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MOUNTAIN BIKE

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A different dimension: Brodie offers his customers differing concepts than what are normally found in the American market. The sloping tube isn't as radical as past designs and helps rider maneuverability. The 12 inch bottom bracket makes the frame bigger than it really is, but it didn't seem to hinder high-speed cornering.

IN FROM THE COLD: CANADIAN MOUNTAIN BIKES

*Color Canada
luckier than ever*



■ If ever there were two neighbors with little in common it would be America and Canada. America is, of course, the flashier of the two, with a lot more pastel-colored shopping centers to break up the endless miles of paved blacktop. Canada, on the other hand, is still very much a frontier land. Rugged, quiet and mysterious, it is a conservative country, owing to its strong European influence. Canada is also a country that offers some of the best mountain bike riding in the world. Whether winding through the trails on the outskirts of such urban wonders as Vancouver, or pedaling in the solitude of the Ottawa plains, there is no shortage of mountain bike excursions.

For years Canadian mountain bikers have

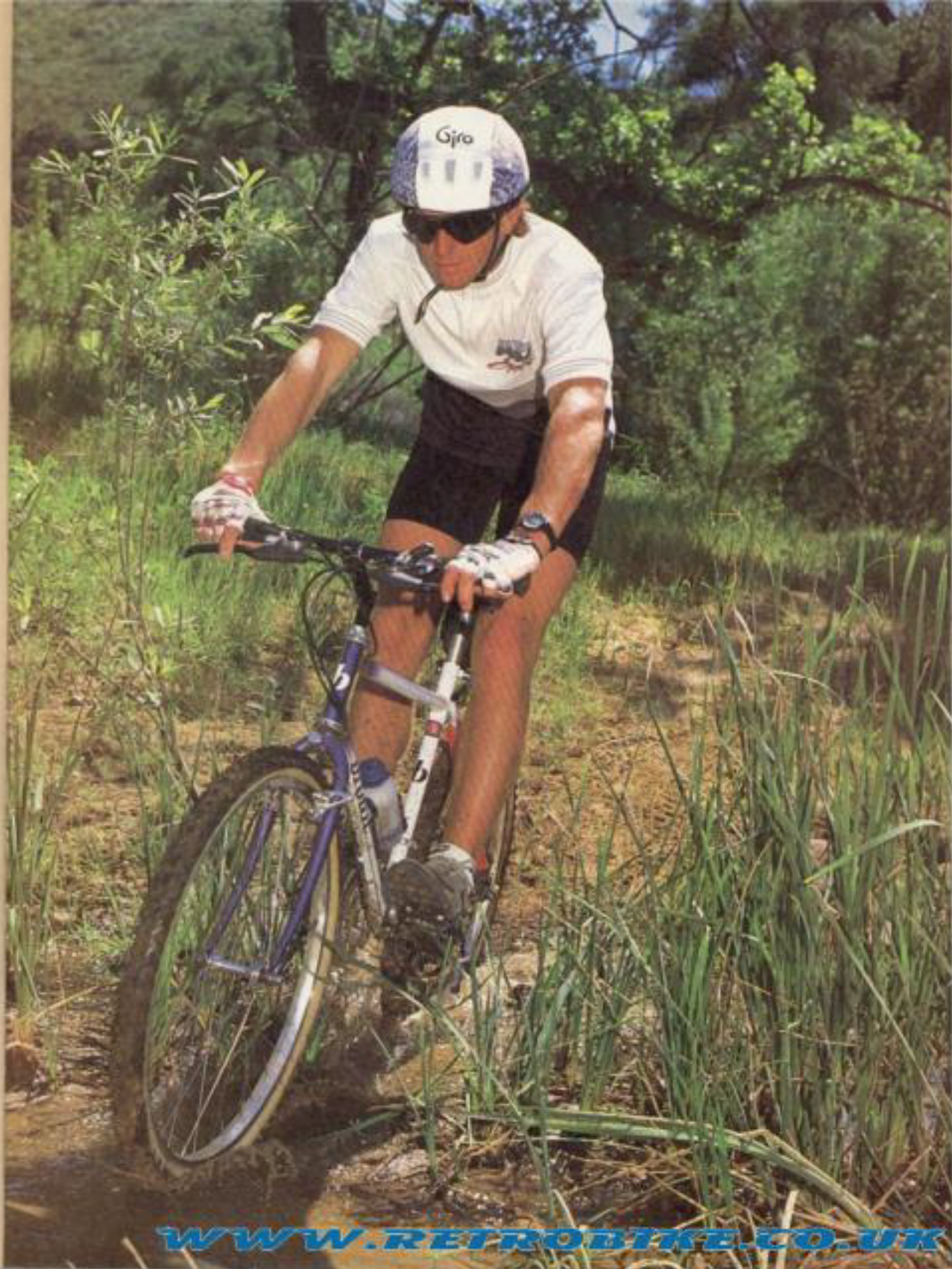
been forced to rely on imported bikes from America, which carry with them a stiff price increase due to the fluctuating exchange rates. Ritchey and Fisher were two of the most popular imports, due to their quality construction and ability to endure the harsh terrain. Although Canadian bike builders have been slow to follow the fast pace of mountain bike development emanating from the United States, it looks as if they have caught their second breath and are determined to give American manufacturers a run for their share of the market.

With the emergence of several domestic mountain bike manufacturers who are approaching the market with distinctly different ideas, Canada appears to have finally

Take it out and play: The Rocky Mountain was a fun bike to ride and we didn't encounter any problems with it. The bike offers stable handling due to the relaxed head angle and works best on downhill fire road runs.

Dream machine: The Brodie Romax was an excellent handler due to the well specified geometry and components. Everything about the bike is meticulously thought out and applied. ▶

ly cast off its dependency on American products. MBA decided to take a look at two of the most popular Canadian mountain bikes to see just what is going on north of the border.



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CUSTOM MADE THE CANADIAN WAY BRODIE ROMAX

• "Paul has been building bikes for just over four years now and he's definitely one of the most meticulous frame builders I've ever seen," said Jacob Heilbron of The Bicycle Group. "Paul started out with an extensive background in machining and has since made over 500 bikes. The Tim Ritchey legacy in Canada is now becoming the Paul Brodie legacy because of his quality craftsmanship. Paul currently has the capacity to build between two and three hundred frames a year. The Romax will be available with either a Tange chromoly or Prestige tubing frame. The price for both is the same, but with the chromoly frame internal cable routing is available. Every Romax is available with an array of options including frame sizes, brake boss location, stems, rack and fender eyelets, pump pegs, and color. We no longer view ourselves as a Canadian company, with the Merlin Metalworks titanium bike and the custom Brodies, we're really concentrating on the American market."

CHASSIS: BEAUTY IN MOTION

FRAME: The Brodie Romax is a work of art! Our test bike was highlighted with an eye-catching purple and white fade paint job, which was the first indication of just

how meticulous Paul Brodie is in finishing off his bikes. Much of what can be said about the Romax centers on the bike's top tube. In true Brodie tradition it is of the sloping variety, though not as radical an angle as past Brodie designs. The top tube's 22.5-inch measurement (measured along the imaginary plane of a standard flat top tube) is just perfect for the 20-inch frame. We say just perfect because if it was even the slightest bit shorter, it would be too short. The top tube is also home to the internally routed cable housings which are so well brazed they look like they grew out of the frame. The internal routing system cleans up the overall design of the bike as well as providing a less encumbered route for the cable to travel.

The seat tube on the Romax is graced with both a reinforced seat binder lug and collar where the top tube and seat stay meet. Ovalized at the bottom bracket, the seat tube has one of two water bottle braze-ons which allows you to use the large capacity bottles. The Romax is also the first test bike we've had with the pump peg mounted on the seat stay. Brodie's crafted pump peg is as creative as it is useful and it's made to accommodate a Mt. Zefal pump. Most noteworthy on the Brodie is the fillet brazing and hand filing which join all the Tange MTB chromoly tubes and one inch diameter forks—immaculate.

GEOMETRY: The Romax is right in the ballpark with its 70-degree head and 73-

IN FROM THE COLD

degree seat tube angles. This is the most popular combination of angles found on the market today due to the all-around performance that they guarantee. The head angle might be more relaxed than some of the new wave frames but it makes for a stable and secure ride. A 12-inch bottom bracket reminds you of the bike's origins—the rough and tumble Canadian terrain demands it. The 17-inch chain stays promise good climbing traits and keep the wheelbase down to a manageable 42.5 inches.

WHEELS: AS GOOD AS THEY CAN GET

ASSEMBLIES: Top-of-the-line Shimano Deore XT hubs are laced to the tried and true Araya RM-20 rims. Brodie had the good sense to leave the flashiness to the frame and paint—the rims are kept in their natural alloy state which provides better braking and looks than their anodized or painted counterparts (since there is no color coating to scratch off). Marin Rockstar tires are quickly becoming the tire of choice for many top riders. The paddle style tires are excellent climbers and offered equal gripping power when descending on hard pack free roads. Both front and rear tire clearance is good which is expected since the bike was designed around the muddy terrain of Canada.

THE JAPANESE/CANADIAN CONNECTION ROCKY MOUNTAIN AVALANCHE

• "We designed the Avalanche around the Canadian style of mountain bike riding. We like to go out and spend a good part of the day climbing hills, and then turn around for a thirty-minute descent down the logging roads," says Rocky Mountain product manager Lance Bohlen. "We intended it to be an entry-level race bike by using the same frame as last year's top-of-the-line bike and then carefully spec'ing it out with less-expensive components."

"The frame is TIG-welded in Japan by the company with the longest history of welding mountain bike frames, and it has very high quality control. Once we get the frame, the entire bike is hand-assembled by seasoned pros in Canada using Chevron Off-Highway grease which is used for the logging trucks."

CHASSIS: GOING DOWN

FRAME: Rocky Mountain has been experimenting with different frame designs for the past few years. Although the Avalanche isn't as radical in frame shape as its brother,

◀ **Take it out and play:** The Rocky Mountain Avalanche is assembled with the same grease used on Canadian logging trucks to ensure protection against the elements.

the Mountain Wedge, it is noticeable different from most bikes with its radically sloping top tube. The frame is made of Tange 4130 MTB double-butted seamless tubing, and as Lance attests, the TIG welding is flawless. Due to the sloping top tube, the seat tube extends four inches above the top tube, but luckily Rocky Mountain used a reinforced seat collar, a la Fisher, to ensure rigidity and strength. There is also a reinforced seat collar for the pinch bolt, a nice touch.

The blue-and-yellow Avalanche surprised us by having two water-bottle braze-ons, which isn't common for a bike with such steeply sloping top tubes (due to space limitations). Sloated cable guides accompany front and rear single-dropout eyelets and fender mounts. The front forks are constructed from Tange MTB tubing and ride in a nice Shimano 105 headset.

GEOMETRY: Our test bike measured 18 inches with a 21.75-inch-long top tube, which is a good size for the small frame. Due to the downward-angled top tube, the junction where it meets the seat tube measures 24.5 inches from the ground versus the 28.5 measurement which the Avalanche would have if it had an ordinary flat version. The extra four inches of clearance is good news for riders who might be on the short side, or anyone who happens to be bucked forward out of the saddle suddenly.

Rounding out the numbers game, the

Avalanche has a 70-degree head angle mixed with a 73.5-degree seat angle. These are close to the most contemporary mountain bike angles on the market today. Why? Because they work. At 70 degrees the front end offers a stable ride that's not too quick, and the seat angle is perfect for the 16.75-inch chain stays. If the chain stays were longer (around 17 inches), the rider wouldn't be placed far enough over the rear wheel to guarantee good traction. But as tight as they are, that isn't a problem with the Avalanche. The bottom bracket measures an ideal 11.5 inches.

WHEELS: JUST LIKE HOMEMADE

ASSEMBLIES: The black anodized Ukal rims are hand-laced by Wheeltech, which is Rocky Mountain's own wheel division. The rims are laced to Shimano 105 hubs with 14-gauge spokes using a thread-locking compound on the nipples. Rocky Mountain is so sure of the assembly that every wheel is guaranteed for one year against breakage for any reason. Now that's an impressive claim! Rocky Mountain says they began using the 105 quick-release hubs before the Deore units were available and found them to be so trustworthy they stayed with them. Ritchey Foece Duro tires keep things rolling along and guarantee long tread life.

DRIVE TRAIN: QUITE A SELECTION

The Avalanche uses 170mm Sakae cranks with round 26/38/48T chain rings. Lance tells us they opted for the round rings over

IN FROM THE COLD

DRIVETRAIN

The Brodie Romax is a top-of-the-line bike which demands a top-of-the-line drivetrain, and that's exactly what it has—Shimano Deore XT. Save for the Browning electric transmission system, which heads the list of hard-to-find components, the Deore XT crankset and derailleurs are the best on the market thanks to their precision performance. The 175mm cranks are mated to 28/38/48T Biopace chainrings and Deore XT pedals. Though there is only a minor difference between the two, the Brodie should come equipped with the more precise Biopace II chainrings to better justify the retail price. Despite the ovalized chainstays, there was very little clearance between the smallest chainwheel and the chainstay. So small that running a bigger ring would be questionable without more crimping.

On the rear a full (13, 15, 18, 22, 26, 30T) range of gears is available for every off-road encounter. The rear derailleur cable is enclosed for its entire length which helps keep the grime out, but can cause a bungy feeling due to all the extra housing. It's a good idea, but we couldn't figure out why the additional housing was left off of the front derailleur cable?

COMPONENTS: MORE GOOD STUFF

Non-tapered bars with imitation Grab-On grips provide the control instruments on the

Brodie. We thought that a bike in this price range should come with a better quality grip, preferably the original Grab-On which is one of the best grips on the market. The imitations are too soft and have dead feeling when gripped hard. A beautiful Brodie fillet brazed stem with a 4-inch rise and a 4.5-inch reach is perfectly mated to the bike's geometry. The front brake cable shares the same type of internal routing as the rear derailleur cable. The stem sits in a Shimano 600EX headset, which is unusual but one of the best headsets around. The headset is just as durable for a mountain bike as a road bike and is a real eye catcher with its sculpted alloy nuts.

SEAT: The seating department reflects the sort of quality that is expected of the Brodie. A Shimano Deore XT quick release seat binder pinches a 300mm SunTour XC seat post—one of the best seat posts available. Topping off the group is an Avocet R20 Gelflex saddle, which most testers were comfortable with because it wasn't over padded. The long and narrow snout of the Gelflex saddle provided ample room to move around easily.

BRAKES: Mountain bike braking systems are at a stage where the market is ready to explode with numerous new groups which will allow for a wider range of diversity, but until then most bikes come outfitted with Shimano brakes. The Romax is no exception and it is equipped with the top-of-the-line Deore XT units. The cantilever front

Almost too pretty to ride: Beautiful fillet brazing and custom paint make the Romax stand out in any crowd.



brake and under-the-chainstay mounted U-brake worked as they always do—great. In the not too immediate future more bikes will start appearing with brakes from other companies who have been using the Deore XT units as a role model.

OVERALL IMPRESSION

The high price of the Brodie Romax brings with it everything you would expect; it's a gorgeous, well thought out bike—everything balances out. On the trail the Romax was a smooth and agile handler that was helped along by the higher than usual bottom bracket. High speed handling was guaranteed with the 70-degree head angle matched with the Marin Rockstar tires. The bike was stable and gripped in the corners, it was fun to ride. Pet peeves? We had a few. The chain ring clearance with the ovalized rings didn't cause us any trouble, but it was something we had to worry about. The grips are what we expect to find on entry-level bikes, not a hot shot custom bike like the Brodie. For a bike with such high performance tendencies we would have also liked to

the more common oval rings because entry-level and road riders are more accustomed to the cadence of round rings so there is less of a transition to make. "When Biopace gets popular in road racing maybe we'll switch, but we like the more traditional approach," says Lance. We have no complaints about the round rings, but we protest loudly over the Sakae cranks which use a threaded spindle and nut combination to stay tight. The problem is that they don't stay tight. The nut is dimpled on the inner surface and does the exact opposite of what it was designed to do. Instead of biting into the alloy crank, the dimpled nut forces itself loose. Check the nut frequently. The MKS MR1000 pedals are small and sharply serrated and are equipped with Christophe plastic toe clips and nylon straps. This is an aggressive pedal combination that works well in all situations.

DERAILLEURS: Shimano Deore shifters keep the Deore derailleurs moving through the gears with the usual Shimano precision. The biggest problem with the Avalanche's shifting was the choice of gears that the derailleurs were forced to shift over. Unrealistic, best describes the 13-26 selection. MBA test riders are far from being chicken-legged wimps, but we think that every production bike should come with a 13-30 gear range (a 26/26 low is identical to a 28/28). Bike owners can lower the gear-

ing to a 26 when their legs get strong enough!

COMPONENTS: SOME OF THIS AND THAT

BAR: Handlebars on the Avalanche are made of Prestige tubing, which offers both better resilience and weight savings over the more common chromoly units. The bars were bent back farther than we liked, but this had more to do with the Ritchey Force stem. Ritchey makes some of the best stems available, in a wide assortment of sizes; unfortunately, the stem on the Avalanche is too long. Although the four-inch rise was perfect, the five-inches of reach was about one inch too long. Fast descents taken in the attack position put the rider's weight in front of the front axle which can lead to some unexpected circumstances. The grips are a spongy copy of the famous Grab-On variety and give a dead feeling that none of the test riders could get used to.

SEAT: A 300mm SunTour Laprade seatpost props up a Sella Italia Anatomical seat which is firm and comfortable. We were hoping for a Shimano seat binder quick-release but found a Sansin unit instead. Due to its trouble free operation we got over the disappointment.

BRAKES: Complementing the Shimano Deore derailleur system is a Deore brake set. The front cantilever worked well despite the anodized rim's best attempt to provide a

Can't be too realistic: The gearing on the Avalanche was so far on the low side that some test riders were unable to ride it uphill. For a professional race bike the gearing was fine, but not for anyone else.



slippery surface. The black anodizing on the rear wheel didn't last as long, but it too didn't affect the braking of the Deore U-brake.

OVERALL IMPRESSION

The Rocky Mountain Avalanche is a good bike, especially for short riders though taller riders, too, would benefit from a larger frame's slanted top tube. The sloping tube gives the rider real room to move which is especially welcome when the going gets rough. The bike handled well on the fast descents just as Rocky Mountain promised, and the short chain stays guaranteed that the bike would climb well, though climbing was



A touch of class: Builder Paul Brodie's attention to detail is flawless on the Romax. The reinforced seat lug and collar guarantee strength and durability.

see the bike come equipped with toe clips. The Brodie's less radical sloped top tube will easily allow the rider to slip the bike over the shoulder (which most bikes with a sloping top tube won't permit).

Riding a custom bike isn't that special to most people, but riding a custom bike that's made in Canada will undoubtedly turn some heads. Not only is the name different, but so are many aspects of the bike such as the internally routed cables, full cable sheathing, and the seat stay mounted pump peg. Paul Brodie's craftsmanship is outstanding, the fillet brazing and paint job is flawless. Even more important (to some riders at least) is the fact that the Brodie Romax handles as



SPECIFICATIONS

Model: Brodie Romax
Manufacturer: The Brodie Group, #206, 1108 Hamilton Street, Vancouver BC, V6Z 0G8
004084-4303
Sizes available: 16", 18", 19", 20.5"

Finishes available: any DuPont paint color combination
Retail Price: U.S. \$1799, Canada \$2199
COMPONENTS
Front derailleurs: Shimano Deore XT

Rear derailleurs: Shimano Deore XT
Front brake: Shimano Deore XT Cardvo
Rear brake: Shimano Deore XT U-brake
Crank: Shimano Deore XT
XT 11/32x142
Freehub: Shimano Cassette

FRAME
 tubing: large butted chromoly/steel
Head angle: 73°
Seat angle: 73°
Top tube length: 22.1"
Chainstay length: 17"
Dropouts: Double water bottle, single front and rear
Internal system

NOTE: THE MOUNTAIN BIKE ACTION test crew rates its test bikes under controlled circumstances, on private property and with respect for the environment. No wilderness or environmentally sensitive areas are used.

good as it looks. It just goes to prove that Canada not only has optimum mountain biking terrain, but they also might have the

optimum mountain bike to do all their mountain biking on—how lucky can you get? *



Like a kid wearing his dad's shoes: The Ritchey Race stem was about one inch too long for the Avalanche. Japanese TIG welding was of very good quality and the paint was durable.

limited due to the high gearing. For the price, we would've liked to have real Grab-On grips and Deore XT components. The only problem with the sloping top tube design (especially when coupled with a water-bottle braze-on) is that there is less room for slipping an arm under so the bike can be portaged.

The Rocky Mountain Avalanche is a good bike that approaches things in its own unique manner. The wide variety of com-



SPECIFICATIONS

Model: Rocky Mountain Avalanche
Manufacturer: Rocky Mountain Bicycles, 4214 5090 7th S. Road, Richmond, B.C., V6V 1Z1
0041775-2700
Sizes available: 17.5", 19", 20.5"
Finishes available: Blue/Yellow

Retail Price: U.S. \$945, Canada \$1175
COMPONENTS
Front derailleurs: Shimano Deore
Rear derailleurs: Shimano Deore
Front brake: Shimano Deore Cardvo
Rear brake: Shimano Deore Cardvo

Front brake: Shimano Deore U-brake
Crank: Sakai FX 170mm 26/32/47 28/30/43
Freehub: Shimano Cassette
FRAME
 tubing: large 4130 steel
 24.1" (20.5")

Head angle: 73°
Seat angle: 73.5°
Top tube length: 25"
Chainstay length: 15.75"
Dropouts: Double water bottle, single front and rear
Internal system, rear fender mounts

NOTE: THE MOUNTAIN BIKE ACTION test crew rates its test bikes under controlled circumstances, on private property and with respect for the environment. No wilderness or environmentally sensitive areas are used.

ponents all work well and make the bike more interesting. If you are the type of person who likes to follow a different path in

life—but at the same time want to arrive with everyone else—then the Rocky Mountain Avalanche is the bike for you. ☐