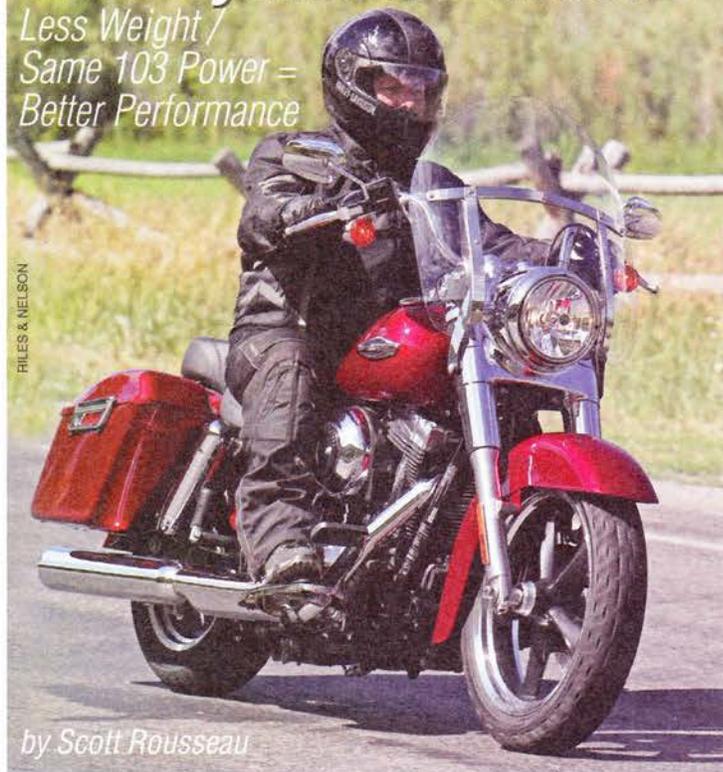


2012 Dyna Switchback

Less Weight /
Same 103 Power =
Better Performance

FILES & NELSON



by Scott Rousseau

HARLEY-DAVIDSON HAS only a single all-new model for 2012, but the fabled Milwaukee cruiser manufacturer is hoping that this one machine, the FLD Dyna Switchback, will hit multiple target markets. Designed to be both a touring cruiser and a boulevard cruiser in one package, the \$15,999 Switchback (base price) is a bike that Harley hopes will appeal to its younger (35–45) core audience, to women and to “Boomerangs” (aging Baby Boomers) alike. Depending on how you look at it, that’s either a lot of math or a tall order. Does the Switchback deliver the goods?

Engine

The Switchback’s engine owes a debt of gratitude to Harley’s high-end CVO line, the original source of the Twin Cam 103. Introduced in 2003 as a CVO exclusive, the 103 cu. in. motor was an enlargement of the Twin Cam 96, itself enlarged from the earlier Twin Cam 88. A 3.3mm bore increase—98.4mm on the 103 vs. 95.3mm on the Twin Cam 96—provides the extra seven cubes and a healthy dose of extra oomph that makes the Twin Cam 103 much quicker and more enjoyable than the 96. Of course, it was only a matter of time before Harley eventually introduced the 103 to its regular production line. Debuting first in the Ultra Classic Limited in 2010, the Twin Cam 103 went from being an option to being standard equipment on all but the Dyna Super Glide and Dyna Street Bob in just two years (these two Dyna models retain the old Twin Cam 96 as part of a strict low-price strategy).

Although the 103’s air-cooled, two-valve, 45° V-twin engine breaks little in the way of new ground, technologically speaking, its ride-by-wire Delphi sequential port fuel injection, which uses a single 50mm throttle body to feed both cylinders, is its most high-tech feature, providing crisp throttle response and excellent driveability.

The difference between the older Twin Cam 96 and the latest 103 is readily apparent on the dyno. Our Switchback produced 67.65 rwhp @ 5000 rpm with 85.8 lb.-ft. of torque @ 3250 rpm, which is very close to Harley’s claimed 10% torque advantage over the Twin Cam 96. Better yet, with Harley’s promise that the Switchback is the lightest bagger in the class, we hoped for better than average (for Harley) acceleration numbers during our performance testing as well.

Unfortunately, prevailing conditions weren’t particularly favorable at our own Area 51 when we put the Switchback through its paces, so its performance numbers don’t look so different from those of the heavier FLHX Street Glide tested in less blustery conditions as part of our “Batwing Bagger Shootout” in the December, 2011, issue. Our Switchback rumbled from 0–60 mph in 5.18 sec., and it galloped through the 1/4-mile in 13.66 sec. @ 93.03 mph. These results simply don’t accurately reflect just how briskly the Switchback accelerates. Without the variable winds he was facing, we reckon test rider Danny Coe could have knocked several tenths from his best run.

Transmission

We must admit we erred in our recent description of Harley’s Cruise Drive transmission (“2012 Harley-Davidsons,” October, 2012) when we stated that the FLs and Softails have overdrive sixth gear ratios. They don’t and never have; sixth is still 1:1. However, steeper final drive gearing on the FL models, which use 68-tooth rear sprockets vs. the 66-tooth sprockets of the Dyna and Softail transmissions mean the Switchback turns less revs at a given speed than the FLs. Part of our testing included a 500-mile loop through some of the old mining towns north of Las Vegas, Nevada, and our Switchback trotted along at 2350 rpm at an indicated 65 mph, which equates to a slightly higher 2420 rpm at true 65 mph, leaving plenty of speed in reserve. Also, typical for a Harley-Davidson, the Switchback’s electronic analog speedometer is very accurate, indicating 65 mph at an actual 64.2 mph.

The Switchback’s gear ratios are nicely spaced to take advantage of the motor’s torque spread, but its shift quality and clutch action leave much to be desired. Shifting is still heavy, notchy and noisy despite continual refinements to the shifting mechanism and the quieter helically cut fifth gear added in 2010. The clutch pull is still too heavy (probably a matter of excessive friction in its low-tech cable), while the clutch’s engagement range is also very narrow, which makes pulling away from a stop more difficult. This primitive clutch action, especially, intimidated some of our less-experienced testers, just the demographic the Switchback is designed to attract. So, while the clutch and gearbox designs have evolved over the past several years, more refinement will still be welcome.

Chassis & Suspension

Harley-Davidson’s rubber-mounted Dyna chassis last underwent a major revision in 2006, when it was redesigned for increased rigidity and room was made for a wider 160mm rear tire. The big suspension news for 2012 is that the Switchback gets an all-new Showa fork for improved ride quality. While the new fork’s 41.3mm legs are significantly slimmer than the 49mm legs found on other Dynas, it features a 20mm-diameter damping cartridge in the left leg (only) and triple-rate springs to provide 3.8" of well-controlled front wheel travel. Out back, a pair of five-position, preload-adjustable emulsion-type shocks offer a scant 2.13" of rear wheel travel.

Harley claims that the Switchback weighs 718 lbs. ready to ride. Our scales revealed a wet weight of 730 lbs.—not a

feathery figure, to be sure, but the last Road Glide we tested weighed 822 lbs., making the Switchback at least a 92-lb.-lighter alternative if a rider is willing to forego the extra bells, whistles and added luggage capacity that the Road Glide offers.

The Switchback's wheelbase is the shortest of the Dynas, checking in at 62.8", with 29.9° of rake at the steering head and a 28.9° fork angle and 5.84" of trail—dimensions unique to the Switchback that yield excellent steering behavior. The Switchback is surprisingly quick-handling for a heavyweight cruiser, and it doesn't sacrifice a hint of straight line stability in exchange. While we wouldn't go so far as to suggest that it handles like a lightweight cruiser, it does hide its 730 lbs. well, with responsive initial turn-in and agile side-to-side transitions that require minimal effort at the bars, while the front end offers plenty of feedback through the curves.

The rear suspension is very composed over a wide variety of road surfaces, and we were surprised at how effective it was, given the short travel available. But such short travel can't perform miracles either, and like H-D's transmissions, there's still plenty of room for future improvements.

Brakes, Wheels & Tires

Part of the Switchback's light-steering effort can be attributed to its new lightweight cast aluminum five-spoke wheels, which resemble the legendary American Racing Torq Thrust mags of the 1960s. The Switchback's 3.50" x 18" and 4.50" x 17" hoops are wrapped with Dunlop bias-ply tires, a 130/70B18 up front and a 160/70B17 rear. Typical of most Dunlop products we've tested, we rate the tires' grip and feedback as excellent.

We were also pleasantly surprised by the braking performance of the Switchback's optional ABS system. Sold as part of Harley's Security Package that adds \$1195 over the base MSRP, the Switchback's ABS system is different than the one found on the FL, Softail and VRSC lines. Re-engineered specifically for the Dyna family, it uses the same wheel bearing-mounted sensors as other Harleys, but a single electro-hydraulic control unit with one module that handles both the front and rear brakes, rather than one module for each brake as found on the other model families.

Our test unit posted extraordinary 60-0 stopping distances, shattering our previous experiences with H-D's ABS, recording a best stop of just over 114' and the majority under 120'. Coe's notes indicate that the brakes do lock momentarily before ABS intervention and that braking effort is relatively high; requiring lots of pressure at the lever to initiate such short stops. Also, the Switchback's traditional wide-bladed control levers may be positioned too far from the handlebar to allow riders with small hands to achieve the maximum grip strength.

Ergonomics, Controls & Instruments

The Switchback's ergonomics work for short runs to your local juke joint and for cross-country jaunts alike. Its one-piece seat is nicely contoured, with a firm, flat comfortable feel, and its 26.1" seat height is low enough for smaller riders to plant their feet on the ground without making taller riders feel too cramped. The

Switchback's "mini-ape" handlebar offers wrist-friendly angles and a comfortable reach, adding to the comfort factor.

However, the Switchback's floorboards are its best ergonomic attribute. They're plenty wide without compromising lean angles excessively, and because the Switchback lacks a heel shifter, extra left foot room is finally available so the rider can vary foot positions during a long haul. H-D's more traditional setup, with shifters front and back, is very confining by comparison.

We also like the Switchback's instrumentation, which features a large, easy-to-read 120 mph speedometer and digital trip functions that can be scrolled through without removing your hands from the handlebar. These include a clock, gear-ratio indicator and tachometer functions. Euro-bike fans might also appreciate the new flash-to-pass function for the headlight.

Riding Impression

The steady thunder from its 2-into-1 header is unmistakably Milwaukee, but the Switchback negotiates serpentine asphalt in a way that will almost convince you that you're on a middleweight cruiser. Its easy steering and sure-footed traction allows you to hustle through curves with confidence. And with the Twin Cam 103's prodigious torque and excellent driveability, thanks to its consistently superb fuel injection, the Switchback is a blast when bombing down the highway or through the back country. Alas, it can be less fun in town, when the 103's engine heat can become uncomfortable on hot summer days.

The Switchback's excellent fuel economy was another high point; delivering an average of 46 mpg—better than Harley's EPA estimate and enough for a 216 mile range from the Switchback's 4.7-gal. fuel tank. *Hmmm...* Perhaps the Motor Company should put all its Big Twins on a diet.

Attention To Detail

As much of Harley's efforts are designed to appeal to the eyes, the Switchback naturally scores high on fit and finish. Yet equally important updates such as a new CAN bus electrical system and a smaller lighter ECU are worthy improvements you can't see. Instead, Harley would rather have its customers focus on how the Switchback's full coverage fenders, police-style windshield, five-spoked wheels and color-matched hardbags allow you to bask in reflected glory when you ride past store windows. Of course, if you want to troll Main Street in style, without the screen and bags, they pop off in about 25 seconds, and the discrete saddlebag mounting posts that remain are barely noticeable. However, as the windshield creates unacceptable buffeting at highway speeds, we preferred running without it in any case.

Final Thoughts

We think Harley has hit a home run with the new Switchback. Despite some issues that could still use more refinement, it offers nearly all of the functionality, more versatility and only marginally less baggage capacity than the hallowed Road King for \$1500 less. Considering its enjoyable overall performance and its target audience, Harley shouldn't have too much trouble convincing plenty of buyers that the Switchback represents a great value. ■

