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## The Sam Hillborne & Functional Versatility

In an age of specialization, like now, versatility gets little respect, and can even be a liability. People hear *versatile* and—horrors!—think *compromised*. They figure they can afford a stable of specialty bikes, so why not? That approach fits right in with how bikes are designed and marketed in 2014, but has led to bikes refined to the point of limited function:

Today's road bike is a racing bike, with skinny tires, no room for fenders, no way to carry anything, and painfully low handlebars. Who's that good for? Racers & nobody else.

A modern mountain bike has shocks front & rear for fast riding over big bumps, but its presence inspires crude, irresponsible riding punctuated by the power braking and hard combat cornering that grooms fragile, loamy trails into a series of berms and banked corners. In nature and on any multi-use trail it's a blight, as out of place as a speedboat in an alpine lake. On the road, it boings irritatingly.

The high-tech city bike doesn't escape extremism either. It teams fashion overflow (color-matched frames, baskets, and fenders) with technical overload (some combo of electric-assists, 250-pound. load capacities, carbon frames, shock forks, internal hubs, clipless pedals, and disc brakes). It's of a weird mix of technological indulgences.

The Sam Hillborne isn't anything like those bikes. It has **functional versatility**, meaning it's never more than a basket, rack, or at most a different tire away from being 90% perfect for the task (and 100% delightful!), whether it's recreational road riding, long distance touring, riding the local trails, or toting your briefcase or groceries from here to there. If you have another kind of riding in mind, Sam will work fine for that, too. It's a polytrick pony!

At its foundation there's a strong, gorgeous lugged CrMo steel frame with good tire and fender clearance. It's kind of halfway semi-custom. With our help, you pick the parts for the way you'll ride and your personal preferences. The parts you pick from are worthy of the frame. It's an affordable way to customize your bike to make it perfect for you. This booklet shows examples of the Sam equipped for all these uses. You'll notice little difference—the commuter & shopper are fungible, and a minor tweak, not a dramatic makeover, dials it in for trails. That's the point and the beauty of the Sam Hillborne. It's perfect for most riding, and within reach of almost everything. It's the bike you'll always throw a leg over, because you know it'll always work.







SAM ZIPS. It's perfect for any paved road light load ride that's not a race. Drop bars make you more aero, but unlike typical road bikes with their always too-low handlebars, the Sam's are higher, more comfortable, more usable. You'll never ride drops more comfortably than on a Sam. We have long-quill stems in all lengths (extensions) to guarantee that.



**SAM TOURS.** For touring you need a frame that's strong and stiff enough to carry loads; high volume tires that you can run soft enough to cushion the ride and protect your wheels; braze-ons for racks; a comfortable riding position with the handlebar above the saddle; and clearance for fenders, because the heavens can dump on you. The Sam has them all.



**SAM THE TRAIL BIKE.** On fire roads light riders can do fine on 38mm tires. Midweights ride at least 42mm; heavy riders or bumpier trails or just more cush, ride up to 45mm tires. The Sam fits them all. Upright bars are better, too. Shown here with Nitto's Albatross bar, this fire-roading Sam is ideal for trail rides.



**SAM COMMUTES.** Sit up so you can see and be seen. Lights front and rear, fenders, and some way to carry things. Ride stout tires to prevent flats, and combine baskets, bags, and racks so you can take extra clothes or a bigger load now and then. Also, those big reflective Yield triangles are fantastic, day or night.



**SAM SHOPS.** For shopping you need to be able to carry weight in front & back, and at least one should be a basket lashed with zip-ties or handlebar tape to a rack. Get a Wald—the best Kentucky-made basket in the world. Then put a net over it to keep your chard in place. We haven't done that here in this photo, but in real life, we're hard-core netters.

### **GETTING THE RIGHT SIZE IS EASY**

### • 62CM—FITS 700C WHEELS

Typical rider height: 5-11 to 6-4. Minimum PBH: 91 cm Approx. standover\*: 89cm / 34.85 in.

### • 58M—FITS 700C WHEELS

Typical rider height: 5-8 to 6-1.5768. Minimum PBH: 87 cm Approx. standover\*: 85cm / 33.5 in.

### • 55CM—FITS 700C WHEELS

Typical rider height: 5-5 to 5-11.

Minimum PBH: 83 cm

Approx. standover\*: 82cm / 32.3 in.

### • 51CM—FITS 650B WHEELS

Typical rider height: 5-3 to 5-9. Minimum PBH: 78 cm Approx. standover\*: 76.2cm / 30 in.

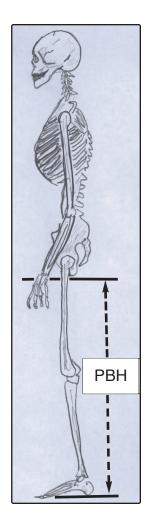
### PUBIC BONE HEIGHT (PBH) & SADDLE HEIGHT (SH)

PBH is from floor to pubic bone. Measure it in centimeters. SH is the distance from the center of the crank to the top of the saddle. Getting the correct SH makes riding a bike easier & more comfortable, and it all starts with an accurate PBH number.

Measure PBH: Place bare feet 10-in. apart on a hard floor next to a wall. Pull a hardcover book as hard as you can against your pubic bone. Have a pal mark the wall, then measure the height of the mark.

For riders of average weight wearing normal shoes and pedaling normal length cranks, PBH minus 11cm = SH.

Heavy riders can't push the book through the crotch fat to the bone, so they undermeasure. If you're 5-10 & your PBH is 82cm & you're pulling up hard, it may be that.



<sup>\*</sup>assumes a 38mm tire. Fatter = higher standover.

### **ART THAT WORKS**

It's good to design a functional, adaptable, versatile, inexpensive bike, and for a knockaboutin' fifth guest bike in your shed, that's fine. But if you identify as a bike rider and you're in it for life and you like the idea of keeping your bike for decades, you'll want a bike that's more than a motley collection of economical materials and efficient processes. A little art for the long haul is always nice, and we've gone to great lengths to pack it into Sam. Some artsy touches make better, stronger frame joints; others just look good.

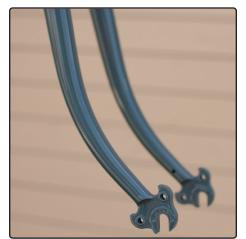
Do they increase the cost? Of course, c'est la vie, lah di dah. But you pay for them once & in 30 years you'll be the oldster with the nice bike that held its value, as art does.



### OUR OWN EXPENSIVE, STRONG AND GORGEOUS INVESTMENT-CAST LUGS.

They're expensive to buy & cost more to build with, but they make strong, pretty joints, and once they're on your Sam, they're there for life, forever.

The seat lug is strong; the bolt is standard.



The fork bend starts low and looks nice.



Lots of clearance for fattish tires & fenders.



The joints, ornate and strong.

### **STEEL**



### **WEIGHT**

**STEEL!** It's the best structural material in the world—strong, tough, safe, abundant, slenderly efficient—perfect for bicycles! The CrMo (chrome-moly) steel alloy in our bikes has an 80-year track record, and continues to be the best frame material in the panoply.

It's the safest by far. When traumatized, steel dents and bends, doesn't snap, as carbon does. It's also the most durable—steel bikes from the early '70s populate the bike racks on every campus in the country. Steel's practical, too—if a tube breaks (unlikely, not impossible), it's the easiest to repair or replace. When you're buying a frame for long-term use, CrMo steel is the best choice.

WEIGHT. Unlike cars or motorcycles, bicycles get weighed without the engine (you), and since the bicycle's engine comprises so much of the total vehicle's weight, that ain't fair. None of our bikes has "fat" weight. The stout tires, strong wheels, racks and bags and baskets and fenders we like to festoon them with pay their way with usefulness. You can strip a Sam of these accessories and equip it with 13 pounds of components (typical of race bikes) and trim the weight to 20lbs, but all you'll have is a great frame with iffy parts that hamstring it in the real world. Useful bikes start at 25lbs.

### **O**THER

The Sam Hillborne frame is made in a clean, modern frame shop in Taiwan. The quality is equal to or better than most custom frames (experience pays), and the quality control is unequalled.

SILVER TUBES. They look normal from the outside, but Silver tubes are our own design and are better for it. Rather than using industry-standard double-butted tubing picked stock from a catalogue, we shifted the wall thickness around to better address the stresses. Long story short, we have more metal where it matters and less where it doesn't. There is not a better-designed tubeset available, and it's ours (and yours) alone.

THE FRAME fits a 27.2mm seat post and a 135mm rear hub, both common/standard. The seat tube is 28.6mm, and all current front derailers fit, sometimes with supplied shims, which shouldn't wig you out. They're perfect. Racks mount easily, and the front dropouts have two eyelets, to make front-racks easy. There's even a slick kickstand plate, so you can mount a kickstand harmlessly without clamping down on the chainstays.

**SAM'S FORK** has the best-designed crown in the land, super strong and lovely, with a low brake hole to maximize tire clearance. The blades have beautiful low bends, and are long enough to fit both useful tires and sidepull brakes.

The Tektro Mod. 559 dual pivot sidepull brakes were originally made to our specs, just for us. That was about 6 years ago. We're proud to say they've been adopted around the world, for their unique dimensions and one tricky feature that make them the only sidepull brake really suitable for useful bikes. They're simple to deal with, as powerful as a brake needs to be.

THE BASIC SAM complete bike, with our recommendation of best-value parts and no wasted money—and no accessories like racks, fenders, bags—costs about \$2,600, or a few hundred more than a lowish-level road bike with a Chinese carbon frame and wannabe racer components. It's less than half the cost of many modern road bikes, yet still a better bike for the vast world beyond racing.

### **GETTING THE BALL ROLLING...**

Call (800) 345-3918 and we'll assign you a resident Sam-expert who'll work with you to make sure your Sam is equipped perfectly for your use. You don't have to know about bike parts, only the result you want. He'll (in this case it will be a boy) explain the options without confusing jargon or assuming you know more than you do. You'll get a custom package that's perfect for you, with every dollar well-spent.

We don't sell on commission or keep score, and nobody here is into gratuitous "upgrades." On the contrary. The jewelry-like components that wealthy, new-to-bikes riders tend to lust over have little cachet with us (they're commonplace around here), and we tend to see more beauty in irony and value, than in blindfully throwing money at "the best" bike parts. On the other hand, if you've always wanted Brand X hubs, we won't rain on your parade, and will make sure you get the model best for you.

**DEPOSIT:** Buy the frame (\$1,225 as of Summer '14) when you place the order, and pay the balance when we're ready to assemble it. A typical Sam without fenders or racks runs about \$2,600. Freight costs \$110 to \$160, and includes the best packing job you'll ever undo.

We don't make money on freight, but we don't lose it, either. The boxes are custom for us and cost about \$18. Packing takes 3 hours at substantially better than minimum wage. It all adds up, but you don't pay local tax on your purchase, at least.

**DELIVERY:** Eighty percent of the bikes are shipped out within 2 weeks of completing the order. If we're out of your size, it may take up to half a year.

**WARRANTY:** Problems are rare, and we always play straight and fair. We're on your side right off the bat—always a good thing to keep in mind.

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### Notes on things not yet harped on

### I. HEADSET AND STEM-TYPE.

Like all our bikes, the Sam Hillborne has I-inch threaded headsets and uses a quill stem. This is good but unusual in 2014, so let us explain.

Bike manufacturers love threadless headsets and forks because for any given model, one size fits all. It avoids potential miscalculation goofs in threading and eliminates the need to inventory gadzillion replacement forks that may never be used. On top of that, the mechanism itself is It's clean, clever, and mechanically excellent, But the bugaboo is that it's not compatible with a quill-style stem, so it's hard/often impossible to adjust the handlebar height. The "old way" with a quill stem is a breeze, looks lovely, and is far more rider-friendly. It makes raising and lowering the stem a seven-second operation. It's way more flexible.

### 2. PEDALS & PEDALING.

A look at the bikes in this booklet reveals only double-sided & grippy platform pedals. They're compatible with all footwear, from a flip-flop to a boot; equally suited to riding in the city or woods.

They're no less efficient than click-in shoes—that's a myth. (go to our site and read *The Shoes Ruse* for the arguments), and so grippy platform pedals make sense for any bike—including Sam Hillborne.

### 3. SLICK KICKSTAND PLATE.

It lets you mount a kickstand without clamping the chainstays. Some riders just think kickstands are blasphemous on good ones. Poppycock! They're the final frontier for practical cyclists.

### 4. Unsympathetic & unhelpful with scratches.

It's true. Our weak point as a business that loves & appreciates our customers to no end...is an ongoing lack of sympathy if your paint chips. The paint isn't prone to chipping, but stuff happens over time, and our attitude, historically has been & still is: so what, it looks good, patch it with fingernail polish and hit the road. We sometimes plan to get original touch-up paint, but it's always low on the list of priorities.

### **O**PINIONS ON OPTIONS

HANDLEBARS. Rule out Albatross bars (our fave) before considering Albastache or Drops. If you can't bring yourself to go upright after a lifetime on drops, OK, we're not your therapists. But you're missing out.

Albastache bars are cool too—sporty and comfortable, the way to go if you don't love drops and can't accept Albatross bars. No problem, great bars, too.

We're not against drops, just the idea that good bikes warrant them on principle. The Sam's sloping-up top tube and quill stem put drop bars high, so you can reach them easily. Your drop-bar experience on the Sam will be heavenly, and if drops "just feel right" to you, stick to your guns, man.

SHIFTERS. On Albatross bars, bar-end shifters free-up space on the bar for another hand position, useful if you climb a lot off the saddle. Thumbies rule out this extra grip, but it's really not a major deal. On Albastache or drops, bar-enders are the only sane choice.

**SHIFTING.** Indexing or friction? Most riders are used to indexing and insist on it. If that's you, get Shimano bar-end shifters—8- or 9-speed. If you're OK not indexing, get the silky smooth Silver bar-ends, or the

less expensive but still excellent Micro-shifts. They're not as "no-brainer" as indexing, but they're easy, smooth, and some find them more satisfying.

GEARING. Three chainrings or two? For riding over steep rolling terrain, go three, with a 46-36-24 combo. You'll use the 36 most of the time. For mostly flat but definitely some hills (including steep ones, but let's say...fewer rolling ups and downs), consider a 40-26 double, something we call our "wide/low." The price is the same and you get a chainguard in the bargain.

RIMS AND WHEELS & TIRES. Our stock Sam wheels have strong rims, 24mm to 25.4mm wide—a good width for the tires we like. The standard tire is a Schwalbe Marathon or Big Ben, about 37mm wide, nealy unflattable and so good at so much.

But if you're mostly a smooth road rider under 200lbs, the Jack Brown (700x33.333mm) is excellent.

If you're heavy or ride trails a lot, put on a 42mm tire. We've got those, too.

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