

Buell History

On February 19, 1998, Erik Buell announced that he had sold almost all of his interest in the Buell Motorcycle Company to his business partner, Harley-Davidson Inc., Harley had been a minority partner in the Buell Motorcycle Company since 1993. As part of the acquisition, Erik Buell became Chairman and Chief Technical Officer. Jerry Wilke was named President of the new company.

According to Buell, the acquisition was a strong signal of Harley-Davidson's continued commitment to Buell as a separate and distinct product and brand. "Now, with Harley's expanded level of support, we can move forward with the exciting plans for growth that I have been dreaming about," he said. "The purchase is a strong endorsement from Harley-Davidson for me and the entire team at Buell. Business is booming and the best is yet to come!"

The acquisition was yet another chapter in the remarkable story of Buell Motorcycles and a major event in the life of company founder, Erik Buell. For the past 15 years, Buell has worked to develop a world-class American sportbike.

The first motorcycle designed and built by Erik Buell was the RW750 in 1983. This was a 750cc, two-stroke, "square-four", rotary-valve racing machine designed specifically to compete in the AMA Formula One road racing class. A prototype RW750 first hit the track in the AMA National at Pocono Speedway in the summer of 1983. Buell continued extensive testing and development work on the bike throughout that summer and into the fall. His success was measured during testing at Talladega, Alabama, where it was clocked at a top speed of 178 mph.

Development on the RW750 continued through 1984, a production version was released in the fall. Just one RW750 was sold to the American Machinists Racing Team before the AMA announced that 1985 would be the last year of Formula One racing. An announcement that Superbikes would occupy the premier race class in 1986 effectively eliminated any market for the RW750.

Crushing as that may have been to lesser builders, Buell viewed the rules change simply as a setback. He went back to work, this time aiming squarely at the goal of building the first world-class sportbike designed and built in the USA. Tapping his knowledge of what works on the racetrack and his experience as a Harley-Davidson engineer, Erik Buell designed his first entry into the sportbike market, the RR1000. Powered by the Harley-Davidson XR1000 engine, the stiff, light chassis was designed to allow rubber-mounting that became a patented engineering “trademark” of Buell sport bikes: the Uniplanar system.

Buell’s design also utilised the engine as a fully stressed member of the frame. Capping the engineering firsts was Buell’s use of a rear suspension mounted beneath the motor and a shock that operated in reverse of the conventional compression-rebound practice. A total of 50 RR1000 models were produced during 1987-88 before the remaining XR1000 engines were depleted.

Buell saw the new 1203cc Harley-Davidson Evolution engine as an opportunity to continue tuning the performance and handling qualities of his bikes. With that in mind, he began redesigning the chassis to accommodate the 1203. The resulting RR1200 model was introduced during 1988, and 65 were produced for sale through 1989.

Streamlining and bodywork had been a particular talent and passion for Erik Buell. Thus, his motorcycles continued to change at a measured pace through the years. In 1989, he introduced the RS1200, a two-seat version of the RR model for riders who demanded both world-class performance and two-up comfort. 105 of these unique models were produced through 1990.

Five-speed transmissions were a new feature of the 1203cc engine in 1991. Buell responded to revised engine mounting points with further design improvements to the RS chassis. These bikes were the first production motorcycles to use “upside-down” (inverted) front forks, stainless steel braided brake lines and a six-piston front brake calliper.

As Buell motorcycles were refined, the company's manufacturing capabilities were expanded. 1991 was the first year in which Buell Motor Company not only designed bodywork, but also produced it in a new composite and paint shop. The result was greater quality control and improved design flexibility.

A single-seat version of the RS1200 was introduced late in the 1991 model year. Dubbed the RSS1200, it won enthusiastic approval of the motorcycle press for its lean, clean lines. A total of 40 units were built between March and August 1991. Combined production of RSS and RS models totalled 325 through 1993.

In 1994, Buell introduced the curvaceous Thunderbolt S2, the first model produced under the partnership with Harley-Davidson Inc. The motorcycle won rave reviews from the motorcycle press and is still known for its beautiful lines and fluid design. A sport-touring version, the S2T, was added to the line-up in 1995. The new model was named Rider Magazine's Top Innovation that season. Together, the two models combined for total sales in excess of 1,000 units.

The next year brought the introduction of the all-new 1996 Lightning S1. The original "street fighter", the Lightning S1, defined a whole new class of "Hooligan" motorcycles. Featuring minimal bodywork, a racing-styled seat, exposed frame and the centralised mass of the 1203cc engine, exhaust system and suspension, the model was named "Hooligan Bike of the Year" by Cycle World Magazine that year.

A redesign of the Thunderbolt was also introduced in 1996 as the Thunderbolt S3 and the Thunderbolt S3T. The models continued the design evolution of sport touring motorcycles. Together with the Lightning S1, the S3 and S3T combined for sales in excess of 2,000 units.

In 1997, the Cyclone M2 was introduced to the Buell line and the motorcycle industry had a new "Standard" class leader. With a more relaxed seating configuration and wider seat, the Cyclone helped push Buell motorcycle sales above the 3,000 unit mark.

The new Thunderstorm engine was introduced into the Buell line-up in 1998 as the powerplant for the new White Lightning S1W model. Similar in styling to the S1 Lightning, the new bike featured a carbon fibre rear fender, bold colours, and the super-high output Thunderstorm engine. The S1W was named “Best Standard” by Cycle World Magazine. The Thunderbolt models also received the Thunderstorm engine to round out an impressive offering of 1998 models. Sales continued to grow, and in 1998 Buell sold more than 5,000 motorcycles.

A complete redesign of the Lightning and Cyclone models was in store for 1999. New body, new frame, new suspension, larger and more comfortable seats and bold new colour offerings were available on the Lightning X1 and Cyclone M2. The Thunderbolt S3 and S3T also received a refined seat and dramatic new colour and sport touring options. Dynamic Digital Fuel Injection (DDFI) became a standard feature on the Lightning and Thunderbolt as well. The redesign and refinements helped contribute to total sales of approximately 8,000 units world-wide during 1999.

In 1999, Buell celebrated another milestone when it officially dedicated its new 42,000-square foot Research and Development Centre adjacent to its existing facility in East Troy, Wisconsin.

After creating a whole range of twin-cylinder motorcycles, Buell produced its first single cylinder in 2000, the Buell Blast which features a 492cc engine. The Blast is the perfect motorcycle to go after a whole new audience in the American market where this bike has received several awards for its innovation. It is also the bike with the highest quality rating and lowest warranty cost ever in the Harley-Davidson Company.

More than ever dedicated to achieve the best quality, Buell successfully completed its ISO 9001:1994 repeat audit in October 2000. This was achieved through a strong commitment to get continuous improvement, and to meet and exceed the customer expectations.

Enhancing the production process even further, Buell introduced a whole new development process.

This process consists of 4 phases:

- Concept

The marketing, engineering, styling and service departments meet to discuss the first concepts. At this stage, a first experimental motorcycle is built.

- Proof of Concept

The main goals are defined and approved. Several R&D motorcycles are built. This is a very detailed testing phase. High mileage, high speed, traffic jams, high and low temperatures. The bikes are tested in all conditions. A council made of Buell and Harley-Davidson engineers decides if the project moves to the next phase.

- Concept durability

The bikes are still tested. The production line is set up and tested. The reliability of the bike but also of the assembly line is tested. Again, the council signs before the project moves to the final stage.

- Validation

The final test. All parts are thoroughly inspected, all the tests reports are checked and signed off. All the departments sign off the final agreement.

The Blast (not available in Europe) was the first motorcycle built by Buell following this process and it has proven to be the most reliable motorcycle ever built by Harley-Davidson Inc.

The Lightning X1, Cyclone M2, Thunderbolt S3 and S3T were also refined through this process for the 2001MY.

In the year 2000, Buell shipped over 10,000 units world-wide, a nearly 30% gain compared to 1999.

On the 1st March 2001, John Hevey was named President and Chief Operating Officer of Buell Motorcycle Company. Jerry Wilke, the former President of Buell, was named Vice President and General Manager, Asia/Pacific and Latin America.

On the 1st June 2001, Buell Motorcycles Company announced details of its 2002 Model Year range including a special edition White Lightning X1W model.

On the 12th July 2001, in addition to the above models, Buell announced its most exciting and radical new model to date: The Buell Firebolt XB9R, writing a new chapter in its history.

The Firebolt XB9R features a unique combination of innovative technology: fuel in the frame, oil in the swingarm, ZTL inside-out front disc brake and radical chassis geometry including a 1320mm wheelbase and 21° front fork angle.

The Firebolt XB9R is powered by a new 984cc force air cooled 45° V-Twin engine that has been developed by Harley-Davidson and Buell to deliver optimum performance, which for Buell means great torque over a wide rpm range and sufficient, controllable power, user friendliness and an exceptional level of reliability.

On the 16th July 2002 Buell announced its 2003 model year featuring a second model on the XB platform: the Buell Lightning XB9S. The Lightning XB9S is the reincarnation of the 1995 Lightning S1. It captures the soul, spirit, emotions of the S1 and combines them with the XB9R's radical, modern, technology.

In July 2003 Buell extended the XB range with the introduction of the Lightning XB12S and the Firebolt XB12R.

The new Firebolt mates the intuitive handling and innovative technology of the original Firebolt XB9R with a torque-monster engine – a 1203cc air-cooled V-Twin rated at 100 peak horsepower and 81 ft.lbs.

The Buell Lightning XB12S is just as agile and sophisticated as the XB9S but powered with the new XB1203 V-Twin engine it is almost brutal.

2005 MY

Model Year 2005 sees another first from Buell with the introduction of the Lightning CityX XB9SX, the urban streetfighter.

Designed unerringly for the tough and aggressive riding that's required on today's urban streets, the unique styling of the Lightning CityX offers a one of a kind translucent Hero Blue airbox cover and flyscreen, headlight grille, Supermotard inspired handlebars and seat, plus dramatically striking Villain Black wheels.

World-wide Production Figures of Buell (As per end of April 2004)

Model	Year Introduced	Years Produced	Approx. Number Built
XB Family			
Firebolt XB9R/X12R			
Lightning XB9R/12R)	2002	2002 –present	17857
Blast	2000	2000 – present	14298
Lightning X1	1999	1999-2001	9386
White Lightning S1	1998	1998	2184
Cyclone M2	1997	1997-2001	11894
Thunderbolt S3T	1996	1996-1998, 2000	1131
Thunderbolt S3	1996	1996	1974
Lightning S1	1996	1996-1998	4292
Thunderbolt S2T	1995	1995-1996	500
Thunderbolt S2	1994	1994-1996	1,500
Westwind RSS1200	1991	1991	40
Westwind RS1200/5	1990	1990-1992	125
Westwind RS1200	1989	1989-1990	102
Battlewin RR1200	1988	1988-1990	65
Battlewin RR1000	1985	1987-1988	50
RW750	1983	1984	1

Retail Sales Buell

	Total European Sales	Total Worldwide Sales
1999	2398	6869
2000	2059	9112
2001	2394	10059
2002	1797	8057
2003	3000	9960
2004 (Q1)	1065	2375