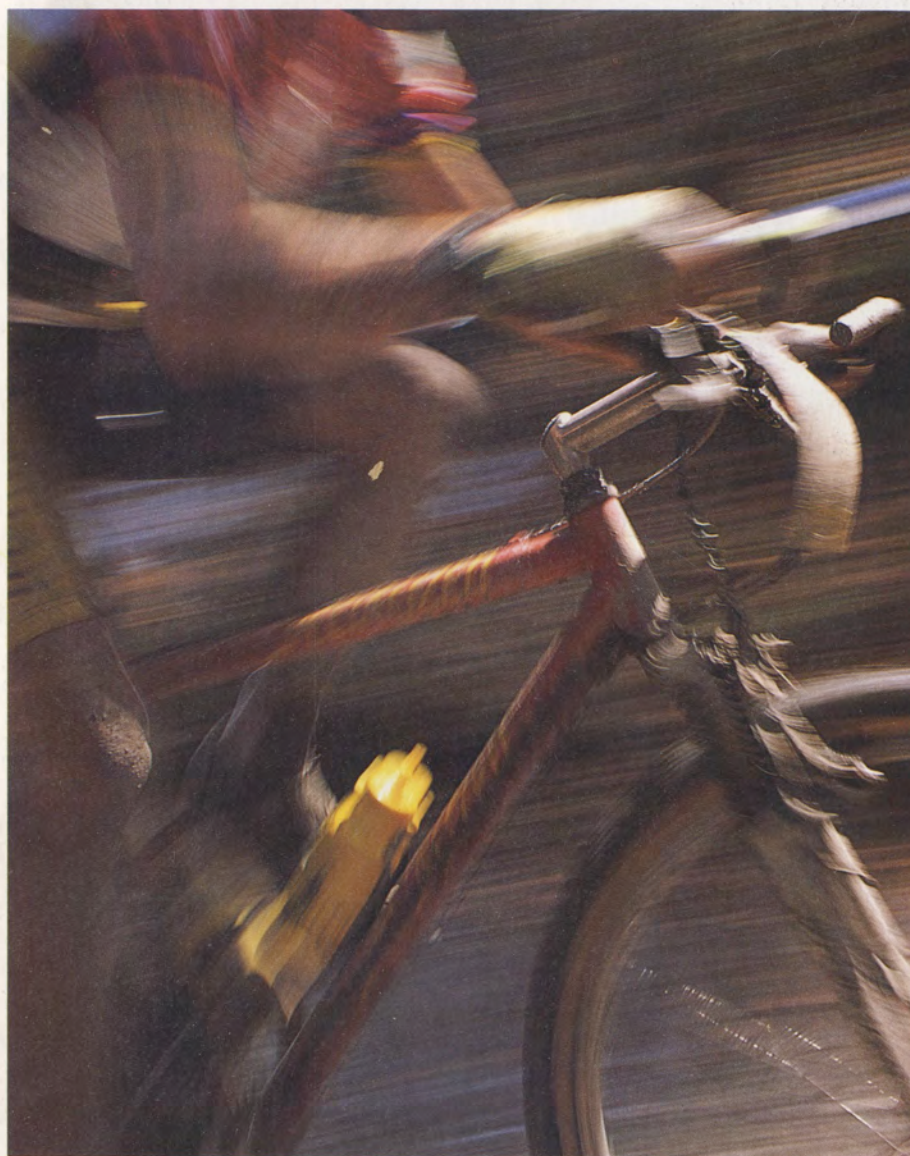
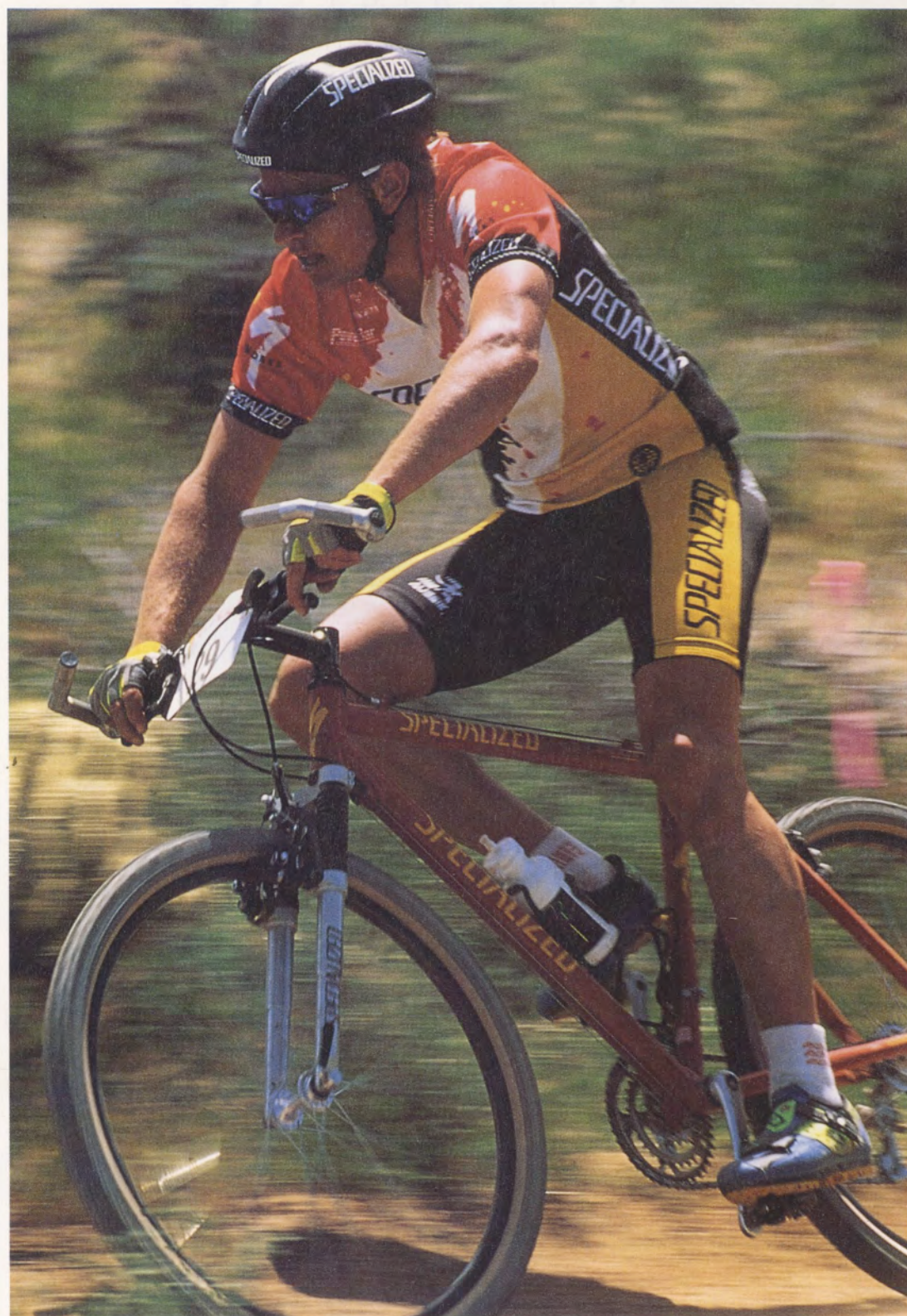


1993 S - WORKS BICYCLES





H A R D C O R E P A S S I O N O N W H E E L S .

See if you've heard this one before. Company A sets out to build the very best products in its field, does so, gains acclaim for it, and rests on its laurels forever after. We've all seen it happen. To our favorite make of car, restaurant, beer. ☞ Determined not to fall into this trap, we started S-Works. This is the part of our company that makes all of our race winning team bikes and racing products. It's that basic. ☞ To begin with, we keep it really simple and eliminate all the rules. These are race bikes. Every piece on the bike is designed to make the bikes lighter, faster or stronger. If it doesn't do that, it doesn't go on the bike. Our motto is really simple as well: "Innovate or die." ☞ Only our best people fine tune every aspect of our racing bike. Definitely not hobbyists and PR people, but scientists, connoisseurs, and crafts people. Our S-Works development team understands every aspect of the bike, races it, rides it and tests it until they are convinced it will blow away any standard they have set before. ☞ S-Works bikes are designed to meet the expectations of our Team Specialized. Ned, Daryl, Sara and Sylvia rely on S-Works bikes every day, all over the world. S-Works has



Each Specialized FS bike has it's own corrected geometry to accommodate the longer suspension fork. So you feel all the trail grabbing benefits without giving up anything in terms of control.

expanded and redefines the limits to make products that are beyond even the team's expectations with new advancements from our high technology partners like DuPont. This results in a race winning bike made of Superlight DirectDrive chromoly, Race Bias carbon fiber and the revolutionary M2™ metal matrix composite. At S-Works, everything on the bike is thought out. Not just the frame and fork, but each and every component. The components are not taken out of a catalog, but rather designed from scratch. Every stem, seatpost, saddle and grip has been designed to meet the rigorous expectations of the team and our own standards. Plus, we let you have a choice of what parts you want. You can get your bike set up with one of our Specialized groups, or order it as a frameset and spec your rig with anything you want. An S-Works bike is the actual bike that Team Specialized is riding and is the best way for you to feel the real racing and cycling experience. What you get is a bike that feels like it is ready to be raced, every time you ride it. Go test out what a real race



The comparison of the specific stiffness of popular metals shows the benefits of M2.

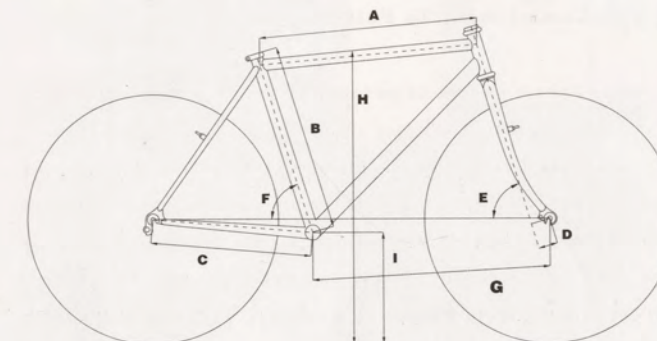
ride one and find bike can do for you.

GEOMETRY

The goal of S-Works is to design an energy-efficient rig, proportioned to the rider's anatomy while wasting a minimum amount of the rider's energy. Properly achieved, the result would be a bike that handled so great, it felt like an extension of the rider's body. Approaching this goal in reality, though, means taking into account the variety of terrain around the world that we ride in. On our S-Works bikes, the seat tube angle positions you over the pedals, allowing for a smooth "spinning" motion which allows for quicker changes in pedaling speed. This also makes it easier to stand up and crank hard on the pedals during a steep climb. Meanwhile, the frame's head tube angle and fork rake make a quicker steering bike that responds to the rider's merest whim.

Top tube lengths and front wheel base are proportioned according to size of the frame. This allows the correct rider position and weight balance for off road conditions. Chainstay length and bottom bracket height also effect the weight balance of the machine, they must be factored into the equation as well. There is a very tenuous balance of weight between the front and rear wheels of the mountain bike. This balance changes with the conditions; uphill, downhill, mud, hardpack, etc., and can make the big difference on steep hills and fast corners.

Other design features, though, characterize all our products. DirectDrive chainstays, reinforced seat collar, Oversize top tube. And the Specialized DirectDrive seatpost and DirectDrive chromoly proportioned stem, to name a few. If a detail affects handling, you can be sure the Specialized design program has affected that detail.



A	Seat Tube Length C-T	D	Fork Rake	G	Front Center
B	Top tube Length C-C	E	Head Tube Angle	H	Stand Over Height
C	Chain Stay Length	F	Seat Tube Angle	I	Bottom Bracket Height

A	B	C	D	E	F	G	H	I
<i>S-Works FSR</i>								
16.5"	52.0cm	43.0cm	4.2cm	71°	74°	59.8cm	29.0	NA
18"	55.0cm	43.0cm	4.2cm	71°	73°	61.9cm	30.0	NA
19"	56.0cm	43.0cm	4.2cm	71°	73°	63.1cm	30.7	NA
20"	58.0cm	43.0cm	4.2cm	71°	73°	64.2cm	31.5	NA
21.5"	60.0cm	43.0cm	4.2cm	71°	73°	66.3cm	33.0	NA
<i>S-Works Ultimate</i>								
16.5"	52.8cm	42.8cm	4.2cm	71°	74°	59.8cm	28.5"	29cm
18"	55.4cm	42.8cm	4.2cm	71°	73°	61.9cm	29.5"	29cm
19"	57.2cm	42.8cm	4.2cm	71°	73°	63.1cm	29.8"	29cm
20"	58.4cm	42.8cm	4.2cm	71°	73°	64.2cm	30.5"	29cm
21.5"	60.2cm	42.8cm	4.2cm	71°	73°	66.3cm	32.3"	29cm
<i>S-Works M2 FSX</i>								
16.5"	52.3cm	43.0cm	4.2cm	71°	74°	60.5cm	28.9"	29cm
18"	55.2cm	43.0cm	4.2cm	71°	73°	62.6cm	29.7"	29cm
19"	56.8cm	43.0cm	4.2cm	71°	73°	63.8cm	30.2"	29cm
20"	58.3cm	43.0cm	4.2cm	71°	73°	64.9cm	30.7"	29cm
21.5"	60.6cm	43.0cm	4.2cm	71°	73°	67.0cm	31.7"	29cm
<i>S-Works Steel</i>								
16.5"	52.1cm	43.0cm	4.2cm	71°	74°	59.8cm	28.5"	29cm
18"	55.5cm	43.0cm	4.2cm	71°	73°	61.9cm	29.5"	29cm
19"	57.2cm	43.0cm	4.2cm	71°	73°	63.1cm	29.8"	29cm
20"	58.3cm	43.0cm	4.2cm	71°	73°	64.2cm	30.5"	29cm
21.5"	60.1cm	43.0cm	4.2cm	71°	73°	66.3cm	32.3"	29cm
	23.7	16.9	1.65			26.1		11.4

A Full Commitment To Full Suspension That Works.

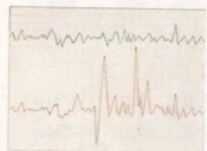
It only takes a couple of seconds to see if a suspension system really works. It takes a couple of years to figure it out.

Far from being the latest spring assisted novelty, we believe the S-Works FSR fully suspended bike delivers performance that will show up in better performance on the trail, a faster finish in competition and an overall better ride. Here's why:

- Better traction. Our Proprietary Future Shock™ uses a combined air/oil system to absorb bumps and quickly return the tire to the dirt. The wheels bounce less, which means they're on the ground providing more traction.

- More aggressive descents. The FSR suspension sucks up the bumps and glides over ruts. You spend less time wrestling with the bike, which frees up more attention for picking your lines and enjoying the ride.

- Smoother climbing. Because there's less loading and unloading over rocks and ruts.



Top; Bump forces at the stem. Bottom; Bump forces at the hub.

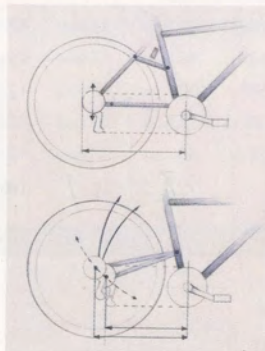
- Easier braking. More traction means less wheel hop, sliding, skidding, lock-up, and face plants and less trail damage.

- Less rider fatigue. The suspension takes all the punishment, so you don't have to. So you can ride stronger, longer.

They're faster, too. A Mountain Bike Action test showed that suspension bikes were "on average eight seconds faster over a one-mile course than rigid bike times."

The S-Works FSR system, at less than 12.7 kg, is lighter than most. There's no hassle with nitrogen cartridges. It's fully adjustable and tunable to meet the requirements of your terrain, unlike those elastomer stoppers you find on some bikes.

More importantly, each suspended S-Works bike has its own meticulously finessed geometry which takes into account the longer fork and rear wheel dynamics. It's all part of our total commitment to providing the ultimate cycling experience.



You already know what front suspension does for you — the benefits are doubled when you suspend the rear of a bicycle as well. Keep the wheels on the ground and improve your control with

Specialized's fully tunable Future Shock FSX suspension fork and FSR rear vertical damping system with an integral spring and hydraulic damper. The rear triangle features linear linkage for zero wind-up performance. The frame is made of superlight Direct Drive Prestige tubing

and the rear suspension linkage mechanism is made of 7005 series aluminum. Components are selected from Shimano XT and new superlight LX brakeset. Specialized Direct Drive Comp cranksets

with Supershift complete the package with XT Rapid fire Plus. (Way Fast) Red. Sizes: 16.5, 18, 19, 20, 21.5".



S - W O R K S U L T I M A T E

Some people can't rest knowing they don't own the best.

Sometimes the search for the perfect frame material can end in a draw. So we take the best from both. Case in point, our race proven carbon fiber/titanium Ultimate frame. Titanium is extremely light and very strong. Carbon fiber offers terrific stiffness and shock damping qualities. Together, their performance is mind blowing! (Our test pilot Ned Overend, won the 1990 Worlds on it!)

Titanium is too flexible for tubing spans under load, so we use it only for the lugs where strength and light weight are the most important. Using aircraft certified Ti 3Al/2.5V, we go through an extensive lugset manufacturing process that takes as long as making an entire bicycle, a process that's repeated anew for each frame size. Anything less would be a compromise.

The titanium lugs are then bonded in Morgan Hill, California, to our multi-layer, Racing Bias, pure carbon fiber tubing. No filler for us. It weakens the material and only adds weight and thickness. The number of fabric layers and fiber orientation varies with the ultimate function of the tube in the frame's overall performance.

We then give it a translucent paint job that looks more like a hologram than a bike frame.

It's a labor of love to be sure. Such that we can only make 200 Ultimate frames a year. Get one if you can.

Bicycling Magazine says, "I have never ridden a more perfect mountain bike than the Ultimate."



American-made, high strength Programmed Stiffness carbon fiber tubing is combined with CNC-machined 3Al/2.5V titanium lugs to create a mountain bike frame

that weighs only 3.1 pounds. Each tube is specifically designed for the stresses it will take. This frame is actually stiffer and stronger than all-titanium frames. Compression molded round-oval carbon fiber chainstays

reduce weight and increase tire clearance for the widest tires made. Relieved bottom head tube & bracket shell. New 675 gram Direct Drive heat-treated fork. Handbuilt in our Morgan Hill facility. Translucent Burgundy/Translucent Green.

Sizes: 16.5, 18, 19, 20, 21.5". Also available with TIG welded 4130 Chromoly lugs. Purple Translucent. Sizes: 16.5, 18, 19, 20, 21.5".



S - W O R K S M 2 F S X

If you wait for someone else to develop it, you won't win the race.

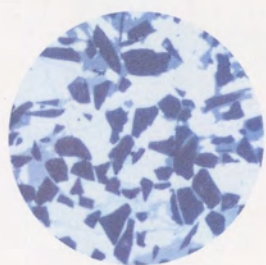
Originally created for use in the space shuttle and other aerospace applications, metal matrix composites had some base properties that were perfect for bicycle applications. However, it couldn't be welded or processed easily and wasn't commercially available for this kind of use (it also cost a fortune for each foot of tube). That didn't stop us. In 1987, Specialized approached a high tech composite manufacturer and embarked on a joint program to develop this material for use on bicycles. three years later, we found success and introduced the 1991 NORBA champion M2™ racing bicycle.

M2 has a different molecular structure than that of "straight" metals. The combination of aluminum atoms and aluminum oxide particles locked together by a high strength covalent bond, translates to 20% more stiffness than 6061 aluminum. This means M2 frames can be built 10% lighter than a comparable 6061 frame without the flex under stress. M2 is also 8% stronger, yielding less and resisting fatigue better than anything on the trail.

What about the bike we make? M2 frames are more comfortable. Its inherent strength allows for a smaller diameter tube. Fat tubes create a harsh and unforgiving ride. It's also much more affordable than titanium.

Our USA made M2™ tubing features a stiffness that is ideal to design the perfect suspension chassis and is the perfect complement to our Future Shock™ fork.

And finally, it's more durable. Just ask Team Specialized and our own R&D team. It can take the constant pounding of Team Specialized's winning NORBA season and the inhuman pounding of our frame testing machines, over and over again.



Photomicrograph of Metal Matrix composite.



Team Specialized's official bike features our exclusive USA made Future Shock FSX. Fully tunable air/oil suspension fork, fine tuned with advanced M2™ metal

matrix tubing, make this bike the state of the off-road art. Bike geometry is race proven and specially formulated for suspension. Programmed frame tubes provide maximum strength and light weight. New vertical dropouts have

been incorporated for increased clearance and precision. It features new taper seatstays as well. Integral cable guide gusset provides additional strength for rough

terrain and racing conditions. Team Red, Black Cherry. Sizes: 16.5, 18, 19, 20, 21.5".

S - W O R K S S T E E L

The steel with feel.

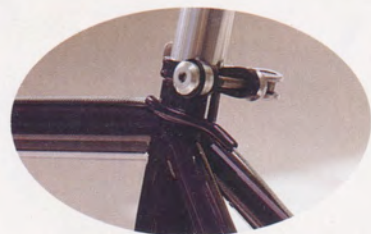
D.I.Y. ~ do it yourself. That's the attitude behind our Direct Drive chromoly steel tubing. Specialized frame designer, Mark DiNucci, couldn't find tubing with the precise characteristics he wanted, so he did it himself. He spec'd the wall thickness, diameter, butting methods, shape and materials and chose the best manufacturer to carry out his ideas.

He reduced the wall thicknesses for a lively light-weight ride without sacrificing durability. He selected the Tange Prestige heat treatment and cold working process for its improved stiffness and yield strength.

The butt lengths are kept to minimum to shave grams yet maintain sufficient wall thickness for welding. The tapers are long and have a gradual transition to reduce stress risers. To resist both torsional and longitudinal flex, he chose a large diameter, stiff enough to preserve accurate steering and handling, but not so large as to give a harsh ride.

The chainstays are extra light, and even the bottom bracket is drilled out and relieved for extra gram cutting.

Then he gently massaged it into some of the sweetest handling you ever set a saddle on, which goes to prove— if you want something done totally right, you have to do it yourself. Or get a bike with DirectDrive.



Optimized DirectDrive Superlite Prestige tubeset means this bike is power efficient and responsive while being forgiving. New lighter square oval chainstays and

seatstays have been redesigned and fine tuned. Cable routing has been improved, and the seat collar has been updated. Relieved and drilled bottom bracket shell and head tube. Low

temperature braze vertical dropouts. New 675 gram DirectDrive heat-treated fork. Bike is spec'd with Shimano XTR system with full Specialized running gear

including Team stem, 140 gram bar and Prolong Ti saddle. Burgundy/Purple. Sizes: 16.5, 18, 19, 20, 21.5".



S - WORKS COMPONENT GROUPS

New LX Plus

Featuring exclusive Specialized components, this group delivers competition-level performance at an affordable price. Shimano's re-designed LX Rapid Fire Plus with upgraded XT racing rear derailleur paired with Specialized DirectDrive Comp cranks and bottom bracket produce a powerful and reliable drive train. Our grey ProLong Titanium saddle gives you optimal positioning for tackling all extremes of terrain. The lightweight, sturdy wheelset features 32-hole Specialized X21 rims, butted spokes and new grey "umma gumma" super-sticky rubber compound Ground Control tires.

Crank

Specialized DirectDrive Comp (689 grams) with hard anodized rings, Specialized DirectDrive bottom bracket (155 grams)

Gearing

24/36/46 with 13-30 Hyperglide freehub (287 grams)

Pedals

Specialized alloy DirectDrive (295 grams) with clips (412 grams)

Derailleurs

Shimano Deore XT rear (270 grams); LX front (116 grams)

Shifters

Shimano New LX Rapid Fire Plus (378 grams/pr.)

Headset

Specialized Pro Alloy (99 grams)

Stem

Specialized Team 10° (280 grams)

Bar

Specialized Team (140 grams)

Grips

Specialized AutoPilot Team grey (60 grams)

Brakes

Shimano New LX (360 grams/pr.)

Seatpost

Specialized DirectDrive (270 grams)

Saddle

Specialized ProLong Titanium grey (230 grams)

Wheels

Specialized 32 hole X21 rims, Ground Control Grey front and rear, Wheelsmith 14/15 stainless spokes with alloy nipples, Shimano LX hubs, Specialized Trick Release titanium skewers (36 grams front, 38 grams rear).

Front wheel 1565 grams, Rear wheel 1797 grams w/o QR's

XC Pro

We designed our sleek and light DirectDrive Micro crankset to work with SunTour's 8-Speed MicroDrive system, the most efficient drive train ever. Comes with racing thumb-shifters, still the choice of many top riders. Our max-control front end includes the durable Specialized Pro Alloy headset, Team bar and stem, and AutoPilot grips. New grey "umma gumma" super-sticky rubber compound Ground Control tires. New Specialized Trick-Release skewers feature ergonomic, CNC-machined lever arms for superior hold with easy release and our sweet new grey ProLong saddle.

Crank

Specialized DirectDrive Micro (659 grams), Specialized DirectDrive Titanium bottom bracket (155 grams)

Gearing

20/32/42 with 11-24 8-speed freehub (320 grams)

Pedals

Specialized DirectDrive Pro (295 grams) with clips (412 grams)

Derailleurs

SunTour XC Pro (R-265 grams, F-110 grams)

Shifters

SunTour XC Pro thumb (149 grams/pr.)

Headset

Specialized Pro Alloy (99 grams)

Stem

Specialized Team 0° (280 grams)

Bar

Specialized Team (140 grams)

Grips

Specialized AutoPilot Team grey (60 grams)

Brakes

SunTour XC Pro (344 grams/pr.)

Seatpost

Specialized DirectDrive (270 grams)

Saddle

Specialized ProLong Titanium grey (230 grams)

Wheels

Specialized 32 hole X21 rims, Ground Control Grey front and rear, Wheelsmith 14/15 stainless spokes with alloy nipples, SunTour XC Pro hubs, Specialized Trick Release titanium skewers (36 grams front, 38 grams rear).

Front wheel 1580 grams, Rear wheel 1830 grams w/o QR's

XTR

This component package is the lightest and best of the best. Shimano's new Rapid Fire Plus is a thumb/finger tip action, unlike the old "push-push" system. We tested it, rode with it and raced with it and give it an unanimous thumbs up. Specialized DirectDrive Titanium bottom bracket and Shimano SPD 737 pedals are precise, light and super durable. Our DirectDrive headset features ball bearings on the top and roller bearings on the bottom for the optimum combo of durability and precision. The lightweight, sturdy wheelset features 32-hole Specialized X21 rims, Wheelsmith butted spokes and our new grey "umma gumma" super-sticky rubber compound Ground Control tires. With grey ProLong titanium-rail saddle.

Crank

Shimano XTR (692 grams); Specialized DirectDrive Titanium bottom bracket (155 grams)

Gearing

26/36/46 with 12-32 Hyperglide 8-speed freehub (332 grams)

Pedals

Specialized DirectDrive Pro (295 grams) with Shimano SPD 737 (576 grams)

Derailleurs

Shimano XTR (R-230 grams, F-118 grams)

Shifters

Shimano XTR Rapid Fire Plus (411 grams/pr.)

Headset

Specialized Pro Alloy (99 grams)

Stem

Specialized Team 0° (280 grams)

Bar

Specialized Team (140 grams)

Grips

Specialized AutoPilot Team grey (60 grams)

Brakes

Shimano XTR (332 grams/pr.)

Seatpost

Specialized DirectDrive (270 grams)

Saddle

Specialized ProLong Titanium grey (230 grams)

Wheels

Specialized 32 hole X21 rims, Ground Control Grey front and rear, Wheelsmith 14/15 stainless spokes with alloy nipples, Shimano XTR hubs, Specialized Trick Release titanium skewers (36 grams front, 38 grams rear).

Front wheel 1560 grams, Rear wheel 1821 grams w/o QR's



Specialized Bicycle Components Limited Warranty

Specialized Bicycle Components ("Specialized") makes the following Limited Warranty:

ONE YEAR LIMITED WARRANTY ON COMPLETE BICYCLE

Specialized warrants to the original owner that this new Specialized bicycle shall be free of defective materials and workmanship for a period of one year from the date of the original purchase provided the bicycle is purchased in the United States and operated under normal conditions and use. During this one-year warranty period, Specialized shall repair or replace, at its sole option, all parts that are found by Specialized to be defective and subject to this limited warranty. The original owner shall pay all labor charges connected with the repair or replacement of all parts.

LIFETIME LIMITED WARRANTY ON BICYCLE FRAME

Specialized further warrants to the original owner that the frame of this new Specialized bicycle shall be free of defective materials or workmanship during the lifetime of the original owner. During this lifetime warranty period, Specialized shall repair or replace, at its sole option, the bicycle frame if Specialized determines the frame is defective and subject to this limited warranty. The original owner shall pay all labor charges connected with the repair or replacement of the bicycle frame.

GENERAL PROVISIONS

This Limited Warranty is made only to the original owner of this new Specialized bicycle, and it shall remain in force only as long as the original owner retains ownership of the Specialized bicycle. This Limited Warranty is not transferable.

In order to obtain service under this Limited Warranty, the original owner must deliver the Specialized bicycle to an authorized Specialized dealer, together with the Specialized warranty card and the bill-of-sale or other dated proof-of-purchase document identifying the Specialized bicycle by frame number.

This Limited Warranty does not apply to normal wear or tear, nor to defects, malfunctions or failures that result from the

abuse, neglect, improper maintenance, alteration, modification, accident, or misuse (including, without limitation, bicycle racing, bicycle motocross, stunt bicycling or similar activities) of the Specialized bicycle.

THIS LIMITED WARRANTY IS THE ONLY EXPRESS OR LIMITED WARRANTY APPLICABLE TO SPECIALIZED BICYCLES. ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL BE LIMITED IN SCOPE AND DURATION IN ACCORDANCE WITH THIS LIMITED WARRANTY. SPECIALIZED SHALL NOT BE RESPONSIBLE FOR ANY DIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES SUFFERED BY ANY PARTY. THE FOREGOING STATEMENTS OF WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS; YOU MAY ALSO HAVE OTHER LEGAL RIGHTS WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, OR THE LIMITATION OR EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES; THEREFORE, THE LIMITATIONS AND EXCLUSIONS SET FORTH IN THIS LIMITED WARRANTY MAY NOT APPLY TO YOU.

THE LIMITED WARRANTY SET FORTH HEREIN MAY NOT BE EXTENDED, ENLARGED OR OTHERWISE MODIFIED BY ANY SPECIALIZED DEALER, AGENT OR EMPLOYEE, AND SPECIALIZED DOES NOT ASSUME ANY LIABILITY OR MAKE ANY WARRANTY EXCEPT AS STATED IN THIS LIMITED WARRANTY.

\$2.00

Authorized Specialized Bicycle Dealer



SPECIALIZED.

15130 Concord Circle
Morgan Hill, California 95037



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