



REV 07/08/2026

Installation Notes

Chevrolet LS/LSX 364428 (3.990") UHP Aluminum Engine Blocks

BEFORE YOU BEGIN...

NOTE: This block has NOT been final cleaned since production machining.

- 1) Inspect for any shipping damage BEFORE you start. This is YOUR responsibility.
- 2) Inspect all bores, oil passages, water jackets, surfaces and threads BEFORE you start. This is YOUR responsibility.
- 3) Measure deck heights, main journals, cylinder bores & lifter bores and machine/hone to your preference. All machine work is on the low side to allow for your preferences. This is YOUR responsibility.
- 4) Check rotating clearances for counterweights and connecting rods. This is YOUR responsibility.
- 5) After all machining and before assembly, wash thoroughly with hot soapy water and clean all passages. This is YOUR responsibility.
- 6) Block/plug any unused ports/passages (eg. front and rear external oil feeds if not used) Guess what? This is YOUR responsibility!

Notes:

- This block has more features than any other entry level high performance block and care should be taken during inspection and assembly. Make sure you have all the parts, tools and assembly equipment prior to starting your build.
- Block is SEMI-FINISHED and will require light machining to desired tolerances.
- All sizes listed are +/- tolerance. OE or tighter.
- NEVER torque head studs into block, just snug lightly.
- Check rotating clearances for counterweights and connecting rods.
- Lifter bores may require light finish hone to size and to remove any burrs.

Part# 364428

Block Material: Premium Grade Cast Aluminum

Bore: Darton Sleeved 3.990" (Max Bore: 4.165")

Bore & Stroke (Max): 4.165" x 4.10" Maximum Recommended **(Check rotating clearances)**

Camshaft Bearing Bore: 2.164" Standard **(deburring required)**

Camshaft Location: Standard

Deck Height: 9.24"

Fuel Pump: No Provision

Frost Plugs: Threaded

Head Bolt/Stud Holes: Upgraded 1/2"

Lifter Bore: Standard .843"

Main Bearing Size: Standard LS

Main Bearing Bore: 2.75"

Main Caps: Billet Steel

Main Cap Bolts: Upgraded 7/16" Splayed

Oiling System: Priority Main

Oil Filter: Standard LS

Oil Pan: Standard LS

Oil Pump : Standard LS

Rear Main Seal: Standard 4.527"

Starter: Standard LS

Timing Chain: Standard LS

Timing Cover: Standard LS

Weight: 121 lbs.

Tech questions? Ask your dealer or email us at sales@performance-world.com