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Buell 1125R Motorcycle Review

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Photo by Kevin Wing



From any angle the new Buell 1125R has a sleek look

The motorcycle shrugs off the quick change of speed and direction with unflappable stability. It turns in easily and holds the line through the double apex, decreasing radius corner on the track at Laguna Seca. The tach crests at 10,000 RPM before a quick upshift to fourth gear.

Is this the latest repli-racer from Japan or Europe? Nope, it's the 1125R, a brand new sportbike from Buell. The company, in their 25th year, has created an innovative new machine that is fast, easy to ride, and equally at home on the track or street.

Looking Back

A few years ago Buell was struggling with languishing sales from a dedicated, hard-core clientele. Their tubular frame machines were good handlers but were known for their idiosyncrasies and sometimes troubling quality control. The company recognized the problem and introduced a new series of motorcycles called the XB which included the Firebolt, followed by the Lightning and later the Ulysses. These bikes were much better and contained unique engineering features including what Buell called the "Trilogy of Technology" – mass centralization, chassis rigidity and low unsprung weight.

With all the chassis changes, Buell had a great handling motorcycle on its hands. Innovations abounded such as a lightweight frame that also acted as the fuel reservoir, a dry sump engine with the swingarm acting as the oil tank, an under engine muffler and a perimeter front brake system. While the chassis moved forward, the engine was deeply rooted in the past. An air-cooled V-twin descended from the Harley Davidson Sportster, it seemed somehow out of step with the modern chassis. A cry went up from the masses to modernize the motor. Some asked if maybe the Harley V-Rod motor would fit.

The Helicon

Buell has gone one better. Enter the new Buell 1125R with its liquid cooled, V-Twin called the "Helicon." In Greek mythology, Helicon is the mountain where Pegasus, the horse with wings, kicked the mountain to keep it from growing larger. The engine was jointly developed by Buell and Austrian engine-maker BRP Rotax. Power output is a claimed 146 hp at 10,500 RPM and 82 pound-feet of torque. A liquid-cooled, 1125cc, 72-degree V-Twin, it uses a dry sump oiling system (no longer in the swingarm), three balancers to quell vibration and fuel injection with dual 61mm throttle bodies.

Shifting Gears

Aiding the shifting is a new clutch design that uses engine vacuum for both reduced lever action and as an integral back-torque limiting, slipper clutch. Buell claims that closed throttle creates high manifold vacuum resulting in low pressure on the outside of the clutch diaphragm. The 1125R uses a 6-speed transmission with straight cut gears and a "sliding dog" design for claimed lighter shifting action. After two days of riding, it is apparent that this is without a doubt the easiest shifting Buell to date.

New Look

The 1125R has a new front fairing that was developed using computer flow dynamics software. Buell claims this allows modeling of air flow management as if it were done in a wind tunnel. The resulting shape provides cooling air into and through the engine and chassis. It deflects air over the rider and Buell claims it creates a "quiet zone" to reduce the turbulence experienced by the rider. Radiators are mounted to the engine on the right and left side for ease of service, with a coolant overflow bottle inside the right cowling. A 12-liter air

box with ram-air uses a paper cartridge air filter. The air inlet is in the high-pressure area under the lower triple clamp. The muffler is under the engine and no catalyst is used except in California.

The chassis uses massive aluminum spars that double as the fuel reservoir and contains just over five gallons of fuel. The frame is designed to flow air through the chassis and is domestically produced. Front forks are inverted, 47mm diameter Showa units with adjustable preload, rebound and compression damping. The front brake is Buell's ZTL2 (zero torsional load) front brake system, with the rotors mounted on the wheel rims and an 8-piston caliper with four individual brake pads. Braided steel lines are used front and rear. The front brake and clutch levers are adjustable. Rear suspension is a direct action Showa shock with adjustable preload, compression and rebound damping.

Finishing Touch

The tires used are Pirelli Diablo Corsa III, the same as used on World Supersport bikes, and feature dual compound technology with a harder compound used in the middle of the tire and a softer one on the edges. The tires worked well on both the track and the street and delivered utmost confidence in their traction characteristics.

The initial impression on seeing the 1125R is that it looks big with its large front fairing. Move around to the side and its largesse disappears. Its 54.6-inch wheelbase, 30.5-inch seat height and 375-pound dry weight make it feel small when you sit on it. The low clip-on handlebars are set at a good angle and your feet are almost directly beneath you and slightly more inboard than usual.

Power response is strong, especially under heavy throttle. Light throttle, under 3000 RPM launches resulted in some stumbling in our "validation build" motorcycles. The benefits of this engine are readily apparent with a very linear power delivery. Torque is available at all RPM ranges. This is not a peaky powerband – it is very similar to the Firebolt 1203cc air-cooled engine – there is just more power everywhere and it continues to rev long after the Firebolt needs to be shifted.

The chassis is very stable with lots of lean angle available. Turn-in is good but requires some effort. This is not necessarily a bad thing as the chassis feels planted and confidence inspiring at all times and is never twitchy. Suspension compliance was good once the suspension is dialed in to your specific weight and riding characteristics. Minor changes to preload and damping yield large results.

The riding position is sportbike comfortable. This is not a touring bike or even a sport tourer but it is comfortable for what it is. That said, idling in traffic or low speed city driving is not its forte. Wrists, arms and backs may ache under these conditions as on any sportbike. At speed, a quiet bubble of air surrounds the rider and freeway droning at higher speeds is tolerable. Curves and mountain twists are where the 1125R thrives and these are the roads you should point it towards.

One other issue is that the low fuel warning light only yields about 20 miles once the light comes on. According to Buell all these issues were known and should be fixed by the time the motorcycle goes into production.

The 1125R accelerates fiercely up the Rahal straight. Brake markers appear suddenly as the road falls away to the left and then again right. The famous corkscrew behind, you accelerate rapidly down the hill towards the left-hand Rainey curve. You laugh in your helmet as the 1125R holds the line. Can this really be a Buell? Yes, it's the 1125R!

The Buell 1125R should be available in late 2007 in midnight black with diamond blue wheels, frame and swingarm. MSRP is \$11,995.

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