INTO THE RIDE #58

Four "Performance Entry" Bikes

and the New F-5

by Randy Schlitter

Cost of entry into a new sport is always a consideration, and to our industries' credit, recumbent manufacturers have made steady progress in offering more bike for the buck. The down drive in MSRP is due to more competition, than advances in technology, or increases in volume. It is often the hope of the manufacturer that an entry-level purchase will turn into brand loyalty and a higher-end bike. The only flaw in this plan is we are assuming the client wants a starter bike. Most entry-priced bents are heavy and lack luster in performance; ultimately it would better suit the consumer to make an upscale buy right off. A “performance entry” bike is going to be all around a better investment since it avoids the cost of upgrading. The offerings by the industry is prolific; our company alone has five to choose from.

Stratus LE
This bike has been very popular with the novice and experienced riders. The bike is easy to ride, reasonably fast, light, well-made, and has the smooth ride that forever impresses. It comes with a set of chopper bars that adjust almost all ways to Sunday, and will accommodate most riders. The bike has been a steady seller for 30 years and maybe one of the most popular bents on the planet. The Stratus was the first-production recumbent to feature a seat tube that lined up directly with the crank; this means the rider stays in the intended riding position no matter the size. The crank on a Stratus is low, thus creating the term 'low bottom bracket', and the rider sits between the wheels, thus long wheelbase. At the time we did not realize the Stratus would become one of the most copied recumbents, and 30-odd-years later it is still one of our best sellers. We introduced the LE spec to lower the price of entry. As your first bent, the Stratus will treat you right and still have performance you may never outgrow. For 2008 the Stratus sports a new two-tone paint scheme and 3-way chopper bars.

V-Rex LE
The V-Rex began life in 1994 and has become one of the most well-regarded short wheel based bents

out there. Over the years we have done the usual tweaks, but in 2008 a dashing new two-tone paint scheme and new handle bar set-up creates a whole new air of excitement. Some will still prefer the original bar set up, which can be installed post-purchase via your dealer. What the new V-Rex offers is a lower price along with the changes. The LE spec is good functional equipment and will service most riders for many thousands of miles. The new handle bar set-up is a slight improvement over the set-up discussed in the 2003 ITR article #7. We used the B-37, quite a bit less wide and deep bar over the B-40 seen on the '08 Rex. What this does is opens the cockpit both ways longitudinally and laterally, making it an easy bike to jump on and go. Some will miss the flip-it, removed for both cost and weight reasons. It can be added back at the owner's expense, but I encourage one to try it without; most never miss it. The V-Rex LE carries on the outstanding tradition of the Rex.

Rocket

It is hard to beat the charm of the Rocket, and the dual 20x20 crowd always shows strong support for this bike. It is perhaps the least in terms of performance-out of the bikes presented here, but what it may lack in all-out speed, it recovers in other areas, such as climb, portability, and zippy handling. A Rocket is value on wheels, a sturdy mount that is adaptable into a speedster with a wheel swap. The Rocket is the bike most missed when sold; finding a used one can be difficult, a great testament to the bike's legacy. For 2008, we added B-39 bars and dropped the flip-it. Now in a flashy two-tone paint, the Rocket is dressed and ready to continue the tradition of providing a great bike for the buck.

V3

Introduced at the 2006 InterBike, the V3 in both aluminum and titanium has surprised many with its speed, sweet handling, and smooth, quiet ride. All things that conspire to yield such a bike are lessons learned from the V2 series (now discontinued), but frame sets are available. The V2 will always be a decent bike and with its super stout frame, it has become a fav among those who tend to really punish a frame, but none to date have brought the V2 to cry uncle. But, as much as we love the V2, the V3 has won our hearts. It has a bit more refined handling and a frame designed from the ground up for dual 26” or 650, with no power side idler. The only complaint we had about the bike was the price. The initial 2007 offerings in Ti and 7005 Alloy are spec’ed with some very light high-performance gear. The success of the V3 even at this spec level is outstanding, and prompted us to offer the bike in a priced relief form. The bike sports a user-friendlier handle bar set-up and the super comfy mesh seat. These two changes, along with less pricey components, have created a fine entry performance bike. The real kicker is the bike can transform into an even higher performance machine with a bar and seat change. The disc brakes and 26” wheels also allow the owner to equip the bike in the other direction; for example: larger tires. Painted in a black and silver powder coat and made in the USA, V3 will definitely make many a great first-timer and keeper bike with outstanding performance and handling.

The New F-5

In building a mono-tube frame, there was a large concern about the strength of the rear joint, where the stays meet the main tube. On the 2008 F-5, this joint is made up of a 1.25-diameter tube contacting against the main tube for almost 3". The end of the main tube is bulk headed and welded to the stays as well. Few competing brands of similar designs have such depth of structure. The larger volume of contact does a better job of load transfer to the main tube. Frame breaks on similar frames have not been reported in any significant numbers, so what the other guys are doing is working for them, and I do not expect to see their designs change. In addition to a better load transfer, there is another thing I believe the larger area does, along with the non-tapered stays: it gives the frame a more even feel. To have less beam deflection across the span could mean favorable ride properties, but we will let the reviewers and public answer that. Another reason for the mono-tube frame is the cost-to-produce is less; we passed that savings on, and it is reflected in the price. This is for a USA-made frame to boot, and in a two-tone powder coat finish. I think we are the first to offer a two-tone powder coat finish, let alone a USA-made frame.

Here are other features that separate the new F-5 from the crowd:

Idler Mount
The idler mount is integrated into the frame. A precisely machined large diameter (.625”) tube comprises the axle and it is welded to a .75 square tube, which is welded to the main tube. There is no idler axle bolt; a large diameter axle is used because we wanted monster bearings in the idler, on the theory it absorbs less power. It sure feels smooth and solid.

Seat Mount
Called V-clamp, the new mount has a huge amount of clamping force, and with just one flip of the QR. The design of the V-clamp is a big triangle with bolts or a QR in each corner. The stress over the clamp is evenly distributed, resulting in more clamping pressure. It also features a series of holes to expand and contract the X-seam even when the V-clamp is at either end of travel. A single pin retains the seat to the block, so pull three pins and the seat is off.

Seat
It must have been around lunchtime when we coined the name Hoagie, but the seat does have the shape of a hoagie bun. Despite the edible name it is a very comfy and light seat, the steel version is 2.75 (less sprint braces) and the Ti 2.25. Lightness comes from using small diameter thin-wall steel tubing and having only two tabs to retain the seat to the V-clamp, which by the way is lighter and cheaper than the Rad-loc. The steel and Ti seats feel very similar, both with a bit of compliance but nice grip in the climb. Another aspect of the Hoagie seat: it is wide enough for some riders that it is comfy even minus the foam cushion, which adds about another .5 pounds.

There have been many requests for the Hoagie seat for our other bikes, and we will have them available a few months into the New Year. Adaptors for the Rad-Locs are extra.

Front Brake Mount
One of the problems with high-racers is the front brake clearance. On the former F-5 we used a fitting to reverse the entry of the cable. Because of the cross-over idler there is no clearance, and another solution was developed. The mount is simply a small chunk of aluminum that allows the brake to drop down and back. The advantage is a wide selection of road brakes can be used. These will be available in a few months.

Why a round main tube?
A round tube is still the best shape to check torsion loading applied by uneven pedal stroke. On a boom tube bent the side-to-side racking would be better served by increasing the depth of structure at the head tube and diminishing to the BB (read hydro-formed). An oval tube stood vertical is good for the beam loading between the wheels, and not particularly good at checking the torsion. So the oval, unless thick walled, or wider on the minor axis than a 50-mm round tube is offering its best efficiency in the beam loading, and not much gain in checking torsion for the weight gain. The really neat trick that would be cost effective, compared to hydro-forming, would be to escalate the main tube size as the bike up-scales, for example: 50mm for a small, 63mm for medium and 66mm for large. That way a thin wall double-butted tube could be used to make a beam bike as light and cost-effective as possible. In the end the round tube is favorable since bending, butting, and size increases structural efficiency better than oval or other shapes. It does create havoc with seat mounts and adapting some components like racks.

For starters the 2008 F-5 will be offered in 50mm for both the XL and Standard. You can safely bet the other options are being explored, as is a Ti version. That may appear later in '08; it will be based around a 2.5" to 2.75" tube, as would an alloy frame.

The end result is an F-5 with a bit lighter all-up weight, with a decent spec and nice price. I guess those triangles will have to wait for that small-tube sub-20 pound. The new F-5 weighs in at 25.5 lbs., has a carbon fork, bladed spoke wheels, and the new Hoagie seat standard. It should be an attractive bike for the first timer, and a nice addition to a veteran's stable.

A Fun Five
In summary: five new or re-vamped models for 2008 that offer the beginner bent rider something they can use for extended play. Perhaps some will think it a push to place a high-racer in the mix, but you have to remember it only takes an open mind and some riding experience, and you can advance to the next level of "entry performance" if budget and spirit are willing. Until next time stay safe and stay into the ride!