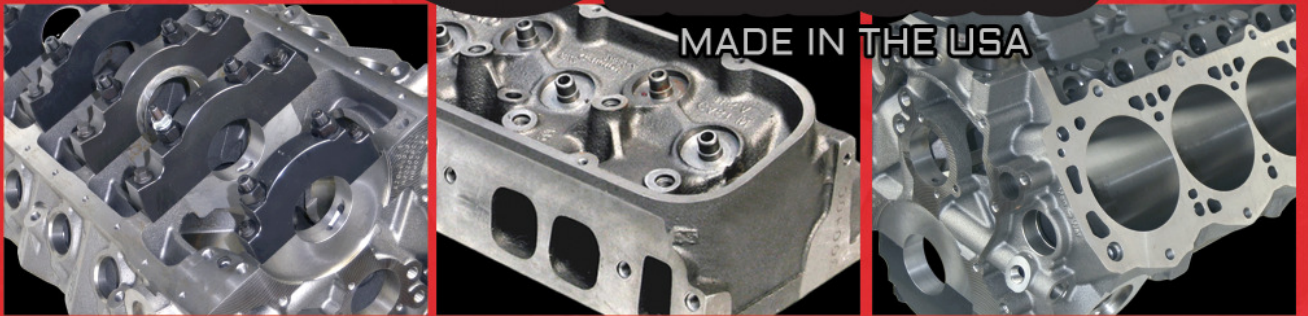


# PRODUCTS 2020

World Class Engineering~High Performance Features~Advanced Materials

# WORLD PRODUCTS

MADE IN THE USA



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

This catalog has been completed using our best efforts for accuracy and correctness. We assume no liability for any errors contained herein.

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# APPAREL



**World Products Cap**  
BLKWCAP



**T-Shirt Still Play With Blocks**

- M PWBMED
- L PWBLG
- XL PWBXL
- 2X PWB2XL
- 3X PWB3XL



FRONT



BACK



**T-Shirt - Merlin**

- M MERMED
- L MERLG
- XL MERXL
- 2X MER2XL
- 3X MER3XL





FRONT



BACK

**WORLD PRODUCTS** **CYLINDER HEAD CASTING ID GUIDE**

Casting ID numbers are located under the valve cover cast into the head face. A guide plate or stud grille may need to be removed to view. Casting numbers identify which head you may have. Use the Part # to determine which version of the head you have. Part #s 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 & intake runner size, but the best way to be sure is to have the heads measured by a qualified Machine Shop. If you were not the original purchaser of the

cyliner heads then this is the only way of knowing for sure what you have. There is no date of manufacture on our heads. No other numbers, letters or markings indicate any specs besides those indicated by this guide.

Casting #	Description
<b>Small Block Chevy Heads</b>	
F-037	SPORTSMAN 2000C Intake / 84CC & 70CC Chambers - Cast Iron SBC
F-038	MOTOWN 228 2200C Intake / 64CC Chamber - Cast Iron SBC
F-039	SPORTSMAN Iron SBC (DISCONTINUED)
F-052	S/R & S/R TORQUER 1700C Intake / 670CC & 700C Chambers (See Part #) - Cast Iron SBC
F-058	S/R 365 1700C Intake / 580C - Cast Iron SBC
<b>Big Block Chevy Heads</b>	
F-048	MERLIN 345CC Intake / 119CC Chamber, Rectangular Port - Cast Iron BBC
F-042C	MERLIN 345CC Intake / 119CC Chamber, Rectangular Port - Cast Iron BBC
F-043D	MERLIN 280CC Intake / 119CC Chamber, Oval Port - Cast Iron BBC
<b>Small Block Ford Heads</b>	
F-034	WINDSOR JR LITE Aluminum SBF (DISCONTINUED)
F-051	WINDSOR (DISCONTINUED)
F-056	WINDSOR JR 180cc Intake / 580C Chamber - Cast Iron SBF
F-057	WINDSOR JR 180cc Intake / 580C Chamber - Cast Iron SBF
F-061	WINDSOR SR 2000C Intake / 64CC Chamber - Cast Iron SBF

Scan for World  
Cylinder Head  
Casting ID



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# World Block Kits



## SBK Block Kits

World's SBK Block Kits simplify your engine building by providing a World block packaged with matched assembly components.

Includes: World Block, Performance Main Bearings and Rod Bearings, Coated Cam Bearings, Brass Freeze Plugs, Steel Cam Plug, Pipe Plugs and Dowels.

MOTOWN II Small Block SBK Block Kits						
Part No.	Block No.	Bore	Mains	Caps	Deck	Cam Tunnel
SBK4	084010	3.995	350	Nodular	9.025	2.000
SBK5	084020	4.120	350	Nodular	9.025	2.000
SBK6	084030	4.120	400	Nodular	9.025	2.000
SBK7	084110	3.995	350	Billet	9.025	2.000
SBK8	084120	4.120	350	Billet	9.025	2.000
SBK9	084130	4.120	400	Billet	9.025	2.000
SBK11	084120RC	4.120	350	Billet	9.025	BBC
SBK11-904	084120RC-904	4.120	350	Billet	9.025	BBC
SBK13	084130RC	4.120	400	Billet	9.025	BBC
SBK13-904	084130RC-904	4.120	400	Billet	9.025	BBC
MERLIN III & IV Big Block SBK Block Kits						
Part No.	Block No.	Bore	Mains	Caps	Deck	Cam Tunnel
SBK14	091100	4.245	454	Nodular	9.800	Std.
SBK15	091111	4.495	454	Nodular	10.200	Std.
SBK16	091101	4.495	454	Nodular	9.800	Std.
SBK17	091102	4.595	454	Nodular	9.800	Std.
SBK18	091112	4.595	454	Nodular	10.200	Std.
SBK19	095000	4.245	454	Billet	9.800	Std.
SBK20	095010	4.495	454	Billet	9.800	Std.
SBK21	095110	4.495	454	Billet	10.200	Std.
SBK22	095012	4.595	454	Billet	9.800	Std.
SBK23	095112	4.595	454	Billet	10.200	Std.
MAN O'WAR Ford Small Block SBK Block Kits						
Part No.	Block No.	Bore	Mains	Caps	Deck	Cam Tunnel
SBK24	087010	3.995	302	Nodular	8.200	Std.
SBK25	087020	4.120	302	Nodular	8.200	Std.
SBK26	087072	3.995	351C	Nodular	9.500	Std.
SBK27	087082	4.120	351C	Nodular	9.500	Std.
SBK28	087110	3.995	302	Billet	8.200	Std.
SBK29	087120	4.120	302	Billet	8.200	Std.
SBK30	087172	3.995	351C	Billet	9.500	Std.
SBK31	087182	4.120	351C	Billet	9.500	Std.

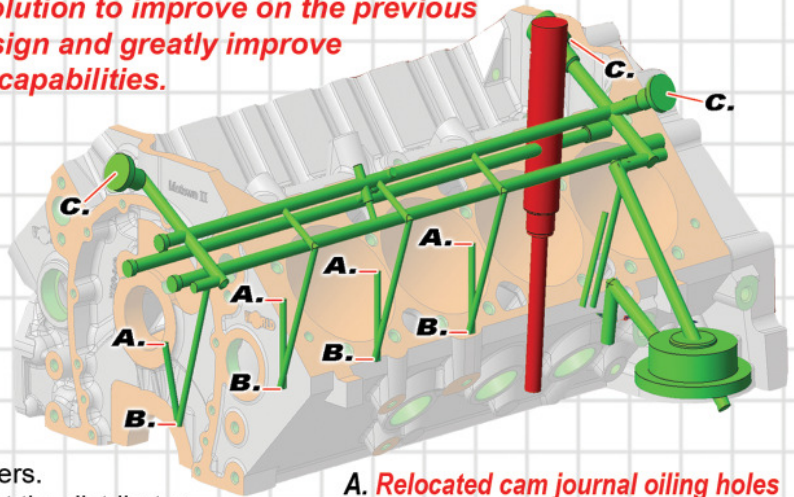


# TECHNICAL BULLETIN MOTOWN II

## SBC Block Oiling System



**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.



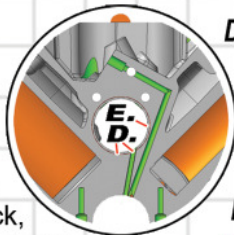
### Illustration 1)

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.

### Illustration 2)

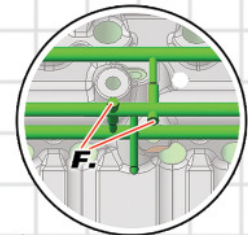
The OE factory oiling holes in the cam journals, located at 6 o'clock, were moved in the new design to the 5 o'clock position. This was a necessity as camshafts requiring high spring pressures would force the camshaft down, effectively closing off the oiling hole when it was in the 6 o'clock position.



- 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.

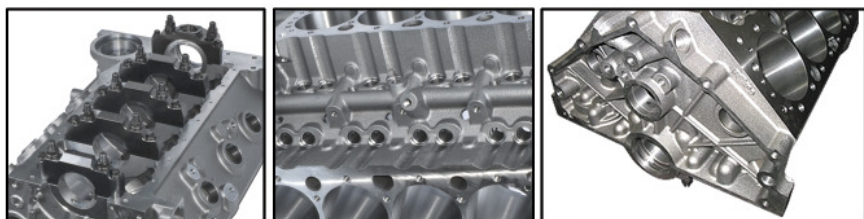
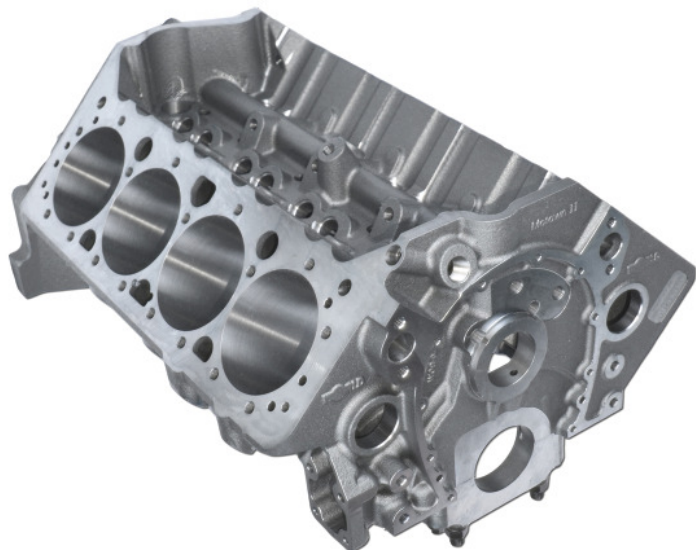
### Illustration 3)

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.

# 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 cross-feed lines between left and right lifter oil galleries.

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.

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

- 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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Tech Sheet



### Torque Specs Mains:

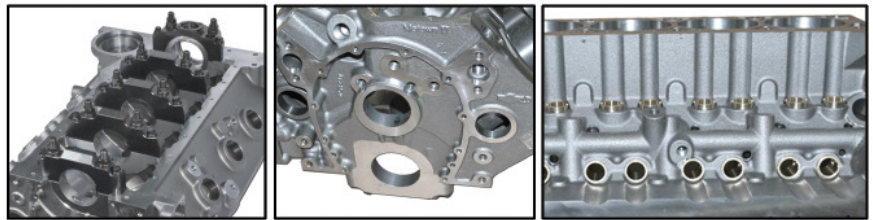
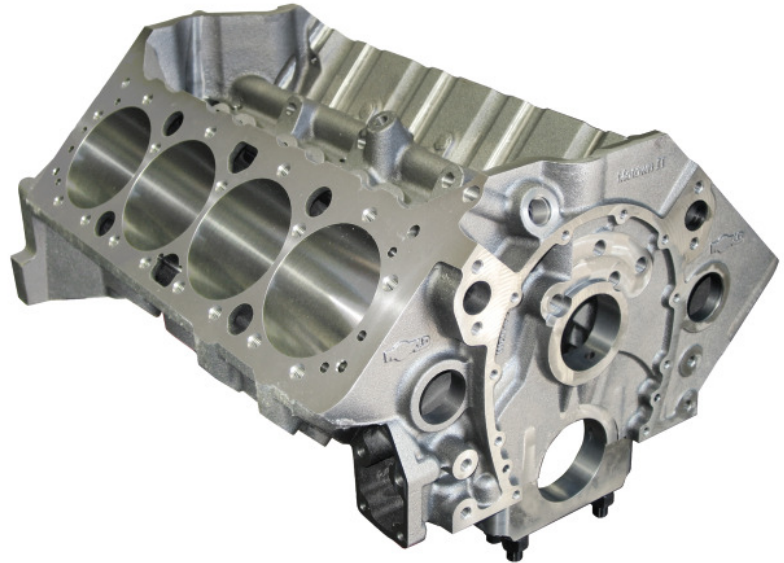
TQ 7/16 Inner Main Bolts 70 FT.LB.  
TQ 7/16 Front & Rear Outer Bolts 70 FT.LB.  
TQ 7/16 Center Splayed Bolts 70 FT.LB.

# MOTOWN II RC SBC Raised Cam Block

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.

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	9.025	4.120	$+.134$	BBC	$.904$	400	Billet

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



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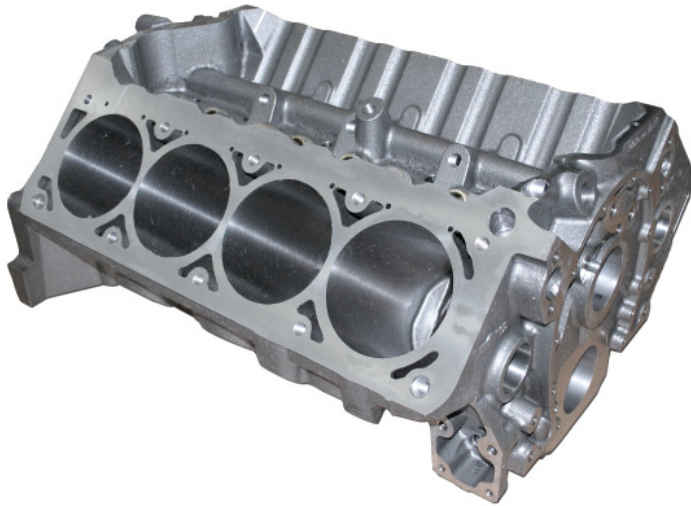
### Torque Specs Mains:

- 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.



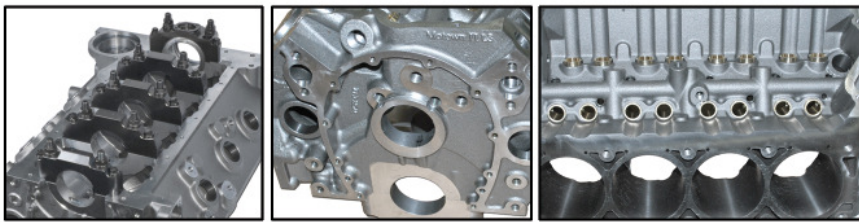
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# MOTOWN II LS LS/SBC Hybrid Block



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

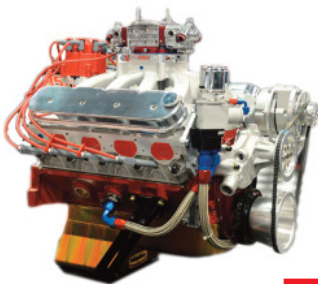
The camshaft location has been raised in the block by +.134" and the block now comes standard with a 55mm cam tunnel. This design allows clearance for the use of a 4.000" stroke crankshaft, and the large cam core provides for exceptional valve train stability at high RPM operation. Bushed lifter bores 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!**

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

- 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 babbitt 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



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Build Instructions



**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 Accessories

## ACCESSORIES

Part No.	Description
WPI703844	- Valley plate for carburetor intake manifolds
WPI703844-I	- Valley plate for LS efi intake manifolds
WPI703848-K	- Cylinder head end plates
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
ERSE115999	- Erson Camshaft Solid Roller Custom Grind
ARP135-7901	- Oil pump drive shaft
8981TRC	- Billet timing set
8981TARC	- Billet adjustable timing set
DURGMP55	- Cam bearing set

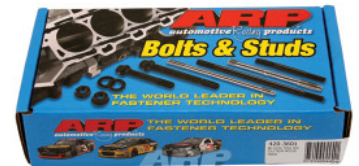
Valley plates for carburetor or LS efi intakes



Cylinder head end plates to adapt SBC accessories



ARP head stud kit



Water return kits  
Pro-Lok or  
Braided Steel  
Hose

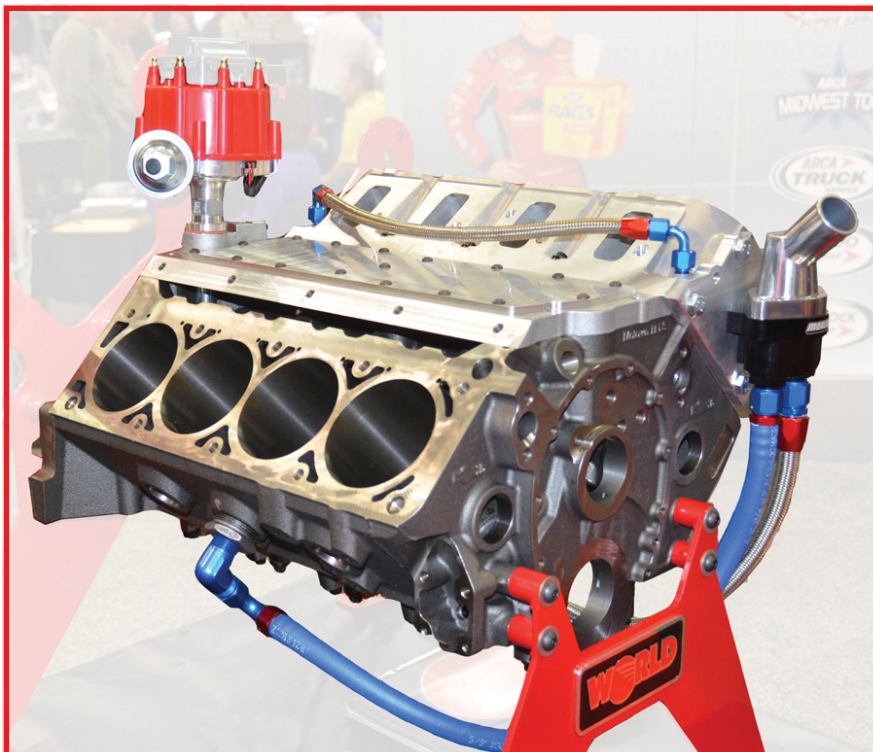


Hydraulic or  
solid roller  
camshaft



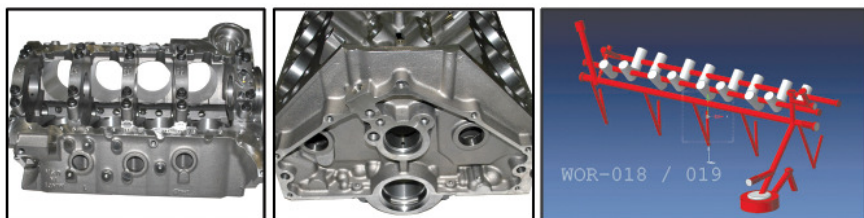
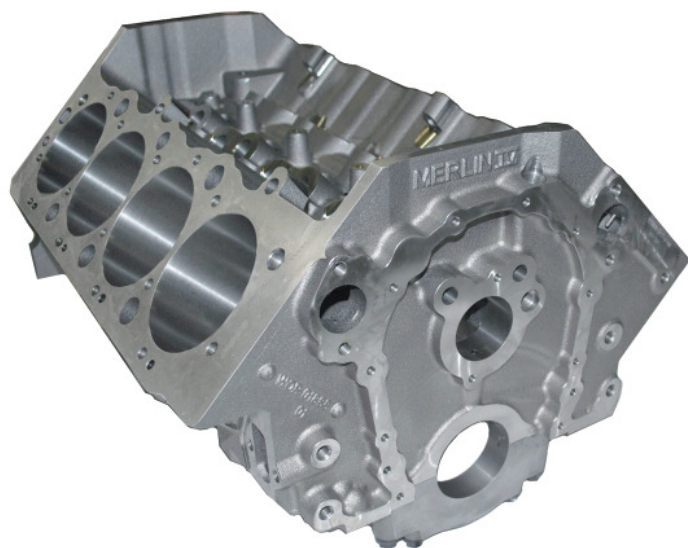
Billet timing sets

Durabond  
cam  
bearings



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# 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 to 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 accommodates 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 babbitt cam & .904 lifters
- Approximately 270 lbs.

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 between bores, non-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



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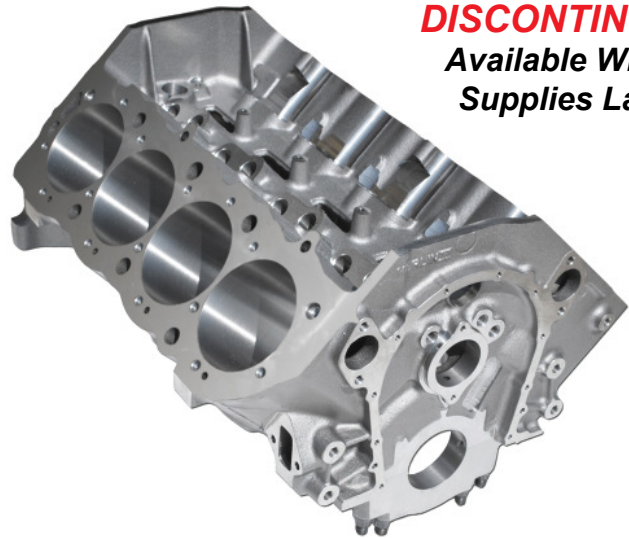
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www.P65Warnings.ca.gov

# MERLIN III BBC Block

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

**DISCONTINUED**  
Available While  
Supplies Last



- 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.

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

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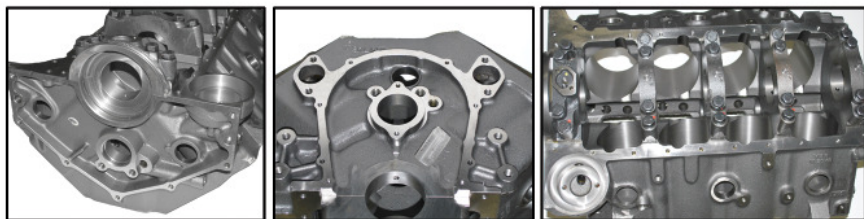
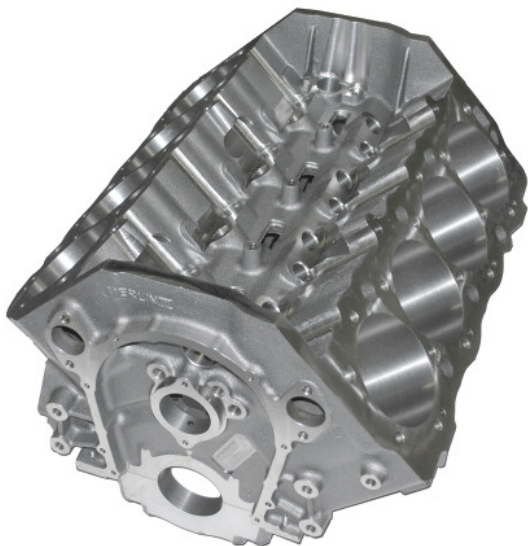
**Torque Specs Mains:**

- 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.



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# 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
081115*	10.200	4.595	Std.	Std.	Nodular

\* Discontinued - available while supplies last

- 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 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, OE style fasteners
- Mk IV style fuel pump & starter mounts
- Approximately 270 lbs.

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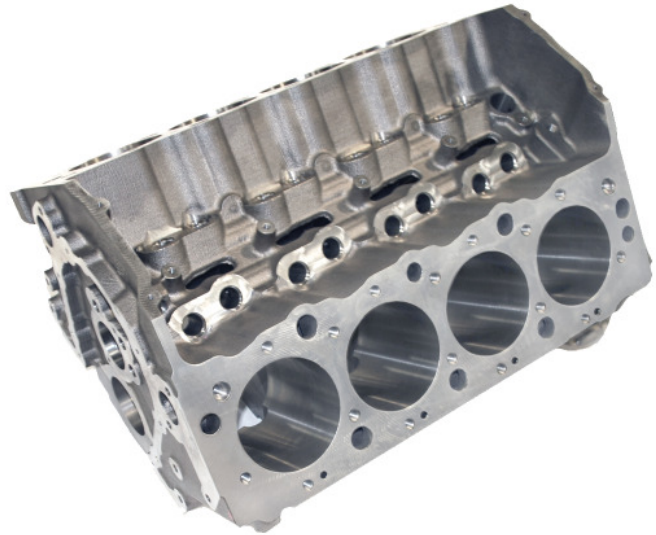


### Torque Specs Mains:

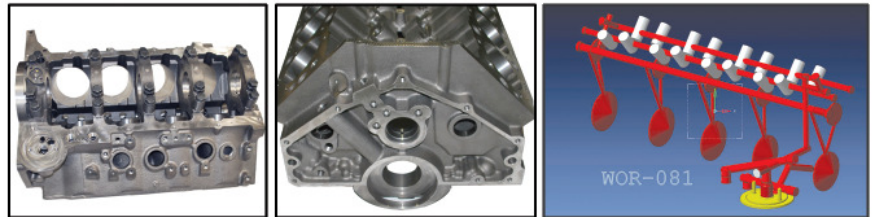
- TQ 1/2 Inner Main Bolts 100 FT.LB.
- TQ 1/2 Front & Rear Outer Bolts 100 FT.LB.
- TQ 1/2 Center Splayed Bolts 100 FT.LB.

# 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:

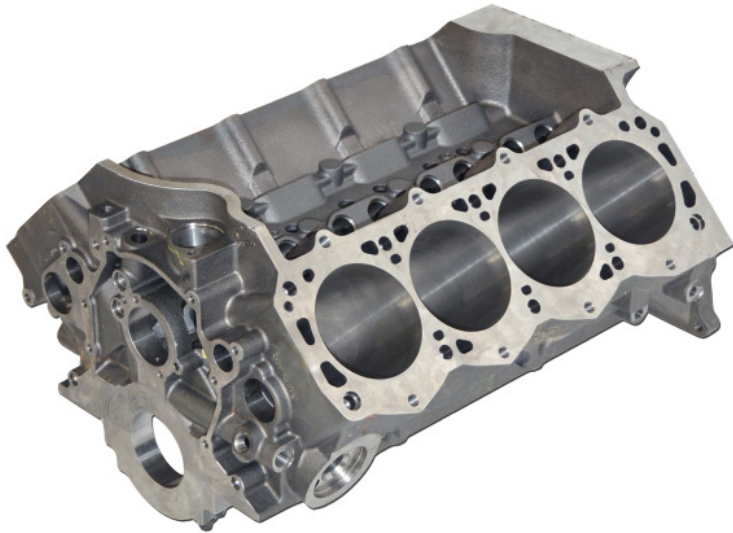
TQ 1/2 Inner Main Bolts 100 FT.LB.  
 TQ 1/2 Front & Rear Outer Bolts 100 FT.LB.  
 TQ 1/2 Center Splayed Bolts 100 FT.LB.

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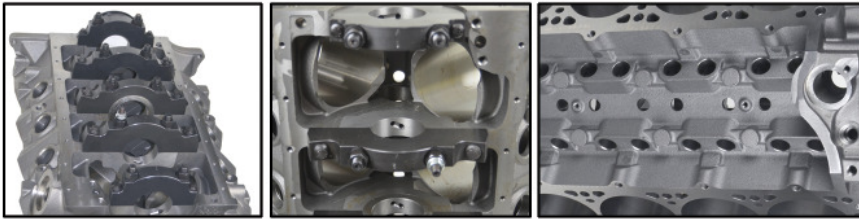
# MAN O'WAR SBF Block



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.



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

- 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.

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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.

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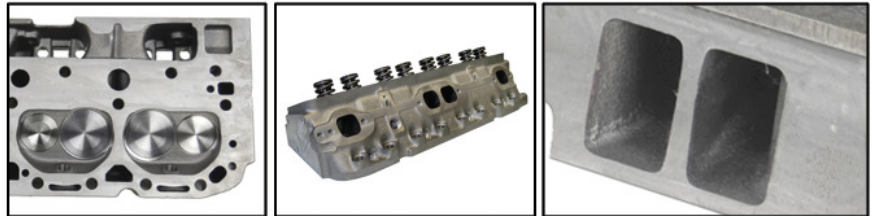
# S/R SBC Heads

**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 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" 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
<b>'86-'95 Intake Face w/Center Bolt Valve Covers</b>					
043650	170cc	67cc	1.940/1.500	Straight	Bare
043650-1	170cc	67cc	1.940/1.500	Straight	1.250
<b>Notes:</b> 58cc chamber is suited for 305 cubic inch SBC					
<b>-1:</b> 1.250" valve springs for hydraulic flat tappet cams					
<b>Valve Train Parts Kit</b> Valves, Springs, Retainers, Locks and Seals -For 1 Head WPISRVT-1					

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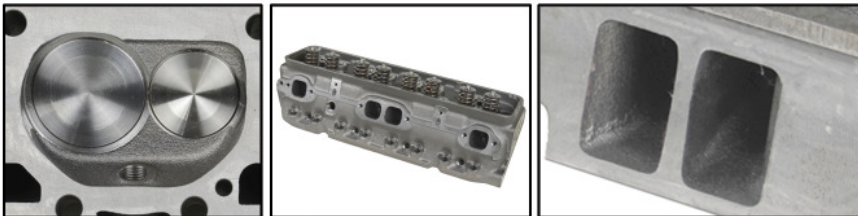
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## S/R TORQUER SBC Heads



**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 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.



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

**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals -For 1 Head  
WPISRTORQUERVT-1

- **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.

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# 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).



011150 WISSOTA Modified spec head

- **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" 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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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
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 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  
**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals -For 1 Head  
 WPISPORTSMANVT-1  
 WPISPORTSMANVT-2  
 WPISPORTSMANVT-3

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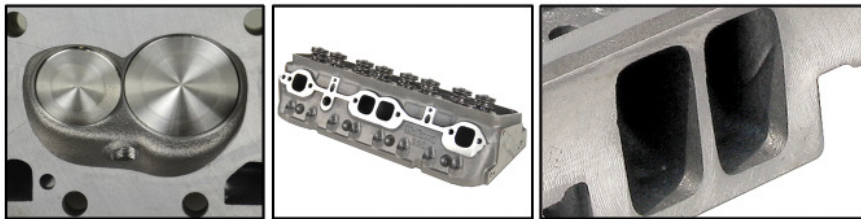
## MOTOWN 220 SBC Heads



**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 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.



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
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

**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals -For 1 Head

WPIMOTOWNVT-1

WPIMOTOWNVT-2

WPIMOTOWNVT-3

- **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.

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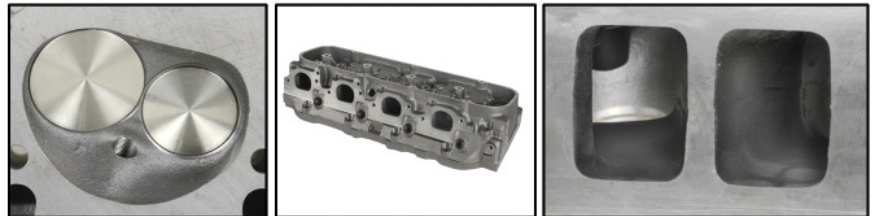
# MERLIN RECTANGLE PORT BBC Heads

**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 multi-angle 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

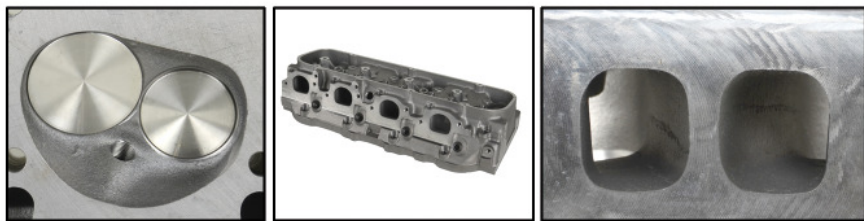
**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals -For 1 Head  
 WPIMERLINVT-1  
 WPIMERLINVT-2  
 WPIMERLINVT-3



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# MERLIN OVAL PORT BBC Heads



**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 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.

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  
**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals -For 1 Head  
 WPIMERLINVT-1  
 WPIMERLINVT-2  
 WPIMERLINVT-3

- **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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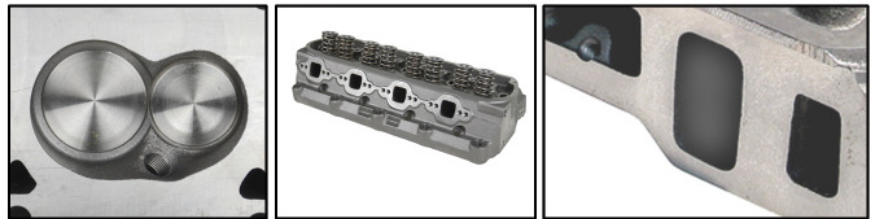


# WINDSOR SR. SBF Heads

**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

**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  
**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals  
 -For 1 Head  
 WPIWINDSORSRVT-1  
 WPIWINDSORSRVT-2  
 WPIWINDSORSRVT-3

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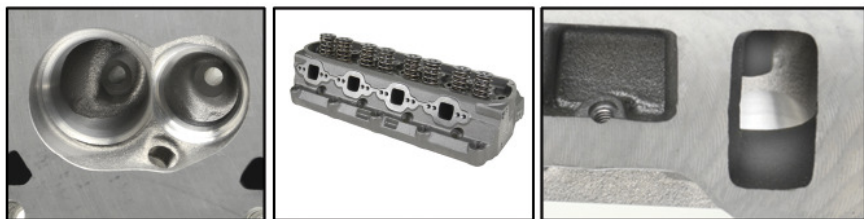
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[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## 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

**Valve Train Parts Kit** Valves, Springs, Retainers, Locks and Seals

-For 1 Head

WPIWINDSORJRVT-1

WPIWINDSORJRVT-2

WPIWINDSORJRVT-3

- **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



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## Main Caps for World Blocks

Part No.	Description	Part No.	Description
WPI703305C	Motown II Center 350 Nodular Cap	WPI703320C	Man O'War 302 Center Nodular Cap
WPI703305F	Motown II Front 350 Nodular Cap	WPI703320CT	Man O'War 302 Center Thrust Nodular Cap
WPI703305R	Motown II Rear 350 Nodular Cap	WPI703320F	Man O'War 302 Front Nodular Cap
WPI703305-5	Motown II 350 Nodular Cap Set	WPI703320R	Man O'War 302 Rear Nodular Cap
WPI703315C	Motown II Center 400 Nodular Cap	WPI703320-5	Man O'War 302 Nodular Cap Set
WPI703315F	Motown II Front 400 Nodular Cap	WPI703335C	Man O'War 302 Center Billet Cap
WPI703315R	Motown II Rear 400 Nodular Cap	WPI703335CT	Man O'War 302 Center Thrust Billet Cap
WPI703315-5	Motown II 400 Nodular Cap Set	WPI703335F	Man O'War 302 Front Billet Cap
WPI703350C	Motown II Center 350 Billet Cap	WPI703335R	Man O'War 302 Rear Billet Cap
WPI703350F	Motown II Front 350 Billet Cap	WPI703335-5	Man O'War 302 Billet Cap Set
WPI703350R	Motown II Rear 350 Billet Cap	WPI703330C	Man O'War Clev Center Nodular Cap
WPI703350-5	Motown II 350 Billet Cap Set	WPI703330CT	Man O'War Clev Center Thrust Nodular Cap
WPI703355C	Motown II Center 400 Billet Cap	WPI703330F	Man O'War Clev Front Nodular Cap
WPI703355F	Motown II Front 400 Billet Cap	WPI703330R	Man O'War Clev Rear Nodular Cap
WPI703355R	Motown II Rear 400 Billet Cap	WPI703330-5	Man O'War Clev Nodular Cap Set
WPI703355-5	Motown II 400 Billet Cap Set	WPI703345C	Man O'War Clev Center Billet Cap
WPI703365C	Merlin III/IV Center Nodular Cap	WPI703345CT	Man O'War Clev Center Thrust Billet Cap
WPI703365F	Merlin III/IV Front Nodular Cap	WPI703345F	Man O'War Clev Front Billet Cap
WPI703365R	Merlin III/IV Rear Nodular Cap	WPI703345R	Man O'War Clev Rear Billet Cap
WPI703365-5	Merlin III/IV Nodular Cap Set	WPI703345-5	Man O'War Clev Billet Cap Set
WPI703370C	Merlin III/IV Center Billet Cap	WPI701545	Main Cap Dowel
WPI703370F	Merlin III/IV Front Billet Cap		
WPI703370R	Merlin III/IV Rear Billet Cap		
WPI703370-5	Merlin III/IV Billet Cap Set		



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

### Main Fasteners

#### World SBC w/ new 7/16 fasteners

WPI701406	Billet cap Stud kit
WPI701407	Nodular cap Bolt kit

#### World BBC Merlin III

WPI701415	BBC billet cap stud kit
WPI701414	BBC nodular cap bolt kit

#### World BBC Merlin IV

WPI701416	BBC billet cap stud kit
WPI701413	BBC nodular cap bolt kit

#### World SBF w/ New 7/16 fasteners

WPI701432	Billet cap stud kit
WPI701431	Nodular cap bolt kit

### Head Bolt Kits

#### Chevrolet - Black Oxide

134-3601	SB 23° cast iron OEM, GEN 111 Vortec/ Truck & most Edelbrock LT-AFR, Brodix-8, -10, -11, -11xb, LT-1, Pro-1, Hex
134-3701	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 Kits

#### Chevrolet

134-4001	23° OEM iron/alum Chev Gen III Vortec/Trk hex head
234-4401	23° OEM iron/alum Chev Gen III Vortec/Trk 12 pt
234-4301	23° OEM iron/alum Chev Gen III Vortec/Trk 12 pt u/cut
234-4601	BBC Cast OEM, Alum factory heads, also early Bowtie

#### Ford World SBF

WPI705027	OEM & most aftermarket
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### Rocker Studs

#### Chevrolet

134-7101	SB 3/8 typical application
134-7104	SB 3/8 w/roller rockers
134-7103	SB 7/16 typical application
235-7204	SB Alum. heads int. studs
235-7203	SB Alum. heads Exh. studs



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