

Specialized Bicycle Components, Inc.

S - Works
1995





There's a place where a brilliant idea is considered a good starting point. Where rules are treated as shackles. And where the term "marketing" is considered a four-letter word.

A place where gram-counting, chainring-drilling zealots build bikes with a single, unflinching purpose: the winning of races.

A place where, once a bike has proven itself in the fires of racing and development, it's offered in limited numbers to checkbook-waving enthusiasts.

It's a selfish place. An unforgiving place. And a place that just happens to make the best damn bikes in the world.

And you, my lucky friend, are about to visit there.

Welcome to S-Works.





"BIG DADDY"
RCH
'94











The M2 Team Frameset

Riddle: What do you get when you take our exclusive M2 tubing, add a FutureShock-customized FSX carbon fork (made for us by Rock Shox), and top it off with an investment-cast titanium seat collar, an investment-cast titanium stem, a Specialized seatpost, a replaceable rear derailleur hanger, and a Dia-Compe alloy Aheadset?

The S-Works M2 Team frameset.

Okay, it's a crappy riddle. But it's one hell of a bike.

With its FutureShock-Tuning, the fork is plush, but ready to soak up serious rock formations at a moment's notice. Thanks in no small part to the FSX shock and its Judy cartridge damping system made up of a super-responsive elastomer spring and a precision-adjustable oil cartridge. And, if you read page 25 with full and total comprehension, there's little need to further extol the virtues of our M2 tubing.

Want even more nods on this frame? Ask our team riders how much they like it at the next race. But wait 'til they step off the podium, okay?

The M2 Team frameset. If you can't win on this puppy, we have only one thing to say: consider lawn bowling.





The S-Works M2 Super Road

Life is not all rocks, singletrack, and ankle-deep mud. It can also be full of ruts, potholes, and roadkill.

Therefore, the Rock Shox-equipped M2 Super Road. Nothing less than the best front suspension available mated to a state-of-the-art road bike.

It's plush. It's comfy. But it's stiff enough to handle even the most killer sprints.

Its bragging rights include the following: M2 frameset (made from that delicious stuff explained elsewhere in this brochure), Campagnolo Record Ergo Group, Cinelli Grammo stem, Profile Hammer bars...take a breath here...Campy Shamal wheels, ProLong titanium saddle, Turbo T tires, and a convenient replaceable drop-out.

Thought for the day: This is not unlike the setup that Gilbert Duclos-LaSalle won Paris-Roubaix on. Twice. Questions, anyone?

Hint: When the rest of the pack is ogling this bike, attack.



The S-Works FSR Frameset

Specialized FSR suspension. Fully active. Fully independent. Fully intense.

And elsewhere on these pages, fully explained. So we'll just say this: this frame was tested by the likes of Todd Tanner, designer Dennis Wootten, Insane Wayne Croasdale, and Jason McRoy, who rode it to victory at the 1994 British National Championship.

Not surprisingly, the FSR emerged in one piece. Ergo, we insist you ride it. ASAP. And you'll soon worship at the church of FSR.

Further appetite whetting: DirectDrive .8/.5/.8 Works Prestige process tubeset. Heat treated A1 aluminum rear linkage members. Fox fully adjustable hydraulic shock. CNC-machined progressive/regressive triangular link. Investment-cast titanium seat collar. Banana seat (not really—just checking to see if you're paying attention). FutureShock-tuned, Rock Shox-built FSX carbon fork with the Judy cartridge damping system its super-responsive elastomer spring and precision-adjustable oil cartridge. Dia-Compe alloy Aheadset. Specialized cold-forged seatpost. Titanium binder bolt.

So, have you ridden it yet? Why not? You've had an entire paragraph to do so.

Again, you must ride this frame. Only then will you be able to rely on what you feel, and not just on what you read.

The S-Works FSR. If you've tried other dual suspension bikes, this should come as quite a shock.





FSR

Rear suspension. A nice idea that just never seemed to work. Like communism.

No matter how rear suspension was designed, there seemed to be a drawback.

With a bottom bracket pivot, pedaling action was okay, but the suspension bottomed out over acorns.

Swingarms? Too much pedal-induced bouncing. Like riding a pogo stick over miles of speed bumps.

Then there's high pivot designs. Or as they're less affectionately known, "biopacers". They...make...the...pedal...stroke...jerky...and...annoying.

But then came a revelation: multiple-pivot designs. More specifically, the Specialized FSR.

With the FSR, there were no design flaws to overcome. So we didn't have to throw together some hackneyed "lock-out" **FSR** feature to disguise poor engineering.

The FSR is 100% active. So whether you're flying down a rutted ravine or climbing a small mountain range, this suspension is constantly working. From the first burnt calorie



Thanks to FSR, we're provided with both.

to the last, it keeps you firmly glued to the ground.

It's also fully independent. With its compact linkage and 4-bar closed "trapezoid" circuit, the FSR isolates the suspension from the pedaling stroke, sideloads, chain tension, braking action, and anything else that interferes with its smooth, progressive/regressive action. So it can give its undivided attention to that discarded Buick fender up ahead.

At the heart of this system is a fully adjustable Fox shock. This shock can be tuned to fit just about any rider weight and riding condition—just use air pressure and the simple external damping adjuster to dial in the perfect set-up.

This shock can take the big spike hits and still float gently over the next section of washboard. No surprise, really—Fox has been making off-road racing shocks for cons, so they know a little about this stuff.

We also made sure to keep the weight down on our FSR frame. By using our DirectDrive Works Prestige $B/5/8$ mm for the main tubes and

our new A1 aluminum in the rear linkage, we've put together a frame that's downright feathery. Crucial for when you're carrying three partially digested donuts and a quart of coffee up a steep grade.

But we didn't just concern ourselves with perfecting rear suspension. We also saw fit to develop a front suspension with the same kind of race winning, crowd-magnet potential.

In other words, FutureShock FSX. Years in the making. Bolt

exclusively for us by Rock Shox. Is it breakthrough? You decide. It's not an oil/air spring fork. It's not an elastomer stack fork. To get the best of both worlds, its oil cartridge damped elastomer spring system actually incorporates both. And as tricky as that sounds, we took it one step further with our exclusive FutureShock-tuning

To let this damping system really show off, we hit the bullet and went

with light, stiff carbon fiber fork sliders. The resulting low unsprung weight offers what can only be described as weasel-quick rebound and compression. And the lack of steering flex makes this fork cut like a knife.



We can't see this bug. We can't see the top. We can't see the bottom. We can't see the sides.

politics or fat-free foods. It's also been the dirty little secret of mountain bike frame design.

However, in a beinous package deal, they also got a dose of "improper front center" (no, penicillin won't stain it), too low of a handlebar position, and no relief from geometry ill-tended for suspension forks.

Clearly, something needed to be done. Which is why **PROFIT** we created an entirely new frame philosophy called Pro-Fit.

The Pro-Fit geometry design,

Look at your average frame. What you see is a distant cousin of road bike geometry—providing poor stand-over clearance, excess weight, and a weak platform for a suspension fork.

Such a compromise, in fact, that savvy riders have tried to fix these shortcomings on their own by buying smaller frames.

Yes, they got more stand-over clearance. Yes, they got lighter weight. And yes, they even got a stiffer bike.

our competitors. And yours.

Compromise. As painful as it is to admit, this hasn't just been the guiding principle of

our competitors. And yours.

Then, with no preconceptions, we built what mountain bike frames should have been in the first place.

For instance, Pro-Fit frames have increased slope at the top tube, providing a safer measure of stand-over clearance. You'll thank us the next time your foot slips off the pedal.

You'll also thank us the next time your foot stays on the pedal. These frames were designed with a reduced triangle area, so not only are they lighter and more rigid, they also have a lower center of gravity. So they go where they're pointed and can carve up even the tightest dual slalom turns.

Pro-Fit frames also have proper front center. Allowing for natural, correct handlebar position. That way the rider's weight distribution and post-

uring don't get thrown off. And neither does the rider.

And Pro-Fit maintains proper geometry whether you're using a suspension fork or not. By making our rigid forks the same length and angle as suspension forks, we allow the handling to stay the same

frame that's a bit too small and one that's a bit too big. Consider this a custom fit, just on a slightly larger scale.

To sum it up, the end result is small, light, has proper front center, suspension-corrected geometry and correct handlebar position.

In other words, the ideal mountain Pro-Fit. Granted, we didn't reinvent the wheel here. But we sure as hell reinvented the frame.

But deep down, everyone knew that the supreme tubing material had yet to be found.

Then one day, out of the blue, we got a call from some people at a company called Duracan. They told us that they'd created a light but incredibly strong metal matrix composite by adding ceramic particles to high-grade aluminum (a.k.a. [Al2O3]). And that, unlike other composites, this

round after round of testing, racing, and improvements later, we held a tubing material that made titanium look like fool's gold. And we gave this material—the first commercial use of metal matrix composite technology—the name M2.

M2. Lighter than titanium. Weight to weight stiffer than steel. Stronger and more fatigue resistant than 6061 aluminum.

What more do we need to say? How about this—after four years of commercial production, M2 has yet to see any stiff competition. Because nothing is stiffer than our butted and tapered M2. Nothing.

Thanks to this extreme rigidity, this material doesn't shy away from the welding torch.

And someone at Duracan thought that, well, if it was good enough for use in the aerospace industry, it just might be good enough for our bike frames.

After pinching ourselves, we wasted no time setting up a joint development program.

Three solid years of R & D and

lessened as well—a further benefit of the ceramic reinforcement.

But beyond all the coefficients, matrix factors and fatigue ratios, M2 tubing offers something no other material can—a truly superb and unique ride. Words cannot do it justice. But here are some anyway. Ned rides it. Sure, you say, he has to. No he doesn't. Ned doesn't have to do anything he doesn't want to do. He's Ned.

You, however, must ride an M2 frame. Find the time. But be forewarned: your credit card will struggle free of your wallet.

A side note: There have been rumors that M2 was developed by the government from metallic compounds gathered at the Roswell, N.M. (spaceship) crash site. This is not true. However, aliens would no doubt be impressed.



We would love that a technology was too, if we do receive possibly credit the rest of the M2. Customers, we tell it.



Pro-Fit Racing Geometry

| Frame Size | 42-44 | Head Angle | 68° |
|-------------|-------|--------------|--------|
| Seat Tube | 480mm | Seat Center | 130° |
| Seat Height | 73" | Front Center | 140mm |
| Top Tube | 580mm | Wheel Base | 1000mm |
| Head Tube | 42-44 | Stem Tube | 100mm |
| Post Tube | 42-44 | Max. Reach | 100mm |



With Pro-Fit, bike riding is taken care of. The rest is up to you and your FSR.

even when the front forks don't. So, if you make the switch from rigid blades to a suspension fork, only your kidneys will be the wisest.

In line with all of this, we're also offering a wider selection of sizes these days—from 13.5 to 20.5. So now you won't find yourself caught between a

Then, slowly but surely, other tubing materials started coming out of the woodwork. It seemed like just about every year, another highly touted metal or composite would

In the beginning, there was steel. Then, slowly but surely, other tubing materials started coming out of the woodwork. It seemed like just about every year, another highly touted metal or composite would

material didn't shy away from the welding torch.

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Three solid years of R & D and



We got our composites to my aluminum. We got our aluminum to my composites. (The truth of M2.)

| M2 vs. the World | | | |
|------------------|--------------------------|----|-----------------------|
| Strength | 800-900 PSI Titanium 242 | M2 | 750 PSI 6061 Aluminum |
| Weight | 1.92g/cm³ | M2 | 2.7g/cm³ |
| Stiffness | 110,000 N/m² | M2 | 100,000 N/m² |
| Impact | 1000 J | M2 | 500 J |

Really a Natural Championship & World Championship. Proof: Lighter, Faster, Stronger.

The S-Works Ultimate Frameset

There it is. Under that puddle of drool. The absolute definition of the term "composite".

The strengths of titanium seamlessly coupled with the strengths of carbon fiber. Each canceling out the other's weak points to create the toughest and most expensive frame we make.

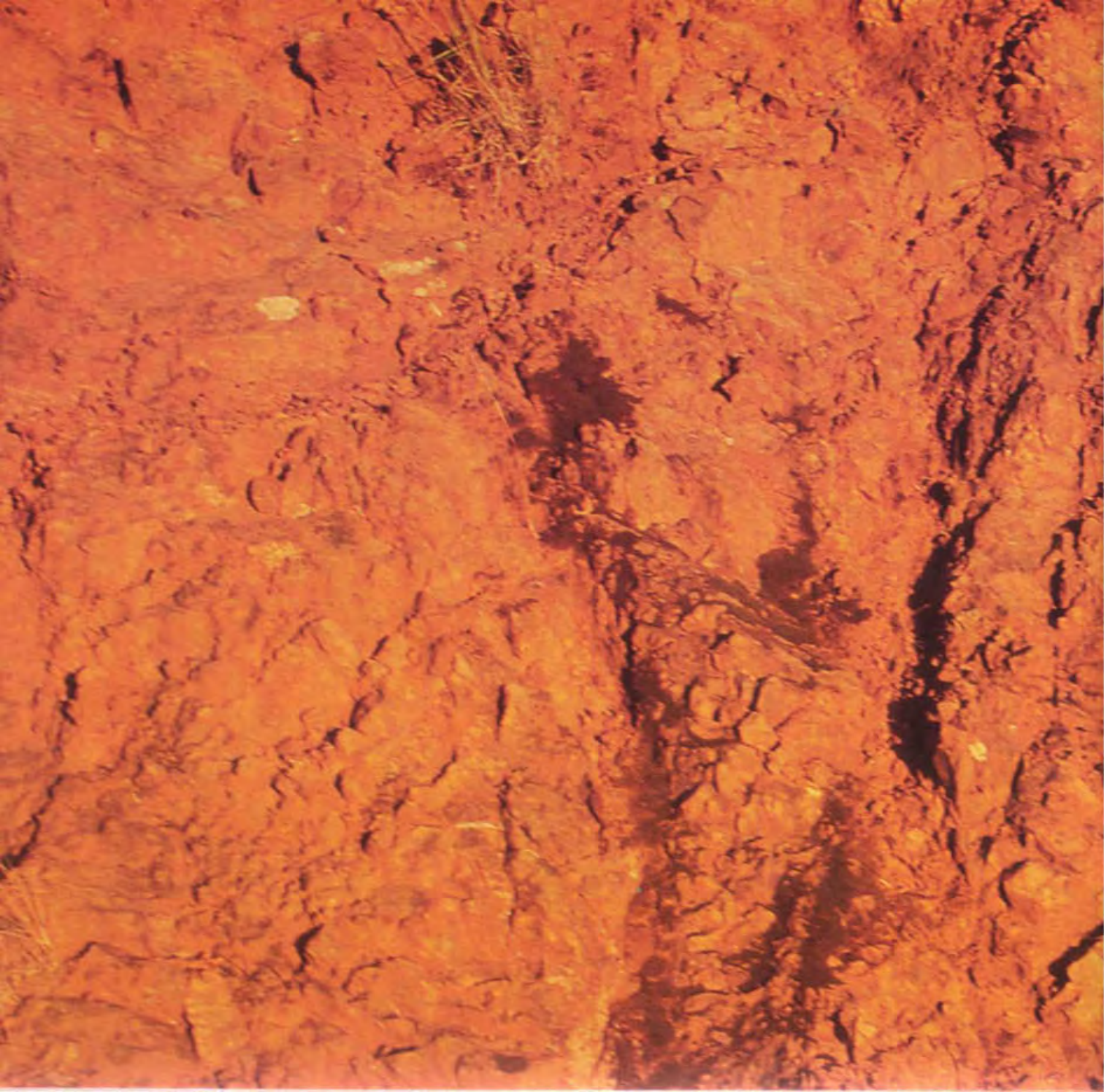
Light, stiff unidirectional multi-layer carbon fiber tubes joined together by the highest grade titanium lugs, fittings, and braze-ons.

2.7 pounds (or 1.36kg) of sheer envy. But don't let the light weight and jewel-like details of this frame fool you. It's precision machined and welded to offer simply hellish strength.

After its meticulous construction in our Morgan Hill shop, each frame is adorned with our DirectDrive heat-treated fork, investment-cast titanium stem, Dia-Compe alloy Aheadset, and Specialized cold forged seatpost.

But don't thank us. We have to give all the credit to our truly impressive production line. We like to call it "Brian Lucas". Every two days, he gives birth to another frame (one of just 100 he'll build this year), and we pry it from his grasp.

Probably why we go through so many damn boxes of tissue.





The S-Works Steel Frameset

They say steel is real. In this case, it's unreal.

Unable to find tubing to his liking, our very own Mark DiNucci actually designed and commissioned his own. He ordered up long tapers and short butting—just enough to accommodate the meticulous TIG welds. He beefed it up where necessary. He lightened it where possible. And after he'd massaged every single molecule, he deemed it “DirectDrive Works with precision long taper, short-butted .8/.5/.8 tubes”. Catchy name, huh?

Then he put together the following shopping list: Investment-cast seat collar; low temperature brazed vertical dropouts; square/oval chainstays (.8 mm); ovalized double-taper seatstays (.9 mm); Dia-Compe alloy Aheadset; cold-forged seatpost; 650g DirectDrive triple-butted fork with low temperature brazed fork tips; 179g titanium stem. All light. All reliable. This is serious bike candy.





Specialized Bicycle Components, Inc.

XTR Hot Rod Component Kit with Grip Shift

| | |
|-------------|-------------------------------|
| CRANKS | <i>XTR</i> |
| PEDALS | <i>SPD 747/737</i> |
| DERAILLEURS | <i>XTR</i> |
| SHIFTERS | <i>X-Ray 800</i> |
| HUBS | <i>White Industries</i> |
| SKEWERS | <i>Trick Release</i> |
| COGS | <i>SRP titanium</i> |
| BRAKES | <i>Avid</i> |
| LEVERS | <i>Avid Super</i> |
| RIMS | <i>Z21 Pro</i> |
| SPOKES | <i>Union Ti</i> |
| SADDLE | <i>ProLong "S" Ti</i> |
| BB | <i>DirectDrive Ti</i> |
| FRONT TIRE | <i>Team Control UG Kevlar</i> |
| REAR TIRE | <i>Team Master UG Kevlar</i> |
| TUBES | <i>Turbo Ultra Light</i> |



Specialized Bicycle Components, Inc.

XTR Plus Component Kit with Grip Shift

| | |
|-------------|-------------------------------|
| GRANKS | <i>XTR</i> |
| PEDALS | <i>SPD 747/737</i> |
| DERAILLEURS | <i>XTR</i> |
| SHIFTERS | <i>X-Ray 800</i> |
| HUBS | <i>Hugi Comp</i> |
| SKEWERS | <i>Trick Release</i> |
| COGS | <i>XTR</i> |
| BRAKES | <i>XTR</i> |
| LEVERS | <i>Dia-Compe PC-11</i> |
| RIMS | <i>z21 Pro</i> |
| SPOKES | <i>Wheelsmith XL 15</i> |
| SADDLE | <i>ProLong "S" Ti</i> |
| BB | <i>DirectDrive Ti</i> |
| FRONT TIRE | <i>Team Control UG Kevlar</i> |
| REAR TIRE | <i>Team Master UG Kevlar</i> |
| TUBES | <i>Turbo Ultra Light</i> |





Specialized Bicycle Components, Inc.

XT Plus Component Kit with Grip Shift

| | |
|-------------|-------------------------------|
| CRANKS | <i>XT</i> |
| PEDALS | <i>SPD 747/737</i> |
| DERAILLEURS | <i>XT</i> |
| SHIFTERS | <i>XT Grip Shift</i> |
| HUBS | <i>XT</i> |
| SKEWERS | <i>Trick Release</i> |
| COGS | <i>XT</i> |
| BRAKES | <i>XT</i> |
| LEVERS | <i>XT</i> |
| RIMS | <i>z21 Pro</i> |
| SPOKES | <i>WheelSmith XL 15</i> |
| SADDLE | <i>ProLong "S" Ti</i> |
| BB | <i>DirectDrive Ti</i> |
| FRONT TIRE | <i>Team Control UG Kevlar</i> |
| REAR TIRE | <i>Team Master UG Kevlar</i> |
| TUBES | <i>Turbo Ultra Light</i> |



And so, we come to the end of this particular road.

However, before you go, allow us to leave you with some parting thoughts:

The way we see it, being a good mountain bike rider is more than finding the fastest route down a rocky trail.

It also comes down to how you promote the sport.

We're not suggesting you grab a bullhorn and a handful of flyers here.

But we would like to see more of you at the races.

Stop by the Specialized tech van. Say hello. We won't bite.

Whenever possible, wear a helmet. Children pick role models at random.

And whether you know it or not, IMBA supports you.

Return the favor.

If you haven't figured it out already, we love this sport.

Chances are, you do too.

Spread the gospel.

The Specialized Warranty

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

One Year Limited Warranty on Complete Bicycles

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 the bicycle frame.

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.

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