

LEFTY TECHNOLOGY 2015



cyclinic

WWW.CYCLINIC.COM.AU



SUPERMAX



LEFTY 2.0



LEFTY

LEFTY

THE LIGHTER-STIFFER-STRONGER-SMOOTHER FRONT SUSPENSION SOLUTION.

Superior suspension performance through unconventional design.

LEFTY IS LIGHTER

Lefties are ultra light. The forks themselves are some of the lightest in the world, but when you factor in the full system weight savings (headset, stem, steerer and hub), no other fork system can compare.

LEFTY IS STIFFER

One leg is stiffer than two! It sounds crazy but the unconventional design of the Lefties make them the stiffest forks in each class, for the most precise steering available. Lightweight efficiency with heavyweight control.

LEFTY IS STRONGER

Gram for gram, Lefties are the strongest forks in the world. Our ultralight XC forks boast better strength and stiffness than big all-mountain forks, while our SuperMax can go head to head with DH forks. Cross-Country weight meets All-Mountain tough.

LEFTY IS SMOOTHER

The heart of the Lefty, Cannondale's patented hybrid needle-bearing technology keeps the suspension moving freely, regardless of load. Even under the hardest braking, impact, and steering forces, the wheel is able to track the ground fluidly for maximum control.

LEFTY IS LESS MAINTENANCE

The sealed hybrid bearing system is so robust that it requires around half the regular maintenance of the competition. With its long service intervals and completely replaceable wear-parts, you'll spend less time and money servicing, and more time riding.

LEFTY IS FOR ALL

We think everyone should be entitled to the joys of Lefty and that's why we created Lefty For All. The Lefty For All kit enables riders of other brands (yes, they exist) to make the ultimate component upgrade.

LEFTY TECHNOLOGY

DUAL INTEGRATED CROWNS

Dual Crowns clamp to an oversize steerer above and below the headtube, distributing loads more evenly for a stronger and stiffer fork.

ISOLATED DAMPER

Sealed cartridge damper keeps air and oil separate for consistent, predictable damping.

INVERTED DESIGN

Like racing motorcycle forks, Lefty has the larger diameter fork tube on top, the best arrangement for fighting flex and increasing strength.

HYBRID NEEDLE BEARING SYSTEM

This feature combines the friction-free action of our needle bearings with the all-weather sealing and additional support of a lower glide bearing. Smoother action under all loads and less maintenance than other forks.

MOTO GUARD

Moto-style guard protects lower leg from rocks and debris.

OPI LOWER LEG/AXLE

The One-Piece-Integrated lower leg and tapered 25mm-to-15mm axle are forged from a single piece of aluminum for incredible strength and stiffness.



Dual Integrated Crowns



Inverted Design



Larger Diameter

Smaller Diameter

HYBRID NEEDLE BEARING SYSTEM

All Leftys and SuperMaxes feature hybrid bearing technology, which combines our proprietary needle bearings with a single lower glide bearing and Durathon seal.

ADVANTAGES OF THE HYBRID NEEDLE BEARING TECHNOLOGY

- » **TROUBLE-FREE:** Completely sealed, low-wear system offers around double the time between major services compared to the competition.
- » **EVEN STIFFER:** The glide bearing adds additional structural stiffness, especially deep in the travel.
- » **SELF LUBRICATING:** The new design seals out contaminants and seals in a small bath of lubricating oil for the bearings and glide bearing.
- » **BOOT-FREE:** Sealed design eliminates the need for the old accordion boot.

SELF-RESETTING

Integrated bearing stops allow needle bearings to reset themselves during regular riding, reducing the need for manual resetting for more trouble-free riding.

NEEDLE BEARINGS

Sandwiched between hardened, polished steel races on the inner and outer legs, these friction-free bearings handle the bulk of the forces, allowing the fork to stay super-active under all loads.

LUBRICATING OIL BATH

Space between inner and outer leg contains an oil bath that keeps the needle bearings and glide bearing constantly lubed for buttery smooth performance and long life.

GLIDE BEARING

Increases contact between inner and outer legs, reducing flex, especially deep in the travel.

DURATHON SEAL

Works with glide bearing to completely seal the fork, sealing out contaminants and holding in a lubricating oil bath for the bearings.

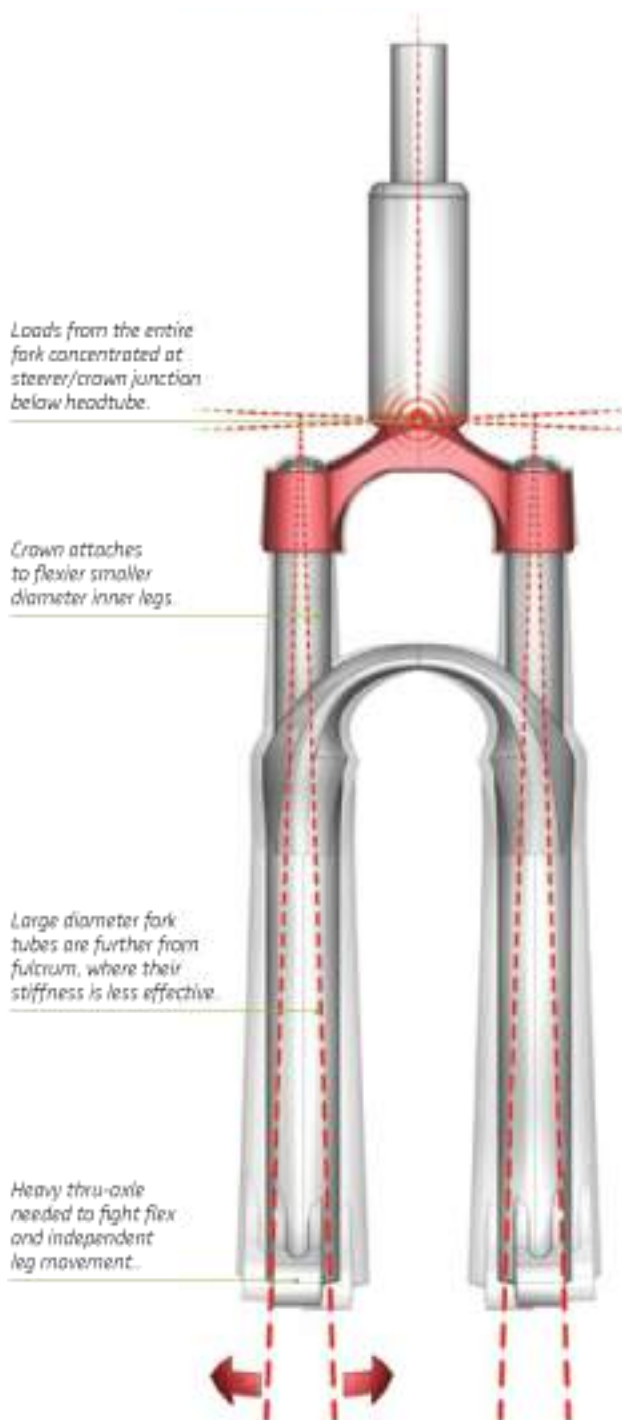


SQUARE-IN-SQUARE DESIGN

The needle bearing races form a square-in-square interface between the inner and outer fork legs, preventing the two tubes from rotating relative to each other like the round-in-round design of traditional forks. Contributes to Lefty's incredibly stiff and precise handling.

LEFTY CROWN STRUCTURE

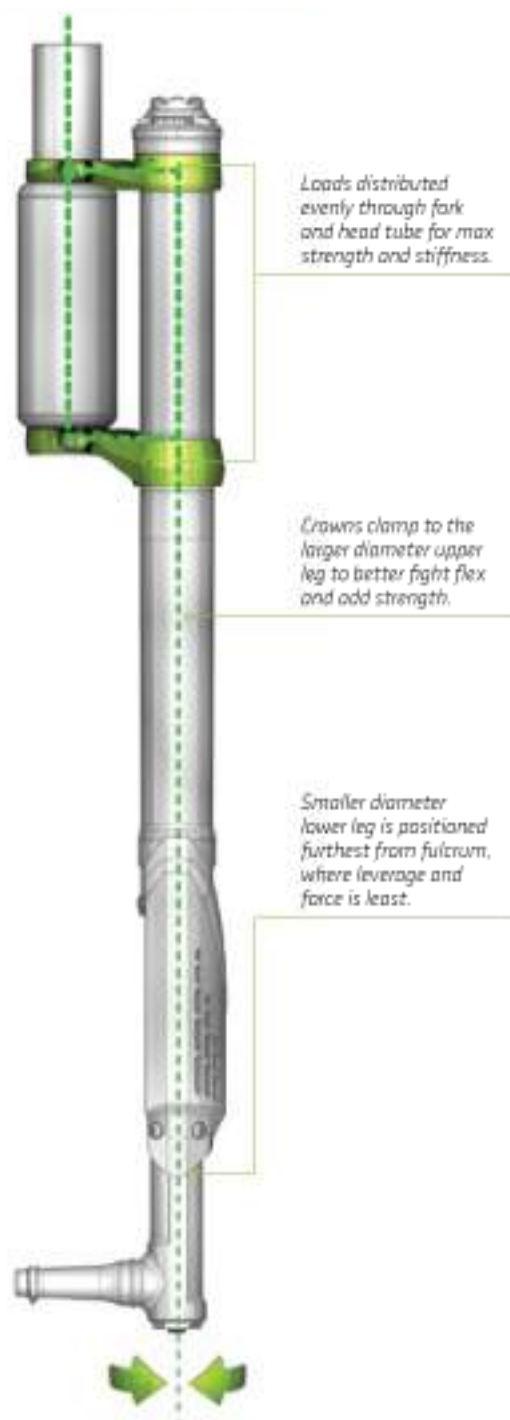
SINGLE CROWN TRADITIONAL STRUCTURE



BOTTOM LINE:

To even get close to Lefty's stiffness and strength, traditional forks must add a lot of reinforcing material which adds big weight.

DUAL CROWN INVERTED STRUCTURE



BOTTOM LINE:

Lefty's unconventional design utilizes material more effectively so it will always be lighter, stiffer and stronger than a traditional fork.

LEFTY DAMPER TECHNOLOGY

Lefty's advanced isolated damper and integrated airspring work with the free-moving hybrid needle bearing system to deliver the smoothest, most controlled suspension response possible.

"Each model of Lefty gets a customized damper tuned for its travel and intended usage:

- » **XC tune** for Lefty and Lefty 2.0 29" forks
- » **TRAIL tune** for SuperMax 29" 130mm and 27.5" 140mm
- » **ENDURO tune** for SuperMax 27.5" 160mm

POPTOP PLATFORM

Restricts fork movement for efficiency when actuated with the XLR or PBR control, but blows open with bump impact for control.

VARIABLE BLOW-OFF THRESHOLD

Each model comes with a platform setting appropriate for its travel and usage. XC forks get a firmer setting. Trail oriented forks get a more open setting. Factory adjustable.

VARIABLE SPEED SENSITIVE DAMPING

Each Lefty has speed-sensitive high and low speed compression damping and rebound damping circuits custom tuned for the fork's travel and usage.

WIDEMOUTH PISTON

New damping piston delivers plusher response for mid-to-high speed hits / chatter and wider range of rebound adjustment.

2 DAMPER CONTROL OPTIONS



XLR

Handlebar-mounted X-Loc Hydraulic Platform Engagement Lever w/ rebound adjustment convenient, easy to use on the fly.



PBR

Push-button Platform Engagement Lever w/ rebound adjustment.

* Located closer to the rider's hands than any other fork-top lockout!

ON-THE-FLY REBOUND ADJUSTABLE

Convenient fork-top rebound controls allow on-the-fly adjustment.

ISOLATED DAMPER TECHNOLOGY

Sealed damper isolates damping oil and prevents it from mixing with air, for consistent controlled performance

INTERNAL PRESSURE COMPENSATION PISTON

Controls heat expansion of the oil for consistent damping from the top of the hill to the bottom.

METAL DAMPER COMPONENTS

Damper body, shafts, pistons and oil caps are all machined from high-grade alloys for maximum durability and performance.

SOLO-AIR SELF-ADJUSTING NEGATIVE SPRING

Lefty air pistons all feature SoloAir technology which automatically adjusts the negative airspring to perfectly match the positive. Fluid response and controlled return for all rider weights.

CUSTOM AIRSPRING VOLUME

Lightweight air volume spacers deliver spring rates that perfectly match the travel and intended usage of each fork.



SUPERMAX

LEFTY GOES BIG.

The SuperMax takes everything that makes Lefty great and supersedes it. The result: a fork as stiff and strong as most dual crown DH forks, yet lighter than most all-mountain forks.

SIZE-SPECIFIC CROWN SPACING

Shorter headtubes allow better fitting for smaller riders.

SM - 97mm

MD - 110mm

LG - 122mm

XL - 134mm

DAMPER

Enduro Tune PBR for Jekyll!

Trail Tune PBR for Trigger 27.5" and Trigger 29"

MASSIVELY OVERSIZED

The SuperMax's lower leg is 36mm in diameter, while the upper leg measures a whopping 46mm for maximum stiffness and steering precision.

OPI INNER LEG

OPI (One Piece Integration)
3D-forged inner leg / axle.



WIDER HUB - STIFFER WHEEL

Wider flange spacing on the Lefty SM hubs makes a stiffer, stronger wheel (Lefty SL hub compatible but requires different brake adapter)



WHEEL-SIZE SPECIFIC FORK RAKE

SuperMax forks feature two different offsets (rakes) to enable us to bring out the best possible handling characteristics in each wheel size. 27.5" wheels get a 50mm offset, and 29" wheels get a 60mm offset, which is up to a full 10mm more than competitors' forks. More offset means less "trail" and quicker handling. When combined with the stability of slacker head angles, you get the best of both: stability at higher speeds and agility at slower speeds.

* MINIMUM STEM LENGTH 50mm

SUPERMAX FORK OPTIONS

SUPERMAX CARBON Filament-wound Carbon fiber outer leg with dual alloy crowns saves over 200 grams compared to Alloy version

SUPERMAX ALLOY Custom drawn 7050 Alloy Outer Leg with dual alloy crowns

LEFTY 2.0

The best gets better. The latest update to the Lefty features an even stiffer structure, multiple clamp spacings, longer fork rake, and interchangeable XLR and PBR damper controls.

SIZE-SPECIFIC CROWN SPACING

Shorter headtubes allow better fitting for smaller riders.

SM & MD - 97mm

LG - 110mm

XL - 122mm

DAMPER

XC tune, XLR or PBR.

NEW CARTRIDGE TOP CAP

Internally threaded top cap allows easy damper compatibility with both XLR and PBR controls.

OVERSIZED INVERTED DESIGN

The Lefty 2.0's Outer leg is 44mm in diameter, while the inner leg measures 32mm.

OPI INNER LEG

OPI (One Piece Integration)
3D-forged inner leg / axle

55MM FORK RAKE

Longer 29er-specific fork offset maintains tight trail measurement when paired with slacker head angles. Delivers high-speed stability and slow speed agility.

WIDER HUB - STIFFER WHEEL

Wider flange spacing on the Lefty SM hubs makes a stiffer, stronger wheel (Lefty SL hub compatible but requires different brake adapter)

* MINIMUM STEM LENGTH 50mm

LEFTY 2.0 FORK OPTIONS

LEFTY 2.0 CARBON Filament-wound Carbon fiber outer leg with dual alloy crown saves over 100 grams compared to Alloy version

LEFTY 2.0 ALLOY For all four sizes, the outer leg and clamps are 3D-forged from a single piece of aluminum for exceptional strength



LEFTY

For over a decade, Lefty has been the Lighter, Stiffer, Stronger, Smoother choice for XC racers.



LEFTY FORK OPTIONS

LEFTY CARBON Filament-wound Carbon fiber outer leg with dual alloy crowns saves over 100 grams compared to Alloy version

LEFTY ALLOY For all four sizes, the outer leg and clamps are 3D-forged from a single piece of aluminum for exceptional strength

SUPERMAX 2.0**LEFTY 2.0****LEFTY****LEFTY LINE-UP**

	TRAVEL	WHEEL	DAMPER	RAKE
SUPERMAX				
SUPERMAX 2.0 CARBON PBR 160 27.5	160MM	27.5	PBR ENDURO TUNE	50MM
SUPERMAX 2.0 PBR 160 27.5	160MM	27.5	PBR ENDURO TUNE	50MM
SUPERMAX 2.0 CARBON PBR 140 27.5	140MM	27.5	PBR TRAIL TUNE	50MM
SUPERMAX 2.0 PBR 140 27.5	140MM	27.5	PBR TRAIL TUNE	50MM
SUPERMAX 2.0 CARBON PBR 130 29	130MM	29	PBR TRAIL TUNE	60MM
SUPERMAX 2.0 PBR 130 29	130MM	29	PBR TRAIL TUNE	60MM
LEFTY 2.0				
LEFTY 2.0 CARBON XLR 100 29	100	29	XLR XC TUNE	55MM
LEFTY 2.0 PBR 100 29	100	29	PBR XC TUNE	55MM
LEFTY				
LEFTY CARBON XLR 100 29	100	29	XLR XC TUNE	45MM
LEFTY XLR 100 29	100	29	XLR XC TUNE	45MM
LEFTY PBR 100 29	100	29	PBR XC TUNE	45MM

FATTY DLR 80**SPECIFICATIONS**

INTENDED USE	MT RACING
TRAVEL (MM)	80
DAMPER	DLR
SPRING	CARTRIDGE AIR SPRING, COIL NEGATIVE
LOCKOUT	LEVER ON/OFF
WEIGHT (GR)	1275

FATTY DL 50**SPECIFICATIONS**

INTENDED USE	MTB/AM
TRAVEL (MM)	50
DAMPER	DL
SPRING	COIL SPRING
LOCKOUT	LEVER ON/OFF
WEIGHT (GR)	1150

SOLO DL 50**SPECIFICATIONS**

INTENDED USE	MTB/AM
TRAVEL (MM)	50
DAMPER	DL
SPRING	COIL SPRING
LOCKOUT	LEVER ON/OFF
WEIGHT (GR)	1150

FATTY / SOLO LINE-UP

	TRAVEL	WHEEL	WEIGHT	AVAILABLE AFTER MARKET
FATTY DLR 80 DISC	80	26"	1275	YES
FATTY DLR 80 CANTI	80	26"	1300	YES
FATTY DL 50 CANTI	50	26"	1150	YES
SOLO DL 50	50	20XC	1150	