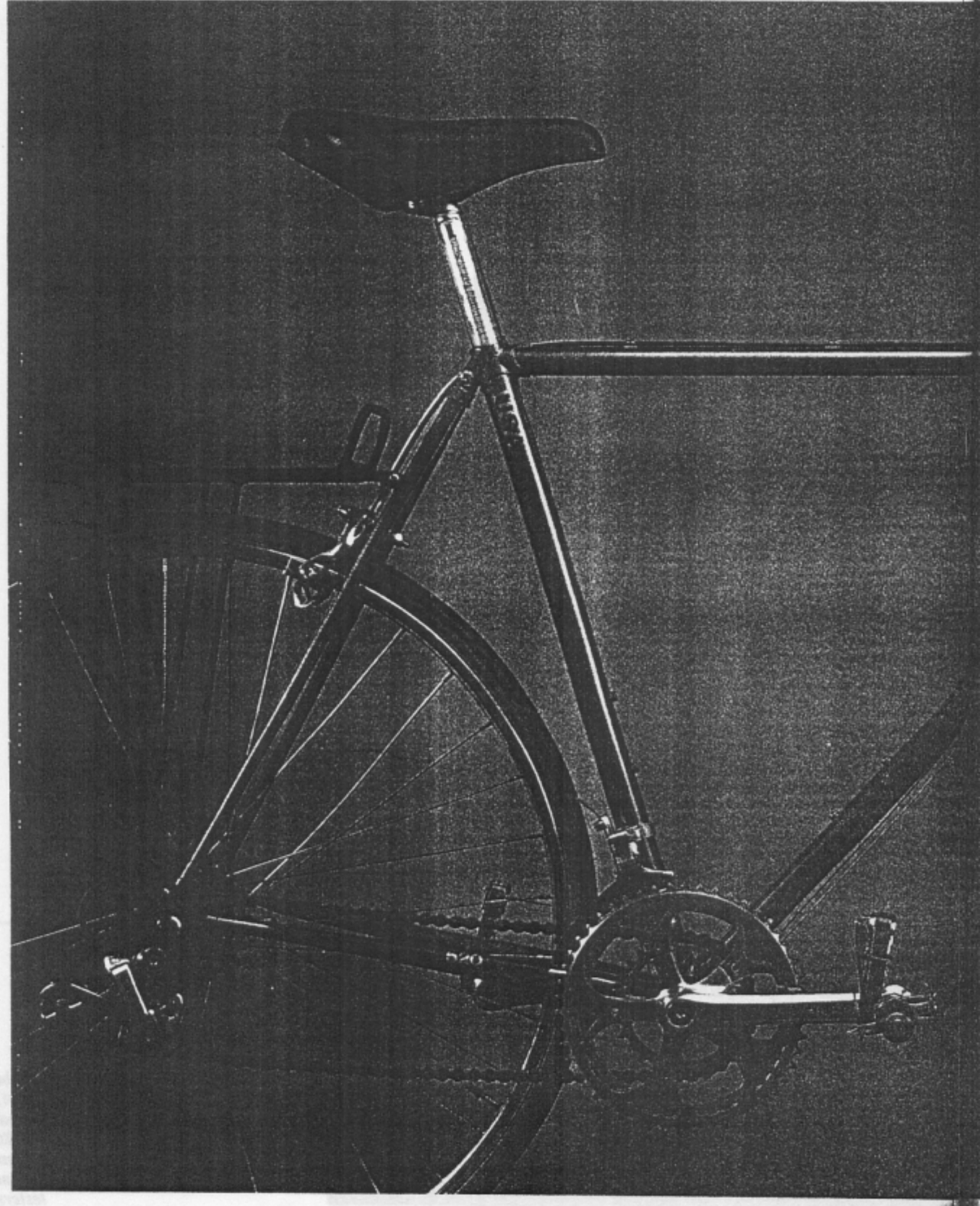


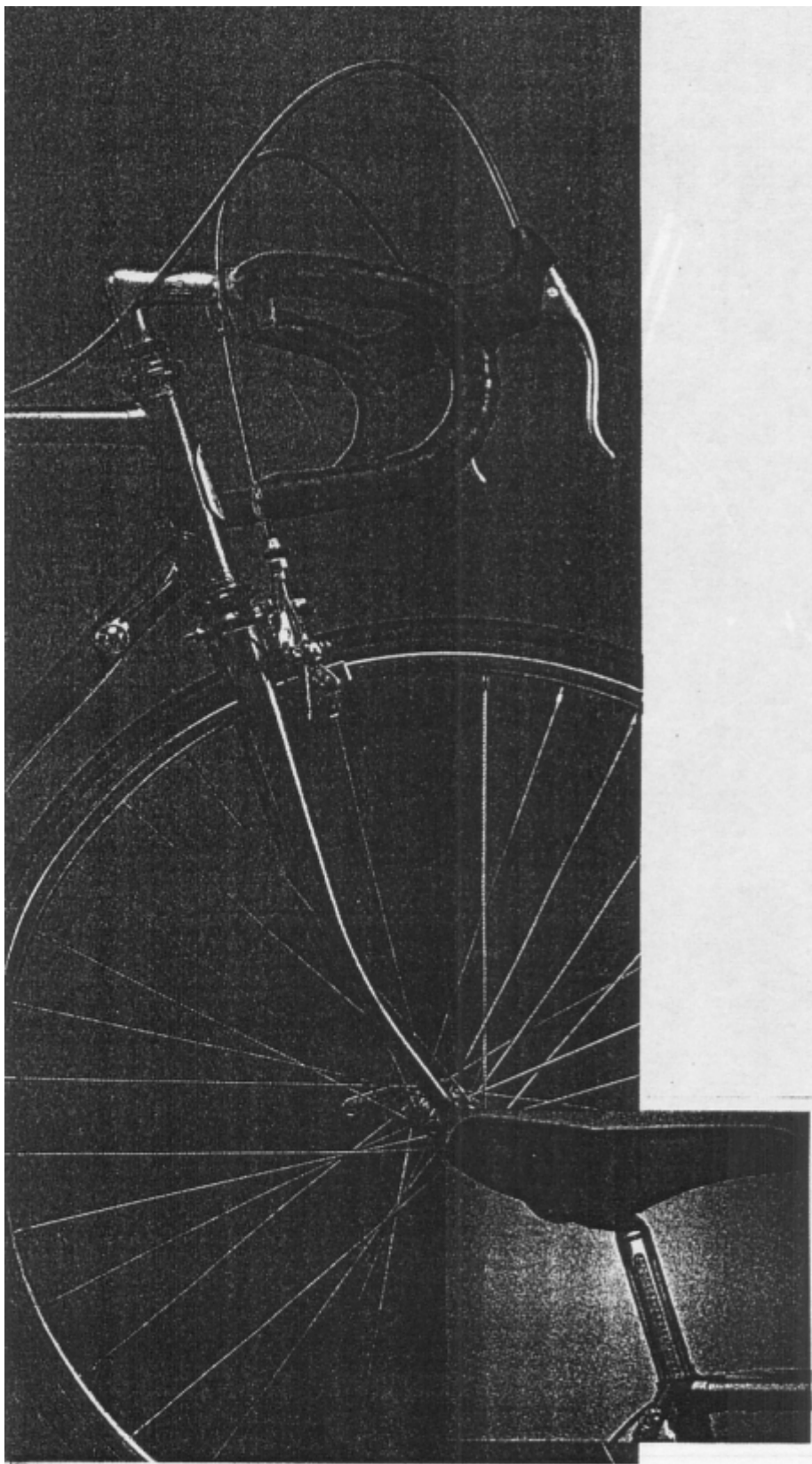
TECHNICAL EDGE

Trek 520

1985

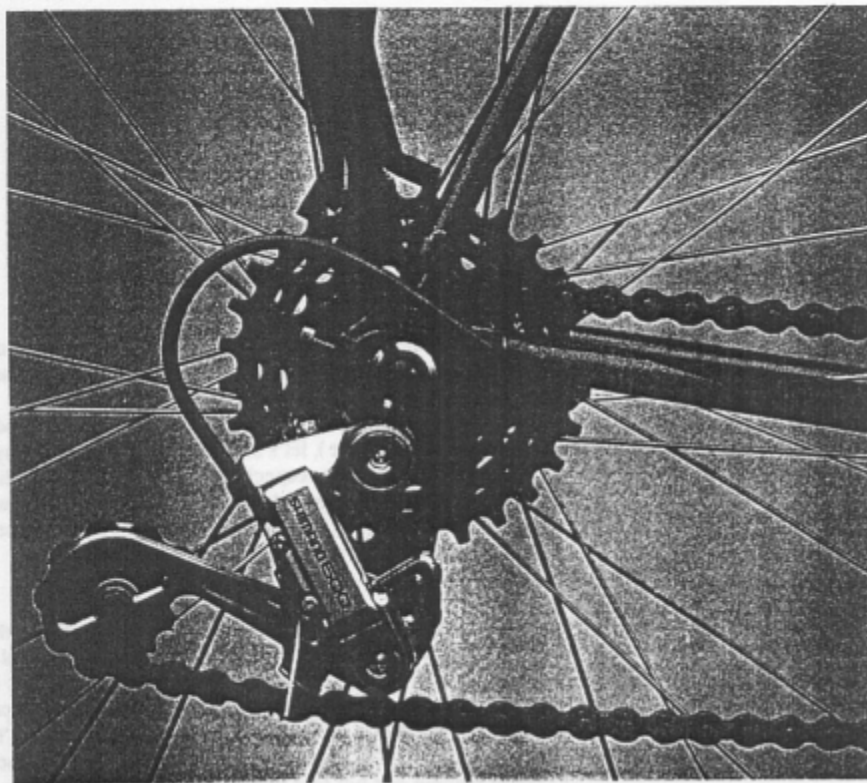


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**T**he Trek 520. Connecting the comfortable anatomic saddle (inset) to the Trek 520's unique cast seat lug is Sugino's popular SP KC graduated seatpost, a popular item among our various-sized road testers.

## TECHNICAL EDGE



**R**eviving the five-speed freewheel and combining it with a New 600 E. derailleur makes for precise shifting. Note the disappearing cable

bag. Lower center of gravity aside, we'd also recommend low-mounted front panniers, because with the handlebar stem set low the rider's hands hit the bags when riding in the drops.

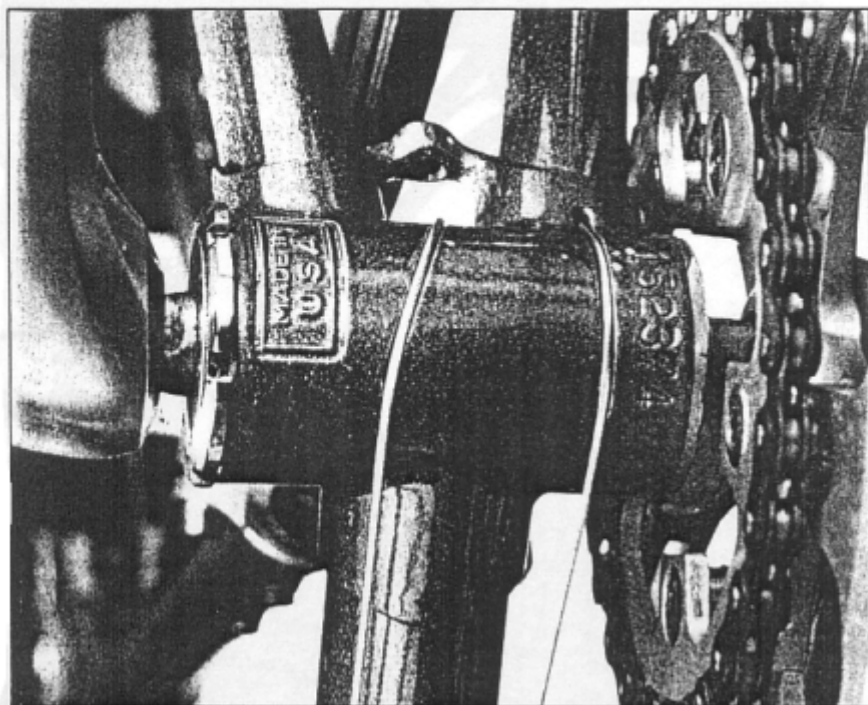
While we're griping (it's hard to get in a negative mood with such a well-designed bike), let's nit-pick about putting flimsy alloy toe clips on a touring bike, especially one practically pleading for a sound thrashing on some rocky hillside. If Raleigh really wanted to be fashionable, they'd have installed the spiffy new plastic toe clips, but I'd settle for a quality set of spring steel ones.

### Trek 520

Many people who buy loaded touring bikes built to slog half their worldly possessions over the Continental Divide never haul more than a couple of bananas, a rain cape, and a patch kit. Trek hopes its new \$499 "credit card touring bike," the 520, will appeal to these folks who want a hill-leveling triple crankset but don't need the extra weight and slow handling of a typical touring frame.

"We're placing our bet that the touring market will prove to be two-way," explains Trek's Harry Spehar. "Why burden the person who wants to ride around town or go on weekend tours with the longer wheelbase and cantilever brakes?"

## TECHNICAL EDGE

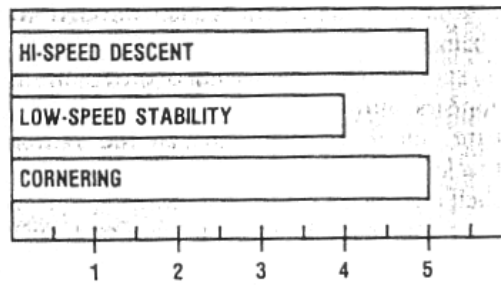


Far from being a burden, the 25 1/2-pound Trek 520 proved a joy to pedal hard and fast over the varied Pennsylvania terrain. Thanks to its 39 1/2-inch wheelbase and quick 73-degree head angle, the bike climbs and corners like a European road racing machine. This from a bike equipped with a rear rack and 28-tooth granny chainring! (Ours was a pre-production version. The 520 will be sold with a 32-tooth inner ring on the Shimano 600 EX crankset, according to Trek.) Either way, that small inner ring should prove a Godsend for day tourists and sag wagon campers whose spirits are more willing than their knees.

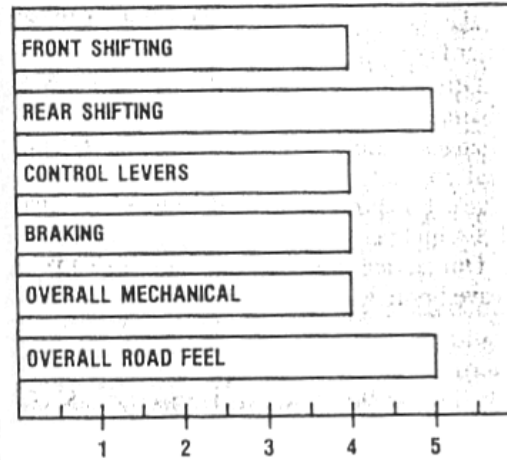
"It seems like a lot of people want to go fast, but athletically they're not quite ready for it," Spehar observes. "We had a lot of re-

**T**he Trek 520's made-in-USA, investment-cast bottom bracket shell includes simple troughs to guide derailleur cables. Note the integral chainstay bridge and internal chainstay cable routing.

## HANDLING



## MECHANICS



quests last year for a sports bike with wider gears."

Despite its 16 3/8-inch chainstays, an inch shorter than on most full-bore tourers, we noticed no problems with chain deflection, thanks to Trek's choice of a five-speed Mailard Helicomatic freewheel. There's plenty of room for a sixth cog between the 126-millimeter-spaced dropouts, but the chain would be forced into a more acute angle by the wider cluster. Had they chose to, Trek could have squeezed an Ultra-7 cluster back there and marketed a more-is-better, 21-speed bike with ornery, imprecise shifting as a result. As is, the garden variety 14-28 freewheel provides true half-step gearing and accurate shifting. Kudos to the super-shifting long cage 600 EX derailleur, which also wraps enough links to eliminate chain slack in the small-small cog-chainring combination.

The frame's main triangle is constructed of Reynolds 501 double-buttressed main tubes of 0.9-0.6-0.9 millimeter wall thickness. Stays are True Temper chrome-moly, with Mangaloy taper gauge forks. The Reynolds seat tube sticker should draw a few nods of approval from experienced cyclists who wore out their first sets of tubulars riding bikes built of Reynolds 531.

Members of that same crowd are apt to mellow their jaded, seen-it-all demeanors at the sight of the 520's unconventional lugs.

Investment cast especially for Trek by a local Wisconsin firm, the lugs and bottom bracket shell need less finish work than forged designs. They also look neat, in every sense of the word. We liked the fastback seat cluster, with a Cinelli-style binder bolt and long seatstay lugs. On most fastback designs, the seatstays are simply brazed to the lug, rather than inserted into their own lug sockets. Check out the photo, all you envious frame build-

ers! Both the seat lug and the bottom bracket, the latter with an integral chainstay bridge, feature cast-in Trek logos.

A novel approach was also taken to the cast rear dropouts, which offset the chain and seatstays to the extreme outside of the dropout flats. According to Spehar, this increases the triangulation and makes for a stiffer rear end, not to mention eliminating the need to bevel the dropout ends of the stays for cog

and chain clearance. The offset also makes routing the derailleur cable through the chainstay as easy as drilling a hole. There's no separate cable stop needed; the casing disappears into the stay and re-emerges as a bare, inner control wire at the bottom bracket, where a groove molded into the shell directs the cable on its way.

Of course, Trek couldn't cover such striking metal work with just any old paint job. The metallic medium gray they chose is complemented by bright red decals, cables, and cushioned, plastic handlebar tape. Flat black brake hoods, headset, rack, and chainstay guard complete the color scheme.

Other than swapping the 28-tooth inner chainring for a larger 32-tooth version, changes anticipated for production are limited to increasing the fork rake from our bike's 1 1/2 inches to a slightly more sedate 1 3/4 inches.

Our advice to sag wagon sojourners? Don't leave home without it.