

CHALLENGE

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CHALLENGE





Welcome to the future.....

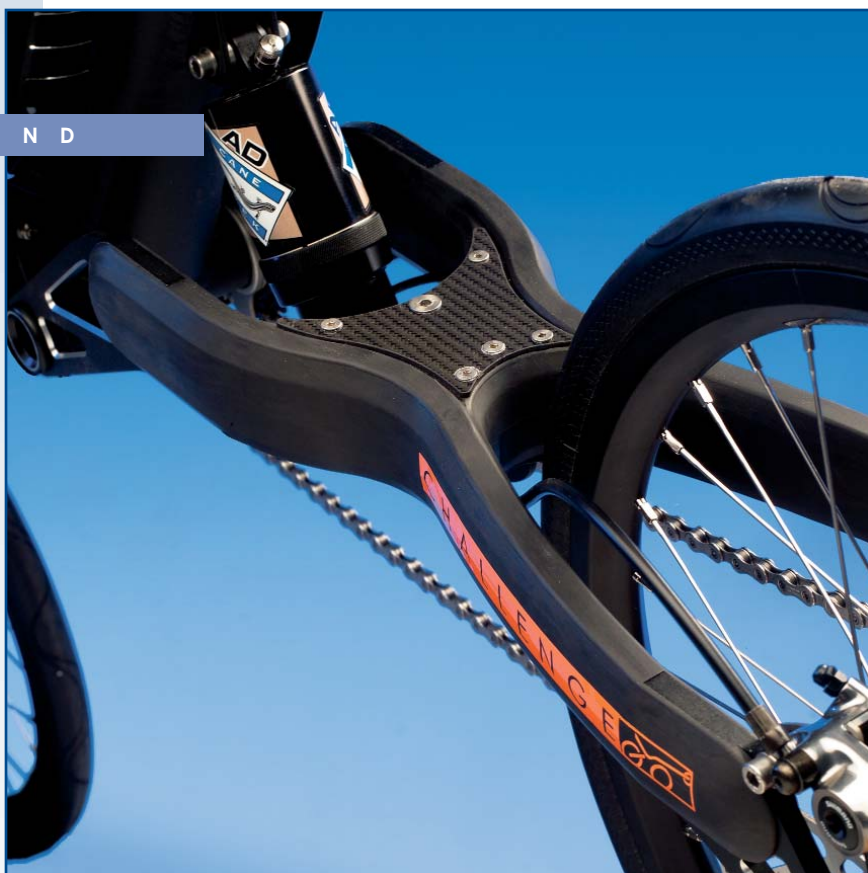
When we introduced the Hurricane in 1994 there was nothing else like it out there. The design and look of the bike, coupled with the superb handling, have made the Hurricane one of the most popular recumbents ever built. Today it continues to outshine its rivals and although we have tweaked a few areas, the original design is a real success. We are keeping the Hurricane and its stable mates at the core of our production, and as the saying goes, "if it isn't broke don't try to fix it". We would however, like to turn up the heat a little, in the form of our all-new SL range.

The challenge (excuse the pun) that we set ourselves was to build a sub 10kg bike at a sub € 3000 price whilst keeping quality at our high standard. It is relatively easy to build a light bike by using high-end components and a correspondingly high-end price tag, but we've managed it using standard 105 level components. If you want to go lighter you'll need to spend more but the sky is the limit! The SL is an entirely new range of bikes, designed from the ground up, that starts at a very low weight at a great price. Make way for the new generation.

The SL: Super-Light series builds upon an entirely new design, manufacturing techniques and the use of aluminium alloy, carbon and titanium frame parts we can now offer the SL-models that weigh ON AVERAGE just 9.6Kg. With the birth of our new SL range, we have pushed recumbent bike building into a new era. Challenge have introduced revolutionary new methods of manufacture to ensure that we remain way ahead of the game. We have innovated in several key areas to retain our unmistakably excellent handling and reliability, while slashing the overall weight of the bike. Here's how we did it....

C A R B O N R E A R E N D

The Carbon rear end is the *piece de resistance*: stiff, strong, and very light. Traditionally an expensive handcrafted process, we have designed our carbon rear fork to be injection moulded by machine. By using aerospace techniques, we keep material, production methods advanced while keeping the price low.



C H A L L E N G E B R A K E S

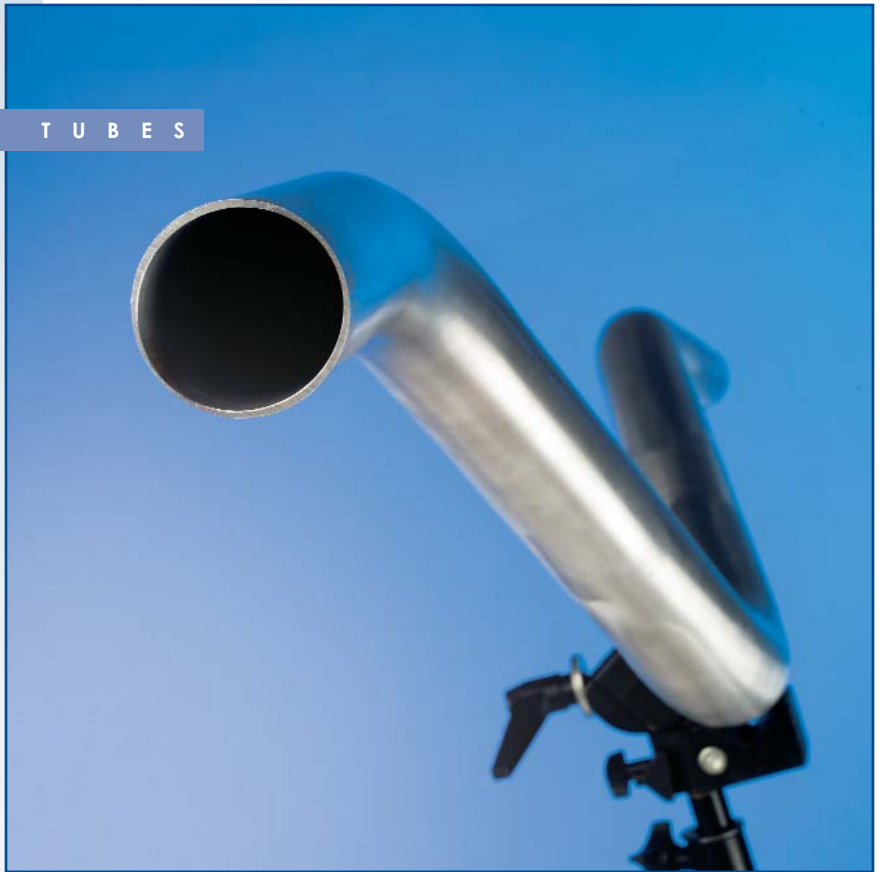
Our new centre spring brakes offer real power to haul you down from the high speeds that you can attain on our bikes. They weigh next to nothing and are entirely our own design. Their unique, low profile means that they offer great aerodynamics no leg snagging.





CHALLENGE FRAME TUBES

Butted aluminium alloy tubes, unparalleled stiffness and rigidity at a low weight, strength where it matters, air where it doesn't. Not as simple as it sounds, but you get the picture. It took a great deal of work to achieve such outstanding results.



TITANIUM STEERER

By specifying special titanium tubing, our steerer is calibrated to its inside dimension. The tube fits the 1" steerer perfectly and mates with the new telescopic handlebar. This eliminates the need for unnecessary welding and clamping and makes for an extremely light and neat system..





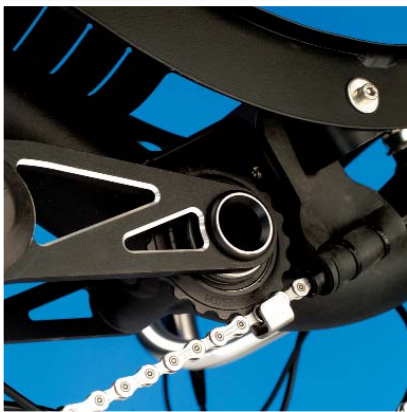


H U R R I C A N E S L

Seat height	40 cm / 15.7"
Bottom bracket height	ca. 58 cm / 22.8"
Wheelbase	107 cm / 42.1"
Seat angle	27 - 31 deg.
Wheel size	dual 406
Average weight	9,6 kg / 21 lbs (excl. seat pad and pedals)
Total weight limit	95 kg / 210 lbs (rider and gear)
Frame	aluminium alloy
Rear stays	carbon
Bracket boom	aluminium alloy
Front fork	carbon monocoque
Seat	Challenge aluminium
Internal cable routing	yes
Above Seat Stearing (ASS)	rigid titanium telescopic
Under Seat Stearing (USS)	not available
Rear suspension	CaneCreek AD5
Brakes	Challenge rimbrake
Gearing	18V Ultegra / 105
Hubs	American Classic
Rims	American Classic Nb-R
Spokes	Sapim Laser
Wheelset excl. tyers	1080g
Optional wheels:	Velocity Aeroheat AT +145g endurance
Diskbrake in front	from +400g (incl. fork and hub)

Chain Idler:

Super smooth, super stiff. Keeps your chain in perfect alignment and your power direct to the back wheel.





M I S T R A L S L

Seat height	49 cm / 19,3"
Bottom bracket height	ca. 61cm / 24"
Wheelbase	110 cm / 43,3"
Seat angle	31 - 35 deg.
Wheel size	dual 406
Average weight	9,6 kg / 21 lbs (excl. seat pad and pedals)
Total weight limit	95 kg / 210 lbs (rider and gear)
Frame	aluminium Challenge custom
Rear stays	carbon
Bracket boom	aluminium alloy
Front fork	carbon monocoque
Seat	Challenge aluminium
Internal cable routing	yes
Above Seat Stearing (ASS)	rigid titanium telescopic
Under Seat Stearing (USS)	indirect +750g
Rear suspension	CaneCreek AD5
Brakes	Challenge rimbrake
Gearing	18V Ultegra / 105
Hubs	American Classic
Rims	American Classic Nb-R
Spokes	Sapim Laser
Wheelset excl. tyers	1080g
Optional wheels:	Velocity Aeroheat AT +145g endurance
Diskbrake in front	from +400g (incl. fork and hub)

USS Steerer:

For a more sedate ride, with a slight weight penalty.



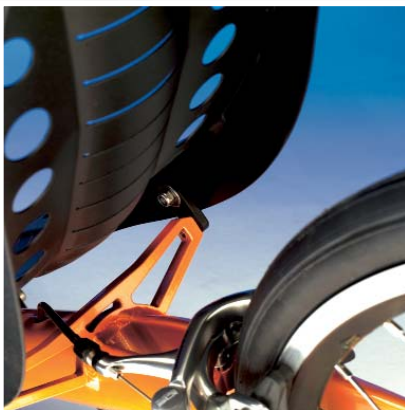


F U J I N S L

Seat height	33 cm / 13"
Bottom bracket height	ca. 56 cm / 22.0"
Wheelbase	124 cm / 48.8"
Seat angle	23°, 26° en 29°
Wheel size	406 / 559 or 406 / 571
Average weight	9,6 kg / 21 lbs (excl. seat pad and pedals)
Total weight limit	95 kg / 210 lbs (rider and gear)
Frame	aluminium Challenge custom
Bracket boom	aluminium alloy
Front fork	carbon monocoque
Seat	Challenge aluminium
Internal cable routing	yes
Above Seat Stearing (ASS)	rigid titanium telescopic
Under Seat Stearing (USS)	not available
Rear suspension	no
Brakes	Challenge rimbrake front / dual pivot rear
Gearing	18V Ultegra / 105
Hubs	American Classic
Rims	Velocity Aeroheat AT
Spokes	Sapim Laser
Wheelset excl. tyers	1380g
Optional wheels:	American Classic Sprint 350 rearwheel American classic Nb-R frontwheel -170g 406 / 571 (650C rear)
Diskbrake in front	from +400g (incl. fork and hub)

Seat Angle:

With a simple bracket you can raise the seat for touring.





S E I R A N S L

Seat height	57 cm / 22,4"
Bottom bracket height	ca. 80 cm / 31.5"
Wheelbase	125 cm / 49,2"
Seat angle	23°-- 31°
Wheel size	dual 559 or dual 571
Average weight	9,6 kg / 21 lbs (excl. seat pad and pedals)
Total weight limit	95 kg / 210 lbs (rider and gear)
Frame	aluminium Challenge custom
Bracket boom	aluminium
Front fork	carbon / alu steerer tube
Seat	carbon
Internal cable routing	yes
Above Seat Stearing (ASS)	rigid titanium telescopic
Under Seat Stearing (USS)	in development
Rear suspension	no
Brakes	Shimano dual pivot
Gearing	18V Ultegra / 105
Hubs	American Classic
Rims	Velocity Aeroheat AT
Spokes	Sapim Laser
Wheelset excl. tyers	1600g Dual 559
Optional wheels:	American Classic Sprint 350 -270g Dual 571 (650C)
Diskbrake in front	from +430g (incl. fork and hub)

Seat-pins (titanium):

Adustable pins would add a lot of weight so these are available in 3 lengths





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