



STROKER GUIDE

>> KITS FOR CUBES

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There are two ways to build an engine: cafeteria style or with a kit. You know the cafeteria style—take a little of this, get a little of that, and soon your tray is a mix of breakfast for dinner and dessert for three people. And sometimes that's how people build their engines—it might be because the budget only allows for the process in stages, or maybe the builder is experimenting as he goes. But the kit route is a great option, because all working parts will work in unison and keep things safe and right with the world. This month, we're taking a look at some stroker options for the Windsor.

One example is from Coast High Performance, which not only offers high-performance engine parts, including crate motors, but also stroker kits. The company says "that the best all-around combo for Windsor replacement or 302 upgrade is a 408Wci stroker." It uses 4.000-inch stroke and a 6.200-inch rod to reach those 408 cubes. With the tall deck height and long stroke, you can expect serious torque without compromising high rpm ranges. Coast can also help you tailor this setup for race or even for use in a tow rig, and you

can choose from low to medium compression.

You can also hit up Crowder when building a stroker engine. The company is famous for its hi-po cams and valvetrain parts, and it offers complete valvetrain and bottom-end packages that will match how you're building your racecar.

Dart's engine combos, via its Special High Performance Group, are designed for power and durability, but remain on the affordable side. SHP short-blocks come in two displacements: 347ci [4.030-inch bore and 3.400-inch stroke] and 363 ci [4.125-inch bore and 3.400 stroke], using a cast-iron block with an 8.200-inch deck height. The short-blocks feature forged 4340 steel I-beam connecting rods, forged pistons with full-floating pins, Total Seal piston rings, Clevite bearings, and coated cam bearings. The company's top-end kits let you pick Iron Eagle or PRO 1 aluminum cylinder heads

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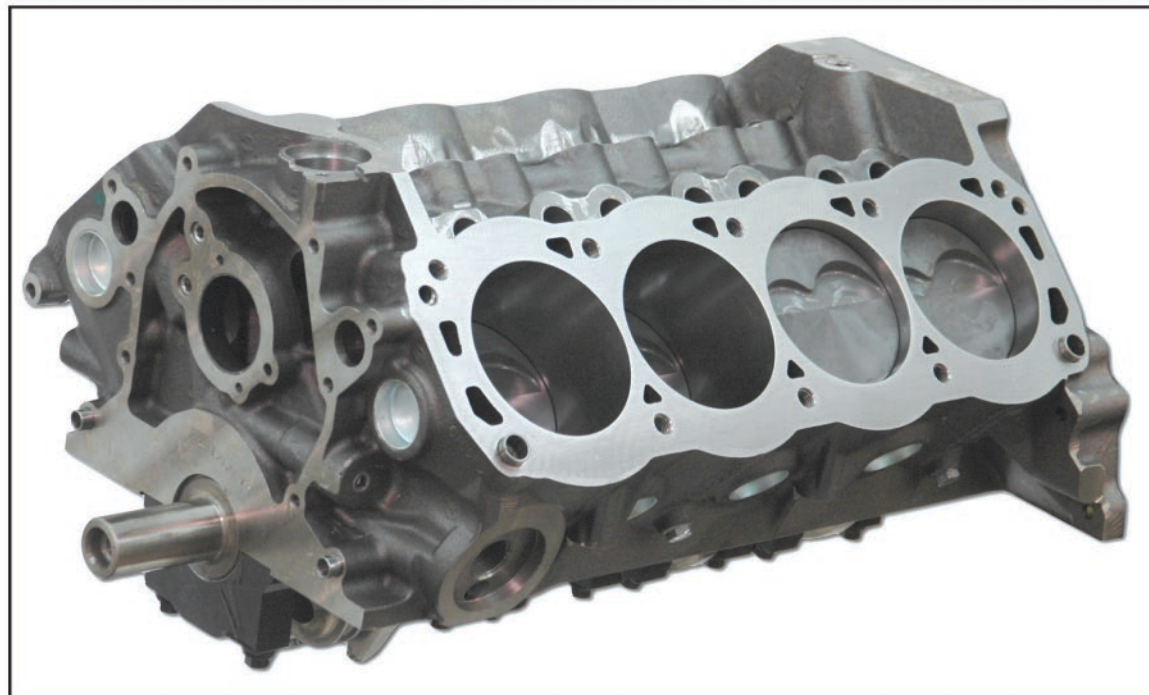
with stainless steel valves and dual valve springs, single- or dual-plane intake manifold, valve covers, and more.

Rods and crankshafts are what Eagle is best known for, and you'll probably dig the fact that they've used their expertise to put together stroker kits. The competition 408ci 351W kit includes an Eagle forged 4340 steel crankshaft with 4.000-inch stroke, Eagle forged 4340 steel H-beam rods in 6.250-inch length, Mahle forged 4032 aluminum pistons and with various compression ratios and bore sizes available, Mahle plasma-moly file-fit rings, and Clevite H-series race bearings.

The other stroker kit from Eagle is a street/strip version, for street engines up to 550 horses. That comes with an Eagle cast-steel crankshaft with 4.000-inch stroke, Eagle I-beam rods that are 6.200 inches in length with 3/8-inch ARP 8740 bolts, Keith Black hypereutectic pistons, Perfect Circle standard-gap iron rings, and Clevite P-Series bearings.

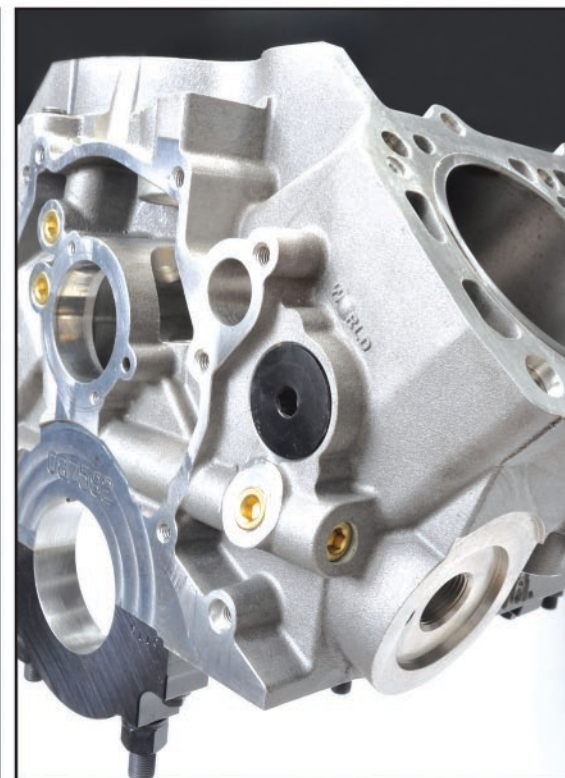
Cylinder heads, intake manifolds, and short-blocks are some of what you know Fox Lake has as its specialties. But just as in-demand are stroker kits, long-blocks, and complete engines, from 331-438ci. Components used in the kits include Edelbrock heads and intakes, Ferrea valves, Manley valves and springs, Dart engine blocks, Harland Sharp rocker arms, Cam Motion custom cams, Scat forged cranks and rods, Oliver billet rods, and Diamond pistons, with, of course, Fox Lake machining and CNC porting.

Speed-O-Motive has a 393ci custom billet 351W short-deck race engine that can be built either with fuel-injection or carbureted. And the engines and their parts have been cryo-treated—the block, crank, rods, pistons, heads, and valve-



^ Dart's SHP short-blocks come in two displacements: 347ci (4.030-inch bore and 3.400-inch stroke) and 363 ci (4.125-inch bore and 3.400 stroke), using a cast-iron block with an 8.200-inch deck height.

train. The raised cam allows for up to 4.000-inch stroke, the deck height is 9.100-inch with the 351W bellhousing mount, there's a priority main oiling system, an encapsulated 60mm cam tunnel with roller bearings to reduce drag from oil



^ World Products' Man O'War 9.500-inch-deck aluminum block is designed to fit up to a 4.250-inch stroker crank producing 460 ci.



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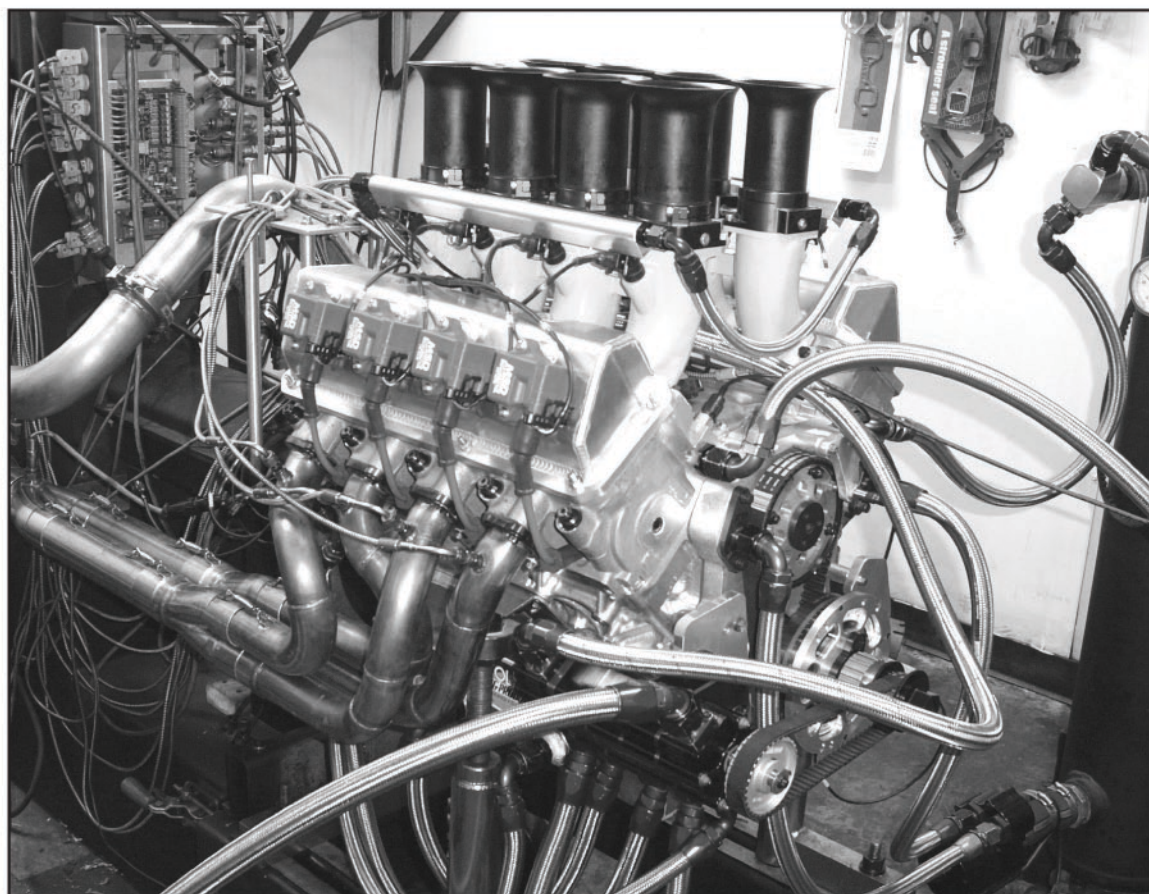
windage on the rotating assembly, and billet-steel four-bolt studded main caps.

World Products is another big name when it comes to stroker setups. The Man O'War 9.500-inch-deck aluminum block is designed to fit up to a 4.250-inch stroker crank producing 460 ci. It's made of 357-T6 aluminum and has a priority main oiling system, expanded water jackets to improve cooling, and reinforcement at the bulkheads, mains, and valleys. It will also accept the stock mechanical fuel pump. The block has provisions for two extra head bolts per cylinder for serious head clamping, which should give you peace of mind if you have a supercharger, turbocharger, or any power-adders.

Other resources in the stroker-kit arena include Pro Power, which not only offers budget stroker kits, but also street/strip, performance, and racing ones. Meanwhile, Scat stroker rotating assemblies include the crankshaft, connecting rods, and pistons. And if you're looking for a scoop here, it's that Lunati has stroker kits under development, so watch for those very soon. ■



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source

Coast High Performance

www.coasthigh.com
866.249.9143

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www.crower.com
619.661.6477

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www.darthheads.com
248.362.1188

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www.eaglerod.com
662.796.7373

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330.682.8800

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Scat

www.scatcrankshafts.com
310.370.5501

Speed-O-Motive

www.speedomotive.com
626.869.0270

World Products

www.worldcastings.com
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