

CHOOSE THE RIGHT CAM: GEAR DRIVE OR CHAIN DRIVE?

BAGGERS

Custom Motorcycle Magazine

BLURRING THE LINES

SPEED BY DESIGN'S
RIGHTEOUS RIDE



**BREAKING BAG
PART DEUX**
SCORING BIG IN ABQ

**BIG-WHEELIN'
DONE RIGHT**
HAWG HALTERS' RAKE KIT

**MORE AIR =
MORE POWER**
K&N TEARDROP AIR CLEANER

A SOURCE INTERLINK MEDIA PUBLICATION
baggermag.com
MAY 2013

BLURRING THE LINES

SPEED BY DESIGN'S RADICAL RIDE

WORDS: Greg Friend of Gearhead Inc. · PHOTOS: Tim Sutton · MODEL: Ashley Estrada



The economic downturn was hard for many industries. From custom cars and bikes to boats and sand rails, sales recently hit historic lows. A few years ago in Corona, California, Coby Klein was working at Eliminator Boats constructing some of the fastest production boats in the world. "The boat market really cooled off, and I've

wanted to get into building bikes for a while. I felt something was missing from the custom bike world and that I might be able to add to it with my fiberglass skills and the talented people I work with," Coby said.

Not long ago he took his knowledge of composites and a handful of good people with him into the bagger world and started

tooling parts under a new shop name; Speed by Design (SBD). Still located in Corona, Coby and his team build a minimum of one show bike every year. This bike, a factory fresh 2012 Electra Glide Classic, became the foundation for SBD's 2012 custom. "Building the front half of the wishbone single downtube frame was the hardest part of the build," Coby said.



"The motor is raised in the front to close the gap between motor and frame that is generated by raising the fairing and the tank 2½ inches in order to accommodate the 30-inch front wheel." A set of inverted American Suspension air ride forks were set at a total rake of 44 degrees and mounted to the chrome-moly reinforced frame neck.

Further frame mods included an electric billet center stand that keeps the bike steady and low when parked, but the original jiffy stand was retained—only because it's hard to see when tucked under the primary. SBD chose to maintain the factory Harley-Davidson 103ci motor and six-speed transmission to maintain reliability,

but it's far from stock in appearance.

According to Coby, thousands of hours of SBD labor and support from many masters in the industry went into the painstaking process of designing the bags, gas tank, and fairing. The saddlebags feature seamless built-in side covers, flangeless internal weather seals, SBD billet electric actuated hinges, and

BLURRING THE LINES

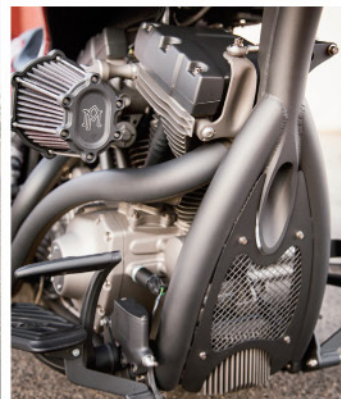
powered lids. "There is a ton of usable space because SBD bags are longer and deeper than stock bags and utilize the side cover area for additional storage," Coby said. LED taillights were frenched into the ends and he managed to keep the OEM mounting brackets and bushings. An adjustable windscreen was built into the fairing and utilizes an electric motor to keep wind off the rider's face, and provide a little extra storage for small items like a wallet or pistol. Somehow, the SBD crew found enough room to hide an air compressor and four speakers

inside the fairing, too. Along with many other styling cues of the original Electra Glide, the dashboard was removed from the gas tank, a bottom-mounted fuel pump was installed with a Matt Hotch recessed filler cap and flush mount fuel fill, and secured to the frame with hidden mounts.

A host of electronics was added, albeit somewhat hidden, to command the sound, movement, and direction of the bike. The main control unit for the bike's electronics is a permanent Samsung Touch Pad tablet with full, turn-by-turn GPS capabilities,

video, Wi-Fi, cell-phone tethered access, and stereo control mounted within a SBD-made billet frame. Audio pleasure was increased by the addition of four 6.5-inch Alpine speakers and tweeters mounted in two sealed enclosures within the fairing and powered by a 300-watt Rockford Fosgate Amp. Aircraft-style switches, easily serviceable headlights and LED turn signals, plus a storage area for keys and other small items were also squeezed into the fairing.

Early on in the build, Coby and the team decided there wouldn't be any chrome or flat



BLURRING THE LINES



black on this bike. "It had to be flashy without being too flashy," Coby tells us. The coloring for the bike started with every aspect of the drivetrain ceramic coated in two shades of satin gray: titanium or cobalt, plus the frame, handlebars, and wheels. A crazy custom satin orange color was chosen for the majority of the bodywork with graphics covering the lower portions of each piece. "We try to always have something new or different for

the paint scheme of every bike we build. This time, our award-winning painter, Chris Guinn, and world renown brush artist, Kiwi Terry, created this medieval-themed design that was specifically named 'Vengeance' instead of 'Vengeance' because it fit on the back of the bike better when followed by the year it was built in Roman numerals," says Coby.

If a person happens to be in the market for a bagger just like this one, he/she would

be in luck. "Basically, it's still a brand-new bike," says Coby. "I've barely ridden it more than 400 miles because I want to keep the mileage down for a prospective buyer. It drives me nuts because I love riding it so much." If a full-blown custom isn't in the budget, Coby made sure to point out that most of custom parts on this bike are available as kits and are specifically designed to fit comparable stock Harleys.

BLURRING THE LINES



SPECS

Bike Owner	Speed By Design/Coby Klein
Shop Name	Speed By Design
Shop Phone	(951) 371-7433
Shop Website	speedbydesign.net
Fabrication	Speed By Design Coby Klein & Troy Johnson
Build Time	2½ months

ENGINE

Year/Manufacturer	2012/H-D
Type/Size	Twin-Cam/103ci
Builder	Josh Rundlett
Cases/Cylinders	H-D
Heads	Burley Performance
Rocker Boxes	H-D
EFI/Carb EFI	H-D Race Tuner
Air Cleaner	Performance Machine Fast Air
Exhaust	Sinister/Dirty Bird Up-Yours
Special Features	Cam Shaft 585 S&S

TRANSMISSION

Year/Manufacturer/Type	2012/H-D/Six-speed
Case	H-D
Clutch	Performance Machine Hydraulic
Primary Drive	Chain

FRAME

Year/Manufacturer	2012/H-D, Speed By Design
Rake / Stretch	9 degrees / 4 inches

SUSPENSION

Manufacturer Front	American Suspension B-17 Vampire King
Length	Trade secret
Triple Trees	9 degrees leading pivot point
Manufacturer Rear	Arnot Aldon-Air
Special Features	Full air ride front and rear

WHEELS, TIRES, AND BRAKES

Manufacturer Front-Type	Speed By Design custom machined by Curtis
Wheel/Tire Height-Width	30 inches
Caliper	Performance Machine six-piston
Rotor	Lyndall Carbon Fiber
Manufacturer	Colorado Custom
Wheel Height-Width	16 inches
Tire Height-Width	Trade Secret
Caliper & Rotor	H-D

FINISH-PAINT

Color	BASF Orange/Satin
Painter	Chris Guinn
Graphics	Kiwi Terry

ACCESSORIES

Front Fender	Aluminum B' Cool
Rear Fender	Speed By Design
Fairing/Windscreen	Speed By Design
Gauges	harleydavidsongauges.com
Gas Tank/Cap	RWD/Speed By Design
Oil Tank	H-D
Handlebars	SBD/Troy Johnson Drag Bars
Hand Controls/Grips	PM with Cruise Control
Foot Controls/Pegs	PM
Headlight	Road Glide
Taillight	Speed By Design
Turn Signals	Speed By Design
License Mount	Klock Works
Seat	Travis Walker Double Cross
Saddlebags	Speed By Design
Speakers	Alpine
Head Unit	Samsung Touch Pad
Amp	Rockford Fosgate