MERLIN-X BLOCKS



MERLINX

Economical New Aluminum Big Block Chevrolet Block

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PRODUCTS

TECHNICAL SPECIFICATIONS

Material: 357-T6 aluminum (strongest available) Deck Height: 9.800" or 10.200" (tall deck) Deck Thickness: .600" minimum Cam Bearings: Standard Chevrolet big block set Main Bearings: Standard Chevrolet **Camshaft Location: Stock** Lifter Bores: Indexed (stock .843" bore) Bore: 4.240" (hone to 4.250") or 4.490" (hone to 4.500") Maximum Bore: 4.530" recommended Cylinder Wall Thickness: (.250" @ 4.500" bore) Water Jackets: Expanded for better cooling Lubrication: Priority main oiling system Oil System Features: Integral boss for front feed, boss for rear scavenge rear main cap has provisions for wet sump pump, drilled for dry sump valley scavenge lines, cross-feed lines between left and right lifter oil galleys Filtration: Integral mount for spin-on filter **Oil Pan Rails:** Solid (stock width) can be clearanced for strokers Crank Clearance: 4.375" for short deck, 4.750" for tall deck block (using H-beam steel rods - sleeves may require notching) Main caps: Splayed billet Mounts: OEM starter and oil filter mounts Block: Side ribs for extra strength & cooling - cross-ribs in valley Motor Mounts: Dual (front and side)

Cylinder Head Holes: Blind tapped to prevent leaks

Weight: Approximately 140 lbs. with sleeves - ready to run

World Products has taken the design and manufacturing technology used on the highly successful Motown Lite small block and applied it to the Big Block Chevrolet. The most noticeable difference between this and the Merlin Pro Lite block are the reinforcing ribs that run along the side of the block. Not only are they attractive, but they serve a valuable purpose in both improving overall stability and aiding in cooling.

Perhaps the most important factor is that the Merlin-X has been designed for 100% compatibility with Chevrolet Mark IV components (no raised cams, etc.) and is intended for use in street and Sportsman competition. As a result of this, the price of the Merlin-X is substantially lower. Dollar for dollar, you won't find a better value!

Consider the potential of building an engine using this new Merlin-X block, plus the new Merlin-X 16° cylinder heads and the new Merlin-X intake manifold. The results could be amazing!

Merlin-X Aluminum Big Block Chevy Blocks

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Part #	Description	Deck Ht.	Bore	Mains	Main Caps					
085500	Merlin-X aluminum BBC block	9.800"	4.240"	BBC	Billet Steel Splayed					
085501	Merlin-X aluminum BBC block	9.800"	4.490"	BBC	Billet Steel Splayed					
085510	Merlin-X aluminum BBC block	10.200"	4.240"	BBC	Billet Steel Splayed					
085511	Merlin-X aluminum BBC block	10.200"	4.490"	BBC	Billet Steel Splayed					
	For an extensive list of prepped block bore sizes in 9.800" or 10.200" deck sizes, see www.worldcastinas.com.									

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ENGINE BLOCKS

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MERLIN III

World has taken the knowledge of over 15 years experience manufacturing Merlin blocks for competition and developed this affordable CNC-machined version that's perfect for marine, e.t. bracket racing, and street use. The Merlin III incorporates such important features of the race block as reinforced bulkheads and main webs, thicker decks, and a priority main oiling system—plus essentials for street use, like using the stock Chevy oil pan pattern,

- Made from high density cast iron
- 9.800" or 10.200" deck height with .600" minimum thickness
- Clearanced for 4.375" stroker crankshaft (H-beam steel rods (9.800" deck) or 4.750" clearance for 10.200" deck
- Integral mount for spin-on oil filter
- Available with 4-bolt nodular or splayed billet caps
- Can be bored to 4.625" maximum
- Water jackets expanded for better cooling
- Standard Chevy cam location and cam bearings
- Priority main oiling system for maximum reliability
- Solid pan rails with stock spacing

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TECHNICAL SPECIFICATIONS

Material: High Density Cast Iron Deck Height: Standard (9.800") or tall (10.200") Deck Thickness: .600" minimum Cam Bearings: Standard Chevrolet Main Bearings: Standard Chevrolet Camshaft Location: Stock Lifter Bores: Indexed (stock .8437" bore) Bore: 4.240 (hone to 4.250") or 4.490 (hone to 4.500") Maximum Bore: 4.625" Cylinder Wall Thickness: .250" at 4.600" bore Water Jackets: Expanded for better cooling Lubrication: Priority main oiling system Filtration: Integral mount for spin-on filter Oil Pan Rails: Solid (stock width) Crank Clearance: 4.375" stroke crank (9.8 deck) or 4.750" for 10.2 deck Main Caps: Nodular iron or billet steel Fuel Pump: OEM mount Starter: OEM mount Motor Mounts: Dual (front and side) Cyl. Head Holes: Blind tapped to prevent leaks Weight: Approximately 270 lbs.

PRODUCTS

OEM 2.750" mains and 100% compatibility with Mark IV components. It has provisions for a spin-on oil filter, while the indexed lifter bores assure optimum reliability.

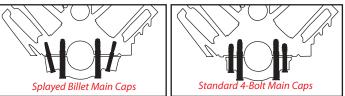
Users now can choose between nodular iron 4-bolt mains or splayed steel billet caps. It's important to note that World's Merlin III blocks are far superior to OEM parts in terms of quality. Each block is precision CNC-machined using only two fixturing operations. Compare this to factory-built blocks, which are done on a production line and passed from machine to machine, causing what is known as "tolerance stacking." World blocks are manufactured to QS-9000 specifications—the global standard of excellence.

Merlin III blocks are available with 4.240, 4.490 and 4.595" bores (to be finish honed by the purchaser) or completely race-prepped. Choice of standard 9.800" or tall 10.200" decks. It's an excellent value in big block power!

- OEM starter, fuel pump and engine mounts
- Blind tapped head bolt holes for extra integrity
- 100% Compatible with OEM Parts
- Indexed Lifter Bores
- Compatible with all Chevy Mark IV components
- Stepped oiling (.584" .500" .437")
- Extra head bolt bosses in valley to accommodate special racing heads)
- Oil drain-back in valley lubricates distributor gear
- Blind holes in valley for screen (no risk of cam binding)
- Manufactured to QS-9000 specs on two CNC centers (eliminates tolerance stacking common to production lines)

TECH NOTE: MAIN CAP ATTACHMENT

Prior to the availability of aftermarket blocks, performance enthusiasts were faced with the dilemma of scouring junkyards looking for 4-bolt main blocks or trying to fit 2-bolt blocks with aftermarket cap kits. Now you have a choice between standard 4-bolt main blocks with nodular iron caps and splayed billet caps. Rest assured that the 4-bolt setup will provide excellent reliability for most applications. But for the serious performance enthusiast, the splayed billet setup is preferred for several key reasons. The illustration below shows a cross-section of a block casting, and the relationship between bolt holes and the "meat" of the block. As you can see, the splayed bolts have a much better "anchor" due to available material thickness. The multi-directional clamping of the splayed bolts also helps improve bottom-end durability.



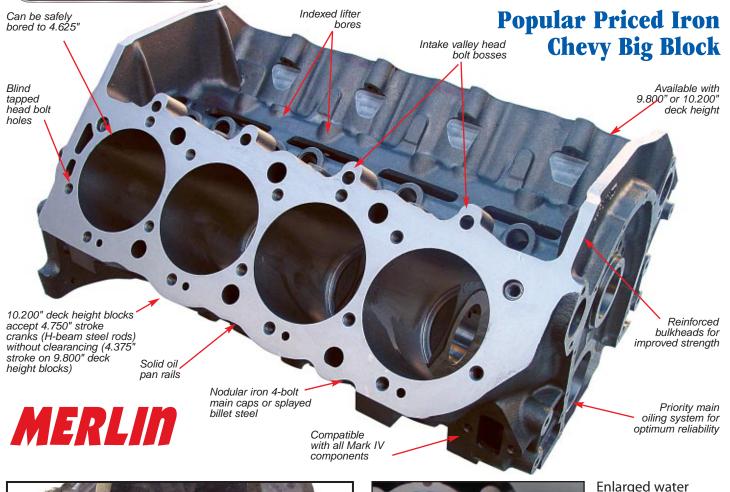
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Merlin III Cast Iron Big Block Chevy Blocks (Bare)									
Part #	Description	Deck	Bore	Mains	Main Caps				
081100	Merlin III cast iron BBC block	9.800"	4.240"	Standard	Nodular Iron				
081110	Merlin III cast iron BBC block	10.200"	4.240"	Standard	Nodular Iron				
081101	Merlin III cast iron BBC block	9.800"	4.490"	Standard	Nodular Iron				
081101-4595B	Merlin III cast iron BBC block	9.800"	4.595"	Standard	Nodular Iron				
081111	Merlin III cast iron BBC block	10.200"	4.490"	Standard	Nodular Iron				
081111-4595B	Merlin III cast iron BBC block	10.200"	4.595"	Standard	Nodular Iron				
085000	Merlin III cast iron BBC block	9.800"	4.240"	Standard	Splayed Billet				
085010	Merlin III cast iron BBC block	9.800"	4.490"	Standard	Splayed Billet				
085010-4595B	Merlin III cast iron BBC block	9.800"	4.595"	Standard	Splayed Billet				
085100	Merlin III cast iron BBC block	10.200"	4.240"	Standard	Splayed Billet				
085110	Merlin III cast iron BBC block	10.200"	4.490"	Standard	Splayed Billet				
085110-4595B	Merlin III cast iron BBC block	10.200"	4.595"	Standard	Splayed Billet				

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CAST IRON

MERLIN III





Beefy bottom end has solid rails, choice of nodular iron or splayed billet main caps.



jackets provide superior cooling. Thick walls can be bored 4.625".

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PRODUCTS

FULLY RACE-PREPPED BLOCKS

For your convenience, Merlin III blocks can be ordered fully raceprepped from the factory. Operations include plate-honing cylinders to the bore sizes listed below, thoroughly washing the block, installing cam bearings and freeze plugs, and protecting all machined surfaces with oil. Ready for assembly!

Merlin III Cast Iron Big Block Chevy Block - Race Prepped

World Products offers a wide assortment of race-prepped Merlin III cast iron blocks. The options, which are too numerous to list here, include various bore sizes, 9.800" and 10.200" deck heights, and nodular iron or billet main caps. Please visit our information-packed website (www.WorldCastings.com) for a complete list of available combinations. Operations include plate-honing to the desired bore size, thoroughly washing the block, installing cam bearings and freeze plugs. All machined surfaces are protected with oil and the block is ready for you to assemble.



CAST IRON

MERLIN PRO

Only a Few Left In Inventory...Hurry, Because Once They're Gone There Won't Be Any More Made — Ever!

The beefy bottom-end of the Merlin Pro block features splayed billet steel main caps (1/2") with dowels. Block is available with dual pattern or DRCE oil pan rails



TECHNICAL SPECIFICATIONS

MERLIN

Here's the block that's been the foundation of many a Pro Stock, Pro Mod, Top Dragster, tractor pull and offshore marine powerplant over the years. It's engineered to handle 2,000-plus horsepower without strain, and has compiled an enviable record of total dependability. Important features contributing to the Merlin's reliability include a siamesed cylinder wall design, solid front and rear bulkheads, extra webbing throughout, reinforced lifter bores and valley head stud bosses.

MERLIN

A priority main oiling system is employed to assure ample lubrication to the crankshaft at high RPM operation, and the oil filter boss has been relocated to clear oil pan kickout. The Merlin Pro is equipped with solid dual pattern oil pan rails, so a stock Chevy or DRCE-style pan can be used.

It comes with a 4.490" bore (hone to 4.500"), and can safely be enlarged to 4.600" while maintaining a nominal .200" wall thickness. Block accepts all Chevrolet factory Mark IV components. Whether it's in a race car, boat, tractor or street machine, you can take full advantage of Merlin power!

Material: High density cast iron Deck Heights: 10.200' Deck Thickness: .600" minimum Cam Bearings: Standard GM Main Bearings: Standard Chevrolet (2.750") Rear Main Seal: 2-piece Chevrolet Mark IV Camshaft Location: Stock or raised (+.400") Lifter Bores: Indexed (stock .843" bore) Bore: 4.490" (hone to 4.500") Maximum Bore: 4.625" Cylinder Wall Thickness: (nominal .200" @ 4.600" bore) Water Jackets: Expanded for better cooling Lubrication: Priority main oiling system Filtration: Integral mount for spin-on filter Oil Pan Rails: Dual pattern, OEM Chevy or DRCE Crank Clearance: Up to 4.375" crank (w/H-beam) standard-can be clearanced for 4.500". Raised cam block can go up to 5.850" stroke Main Caps: Splayed billet steel (1/2") with dowels Fuel Pump: OEM mount Starter: Dual left and right mounts Motor Mounts: Dual (front and side) Cylinder Head Holes: Blind tapped to prevent leaks Weight: Approximately 292 lbs.

Merlin Pro Cast Iron Blocks								
Bore	Oil pan Rails	Cam Location	Deck Ht.					
4.490"	Dual Pattern	standard	10.200"					
4.490"	DRCE	raised .400"	10.200"					
	Bore 4.490"	BoreOil pan Rails4.490"Dual Pattern	BoreOil pan RailsCam Location4.490"Dual Patternstandard					



SHOW YOUR COLORS WITH WORLD'S DISTINCTIVE BLACK MOTOWN, MERLIN & MAN O' War T-SHIRTS

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Looking for something distinctive to wear to the races, rod run or anyplace where horsepower rules? Show your colors with top grade World Products apparel. We've got T-shirts made of black, heavyweight 50/50 blend material

APPAREL

that won't shrink and is easy to maintain. Choose between Motown, Merlin and Man O'War designs (on back side) with World logo on the front.

