

# Harley-Davidson CVOs For 2007

text and detail photos by Dave Searle

**H**AVE YOU GOT \$24,995 lying around to buy a new bike? Yeah? How about \$33,495? If the answer's yes, you've got enough dough to own *any* of Harley's new CVO models, perfect ways to show off your dedication to the brand, or perhaps your net worth when playing weekend warrior with your buddies.

CVO stands for Custom Vehicle Operations, essentially a line of four pre-customized and hot-rodded Harley big twins. What started out as a tentative stab at the clone custom bike marketeers like Big Dog and American Ironhorse, with just 900 CVO bikes back in 1999, has now grown to four models and over 12,000 bikes a year—nearly 3% of Harley's total production capacity.

The power source for all four models is a very special 110-cubic inch version of the 6-speed engine. Standard Harleys are powered by a larger 96 c.i. motor for 2007, so the old 103 c.i. CVO motor just wouldn't cut it any longer. Enlarged with a 4.0" bore (the stock 96 uses a 3.75" bore), the new motor also gains larger intake valves, upsized from 1.898" to 2.080", revised combustion chambers, higher compression (now 9.3:1 vs. 8.8:1), new porting and cam timing so that its breathing ability isn't overwhelmed by the new size.

Because the starter motor on the new standard-issue 96 c.i. motor struggles to twist the stock motor to life, we had to wonder whether the oversized CVO motor would win the arm wrestling contest. No, the CVO starts even easier, thanks to a built-in Automatic Compression Release. Good.

The powerband on the 110 is exactly opposite of most engines, making maximum torque practically as soon as you let the clutch out, tapering off from its 2500 rpm peak thereafter. Horsepower is not quoted, just torque, and each model's exact output depends on the muffler configuration, but ranges from 115 to 105 lb.ft., they say. However, the factory does claim a 13% gain over the old 103 CVO motor, which was already 10% stronger than the 2007-spec 96 c.i. motor. You're right, that would make the CVO's motor much stronger, and it is.

Backed up by the new 6-speed Cruise Drive transmission, the big 110 spins at an effortless 2000 rpm at an indicated 70 mph in top gear, yet is still more than willing to accelerate up long steep grades from that starting point.

And the new breathing enhancements really work, too. Take it to the limit through the gears, and the engine's rate of accel-



KEVIN WING PHOTO

The very top of the CVO line, the \$33,495 Screamin' Eagle Ultra Classic Electra Glide, resplendent in two-tone blue, powered by the massively torquey new 110 cubic inch engine with 6-speed trans.

eration is impressive and never falls off as it approaches redline at 5500 rpm (unlike so many Harleys of the past).

Accelerating onto an empty stretch of freeway, the speed climbed so quickly that I had to catch myself and back off at 90 mph. I've ridden a lot of stock Harleys, but the CVO is the first one I'd actually call fast.

Even better is the sound, which has benefited from cleverly re-engineered mufflers which use fiberglass cylinders under the chromed steel to damp the high frequency notes so that a deep rich thunder can be increased in volume.

And the 110 is completely civilized pattering around at lower revs in traffic and didn't run too hot, either. In the past, a fortune in "off-road" Screamin' Eagle parts would accomplish a similar power transformation, but the results had no warranty. This motor does, and incidentally all of H-D's latest street-legal Screamin' Eagle parts will keep the factory's 24-month warranty in effect.

Enough on the tasty new motor, how about the platforms?

The most expensive is the **Screamin' Eagle Ultra Classic Electra Glide**, priced at \$33,495, which gets a memory choking new designation as the FLHTCUSE<sup>2</sup> (the numeric last bit pronounced "two" not "squared"). Assembled, like all CVOs, at the York, PA plant with a variety of Parts & Accessories "wish book" bits and pieces too numerous to list in place of standard parts, it will be available in three special

two-tone color schemes and naturally carries a number of special covers that identify it as a 110-inch Screamin' Eagle CVO model.

As the standard Ultra Classic Electra Glide is already the full-boat flagship of the line, the CVO version has to go one better in terms of amenities. Thus the CVO Ultra gets a GPS-based Audio Navigation System integrated into the readout panel for the 40W-per-channel Harmon/Kardon Advanced Audio System that includes AM/FM radio, Weather Band, CB, Intercom, CD and mp3 players and 150-channel XM satellite radio. Although the placement of the screen is really not ideal for studying a GPS map on the go, the system will call out your turns over the sound system, to make your life easier.

As for creature comforts, backrests are provided for both rider and passenger, heated seats and handlebars are standard, the passenger pegs are height adjustable, a special key fob will lock or unlock the saddlebags and tour trunk (both leather-covered for style), and a trick proximity sensor-based keyless alarm system is standard.

The big Ultra's heavy handlebar-mounted fairing requires a very light touch at the bars, so as not to excite oscillations from the front end, which reduced this rider's confidence. Also, the machine's aerodynamics are poor, even in windless conditions, so that turbulence seemingly beats at the bike from all directions, causing the machine to dance from side to side at freeway speeds so much that holding a



It's all about the details, as the embossed flames on the CVO Road King's tail trunk shows!



The CVO Dyna wears these all-metal handgrips with raised knurled panels—bad to the bone!



The Springer is the only model in H-D's lineup to use the old single-piston high-effort front brakes.

precise line is impossible. A stylishly lowered windshield also sacrifices function for style (and more turbulence), blurring the rider's vision to make high speed riding even more challenging.

The **FLHRSE<sup>3</sup> Screamin' Eagle Road King**, priced at \$28,495, also returns for 2007. Its leather-covered saddlebags carry an embossed flame pattern to match its flame-painted bodywork. Three color combinations are offered, but the Razor Red with Burnt Gold Leaf flames is hard to beat in my estimation.

In addition to the new 110 motor and Cruise Drive 6-speed transmission, another combination of P&A accessories—the "Ironside" collection, replaces the standard pegs, grips, mirrors, etc. Cruise control is also standard. An especially trick item is the new flush mount fuel gauge, which uses a series of LEDs to indicate volume, glowing under a one-way mirrored cover that looks just like polished chrome until you fire up the engine. The flush fuel gauge is matched with a flush mount fuel filler on the right side of the tank with a pop-up cap.

The CVO Road King rolls on new forged aluminum "Road Winder" wheels in 3.50 x 18" and 4.50 x 17" front and rear sizes, using 130mm and 170mm-wide tires respectively, and the rear suspension is air adjustable for rear ride height.

As with the standard Road King, a quick-disconnect, handlebar-mounted windshield is provided, but the CVO wears a lower, lightly smoke-tinted version. Again, I found the short windshield created way too much turbulence, and I would have left it in the garage if the bike were mine, but much shorter riders thought it was okay. At least, this situation could be easily fixed with a different shield.

The **FXDSE Screamin' Eagle Dyna** sells for a cool \$24,995 and wears scalloped graphics over one of three base colors. Inspired, they say, by a "Pro Street" theme, the bike has a full-metal look reinforced by shiny knurled alloy handgrips, 1¼" pullback

**Screamin' Eagle Softail Springer**, priced at \$24,995. Wearing "tribal" style graphics, it's available in three color combinations and uses the same thin-spoke forged wheels and 21"/17" tires as the Dyna.

The Springer fork, a modern interpretation of the timeless original that graced Lee Marvin's chopper in *The Wild One*, is actually a clever and effective fork; stiff enough for stability and with an inherent anti-dive geometry that adds to the bike's sense of agility. Plus, the CVO Springer's stiff fork and narrow front tire gives X-Acto knife-like steering precision. Additionally, the seating position is quite reasonable if your arms are fairly long (mine are), the seat is decent, the handling is agile and fun, and the big power and exhaust note very entertaining. Plus, the absence of troublesome wind turbulence, as it has no windshield, was a relief as I could see the road clearly. This was my favorite CVO, and I heard several other journalists say the same.

All the bikes had very good suspension systems, unlike our last CVO model, the 2005 Screamin' Eagle Fat Boy. At least until you reached speeds over 70 mph, the springing and dampening was very effective for a comfortable ride appropriate for the bike's intended use.

A trick proximity sensor-based keyless alarm system is standard on all the CVO bikes, which should add a bit of peace of mind to owners of what will be coveted machines. Indoor-grade bike covers and special commemorative ignition keys are also part of the ownership experience.

Value is a hard thing to judge when a bike is new, but as Harleys traditionally command very high resale prices, and the CVO models are premium special editions, their outlandish prices may not be such a bad deal, long term ... if you can afford one! 🍀



With a flourish that would do justice to a Wurlitzer jukebox from the '50s, this aircleaner says it all: 'Screamin' Eagle 110 Cubic Inch.' "Torque Monster" would be another way to say it!

drag bars with internal wiring, and forged, thin-spoke wheels in 21" front and 17" rear sizes with skinny front rubber and a fattish 170mm rear tire. Unfortunately, its thin seat is also nearly metal hard, magnifying the engine vibration that escapes the rubber mounts. Also, the Dyna's forward control footpegs are placed very low and far forward, reducing cornering clearance and increasing the leg length needed from the rider. The front fork is an inverted type they called a 43mm. But it's only 43mm if you measured the fixed tubes, not the sliders (which is the naming convention), and the pretty forks are actually not stiff enough for quick and stable steering transitions. That's too bad, and the Dyna was my least favorite ride of the CVOs.

The final model is the **FXSTSSE**