



**EDELBROCK ENGINE BLOCK  
FOR BIG BLOCK CHEVY ENGINES  
Part #450000 & 450001  
GENERAL INSTALLATION INSTRUCTIONS**

**PLEASE** study these instructions carefully before beginning this installation.

**Proper installation is the responsibility of the installer. Improper installation will void the manufacturer's warranty and may result in poor performance and engine or vehicle damage.**

**IMPORTANT NOTE:** This instruction sheet provides general guidelines which can affect your warranty. Read it carefully. It is not our intent to cover each detail of installation here as the procedures are vehicle and engine specific. Building and installing an engine is a complicated procedure that requires a high level of automotive and mechanical knowledge. Consulting with an experienced engine builder is highly recommended.

**AVAILABLE VARIANTS:**

P/N 450000 - BBC Cast Iron Engine Block, Siamese 4.50" Bore, 9.80" Deck Height, **2-Piece Rear Main Seal, 10 Bolt Timing Cover**

P/N 450001 - BBC Cast Iron Engine Block, Siamese 4.50" Bore, 9.80" Deck Height, **1-Piece Rear Main Seal, 6 Bolt Timing Cover**

**SPECIFICATIONS FOR: 450000**

**Block Type** ..... Big Block Chevy  
**Material** ..... Cast Iron  
**Cylinder Wall** ..... Siamese  
**Bore Size**..... 4.500"  
**Max Recommended Bore Size**..... 4.600"  
**Deck Height** ..... 9.80"  
**Cam Bearing Bore ID** ..... 2.120"  
**Camshaft Position** ..... Standard  
**Head Bolt Pattern** .....Standard BBC  
**Inside Head Stud Bosses** .....Yes  
**Lifter Bores**..... Gen V, VI: Will Accept Link Bar  
**Main Bearing Size** .....Standard BBC  
**Main Bearing Bore** ..... 2.9370" - 2.9380"  
**Main Caps**.....Nodular Iron, 4 Bolt Splayed  
**Oil System** ..... Main Priority Oiling, Wet or Dry Sump  
**Oil Cooler Holes**.....Integral to Block  
**Rear Main Seal** ..... 2-Piece  
**Hydraulic Roller Provisions:** Will accept Gen V and VI & Most Link Bars  
**Stud and Bolt Holes** .....Blind Tapped  
**Tapped Holes**.....Standard Thread and Pitch  
**Timing Chain / Gears** .....Standard BBC Gen IV, V, VI  
**Timing Cover** .... Will Accept Mark IV, 10 Bolt Timing Cover  
**Fuel Pump Boss** .....Yes  
**Starter**..... Standard Location  
**Clutch Linkage Boss** .....Yes

**SPECIFICATIONS FOR: 450001**

**Block Type** ..... Big Block Chevy  
**Material** ..... Cast Iron  
**Cylinder Wall** ..... Siamese  
**Bore Size**..... 4.500"  
**Max Recommended Bore Size**..... 4.600"  
**Deck Height** ..... 9.80"  
**Cam Bearing Bore ID** ..... 2.120"  
**Camshaft Position** ..... Standard  
**Head Bolt Pattern** .....Standard BBC  
**Inside Head Stud Bosses** .....Yes  
**Lifter Bores**..... Gen V, VI: Will Accept Link Bar  
**Main Bearing Size** .....Standard BBC  
**Main Bearing Bore** ..... 2.9370" - 2.9380"  
**Main Caps**.....Nodular Iron, 4 Bolt Splayed  
**Oil System** ..... Main Priority Oiling, Wet or Dry Sump  
**Oil Cooler Holes**.....Integral to Block  
**Rear Main Seal** ..... 1-Piece  
**Hydraulic Roller Provisions:** Will accept Gen V and VI & .. Most Link Bars  
**Stud and Bolt Holes** .....Blind Tapped  
**Tapped Holes**.....Standard Thread and Pitch  
**Timing Chain / Gears** .....Standard BBC Gen IV, V, VI  
**Timing Cover:** Will Accept Gen V and Gen VI, 6 Bolt Timing Cover  
**Fuel Pump Boss** .....Yes  
**Starter**..... Standard Location  
**Clutch Linkage Boss** .....Yes

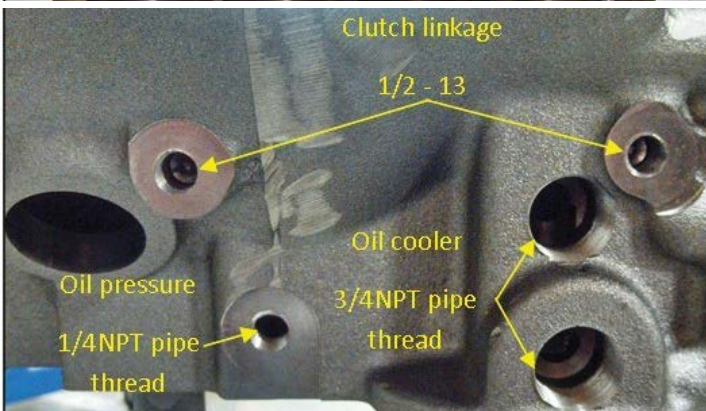
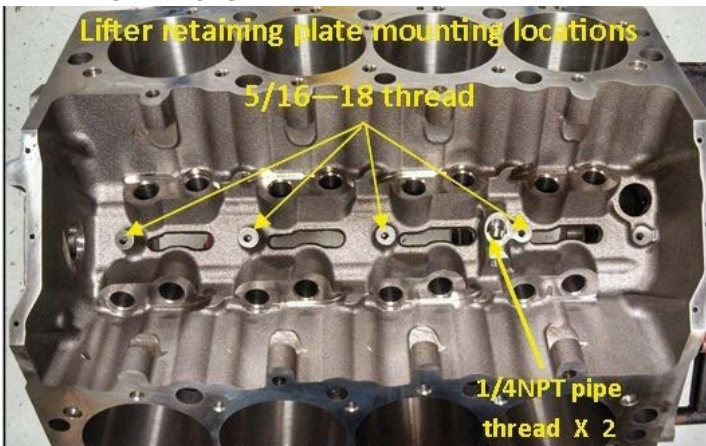
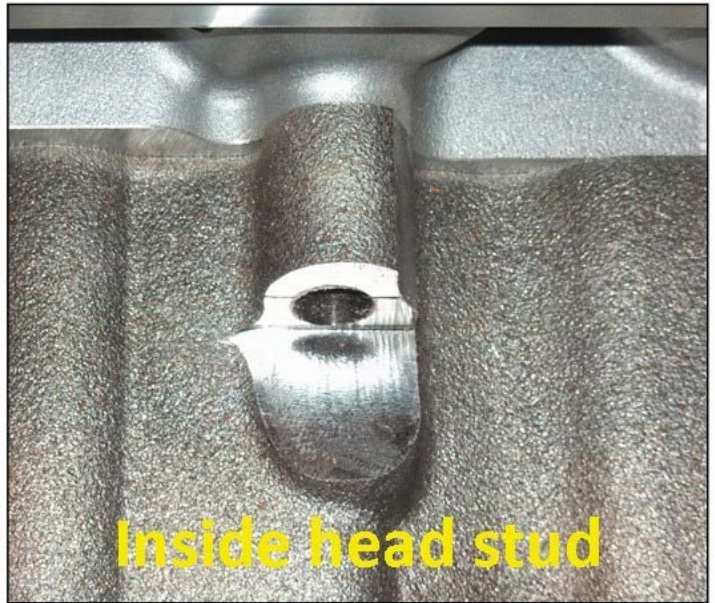
**ANCILLARY PARTS FOR ASSEMBLY:**

Oil Filter .....	Standard BBC
Head Bolts/Studs .....	Standard BBC
Distributor .....	Standard BBC
Push Rod .....	Standard BBC
Head Gasket .....	Fel Pro #1047 or 1067
	(Depends on bore size)
Cam Bearings .....	Clevite SH617S Recommended
Freeze Plugs .....	Standard 1-5/8" (included)

**GENERAL INSTALLATION NOTES:**

- Actual deck height is .005"-.010" taller for additional machining requirements.
- Head stud holes are blind and do not go into the water jacket. Make sure the head studs are lightly snugged. DO NOT torque them into the block. A sealant/anti-seize must be used on the head studs. Loctite #620 is recommended.
- Due to variations in lifter sizes and clearance preferences, engine builders prefer the lifter bores sized on the small end of the specification. In some cases, the lifter bores may require a light hone.
- Due to the wide variety of available rotating assembly components, it is important to check clearance of all moving parts, especially crankshaft counterweights and connecting rod to block. Rotating counterweights and connecting rods require .060" clearance. All parts MUST be checked before any machining is done.
- Final washing should be very thorough! Make sure particular attention is given to all oil galleries.
- Torque main cap bolt to 110 ft/lbs inner and outer.

**REFERENCE IMAGES:**



**NOTE:** If your engine requires an oil cooler or dry sump set up, you must install a 5/8" core plug to the bottom of the step in the red outlined oil galley located under the oil filter housing. An additional bypass is also required under the oil filter adapter as shown below.

