

BILL DAVIDSON

THE SECRET IS OUT

Like his home city of Seattle, framebuilder Bill Davidson has been a well-kept secret. But with increased production and a new sales force, the secret is out. *By Christopher Koch*



Ask Seattle residents if it's true, if the weather is *really* as bad as legend says, and they'll reply immediately, "Oh yes, it's terrible."

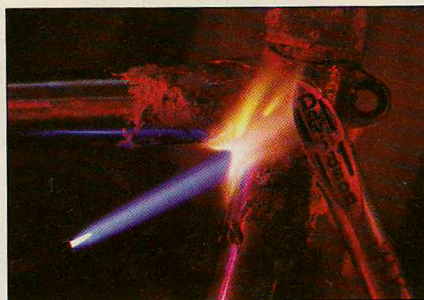
Trouble is, they say it with a strange, sly smile.

Okay, c'mon, is it *really* as bad as everyone says? "Oh yes," (there's the smile again) "the sun never shines. Rains constantly."

By the end of a stay in Seattle, a visitor feels the victim of a friendly conspiracy; in the other Washington, they'd call it a "disinformation campaign." It's similar to the campaign that Oregonians waged in the seventies, when they slapped various bumper stickers on their cars urging visitors to bring their umbrellas, or better yet, just stay home.

Seattle residents are smarter than that. They don't talk about their home at all. They'd prefer not to tell you about the two mountain ranges that flank the city, contributing to its ranking as the country's best outdoor recreational area. They won't tell you about Seattle's hilly, compact, San Francisco-like downtown area with its huge, fascinating waterfront market. And they certainly won't tell you that despite all the cloudy, gloomy days (Seat-

tle averages about 60 sunny days a year, about 40 fewer than most eastern cities), the city has only about 30 more days of precipitation a year than most midwestern or eastern cities, it receives less precipitation per year than any major East Coast city, and its climate is one of the most temperate in the country. This means that despite Seattle's rainy reputa-



Davidson's goal is 1000 frames a year, built with a blend of handwork and production efficiency.

tion, its residents can probably spend more days outdoors per year than most anyone in the country except Californians. But unlike California, Seattle is still a fairly well-kept secret.

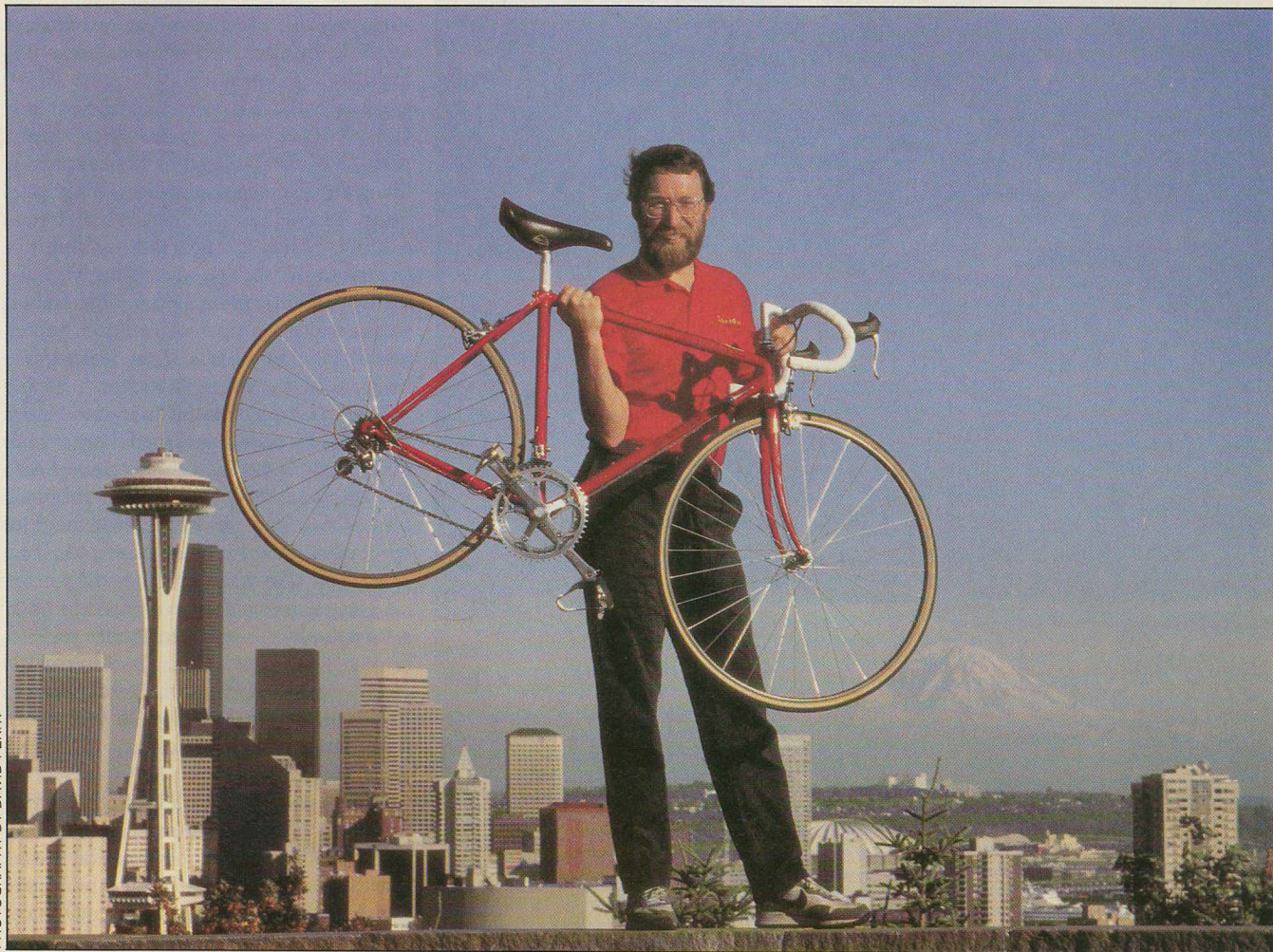
The same could be said about Bill Davidson, Seattle's most prolific framebuilder. He builds a fine bike, and has been doing so for more than ten years,

but until recently he was virtually unknown outside the Pacific Northwest. Not that that bothers Davidson, who was born and raised in Seattle. Seatlites are used to keeping secrets.

Like his city, the quiet, bearded Davidson is completely without pretense. "Provincial, easterners are fond of calling the place," he says in a defiant tone, "and it doesn't offend me any." With his deliberate speaking style and his slack-shouldered, hands-in-the-pockets manner, Davidson feels that an easterner might try to pin the same label on him. But behind his unassuming outward style is a determined, intelligent craftsman who has seen a great deal more of the world than an easterner might expect.

Of course, this worldliness is all bike-related. It began with a trip to Liverpool, England, in 1971, when Davidson was 20. Davidson had been racing in the Seattle area, and decided to order a bike from one of the top Liverpoolian shops, run by a man named Harry Quinn. "I went to England to get it," explains Davidson, "and of course they were late with it, so I spent the last couple of days watching them put the finishing touches on the frame." That sparked his interest.

When he finally got the bike, Davidson



"Provincial, easterners are fond of calling the place,"
says Bill Davidson of his home city, Seattle. But the man and the city
are more worldly than they might seem.



Davidson is not a salesman. He relaxes noticeably when he retreats to his domain of cinder blocks and metal shavings out back behind the retail store.

embarked on a tour of the Continent. Not surprisingly, he just happened to stop off at a few frameshops here and there along the way. "It was more curiosity to see what they were up to and see how they were doing things differently from each other than any real interest in framebuilding," he says. Uh, huh. Sure.

"You could see the English were doing it all with hard work, the French were doing it with hard work and a little mechanics, and when you got to the Italians you could tell that they were into the machine aspect of framebuilding. No hand-mitering of the tubes like you found in England. In England you might see a couple

of toe straps holding the fork blades onto the jig—not in Italy. There you saw real framebuilding fixtures. Italy appealed to me when it came time to learn framebuilding, but I knew the language barrier would be impossible." After a soul-searching session in Greece at the end of his travels, Davidson decided to become a framebuilder. "But there was only one place where anybody knew me," he says. So he boarded a train for England.

He showed up at Harry Quinn's door one day and did what every successful framebuilder has done before him. He hung around. "I said, 'How about teaching me to make these frames.' And Harry

said, 'No.' He said, 'We had an American over here about a year ago wanting to do it and after a month he couldn't even get the tea right.' I learned how to do English tea. I learned how to get the chips with the right amount of vinegar on them."

He also learned how to build frames. "They wouldn't let me touch anything that was going to a customer. But I had some time to practice on scrap material and ask for advice on whether I was doing a good job or not."

Apparently, those few minutes of advice per week made up for all the grunt work, and for Davidson's rather spartan living arrangements: a cot in an unheated house that a bike racer friend was renovating. "I had a little gas stove and lots of dust to live in," he says. A lively social life helped mitigate the gloom. "Someone was always having me over for dinner just to listen to me talk. They really got a kick out of the American accent."

After a four-month stint at Harry Quinn's, Davidson returned home with five sets of Reynolds tubing, some brazing rod and flux, and began cobbling frames together in his basement. His reputation grew by word of mouth, and soon Davidson was approached by a local bike shop owner who wanted to have a framebuilder in the back room to lend prestige to the operation. "It didn't work out," says Davidson of the arrangement. "They promised to let me do things my way, but soon it all became production oriented."

Things were changing swiftly on other fronts as well. Davidson had met the woman who would become his wife, Martha, and he had to think about getting a "real" job. "I started looking for another job," he says, "doing anything else. And after awhile Martha said, 'You really want to do this, don't you?' And I said I guess so. It was like a job unfinished, you know?"

With Martha's solid income as an ultrasound technician providing "seed capital," the Davidsons built a four-car garage onto their suburban house and converted it into a frame workshop. Production began small and remained that way for many years. "I worked out there alone. Just me, the radio, and a bag of chocolate chip cookies." Capital improvements came slowly; "My wife is what you'd call a fiscal conservative," Davidson says. Still, his reputation grew steadily in the Pacific Northwest, buoyed along by his partial sponsorship of Washington road racing phenom Mark Pringle in the late seventies and early eighties.

Then in 1983, it came time for David-

son to make the sink or swim jump from a small custom builder to a production builder, with such real-life business trappings as an administrative staff and a sales force. Davidson made the jump with a friend named Bob Freeman, who had some experience in sales and marketing. It was decided to model the business after the traditional European bike shop—a retail store out front, a frame shop in the back.

The shop, dubbed Elliott Bay Cycles, was established in what was, at the time, a fringe section of Seattle waterfront. Davidson's rehab of the white clapboard building displaced a gaggle of street people who now congregate down the street at the last neglected building on the block, huddled against the encroaching gentrification of the neighborhood.

The retail section of the shop is thoroughly up to date: clean and airy, full of oak trim and track lighting, with department store-like modular wall racks for the reams of clothing on display. This is clearly Bob's domain. Davidson is ill at ease as he stands stiffly on the soft, earth-tone carpeting (it matches the oak trim perfectly) and eyes one of his track-lit frames hanging from an oak wall rack. "Me, I consider myself a good judge of metal and a good judge of character. I'm not very sales oriented, so I leave that to them." He relaxes noticeably when he retreats into his domain of cinder blocks and metal shavings out back.

Here, he oversees an operation that rivals some of the larger frameshops in Italy. The work area is large, high ceilinged, and bustling with activity. In the Italian tradition, Davidson has gotten away from the day-to-day task of building frames. He pitches in now and then, but he's got a staff of seven, including two men capable of brazing complete bikes, to handle the practical details.

That leaves Davidson free to do what he loves best, to experiment with new designs for frame parts and machine tools. Indeed, it sometimes seems that the frames are simply a byproduct of Davidson's love for machines. He's got two drafting tables, one at the shop and one at home, where he's constantly working on ways to improve the mechanical process of framebuilding. The interest is genetically based. "My Dad's been in the metal fabrication business all his life, so I kind of had an idea how to use tools," he explains. "I have a lifelong background of metal shavings." In one corner of the shop is a fork preheater and brazing jig that Davidson designed and built himself along the lines of the Italian production

machines. The machine is rather crude looking, with bundles of copper gas tubes snaking everywhere, but it does the job.

We watched as Davidson's star brazer, Mark Bulgier, pressed a pneumatic foot pedal that jerked the clusters of flaming preheater tubes into place around a tacked fork. Just then, Davidson pulled a small brass ring from his pocket and displayed it between his thumb and forefinger like a magician. Indeed, it is a trick of sorts, one he picked up in Japan. Prior to insertion into the crown, one of these small brass rings is placed inside each

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fork blade. As Bulgier applied heat to the fork on the jig, the brass ring showed up as a dark shadow against the red steel. With a final flick of the torch, the shadow suddenly turned into a dark cascade flowing down through the joint. Bulgier touched a few edges of the crown with a brazing rod and the fork was done. On a preheated joint, this operation takes all of 30 seconds.

"Speed is the key component in brazing," says Davidson. "Get the job done and get out of there. If you overheat the joint you weaken it. I really do think the strength of a frame is affected by brazing time. With these rings, we can make a stronger joint because we can do the job in 30 percent less time than with the brazing rod." Davidson is such a believer in the process that he specs the brass rings wherever possible. Unfortunately, however, the only other place he can use them is in the head tube joints.

The brass rings come from Takahashi Press in Japan, probably the world's largest maker of fork crowns, and the company that taught Davidson the brass ring trick. Davidson has been designing investment cast lugs for Takahashi since 1982, and he acts as American middle-

man for the firm, supplying some 30 American framebuilders. The close connection between Davidson and Takahashi is evidenced by the stacks of small, extremely heavy boxes piled in a corner of the shop that say "Takahashi-Bill" on the sides.

Davidson's lug designs for other builders are purposely conservative, so as not to put a Davidson stamp on another builder's bike. He does, however, put some understated flair into the designs that he uses on his own bikes; rear dropouts with investment-cast flourishes, lugs with just a bit more sweep than usual to the finely crafted points. Ironically, the lugs and dropouts are so expensive to make that Davidson can only use them on his top custom models.

While he's proud of his designs, Davidson is a pragmatist, and uses whatever products he feels are best for the job. His production frames mix Campagnolo dropouts with Tange Prestige tubing. He uses the dropouts because they're less expensive than his own Takahashi designs, and he uses Prestige tubing because he likes the higher tensile strength of the Japanese pipes—they make the bike hold up better in a crash. "I'm a believer," he says of Tange Prestige. "I don't think strength has anything to do with ride characteristics, so why not use something a little stronger?"

Pragmatism also pervades his overall bike design philosophy. "My input comes from my customers and the local racing teams that I sponsor," he says. "I just don't have this feeling that everything that emanates from my head is automatically the best that can be designed and fabricated in a bike frame. I don't have that ego problem."

The design that he's developed over the years for his production bikes is a conservative one. Wheelbases are longer than usual for a racing bike, and front ends are also a little longer. "The geometry comes from an older racer's vantage point. The kind of bikes that I started racing on were a little more laid back, slightly longer wheelbase, higher trail-type bikes." If his design is conservative, Davidson says it is only because he is trying to serve a wide audience with a single bike. He prefers shallow-angled designs to the tight, steeply angled criterium bikes that are in vogue today. "I try to put my foot down on overly steep designs," he says. "That's my pet peeve."

Overall, Davidson has moved away from his original bread and butter, custom bikes, and toward a more production-oriented system as his business has

grown. The move was not entirely dictated by economics, however. "I think there's a trend towards people realizing that they can be properly fitted to a production frame as opposed to actually requiring a custom frame," he says. "One of my theories has always been, don't build them a custom frame unless they need a custom frame."

Confident in his production bike design, Davidson's recent focus has been to increase output. Despite a staff of seven, Davidson only produced about 500 frames last year. This year, he expects output to double. He claims he has had the potential to produce 1000 frames for a few years, but that there was not suffi-

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cient demand until now. "We've got a few sales reps doing a nice job for us now," he says. "We're moving out more into the entire country."

Yet there is another force at work here: pride. Davidson is determined to join the handful of American builders who are producing more than 800 frames a year. It's difficult and dangerous turf, dealing with all the headaches of a growing business—production quotas and group health insurance—while maintaining high quality in the frames. Still, Davidson is confident that Americans can take on the established high-end Italian production shops. "In the seventies, Americans felt we had to outbraz 'em, outalign 'em, outfile 'em, and outpaint 'em. I think we've got to do all those things and outproduce 'em. Or at least bring our numbers up to a respectable level. Anybody can make a great bike if they want to spend 40 hours on it. The question is, can you make a great bike in six or ten man hours?"

Bill Davidson is determined to find out. □

ON THE ROAD: DAVIDSON IMPULSE



PHOTOGRAPHY BY TONY SCARPETTA

Bill Davidson knows how to get a rider's attention: build a comfortable frame of lightweight tubing and stick on a pair of the hottest wheels you can lace. Then send the rider out on the road and let him discover firsthand the joys of light weight and low rolling resistance.

Davidson's strategy worked perfectly on the Impulse he sent us. Despite its skyscraping 62-cm size, the frame barely nudged the BG Weight-O-Meter needle past 4½ pounds, which is about a half-pound under most steel frames this size. Every ounce shed in Davidson's shop is one less to drag around on the road, and it was impossible to ignore that advantage in sprints, climbs, and manic blasts around Boston's infamous traffic scofflaws. Light weight is especially noticeable in a tall frame; it feels less ponderous as it enters and exits low-speed turns, and it pivots more easily underneath you in out-of-the-saddle climbs.

Significantly, Davidson pares down the weight of his bikes without carving away too much strength or rigidity. He does this by using a mix of Tange Prestige tubing. Our bike had a thin-section top tube and seat tube for minimal mass, but employed a thicker down tube to maintain stiffness in the critical power transmission path through the bottom bracket. This blend has a significant effect on ride comfort, too, since the tubing, though sufficiently rigid for tall, heavy riders, is still flexible enough to absorb road shock.

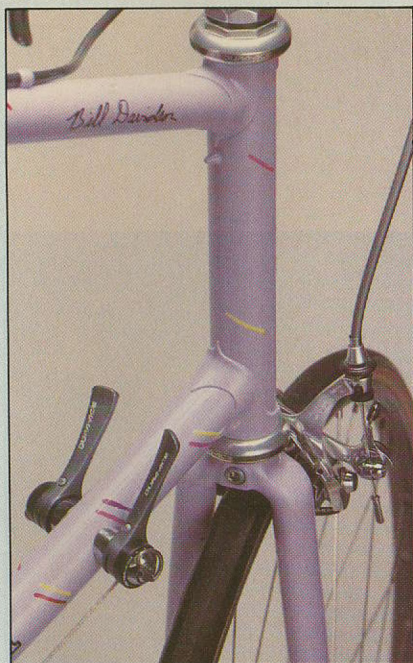
Abetting the frame's good efforts were Davidson's choice in wheels and tires. Lacing Mavic's G.L. 330 rims to low-flange hubs with bladed Wheel-smith spokes results in an attractive, lightweight package; adding Vittoria

silks to the mix is inspired. I flinched every time I dropped these beauties into Beantown's bottomless potholes, but the wheels seemed oblivious to the harsh treatment.

The low weight and high comfort of Davidson's frame got most of our attention; surprisingly, the bike didn't draw much notice otherwise. Up close, you can't miss the singleminded attention to detail that American frame-builders are famous for—the fanatically finished lugs, the perfect brazing at the bottom bracket, the obsessively filed fork ends—but the metalwork displays none of the ornate flourishes that often adorn custom frames. And even though our bike was smoothly painted in what might have been an eye-stopping lavender, the particular



Up close, you can't miss the singleminded attention to detail that is the American frame-builder's badge of honor.



Smoothly integrated crown and Tange Prestige legs contribute to low fork weight—just over 1½ pounds on our 62-cm test frame.

shade chosen was neutral to the point of near-invisibility. Even Davidson's decals are unobtrusive, mere outlines of type that barely interrupt the eye's travel over the tubes. Viewed from a distance, this bike is more restrained than a Windham Hill cassette.

But Davidson has any number of standard and custom paint schemes available to sear the eye, and if it's light weight, solid construction, and excellent workmanship you're after, the Impulse has these in spades. The frame specifications vary with frame size (a good example of Davidson's custom framebuilding instincts carrying over to his "stock" frame), and the angles, top tube lengths, and steering geometry seem well thought-out for most riders. Though I would have preferred a shallower seat angle to get behind the pedals more, and more fork rake to reduce the steering trail figure, it is hard to argue with the bike's smooth ride and easy-going manners.

Easy-going, smooth, well-mannered—those are rare attributes in these uncivilized times. Perhaps Davidson's home town has had a calming effect on his bikes, or perhaps we're just too wired here on the East Coast. Whatever the cause of the Impulse's decided unimpetuosity, it is a well-crafted bike that is easy to like. Davidson's goal is to crank out fine bikes for American riders and American roads. With specs derived from his custom frames, the Impulse is a well-aimed arrow into the heart of that target.

—Ted Costantino

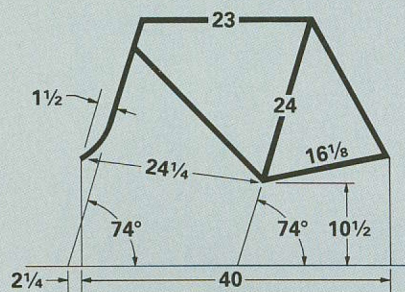
DAVIDSON IMPULSE

\$1700-1900 (price may vary)

\$2100, as tested with custom paint (price may vary)

Sizes available: 48-62 centimeters in 2-cm increments, measured center to top

Size tested: 62 cm



Total weight: 21 lbs, 4¼ oz

Frame without fork: 4 lbs, 8½ oz

Fork only: 1 lb, 9 oz

Front wheel only: 2 lbs, 4¼ oz

Rear wheel only: 3 lbs, 8¼ oz

Frame: Tange Prestige double-buttressed chrome-moly tubing throughout. Bosses for two waterbottles, top tube cable guides, shift levers, derailleur stops and guides, pump peg. Shimano Dura-Ace headset.

Rims: Mavic G.L.330

Spokes: 32 Wheelsmith bladed stainless steel spokes, 14 gauge, laced three-cross

Hubs: Shimano Dura-Ace low flange with quick-release

Tires: Vittoria Corsa CX Seta tubular

Crank: Shimano Dura-Ace, 42/53, 175-mm arms; Shimano Dura-Ace bottom bracket

Derailleurs: Shimano Dura-Ace with SIS levers

Freewheel: Shimano Dura-Ace Freehub

Chain: Sedisport

GEARING in inches:

**	42	53
13	87	110
14	81	102
15	76	95
16	71	89
17	67	84
19	60	75
21	54	68

Saddle: Selle Italia Turbo, suede over padded plastic base

Seatpost: Shimano Dura-Ace, 27.2-mm diameter, 200 mm long

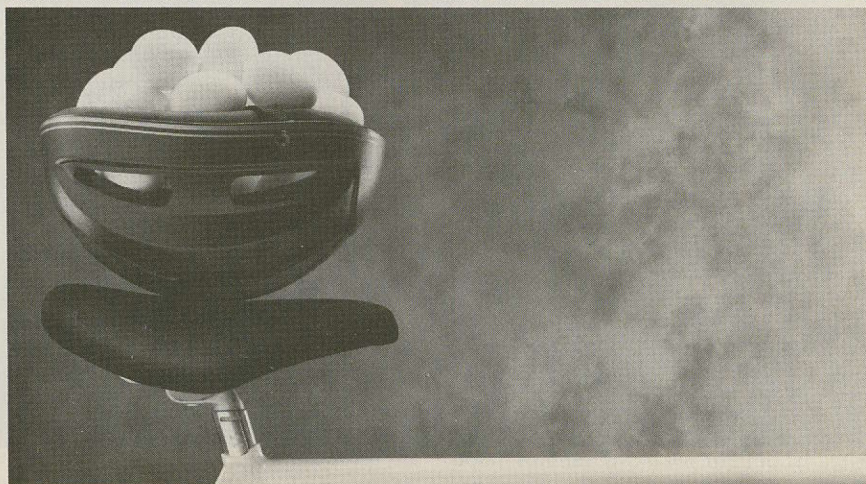
Brakes: Shimano Dura-Ace sidepull

Pedals: Shimano Dura-Ace with steel toe-clips and Specialized leather straps

Handlebars: Specialized V, 42-cm wide, with padded vinyl tape; Specialized stem, 12.5-cm long

Manufactured by: Davidson Handbuilt Bicycles, 2116 Western Ave., Seattle, WA 98121; 206-441-9998

**SOMETIMES IT MAKES SENSE
TO PUT ALL YOUR EGGS IN ONE BASKET.**



**USE YOUR HEAD.
WEAR A HELMET WHEN YOU RIDE.**

**BICYCLE
GUIDE**