



301 Maple Ave. • P.O. Box 1347 Mena, AR • 71953 (479) 394-1075 • Fax: (479) 394-1996 www.brodix.com

## BIG BLOCK BRODIX OF STITION ENGINE BLOCK INSTRUCTIONS

PART#		BORE	LIFTER	DECK	MAIN CAPS	<b>CAM LOCATION</b>
BR B4284298S	SIAMESE	4.250	.842	9.800	Ductile	Standard
BR B4584212S	SIAMESE	4.500	.842	10.200	Ductile	Standard
BR B4584298S	SIAMESE	4.500	.842	9.800	Ductile	Standard
BR B4590312S	SIAMESE	4.500	.903	10.200	Ductile	Standard
BR B4590398S	SIAMESE	4.500	.903	9.800	Ductile	Standard
BR B4684212S	SIAMESE	4.600	.842	10.200	Ductile	Standard
BR B4684298S	SIAMESE	4.600	.842	9.800	Ductile	Standard
BR B4690312S	SIAMESE	4.600	.903	10.200	Ductile	Standard
BR B4690398S	SIAMESE	4.600	.903	9.800	Ductile	Standard

**Block Applications:** BRODIX blocks are designed as a replacement and upgrade of GM big block Chevrolet blocks

**Block Material:** Premium iron alloy

Oil System Features: Priority main oiling system - the main bearings get oil directly from the oil pump before

anything else receives oil **Deck Height:** 9.800 or 10.200

**Cam Bearings:** Cam bore diameters are the same on all five journals; this requires the use of Clevite SH617S or equivalent big block Chevy cam bearings NOTE: When installing cam bearings MAKE SURE the oil hole in the bearings is in line with the oil feed hole to the main bearings

Main Bearings: Utilizes standard big block 454 Chevrolet style main bearings (depending on the part number) Align Hone: Main bores will come undersized, must be align honed for crankshaft clearance

**Main Caps:** Ductile iron - middle three caps are 4-bolt splayed. Torque specs on main bolts are 110 ft-lb on the inner and 110 ft-lb on the outer

Rear Main Seals: Fel-Pro 2904

**Lifter Bores:** Lifter bore size comes .843 +/- .0003 unless other sizes are specifically ordered. Always check for proper lifter clearance before lifter installation (different manufacturer's lifters will vary in size).

Maximum Bore: 4.625

**Freeze Plugs:** 1 5/8" available from BRODIX in kits sold separately

Camshaft: Block is machined for early style 454 Chevrolet cam bearings; camshaft in stock location

**Timing Cover:** Block will accept an early 454 timing cover. Always check for proper clearance if running a gear or belt drive. Always check for interference with pipe plugs.

Oil Pump Bypass: Optional Gen V - included with block

**Fuel Pump:** Standard provision for mechanical fuel pumps utilizing a standard length fuel pump pushrod **Filtration:** Must use Gen V or Gen VI oil filter adapter GM part number 3853870, standard oil filter may be used

**Oil Pan Rails:** Solid (stock width) and can be clearanced for additional stroke if required; clear 4.500 stroke from factory

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**Starter:** Stock location

Motor Mounts: Drilled and tapped for side and front mounts in the OEM location

**Distributor:** Standard length is used with 9.800 or 10.200 deck height, always check for proper

engagement

10° Inside Deck Holes: Always check for proper alignment between cylinder head and block before

final assembly

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**Head Gaskets:** Fel-Pro Composite/.039 Thick – FP 1037 (4.370 Bore), FP 1047 (4.540 Bore),

FP 1067 (4.630 Bore)

Cometic MLS/.040 Thick – CO C5332 (4.375 Bore), CO C5333 (4.540 Bore),

CO C5334 (4.630 Bore)



IF YOU NEED TECHNICAL ASSISTANCE, CALL

(479) 394-1075

Thank You For Buying BRODIX!



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WHILE OUR PRODUCTS ARE USED ON MANY SUPER-CHARGED APPLICATIONS SUCCESSFULLY, PLEASE BE AWARE THAT THERE IS A GREATER POTENTIAL FOR ENGINE DAMAGE DUE TO THE POSSIBILITY OF TUNING ERRORS.

## **Important Notice**

This instruction sheet has been completed using our best efforts. We assume no liability for errors contained herein. Our website is updated on a regular basis and can be used to supplement the information contained herein.

It is the responsibility of the installer to ensure that all of the products are correct before installation. Proper assembly always requires that the installer measure all tolerances for proper clearance. We assume no liability for any errors made in product selection or installation

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