Iron ENGINE BLOCKS

- High density cast iron construction
- Accepts Mk IV or Gen V-VI Heads
- Gen VI style 1-piece rear seal
- Gen VI style oil pan rail bolt pattern
- Gen VI style timing cover bolt pattern
- Priority main oiling
- Expanded water jackets
- Bore to 4.625 (4.245, 4.495 or 4.595 std.)
- Cylinder walls .250” @ 4.600
- Valley accommodates OE roller lifters or use +.300” tall aftermarket lifters
- 9.800” or 10.200” deck heights
- Clearance for 4.750” stroke (10.200” deck) or for 4.375” stroke (9.800” deck)
- Splayed 4-bolt main caps w/dowels & stepped register
- Mk IV style fuel pump & starter mounts
- Approximately 270 lbs.

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Part No. D eck Ht. Bore Cam Lifters Caps
081103 9.800 4.245 Std. Std. Nodular
081105 9.800 4.495 Std. Std. Nodular
081114 10.200 4.495 Std. Std. Nodular
081115 10.200 4.595 Std. Std. Nodular

Gen VI Compatible IRON BIG BLOCK

- Gen VI style one-piece rear seal
- Gen VI style oil pan rail
- Gen VI style front cover bolt pattern
- Mk IV style fuel pump boss
- Mk IV style oil filter pad
- Mk IV style water jacket & deck
- Uses Mk IV or Gen V & VI style heads
- 9.800” or 10.200” deck height
- 4.245”, 4.495” or 4.595” bore
- OE style roller lifter provision
- World’s priority main oiling system
- Nodular iron 4-bolt main caps

www.worldproducts.net
877-630-6651
SBC Iron ENGINE BLOCKS

MOTOWN II

World Products has developed a refined version of its popular MOTOWN block in the form of the MOTOWN II for small block Chevrolet applications. The MOTOWN II can be bored to a maximum of 4.200” and is clearance for a 4.000” crank.

The oil system features an integral boss for front and rear oil feed. The rear main cap has provisions for a wet sump pump. The valley has cross-feed lines between left and right lifter oil galleys.

Like all World’s blocks and heads, The Motown II is 100% American made. World’s new digital inspection equipment and quality verification procedures ensure dimensional accuracy and mean you can be assured of total quality and superior performance.

- High density cast iron construction
- Priority main oiling
- Expanded water jackets
- Bores to 4.200” (3.995” or 4.120” std.)
- Cylinder walls .250” @ 4.200
- 350 or 400 mains
- Nodular or billet main caps
- Clearance for 4.000” stroke crank
- 2.000” cam bore std.
- 9.025” stock deck height
- Splayed 4-bolt main caps w/dowels & stepped register, ARP fasteners
- Accepts standard SBC components
- Dual motor mounts
- Provision for dry sump
- OE style fuel pump & starter mounts
- Approximately 200 lbs.

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DRIVEN TO WIN

COMPETITION PROVEN CAST IRON BLOCKS & HEADS
Small Block Chevy - Big Block Chevy - Small Block Ford
MOTOWN II RC

RAISED CAM SMALL BLOCK

World’s new Motown II RC small block provides an ingenious solution to a long standing problem. By raising the camshaft location in the block by +.134”, World Products has created a robust platform for big inch small blocks which upgrades the cam journal to either a BBC or 50mm. The MOTOWN II RC also features bushed lifter bores in your choice of .842” or .904”. These upgrades provide exceptional valve train stability at high rpm operation. Raising the cam location also allows use of H-Beam connecting rods with a 4.000” stroke crankshaft for greater bottom end strength.

Standard small block style oil pans, timing covers, intakes and other components are used.

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</tbody>
</table>

Billet timing sets are available from Erson Cams for this application. Part # 8981TRC or 8981TARC w/ adjustable upper gear.

- High density cast iron construction
- Raised cam location +.134”
- BBC or 50mm cam bearing bore
- Bushed lifter bores (.842 or .904)
- Clearance for 4.000” stroke w/H-beam rods
- Priority main oiling
- Expanded water jackets
- Bores to 4.200” (4.120” std.)
- Cylinder walls .250” @ 4.200
- 350 or 400 mains
- 9.025” stock deck height
- Splayed 4-bolt main caps w/dowels & stepped register, ARP fasteners
- Dual motor mounts
- Provision for dry sump
- OE style fuel pump & starter mounts
- Approximately 200 lbs.
SBC Iron ENGINE BLOCKS

## MOTOWN LS

### LS-SBC HYBRID BLOCK

The Motown LS block allows the use of high flowing LS style cylinder heads with affordable SBC rotating assemblies and related components.

The camshaft location has been raised in the block by +.134" and the block now comes standard with a 55mm cam tunnel. This design allows use of a 4.000" stroke crankshaft, and the large cam core provides for exceptional valve train stability at high RPM operation. Bushed lifter bores are standard with a choice of .842" or .904" diameter. The Motown LS can be built with carburetor or EFI induction and distributor or crank trigger ignition. A standard LS 9.240" deck height means off the shelf LS intake manifolds can be used.

The Motown LS make LS swaps into classic chassis easy!

### Specifications

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Deck Ht.</th>
<th>Bore</th>
<th>Cam Loc.</th>
<th>Cam</th>
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<td>+.134</td>
<td>55mm</td>
<td>.904</td>
<td>350</td>
<td>Billet</td>
</tr>
</tbody>
</table>

- High density cast iron construction
- Uses high-flowing LS cylinder heads
- LS style reverse flow cooling
- 9.240" stock LS deck height
- Uses affordable SBC rotating assemblies
- Raised SBC cam location +.134"
- Clearance for 4.000” stroke w/H-beam rods
- 55mm babbit cam bearing bore
- Bushed lifter bores (.842 or .904)
- Priority main oiling
- Bores to 4.200” (4.120” std.)
- Cylinder walls .250" @ 4.200
- 350 SBC mains
- Splayed 4-bolt main caps w/dowels & stepped register, ARP fasteners
- SBC style motor mounts
- SBC style fuel pump & starter mounts

---

**THE ULTIMATE SMALL BLOCK!**

**World Motown LS**

**LS/SBC HYBRID IRON BLOCK**

High-Flowing LS Heads – Proven SBC Bottom End

Visit our site for more info on LS/SBC iron block and LS heads.

- Uses high flowing LS cylinder heads
- Standard SBC crank, rods & bearings
- 55mm cam tunnel - Raised +.134" 3.395" or 4.120" (surf. finished)
- Accepts 4.000" stroke w/H-beam rods
- 9.240" LS deck height
- Use distributor or Crank trigger ignition
- Use LS EFI or Carburetor intake
- SBC oil pans, oil pumps & filters
- SBC block housing patterns
- World’s priority main oiling system
- SBC or Billet 4-bolt main caps
- High density cast iron sty"
**ACCESSORIES**

<table>
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<tr>
<th>Part No.</th>
<th>Description</th>
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<td>WPI703844</td>
<td>Valley plate for carburetor intake manifolds</td>
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<tr>
<td>WPI703844-INJ</td>
<td>Valley plate for LS efi intake manifolds</td>
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<tr>
<td>WPI703848-K</td>
<td>Cylinder head end plates with fasteners</td>
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<tr>
<td>WPI705017</td>
<td>Head stud kit</td>
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<tr>
<td>WPI703849-K</td>
<td>Water Return Kit - Pro-Lok Hose</td>
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<td>WPI703850-K</td>
<td>Water Return Kit - Braided Steel Hose</td>
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<tr>
<td>ERS115996</td>
<td>Erson Camshaft Hydraulic Roller Custom Grind</td>
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<tr>
<td>ERS115999</td>
<td>Erson Camshaft Solid Roller Custom Grind</td>
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<td>ARP135-7901</td>
<td>Oil pump drive shaft</td>
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<td>ERS8981TRC</td>
<td>Billet timing set</td>
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<td>ERS8981TARC</td>
<td>Billet adjustable timing set</td>
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<tr>
<td>DURGMP55</td>
<td>Cam bearing set</td>
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</table>

**Valley plates for carburetor or LS efi intakes**

**Cylinder head end plates to adapt SBC accessories**

**ARP head stud kit**

**Water return kits Pro-Lok or Braided Steel Hose**

**Hydraulic or solid roller camshaft**

**Billet timing sets**

**Durabond cam bearings**
# SBC Iron CYLINDER HEADS

## S/R
Stock replacement style 23° heads for small block Chevy.

World’s S/R cylinder heads are the preferred alternative to expensive OEM castings or junkyard rebuilds. These heads are designed with extra-thick decks and walls for improved reliability as well as equipped with hardened steel exhaust seats that are compatible with today’s unleaded gasolines. They are machined for screw-in rocker arm studs for extra durability.

S/R Cylinder heads are fully 50-state emissions legal and because they are an OEM replacement head, they are legal for use by many oval tracks and race Sanctioning organizations.

---

### Material:
- High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron
- Spring Seats: Machined for 1.250”
- Valve Diameter: 1.940” intake, 1.500” exhaust (11/32” stem)
- Valves: Erson stainless steel valves in assemblies
- Rocker Arm Studs: Screw-in style
- Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
- Intake Runner: 170cc, standard port location
- Exhaust Ports: 65cc, standard location
- Combustion Chamber: 67cc or 76cc, straight plug
- Spark Plug: 14mm 5/8”.460” reach tapered style. Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail raised w/perimeter and center bolt
- Valve Angle: Stock 23°
- Accessory Bolt Holes: Stock
- 50-State Emissions legal
- Accepted by most oval tracks and sanctions as stock replacements. Check with rule book.

### Part No. | Intake | Chamber | Intk/Exh | Spark | Valve
---|---|---|---|---|---
042650 | 170cc | 58cc | 1.940/1.500 | Straight | Bare
042650-1 | 170cc | 58cc | 1.940/1.500 | Straight | 1.250
043600 | 170cc | 76cc | 1.940/1.500 | Straight | Bare
043600-1 | 170cc | 76cc | 1.940/1.500 | Straight | 1.250
043610 | 170cc | 67cc | 1.940/1.500 | Straight | Bare
043610-1 | 170cc | 67cc | 1.940/1.500 | Straight | 1.250
043650 | 170cc | 67cc | 1.940/1.500 | Straight | Bare
043650-1 | 170cc | 67cc | 1.940/1.500 | Straight | 1.250

**Notes:**
- 58cc chamber is suited for 305 cubic inch SBC
- -1: 1.250” valve springs for hydraulic flat tappet cams
S/R TORQUER

Improved stock replacement style 23° heads for small block Chevy.

World’s SR Torquer provides up to 30HP over stock heads. These heads are designed with extra-thick decks and walls for improved reliability as well as equipped with hardened steel exhaust seats that are compatible with today’s unleaded gasolines. They are machined for screw-in rocker arm studs for extra durability. They feature a larger 2.02 Intake Valve and a 1.60 Exhaust Valve.

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron, machined for .530” seals
- Spring Seats: Machined for 1.250”
- Valves: Ersen stainless steel valves in assemblies
- Valve Diameter: 2.020” intake, 1.600” exhaust (11/32” stem)
- Rocker Studs: Screw-in style
- Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
- Intake Runner: 170cc, standard port location
- Exhaust Ports: 65cc, standard location
- Combustion Chamber: 67cc or 76cc, straight plug
- Spark Plug: 14mm 5/8” .460” reach tapered style. Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail: raised w/perimeter and center bolt
- Valve Angle: Stock 23°
- Accessory Bolt Holes: Stock
- 50-State Emissions legal
- Accepted by most oval tracks and sanctions as stock replacements. Check with rule book.

<table>
<thead>
<tr>
<th>S/R Torquer</th>
<th>Intake Port</th>
<th>Chamber Volume</th>
<th>Intk/Exh Valves</th>
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<td>67cc</td>
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<tr>
<td>042670-1</td>
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<td>76cc</td>
<td>2.020/1.600</td>
<td>Straight</td>
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</table>

Notes:
Requires pushrod guide plates
-1: 1.250” valve springs for hydraulic flat tappet cams
**SPORTSMAN II**

The first true aftermarket performance cylinder head, good for 30-70HP over stock, and emissions legal!

The industry’s most popular true high performance cast iron cylinder head has been continuously improved since its introduction over 20 years ago. With 200cc intake and 69cc exhaust ports, World’s SPORTSMAN II heads offer 30-70 horsepower gains over OEM heads, yet are 50-state emissions legal (E.O. #D-343-1).

---

**SBC Iron CYLINDER HEADS**

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron, machined for .530” seals
- Spring Seats: Machined for 1.550”
- Valves: Erson stainless steel valves in assemblies
- Valve Diameter: 2.020” intake, 1.600” exhaust (11/32” stem)
- Rocker Arm Studs: Screw-in style
- Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
- Intake Runner: 200cc, standard port location
- Exhaust Ports: 69cc, standard location
- Combustion Chamber: 50cc, 64cc or 72cc
- Straight or angle plugs
- Spark Plug: 14mm 5/8” .460” reach tapered style. Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail raised w/perimeter and center bolt
- Valve Angle: Stock 23°
- Accessory Bolt Holes: Stock
- 50-State Emissions legal
- Accepted by most oval tracks and sanctions as stock replacements. Check with rule book.

---

**Part No. Intake Chmbr Intk/Exh Spark Valve Ports Plugs Springs**

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<th>Chmbr Volume</th>
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**NEW Sportsman 50cc Chambers**

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<td>50cc</td>
<td>2.020/1.600</td>
<td>Straight</td>
<td>1.437</td>
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**Notes:**

Requires pushrod guide plates

-1: 1.250” valve springs for hydraulic flat tappet cams

-2: 1.437” valve springs for solid flat tappet or hyd roller cams
MOTOWN 200

Racing style 23° iron heads for small block Chevy.

Designed for use in racing applications where cast iron heads are mandated or for larger displacement small block street-type engines, World’s 200cc intake MOTOWN heads are the ULTIMATE cast iron SBC head.

Employing big 2.020” diameter intake valves and highly efficient 50cc or 64cc combustion chambers, the MOTOWN provides significant power increases over other heads on the market.

Material: High density cast iron
Valve Seats: Intake (integral), exhaust (hardened)
Valve Guides: Integral cast iron, machined for .530” seals
Spring Seats: Machined for 1.550”
Valves: Erson stainless steel valves in assemblies
Valve Diameter: 2.020” intake, 1.600” exhaust (11/32” stem)
Rocker Arm Studs: Screw-in style
Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
Intake Runner: 200cc, standard port location
Exhaust Ports: 70cc, standard location
Combustion Chamber: 50cc or 64cc
Angle plugs
Spark Plug: 14mm 5/8” .460” reach tapered style. Accel 276 or 276S or equivalent
Valve Job: Multi-angle intake and radiused exhaust
Valve Cover Rail raised w/perimeter and center bolt
Valve Angle: Stock 23°
Accessory Bolt Holes: Stock
Accepted by most oval tracks and sanctions as stock replacements. Check with rule book.

Available Summer Of 2015

SBC Iron CYLINDER HEADS

Part No. Intake Chmbr Intk/Exh Spark Valve Port Volume Valves Plugs Springs
014050 200cc 64cc 2.020/1.600 Angle Bare
014050-1 200cc 64cc 2.020/1.600 Angle 1.250
014050-2 200cc 64cc 2.020/1.600 Angle 1.437
014050-3 200cc 64cc 2.020/1.600 Angle 1.550

New Motown 50cc Chambers
014050-50 200cc 50cc 2.020/1.600 Angle Bare
014050-50-1 200cc 50cc 2.020/1.600 Angle 1.250
014050-50-2 200cc 50cc 2.020/1.600 Angle 1.437
014050-50-3 200cc 50cc 2.020/1.600 Angle 1.550

Notes:
Requires pushrod guide plates
-1: 1.250” valve springs for hydraulic flat tappet cams
-2: 1.437” valve springs for solid flat tappet or hyd roller cams
-3: 1.550” valve springs for solid roller cams
SBC Iron CYLINDER HEADS

MOTOWN 220

Racing style 23° iron heads for small block Chevy.

Designed for use in racing applications where cast iron heads are mandated or for larger displacement small block street-type engines, World’s 220cc intake MOTOWN heads are the ULTIMATE cast iron SBC head.

Employing 220cc ports, big 2.080” diameter intake valves and a highly efficient 64cc combustion chamber, the MOTOWN provides significant power increases over other heads on the market. They are ideally suited for high rpm use on small block Chevy engines of 383” or larger displacements.

50cc Version
Available Summer Of 2015

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron, machined for .530” seals
- Spring Seats: Machined for 1.550”
- Valves: Erson stainless steel valves in assemblies
- Valve Diameter: 2.080” intake, 1.600” exhaust (11/32” stem)
- Rocker Arm Studs: Screw-in style
- Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
- Intake Runner: 220cc, standard port location
- Exhaust Ports: 70cc, standard location
- Combustion Chamber: 50cc or 64cc
- Angle plugs
- Spark Plug: 14mm 5/8” .460” reach tapered style. Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail raised w/perimeter and center bolt
- Valve Angle: Stock 23°
- Accessory Bolt Holes: Stock
- Accepted by most oval tracks and sanctions as stock replacements. Check with rule book.

<table>
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<tr>
<th>Part No.</th>
<th>Intake Port</th>
<th>Chmbr Volume</th>
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<td>014150-2</td>
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<td>014150-3</td>
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</tr>
<tr>
<td>014250-1</td>
<td>220cc</td>
<td>64cc</td>
<td>2.080/1.600</td>
<td>Straight</td>
<td>1.250</td>
</tr>
<tr>
<td>014250-2</td>
<td>220cc</td>
<td>64cc</td>
<td>2.080/1.600</td>
<td>Straight</td>
<td>1.437</td>
</tr>
<tr>
<td>014250-3</td>
<td>220cc</td>
<td>64cc</td>
<td>2.080/1.600</td>
<td>Straight</td>
<td>1.550</td>
</tr>
</tbody>
</table>

New Motown 50cc Chambers

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Intake Port</th>
<th>Chmbr Volume</th>
<th>Intk/Exh Valves</th>
<th>Spark Plugs</th>
<th>Valve Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>014150-50</td>
<td>220cc</td>
<td>50cc</td>
<td>2.080/1.600</td>
<td>Angle</td>
<td>Bare</td>
</tr>
<tr>
<td>014150-50-1</td>
<td>220cc</td>
<td>50cc</td>
<td>2.080/1.600</td>
<td>Angle</td>
<td>1.250</td>
</tr>
<tr>
<td>014150-50-2</td>
<td>220cc</td>
<td>50cc</td>
<td>2.080/1.600</td>
<td>Angle</td>
<td>1.437</td>
</tr>
<tr>
<td>014150-50-3</td>
<td>220cc</td>
<td>50cc</td>
<td>2.080/1.600</td>
<td>Angle</td>
<td>1.550</td>
</tr>
</tbody>
</table>

Notes:
- Requires pushrod guide plates
-1: 1.250” valve springs for hydraulic flat tappet cams
-2: 1.437” valve springs for solid flat tappet or hyd roller cams
-3: 1.550” valve springs for solid roller cams
**MERLIN**

**Oval port 24° iron performance heads for big block Chevy.**

World’s MERLIN series has earned a reputation as the performance industry standard for Big Block Chevy power.

The 269cc oval port design provides great low to midrange power and throttle response for street and racing engines up to 496 cubic inches.

They are available bare or in complete assemblies that feature multi-angle valve jobs, Erson stainless steel valves and valve springs matched to camshaft requirements.

- **Material:** High density cast iron
- **Valve Seats:** Intake (integral), exhaust (hardened)
- **Valve Guides:** Integral cast iron
- **Spring Seats:** Machined for 1.550” (can machine to 1.625”)
- **Valves:** Erson stainless steel valves in assemblies (inconel exhaust valves on marine applications)
- **Valve Diameter:** 2.300” intake, 1.880” exhaust (11/32” stem)
- **Guide Plates:** Stock
- **Rocker Arm Studs:** Screw-in style
- **Rocker Arms:** Standard
- **Intake Runner:** 269cc, standard port location
- **Exhaust Ports:** 137cc, Raised .600
- **Combustion Chamber:** 119cc
- **Spark Plug:** 14mm 5/8” .460” reach tapered style, Accel 276 or 276S or equivalent
- **Valve Job:** Multi-angle intake and radiused exhaust
- **Valve Cover Rail:** Raised
- **Valve Angle:** Stock 24°
- **Accessory Bolt Holes:** Stock
- **Chamber Design:** Open

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**BBC Iron CYLINDER HEADS**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Intake Port</th>
<th>Chmbcr Volume</th>
<th>Intk/Exh Port Valves</th>
<th>Port Shape</th>
<th>Valve Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>030040</td>
<td>269cc</td>
<td>119cc</td>
<td>2.300/1.880</td>
<td>Oval</td>
<td>Bare</td>
</tr>
<tr>
<td>030040-1</td>
<td>269cc</td>
<td>119cc</td>
<td>2.300/1.880</td>
<td>Oval</td>
<td>1.550</td>
</tr>
<tr>
<td>030040-2</td>
<td>269cc</td>
<td>119cc</td>
<td>2.300/1.880</td>
<td>Oval</td>
<td>1.550</td>
</tr>
<tr>
<td>030040-2M</td>
<td>269cc</td>
<td>119cc</td>
<td>2.300/1.880</td>
<td>Oval</td>
<td>1.550</td>
</tr>
</tbody>
</table>

**Notes:**

-1: 1.550” valve springs for hydraulic flat tappet cams
-2: 1.550” valve springs for solid flat tappet or hyd roller cams
-2M: -2 Assembly with Inconel exhaust valve for Marine use
The cast iron MERLIN rectangular port design is available with intake ports in 320 and 345cc configurations. Choose the port size that will provide the optimum balance of flow and velocity for your engine combination.

They are available bare or in complete assemblies that feature multi-angle valve jobs, Erson stainless steel valves and valve springs matched to camshaft requirements.

World Products Merlin cylinder heads for big Chevys combine large intake runners with open combustion chambers to produce good torque and low-end power.

**Part No.** | **Intake Chmbr** | **Chamber Volume** | **Intk/Exh Port Valve** | **Port Shape** | **Valve Springs**
---|---|---|---|---|---
030620 | 320cc | 119cc | 2.300/1.880 | Rect | Bare
030620-1 | 320cc | 119cc | 2.300/1.880 | Rect | 1.550
030620-2 | 320cc | 119cc | 2.300/1.880 | Rect | 1.550
030620-2M | 320cc | 119cc | 2.300/1.880 | Rect | 1.550
030620-3 | 320cc | 119cc | 2.300/1.880 | Rect | 1.550
030630 | 345cc | 119cc | 2.300/1.880 | Rect | Bare
030630-1 | 345cc | 119cc | 2.300/1.880 | Rect | 1.550
030630-2 | 345cc | 119cc | 2.300/1.880 | Rect | 1.550
030630-3 | 345cc | 119cc | 2.300/1.880 | Rect | 1.550

Notes:
-1: 1.550” valve springs for hydraulic flat tappet cams
-2: 1.550” valve springs for solid flat tappet or hyd roller cams
-2M: -2 Assembly with Inconel exhaust valve for Marine use
-3: 1.550” valve springs for solid roller cams
WINDSOR JR.

Improved replacement 20° iron performance heads for small block Ford.

When it comes to high performance replacements for factory cast iron heads, World’s WINDSOR JR. has the market covered with 180cc intake runners, plus the 64cc exhausts ports are substantially larger than OEM Ford heads. Add a highly efficient combustion chamber design and larger valves and you have big bolt-on power.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Intake Port</th>
<th>Chmbr Volume</th>
<th>Intk/Exh Valves</th>
<th>Valve Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>053030</td>
<td>180cc</td>
<td>58cc</td>
<td>1.940/1.600</td>
<td>Bare</td>
</tr>
<tr>
<td>053030-1</td>
<td>180cc</td>
<td>58cc</td>
<td>1.940/1.600</td>
<td>1.250</td>
</tr>
<tr>
<td>053030-2</td>
<td>180cc</td>
<td>58cc</td>
<td>1.940/1.600</td>
<td>1.437</td>
</tr>
</tbody>
</table>

Notes:
Requires pushrod guide plates
-1: 1.250” valve springs for hydraulic flat tappet cams
-2: 1.437” valve springs for solid flat tappet or hyd roller

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron
- Spring Seats: Machined for 1.550” (can machine to 1.625”)
- Valves: Erson stainless steel valves in assemblies (inconel exhaust valves on marine applications)
- Valve Diameter: 1.940” intake, 1.600” exhaust (11/32” stem)
- Rocker Arm Studs: Screw-in style
- Rocker Arms: Adjustable rockers recommended. 1.6 ratio (use of 1.73 ratio will require elongation of pushrod holes)
- Intake Runner: 180cc, standard port location
- Exhaust Ports: 64cc, standard location (dual exhaust bolt pattern to accommodate large custom headers)
- Combustion Chamber: 58cc
- Spark Plug: 14mm 5/8” .460” reach tapered style, Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail: Raised
- Valve Angle: Stock 20°
- Accessory Bolt Holes: Stock
**SBF Iron CYLINDER HEADS**

**WINDSOR SR.**

High performance replacement 20° iron heads for small block Ford.

When it comes to high performance replacements for factory cast iron heads, World’s WINDSOR SR. boasting 200cc ports, plus 64cc exhausts ports that are substantially larger than OEM Ford heads. Add a highly efficient combustion chamber design and larger valves and you have big bolt-on power.

Marine applications are also available, equipped with high temperature inconel exhaust valves. The WINDSOR series of heads are the cost-effective choice for serious power from your 302/351.

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron
- Spring Seats: Machined for 1.550” (can machine to 1.625”)
- Valves: Eron stainless steel valves in assemblies (inconel exhaust valves on marine applications)
- Valve Diameter: 2.020” intake, 1.600” exhaust (11/32” stem)
- Rocker Arm Studs: Screw-in style
- Rocker Arms: Adjustable rockers recommended. 1.6 ratio (use of 1.73 ratio will require elongation of pushrod holes)
- Intake Runner: 200cc, standard port location
- Exhaust Ports: 64cc, standard location (dual exhaust bolt pattern to accommodate large custom headers)
- Combustion Chamber: 64cc
- Spark Plug: 14mm 5/8” .460” reach tapered style, Accel 276 or 276S or equivalent
- Valve Job: Multi-angle intake and radiused exhaust
- Valve Cover Rail: Raised
- Valve Angle: Stock 20°
- Accessory Bolt Holes: Stock

---

<table>
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<tr>
<th>Part No.</th>
<th>Intake Port</th>
<th>Chmbr Volume</th>
<th>Intk/Exh Valves</th>
<th>Valve Springs</th>
</tr>
</thead>
<tbody>
<tr>
<td>053040</td>
<td>200cc</td>
<td>64cc</td>
<td>2.020/1.600</td>
<td>Bare</td>
</tr>
<tr>
<td>053040-1</td>
<td>200cc</td>
<td>64cc</td>
<td>2.020/1.600</td>
<td>1.250</td>
</tr>
<tr>
<td>053040-2</td>
<td>200cc</td>
<td>64cc</td>
<td>2.020/1.600</td>
<td>1.437</td>
</tr>
<tr>
<td>053040-3</td>
<td>200cc</td>
<td>64cc</td>
<td>2.020/1.600</td>
<td>1.550</td>
</tr>
</tbody>
</table>

**Notes:**

Requires pushrod guide plates

-1: 1.250” valve springs for hydraulic flat tappet cams
-2: 1.437” valve springs for solid flat tappet or hyd roller
-3: 1.550” valve springs for solid roller cams
**MOTOWN**  Aluminum SBC Intake Manifolds
Proven to bolt on 15-25HP! The best average horsepower & torque of any SBC manifold available!

#061040  MOTOWN SBC, single plane, 4150 flange, 5.625” tall
#061050  MOTOWN SBC, single plane, 4500 flange, 6.250” tall
#061041  MOTOWN SBC Vortec, single plane, 4150 flange, 6.625” tall

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**MERLIN**  Aluminum BBC Intake Manifolds
Highly effective big block manifolds for street or strip.

#063030  MERLIN BBC, single plane, 4150 flange, standard 9.8” deck, 6” tall
#063031  MERLIN BBC, single plane, 4150 flange, tall 10.2” deck, 6” tall
#063032  MERLIN BBC, single plane, 4500 flange, standard 9.8” deck, 8.125” tall
#063033  MERLIN BBC, single plane, 4500 flange, tall 10.2” deck, 8.250” tall
#063034  MERLIN BBC, single plane, 4150 flange, standard 9.8” deck, MARINE
#063035  MERLIN BBC, single plane, 4150 flange, tall 10.2” deck, MARINE
#063036  MERLIN BBC, single plane, 4500 flange, standard 9.8” deck, MARINE
#063037  MERLIN BBC, single plane, 4500 flange, tall 10.2” deck, MARINE

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**MERLIN X**  Aluminum BBC Intake Manifolds
The ultimate in our line of big block Chevrolet manifolds!

- Port Size: 2.300” x 1.670”
- Designed for 4500 series carbs
- Ideally suited to 540 and larger displacements

#063040  MERLIN X BBC, single plane, 4500 flange, standard 9.8” deck
#063041  MERLIN X BBC, single plane, 4500 flange, tall 10.2” deck
#063042  MERLIN X BBC, single plane, 4500 flange, standard 9.8” deck, MARINE
#063043  MERLIN X BBC, single plane, 4500 flange, tall 10.2” deck, MARINE

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**MAN O’WAR**  Aluminum SBF Intake Manifolds
These intakes are a perfect mate to our high flowing heads!

- 302/351 Ford applications
- 9.5 Decks
- 4150 series or 4500 (Dominator) carb flanges

#063415  MAN OWAR SBF, single plane, 4150 flange, 351 9.5” deck, raised roof
#063416  MAN OWAR SBF, single plane, 4500 flange, 351 9.5” deck, raised roof