

Delkron Long Block

The short road to BIG power

story by Jerry Smith • photos courtesy Delkron

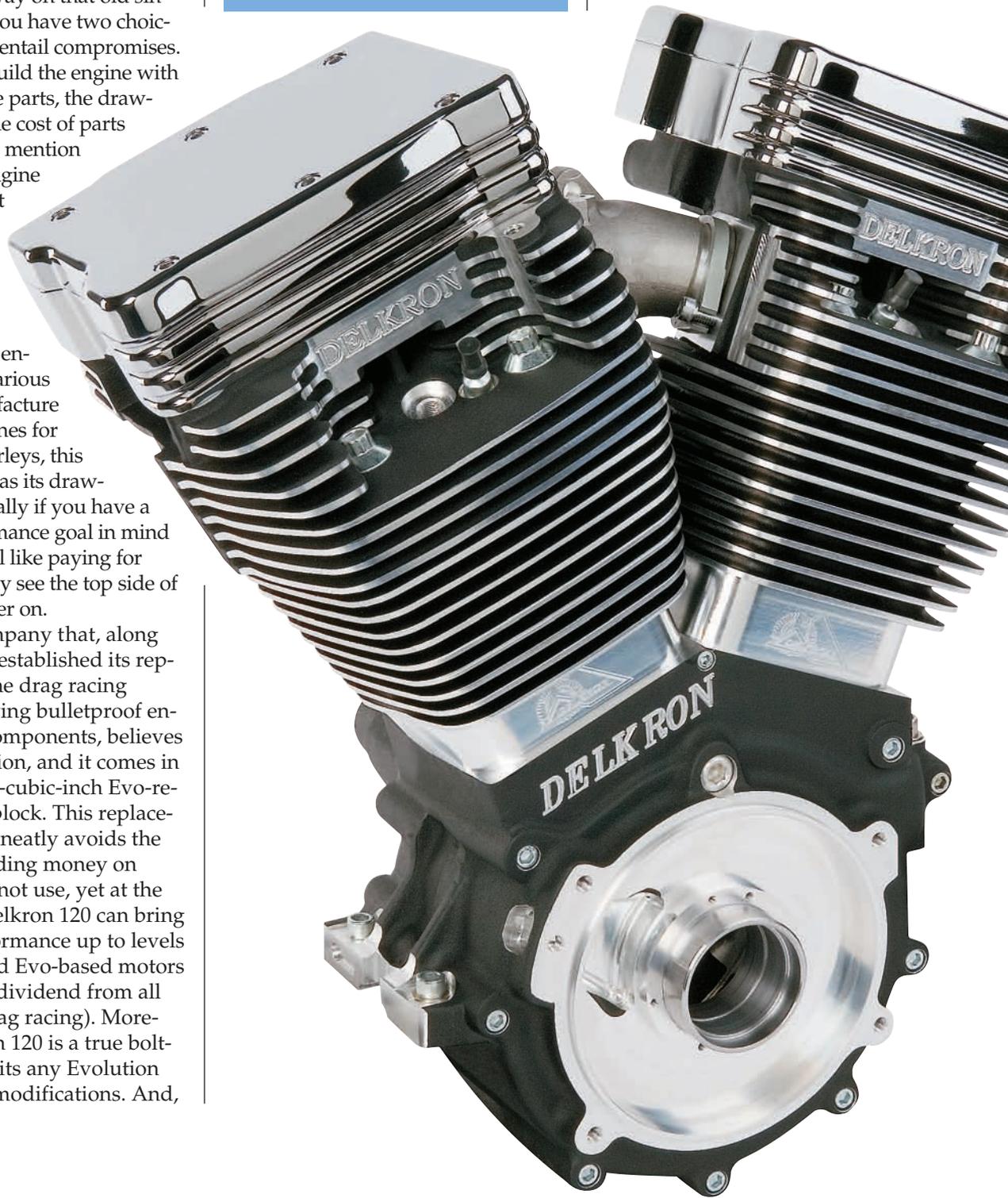
All things must pass, including the factory-fresh performance of your Evolution engine. As the miles pile on and the performance slips away on that old single-cam engine, you have two choices, both of which entail compromises. First, you can rebuild the engine with high-performance parts, the drawback being that the cost of parts and labor—not to mention fine-tuning the engine afterward—might exceed the price of a replacement engine. And that's the second choice, to replace the entire engine. Although various companies manufacture replacement engines for Evo-powered Harleys, this course of action has its drawbacks, too, especially if you have a particular performance goal in mind and you don't feel like paying for parts that will only see the top side of a storage shelf later on.

Delkron, a company that, along with H.S.E. Inc., established its reputation among the drag racing crowd by supplying bulletproof engine cases and components, believes it has a third option, and it comes in the form of a 120-cubic-inch Evo-replacement long block. This replacement alternative neatly avoids the problem of spending money on parts you might not use, yet at the same time the Delkron 120 can bring your bike's performance up to levels that few modified Evo-based motors can approach (a dividend from all those years in drag racing). Moreover, the Delkron 120 is a true bolt-in upgrade that fits any Evolution chassis without modifications. And,

"It's a very torquey motor, and that's the key."

like Delkron's racing engine cases, the street 120 cases are made of 356-T6 aluminum.

Why a long block and not a com-



plete engine? "We started realizing more and more shops are looking for kits," says Delkron's Steve Swarhout. "We didn't want to build complete engines because engine builders are very interested in doing things their own way. Everyone has their own recipe when it comes to cams and carbs." The same goes for customers, too, who often have very definite ideas of their own about such things. The long block gives both builders and riders the opportunity to get exactly the performance characteristics they're looking for, rather than something close, which is what they might have to settle for in an engine that comes complete with the cam and carburetor that the manufacturer includes with it.

The Delkron 120 long block comes with Delkron cases; 8.5-inch HSE flywheels; forged 10.5:1 Ross pistons; Delkron high-flow heads with AV&V valves (2-inch intakes and 1.625-inch exhausts), guides, and springs; a high-flow oil pump with Baisley gears; cylinders; rocker boxes; and a carburetor manifold that accepts an S&S Super G

carburetor (minor modifications required when adapting a Mikuni or CV carb). The rocker boxes are machined from 6061 billet aluminum, and their valve spring pockets have been opened up to accommodate high-lift cams and springs. The rocker box assemblies are .050" shorter than stock to simplify removal and installation.

"Horsepower is just a derivative of torque."

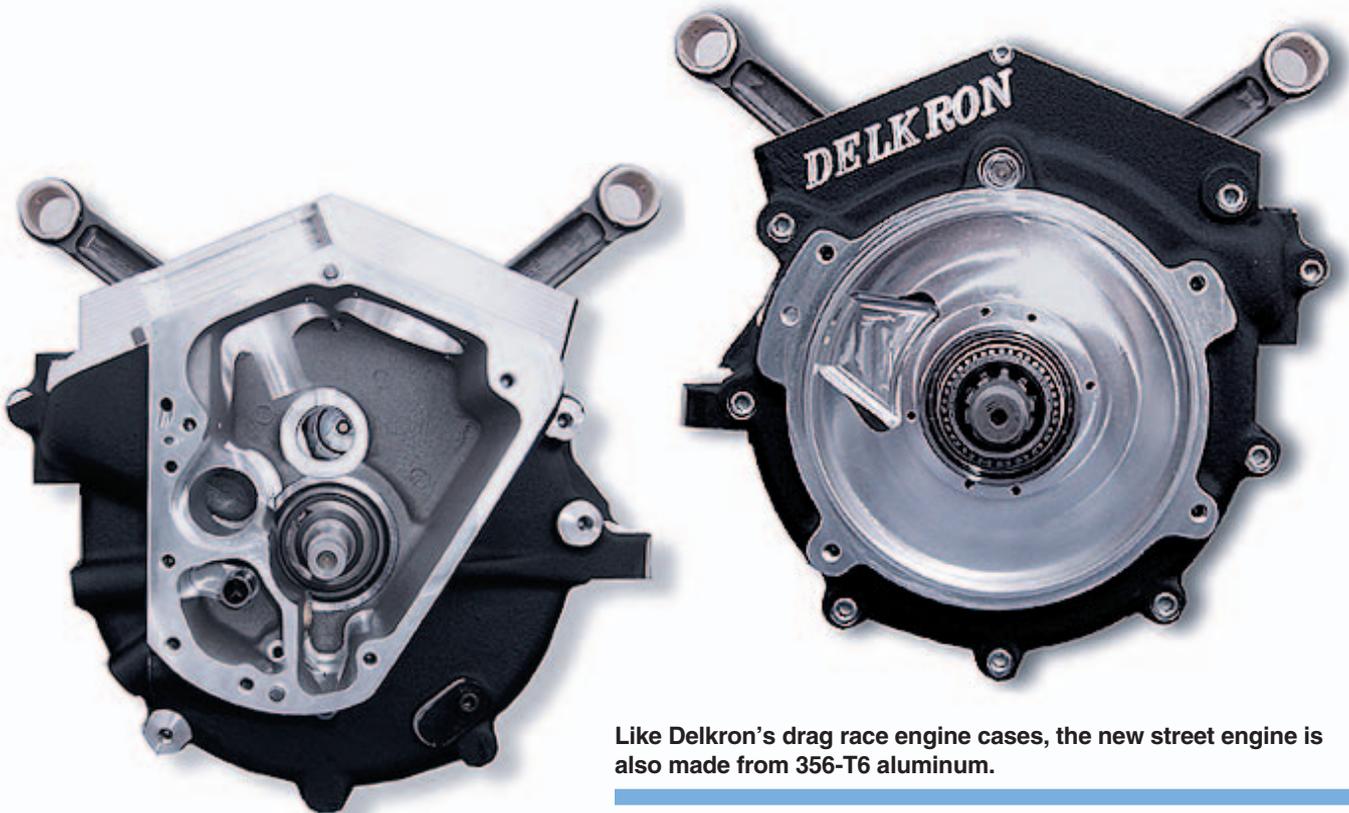
Here's what you'll need to bring to the party: a carb, a cam, tappet blocks, pushrods and tubes, an ignition—the stock Harley-Davidson ignition will do—and a less restrictive set of exhaust pipes to handle the 120's improved breathing. The finished long block bolts right up to the stock primary drive, giving you further options in which parts you select.



The cylinders come bored to match their 10.5:1 Ross pistons. The jugs slip right into the Delkron cases.

You'd imagine replacing a wheezy 80-incher with a fire-breathing 120 would increase performance some, and you'd be right. Exactly how much depends on the combination of go-fast parts you choose to round out the long block. One particular build based on the Delkron 120 (which we'll show you in detail in the next issue) clocked 121 horsepower and 138 ft.-lbs. of torque on the dyno.

continued



Like Delkron's drag race engine cases, the new street engine is also made from 356-T6 aluminum.



"It's a very torquey motor, and that's the key," Swarthout reassures, adding, "Horsepower is just a derivative of torque."

The Delkron 120 long block has a suggested retail of \$4,542 in natural finish and \$4,786 in black. Compare that to the cost

A set of Delkron high-flow heads use AV&V valves (2" intake and 1.625" exhaust), guides, and springs.

**Bike Week
in Daytona Beach.
Expect everything.**

Satisfying expectations for 66 years.
For details ...
visit
iw.bikerbeach.com
or call
1 866 296 8969

March 2-11, 2007

Daytona Beach
Area Convention & Visitors Bureau

Reader Service No. 63

COAST TO COAST

BASSANI
Yankee

BASSANIPIPES.COM • TOLL FREE: 866.439.4287

Reader Service No. 48

of parts and labor for rebuilding your old engine, or the price of a new complete engine plus the cam and carb you'll need to make it work the way you want it to, and the long-block concept makes even more sense as the go-to alternative for breathing new life into an aging Evo. And, if you plan the build right, you can save a lot of dollars in

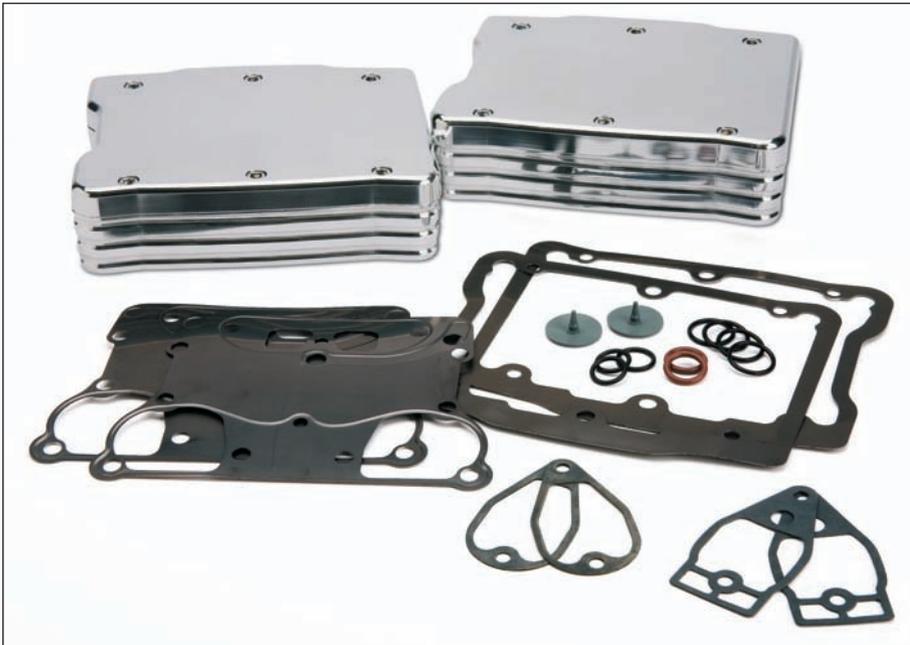
the process. Thanks to Delkron, the theory of Evolution makes even more sense than ever.

Resource

Delkron Inc.
Bedford, Ohio
866-335-5766
www.delkron-mfg.com



To complete the Delkron 120 long block kit, the engine comes with cylinders, pistons, heads and top-end gaskets.



Gaskets and rocker box assemblies complete the package. You supply the carb, exhaust, ignition, cam and pushrod assemblies.

American Wire
wheel

- * 7 unique wheel styles
- * Custom finish options
- * Most popular sizes
- * Made in the USA
- * Call direct or visit your favorite local wrench:

866.264.0531
www.awworks.com

DRAG Specialties CUSTOM CHEVROLET

BIKER'S CHOICE

Ducati 90th Anniversary
 American MADE

Reader Service No. 49