



LITESPEED TITANIUM BICYCLES

1998 CATALOG

OF BICYCLES,
ACCESSORIES,
AND APPAREL

Why

is titanium the best material for a bicycle frame?

There are many reasons that titanium is the best material for cycling; however, the main reasons are strength, stiffness, fatigue life, light weight, magical ride qualities, and unmatched corrosion resistance.

Strength/Weight: ***

The alloys of titanium we use at Litespeed, 3Al - 2.5V and 6Al - 4V, have a strength-to-weight ratio that is on average 75 per cent greater than the most popular aluminum and steel materials used in cycling. This amazing property allows us to build bikes that can be significantly stronger and lighter.

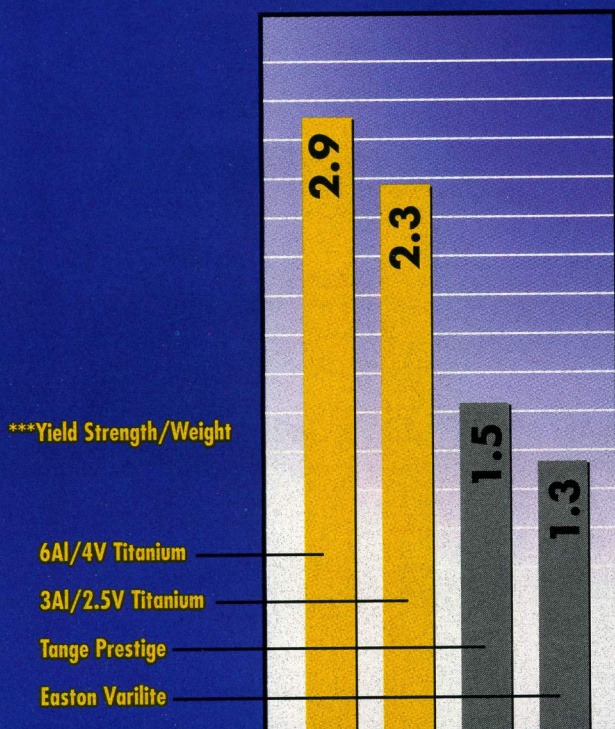
Fatigue Life:

Our titanium alloys have a fatigue life that is 5 times greater than that of steel or aluminum. This means that your Litespeed bicycle will have a much longer lifespan than other bicycles.

What about titanium compared to carbon fiber?

It is nearly impossible to accurately compare any material to carbon fiber. There are too many uncontrollable variables. Carbon is dependent on how many strands are used, what direction are they wrapped, what shapes are formed, and what type of glue is used to hold them together. While many carbon fiber designs seem durable, few have longer than a 5 year warranty.

Technical Data



Magical Ride Quality:

The molecular structure of titanium provides a very unique ability to damp vibrations without deadening the overall feel of the bike. Litespeed titanium bikes have the liveliness of high-quality of steel tubes, the shock absorbency of good carbon fiber, and the stiffness of aluminum.

Stiffness:

The first 3Al - 2.5V titanium bikes were limited to the small tube diameters used in aerospace industry. These smaller tubes yielded comfortable, albeit somewhat flexible, frames. Modern-day titanium bikes, if built with the proper combination of alloys, tube sizes, and structural designs, are capable of being manipulated to any level of stiffness desired.

At Litespeed we have never been satisfied with accepting current technology. Every day we stay focused on applying our 40 years of titanium fabricating experience to advancing the state of the art in cycling technology. Litespeeds are not just "titanium" bicycles. When our raw materials arrive from the mill the real work begins. Our exclusive processes of enhancing titanium performance yield bicycles that are in a class by themselves.

Quality of Materials:

Litespeed uses only the highest quality, U.S. made, certified aerospace grade titanium in every frame we build.

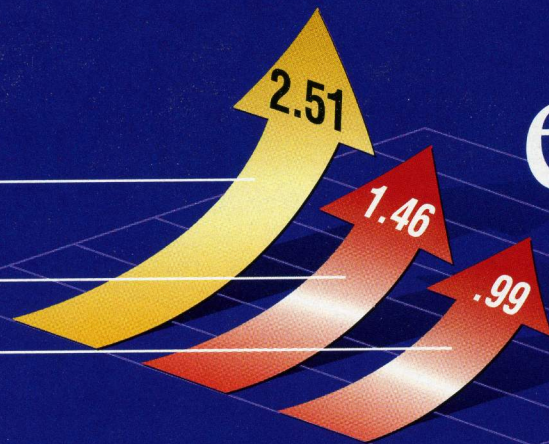
Custom Tubesets:

Each and every frame we make has a custom tubeset designed not only for each model, but for each size as well. Each tube is specified by size and strength level according to the rider's performance needs.

TAPERED/BUTTED (COLD-WORKED)
1.375" x .038" wall

STRAIGHT GAUGE
1.375" x .038" wall

DOUBLE-BUTTED
1.375" x .038"/.020" wall



***Stress chart comparison of cold-worked vs. standard tubesets

This chart represents the relative ability of a specified downtube to resist a 150 lb load on a 170 mm crank arm.

Cold-Worked Titanium: ***

Litespeed is the only company in the world to extensively cold-work titanium for bicycles. Cold-working is a process of shaping titanium at room temperature, resulting in an increase of up to 45% in the material's strength, stiffness, and hardness. This allows us to make the world's stiffest, strongest, and most durable titanium bicycle frame.

6Al - 4V Titanium Alloy:

Litespeed is the only company in the world to use the super-strong 6Al - 4V titanium alloy extensively in bicycles. Due to difficulties in machining and fabrication, other companies are limited to using this alloy for dropouts, cable guides, and other small parts. At Litespeed we actually create tubing from this super-strong material. Most of our models use a blend of 6Al - 4V and 3Al - 2.5V, and the Vortex and Tellico frames are made entirely from this alloy.

But just being titanium isn't good enough

anymore.



What to get, what to get?

or
"How to Pick
The Bike of
Your Dreams"

Cycling technology is advancing faster than ever before. The last 10 years of cycling have seen as much advancement as the first 100 years. Yet amazingly enough, a bicycle from a distance still looks the same as almost a century ago.

Because of this whirlwind of change, choosing a high-performance bicycle can be an overwhelming task. However, broken down into segments the process can be simple and rewarding.

Riding Style: Before you ask, "What should I buy?", think about what you want from a bike, why you want it, and how you will use it. A bike should be your faithful partner and match the life you want to lead. This catalog is divided into four basic types of bicycles: full suspension mountain bikes, hardtail mountain bikes, racing and sport road bikes, and triathlon/time trial road bikes. Once you've thought about what you want from a bicycle, you should be able to choose one of the above categories.

Pricing: For most of us, cost is usually an issue. In each bicycle category of this catalog the products are shown from least expensive to most expensive. This is also true for the frame finish options, fork options, and component selections listed on each page. Due to international circulation there are no specific prices listed in this catalog. To obtain pricing you have the following options: Call Litespeed and we can mail, fax, E-mail, or verbally quote you suggested retail pricing in U.S. dollars; visit our website (www.Litespeed.com) where you can find suggested retail in U.S. dollars; or visit your local Litespeed dealer. If you do not know the dealer in your area, feel free to call us and we'll refer you to your nearest Litespeed retailer.

Frame Style: Now that you know the basic type of bike frame you're looking for, you can begin to review the specifics of each model within its class. Now is the time to take into consideration your body size, riding style, and what type of racing (if any) you would like to do. If you already own a bike and are happy with the way it fits you, take some basic measurements from it and try to match them. Don't worry if you can't find an exact match; that's why stems, seatposts, saddles, handlebars, and crankarms vary in size and adjustment.

Front Fork: Once you've chosen the frame style that best suits your needs, it's time to choose a front fork. The front fork is very important to the overall performance of a bicycle. Don't cut corners here. All the forks Litespeed sells are of excellent quality, and any choice will be a good one. For road riding aluminum provides a smooth ride. If you're going to even consider road racing go with aero carbon fiber. For mountain bikes weight and fork travel are the considerations of the day. The Rock Shox Judy XC and SL forks have over 2 inches of travel; the Rock Shox Sid has 1 3/4 inches, and Rock Shox XL is has approximately 4 inches. The Sid is the lightest of the group. If you're choosing a full suspension mountain bike, it is best to try to match front and rear travel.

Components: Now let's look at components. The basic component selections that best match frame performance are listed on each bicycle page, from least to most expensive. Especially in this category, price does not necessarily match performance; for a detailed description of what each group contains, refer to pages 32 and 33.

LITESPEED COMPONENT UPGRADES: On page 28 you will find Litespeed titanium component options. Our stems, seatposts, and handlebars enhance performance and significantly reduce the weight of any of the standard groups.

Apparel: You're going to need high quality cycling apparel to get the most comfort out of your ride. Moisture transfer, coolness, or warmth are important considerations in choosing what to wear while riding. All Litespeed apparel is of the highest available quality.

Finding Your Dream Bike: Now that you've chosen your dream bike, how do you get it? The quickest way to get a Litespeed is to contact our sales department. Our personnel can answer any remaining technical questions you may have, give you accurate information about inventory and componentry, and assist you in choosing a Litespeed dealer in your area. You can reach us via telephone, fax, mail, or E-mail.

Now go riding!



Full

Suspension

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FRAME DETAILS:

- Litespeed custom 3Al - 2.5V titanium mainframe
- Litespeed 7005-T6 aluminum rear swingarm
- 2 3/4 inches rear travel
- Coil spring, oil damped rear shock
- Double crown fork compatible
- Traditional cross-country geometry

Frame finish: front - Natural Satin/rear - Phoenix Red

FORK OPTIONS:

- Rock Shox Judy XC
- Rock Shox Judy SL
- Rock Shox Judy XL

COMPONENT SELECTIONS:

- Shimano LX
- Shimano XT
- Shimano XTR

The Hiwassee River flows through an area that offers some of the most diverse mountain biking in the entire Appalachian mountain range. It spans terrain ranging from the gorges of North Carolina's Nantahala National Forest to the rolling hills of East Tennessee.

What better bike to handle this varied topography than the Litespeed Hiwassee! This strut-style full suspension design offers 2 3/4 inches of rear travel. Up front is a suspension-specific main triangle hand-crafted from American made, oversize 3Al - 2.5V seamless aerospace grade titanium tubing. Attached to this beefy front is a rear strut assembly which is fabricated using 7/8 inch square 7005-T6

Hiwassee

aluminum tubing and a bolt-on stiffener plate for excellent rigidity. The rear assembly features a coil spring, oil damped shock, low frontal pivot, and a rear chainstay pivot to ensure fully active rear action and no pedal-induced bobbing. The Litespeed Hiwassee...you won't find a better value in lightweight full suspension on the mountain trail.



Certain components shown are optional

The Litespeed Unicoi utilizes a pivotless rear suspension system. This offers an adequate amount of rear wheel travel without all the problems that multi-pivot systems must overcome.

This system provides up to 1 inch of rear wheel travel, yet the absence of pivot points keeps the rear end stiff and efficient. It is also the lightest of all full suspension designs. The rear stays are controlled by an oversized, lightweight shock which is supported by an internal coil spring. The shock is tunable to the rider's style via interchangeable coil springs.

The Litespeed Unicoi: simple, reliable, maintenance-free, full suspension.

Unicoi

FRAME DETAILS:

- Litespeed cold-worked 3Al - 2.5V titanium tubeset
- Lightest full suspension design
- S-bend monostay
- Asymmetric chainstays
- 1 inch of rear wheel travel
- Cross-country oriented geometry

Frame finish: Bright Brushed

FORK OPTIONS:

- Rock Shox Judy XC
- Rock Shox Judy SL
- Rock Shox Sid

COMPONENT SELECTIONS:

- Shimano LX
- Shimano XT
- Shimano XTR

Certain components shown are optional



FRAME DETAILS:

- Litespeed cold-worked 3Al - 2.5V titanium mainframe
- Litespeed 7005-T6 aluminum rear swingarm
- 4 1/2 inches of rear travel progressive air/coil rear shock with external rebound/compression damping adjustment and remote lockout
- Double crown front fork compatible
- Adjustable geometry for downhill or cross-country

Frame finish: mainframe - Bright Brushed; rear swingarm - Phoenix Red

FORK OPTIONS:

- Rock Shox Judy SL (long travel)
- Rock Shox Judy XL
- Rock Shox Boxxer
- Rock Shox Boxxer Pro

COMPONENT SELECTIONS:

- Shimano XT
- Shimano XTR

The Litespeed Cohutta is a fully active four-bar link design with 4 1/2 inches of rear wheel travel. This linkage suspension is controlled by a Stratos Helix-Pro progressive air-coil rear shock. This shock also features external rebound and compression damping control and a remote dual-damping/lock-out control lever conveniently mounted on the handlebar...this amazing combination allows the rear wheel to respond to the most minute ripple in the trail.

The geometry of the Cohutta, combined with the adjustability of the seattube angle, allows this bike to be set up for either downhill, cross-country, or simply freeriding.

Cohutta

- DIFFERENCES FROM HIWASSEE:
- Four-bar link suspension system
 - Longer rear suspension travel
 - Adjustable rebound and compression damping on rear shock
 - Dual spring rate adjustment (air-coil)
 - Remote handlebar mounted lock-out for rear shock
 - Adjustable geometry via seattube angle



Certain components shown are optional

The Owl hollow MTS utilizes a unified rear triangle/single main pivot design. The pivot location prevents unwanted lock-out and changes to effective seat tube length while pedaling. The rear swingarm is fabricated using 7005-T6 aluminum tubing. It features asymmetric S-bend chainstays and Z-bend three-dimensional upper stays. This creates a super-stiff, lightweight drive train with tremendous chainring and tire clearance. The MTS system employs a Stratos brand Strata-Pro air spring/oil-damped rear shock. This unit has fully adjustable spring rates and damping rates. It also possesses a remote lockout function that is activated by a handlebar-mounted control lever.

FRAME DETAILS:

- Litespeed cold-worked 3Al - 2.5V titanium mainframe
- 4 or 6 inch adjustable rear travel options
- Fully adjustable air sprung/oil damped rear shock with remote lockout
- Double crown front fork compatible
- Cross-country oriented geometry

Frame finish: mainframe - Bright Brushed; rear swingarm - Phoenix red

DIFFERENCES FROM COHUTTA: Unified rear triangle suspension system
Adjustable travel
Lighter weight

FORK OPTIONS:

- Rock Shox Judy SL (long travel)
- Rock Shox Judy XL

COMPONENT SELECTIONS:

- Shimano XT
- Shimano XTR

Certain components shown are optional

"...the Owl Hollow MTS performed flawlessly. The light weight was a noticeable bonus when climbing and when throwing the bike around in tight, technical stuff..."

Owl Hollow ^{MTS}

"...a machine that will enhance riding enjoyment."

Canadian Cyclist Magazine



Hardtails



“The Obed is stiff, light, fast, aggressive, comfortable and pretty, with the perfect sculpted Litespeed welds that compel you to lean down and run your fingers over them.”

Roy M. Wallack, Men's Journal Magazine

The Obed Wild and Scenic River cuts deeply into the sandstone of the Cumberland Plateau in East Tennessee. It is a rough landscape of wild land and turbulent waters. This topography parallels the design philosophy of the Litespeed Obed: tough and rugged, yet beautiful.

This is the bike that all other bicycle companies wish they could match. Feature for feature, the Obed possesses all the design criteria that make it such a high-performance mountain bike. Our American-made, over-size 3Al - 2.5V seamless, aerospace grade titanium tubeset is stronger, lighter, and stiffer than carbon fiber, aluminum, or steel. The combination of top tube

Obed

FRAME DETAILS:

- Litespeed tapered/butted 3Al - 2.5V titanium tubeset
- S-bend seatstays
- Asymmetric chainstays
- Suspension-specific geometry
- Dual water bottle mounts

Frame finish: Natural Satin

FORK OPTIONS:

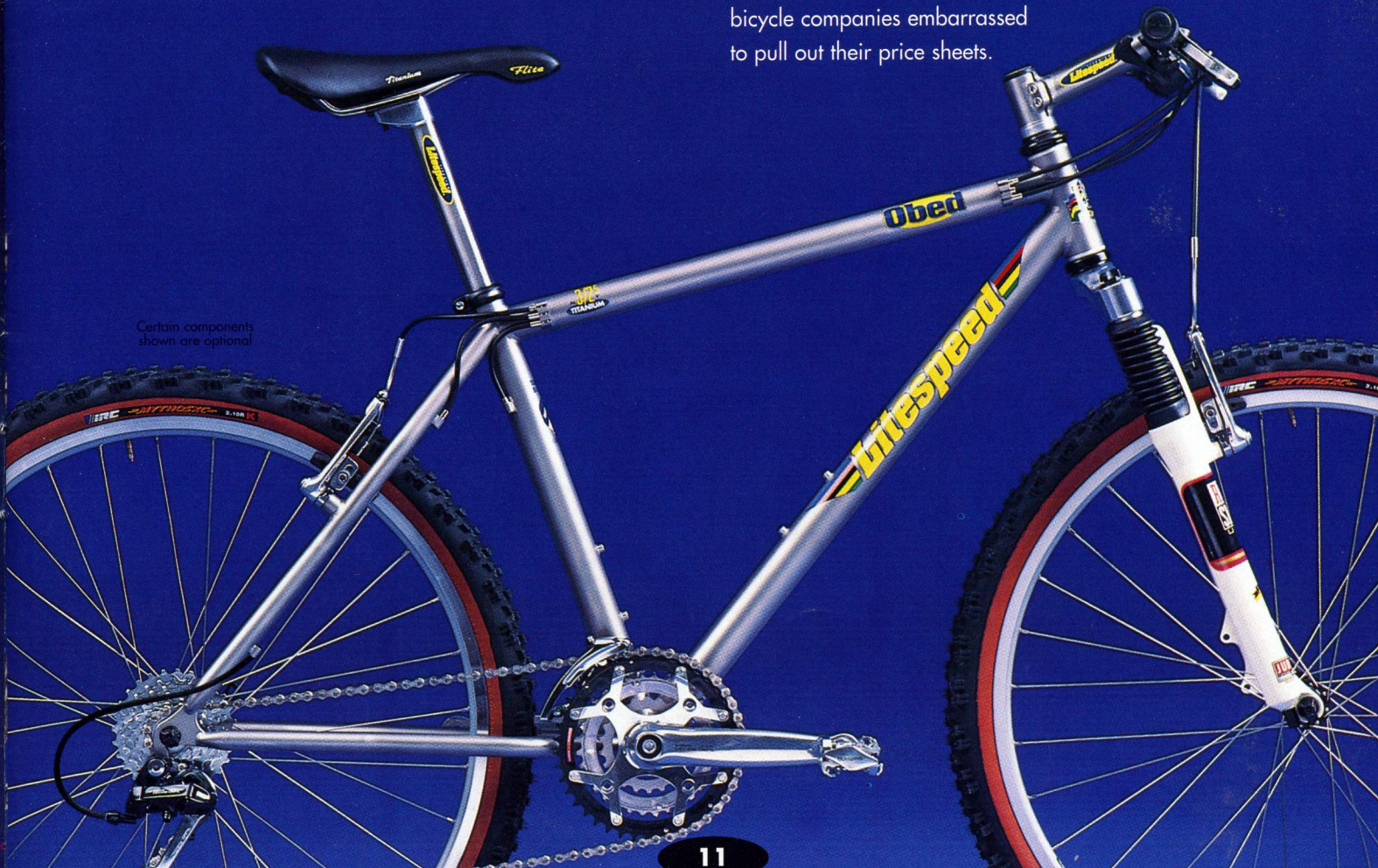
Rock Shox Judy XC
Rock Shox Judy SL
Rock Shox Sid

COMPONENT SELECTIONS:

Shimano LX
Shimano XT
Shimano XTR

lengths and suspension-specific geometry creates a spacious cockpit allowing the pilot total control over any situation. Exclusive cold-worked, S-Bend seatstays and asymmetric/S-Bend chainstays provide excellent tire and chainring clearance, as well as enhanced braking power. All this, plus the legendary welding and overall quality you've come to expect from Litespeed at an amazing value that makes other bicycle companies embarrassed to pull out their price sheets.

Certain components shown are optional



The Ocoee River Gorge is an environment of power and emotion with raging currents, voracious rapids, climbs that test the minds limits of pain, and singletrack descents that stretch your limits of fear.

From the mountains encompassing the river gorge to the rigors of the NORBA and Grundig World Cup circuit, the Ocoee is the workhorse of the Litespeed mountain bike stable. It has proven itself able to sustain violent levels of off-road punishment. This high-performance mountain bike uses an exclusive custom cold-worked 3Al - 2.5V aerospace grade titanium tubeset. These Litespeed proprietary processes of

swaging, ovalizing, and butting generate a tubeset that is incredibly stiff, light, and strong. S-bend chainstays provide additional stiffness and better braking modulation, and asymmetric/S-bend chainstays yield excellent crank-arm and tire clearance while maintaining proper chain-line.

Our race-proven, suspension-specific geometry permits the rider to maintain proper body position while never allowing headtube angles to grow too steep or bottom bracket height to fall too low during front suspension compression. Simply put, the Litespeed Ocoee is the stiffest, strongest, and most agile 3Al - 2.5V titanium bicycle made.

FRAME DETAILS:

- Litespeed custom cold-worked tapered/butted, ovalized 3Al - 2.5V tubeset
- S-bend seatstays
- Asymmetric chainstays
- Dual water bottle mounts

Frame finish: Bright Brushed

FORK OPTIONS:

- Rock Shox Judy XC
- Rock Shox Judy SL
- Rock Shox Sid

COMPONENT SELECTIONS:

- Shimano LX
- Shimano XT
- Shimano XTR

Ocoee

DIFFERENCES FROM THE OBED: More size options
More cold-worked tubeset
Different finish

Certain components shown are optional



Voted best hardtail mountain bike of 1997 by the editors of Mountain Biker Magazine

There is a cove nestled just north of Litespeed that the locals know as Owl Hollow. A serene peacefulness fills the area; so do the most difficult riding conditions imaginable. The terrain is steep and rocky on the ridges and wet and slippery in the hollows - a proving ground so brutal that only the strong have a chance of survival. The all new Litespeed Owl Hollow was designed to excel on this savage landscape. We started with our exclusive cold-worked, tapered/butted 3Al - 2.5V titanium tubeset, which is 45% stronger than any straight-gauge or double-butted tubeset, and combined it with a mammoth 2" diameter bi-axially ovalized 6Al - 4V titanium downtube. This extremely impervious front end blends with S-bend seatstays and oversize asymmetric/S-bend chainstays to make this bicycle perfect for the most ravaging rider. These outstanding strength levels are accomplished while maintaining the phenomenal comfort that only titanium can provide.

The new Litespeed Owl Hollow earns its name by being the toughest, stoutest, most bombproof bicycle ever built, regardless of material.

"The Owl Hollow is an incredible bike, (it) feels like it could climb itself if you let go of it...the Owl Hollow is stiff at the bottom bracket. The bike is incredible on tight singletrack."

Joel Smith, Associate Editor, Mountain Biker Magazine

Owl Hollow

FRAME DETAILS:

- Litespeed cold-worked, tapered/butted 3Al - 2.5V/6Al - 4V titanium tubeset blend
- Massive 2" 6Al - 4V bi-axially ovalized downtube
- S-bend seatstays asymmetric chainstays
- Suspension-specific geometry
- Dual water bottle mounts

Frame finish: Bright Brushed

FORK OPTIONS:

Rock Shox Judy XC
Rock Shox Judy SL
Rock Shox Sid

COMPONENT SELECTIONS:

Shimano XT
Shimano XTR

DIFFERENCES FROM THE OCOEE:

Use of 6Al - 4V titanium in the tubeset

Certain components shown are optional



Zapata Espinoza says this bike will make you a better racer. We couldn't agree with him more. The Litespeed Tellico is the lightest and most durable mountain bike in existence. There are carbon fiber and aluminum bikes that attempt to match weights, but the physical properties of these materials simply cannot duplicate the strength, durability, and fatigue life of 6Al - 4V titanium. Compare the data yourself. At Litespeed we do not need to sacrifice quality and durability in an effort to save weight.

Our evolution of the superstrong 6Al - 4V titanium tubing allows our craftsmen to create a frame that has redefined the term "lightweight". The incredible strength-to-weight ratio of this alloy ensures that there is absolutely no sacrifice in stiffness, strength, or durability. To guarantee precise and stable handling, the Tellico incorporates classic cross-country suspension specific geometry. This, combined with the ultra-light 6Al - 4V tubing, produces a bicycle that accelerates, climbs, and descends better than any other mountain bike in the world.

The bike of choice for the Polo Sport World Cup Mountain Bike Team

POLO SPORT
RALPH LAUREN



WORLD CUP MOUNTAIN BIKE TEAM

Tellico

"...an incredibly lightweight bike that will make you a better racer the day you buy it,"

Zapata Espinoza, Editor, Mountain Bike Magazine

FRAME DETAILS:

- Litespeed exclusive cold-worked 6Al - 4V titanium mainframe
- Oversize seatstays and chainstays
- Suspension- specific geometry
- Dual water bottle mounts

Frame finish: Bright Brushed

DIFFERENCES FROM OWL HOLLOW: Lighter tubeset
More comfortable ride

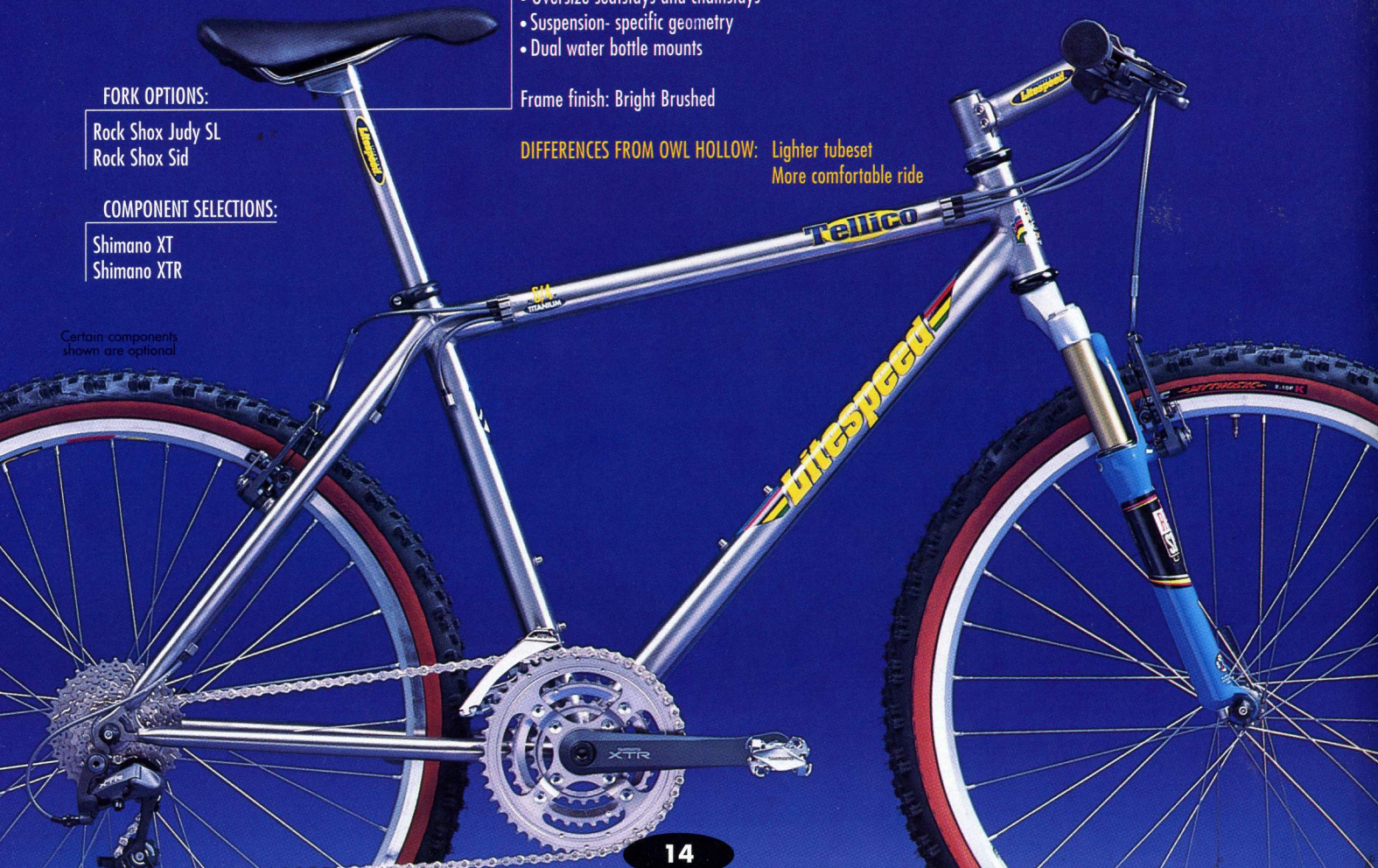
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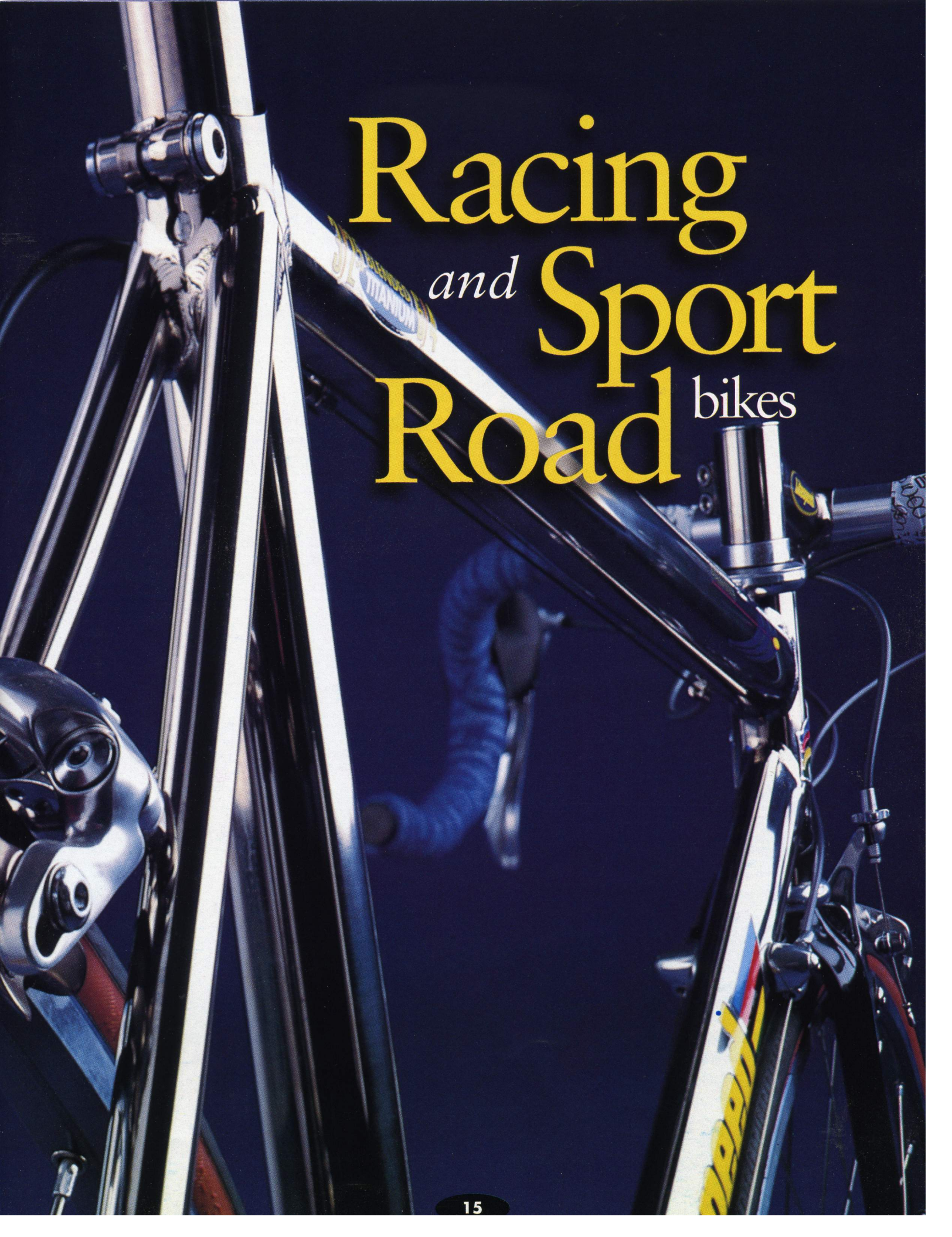
Rock Shox Judy SL
Rock Shox Sid

COMPONENT SELECTIONS:

Shimano XT
Shimano XTR

Certain components shown are optional





Racing
and Sport
Road bikes

“The Natchez is a stable platform, ideal for those long days on the road. Bank it into turns and it heels over willingly.”

Garrett Lai, Editor, Bicyclist Magazine

FRAME DETAILS:

- 3Al - 2.5V aerospace grade titanium tubeset
- Cold-worked radial seatstays
- Clearance for triple front chainrings

Frame finish: Natural Satin

FORK OPTIONS:

- Kinesis Aluminum
- Litespeed Aero Carbon
- Kestrel Carbon
- Time Equipe Carbon

COMPONENT SELECTIONS:

- Shimano 105SC (double or triple chainrings)
- Shimano Ultegra (double or triple chainrings)
- Campagnolo Chorus

The Natchez Trace National Scenic Parkway extends over 500 miles between the hills of Nashville, Tennessee, and the deltas of Natchez, Mississippi. Following the 19th century trade route of the early settlers, this road has become a favorite weekend getaway among cyclists.

The Litespeed Natchez is as beautiful and pleasant as its namesake. Our American-made, oversize 3Al - 2.5V seamless, aerospace grade titanium yields the perfect combination of comfort, stiffness, and durability. Cold-worked radial seatstays serve two functions: enhanced lateral stiffness for sharper tracking, and vertical compliance

Natchez

for a more comfortable ride. The super strength levels and long fatigue life of titanium allow us to keep the Natchez lightweight as well as strong.

For 1998 we've given the Natchez a more classic European geometry for precise handling, smooth acceleration, and excellent climbing ability.

Unrivaled titanium comfort alloyed with select componentry make the Natchez the best quality and value in road bikes on the market today.



Certain components shown are optional

The southern Appalachian mountains of our region have an exceptional network of diverse riding opportunities. Routes range from beautiful scenic byways to miles and miles of smooth single and doubletrack. In a single outing one can encounter varied surface conditions. Because more cyclists are discovering the challenge of negotiating a road bike on these beautiful trails, the popularity of the sport of cyclo-cross continues to develop. These conditions require a bicycle to be lightweight, versatile, strong, and dependable. Enter the Litespeed Appalachian.

Using our American made, over-size, 3Al - 2.5V seamless aerospace grade titanium tubeset, we've created a bicycle that is light, stiff, and durable. A comfortable, predictable, and stable geometry

provides steady going on the road and agile handling in rough off-road conditions. We've given this bike 700c wheels with spacious tire clearance, cantilever brakes, and

rack mounts. This combination of titanium frame and Litespeed's select cyclo-cross component group defines a bicycle that is easily shoulderable, lightweight for those 10th lap triple barricades, and thoroughly capable of handling a weekend of epic mountain exploration.

One of Bicycling Magazine's TOP 10 favorite road/sport bikes of 1997

Appalachian

FRAME DETAILS:

- Litespeed custom 3Al - 2.5V titanium tubeset
- Oversize S-Bend seatstays and chainstays
- Cantilever brakes, front and rear
- Clearance for 38 mm tires or fenders
- Rack braze-ons
- Clearance for triple chainrings

Frame finish: Bright Brushed

FORK:

Kinesis Cross Aluminum

COMPONENT SELECTIONS:

Shimano Ultegra Cyclo-Cross

Certain components shown are optional

DIFFERENCES FROM STANDARD ROAD FRAME:

- More relaxed geometry
- Greater stability
- Shorter toptube
- Higher bottom bracket
- Greater tire clearance
- Cantilever brake mounting
- Standard rack mounts



FRAME DETAILS:

- Litespeed custom 3Al - 2.5V titanium tubeset
- Oversize S-Bend seatstays and chainstays
- Cantilever brakes, front and rear
- Clearance for 38 mm tires or fenders
- Rack braze-ons
- Clearance for triple chainrings

Frame finish:
Bright Brushed

DIFFERENCES FROM STANDARD ROAD FRAME:

- More relaxed geometry
- Greater stability
- Shorter toptube
- Higher bottom bracket
- Greater tire clearance
- Cantilever brake mounting
- Standard rack mounts

"...light, fast, silky, and amazingly versatile...a super century machine that's even suitable for road racing. Install your racks and panniers to turn it into a comfortable high-performance beast of burden for long-distance touring, even on hard-packed roads. Besides titanium's ability to buffer road shock, this bike can take a pounding and come back for more, season after season...innovations include the use of cantilever brakes for tire and mud clearance and more stopping power; mountain bike style S-bend seatstays and chainstays for stiffness, tire clearance, and better support for the rear brake...I liked how the bottom bracket didn't deflect enough to cause chain rub when I stood to jam over short hills...one bike that can do it all...It lays to rest the notion that a touring bike and fast-century bike are two different breeds."

Blue Ridge

Ed Pavelka, Executive Director, New Ventures, Bicycling Magazine

Thanks, Ed,
we couldn't have
said it better ourselves!

FORK OPTIONS:

Kinesis Cross Aluminum

COMPONENT SELECTIONS:

Shimano Ultegra touring triple

Certain components shown are optional



Over the years the Tuscan region of Italy has become a Mecca for the world's finest professional cyclists. Days are filled with arduous training rides along the beautiful Tyrrhenian Sea coastline, or perhaps a climb into the nearby Tuscan hills. In the evenings the streetside cafes buzz with conversations of the day's activities. The area breathes racing in its purest form.

There could be no better inspiration for the creation of the Tuscany, a thoroughbred racing machine. The Tuscany is a bicycle durable enough for everyday training, yet still has all the performance characteristics needed to win races: responsiveness, light weight, and stiffness! To accomplish this was no easy task; new cold-working techniques had to be developed. These processes enhance the strength and stiffness levels of the 3Al - 2.5V titanium alloy by as much as 50% over the normal mill specifications.

Blend this tapered/butted tubeset with an aggressive but stable geometry and the result is The Litespeed Tuscany; a bicycle bred for racing.

FRAME DETAILS:

- Litespeed cold-worked, tapered/butted 3Al - 2.5V titanium tubeset
- Cold-worked radial seatstays
- Clearance for triple front chainrings

Frame finish: Natural Satin

FORK OPTIONS:

Kinesis Aluminum
Litespeed Aero Carbon
Kestrel Carbon
Time Equipe Carbon

COMPONENT SELECTIONS:

Shimano 105SC (double or triple chainrings)
Shimano Ultegra (double or triple chainrings)
Campagnolo Chorus
Shimano Dura-Ace
Campagnolo Record

Tuscany

DIFFERENCES FROM THE NATCHEZ: More cold-worked tubeset
More aggressive geometry
Weld-on seatpost binder



FRAME DETAILS:

- Litespeed custom cold-worked, tapered/butted 3Al - 2.5V titanium tubeset
- Clearance for triple front chainrings
- Classic European geometry

Frame finish options: Bright Brushed, Brilliant Polished, Maui Blue, Phoenix Red



FORK OPTIONS:

- Litespeed Aero Carbon
- Kestrel Carbon
- Time Equipe Carbon

COMPONENT SELECTIONS:

- Shimano Ultegra (double or triple chainrings)
- Campagnolo Chorus
- Shimano Dura-Ace
- Campagnolo Record

The Litespeed Classic is a road frame that combines traditional styling with state-of-the-art technology. The Litespeed custom cold-worked 3Al - 2.5V titanium tapered/butted tubeset blends with our classic road geometry to allow the rider to carve tighter corners yet maintain straight line stability. The tapered/butted rear stays provide both lateral rigidity and vertical compliance for sure climbing, acceleration, and, of course, unmatched titanium comfort. Our craftsmen hand work each tube, braze-on, and dropout to create a beautiful merging of style, strength, comfort, and versatility. The end result is a high-performance bike that equally suits an aspiring USCF racer or an aggressive rider who enjoys local group rides.

Classic

DIFFERENCES FROM THE TUSCANY: More oversize tubeset
Braze-on front derailleur mount
Sculpted seattube with weld-on seatpost binder
Solid titanium shifter bosses
More frame finish options



Certain components shown are optional

The Litespeed Ultimate reigns as the most sought-after high performance bike in the world. A Pro World Championship, three Tour DuPont wins, stage victories at the Tour de France, and four U.S. Pro National titles are undisputed evidence of the level of excellence of this bike. The Ultimate is the consummate combination of aerodynamics, stiffness, and comfort.

We achieve these amazing properties with a unique and complex combination of titanium alloys and tube shapes. We start with U.S. made, 3Al - 2.5V seamless titanium tubing, and specially cold-work it to increase its strength levels as much as 50% with no weight gain. Radially curved seatstays serve two functions: enhanced lateral stiffness for sharper tracking, and vertical compliance for a more comfortable ride. We then top it all off with the aerodynamic and strength benefits of our hand-formed 6Al - 4V bladed titanium tubing in the downtube.

Precise handling, screaming acceleration, wicked cornering, and titanium-enhanced rider comfort; the Litespeed Ultimate is one bike that lives up to its name.

“One quick glance at the Ultimate's swaged and tapered tubes lets you know that some heavy R&D went into this frame. To me, the Ultimate was also the most sexy frame...”

Mark Reidy, Bicycle Guide Magazine

Ultimate

FRAME DETAILS:

- Litespeed cold-worked, tapered/buffed 3Al - 2.5V/6Al - 4V titanium tubeset blend
- Bladed aero downtube
- Radial seatstays
- Braze-on front derailleur mount
- Sculpted seattube with weld-on seatpost binder
- Solid titanium shifter bosses

Frame finish options: Bright Brushed, Brilliant Polished, Maui Blue, Phoenix Red



DIFFERENCES FROM THE CLASSIC:

Blend of 3Al - 2.5V and 6Al - 4V titanium alloys
More aero tubeset
Radial seat-stays
More aggressive geometry

FORK OPTIONS:

Litespeed Aero Carbon
Kestrel Carbon
Time Equipe Carbon

COMPONENT SELECTIONS:

Shimano Ultegra
Campagnolo Chorus
Shimano Dura-Ace
Campagnolo Record

Certain components shown are optional



“The Vortex in our hands was not only light, it was...the lightest bike we'd ever hoisted. Jaw dropping light, eye-rolling light, impossibly light.”

Rich Carlson, Editor, Winning Illustrated

“This amazing Litespeed...sets the standard by which I'll judge all future dream machines.”

Jim Langley, Technical Editor, Bicycling Magazine

The Litespeed Vortex is the ultimate dream machine. If you're after the world's lightest, stiffest, and most durable high-performance bicycle, this is it. This bike has brought cycling state of the art to a level never before perceived achievable. Utilizing the Litespeed exclusive cold-worked 6Al - 4V titanium tubeset, we have created a frame that, while being inconceivably lightweight, maintains the strength necessary for high performance.

You've read claims of “world's lightest and stiffest bicycle” by manufacturers of carbon fiber and aluminum bicycles, but the simple truth is that the physical properties of these materials cannot match the strength, durability, and fatigue

Vortex

life of cold-worked 6Al - 4V titanium. Compare the data yourself (if you can find accurate printed data on carbon fiber). By using cold-worked 6Al - 4V titanium, we do not need to sacrifice quality, durability, or reliability in an effort to save weight.

Instantaneous acceleration, rail-like stability on descents, a well-balanced geometry, and unmatched craftsmanship. Let 'em try to stay on your wheel!

FRAME DETAILS:

- Litespeed exclusive super-light, super-strong, cold-worked 6Al - 4V titanium tubeset
- Radial seatstays
- Solid titanium shifter bosses

Frame finish options: Bright Brushed, Maui Blue, Phoenix Red



FORK OPTIONS:

- Litespeed Aero Carbon
- Kestrel Carbon
- Time Equipe Carbon

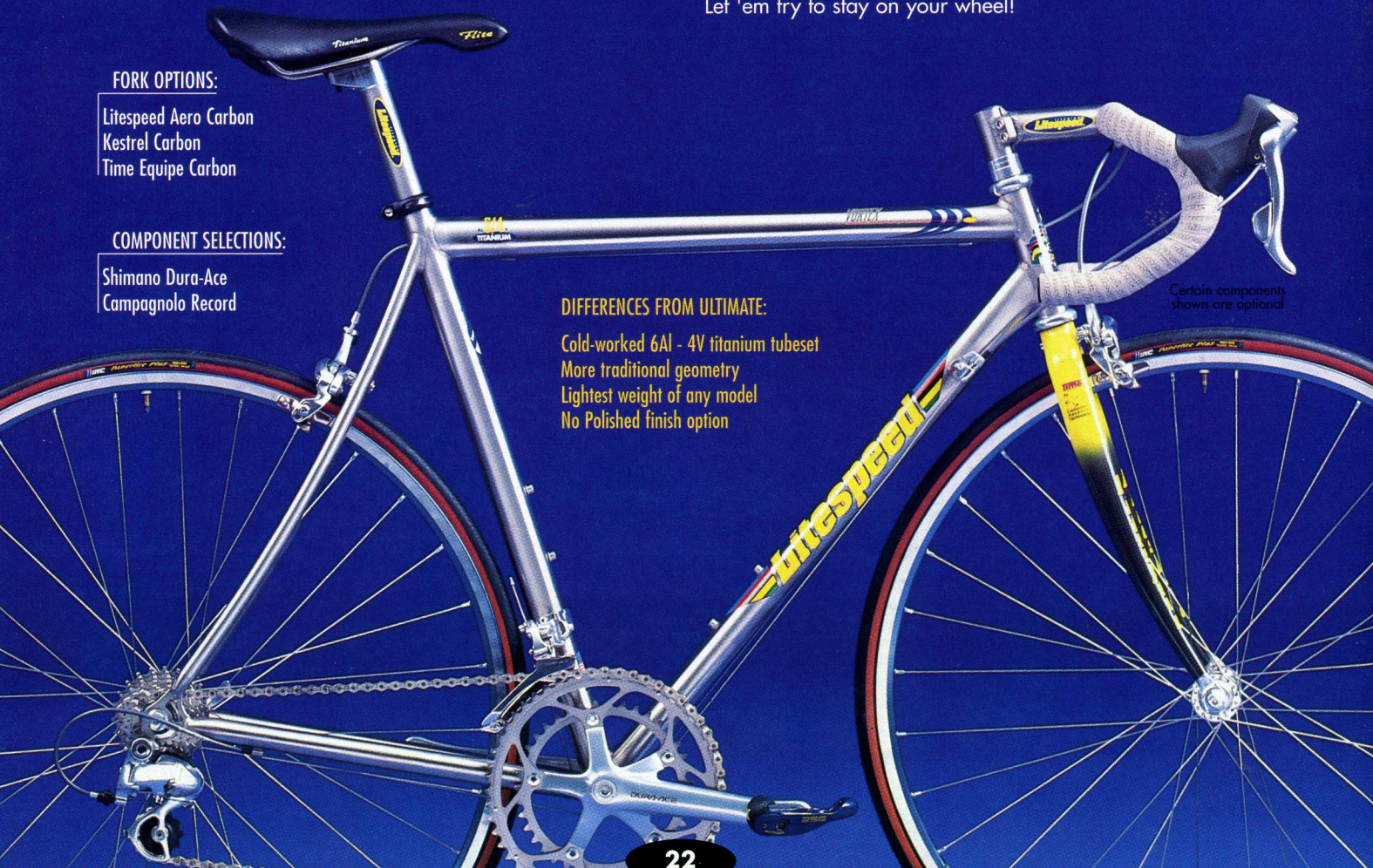
COMPONENT SELECTIONS:

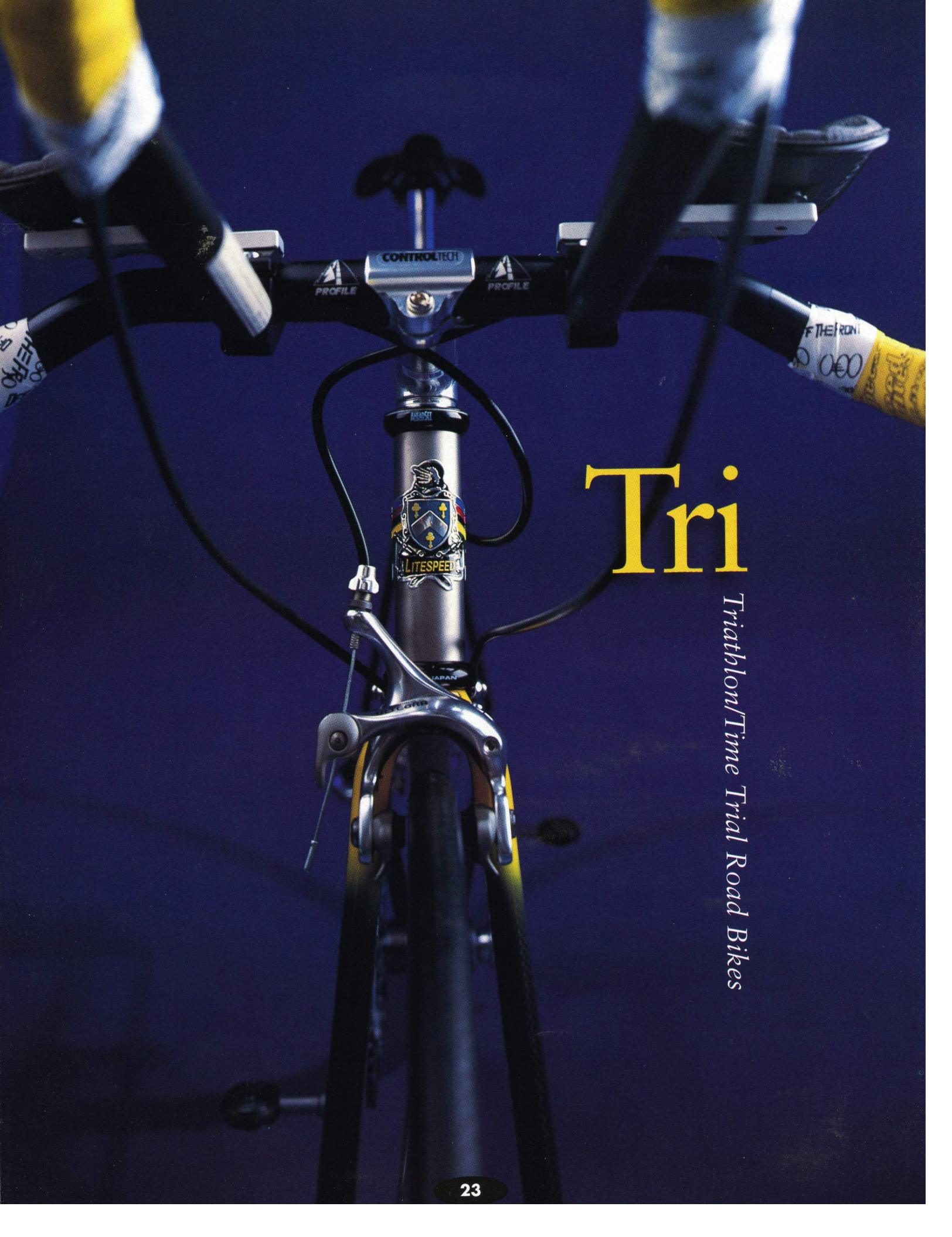
- Shimano Dura-Ace
- Campagnolo Record

DIFFERENCES FROM ULTIMATE:

- Cold-worked 6Al - 4V titanium tubeset
- More traditional geometry
- Lightest weight of any model
- No Polished finish option

Certain components shown are optional





Tri

Triathlon/Time Trial Road Bikes

Since its inception the Litespeed Tachyon has maintained its dominance in the world of triathlon. It consistently sets the standards of aerodynamics, rider comfort, positioning, handling, and weight which all other triathlon bikes attempt to reach. For 1998 the Tachyon has once again redefined the benchmark for high-level performance.

An improved cold-worked, aero-oval, seamless 3Al - 2.5V titanium tubeset ensures that the Tachyon is more aerodynamic, lighter, and stronger than ever before. The

addition of Litespeed's radial seatstay technology adds more rider comfort and greater energy transfer. A forward seattube angle provides a comfortable and aerodynamic rider position. The use of 650c (26 inch) wheels further aids in the reduction of wind drag.

Combine this bicycle with our custom spec'd triathlon componentry and the end result is a bicycle that is greater than the sum of its parts. The Litespeed Tachyon delivers smooth, precise, aerodynamic performance at an incomparable value.

FRAME DETAILS:

- Litespeed cold-worked, aero-oval 3Al - 2.5V titanium tubeset
- Radial seatstays
- 78 degree seattube
- 650c wheels

Frame finish: Natural Satin

Tachyon

FORK OPTIONS:

Litespeed Aero Carbon

COMPONENT SELECTIONS:

Shimano Ultegra triathlon/time-trial
Shimano Dura-Ace triathlon/time-trial



Since its creation the Litespeed Blade has been the most aerodynamic production time trial bike in the world. Years of wind tunnel tests, winning the 1995 and 1996 U.S. National Time Trial Championships, being the #1 bike of choice for the 1996 Summer Olympic Games, and winning two World titles in track events in 1997 have established it as the undisputed leader in high-speed cycling.

For 1998 we have brought together all our experience in high-speed cycling and our years of expertise in titanium fabrication to create the next evolution in triathlon/time trial technology. The most important features of our custom,

FRAME DETAILS:

- Litespeed cold-worked 3Al - 2.5V, 6Al - 4V bladed titanium blend
- Headtube nosecone
- Radial seatstays
- 78 degree seattube
- 650c wheels

Frame finish: Bright Brushed

DIFFERENCES FROM TACHYON: More aero frame design
tubset due to 6Al - 4V titanium aero downtube

FORK OPTIONS:

Litespeed Aero Carbon

COMPONENT SELECTIONS:

Shimano Ultegra triathlon/time-trial
Shimano Dura-Ace triathlon/time-trial

Blade

Pro-level, and Olympic bikes have evolved into the 1998 production model. These include radial seatstays, a newly revamped 6Al - 4V titanium aero downtube, and a headtube nosecone.

The strength of our cold-worked 6Al - 4V titanium formed into a supremely aerodynamic tubset, wind tunnel proven aero rider position, a 650c wheel design, and a level of rider comfort that only titanium can give all contribute to make the Litespeed Blade a no-compromise, state-of-the-art choice in high-speed design.



We will custom

For years

Litespeed has quietly hand crafted custom bicycle designs for some of the world's most discerning cyclists. You'd be more than a little surprised (or maybe not) at how many professionals actually compete on bikes designed and custom crafted by Litespeed. What may also surprise you is that having your own Litespeed custom built to your specifications is fairly simple, immensely rewarding, and will give you an unparalleled level of riding enjoyment for years to come.

So how do you go about getting a custom Litespeed? It's really easy; the best way to get started is to call us. Our staff of design specialists will help you create your custom masterpiece. Some of the topics you should be prepared to discuss are the basic style of

FRAME DETAILS:

- Litespeed cold-worked, 6Al - 4V/3Al - 2.5V titanium blended tubeset
- Massive boomtube and downtube
- Pierced, not spliced toptube
- Mountain style brake bosses
- Custom frame designs are available. Contact Litespeed for details.

Frame finish options: Bright Brushed, Custom paint

FORK:

Litespeed Chrome-Moly

COMPONENT SELECTIONS:

Shimano Ultegra tandem triple

The tandem pictured weighs a scant 31 pounds.



build *any* bike...

bicycle you are interested in, your personal riding style, any unusual physical characteristics (longer than normal torso, inseam, etc.), what componentry you prefer, and what type finish (brushed, polished, custom paint) you would like your bicycle to have. Once these parameters have been determined our sales staff will help you locate a dealer in your area. The dealer will assist you in the sizing and geometry of your bicycle. After all this information has been compiled our designers will forward drawings to the dealer for your approval. Once you and the dealer have approved the final design, our custom craftsmen will create your bicycle of a lifetime.

...even a tandem



Taliani...a Cherokee Indian phrase meaning "group of two". This phrase can be applied to many things; at Litespeed it represents the ultimate tandem. Comfortable yet phenomenally stiff, unbelievably lightweight, and reassuringly stable, the Taliani is the tandem experience of a lifetime.

Litespeed is the only frame builder in the world to utilize super-strong 6Al - 4V titanium tubing in bicycles, and in the Taliani we put it to good use. A massive 2 inch (51 mm) diameter biaxially ovalized/cold-worked downtube combines

Taliani

with a hefty 1 1/2 inch x 2 5/8 inch (33 mm x 68 mm) boom tube to yield the stiffest and lightest tandem frame in the world. But it doesn't stop here; the magical damping properties of titanium provide an unmatched level of comfort and vibration-free riding - a must for the stoker position.

The Taliani; your dream tandem realized.

Because of the custom nature of a tandem, we do not have a specific production geometry. It is best to call us at Litespeed and we will design your tandem to match your specific requirements.

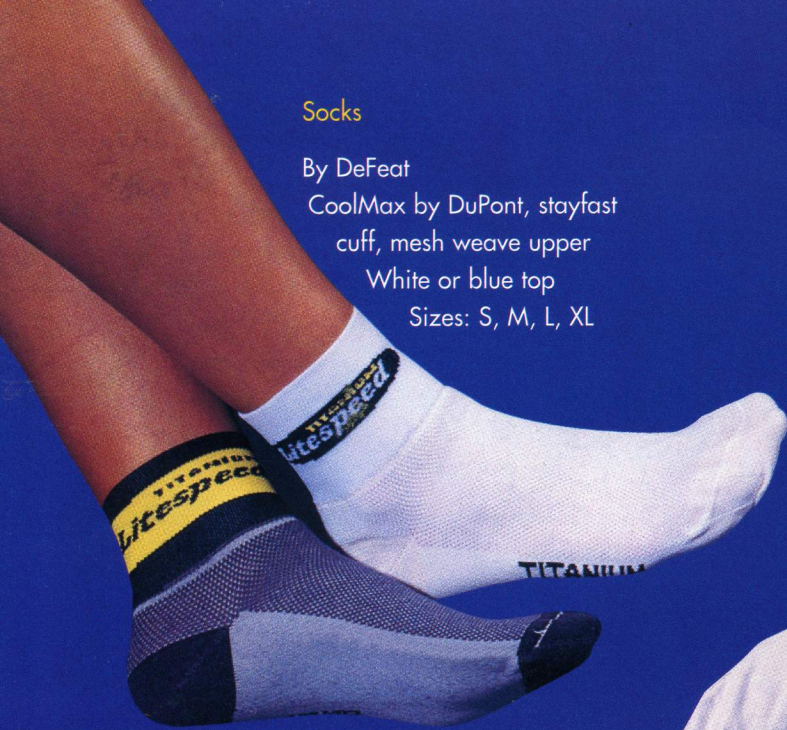
Socks

By DeFeat

CoolMax by DuPont, stayfast cuff, mesh weave upper

White or blue top

Sizes: S, M, L, XL



Tee-Shirts

100% cotton

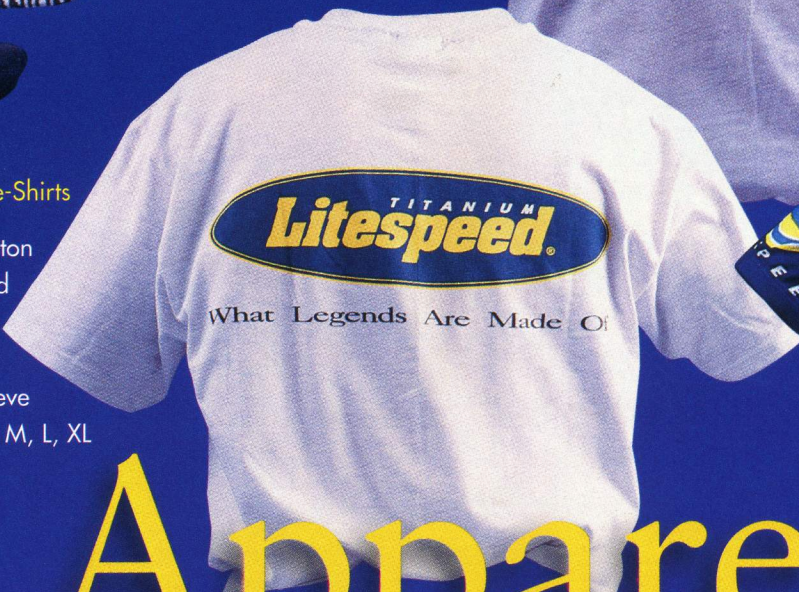
Ash grey with Litespeed

oval silkscreen front

and rear

Short sleeve

Sizes: M, L, XL



Apparel

Hats

100% cotton

Tan with embroidered Litespeed

Adjustable sizing

Shop Aprons

100% cotton

Natural unbleached cotton

with silkscreened Litespeed

oval on front

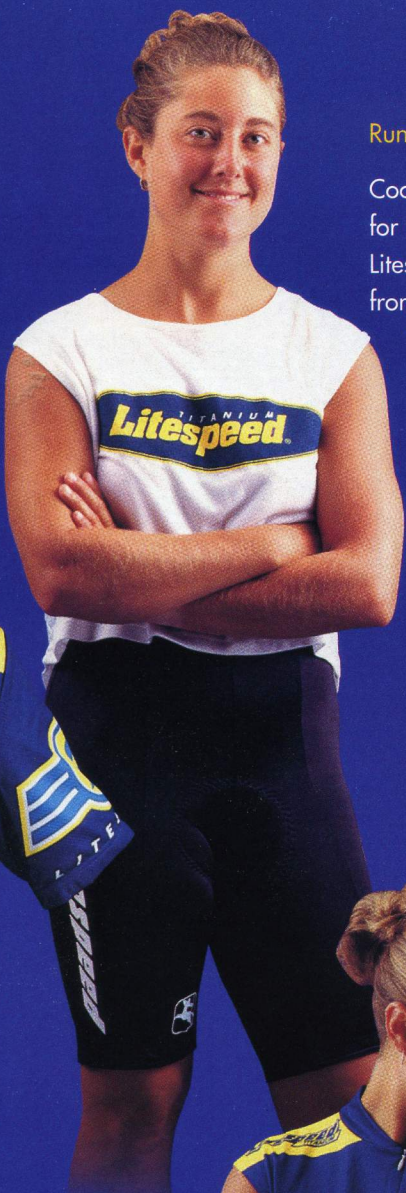


Running/Triathlon Singlet

CoolMax by DuPont, rear pocket for water bottle or food
Litespeed logo silkscreened on front

White

Sizes: S, M, L, XL



Team Jerseys

Giordana Design

Tactel by DuPont advanced high performance fiber
short sleeve, long sleeve, sleeveless

Sizes: 2-8 Italian

Team Shorts

Giordana 8 panel design

190 gram Lycra by DuPont (short)

Eschler of Switzerland (antibacterial insert)

Black

Sizes: 2-6 Italian

Litespeed Banner

100% nylon

18"x48" with brass eyelets



Polo Shirt

100% cotton

Natural unbleached cotton with embroidered Litespeed oval on chest and Litespeed on collar
Short sleeve

Sizes: S, M, L, XL



1

2

3

7

4

6

5



COMPONENT

Options

Exclusively

FROM LITESPEED

Our stems, seatposts, and handlebars enhance performance and significantly reduce the weight of any of the standard groups.

1 • 3Al - 2.5V Titanium Mountain Bar

Cold-worked, seamless, bulge design

58 cm length

Finish: Satin

Weight: 160 grams

2 • Titanium Mountain Ahead Stems

5° rise

120, 135, 145 mm reach

Ahead style 1 1/8"

Finish: Brushed

Weight: Average 150 grams

3 • Titanium Road Ahead Stems

-14° rise

120, 135, 145 mm reach

Ahead style 1"

Finish: Polished

Weight: Average 150 grams

4 • Titanium Road Stems

-14° rise

90, 100, 120, 130 mm reach

Finish: Polished

Weight: Average 180 grams

5 • Titanium Mountain Seatposts

330 mm length

27.2 diameter

Finish: Brushed

Weight: 210 grams

6 • Titanium Road Seatposts

230 mm length

27.2 mm diameter

Finish: Polished

Weight: 180 grams

7 • Litespeed Bar Tape

Off the Front

Neoprene material, reusable, washable, and durable

Blue, grey, yellow

Litespeed Limited Warranty For Bicycles Purchased Through An Authorized Retailer

Frame

Your Litespeed frame is warranted against any manufacturing defects in materials and/or workmanship for as long as you own it. With proof of purchase we will repair or replace, at our discretion, any defective frame with the same or comparable model (due to product evolution).

Frame Finishing

Any finishes on your frame applied by Litespeed (paint and decals) are warranted against any manufacturing defects in materials and/or workmanship for one year from date of purchase. Scratches, dings, or abrasions caused by use or handling are not considered defects.

Components

All components other than your Litespeed frame bear their manufacturer's own warranty. Any claims should be directed to said manufacturer's customer service department.

Warranty

What is Not Covered

This warranty does not cover normal wear and tear, or normal maintenance items; any damage, failure, or loss caused by accident, misuse, abuse, or neglect; improper assembly, improper maintenance, or use of parts or devices not consistent with the original intent for the product sold; or failure to follow instructions for installation, assembly or use.

Warranty Void

This product is not intended for use in stunt riding, ramp jumping, acrobatics, or similar activities, or with motors or power-driven vehicles. This warranty is VOID where the Litespeed product has been used in any of these ways. NOTICE: The user assumes the risk of any personal injuries, damages to or failures of the products and any other losses if the Litespeed product has been used in any such event.

For How Long

The warranty coverage runs for the lifetime of the frame; it is applicable ONLY to the original owner.

No Liability For Incidental Or Consequential Damages

In no event shall Litespeed be liable for incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply.

How to Obtain Service

Proof of purchase is required to validate protection under the limited warranty. The return of the warranty registration form within 30 days of purchase is a condition precedent to coverage as provided herein. Claim must be made through an authorized dealer.

For information regarding the nearest dealer, write or call Litespeed at P.O. Box 22666, Chattanooga TN 37422 (423) 238-5530

Your Rights Under State Law

This warranty gives you specific legal rights; and you may also have other rights which may vary from state to state.

Some Important Things to Remember About Your Warranty

- This warranty applies only to the original owner.
- All claims must be processed through an authorized Litespeed bicycle retailer.
- This warranty is void if your bicycle is subjected to abuse, alterations, modifications, improper maintenance, or other abnormal, excessive, or improper conditions.
- This warranty offers no cash refunds.
- Any labor charges for part change-overs, assembly or disassembly, and freight are the responsibility of the owner.

Components

Spec's subject to change and other options may be available.

Mountain

Component	Model • Sizes/Options	Model • Sizes/Options	Model • Sizes/Options
	Shimano LX	Shimano XT	Shimano XTR
Crankset	LX, 4-Arm • 170 mm, 175 mm	XT, 4-Arm • 170 mm, 175 mm	XTR, 4-Arm • 170 mm, 175 mm, 177.5 mm
Chainrings	LX • 42-32-22	XT • 42-32-22	XTR • 46-34-24
Cassette	LX • 11-28, 11-30	XT • 11-28, 11-30	XTR • 12-32
Bottom Bracket	LX	XT	XTR
Chain	LX	XT	XTR
Rear Derailleur	LX	XT	XTR
Front Derailleur	LX	XT	XTR
Shifting	Rapidfire	Rapidfire	Rapidfire
Brake Levers	LX	XT	XTR
Brakes	LX V-Brake	XT V-Brake	XTR V-Brake
Handlebar	Litespeed Aluminum	Litespeed Aluminum	Litespeed Aluminum
Grips	Pedro's Slimwalls	Pedro's Slimwalls	Pedro's Slimwalls
Stem	Kore, black • 120 mm, 135 mm	Control Tech, silver • 120 mm, 135 mm	Control Tech, silver • 120 mm, 135 mm
Headset	Dia-Compe SA, black • 1.125 diameter	Dia-Compe DL, silver • 1.125 diameter	Dia-Compe DL, silver • 1.125 diameter
Seatpost	Kore, black	Control Tech, silver	Control Tech, silver
Saddle	Avocet Cro-Mo, black	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue
Hubset	LX • 32 hole	XT • 32 hole	XTR • 32 hole
Rims	Mavic M238, silver	Mavic M217, silver	Mavic M217, silver
Spokes	Wheelsmith 1.4g	Wheelsmith 14/15/14	Wheelsmith 14/15/14
Nipples	Brass	Alloy	Alloy
Build Quality	Wheelsmith silver	Wheelsmith gold	Wheelsmith gold
Tires	IRC Mythos Rustwall • 26 x 2.1	IRC Mythos Kevlar Rustwall • 26 x 2.1	IRC Mythos Kevlar Rustwall • 26 x 2.1

Road Sport/Touring

Component	Shimano Ultegra 6503 Touring Triple (Cantilever Brakes)	Shimano Ultegra 6500 Cyclocross	Shimano Ultegra 6503 Tandem Triple (Cantilever Brakes)
Crankset	Ultegra 6503 • 170 mm, 172.5 mm, 175 mm	Cook Bros. E-Crank • 170 mm, 172.5 mm, 175 mm	Ritchey Tandem • 170/170 mm, 170/175 mm, 175/175 mm
Chainrings	Ultegra 6503 • 52-42-30	Sugino • 48-36 110 bolt-circle	Ritchey • 54-44-32
Cassette	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27
Bottom Bracket	Ultegra 6503	Ultegra 6500	Ritchey
Chain	Ultegra 6500	Ultegra 6500	Ultegra 6500
Rear Derailleur	Ultegra 6500 long cage (GS)	Ultegra 6500	Ultegra 6500 long cage (GS)
Front Derailleur	Ultegra 6503	Ultegra 6500	Ultegra 6503
Shifting	STI	STI	STI
Brake Levers	Ultegra 6500	Ultegra 6500	Ultegra 6500
Brakes	Shimano XT Cantilever	Shimano XT Cantilever	Shimano XT Cantilever
Handlebar	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46
Bar Tape	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow
Stem	ControlTech 0° Ahead Road, silv. • 90, 100, 110, 120, 130	ControlTech 0° Ahead Road, silver • 90, 100, 110, 120, 130	Front, ControlTech 0° Ahead; rear, Control Tech adjustable • 100, 120, 135
Headset	Dia-Compe A-Head DL, silver	Dia-Compe A-Head DL	Dia-Compe Ahead DL, silver • 1 1/8 inch diameter
Seatpost	American Classic	American Classic	American Classic
Saddle	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue
Hubset	Ultegra 6500 • 32 hole	Ultegra 6500 • 32 hole	Hope • 40 hole
Rims	Mavic Reflex	Mavic Reflex	Mavic T217
Spokes	Wheelsmith 14/15/14	Wheelsmith 14/15/14	Wheelsmith 14g
Nipples	Alloy	Alloy	Brass
Build Quality	Wheelsmith gold	Wheelsmith gold	Wheelsmith gold
Tires	IRC Tandem • 700 x 30	IRC V-Cross • 700 x 38	IRC Tandem • 700 x 30

Triathlon/Time Trials

Component	Shimano Ultegra 6500 Triathlon	Shimano Dura-Ace 7700 Triathlon
Crankset	Ultegra 6500 • 170 mm, 172.5 mm, 175 mm	Dura-Ace 7700 • 170 mm, 172.5 mm, 175 mm, 177.5 mm, 180 mm
Chainrings	Ultegra 6500 • 53-39, 53-42	Dura-Ace 7700 • 53-39, 53-42
Cassette	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27	Dura-Ace 7700 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27
Bottom Bracket	Ultegra 6500	Dura-Ace 7700
Chain	Ultegra 6500	Dura-Ace 7700
Rear Derailleur	Ultegra 6500	Dura-Ace 7700
Front Derailleur	Ultegra 6500	Dura-Ace 7700
Shifting	Dura-Ace Bar End (9 spd)	Dura-Ace Bar End, 9-sp
Brake Levers	Ultegra 6403	Dura-Ace 7402
Brakes	Ultegra 6500 Calipers	Dura-Ace 7700 Calipers
Handlebar	Profile Airwing/Split Endz • 40, 42	Profile Airwing/Split Endz • 40, 42
Bar Tape	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow
Stem	Profile H20 Ahead, black • 90, 100, 110, 120, 130	Profile H20 Ahead, black • 90, 100, 110, 120, 130
Headset	Dia-Compe DL, silver	Dia-Compe DL, silver
Seatpost	Profile Fastback	Profile Fastback
Saddle	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue
Hubset	Ultegra 6500 • 28 hole	Dura-Ace 7700 • 28 hole
Rims	Velocity DEEP-V, titanium grey	Velocity Deep-V, titanium grey
Spokes	Wheelsmith 14/15/14	Wheelsmith 14/15/14
Nipples	Alloy	Alloy
Build Quality	Wheelsmith gold	Wheelsmith gold
Tires	IRC Paperlite Plus Kevlar	IRC Paperlite Plus Kevlar

Road Racing

Component	Model • Sizes/Options	Model • Sizes/Options	Model • Sizes/Options
	Shimano 105SC	Shimano 105 Triple	Shimano Ultegra 6500
Crankset	105SC • 170 mm, 172.5 mm, 175 mm	105 • 170 mm, 175 mm	Ultegra 6500 • 170 mm, 172 mm, 175 mm
Chainrings	105SC • 53-39, 53-42	105 • 52-42-30	Ultegra 6500 • 53-39, 53-42
Cassette	105SC • 12-21, 12-23, 12-25, 13-23, 13-26	105 • 12-21, 12-23, 12-25, 13-23, 13-26	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27
Bottom Bracket	105SC	105	Ultegra 6500
Chain	105SC	105	Ultegra 6500
Rear Derailleur	105SC	105, long cage (GS)	Ultegra 6500
Front Derailleur	105SC	105	Ultegra 6500
Shifting	STI	STI	STI
Brake Levers	105SC	105	Ultegra 6500
Brakes	105SC Calipers	105 Calipers	Ultegra 6500 Calipers
Handlebar	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46
Bar Tape	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow
Stem	TTT Synthesis • 90, 100, 110, 120, 130	TTT Synthesis • 90, 100, 110, 120, 130	TTT Synthesis • 90, 100, 110, 120, 130
Headset	105SC	105	Ultegra 6500
Seatpost	American Classic	American Classic	American Classic
Saddle	Avocet Cra-Mo, black	Avocet Cra-Mo, black	Avocet Titanium, yellow/blue
Hubset	105SC • 32 hole	105 • 32 hole	Ultegra 6500 • 32 hole
Rims	Mavic CXP-10, silver	Mavic CXP-10, silver	Mavic Reflex
Spokes	Wheelsmith 14g	Wheelsmith 14g	Wheelsmith 14/15/14
Nipples	Brass	Brass	Alloy
Build Quality	Wheelsmith silver	Wheelsmith silver	Wheelsmith gold
Tires	IRC Paperlite • 700 x 23	IRC Paperlite • 700 x 23	IRC Paperlite Plus Kevlar • 700 x 23

	Shimano Ultegra 6503 Triple	Campagnolo Chorus	Shimano Dura-Ace 7700
Crankset	Ultegra 6503 • 170 mm, 172.5 mm, 175 mm	Chorus • 170 mm, 172.5 mm, 175 mm	Dura-Ace 7700 • 170 mm, 172.5 mm, 175 mm, 177.5 mm, 180 mm
Chainrings	Ultegra 6503 • 52-42-30	Chorus • 53-39, 53-42	Dura-Ace 7700 • 53-39, 53-42
Cassette	Ultegra 6500 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27	Chorus (9 spd) • 11-21, 11-23, 12-21, 12-23, 13-23, 13-26	Dura-Ace 7700 • 11-21, 11-23, 12-21, 12-23, 12-25, 12-27
Bottom Bracket	Ultegra 6503	Chorus	Dura-Ace 7700
Chain	Ultegra 6500	Record	Dura-Ace 7700
Rear Derailleur	Ultegra 6500 long cage (GS)	Chorus	Dura-Ace 7700
Front Derailleur	Ultegra 6503	Chorus	Dura-Ace 7700
Shifting	STI	Ergo Power	STI
Brake Levers	Ultegra 6500	Chorus	Dura-Ace 7700
Brakes	Ultegra 6500 Calipers	Chorus Calipers	Dura-Ace 7700 Calipers
Handlebar	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46	TTT Forma 2 • 40, 42, 44, 46
Bar Tape	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow	Litespeed • Blue, Grey, Yellow
Stem	TTT Synthesis • 90, 100, 110, 120, 130	TTT Synthesis • 90, 100, 110, 120, 130	TTT Synthesis • 90, 100, 110, 120, 130
Headset	Ultegra 6500	Chorus	Dura-Ace 7700
Seatpost	American Classic	Litespeed Titanium	Litespeed Titanium
Saddle	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue	Avocet Titanium, yellow/blue
Hubset	Ultegra 6500 • 32 hole	Chorus • 32 hole	Dura-Ace 7700 • 32 hole
Rims	Mavic Reflex	Mavic Reflex	Mavic Reflex
Spokes	Wheelsmith 14/15/14	Wheelsmith 14/15/14	Wheelsmith 14/15/14
Nipples	Alloy	Alloy	Alloy
Build Quality	Wheelsmith gold	Wheelsmith gold	Wheelsmith gold
Tires	IRC Paperlite Plus Kevlar • 700 x 23	IRC Paperlite Plus Kevlar • 700 x 23	IRC Paperlite Plus Kevlar • 700 x 23

	Campagnolo Record
Crankset	Record • 170 mm, 172.5 mm, 175 mm
Chainrings	Record • 53-39, 53-42
Cassette	Record Ti/Steel • 12-21, 12-23, 13-23, 13-26
Bottom Bracket	Record
Chain	Record
Rear Derailleur	Record
Front Derailleur	Record
Shifting	Ergo Power
Brake Levers	Record
Brakes	Record Caliper
Handlebar	TTT Forma 2 • 40, 42, 44, 46
Bar Tape	Litespeed • Blue, Grey, Yellow
Stem	TTT Synthesis • 90, 100, 110, 120, 130
Headset	Record
Seatpost	Litespeed Titanium
Saddle	Avocet Titanium, yellow/blue
Hubset	Record • 32 hole
Rims	Mavic Reflex
Spokes	Wheelsmith 14/15/14
Nipples	Alloy
Build Quality	Wheelsmith gold
Tires	IRC Paperlite Plus Kevlar • 700 x 23

Geometry

	Size	Toptube	Head	Seat	Chainstay	BBHT	Wheel Base	Front Center	Fork Rake	Trail	Stand Over	Head Tube	Weight
Hiwassee	14.0	21.00	71.0	73.0	16.75	12	40.0	23.2	1.6	2.8	26.8	4.1	5.45
	16.5	22.00	71.5	72.5	16.75	12	40.7	24.2	1.6	2.7	28.8	4.1	5.56
	18.0	22.75	71.5	72.5	16.75	12	41.5	24.8	1.6	2.7	29.8	4.5	5.67
	19.5	23.50	71.5	72.5	16.75	12	42.2	25.6	1.6	2.7	30.9	5.2	5.79
Unicoi	14.0	21.00	71	73.0	16.93	11.75	39.6	22.8	1.6	2.8	26.6	4.1	3.79
	16.5	22.00	71.5	72.5	16.93	11.75	40.3	23.8	1.6	2.7	28.6	4.1	3.92
	18.0	22.75	71.5	72.5	16.93	11.75	41.1	24.4	1.6	2.7	29.7	4.5	4.04
	19.5	23.50	71.5	72.5	16.93	11.75	41.8	25.2	1.6	2.7	30.8	5.2	4.18
Cohutta	15	21.75	71.0	73/69	16.75	13	40.8	24.1	1.6	2.8	28.7	4.1	7.11
	17	22.25	71.5	73/69	16.75	13	41.2	24.5	1.6	2.7	29.9	4.1	7.20
	18	22.75	71.5	73/69	16.75	13	41.8	25.1	1.6	2.7	30.6	4.5	7.25
	19	23.25	71.5	73/69	16.75	13	42.3	25.6	1.6	2.7	31.6	5.0	7.31
	21	24.25	71.5	73/69	16.75	13	43.3	26.6	1.6	2.7	33.3	6.0	7.42
Owl Hollow MTS	15	21.75	71	73	17	13	41.4	24.4	1.6	2.8	28.2	4.1	5.50
	17	22.25	71.5	73	17	13	41.8	24.8	1.6	2.7	29.9	4.1	5.53
	18	22.75	71.5	73	17	13	42.4	25.4	1.6	2.7	30.8	4.5	5.59
	19	23.25	71.5	73	17	13	42.9	25.9	1.6	2.7	31.6	5.0	5.66
	21	24.25	71.5	73	17	13	43.9	26.9	1.6	2.7	33.3	6.0	5.79
Obed	14	21.00	71.0	73.0	16.93	11.75	39.6	22.8	1.6	2.8	26.6	4.1	3.28
	16.5	22.00	71.5	72.5	16.93	11.75	40.3	23.8	1.6	2.7	28.6	4.1	3.41
	18	22.75	71.5	72.5	16.93	11.75	41.1	24.4	1.6	2.7	29.7	4.5	3.53
	19.5	23.50	71.5	72.5	16.93	11.75	41.8	25.2	1.6	2.7	30.8	5.2	3.67
Ocoee	12	21.00	71.0	73.0	16.93	11.75	39.6	22.8	1.6	2.8	25	4.1	3.35
	14	21.00	71.0	73.0	16.93	11.75	39.6	22.8	1.6	2.8	26.6	4.1	3.35
	16	21.75	71.0	73.0	16.93	11.75	40.2	23.5	1.6	2.8	28.3	4.1	3.45
	17	22.25	71.5	72.5	16.93	11.75	40.6	23.8	1.6	2.7	28.8	4.3	3.52
	18	22.75	71.5	72.5	16.93	11.75	41.1	24.4	1.6	2.7	29.7	4.5	3.59
	19	23.25	71.5	72.5	16.93	11.75	41.5	24.8	1.6	2.7	30.6	5.0	3.68
	20	23.75	71.5	72.5	16.93	11.75	42.1	25.4	1.6	2.7	31.6	5.7	3.77
Owl Hollow	14	21.00	71.0	73	16.93	11.75	39.6	22.8	1.6	2.8	26.6	4.3	3.42
	16	21.75	71.0	73.0	16.93	11.75	40.2	23.5	1.6	2.8	28.3	4.3	3.53
	17	22.25	71.5	72.5	16.93	11.75	40.6	23.8	1.6	2.7	28.8	4.3	3.59
	18	22.75	71.5	72.5	16.93	11.75	41.1	24.4	1.6	2.7	29.7	4.5	3.65
	19	23.25	71.5	72.5	16.93	11.75	41.5	24.8	1.6	2.7	30.6	5.0	3.74
	20	23.75	71.5	72.5	16.93	11.75	42.1	25.4	1.6	2.7	31.6	5.7	3.83
	22	24.75	71.5	72.0	16.93	11.75	42.8	26.1	1.6	2.7	33.1	6.3	3.98
Tellico	14	21.00	71.0	73.0	16.93	11.75	39.6	22.8	1.6	2.8	26.6	4.1	2.94
	16	21.75	71.0	73.0	16.93	11.75	40.2	23.5	1.6	2.8	28.3	4.1	3.02
	17	22.25	71.5	72.5	16.93	11.75	40.6	23.8	1.6	2.7	28.8	4.3	3.08
	18	22.75	71.5	72.5	16.93	11.75	41.1	24.4	1.6	2.7	29.7	4.5	3.14
	19	23.25	71.5	72.5	16.93	11.75	41.5	24.8	1.6	2.7	30.6	5.0	3.21
	20	23.75	71.5	72.5	16.93	11.75	42.1	25.4	1.6	2.7	31.6	5.7	3.29

FRAME SIZE

All mountain frames are measured in inches; all road frames are measured in centimeters. We measure all of our road and mountain frames in the center-to-top format. This measurement is derived by the distance from the center measured along the center of the seattube. This measurement is more accurate than the center-to-center format which doesn't allow for different tube shapes. When comparing Litespeed frame dimensions with the figures supplied by other companies, it is important to note how the frame is measured for accurate comparisons.

TOP TUBE LENGTH

Because of our competitive background, we lean toward longer toptubes than the average bike. The

measurement on both road and mountain bikes is taken from the intersection of the topside of the toptube and the centerline of the seattube (same point used when determining frame size) measured parallel with ground to the intersection with steering axis centerline. We believe this to be the most accurate possible, because we are using real points on the frame and not theoretical points in space.

SUSPENSION GEOMETRY

All Litespeed mountainbikes use suspension corrected geometry. The angles and dimensions of our mountainbikes are determined with a theoretical amount of sag in the suspension for a greater degree of on-the-trail accuracy.

RACING AND SPORT ROAD FRAMES:

Frame size measured from center of bottom bracket to top of top tube at specified seattube angle.

Top tube measured on a horizontal plane from center of seattube/top tube juncture to steering axis.

Frames using 650c road wheels: Geometry based on 34.0 cm (axle center to crown race seat) fork plus a 1.1 cm lower stack height.

Frames using 700c road wheels: Geometry based on 37.0 cm (axle center to crown race seat) fork plus a 1.1 cm lower stack height.

700c Cyclocross and Touring Frames: Geometry based on a 40.1 cm (axle center to crown race seat) fork plus a 1.1 cm lower stack height.

TRIATHLON/TIME TRIAL FRAMES:

Frame size measured from center of bottom bracket to top of seattube.

Top tube measured on a horizontal plane from top center of seattube to steering axis.

	Size	Toptube	Head	Seat	Chainstay	BBHT	Wheel Base	Front Center	Fork Rake	Trail	Stand Over	Head Tube	Weight	Wheel Size
Natchez	49	51.0	72.0	74.0	41.1	26.9	95.7	55.5	4.3	6.4	74.0	9.0	3.18	700c
	51	52.5	72.5	74.0	41.1	26.9	96.8	56.6	4.3	6.1	75.9	9.0	3.23	700c
	53	54.0	73.0	74.0	41.1	26.6	97.8	57.7	4.3	5.8	77.6	10.3	3.31	700c
	55	55.5	73.0	73.0	41.1	26.6	98.3	58.2	4.3	5.8	79.2	12.0	3.38	700c
	57	56.5	73.0	73.0	41.1	26.6	99.3	59.2	4.3	5.8	81.1	14.0	3.46	700c
	59	57.5	73.0	73.0	41.1	26.3	100.2	60.2	4.3	5.8	82.7	15.7	3.53	700c
	61	59.0	73.0	72.5	41.7	26.3	101.8	61.2	4.3	5.8	84.5	17.5	3.62	700c
Appalachain (w/ 700 x 38c)	49	50.5	71	74.0	42.5	27.9	97.4	55.9	4.4	7.4	75.0	9.0	3.43	700c
	51	52.0	71	73.5	42.5	27.9	98.5	57.0	4.4	7.4	76.8	9.0	3.48	700c
	53	53.5	71.5	73.3	42.5	27.9	99.5	58.0	4.4	7.0	78.7	9.0	3.53	700c
	55	55.0	71.5	73.0	42.5	27.9	100.7	59.2	4.4	7.0	80.5	9.5	3.59	700c
	57	56.0	72.0	72.8	42.5	27.9	101.1	59.6	4.4	6.7	82.3	11.2	3.67	700c
	59	57.0	72.0	72.5	42.5	27.9	101.9	60.3	4.4	6.7	84.2	13.1	3.75	700c
	61	58.5	72.0	72.3	42.5	27.9	103.2	61.6	4.4	6.7	86.0	15.1	3.83	700c
63	60.5	72.5	72.0	42.5	27.9	104.2	62.7	4.4	6.4	87.8	16.7	3.92	700c	
Blue Ridge (w/700 x 28c)	49	50.5	71.0	74.0	42.5	27.1	97.4	55.9	4.4	7.1	74.2	9.0	3.43	700c
	51	52.0	71.0	73.5	42.5	27.1	98.5	57.0	4.4	7.1	76.0	9.0	3.48	700c
	53	53.5	71.5	73.3	42.5	27.1	99.5	58.0	4.4	6.8	77.9	9.0	3.53	700c
	55	55.0	71.5	73.0	42.5	27.1	100.7	59.2	4.4	6.8	79.7	9.5	3.59	700c
	57	56.0	72.0	72.8	42.5	27.1	101.1	59.6	4.4	6.5	81.5	11.2	2.67	700c
	59	57.0	72.0	72.5	42.5	27.1	101.9	60.3	4.4	6.5	83.4	13.1	3.75	700c
	61	58.5	72.0	72.3	42.5	27.1	103.2	61.6	4.4	6.5	85.2	15.1	3.83	700c
63	60.5	72.5	72.0	42.5	27.1	104.2	62.7	4.4	6.1	87.0	16.7	3.92	700c	
Tuscany	47	50.5	72.0	74.5	39.3	26.6	93.9	55.1	3.5	6.4	71.8	10.0	3.10	650c
	49	51.0	72.0	74.0	40.6	26.9	95.2	55.5	4.3	6.4	74.0	9.0	3.06	700c
	51	52.5	72.5	74.0	40.6	26.9	96.3	56.6	4.3	6.1	75.9	9.0	3.11	700c
	53	54.0	73.0	74.0	40.6	26.6	97.3	57.7	4.3	5.8	77.6	10.3	3.19	700c
	55	55.5	73.0	73.0	40.6	26.6	97.8	58.2	4.3	5.8	79.2	12.0	3.25	700c
	57	56.5	73.0	73.0	40.6	26.6	98.8	59.2	4.3	5.8	81.1	14.0	3.33	700c
	59	57.5	73.0	73.0	40.6	26.3	99.7	60.2	4.3	5.8	82.7	15.7	3.40	700c
61	59.0	73.0	72.5	41.1	26.3	101.2	61.2	4.3	5.8	84.5	17.5	3.49	700c	
Classic	49	51.0	72.0	74.0	41.3	26.9	95.9	55.5	4.3	6.4	74.0	9.0	3.14	700c
	51	52.5	72.5	74.0	41.3	26.9	97.0	56.6	4.3	6.1	75.9	9.0	3.20	700c
	53	54.0	73.0	74.0	41.3	26.6	98.0	57.7	4.3	5.8	77.6	10.3	3.28	700c
	55	55.5	73.0	73.0	41.3	26.6	98.5	58.2	4.3	5.8	79.2	12.0	3.35	700c
	57	56.5	73.0	73.0	41.3	26.6	99.5	59.2	4.3	5.8	81.1	14.0	3.43	700c
	59	57.5	73.0	73.0	41.3	26.3	100.4	60.2	4.3	5.8	82.7	15.7	3.50	700c
	61	59.0	73.0	72.5	41.7	26.3	101.8	61.2	4.3	5.8	84.5	17.5	3.59	700c
63	61.0	73.0	72.0	41.7	26.3	103.1	62.5	4.3	5.8	86.2	19.3	3.67	700c	
Ultimate	49	51.00	72.0	74.5	39.3	26.9	94.7	56.2	4.3	6.4	75.0	10.1	3.24	700c
	51	52.50	72.5	74.0	39.3	26.9	95.3	56.9	4.3	6.1	76.4	10.1	3.31	700c
	53	54.00	73.0	73.0	39.3	26.9	95.8	57.4	4.3	5.8	77.9	10.9	3.38	700c
	54	54.75	73.0	73.0	39.3	26.9	96.6	58.1	4.3	5.8	78.8	11.9	3.50	700c
	55	55.50	73.0	73.0	39.3	26.9	97.3	58.9	4.3	5.8	79.7	12.8	3.54	700c
	56	56.00	73.0	73.0	39.3	26.9	97.8	59.4	4.3	5.8	80.7	13.8	3.58	700c
	57	56.50	73.0	73.0	39.3	26.9	98.3	59.9	4.3	5.8	81.7	14.8	3.63	700c
	58	57.00	73.0	73.0	39.3	26.9	98.8	60.4	4.3	5.8	82.6	15.8	3.67	700c
	59	57.50	73.0	73.0	39.3	26.9	99.3	60.9	4.3	5.8	83.6	16.8	3.71	700c
	61	59.00	73.0	73.0	39.3	26.9	100.8	61.9	4.3	5.8	85.6	18.8	3.80	700c
	63	61.00	73.0	73.0	40.6	26.9	103.8	64.1	4.3	5.8	87.4	20.8	3.92	700c
Vortex	49	51.0	72.0	74.0	40.6	26.9	95.2	55.5	4.3	6.4	74.0	9.0	2.67	700c
	51	52.5	72.5	74.0	40.6	26.9	96.3	56.6	4.3	6.1	75.9	9.0	2.71	700c
	53	54.0	73.0	74.0	40.6	26.6	97.3	57.7	4.3	5.8	77.6	10.3	2.77	700c
	55	55.5	73.0	73.0	40.6	26.6	97.8	58.2	4.3	5.8	79.2	12.0	2.83	700c
	57	56.5	73.0	73.0	40.6	26.6	98.8	59.2	4.3	5.8	81.1	14.0	2.89	700c
	59	57.5	73.0	73.0	40.6	26.3	99.7	60.2	4.3	5.8	82.7	15.7	2.96	700c
	61	59.0	73.0	72.5	41.1	26.3	101.2	61.2	4.3	5.8	84.5	17.5	3.03	700c
Tachyon	47	49.50	72.0	78.0	39.9	27.0	96.1	57.1	3.5	6.4	71.0	11.1	2.90	650c
	49	50.00	72.0	78.0	39.3	27.0	96.8	57.9	3.5	6.4	71.5	8.7	2.95	650c
	51	51.50	72.5	78.0	39.3	27.0	98.1	59.1	3.5	6.1	71.5	8.7	3.00	650c
	53	54.25	73.0	78.0	39.3	27.0	100.6	61.6	3.5	5.9	73.8	10.5	3.10	650c
	55	55.75	73.5	78.0	39.3	27.0	101.8	62.9	3.5	5.6	75.7	12.5	3.19	650c
	57	57.00	73.5	77.0	39.3	27.0	102.2	63.2	3.5	5.6	77.7	14.5	3.28	650c
	59	58.50	73.5	76.0	39.3	27.0	102.7	63.8	3.5	5.6	79.7	16.5	3.36	650c
	61	60.00	73.0	76.0	40.6	27.0	105.5	65.8	4.0	6.1	81.5	13.3	3.37	700c
Blade	49	50.00	72.0	78.0	39.3	27.0	96.8	57.9	3.5	6.4	71.5	8.7	2.99	650c
	51	51.50	72.5	78.0	39.3	27.0	98.1	59.1	3.5	6.1	71.5	8.7	3.04	650c
	53	54.25	73.0	78.0	39.3	27.0	100.6	61.6	3.5	5.9	73.8	10.5	3.15	650c
	55	55.75	73.5	78.0	39.3	27.0	101.8	62.9	3.5	5.6	75.7	12.5	3.23	650c
	57	57.00	73.5	77.0	39.3	27.0	102.2	63.2	3.5	5.6	77.7	14.5	3.33	650c
	59	58.50	73.5	76.0	39.3	27.0	102.7	63.8	3.5	5.6	79.7	16.5	3.41	650c
	61	60.00	73.0	76.0	40.6	27.0	105.5	65.8	4.0	6.1	81.5	13.3	3.42	700c



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