

PRODUCT CATALOG Volume XVIII

PERFORMANCE BLOCKS & HEADS

WWW.WORLDPRODUCTS.NET

World Products has been producing affordable high performance cast iron engine blocks and cylinder heads for over 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. World Products 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:

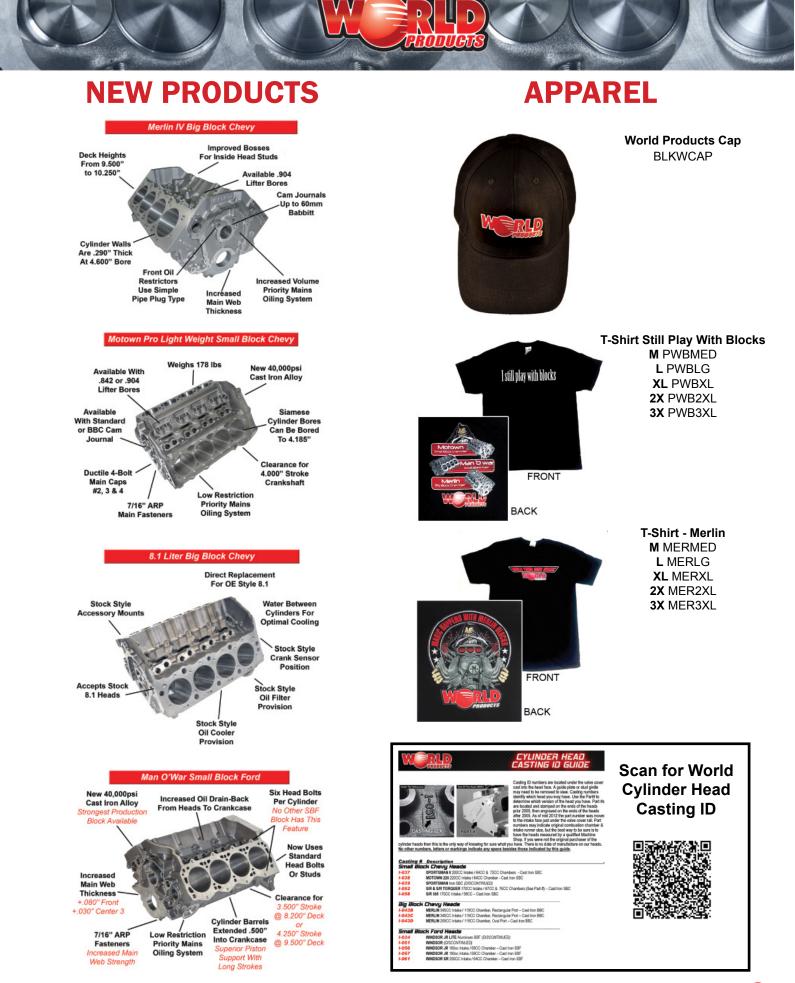
Some products sold by World Products have been designed and are intended for Off-Highway application only. Installation on a vehicle intended for use on public roads may violate U.S., Canadian, State or Provincial laws and regulations including those related to emission requirements and motor vehicle safety standards. Purchaser bears full risk of any such violation.

IMPORTANT NOTICE

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Table of Contents

Content	Pg.
New Products & Apparel	3
Motown II SBC Oiling System	4
Engine Blocks	
Motown II SBC	5
Motown II RC SBC	6
Motown Pro Light Weight SBC	7
Motown LS SBC	8
Motown LS Accessories	9
Merlin III BBC	10
Merlin IV BBC	11
Merlin Gen VI BBC	12
8.1 Liter BBC	13
Man O'War SBF	14
Cylinder Heads	
S/R SBC	15
S/R Torquer SBC	16
Sportsman II SBC	17
Motown 220 SBC	18
Merlin BBC	19
Merlin BBC	20
Windsor Sr.	21
Windsor Jr.	22
Intake Manifolds & ARP	23





TECHNICAL BULLETIN MOTOWN II

SBC Block Oiling System

A. Relocated cam journal oiling holes

B. Priority main oiling

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. C.

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.
- C. Integral bosses front and rear for dry sump applications.

R

- This leak would now happen only after all the other critical components have been lubricated instead of before as in the OE design.
- D. New 5 o'clock location Illustration 3) of cam journal oiling The oil restrictors Illustration 2) holes replaces the are now located The OE factory E. D. F. inadequate OE in the middle of oiling holes in position of 6 o'clock. the lifter valley to the cam journals, E. Cam journal can be equalize oil distribution. located at 6 o'clock. F. Oil restrictors machined to accomodate An important advantage were moved in the new of this move is that you are shown in their design to the 5 o'clock position. 55mm cam bearings. no longer need to remove new location in the This was a necessity as camshafts the transmission, converter requiring high spring pressures would middle of the lifter or clutch and flywheel to force the camshaft down, effectively valley. Their new access the oil restrictors. closing off the oiling hole when it was location makes for in the 6 o'clock position.

easier access.

MOTOWN II SBC Block

World Products has developed a refined version of its popular MOTOWN block in the form of the MOTOWN II for small block Chevrolet applications.

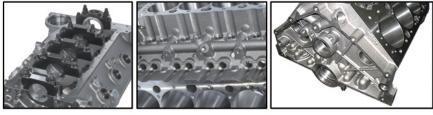
The MOTOWN II can be bored to a maximum of 4.200" and is clearanced for a 4.000" crank. The oil system features an integral boss for front and rear oil feed. The rear main cap has provisions for a wet sump pump. The valley has crossfeed lines between left and right lifter oil galleys.

Like all World 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.







Part No.	Deck Ht.	Bore	Cam	Lifters	Mains	Caps
084010	9.025	3.995	2.000"	Std.	350	Nodular
084020	9.025	4.120	2.000"	Std.	350	Nodular
084030	9.025	4.120	2.000"	Std.	400	Nodular
084110	9.025	3.995	2.000"	Std.	350	Billet
084120	9.025	4.120	2.000"	Std.	350	Billet
084130	9.025	4.120	2.000"	Std.	400	Billet

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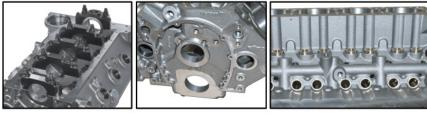
Torque Specs Mains:

TQ 7/16 Inner Main Bolts 70 FT.LB. TQ 7/16 Front & Rear Outer Bolts 70 FT.LB. TQ 7/16 Center Splayed Bolts 70 FT.LB.









Part No.	Deck Ht.	Bore	Cam Loc.	Cam	Lifters	Mains	Caps
084120RC	9.025	4.120	+.134	BBC	.842	350	Billet
084120RC-904	9.025	4.120	+.134	BBC	.904	350	Billet
084130RC	9.025	4.120	+.134	BBC	.842	400	Billet
084130RC-904							

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



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Torque Specs Mains:

TQ 7/16 Inner Main Bolts 70 FT.LB. TQ 7/16 Front & Rear Outer Bolts 70 FT.LB. TQ 7/16 Center Splayed Bolts 70 FT.LB. World's Motown II RC small block provides an ingenious solution to a long standing problem. By raising the camshaft location in the block +.134", World Products has created a robust platform for big inch small blocks which upgrades the cam journal to a BBC 2.120" bore.

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 clearance for the 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.

- High density cast iron construction
- Raised cam location +.134"
- BBC 2.120" 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 billet main caps w/dowels & stepped register, ARP studs
- Dual motor mounts
- Provision for dry sump
- OE style fuel pump & starter mounts
- Approximately 200 lbs.





MOTOWN PRO Light Weight SBC Block

World's new Motown Pro Light-Weight block offers tremendous performance potential in a new lightweight package that will appeal to both circle track racers and drag racers.

Weighing in at a nominal 178 lbs, the Motown Pro Light-Weight is cast from a special 40,000 psi iron alloy for increased strength while weighing significantly less than typical aftermarket blocks. The new block is available with either a standard SBC cam journal and lifters, or with a BBC cam journal and .904" lifter bores to provide enhanced valve train stability and performance.

Ductile iron main caps are fitted with 4bolt splayed caps on #2, 3 & 4 and 2-bolt caps for #1 & 5 which allow easy oil pan fitment. The main caps are secured by high strength 7/16" ARP bolts for maximum stability.

- 40,000psi cast iron construction
- 178 lbs. average weight
- Standard SBC or BBC 2.120" cam bore
- .842 or .904 lifter bores
- Clearance for 4.000" stroke
- Priority main oiling
- Expanded water jackets
- Bores to 4.185"
- 350 mains
- 9.025" stock deck height
- Splayed 4-bolt main caps on #2, 3 & 4
- Ductile main caps
- ARP main bolts
- Provision for oil restrictors
- OE style fuel pump & starter mounts







Part No.	Deck Ht.	Bore	Cam Loc.	Cam	Lifters	Mains	Caps
083010	9.025	3.995	Std.	SBC	.842	350	Nodular
083020	9.025	4.120	Std.	SBC	.842	350	Nodular
083010-BBC	9.025	3.995	Std.	BBC	.904	350	Nodular
083020-BBC	9.025	4.120	Std.	BBC	.904	350	Nodular

Scan For Tech Sheet

Torque Specs Mains: TQ 7/16 Inner Main Bolts 70 FT.LB. TQ 7/16 Front & Rear Outer Bolts 70 FT.LB. TQ 7/16 Center Splayed Bolts 70 FT.LB.





MOTOWN II LS LS/SBC Hybrid Block





Part No.	Deck Ht.	Bore	Cam Loc.	Cam	Lifters	Mains	Caps
084080	9.240	3.995	+.134	55mm	.842	350	Nodular
084080-904	9.240	3.995	+.134	55mm	.904	350	Nodular
084081	9.240	4.120	+.134	55mm	.842	350	Nodular
084081-904	9.240	4.120	+.134	55mm	.904	350	Nodular
084180	9.240	3.995	+.134	55mm	.842	350	Billet
084180-904	9.240	3.995	+.134	55mm	.904	350	Billet
084181	9.240	4.120	+.134	55mm	.842	350	Billet
084181-904	9.240	4.120	+.134	55mm	.904	350	Billet







Torque Specs Mains:

- TQ 7/16 Inner Main Bolts 70 FT.LB.
- TQ 7/16 Front & Rear Outer Bolts 70 FT.LB.
- TQ 7/16 Center Splayed Bolts 70 FT.LB.

Scan For Build Instructions



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

Motown ITLS

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 clearance for the 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 makes LS swaps into classic chassis easy!

- 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

MOTOWN II LS Accessories

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ACCESSORIE	S	Valley plates for carburetor
Part No.	Description	or LS efi intakes
WPI703844	- Valley plate for carburetor intake manifolds	The second second
WPI703844-I	- Valley plate for LS efi intake manifolds	
WPI703848-K	- Cylinder head end plates	Cylinder head end plates to adapt SBC accessories
WPI705017	- Head stud kit	
WPI703849-K	- Water Return Kit - Pro-Lok Hose	
WPI703850-K	- Water Return Kit - Braided Steel Hose	* *
ERSE115996	- Erson Camshaft Hydraulic Roller Custom Grind	ARP head stud kit
ERSE115999	- Erson Camshaft Solid Roller Custom Grind	Bolts & Studis
ARP135-7901	- Oil pump drive shaft	Sold And Andrew Andrew Andrew
8981TRC	- Billet timing set	
8981TARC	- Billet adjustable timing set	
DURGMP55	- Cam bearing set	Water return kits Pro-Lok or





Motown II LS

MERLIN III BBC Block





Part No.	Deck Ht.	Bore	Cam	Lifters	Caps
081102	9.800	4.595	Std.	Std.	Nodular
081102- 55	9.800	4.595	55mm	.904	Nodular
081111	10.200	4.495	Std.	Std.	Nodular
081111- 55	10.200	4.495	55mm	.904	Nodular
081112- 55	10.200	4.595	55mm	.904	Nodular
085010- 55	9.800	4.495	55mm	.904	Billet
085012	9.800	4.595	Std.	Std.	Billet
085012-55	9.800	4.595	55mm	.904	Billet
085100	10.200	4.245	Std.	Std.	Billet
085110	10.200	4.495	Std.	Std.	Billet
085110- 55	10.200	4.495	55mm	.904	Billet

Scan For Tech Sheet



Torque Specs Mains:

TQ 1/2 Inner Main Bolts 100 FT.LB. TQ 1/2 Front & Rear Outer Bolts 100 FT.LB. TQ 1/2 Center Splayed Bolts 100 FT.LB. 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.

ERLINE.

World's 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 4.625 (4.245, 4.495 or 4.595 std.)
- Cylinder walls .250" @ 4.600
- Valley accomodates 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, ARP fasteners
- Standard BBC cam bearing bore
- Available 55mm babbit cam & .904 lifters
- OE style fuel pump & starter mounts
- Approximately 270 lbs.



MERLIN IV BBC Block

World Products has redesigned the famed Merlin Big Block Chevy casting, incorporating numerous improvements and new features. Designated the Merlin IV, this new block is sure be a favorite among racers and professional engine builders.

New features include thicker main webs for increased strength and thicker cylinder walls which are nominally .310" @ 4.600" bore. The oiling system is revised with enlarged passages and cross overs in front, uses simple pipe plug type restrictors, .500 oil gallery is relocated so 55mm cam does not require lifter bushings. The block will accept cam journals up to 2.480" or 60mm Babbitt and 1.060" lifter bores. Also new are deck heights from 9.500" to 9.850" and 10.200" to 10.250".

> NEW 396 Style Block with 4.120 Bore Non-Saimese PN 091090

- High density cast iron construction
- Priority main oiling
- Front oil inlet and restrictor provision
- Bores to 4.625 (4.245, 4.495 or 4.595 std.)
- Cylinder walls .310" @ 4.600
- Valley accomodates OE roller lifters or use +.300" tall aftermarket lifters
- 9.500" to 10.250" 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, ARP fasteners
- 2.120" BBC cam bearing bore
- Available 55mm babbit cam & .904 lifters
- OE style fuel pump & starter mounts
- Approximately 270 lbs.







MERLINITY



Part No.	Deck Ht.	Bore	Cam	Lifters	Caps
091100	9.800	4.245	Std.	Std.	Nodular
091101	9.800	4.495	Std.	Std.	Nodular
091101- 55	9.800	4.495	55mm	.904	Nodular
091102	9.800	4.595	Std.	Std.	Nodular
091107	9.850	4.595	Std.	Std.	Nodular
091110	10.200	4.245	Std.	Std.	Nodular
091111	10.200	4.495	Std.	Std.	Nodular
091112	10.200	4.595	Std.	Std.	Nodular
091117	10.250	4.595	Std.	Std.	Nodular
091090*	9.800	4.120	Std.	Std.	Nodular
*396 style with	water betwee	en bores, n	on-siamese		
095000	9.800	4.245	Std.	Std.	Billet
095010	9.800	4.495	Std.	Std.	Billet
095012	9.800	4.595	Std.	Std.	Billet
095013- 55	9.500	4.595	55mm	.904	Billet
095017	9.850	4.595	Std.	Std.	Billet
095100	10.200	4.245	Std.	Std.	Billet
095110	10.200	4.495	Std.	Std.	Billet
095110- 55	10.200	4.495	55mm	.904	Billet
095112	10.200	4.595	Std.	Std.	Billet
095112- 55	10.200	4.595	55mm	.904	Billet
095117	10.250	4.595	Std.	Std.	Billet

MERLIN GEN VI BBC Block



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 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.



Part No.	Deck Ht.	Bore	Cam	Lifters	Caps			
091103	9.800	4.245	Std.	Std.	Nodular			
091105	9.800	4.495	Std.	Std.	Nodular			
081114*	10.200	4.495	Std.	Std.	Nodular			
* Discontinue	* Discontinued - available while supplies last							

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Torque Specs Mains:

TQ 1/2 Inner Main Bolts 100 FT.LB. TQ 1/2 Front & Rear Outer Bolts 100 FT.LB. TQ 1/2 Center Splayed Bolts 100 FT.LB.



- 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
- Bores to 4.625 (4.245, 4.495 or 4.595 std.)
- Cylinder walls .250" @ 4.600
- Valley accomodates 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, OE style fasteners
- Mk IV style fuel pump & starter mounts
- Approximately 270 lbs.

8.1 LITER VORTEC STYLE BBC Block

World Products new 8.1 liter block is a direct replacement style with all the OE fitments and accessory mounts. The 8.1 engine is no longer in production and until now there have been no direct replacement blocks available. These engines are common in trucks, motor homes, marine and industrial applications. Full water jackets between the cylinders of the standard 2.245" bore ensure proper cooling capacity, and bore sizes of 4.495 and 4.595 are available with siamese bores. The block is compatible with stock cylinder heads and other components.

Like all World blocks and heads, the 8.1 liter 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.

- Cast iron construction
- Direct stock 8.1 replacement block
- Accepts stock 8.1 heads
- Stock style oil filter provisions
- Stock style oil cooler provisions
- Stock style accessory mounts
- Full water jackets between cylinders
- Stock crank sensor position
- Approximately 270 lbs.





Part No.	Deck Ht.	Bore	Cam	Lifters	Caps
018100	10.240	4.245	Std.	Std.	Nodular
018101	10.240	4.495	Std.	Std.	Nodular
018102	10.240	4.595	Std.	Std.	Nodular

Torque Specs Mains:

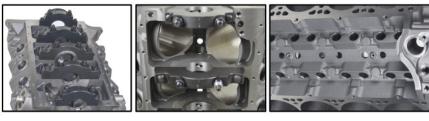
- TQ 1/2 Inner Main Bolts 100 FT.LB.
- TQ 1/2 Front & Rear Outer Bolts 100 FT.LB.
- TQ 1/2 Center Splayed Bolts 100 FT.LB.
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MAN O'WAR SBF Block





Part No.	Deck Ht.	Bore	Cam	Lifters	Mains	Caps
087010	8.200	3.995	Std.	Std.	2.248	Nodular
087020	8.200	4.120	Std.	Std.	2.248	Nodular
087072	9.500	3.995	Std.	Std.	2.749	Nodular
087082	9.500	4.120	Std.	Std.	2.749	Nodular
087110	8.200	3.995	Std.	Std.	2.248	Billet
087120	8.200	4.120	Std.	Std.	2.248	Billet
087172	9.500	3.995	Std.	Std.	2.749	Billet
087182	9.500	4.120	Std.	Std.	2.749	Billet
087150	9.200	3.995	Std.	Std.	2.248	Billet
087160	9.200	4.120	Std.	Std.	2.248	Billet
087152	9.200	3.995	Std.	Std.	2.749	Billet
087162	9.200	4.120	Std.	Std.	2.749	Billet

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Torque Specs Mains:

TQ 7/16 Inner Main Bolts 70 FT.LB. TQ 7/16 Front & Rear Outer Bolts 70 FT.LB. TQ 7/16 Center Splayed Bolts 70 FT.LB. 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.

- 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
 PN Bolts 154-3603 / Studs WPI705027
- 8.200", 9.200" or 9.500" deck heights
- 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
- Clearance for 4.000" crank w/9.200 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
- Approximately 200 lbs.



S/R SBC Heads

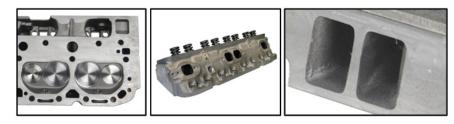
Stock replacement style 23° heads for small block Chevy.

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 50state 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" int, 1.500" exh (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 rule book.

Part No.	Intake Port	Chamber Volume	Intk/Exh Valves	Spark Plugs	Valve Springs
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
'86-'95 Intake	Face w/C	enter Bol	t Valve Covers		
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

Scan For Tech Sheet Scan For 305 Sheet





S/R TORQUER SBC Heads



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 extrathick 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.



S/R Torquer Part No.	Intake Port	Chamber Volume	Intk/Exh Valves	Spark Plugs	Valve Springs
042660	170cc	67cc	2.020/1.600	Straight	Bare
042660-1	170cc	67cc	2.020/1.600	Straight	1.250
042670	170cc	76cc	2.020/1.600	Straight	Bare
042670-1	170cc	76cc	2.020/1.600	Straight	1.250

Notes:

Requires pushrod guide plates

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

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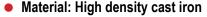


- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron, machined for .530" seals
- Spring Seats: Machined for 1.250"
- Valves: Erson stainless steel valves in assemblies
- Valve Diameter: 2.020" int, 1.600" exh (11/32" stem)
- Rocker Arm Studs: Screw-in style
- Rocker Arms: 1.5 ratio (use of 1.6 ratio will require elongation of pushrod holes)
- Intake Runner: 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 rule book.

SPORTSMAN II SBC Heads

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).



- 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" int, 1.600" exh (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.

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011150 WISSOTA Modified spec head

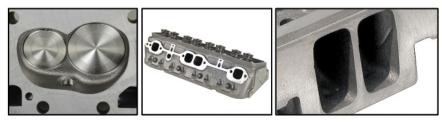
Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Spark Plugs	Valve Springs
011150	200cc	64cc	2.020/1.600	Angle	Bare
011150-1	200cc	64cc	2.020/1.600	Angle	1.250
011150-2	200cc	64cc	2.020/1.600	Angle	1.437
011150-3	200cc	64cc	2.020/1.600	Angle	1.540
011250	200cc	64cc	2.020/1.600	Straight	Bare
011250-1	200cc	64cc	2.020/1.600	Straight	1.250
011250-2	200cc	64cc	2.020/1.600	Straight	1.437
011250-3	200cc	64cc	2.020/1.600	Straight	1.540
012150	200cc	72cc	2.020/1.600	Angle	Bare
012150-1	200cc	72cc	2.020/1.600	Angle	1.250
012150-2	200cc	72cc	2.020/1.600	Angle	1.437
012150-3	200cc	72cc	2.020/1.600	Angle	1.540
012250	200cc	72cc	2.020/1.600	Straight	Bare
012250-1	200cc	72cc	2.020/1.600	Straight	1.250
012250-2	200cc	72cc	2.020/1.600	Straight	1.437
012250-3	200cc	72cc	2.020/1.600	Straight	1.540
NEW Sportsman	n 50cc Ch	ambers			
011150-50	200cc	50cc	2.020/1.600	Angle	Bare
011150-50-1	200cc	50cc	2.020/1.600	Angle	1.250
011150-50-2	200cc	50cc	2.020/1.600	Angle	1.437
011150-50-3	200cc	50cc	2.020/1.600	Angle	1.540
011250-50	200cc	50cc	2.020/1.600	Straight	Bare
011250-50-1	200cc	50cc	2.020/1.600	Straight	1.250
011250-50-2	200cc	50cc	2.020/1.600	Straight	1.437
011250-50-3	200cc	50cc	2.020/1.600	Straight	1.540
Notes: Requires pusl	hrod guid	de plates	6		

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

- -2: 1.437" valve springs for solid flat tappet or hyd roller cams
- -3: 1.540" valve springs for solid roller cams

MOTOWN 220 SBC Heads





Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Spark Plugs	Valve Springs
014150	220cc	64cc	2.080/1.600	Angle	Bare
014150-1	220cc	64cc	2.080/1.600	Angle	1.250
014150-2	220cc	64cc	2.080/1.600	Angle	1.437
014150-3	220cc	64cc	2.080/1.600	Angle	1.540
014250	220cc	64cc	2.080/1.600	Straight	Bare
014250-1	220cc	64cc	2.080/1.600	Straight	1.250
014250-2	220cc	64cc	2.080/1.600	Straight	1.437
014250-3	220cc	64cc	2.080/1.600	Straight	1.540
New Motown	50cc C	hamber	S		
014150-50	220cc	50cc	2.080/1.600	Angle	Bare
014150-50-1	220cc	50cc	2.080/1.600	Angle	1.250
014150-50-2	220cc	50cc	2.080/1.600	Angle	1.437
014150-50-3	220cc	50cc	2.080/1.600	Angle	1.540
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: 1.540" valve springs for solid roller cams



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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 MO-TOWN heads are the ULTIMATE cast iron SBC head.

Employing 220cc intake 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.

- 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 Straight or Angle plugs (Angle only on 50cc heads) • 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.

MERLIN RECTANGLE PORT BBC Heads

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Rectangle port 24° iron performance heads for big block Chevy.

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 multiangle valve jobs, Erson stainless steel valves and valve springs matched to camshaft requirements.

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

- Material: High density cast iron
- Valve Seats: Intake (integral), exhaust (hardened)
- Valve Guides: Integral cast iron
- Spring Seats: Machined for 1.550" (1.625" max.)
- 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: 320 or 345cc, 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





Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Port Shape	Valve Springs
030620	320cc	119cc	2.300/1.880	Rect	Bare
030620-1	320cc	119cc	2.300/1.880	Rect	1.500S
030620-2	320cc	119cc	2.300/1.880	Rect	1.460D
030620M-2	320cc	119cc	2.300/1.880	Rect	1.460D
030620-3	320cc	119cc	2.300/1.880	Rect	1.550D
030630	345cc	119cc	2.300/1.880	Rect	Bare
030630-1	345cc	119cc	2.300/1.880	Rect	1.500S
030630-2	345cc	119cc	2.300/1.880	Rect	1.460D
030630-3	345cc	119cc	2.300/1.880	Rect	1.550D

Notes:

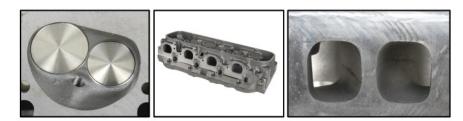
- -1: 1.500" valve springs for hydraulic flat tappet cams
- -2: 1.460" valve springs for solid flat tappet or hyd roller cams
- M-2: -2 Assembly with Inconel exhaust valve for Marine use
- -3: 1.550" valve springs for solid roller cams

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MERLIN OVAL PORT BBC Heads





Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Port Shape	Valve Springs
030040	269cc	119cc	2.300/1.880	Oval	Bare
030040-1	269cc	119cc	2.300/1.880	Oval	1.500S
030040-2	269cc	119cc	2.300/1.880	Oval	1.460D
030040M-2	269cc	119cc	2.300/1.880	Oval	1.460D

Notes:

-1: 1.500" valve springs for hydraulic flat tappet cams

- -2: 1.460" valve springs for solid flat tappet or hyd roller cams
- M-2: -2 Assembly with Inconel exhaust valve for Marine use

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Oval port 24^o 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 mid-range 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

WINDSOR SR. SBF Heads

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 intake 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 upon request, 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: Erson 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

Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Valve Springs
053040	200cc	64cc	2.020/1.600	Bare
053040-1	200cc	64cc	2.020/1.600	1.500S
053040-2	200cc	64cc	2.020/1.600	1.437D
053040-3	200cc	64cc	2.020/1.600	1.540D
	20000	0100	2.020/1.000	1.0100

Notes:

Requires pushrod guide plates

- -1: 1.500" valve springs for hydraulic flat tappet cams
- -2: 1.437" valve springs for solid flat tappet or hyd roller
- -3: 1.540" valve springs for solid roller cams

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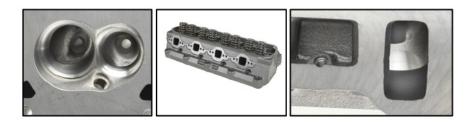


WINDSOR JR. SBF Heads



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.



Part No.	Intake Port	Chmbr Volume	Intk/Exh Valves	Valve Springs
053030	180cc	58cc	1.940/1.600	Bare
053030-1	180cc	58cc	1.940/1.600	1.500S
053030-2	180cc	58cc	1.940/1.600	1.437D
053030-3	180cc	58cc	1.940/1.600	1.540D

Notes:

Requires pushrod guide plates

- -1: 1.500" valve springs for hydraulic flat tappet cams
- -2: 1.437" valve springs for solid flat tappet or hyd roller
- -3: 1.540" valve springs for solid roller cams

Scan For Tech Sheet



- 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



INTAKE MANIFOLDS

MOTOWN Aluminum SBC Intake Manifolds

Proven to bolt on
15-25HP! The best#061040MOTOWN SBC, single plane, 4150 flange, 5,625" tall
#061050average horsepower &
torque of any SBC manifold available!#061041MOTOWN SBC Vortec, single plane, 4150 flange, 6.625" tall
#061041

MERLIN Aluminum BBC Intake Manifolds

Highly effective big block manifolds for steet or strip.

#063030MERLIN BBC, single plane, 4150 flange, standard 9.8" deck, 6" tall#063031MERLIN BBC, single plane, 4150 flange, tall 10.2" deck, 6" tall#063032MERLIN BBC, single plane, 4500 flange, standard 9.8" deck, 8.125" tall#063033MERLIN BBC, single plane, 4500 flange, tall 10.2" deck, 8.250" tall

MERLIN X Aluminum BBC Intake Manifolds

The ultimate in our line of #063040 MERLIN X BBC, single plane, 4500 flange, standard 9.8" deck big block Chevrolet #063041 MERLIN X BBC, single plane, 4500 flange, tall 10.2" deck manifolds!

Port Size: 2.300" x 1.670"

Designed for 4500 series carbs

MAN O'WAR Aluminum SBF Intake Manifolds

These intakes are a perfect mate to our high flowing heads!

#063415 MAN O'WAR SBF, single plane, 4150 flange, 351 9.5" deck, raised roof #063416 MAN O'WAR SBF, single plane, 4500 flange, 351 9.5" deck, raised roof

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



World Products uses and recommends ARP fasteners. Common part numbers to suit World blocks and heads are listed below. Available from Pbm Performance Parts

ARP235-7203

Main Fastene	rs
	new 7/16 fasteners
WPI701406	
WPI701407	Nodular cap Bolt kit
World BBC Me	
WPI701415	BBC billet cap stud kit
WPI701414	BBC nodular cap bolt kit
World BBC Me	
WPI701416	BBC billet cap stud kit
WPI701413	BBC nodular cap bolt kit
	New 7/16 fasteners
WPI701432	Billet cap stud kit
WPI701431	Nodular cap bolt kit
Head Bolt Kit	S
Chevrolet - Bla	ck Oxide
ARP134-3601	SB 23° cast iron OEM, GEN 111 Vortec/ Truck & most Edelbrock LT-AFR, Brodix-8, -10, -11, -11xb, LT-1, Pro-1, Hex
ARP134-3701	SB 23° cast iron OEM, GEN 111 Vortec/ Truck & most Edelbrock LT-AFR, Brodix -8,

-10, -11, -11xb, LT-1, Pro-1, 12 pt

Head Stud Kit Chevrolet	S
ARP134-4001	23°OEM iron/alum Chev
	Gen III Vortec/Trk hex head
ARP234-4401	23°OFM iron/alum Chev
ARP234-4401	
	Gen III Vortec/Trk 12 pt
ARP234-4301	23°OEM iron/alum Chev
	Gen III Vortec/Trk 12 pt u/cut
ARP234-4601	BBC Cast OEM, Alum factory heads,
	also early Bowtie
Ford World SBF	-
WPI705027	OEM & most aftermarket
Rocker Studs	
Chevrolet	
ARP134-7101	SB 3/8 typical application
ARP134-7104	SB 3/8 w/roller rockers
ARP134-7103	SB 7/16 typical application
AN 134-7103	SB Alum, heads int. studs

SB Alum. heads Exh. studs

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