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THE ALL-NEW BUELL 1125R!**

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2007 SCHEDULE

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09.12 • VIRGINIA INTERNATIONAL RACEWAY • ALTON, VA
09.27 • POCONO RACEWAY • LONG POND, PA
10.04 • MID-OHIO • LEXINGTON, OH

10.09 • ROAD AMERICA • ELKHART LAKE, WI
10.17 • STREETS OF WILLOW • ROSAMOND, CA
10.23 • MOTORSPORT RANCH COUNTRY CLUB • CRESSON, TX
12.18 • LAGUNA SECA • MONTEREY, CA

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THE BUELL SOURCE SUMMER 2007



EXPOSING THE 1125R
HOMECOMING HIGHLIGHTS
WALT SIPP TACKLES THE 200
HANGIN' OUT WITH BUBBA



8

The 1125R makes its unofficial debut at Road America during the Homecoming festivities. Two weeks later, the new bike thrilled Buell owners at a Friday night VIP Launch Party at Laguna Seca, where it continued to draw crowds all weekend.



4 Buell Lines

5 Back Talk

6 Factory Buzz

FASTRACK

12 Buffalo Power

The story of a determined privateer Buell® racer, the first to finish the Daytona 200.

GEARHEAD

16 Too Cool

Erik talks liquid cooling, while smiling ear-to-ear.

24 Upping the Air

The Buell Thunderstorm® engine gets even better.

26 Kindred Spirits

Similar DNA strands lead to two completely different rides.

30 Ask Abe

Exploring the balance between torque and horsepower.

STREETWISE

8 Locations, Locations, Locations

Recapping the hit that was Homecoming.

10 Changing Gears

Bubba Blackwell's greatest stunt is making you smile.

11 Streetfighters



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Matt King

Visit Buell Motorcycle Company on the internet at buell.com.

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gsdesign.com

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BUELL LINES »



The 1125R is not only emotionally satisfying, it is truly a great motorcycle.

Well, I have to say I am in shock recovery right now from the 1125R launch. This is a project that has been on my wish list for longer than I care to admit! But after all the years building the Buell business to the size, the quality, and the skill level necessary to build a true American superbike, I still really wasn't sure how the sportbike world would react. The reaction has been incredible.

From the rush on the stage by the dealers to the instant magazine covers to the crush of sportbike riders at Laguna, the answer has been a resounding YES! That my hopes were right; that the world was ready for us to do a superbike. If there ever was an example of good things coming to those who work hard and have patience, boy this is it!

The 1125R is not only emotionally satisfying, it is truly a great motorcycle. Though it was hard to wait, if the team at Buell wasn't as experienced and capable as the 1125R team is now, the motorcycle wouldn't have been as good. The fact is that many of these guys have worked on product after product, from Blast® to Firebolt® to Ulysses®, honing their skills and judgment to a point where we really could deliver the motorcycle I (and so many other sportbike riders) wanted.

It may seem trite to say this, but ride an 1125R, and you will see. Even better, get your friends who have always owned high-performance import motorcycles to ride one. I think you will all be grinning the same way I am!

Best of roads to you,

Erik Buell

« BACK TALK

Readers are an integral part of *Fuell*®. Whether it's praise, criticism, or anything else you want to share with other Buell® owners, we want to hear what you have to say about the magazine, your bikes, events, racing, trips, or just motorcycling in general. Send letters or submissions for the Streetfighters section to fuelleditor@gsdesign.com, or mail them to *Fuell*, 3700 W. Juneau Ave., Milwaukee, WI 53208.

MORE RACING INFO!

I enjoyed the Homecoming events this weekend. Living nearby makes it easy to attend all events. I am just beginning to get into the ASRA and the CCS racing series. It would have been nice to have some information on the Buell racers: what class they ride, bikes, numbers, etc. I really enjoyed the weekend and am looking forward to next year.

Daryll Boettcher
Watertown, WI

... OR NOT

Hate to be a party pooper, but I think the *Fuell* issue I received has gone overboard with racing. I liked the way you used to have the section in the back of the magazine, where you had a picture of a Buell owner who wrote about a ride or an adventure done on a Buell. It allowed you to relate to a fellow rider. I mean, honestly, are there that many people who race bikes? I believe you'll find that most are just casual riders who use it for their own enjoyment or for commuting back and forth to work.

Richard Koch
Deer Park, Long Island, NY

Daryll and Richard: Obviously, providing content for Fuell is a balancing act, and as we continue to move forward with this new format, we'll be working on getting that balance just right. So we definitely appreciate your feedback!

For Daryll, racer profiles will continue to be a regular feature. We like spotlighting some of the guys that epitomize the spirit of the Buell privateer – such as our feature on Walt Sipp on Page 12 of this issue. For guys like Richard, we would love to include more stories about Buell riders having a great time on their bikes. Do you have a story and photos to share? If so, send them to fuelleditor@gsdesign.com. We'll be happy to consider all submissions. –Ed.

TOUGH ULY

I bought a 2006 Ulysses® last year to travel on, and during one of my day runs through Vermont, I had a young driver turn in front of me. The handling of the Ulysses made the difference in being able to ride away. The scratches that remain on my bike remind me of how vulnerable we are when we ride. Thank God for some experience and a quick reacting machine. The Ulysses is truly a great bike.

Mike Kirwan
East Rochester, NH

UP IN THE AIR

Okay, okay, I keep waiting for a replacement to come out for the 1999 Thunderbolt® S3T I bought in 1998. I've put a bunch of great miles on it and would really like to stay with the Buell marque and retire the trusty '99. Problem is, although I like what I've seen with the Ulysses – even with the lower, narrow seat – it's too tall for me. Anything in the works for another sport-touring bike or suspension lowering of the Ulysses? If you notice (and I'm sure you did), all of the early reviews of the Ulysses indicated that people were not crazy about the seat height, so it's not just me. Please don't make me look to those "other" brands for my next "S3T."

Larry L. Mayne
Huntington, WV

Great question, Larry. The S3T was an enormously popular motorcycle in certain circles, and people often wonder about a "replacement" for it. Have you given the Super TT XB12STT a serious look? It's a much more capable all-around motorcycle than most people realize. Take a look at the article on Page 26 in this issue that puts it through its paces as a touring machine. –Ed.

THE ART OF THE BUELL

My life as a rider has shifted focus over the years. First it was all about the ride, then it was all about making noise, then it was showing off that big rear tire. Now it's all about the ride again. Still, I can't get over the Buell aesthetic: the perforated Pegasus wings next to the foot pegs, the tiny red gates on the keyed locks, the unique speedometer, that Gaudiesque taillight, the pasta-colander tail section, the bug-eyed headlamps, and antennae mirrors. Was all this Erik's brainchild as well? Is there some Italian blood running through his veins? Could those responsible for the art of the Buell please stand up?

Edgar Cheetham
Prince Frederick, MD

Hmmm ... sounds like a great topic for a future feature. Stay tuned! –Ed.

Could those responsible for the art of the Buell please stand up?



TALK BACK TO US:

Send us an e-mail (fuelleditor@gsdesign.com). Submission of a letter constitutes permission to publish it in any form or medium. Letters may be edited for reasons of space and clarity.

FACTORY BUZZ »

FRENCH PROTWINS

Two for the Money

After an exceptionally strong start, things are tightening up in the French Protwins series for Buell XBRR riders Bruno Destoop of Grenoble H-D and Michel Amalric of Macadam Moto. Entering the fifth race of the eight-race series at Le Mans, the two riders were in a dead heat for the overall lead. With two wins apiece (including two 1-2 finishes), they shared a 15-point lead over their nearest competitor, former GP rider Louis Luc Maisto and his 1098 Ducati.

Things got a little bumpy at Le Mans, however, when Amalric failed to finish due to a mechanical failure, while Destoop managed to grab the third spot on the podium. Maisto moved into second overall with a second-place finish, now 10 points behind Destoop for the championship lead. The race was won by Frédéric Bottoglieri on an Aprilia RSV 1000.

With just three races left in the series (including two races at Spa, August 11-12), anything could still happen in this wide-open class. Open to twin-cylinder motorcycles between 620 and 2000 cc, with any type of chassis and no weight limits, the Protwins class is well-known in Europe for its exciting racing among a wide variety of bikes.



PHOTOGRAPHY: GERARD DELIO

2007 BUELL DEMO SCHEDULE

Mid-Ohio
Mansfield, OH
September 28-30

Biketoberfest
Daytona Beach, FL
October 18-20



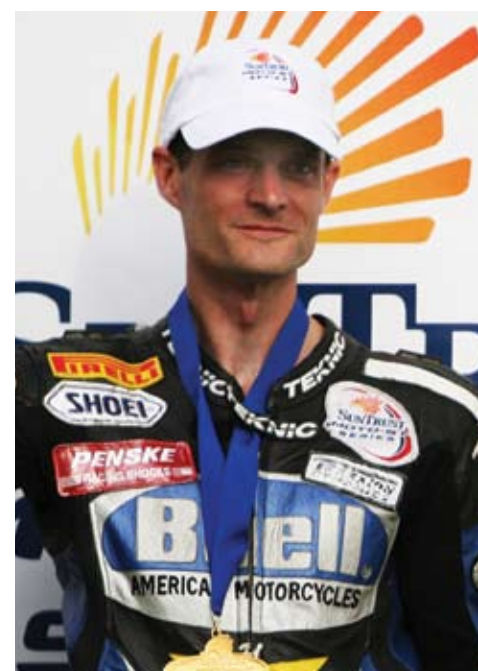
If the Suit Fits ...

BUELL INTRODUCES NEW ADVENTURE JACKET/PANTS WITH SWITCHBACK TECHNOLOGY

Go where only Buell riders dare to go with this new high-tech riding suit. What is "Switchback Technology," you ask? Simple: outer panels that zip off to provide added airflow and additional rider comfort. It's what all the coolest riders will be wearing this season. To get yours, head to your nearest Buell dealer or visit buell.com.

SUNTRUST MOTO-ST SERIES

Higbee Hurt, Team DQ'd in Iowa



Richie Morris Racing's race to the GST class championship of the SunTrust MOTO-ST endurance series was dealt a serious blow at Iowa Speedway, July 14, when Shawn Higbee hit the wall hard in Turn 2. Higbee sustained multiple serious injuries in the accident, and his bike was destroyed.

The race was red-flagged with 30 laps remaining. Because they were leading the class at the time of the accident (by more than three laps), Higbee and teammate Dan Bilansky were initially awarded the win. But the team was later disqualified because their Buell® Firebolt® could not be presented for post-race inspection. James Gang Racing (Hoban Brothers Racing/Hal's Speed Shop/Appleton Buell) and riders Paul James and Jeff Johnson were then given the victory.

With one race remaining in the series (the 8 Hours at Daytona, October 22), the Richie Morris team slips to fourth in the standings, 18 points behind the Touring Sport Ducati team in first. Meanwhile, James Gang Racing moves to second overall, just two points out of the top spot entering Daytona. At press time, there was no word on who might replace Higbee, though the team did state its intentions to finish the season.

At press time, Shawn Higbee was recovering at his home in Oconomowoc, Wisconsin.



JUMP ON IT!

Be among the first to demo the all-new 1125R – on the track! An additional 10 slots for each of the Inside Pass™ demo events have been set aside exclusively for Buell owners, beginning with the session at Miller Motorsports Park in Tooele, Utah, September 6.

To secure your place at an event, log on to the Owners section of buell.com for details and to register!

TEAM AMMO CAN

Smokin'!!

With a speed of 168.90624 mph at Maxton, North Carolina, the Buell® XBRR™ of Team Ammo Can set a new East Coast Timing Association (ECTA) land speed record May 20. The run was more than 9 mph faster than the previous record in the MPSPG/1350/4 class (Modified/Partially Streamlined/Pushrod/Gas, 1350 cc, four-stroke).

"With a little gearing adjustment and some attention paid to our technique, we expect to see in excess of 175 mph soon," said Pete Strunk, the team's rider. "We plan a further assault on records in the unstreamlined and fuel classes, since these records seem to be within reach, as well."

Congratulations to Pete and Chief Mechanic "Slo Jon" Stauffer of Team Ammo Can on a job well run!

ASRA PRO THUNDERBIKE

Estok Extends Lead

Buell riders continue to dominate the American Sportbike Racing Association (ASRA) Pro Thunderbike class, with Deeley H-D/Buell Canada/Ruthless Racing rider David Estok setting the pace. With a second-place finish at Road America on July 8, Estok stretched his Thunderbike lead to 27 points. BMW rider Brian Parriott took the top spot.

After five of eight ASRA Pro Thunderbike rounds, Estok leads the pack with 147 points. With a third place at Road America, teammate Darren James moves up to second with 120 points, while defending champ Dan Bilansky (Hal's H-D/Buell Hal's Speed Shop) finished fourth, dropping from second to third overall with 119 points. Buell racers Sam and Joe Rozynski rounded out the top five.



Erik signs the tail section of a beautiful RS1200 (one of only about 65 made) belonging to Al Moore, who brought the bike from his home in Vidalia, Georgia. And the bike is more than a showpiece – Al rode it from East Troy to Kenosha for the festivities at Uke's that afternoon.

LOCATIONS, LOCATIONS, LOCATIONS

WHERE IN WISCONSIN WAS BUELL HOMECOMING 2007?

THE MAIN EVENT KICKED OFF AT THE BUELL FACTORY IN EAST TROY, WISCONSIN,

on Friday, where a record number of Buelligans gathered to hang out with Erik, show off their rides, tour the plant, eat lunch with the crew, collect a few autographs, and attend a tech seminar or two.

But, Homecoming fever was also spread throughout southeast Wisconsin. It started in New Berlin on Thursday, where Hal's H-D/Buell treated Buell pilgrims to the Team Xtrem stunt show. It spread to Racine that night, where Erik & the Thunderbolts performed a late-night gig (and sold a few pre-release CDs). It heated up in Kenosha, after Keith Ulicki and Bubba Blackwell led the ride from

East Troy to Uke's H-D/Buell (followed by an awesome show by Bubba). And it was at Road America in Elkhart Lake, where Homecomers put the Buell demo fleet through its paces, beat the heat at the Buell hospitality tent, and took in some exciting Buell racing action at Road America.

Of course, for those who stuck around the racetrack until Sunday afternoon, it all reached a fever pitch at the unofficial unveiling of the long-awaited all-new liquid-cooled 1125R. It was the first public viewing of this exciting new motorcycle – a special exclusive for registered Buell owners.

Not bad to celebrate 24 years of amazing American motorcycles. But just imagine what's in store for the 25th anniversary in 2008!

Go to the Owners section of buell.com for a full recap of the event, including daily recaps, photos, and owner testimonials.



Bubba Blackwell and Keith Ulicki prepare to lead the ride from East Troy to Kenosha.

Standing room only at the afternoon technical seminar in East Troy, where Erik spoke quite candidly about some of the challenges the company faced in the early years.



The amazing paint job on this Firebolt* drew a frightening amount of attention.

FIREWORKS GUARANTEED IN 2008

Buell Homecoming promises to be bigger and better than ever in 2008, as Buell Motorcycle Company celebrates its 25th anniversary with a bang. Mark your calendars for the long Fourth of July weekend and get ready to enjoy the best of southeast Wisconsin in the summertime — including special concerts at Milwaukee's Summerfest, the world's largest music festival!

STREET  FIGHTERS

HIS RED UNIFORM WAS SOAKED WITH SWEAT AS HE SQUINTED INTO THE NAKED ALABAMA SUN.

Worn from another day of dead-ending Coca-Cola to the masses, he turned the key in his truck's ignition and as the engine sprang to life, reflected on the murk that swarmed through the gloaming; the news that hit him (and the rest of his Alabaman natives) like a cinder block to the face: Davey Allison was dead.

CHANGING GEARS

THE EVOLUTION OF AN ENTERTAINER

It was July 13, 1993 – the moment Bubba Blackwell realized life (always too short) demanded more of him than he'd been willing to offer. So far.

Flash forward to July 6, 2007 – the moment Bubba Blackwell is scoping his make-do arena in the parking lot of Uke's Harley-Davidson/Buell on a balmy summer eve. It is the crux of opening day for Buell's annual Homecoming event, and Bubba – dressed now in his "uniform" of red, white, and blue – saddles back a moment to reflect upon the 14 years that just seemed to throttle past.

"Ya know, if you get 10 years out of any entertainment career, you're above and beyond what's expected of you," he says in his endearing casual boyish drawl. "And I've not fooled myself. By no means am I the best stunt rider out there. But in my opinion, there is much, much, *much* more value in entertainment."

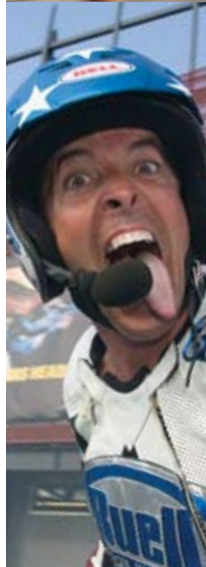
Case in point: Evel Knievel.

"He would take an activity," Bubba says, "that took literally five seconds to complete and turn that into a huge production. *That's* the way I've modeled my career." A career that started (unofficially) in 1990 when a local racetrack owner asked for a willing volunteer to jump some cars between races. Bubba was first to raise his hand, even though he'd never jumped before.

"I didn't even own a motorcycle," laughs Bubba, who was strictly a road racer at the time. But Bubba's never been one to allow such technicalities to stand in his way. So he borrowed a buddy's bike, built his own ramps, and taught himself (a few feet at a time), how to jump.

"I remember saying to myself, *Oh my God, what am I thinkin'!?*" Bubba recalls. But he did it. Then he did it again. And again. And jumping led to showmanship. And showmanship led to stunting, and to Buell sponsorship. And almost before he knew it, 14 years had blown by Firebolt®-fast. But Bubba (now 40) has started thinking about slowing it down some. Well ... sorta.

"There comes a point when you have to start evaluating your future," Bubba says. "But I love what I do so much, bein' out here, provin' a 40-year-old can still draw a crowd. I'm livin' the dream – and I'm not done yet!"



No he's not. At Homecoming, Bubba announced plans to perform more jumps next year – including one last go at the failed jump that nearly took his life in 2001 – before he parks his jumping bike for good.

And just as quickly as the news of more jumps induces a raucous applause from his spirited fans, Bubba Blackwell flashes one of his trademarked toothy Mad Hatter grins and pops a wheelie to wrap one helluva Homecoming performance.

This much is sure: The man knows how to work a crowd. **fuel**

PATIENCE PAYS

Last year, when I was 19, all my buds were catching motorcycle fever – all of them, buying Suzuki GSXR's and Yamahas. But I didn't want a repli-racer built solely for lap times. So I held out. I was working in Alaska as a bush powerlineman at the time. Some friends dragged me to a Harley® shop, and I started looking around, not too keen on the Harleys. But then I found the Buells. I knew immediately I had to have one. The Lightning® had everything I was looking for: a wide powerband, awesome handling, all-day comfort, and badass looks. I saved all summer and ordered a brand-new XB12S when I got home to South Dakota. I've never had more fun on a motorcycle than I do on my Buell.®

Ben Murphey » Sioux Falls, South Dakota
2007 Lightning XB12S



MOUNTAINEERING MACHINE

A few years back, I took a motorcycle safety course because I'd always wanted to learn how to ride. After I graduated the class and got my license, I picked up a 2000 Harley-Davidson® Sportster® 1200 and enjoyed it for a while ... until I walked through an H-D shop and happened upon a Buell® CityX. It was love at first sight. I sold the Sportster and bought the Buell, and it fits me like a glove. I love riding the open roads, like US 93 in northeastern Nevada, which runs alongside the Ruby Mountains. They make the perfect backdrop for a riding shot, but I'd much rather be *in them*, cornering the curves like a dream on my Buell.

Jennifer M. Spencer » Elko, Nevada
2005 Lightning CityX XB9SX



EXPLOSIVE POWER

Currently assigned to Patrick Air Force Base as part of the Explosive Ordnance Disposal Flight, it doesn't take a leap of the imagination to know I love things that put me on the edge. For instance, my Firebolt® XB9R. It's my boy. I love the torque and the ease with which I twist through the corners. So I entered it in a "go SLOW and go FAST" competition at a bike and car show held on base – I wanted to drum up some interest in a riding group – and my Buell took second place in the stock bike class. I have the trophy to prove it (see photo)!

John Lawson » Patrick Air Force Base, Florida
2006 Firebolt XB9R

Want to be a Streetfighter? Take your best shot for the best chance to appear!

E-mail your high-resolution photo, along with a few paragraphs about you and your Buell, to: fuelleditor@gsdesign.com. All Streetfighter submissions become property of Buell Motorcycle Company.





Buffalo Power

THE FIRST BUELL® MOTORCYCLE EVER TO FINISH THE DAYTONA 200 IS OWNED BY A RETIRED BISON RANCHER. NOT A FACTORY TEAM. NOT A DEALERSHIP.

JUST A BUELL ENTHUSIAST WHO WANTED TO SEE A BUELL IN AMERICA'S BIGGEST MOTORCYCLE RACE.



HOW'S THAT FOR "GRASS ROOTS"?

The XBRR™ in question, piloted with skill and unrelenting determination by Walt Sipp in the 2007 race, was originally purchased with track schools in mind, says its owner, Dick Fish of Cardston, Alberta, Canada.

"But that's a lot of money for a track school bike," he says. "I realized it ought to be campaigned [in a racing series]."

In a perfect world, Dick, a motorcycle enthusiast all his life and former cross-country racer, may have liked to take on the 200 himself. But at 65, his saddle time these days is devoted to more "reasonable" pursuits – such as setting an Iron Butt record for riding from Prudhoe Bay, Alaska to the southern tip of South America.

"I'm old and retired now, over the hill for most forms of racing."

So if the XBRR was going to be raced, Dick needed a rider. Somebody he could trust to do right by his new bike. Somebody mature and responsible. But also somebody hungry to win.

MEANWHILE, IN BLUE SPRINGS, MISSOURI ...

Walt Sipp needed a ride for the 2007 season. The Daytona 200? Not even on the radar screen. A well-respected veteran of the Thunderbike and Supertwins circuits, he had lost some support from 2006 and was just looking for a way to get back on the track. So when he put the word out that he was seeking sponsorship for '07, he was thrilled to get a call from Canada. And discussions began about putting together the team that would be known as "Bison Racing."





DESPITE BEING PRETTY BANGED UP, HE DID WHAT HE HAD TO DO TO BECOME THE FIRST BUELL RIDER EVER TO CROSS THE FINISH LINE AT THE DAYTONA 200.



“When I first phoned Walt, it was to talk to him about CCS and ASRA,” Dick explains. “But it evolved to talk about Formula Xtreme. I don’t know how Daytona came up, but it did.”

“At first it didn’t seem like it was going to work out,” Walt recalls. “Alberta, Canada is a long way from Blue Springs, Missouri, and Dick really wanted to be at the races. But the more we talked, the better it felt. Practically at the last minute we decided, ‘Let’s run the Daytona 200.’”

Next thing you know, a deal was in place, and Dick delivered the XBRR to Missouri, where Walt would start prepping the bike and assembling a crew.

GRASS ROOTS GET GREENER

As word spread that a truly privateer Buell team would be competing in the Daytona 200, the effort attracted a lot of attention – and a surprising amount of additional support.

“A lot of people stepped up and helped this whole deal out,” Walt says. “People were really excited

to have a Buell in the 200 – and Darren James’ additional entry was very last-minute. People who had nothing to do with it sent us financial support. It was awesome!”

On the track, Walt found himself going faster and faster on the new bike. He qualified 38th but felt he could have done much better. “I thought we had another second or second-and-a-half in us,” he says. “I was going to go back out on a fresh set of tires, but there was an incident on the track and we got caught out. But we made the first wave, which was one of our goals.”

Still, his expectations for the race were high. His best lap times in practice seemed to put a top-20 finish within reach. Those lap times, of course, don’t account for losing seven laps in the pits following a spectacular crash.

COMING TOGETHER

The Daytona 200 is not like Thunderbike or Supertwins, where if you get knocked down there’s

a better chance than not it’s going to be by another Buell rider. There were just two Buells on the track that day – two Buells! – in a field of 61.

So when Walt went down, you probably would have thought it was one of those metric bikes on the other side of the impact. Only it wasn’t. It was the other Buell.

“It was a racing incident,” he says stoically of his collision with Darren James. “It happens. You move on.”

In this case, “moving on” meant getting up, getting back on the Bison Racing Buell XBRR, and heading to the pits for repairs. As high-sides go, it was not that spectacular. The bike came down hard but then just slid, so the damage was confined to a few bent and broken parts on the right side.

Meanwhile, Walt also came down hard on his right side – and then tumbled a bit. Despite being pretty banged up, he did what he had to do to become the first Buell rider ever to cross the finish line at the Daytona 200 (James and the Deeley H-D/Buell XBRR dropped out with a mechanical issue a few laps after the incident).

“I was so proud of him to get back up and finish the race,” Dick says. “I mean, he was hurt. He was still hurting last week [two weeks after the race]. But he got up, came into the pits, then went out and ran the same lap times he did before the crash.”

In fact, Walt’s last lap was his second fastest of the day. Much credit, of course, goes to the pit crew, a dedicated bunch of skilled and enthusiastic supporters gathered from Illinois, Missouri, Wisconsin, and beyond. Mike Kirkpatrick, John Kinzer, Tim Kinzer, A.J. Frels, and crew chief Terry Galagan quickly got the damaged bike back in race shape – and gave Walt a standing ovation when he pulled in after the race was over.

THE LEGACY

“From a racer’s standpoint, I’m not at all happy with 46th,” Walt says. “I want to win every race I enter, and I know I could have done a lot better. Two riders who I qualified ahead of finished 17th and 19th, so a top-20 finish was definitely feasible.”

“But as a Buell enthusiast, I’m really stoked that we were able to finish. It was pretty special, especially considering the caliber of riders who were out there. And I was thrilled for all the people who helped make it possible.”

In the end, the Buell XBRR did exactly what it was designed to do: put a fast, high-quality, race-ready motorcycle within the reach of people like Dick Fish and Walt Sipp. And be competitive in big races like the Daytona 200.

Somewhere in Canada, a herd of bison has just become a part of Daytona history. So next time you sink your teeth into a nice, juicy buffalo burger, give a nod of appreciation to those who gave their all for Buell racing. fuel



IT WOULD BE ANOTHER WEEK BEFORE HE COULD LET IT OUT OF THE BAG OFFICIALLY, AND ERIK BUELL WAS HAVING A HARD TIME CONTAINING HIS EXCITEMENT. "THIS MOTORCYCLE," HE SAYS, "IS GOING TO BE THE START OF

A WHOLE NEW ERA."



TOO COOL

With an all-new liquid-cooled, 1125cc DOHC V-twin engine – the result of an exclusive collaboration between Buell and BRP-Rotax – the 1125R is the most powerful street-legal motorcycle ever to bear the Buell name. It pounds out 146 crankshaft horsepower while delivering optimized usable power, with a broad powerband across its 10,500 rpm range. In other words, it's a Buell through and through, built from the rider down without compromise in handling or rideability.

So Erik's excitement is well warranted. Besides being just flat-out fun to ride, the 1125R firmly establishes the Buell Motorcycle Company as more than a niche player.

"What the release of the 1125R says – along with the announcement we made in January that we'll be releasing a dirt bike within two years – is that Buell is a full-blown American sportbike company."

BASICS AND BEYOND

The first thing Erik wants you to understand about the 1125R is that the design fundamentals remain the same. Nothing has been compromised in developing the extra horsepower.

"All the things we've been talking about all these years are absolute fundamentals. They're not some gimmick that I used in the air-cooled bikes, and I'm not going to abandon them for a liquid-cooled bike. The Trilogy of Tech™ is applicable to any type of motorcycle.

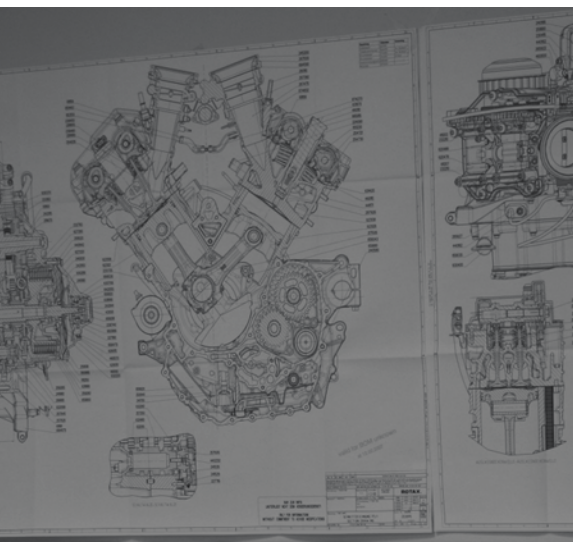
"But the 1125R is not just an XB with a new motor stuffed in. This is completely new. The swingarm is completely new. The forks are completely different. It's fundamentally, in principle, the same. But every part is different.

"I mean, the XB has won 'best-handling bike' several times, so we know how good that is. We think this one is even a little better – but in a range where few people would even know."



"ALL THE THINGS WE'VE BEEN TALKING ABOUT ALL THESE YEARS ARE ABSOLUTE FUNDAMENTALS. ... I'M NOT GOING TO ABANDON THEM FOR A LIQUID-COOLED BIKE."





“THE RESULT ... IS A VERY HIGH-PERFORMING MOTORCYCLE – BUT WE TAKE A DIFFERENT APPROACH TO GET THERE.”



In other words, anyone who may think that handling has been compromised to accommodate the requirements of liquid-cooling would be grossly mistaken. The new Helicon engine, for instance, is significantly lighter than the air-cooled XB Thunderstorm,* Erik says.

And the overarching goal of the Buell Motorcycle Company – to build real-world, high-performance motorcycles that are fun to ride – remains absolutely intact.

“We really worked a lot on the chassis, refining the torsional and lateral rigidity to get some of the stiffness goals we’ve been trying to achieve. And it really works.

“Like the big forks [47 mm] ... nobody has ever run such big forks on a sportbike before. The way that came about was, we were out testing experimental chassis stuff against some competitive bikes, and doing very well. But then it seemed like we were at a dead end with chassis advances, in short, frame changes that should have helped weren’t making much difference. So we talked in detail with our riders, and looked at all the instrumentation data and then it became clear. What we realized is that the only reason we were struggling with the front end, compared to the other bikes, was because the back end was flawless – which is where the competitive bikes were weak. So our front seemed weak by comparison, even though it was state of the art. It was the weak link in the system, and just had to catch up to the back end. So we had these special forks built to get the front end more in balance with the torsional and lateral rigidity of the chassis, and boy did it work!”

The way the bike handles is just one aspect of what it means to be “Built from the Rider Down.” And in this case, the handling goals were a driving factor in the design of the engine.

“This was very much a chassis-driven engine design. And this was the first time we’ve really been able to do that: co-design an engine and a chassis with virtually no constraints. What that means is we were able to do things like put the swingarm pivot exactly where we want it ... put the engine mounts exactly where we want them, and so on.



INSIDE THE HELICON

With 146 horsepower, 82 ft. lbs. of torque, and a 10,500 rpm redline, the liquid-cooled, 72° V-Twin Helicon™ engine brings Buell power to new levels – without sacrificing any of the other performance characteristics Buell is known for.

RAM AIR: For additional performance gain at higher speeds.

DDFI III AND 61 mm DUAL THROTTLE BODIES: For optimal air/fuel mix, superior air intake, and maximum engine performance and throttle response.

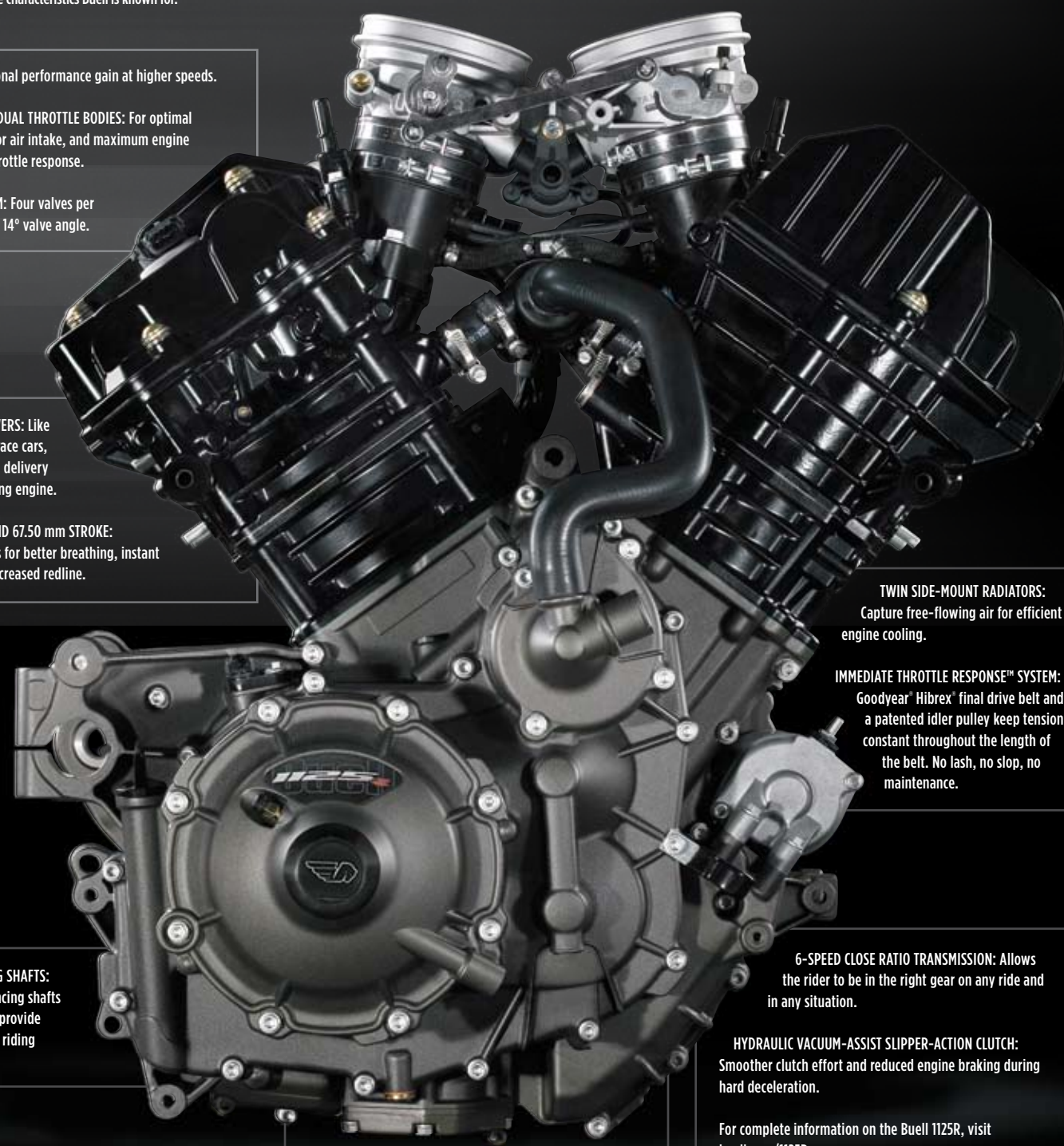
DUAL OVERHEAD CAM: Four valves per cylinder and a steep 14° valve angle.

FINGER CAM FOLLOWERS: Like those found on F-1 race cars, for smoother power delivery and a quicker-revving engine.

103.00 mm BORE AND 67.50 mm STROKE: Allows larger valves for better breathing, instant response, and an increased redline.

PRIMARY BALANCING SHAFTS: Three internal balancing shafts reduce vibration to provide a more comfortable riding experience.

INTEGRATED DRY SUMP AND OIL RESERVOIR: Eliminates the need for a separate oil tank and centralizes mass for enhanced flickability.



TWIN SIDE-MOUNT RADIATORS: Capture free-flowing air for efficient engine cooling.

IMMEDIATE THROTTLE RESPONSE™ SYSTEM: Goodyear® Hibrex® final drive belt and a patented idler pulley keep tension constant throughout the length of the belt. No lash, no slop, no maintenance.

6-SPEED CLOSE RATIO TRANSMISSION: Allows the rider to be in the right gear on any ride and in any situation.

HYDRAULIC VACUUM-ASSIST SLIPPER-ACTION CLUTCH: Smoother clutch effort and reduced engine braking during hard deceleration.

For complete information on the Buell 1125R, visit buell.com/1125R.



"And we didn't start with a bunch of specific goals for things like horsepower and top speed. We started with how we wanted the bike to feel and how we wanted it to ride – what we wanted the rider to experience on this bike. The performance specifications, then, become almost byproducts of making those rider goals our priority. The result is the same – a very high-performing motorcycle – but we take a different approach to get there.

"I wanted the power and torque of an XB12 – as a starting point but then not stop. That is, I wanted all that, plus an extra 3,000 rpm at the top. And that's what the engine likes. So its got dead-flat torque, an unbelievable torque band. And in the videos [posted on buell.com], that's what the riders talk about, how deceptively fast it is.

"It's almost like an electric motor. You turn the power on and it just goes rrrrrrrrrrr! That's what the riders are saying: 'It feels so easy but look at the lap times!'"

Another result of this approach is the Quiet Zone™ rider environment of the 1125R. The concept was inspired by the bodywork on the RR1000, one of the first (and slipperiest) Buell™ motorcycles ever built.

"I can still remember the first time I rode an RR1000 with that bodywork on it. I had the thing dimed, of course, going way too fast. I came over a rise and there was a tractor-trailer coming the other direction. I was like, 'Oh, crap!' As I went by it, I tucked in behind the bubble and braced for the blast from the wind wake. But instead it just kind of went poof! The bike went right through it like it didn't exist. Whoa! I never thought about that part of it! It's not only fast, it's also comfortable. And anybody who has ever ridden an RR in the rain knows you don't get very wet.



"That's what we were looking to re-create with the Quiet Zone on the 1125R. It's built around the same principles, of having a good bubble that goes around the rider. It makes you fast, because you don't have the drag of all these elbows and fingers and stuff sticking out, creating one vortex on top of another, and building a cascade of crap behind the bike. But it also helps with the comfort because you don't get all that buffeting."

One of the highlights of the development process was a mock six-hour endurance race staged at Barber Motorsports Park. Two bikes and four (very talented) riders: four-time Canadian Thunder champion Darren James, former and reigning ASRA (American Sportbike Racing Association) Thunderbike champions Dave Estok and Dan Bilansky, and three-time Irish champion and former Moto GP rider Jeremy McWilliams.

"Those guys are all champions – and very competitive. It was fun watching them try to outdo each other. Dave and Danny were arguing a bit; one of them has the ASRA race [lap] record at Barber, and the other has the qualifying record. Which one is faster? It depends on which one you ask! Endurance racing is tough, and the bikes held up very well. And everyone was impressed by how fast they were."

The 1125cc Helicon engine was built with room to grow. No race kit is available at this point, but the potential is there to increase power considerably.

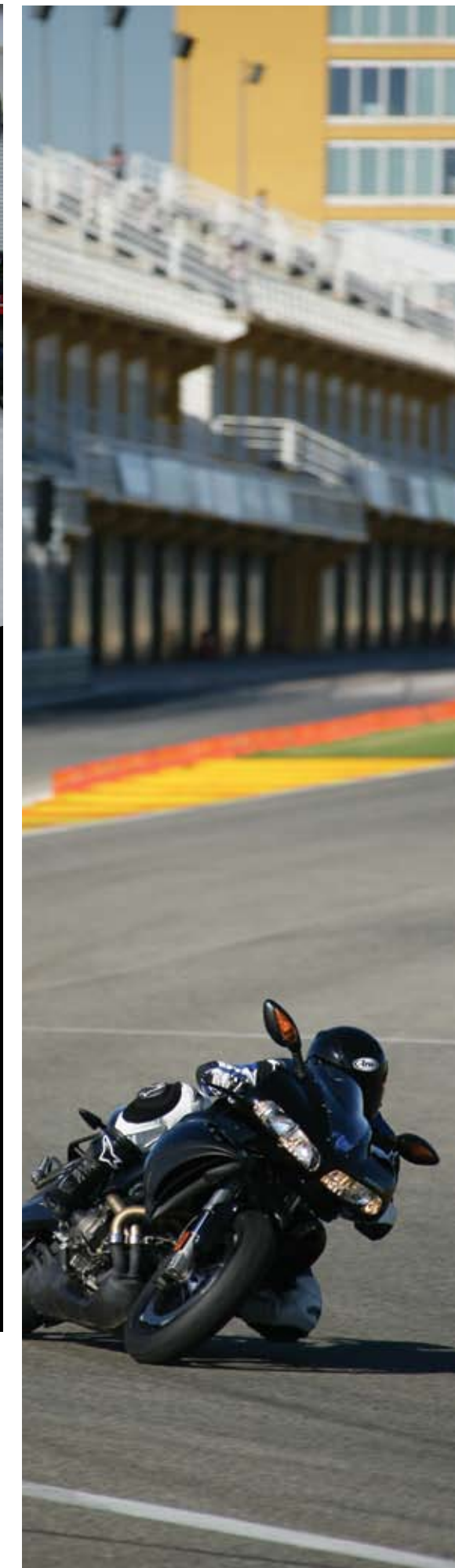
"If you wanted to make a race version out of it, it's got a super strong crankshaft, short stroke, big bore, huge valves, all the great fundamentals. But getting the maximum horsepower out of it was not the goal with this bike. Right out of the box, it's providing very credible superbike performance. We've always strived for maximum rideability and reliability. In other words, very useable and very real-world. And incredibly fun to ride."

So, what does all this mean for the future of the air-cooled XB lineup? Not much – at least, not in terms of its importance to the company. The Thunderstorm engine is alive and well – and continuing to evolve.

"If anything, the 1125R should improve people's perception of the Buell air-cooled bikes. Because now no one will think, 'Oh, they're just using an air-cooled motor because they have to, because of Harley.' We never were, of course. I've been saying for years that the air-cooled XB engine is a great engine, but a certain percentage of people never believed it.

"Now those people can look at the new Helicon engine with a fresh eye, without any baggage attached, and say, 'Wow, look at what a great choice they made for the liquid-cooled engine! Maybe Buell really knows their technology after all!' And that reflects well on the air-cooled lineup.

"So I'm not about to get rid of that engine. In fact, we just improved it for 2008." **fuell**





UPPING THE AIR

Reliability and durability have long been hallmarks of the Buell® Thunderstorm® engine, and are major contributors to Buell's lowest cost of ownership ranking among all the top brands. For 2008, those attributes will be taken to an even higher level. Refined XB engines will deliver buyers the same unique V-twin character, sound, torque, and power with even greater reliability, innovations that translate into the superior ride quality and cost-effective, low-maintenance experience owners expect from a Buell. **fuel**



REFINEMENTS TO THE THUNDERSTORM®



• Higher 7,100 RPM redline (reflected on the new instrument panel graphics on every XB model).

• New DDF13 ECM with increased capacity. Integrated computer technology actively controls and monitors the TPS (Throttle Position Sensor), IAC (Idle Air Control), and spark timing, automatically zeroing the TPS and adjusting the fuel metering at idle. These refinements provide a smoother idle, while substantially reducing the service check interval.

• Elimination of timing cover. Engine timing information is received from a new crank position sensor, eliminating the need for manual timing. Computer technology actively monitors and adjusts timing 30 times per rotation, up from the previous two times per rotation. This allows the engine management system to adjust fuel mapping and timing to riding conditions more frequently and precisely, resulting in an improved ride experience and superior service life.

• New eight-row oil cooler with Jiffy-Tite connections. To accommodate the increase in crank and bearing oiling changes, oil cooling was enhanced. All five oil lines incorporate quick-release Jiffy-Tite fittings on both ends for a tight and reliable seal.

• Increase in crankpin size and larger diameter bearings. Larger left main bearing size accommodates the increased crankpin, providing superior durability over the service life of the vehicle. This makes service easy, with an improved engine sprocket joint bolt design.

• Progressive throttle control system improvements. Provide a smooth throttle feel from stops and reduced rotational travel to full power.

• New higher output oil pump. XBRR race technology is duplicated in the new oil pump. Supporting the crankpin and new bearings, the new oil pump design results in longer service life for all dynamic systems of the powertrain. (Removes oil pump worm drive gear.)

• New oil pump and gear cover colors match engine. The oil pump and gear covers are color-matched to each engine, with a magnesium tone color cover on the XB12 engine and a black cover to match the XB9.



KINDRED SPIRITS

BY REG KITRELLE

“ DESPITE THEIR COMMON DNA, THE SUPER TT AND THE ULYSSES OFFER DIFFERENT RIDER EXPERIENCES. ”

THE TT vs. THE ULY

THE BUELL® ULYSSES® AND I HAD REACHED AN UNDERSTANDING. IN THE MIDDLE OF THE NIGHT. IN THE MIDDLE OF NOWHERE. OUR, UH, CONVERSATION BEGAN AT THE START OF THE INAUGURAL “SPORTBIKE 1000” LATE LAST SUMMER. I HAD SPENT SEVERAL HUNDRED MILES ON THE ULYSSES PRIOR TO THIS EVENT, BUT 1,000 MILES IN 24 HOURS HAS A WAY OF MAKING OR BREAKING A RELATIONSHIP, BE IT WITH A HUMAN OR A MOTORCYCLE.

THE BIG U HAD PERFORMED SUPERBLY,

taking me across desert, up and down winding mountain passes, and threading traffic like a snake in a pipe. But, it was around 2AM, the fog enveloped me, and I was getting groggy. So I pulled over and got off. The break to clear my head led me to the realization that I was letting the motorcycle down. As I tired I had begun to ride in a very sloppy manner. I was making the motorcycle look bad. This is when the “understanding” took place. That is, if I would just do my part, the Ulysses was more than happy to continue to do its share. Properly chastised, I hopped back on and finished the event on time.

The experience left me with one dominant impression: The Buell Ulysses XB12X should really be called the XB12X-SAK, as in “Swiss Army Knife,” because it will do just about anything reasonable asked of it. You want to ride from here to the end of the world or just to work? Maybe carve a canyon or two, or try a fire road? No matter, it will do it competently, comfortably, and – here’s a big bonus – give you gas mileage numbers that will put cobwebs in your wallet.



So what does any of this have to do with the Buell Lightning® XB12STT Super TT? Well, given that these stablemates start life with the same frame, motor, wheels, tires, and various other bits and pieces, I was interested in learning if the lean and mean Super TT was as user-friendly as the Ulysses. My first walk around the Super TT showed a sparse machine, with only the high front fender reminding me of the Ulysses. No trick “Triple Tail System,” and simple, smooth “number plates” in place of hard bags. (“What is that all about?” was my first thought.) There was also a strong reminder of something I couldn’t quite pin down.

In the saddle, my short self found the ground a bit closer than on the Ulysses. Though the Super TT features a seat that is just 0.4 inches lower, I believe its more rounded profile is what gave me firmer footing. Tank, bars, mirrors ... all familiar items. One thing that was absent was the dash-mounted 12-volt outlet (as is the underseat outlet).

This brief inspection raised the question, “Why?” I mean, I really like the Ulysses, so what was the purpose of this Ulysses-Lite? Oh darn! I had to ride it to find out.

“

**THE SUPER TT DEVOURS THE
BENDS AND IS RELATIVELY
UNFAZED BY THE ROUGHNESS
THAT’S OFTEN ENCOUNTERED ...**

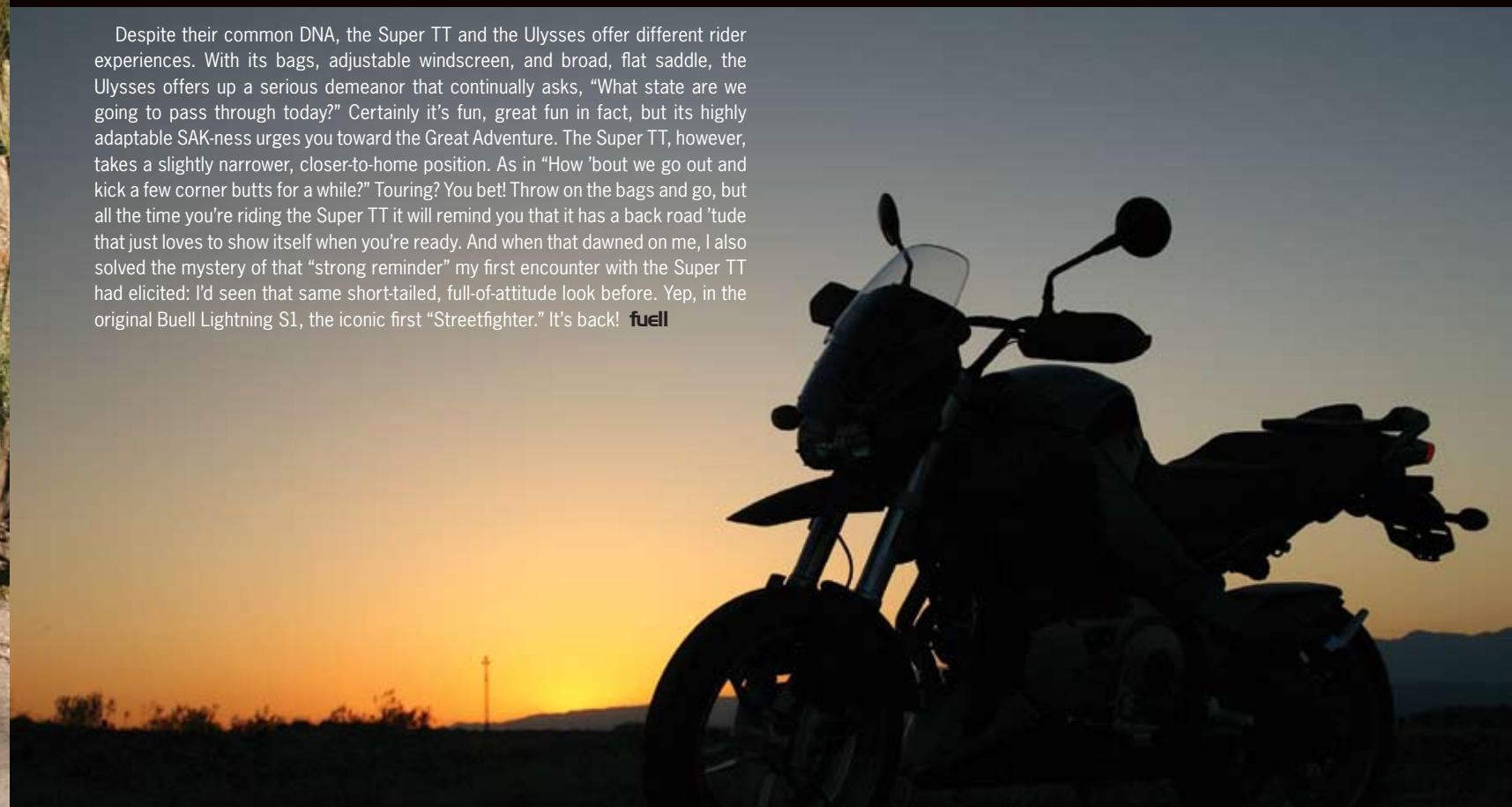
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Differing schedules prevented another 1,000-mile event, so a few trips and extensive errand duty would have to suffice, which actually better reflects how the Super TT would be used by owners. After mapping out a couple back-to-back 400-mile days, the next step was figuring out how to pack my travel kit. I always carry cameras, notebooks, water, some energy bars, foul-weather gear, simple tools, and the basics of overnights. Not a lot of stuff, but certainly more than the sparse underseat storage of the Super TT could afford. Soft bags became the order of the day and resulted in an “Aha!” moment. Remember those “What is that all about?” number plates? I found these braced, rugged Surlyn pieces make excellent supports for over-the-seat soft luggage.

My route was a mix of inland freeways, mountain roads, commuter traffic, and California’s spectacular Big Sur coast. Regardless of the motorcycle, I don’t know that anyone prefers the freeway for travel, but it is effective in evaluating the wind’s impact. With nothing but a token flyscreen, the Super TT fends off the push of the wind until about the 50 mph range. Above that, your helmet shield becomes the first thing the wind reaches and the last thing felt by doomed bugs. To counter this, I slid back on the long tapered saddle, hunched over, and let the wind support me. Other than on freeways, I prefer the lack of a windshield as long as the weather is mild.

It will surprise no one to learn that it is when the road starts to wind that the Super TT comes into its own. The “Adventure Sportbike” concept behind the Ulysses and the Super TT is really a very practical one from a handling standpoint. Featuring longer travel suspension and tires suited to real roads, the Super TT devours the bends and is relatively unfazed by the roughness that’s often encountered, particularly on the more remote back roads. With 84 ft. lbs. of torque to draw from, shifting often becomes irrelevant and the motorcycle leaps out of turns. Ride the Super TT through an interesting section of mountain road and the oldest cliché in the Motojournalists Manual of Motorcycle Metaphors jumps to mind: fun, just plain fun.

Despite their common DNA, the Super TT and the Ulysses offer different rider experiences. With its bags, adjustable windscreen, and broad, flat saddle, the Ulysses offers up a serious demeanor that continually asks, “What state are we going to pass through today?” Certainly it’s fun, great fun in fact, but its highly adaptable SAK-ness urges you toward the Great Adventure. The Super TT, however, takes a slightly narrower, closer-to-home position. As in “How ‘bout we go out and kick a few corner butts for a while?” Touring? You bet! Throw on the bags and go, but all the time you’re riding the Super TT it will remind you that it has a back road ‘tude that just loves to show itself when you’re ready. And when that dawned on me, I also solved the mystery of that “strong reminder” my first encounter with the Super TT had elicited: I’d seen that same short-tailed, full-of-attitude look before. Yep, in the original Buell Lightning S1, the iconic first “Streetfighter.” It’s back! **fuel**





ASK ABE

A Buell technical forum with **Abe Askenazi**,
Director of Analysis, Test, and Engineering Process,
Buell Motorcycle Company

Q Abe, Buell always stresses the importance of torque; can you tell me the difference between torque and horsepower?

– Marc, Ulysses® owner

A Marc, let's start by examining what happens at the rear contact patch. When you give the grip some throttle, the resulting combustion process in the engine creates a torque at the crank. This torque gets transmitted through the primary, transmission, and secondary drives to the rear wheel. Since torque is produced by a force exerted on a lever arm, if we know the magnitude of the torque and the size of the arm, we can solve for the corresponding force "F." In other words, knowing the torque "T" at the rear wheel and the effective outer radius "R" of the tire mounted to it (the distance between the axle and the contact patch), we can figure out the value of the traction force "F" that is thrusting the motorcycle forward.

Let's do this one step at a time for your Ulysses at its maximum measured torque. First, let's begin by clarifying what is meant by the "rear wheel torque" reported from a chassis dyno. For instance, if a Uly yields 76 ft. lbs. of torque at 6,000 rpm on a dyno, does that mean that this is the torque experienced at the rear wheel? Using an effective tire radius of a foot (12" is a close approximation of this measurement), this would mean that the thrust the tire exerts on the road is 76 lbs.! This seems low doesn't it? This is a common misconception of reported dyno torque. As mentioned above, since rear wheel torque is affected by the primary, transmission, and secondary ratios "N," it varies from gear to gear and can't be "neutrally" compared to that of other engines with different drive ratios. Hence, the dyno compares the rear wheel speed to the engine rpm and reports an effective crank torque that takes into account all the efficiency losses of the entire drive system that delivers this torque to the rear wheel. This explains the difference between the 84 ft. lbs. of torque that's truly measured at the crank on an engine dyno and the corresponding 76 ft. lbs. of crank torque measured on a chassis dyno.

What's the real thrust force at the ground? Well, it will depend on what gear you're in. Let's calculate the max rear wheel force for your Ulysses in every gear:

$$F(\text{rear wheel}) = T(\text{rear wheel}) / R$$

$$= [T(\text{dyno}) \times N(\text{primary}) \times N(\text{trans}) \times N(\text{final})] / R$$

$$= [76 \times 1.5 \times N(\text{trans}) \times 2.407] / 1 = 274 \times N(\text{trans})$$

Where $N(\text{trans})$: 1st = 2.648 2nd = 1.892
3rd = 1.407 4th = 1.166
5th = 1.000

Hence: $F(\text{rear wheel, 1st}) = 727 \text{ lbs.}$
 $F(\text{rear wheel, 2nd}) = 519 \text{ lbs.}$
 $F(\text{rear wheel, 3rd}) = 386 \text{ lbs.}$
 $F(\text{rear wheel, 4th}) = 320 \text{ lbs.}$
 $F(\text{rear wheel, 5th}) = 274 \text{ lbs.}$

This is why we believe it's so important for us to create the right balance of both torque and horsepower ...

That's more like it! Is it any wonder why it's easier to wheelie in 1st gear?

How does this relate to horsepower? Well, power is defined as the time-rate at which work is performed by a system. And since work is defined as the energy spent by a force exerted over a distance, it turns out that power is simply this force multiplied by the resulting velocity of the system. When dealing with a system having a rotational output, such as an engine crank or a motorcycle wheel, we can translate this concept using torque and rpm (rotational force and velocity), so that horsepower is defined as:

$$HP = T (\text{ft. lbs.}) \times \text{rpm} / 5,252$$

Where, the 5,252 is a unit conversion factor. Also, conservation of energy applies to the mechanics of power transfer, such that the output power is equal to the input power minus any efficiency losses. Hence, since the crank torque that's reported by the chassis dyno already takes into account these losses, the rear wheel horsepower will be equal to this reported value times the engine rpm. Isn't it neat that we don't need to know the actual rear wheel torque or its rotational velocity in order to calculate its horsepower? It then follows that for the reported 76 ft. lbs. at 6,000 rpm, the corresponding measured rear wheel horsepower should be:

$$HP = 76 \times 6,000 / 5,252 = 87 \text{ horsepower}$$

In other words, for an engine to make power, it needs both torque and engine speed. But, whereas torque is the actual, raw thrust we feel at the tire contact patch, power is the sensation of propulsion we get from the engine working harder and harder the faster we make it spin. You want solid, instantaneous acceleration? You need torque. You want to feel this acceleration building swiftly underneath you? You need horsepower.

This is why we believe it's so important for us to create the right balance of both torque and horsepower for the different rider types we expect to enjoy each of our various motorcycle products.

Designed from the rider down? Absolutely!



FOR THE UNCOMPROMISING RIDER, THERE'S DIABLO.

The International Press and riders from all over the world say it: The Buell homologated Diablo T is the best tire in terms of grip, rider feedback and stability. Perfect for sport-oriented street riding, the Diablo T assures fast warm-up and equally impressive performance in wet and dry conditions.

DIABLO

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PIRELLI

POWER IS NOTHING WITHOUT CONTROL.