SAMPAGNOLO **2005** 

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Products Range

-Campagnolo		COMPONENTS	10 - XENON components	
		4	16 - MIRAGE* components	
			22 - VELDCE` components	
			30 - CENTAUR" components	
			52 - <i>RECORD</i> ° components	
	<b>Dear Friend</b> , We have tried to be precise but would like to apologize for any mistakes that there might be in this catalogue. We must also point out that we reserve the right to	WHEELS	66 - Low-Profile wheels  PROTON™ - NEUTRON™  NEUTRON CARBON™  H*PERON™ - H*PERON ULTRA™	
	change products, surface finish and specifications at any moment without prior notice. For further information, please visit our site www.campagnolo.com, which is regularly updated.		80 - Medium-Profile wheels  VENTO* - SCIROCCO* - ZONDA*  EURUS - EURUS CARBON*	
			92 - High-Profile wheels	
	Campagnolo, Campy, Record, Chorus, EPS, CT, Centaur, Centaur Century Grey, Veloce, Mirage, Xenon, Hyperon, Hyperon, Hyperon, Develor, Eurus, Eurus, Carbon, Zonda, Scirocco, Bora, Ghibli, Vento, Pista, Ergobrain, Ergopower, Enders, Pro-Fit, Pro-Fit PLUS, Differential brakes, Threadless, Hiddenset, Hiddenset TTC, TTC, Ergopower, Ergopower Flat Bar, BB System, C10, C9, ED, UD, HPW, G3, Ultralinear-Geometry, Ultralinear, Differential rims, Differential spokes, Asymmetric, AC-H, AC-S, SC-S, Pro-Shop, Tecnologia ed Emozione are Campagnolo Srl Trademarks	SPARE PARTS TOOLS	98 - Spare Parts - Tools	
		CORKSCREW	101 - Corkscrew	
		SERVICE	<b>102</b> - Pro Shop™ - Service Center	
		CYCLING APPAREL	<b>105</b> - Cycling Apparel	
	5	TECHNICAL SPECIFICATIONS	<b>161</b> - Technical Specifications Limited Warranty	

# 2004 PROFESSIONAL TEAMS





Alessandro Petacchi Team Fassa Bortolo

Gilberto Simoni Feam Saeco

#### **2004 PROFESSIONAL TEAMS**

A victory is the final outcome of the perfect combination between a rider and his bike. Professional riders give crucial importance to even the tiniest of details since, on tarmac, one gram, one deflection and one frictional force less, can make all the difference.

Campagnolo was born into and grew up in a racing world. The fact that it has been outfitting the bicycles of the world's ace riders for over 70 years is not at all a coincidence.

From Coppi to Bartali, through Merckx, Gimondi, Hinault, Fignon, Roche, Lemond, Indurain and up to our present-day champions Simoni, Petacchi, Hamilton, McEwen, Cunego...

Whether it's a multi-stage race, or a Northern classic or a time trial, Campagnolo is the reliable partner of top pro teams. Just as these teams are our best partners when it comes to testing new technologies and technical solutions. Only they, with thousands of kilometres in the most extreme conditions to their credit, are able to give us the feedback necessary to design our future products.

Campagnolo and the racing world are fully interdependent and neither one can exist without the other.



Yaroslav Popovych

Team Landbouwkrediet

Stefano Garzelli Team Vini Caldirola



Tyler Hamilton Team Phonak

David Moncoutie Team Cofidis

Ivan Quaranta Team Formaggi



# 2004 PROFESSIONAL TEAMS

Jurgen Vandewalle Team Chocolat Jacques



Fred Rodriguez Team Acqua & Sapone

Team Relax Bodysol Team Jelly Belly

> Iván Gutiérrez Team Illes Balears

Team Amore e Vita

Renzo Mazzoleni Team Tenax

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CHOCOLAT JACQUES LANDBOUWKREDIET LOTTO - DOMO RELAX-BODYSOL

AG2R-PREVOYANCE COFIDIS MBK - OKTOS

MIYATA-SUBARU

ACQUA & SAPONE ALESSIO AMORE E VITA FASSA BORTOLO FORMAGGI PINZOLO PIAVE SAECO MACCHINE PER CAFFÈ SELLE ITALIA TENAX

VINI CALDIROLA

ILLES BALEARS

JELLY BELLY **NAVIGATORS** SIERRA NEVADA

TEAM SEA SILVER

PHONAK

Frame

MBK COLNAGO MERCKX RIDLEY

DECATHLON DECATHLON MBK

KOGA

MOSER BIANCHI SAB PINARELLO

GIOS CANNONDALE DACCORDI OLMO DE ROSA

**PINARELLO** 

BMC

ORBEA COLNAGO SEROTTA **IRON HORSE**  Country

BELGIUM BELGIUM BELGIUM BELGIUM

FRANCE FRANCE FRANCE

JAPAN

ITALY ITALY ITALY

ITALY ITALY ITALY ITALY ITALY ITALY

SPAIN

SWITZERLAND

USA USA USA USA

Jacques-Maynes Team Sierra Nevada

Johan Van Summeren

Jann Kirsipuu

Team Navigators

Team Miyata Subaru

Pomona

Team Sea Silver

2004 PROFESSIONAL TEAMS CAMPAGNOLO FOUIPPED









#### **XENON GROUPSET**

Xenon is the entry-level groupset of the Campagnolo range, nevertheless distinguishable for its high technological content. It's enough to mention the extensive use of composite materials, the Record 9s chain, the three rear derailleurs available for maximum functionality, the 9 speed sprocket sets besides the powerful Dual-Pivot brakes. The Xenon groupset is available in the classic 2x9 drivetrain version or in the more comfortable 3x9 version, thereby meeting all your demands.

#### 2X9 DRIVETRAIN

The 2x9 drivetrain is the classic drivetrain used on road bikes. It is the ideal solution for those who tackle low or average gradients or cyclists who are in great physical shape.

The Xenon 2x9 drivetrain comes with a 39-52 crankset and with 170 or 175 mm cranks, so that it can be suited to your build.

#### **3X9 DRIVETRAIN**

The 3x9 drivetrain is the ideal solution for cycle-tour enthusiasts. It's been created for those of you who love engaging in the most difficult slopes but don't want to miss out on the beauty of the mountains around you. The three chainrings [30-42-52] on the Xenon crankset will let you find the right cadence in any situation.

# XENON REAR DERAILLEUR

As with the entire Campagnolo range, the Xenon groupset proposes three rear derailleurs. Every rear derailleur stems from an integrated project aimed at generating the most optimal shifting possible. Campagnolo offers no compromises, but the perfect rear derailleur for each specific crankset/sprocket set combination. A short cage derailleur for combining a double crankset with a 13-26 sprocket set or smaller.

A medium cage derailleur for combining a double crankset with a 13-28 cluster or smaller or triple crankset with a 13-26 sprocket set or smaller. A long cage derailleur for combining a triple crankset with a 13-28 sprocket set or smaller.





drivetrains



Ultra-Drive 9 Speed sprocket set

Record 9s chain, the utmost in quality and performance





### **XENON ERGOPOWER**

The Xenon Ergopower controls are constructed entirely from composite materials and are fully integrated. This means that gear shifting and braking can be performed without removing your hands from the handlebar. These controls are extremely comfortable and functional thanks to their ergonomics which equals that of high-end groupsets.

#### **RECORD 9S CHAIN**

The Xenon groupset includes a Record 9s chain. This chain is created using materials and technical solutions that are typical of high-end products. While the quality of the shifting operation is guaranteed by the precise Ultra-Drive and Floating Link Action geometries, its endurance in time is ensured by the Chrome-Nickel-PTFE surface treatments.

#### **BRAKES**

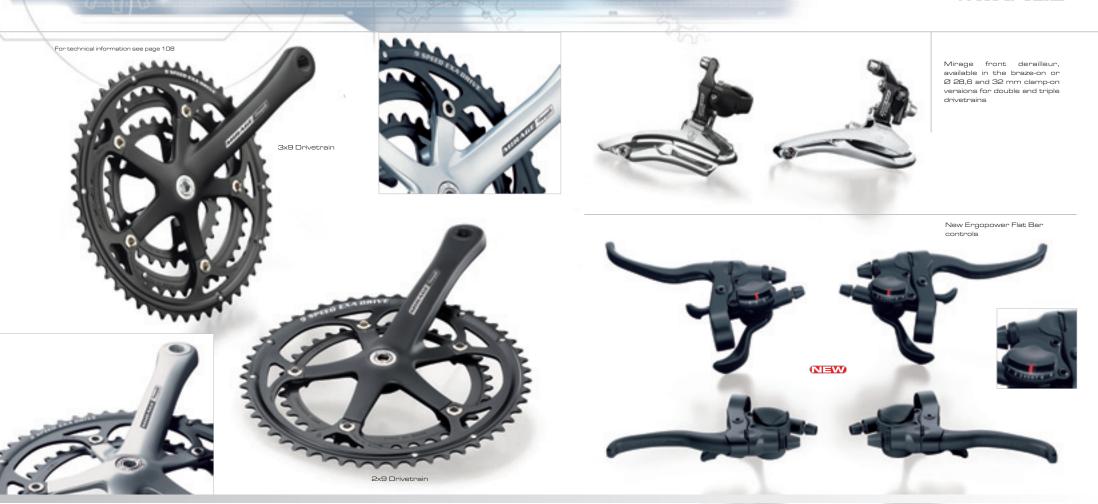
The Xenon brakes are powerful and modulating, thanks to their Dual Pivot geometry which allows more powerful braking to be achieved with a lower actuating force. Use of Record series brake pads improves the braking action under all conditions.

#### **HUBS**

The Xenon hubs have been further improved thanks to the new movement of the front hub, which now incorporates Hi-Precision Bearings for improved rotation and endurance.

Available in 32 and 36-hole versions.





#### MIRAGE GROUPSET

Following last year's colour restyling, the Mirage groupset now focuses on choice, offering you three completely different options for interpreting your bike. The first is synonymous with comfort, offered by the new Ergopower Flat Bar 3x9 that lets you ride your two-wheeler in as comfortable a position as possible. The second is for racing enthusiasts, to emulate the achievements of their heroes with the classic 2x9 drivetrain. The third option is for those of you who prefer to tour peacefully through beautiful mountain ranges, rather than set off with a racing spirit.

#### 2X9 DRIVETRAIN

The Mirage 2x9 drivetrain offers you a road bike in all its essence. If you crave the vibes of a Tour de France or Giro d'Italia race and wish to step into the shoes of your heroes, Mirage is the drivetrain for you. The Campagnolo technology, which has been perfected over many years of professional racing, is now yours to try, letting you experience the incredible sensations of fluidity, precision, rapidity and silence.

#### 3X9 DRIVETRAIN

The Mirage 3x9 drivetrain is the optimal choice for those who take to their bike without competitive ambitions.

For those who love to lose themselves to Nature and enjoy every pedal stroke in supreme silence, Mirage responds with Campagnolo's finest technical solutions. 27 gear ratios to suit your cadence as you climb mountains of unrivalled beauty.

# MIRAGE ERGOPOWER FLAT BAR

The new Mirage Ergopower Flat Bar controls have now been dressed in captivating black, well matched with the overall colours of the entire groupset. The Ergopower Flat Bar project was born from the concept of providing the same qualities of performance and lightness to cyclists wishing to ride in a more comfortable position. A position determined by the use of a straight handlebar which obviously requires the use of special controls. hence Ergopower Flat Bar.

The Mirage Ergopower Flat Bar controls incorporate the brake lever and gear shifter into one single component. In this way the overall result is extremely compact and light. Both levers are fitted with an indicator, enabling the chain position on the chainring and sprocket set to be viewed at any time. A barrel located on the brake lever allows the distance between the lever and handlebar grip to be adjusted. In this way, everybody, even those with the smallest hands, can find the right fit. The shifters are of the push-pull type, a solution which

enhances the incredible task accomplished by our engineers in reducing the actuating force. The ease with which the gear is raised is, to say the least, impressive. Mirage Ergopower Flat Bar controls also allow the rider to upshift and downshift several gears at a time in order to get out of awkward situations easily. Mirage Ergopower Flat Bar controls are only available for 3x9 drivetrains.



Mirage rear derailleurs: available in three versions: short, medium or long cage. No compromise in quality where shifting is concerned Mirage hubs: black finish and hiprecision bearings for improved smoothness and endurance

# **FLAT BAR 3X9 FRONT**

Indexing with Ergopower Flat Bar controls also means special front derailleurs.

**DERAILLEURS** 

The actuating mechanism, which differs considerably from that of Campagnolo's Ergopower, required a new, specially designed front derailleur to enable precise and light shifting as well as proper indexing. Mirage FB front derailleurs are only available for 3x9 drivetrains in braze-on or clamp-on versions.

#### **ERGOPOWER**

Mirage Ergopower controls are constructed entirely from composite materials. Use of such materials allows the creation of lighter components with respect to the same parts in aluminium alloy, for the same degree of strength.

After years of experience on the Record groupset, Campagnolo's Unità Compositi of Vicenza is now able to apply this know-how to entry-level groupsets too, with obvious advantages.

#### **BRAKES**

The Dual-Pivot geometry of the Mirage brakes assures modular braking power. These characteristics are further augmented by the use of aluminium brake shoes for overall rigidity and the same brake pads as the Record series.

#### SPROCKET SET

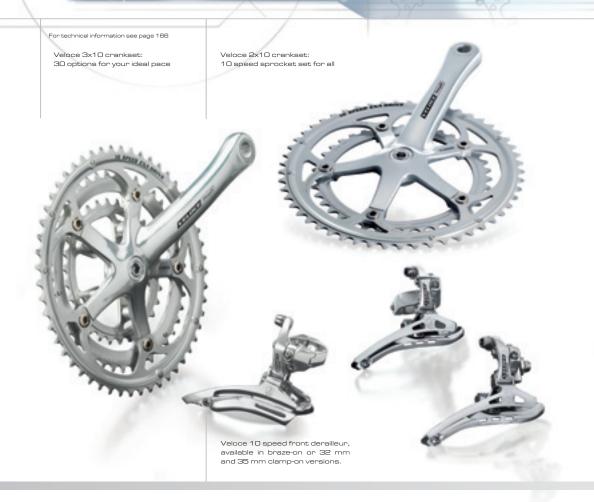
The Mirage 9-speed sprocket set sports the Ultra-drive design for precise, rapid and silent shifting. Available in three versions: 12-23, 13-23 and 13-26 to meet all your needs.

#### **BOTTOM BRACKET**

Cartridge bottom bracket available in the 111 and 115.5 mm versions, both for Italian and BSA threads.









#### **VELOCE GROUPSET**

The Veloce groupset is available in no less than five versions: 2x10 drivetrain, 3x10 drivetrain, 9x2 drivetrain with Ergopower Flat Bar controls. A wide range of options that lets you define your preferred riding set-up. Whether you enjoy racing and steep climbs or whether you appreciate light and comfortable rides, the Veloce groupset has the solution for you.

#### **2X10 DRIVETRAIN**

The Veloce groupset presents the 10-speed drivetrain for a wide range of cyclists. Initially developed from the Record groupset, the 10s drivetrain was soon to prove its countless advantages. Close-ratio sprockets and the design of the front and rear derailleurs, chain and crankset make for quicker, more precise and silent shifting. Thanks to the wider range of gears available, the sprocket set need not be replaced for one particular race, with so much trouble and energy saved.

#### **3X10 DRIVETRAIN**

The Veloce 3x10 drivetrain offers no less than 30 gear ratios: you can choose your ideal cadence both during uphill as well as downhill riding. This drivetrain is available with a 30-40-50 or 30-42-53 crank-set and 170 mm or 175 mm cranks. The steepest hills are yours to be conquered!

# VELOCE ERGOPOWER FLAT BAR

The Veloce Ergopower Flat Bar controls were designed and created by our engineers with an eye to providing a product that grants undeniable qualities of performance and lightness to cyclists wishing to ride in a more comfortable position. A posture that is achieved by replacing the usual drop handlebar with a straight one, and hence the gear shifters and brake levers too. The brake/gear shifter assembly of the Veloce Ergopower Flat Bar provides

truly unique compactness and lightness. The ease with which these push-pull type controls enable gears to be changed is amazing. Our engineers have really outdone themselves, creating a system that allows you to upshift and downshift several gears at a time. In this way you will no longer be caught out by changing slopes. A barrel located on the butt area of the brake lever allows the distance between the lever and the handlebar grip to be adjusted to your needs.

# FRONT DERAILLEURS FOR ERGOPOWER FLAT BAR CONTROLS

In order to achieve optimal chain shifting from one sprocket to another, the Ergopower Flat Bar controls need a special front derailleur. The different drive mechanism in fact requires a new type of derailleur design to assure precise and light shifting. The Veloce FB derailleurs are available for 2x10 and 3x10 drivetrains in braze-on or clampon versions.



For technical information see page 166





Veloce hubs: hi-precision bearings for improved rotation Record C-10 chain constructed from the best materials available and under the strictest of tolerances.

Veloce cartridge bottom bracket with sealed bearings

#### VELOCE **REAR DERAILLEURS**

The Veloce drivetrain offers three types of rear derailleurs: short, medium and long cage. Only in this way can the best shifting performance be obtained with different crankset/sprocket set combinations. And, as you may well know, Campagnolo does not compromise on performance. The short cage derailleur is used for combining a double crankset with a max 13-26 sprocket set.

The medium cage derailleur is used for combining a double crankset with a max 13-29 sprocket set or triple crankset with a max 13-26 sprocket set. The long cage derailleur is used for combining a triple crankset with a max 13-29 sprocket set.

#### SPROCKET SET

The Veloce 10s sprocket set employs the Ultra-Drive geometry which assures fluid, rapid and silent chain shifting. The sprockets are made of steel and are longer-lasting thanks to surface treating with nickelchrome.

#### **BOTTOM BRACKET**

Cartridge bottom bracket with light alloy cups. Available in 111 and 115.5 mm versions, both for Italian and English threads.

#### **BRAKES**

The Veloce brakes are of the Dual-Pivot type and feature orbital adjustment of the brake shoes. In this way the brake pads engage perfectly with the braking surface for a powerful and modular braking action. The compound used for the brake pads is the same as for the Record series

#### **RECORD 10S CHAIN**

The Veloce 10s drivetrain employs a Record 10s chain. The Record 10s chain features the Ultra-Drive and Floating Link Action geometries and is constructed using the best available materials, treatments and tolerances to guarantee rapid, fluid and silent shifting between gears. The chain is connected by means of an HD-Link system.



For technical information see page 166



## **VELOCE 9S**

The Veloce 9s groupset in the double and triple version is still an integral part of the 2005 collection.

The incredible quality-to-price ratio for which it is renowned could not but make its presence a must.

The Veloce 9s groupset is emblematic of quality, reliability and endurance thanks to the materials employed and the manufacturing tolerances that are typical of high-end products.











### **CENTAUR GROUPSET**

The Centaur groupset welcomes you to Campagnolo's high-end range and lots of new titbits. Besides the already famous 2x10 and 3x10 drivetrains, this year Centaur also presents itself in the Ergopower Flat Bar version as well as in the first compact drivetrain version.

While the former offers the ideal solution for those who prefer a light, performing, yet comfortable bicycle, the latter is the option that became necessary to meet the demands of century ride aficionados.

All the solutions offered by the Centaur groupset are available in two colours: Silver and Century Grey.







#### **2X10 DRIVETRAIN**

The Centaur 2x10 drivetrain performs excellently right from the very first race. Lightness, quality, reliability and performance are characteristics that make it the ideal means of transport when you want to make a real racing difference.

# NEW CENTAUR CARBON CRANKSET

This year the Centaur groupset presents an optional carbonfiber crankset. The Centaur Carbon crankset was designed applying the constructive technology as for the Record Carbon and Chorus Carbon series. This involves a careful union of two technologies, namely Multidirectional Carbon Fiber and Unidirectional Carbon Fiber technologies. In this solution the Multidirectional Carbon Fiber is first spread, creating the

component's overall strength, after which the Unidirectional Carbon Fiber is applied, following the same direction as the stress lines, i.e. all the points where the component is subjected to maximum stress. In this way a component of unbelievable mechanical strength is obtained. When comparing the results with the same model in aluminium, the differences are extraordinary:

- Greater lightness
- Greater resistance to static loads
- Greater fatique strength
- Greater laugue strength
   Greater torsional strength

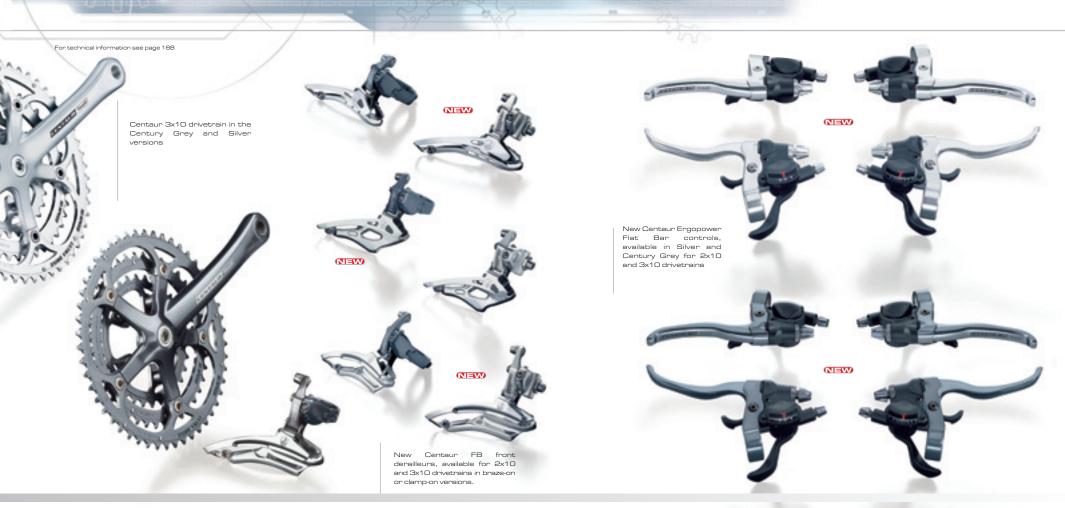
# CENTAUR COMPACT DRIVETRAIN

Campagnolo decided to go a step further than the simple compact crankset, preferring to develop a fully integrated project with a 10-speed drivetrain so that there are no half measures where safety, performance and longevity are concerned. This integrated project has resulted in the creation of the Centaur CT crankset and Centaur CT front derailleur... which is why we can now talk about the first compact drivetrain.

The cranks of the Centaur CT crankset are born of a project that skilfully unites Multidirectional Carbon Fiber. The Centaur CT crankset is available with 34-48, 34-50 or 36-50 chainrings and with 170, 172.5 or 175 mm cranks. The chainrings were created specifically for the Centaur CT crankset and are not compatible with other cranksets.

The diameters of the Centaur CT chainrings are smaller than those used in traditional versions, whereas the tooth difference is considerably larger. Thus a special front derailleur must be used if the utmost in performance is to be achieved. The Centaur CT front derailleur presents a cage that is more curved in order to match the curvature of the smaller chainrings. In this way the tail of the cage does not distance itself too much from the chainrings.





The profile of the inner cage is higher so that the chain can be shifted easily from the smaller chainring to the larger one and is shaped like an inverted "S" for increased precision when shifting the chain from the larger chainring to the smaller one.

Without this special front derailleur, the chain could drop onto the bottom bracket shell, provoking considerable damage. The Centaur CT front derailleur is available in both braze-on and clamp-on versions.

#### **3X10 DRIVETRAIN**

Lovers of steep climbs can now whet their appetite thanks to the 30 gear ratios offered by the Centaur 3x10 drivetrain. Whatever the conditions, the right gear ratio will always be at your feet. From now on, the adjective impossible shall no longer be linked to the word climb

# CENTAUR ERGOPOWER FLAT BAR

For all cyclists wishing to mount a straight handlebar on their road bike, Campagnolo has created specific Centaur Ergopower Flat Bar controls. In this way they can enjoy the qualities of precision and lightness that are typical of Campagnolo's products, while riding in a more comfortable position. The Centaur Ergopower Flat Bar controls incorporate the brake lever and gear shifter into one single component, yielding a more compact, and hence lighter overall assembly. The brake and gear levers feature two indicators

that enable the chain position on the chainring and sprockets to be viewed at all times. Our engineers have concentrated greatly on reducing the driving force necessary for chain raising and lowering and their results are immediately perceivable through the incredible ease with which the operation is achieved. Another of our engineers' objective was multiple chain shifting. In fact, upshifting or downshifting of more than one gear is now possible in one simple operation. An adjusting barrel fitted on the brake lever allows the distance between the lever and the

handlebar grip to be altered, for added riding comfort.

#### NEW FRONT DERAILLEURS FOR ERGOPOWER FLAT BAR CONTROLS

In order to assure optimal chain shifting from one chainring to another, the Ergopower Flat Bar controls need a special front derailleur. The drive mechanism differs greatly from that of the Ergopower controls, whereby the front derailleur must possess a specific type of geometry to assure precise and light shifting.



For technical information see page 168

Centaur front derailleur: available in braze-on or Ø 28.6 -32 - 35 mm clamp-on versions





AC-H bottom bracket in the Century Grey and Silver versions



NEW CONTRACTOR OF THE PARTY OF

New Centaur bottom bracket: lighter and stronger

New graphics sported by the Century Grey Centaur Ergopower controls



New Centaur bottle cage



Record 10s chain: Ultra Drive and Floating Link Action geometry for rapid, fluid and silent chain shifting



Centaur Hiddenset integrated headset

#### CENTAUR REAR DERAILLEURS

Reiterating the concept of an integrated project, the Centaur groupset presents three rear derailleur models: short cage, medium cage and long cage to impart the greatest functionality depending on the crankset/sprocket set combination used. The short cage derailleur is recommended for use with a double/compact crankset and 13-26 cluster or smaller.

The medium cage derailleur is recommended for use with a double/compact crankset and 13-29 cluster or smaller or with a triple crankset and 13-26 cluster or smaller. The long cage derailleur is recommended for use with a triple crankset and 13-29 cluster or smaller.

#### CENTAUR BOTTOM BRACKET

The new Centaur bottom bracket now sports a captivating black look, but the novelty does not stop there... the contents are even more precious. Our engineers have produced a bottom bracket with a 111 mm spindle length that is much lighter and stronger than the AC-H model. This bottom bracket looks set to become the ideal companion for the new Centaur Carbon crankset.

#### HIDDENSET

The Centaur headset is of the Hiddenset type and is integrated into the head tube of the frame, providing an extremely elegant look thanks to the aesthetical balance achieved between the fork and the frame and between the frame and the handlebar stem. Light, lasting and easy to mount, the Centaur headset is the consequence of Campagnolo's experience in the field of composite materials.

#### NEW CENTAUR BOTTLE CAGE

As of this year, even the Centaur groupset has its own special bottle cage. The Centaur bottle cage is realized using Multi-directional Carbon Fiber technology for the collar and carbon-resin for the support.

The result is an extremely strong product weighing a mere 35 g. The Centaur bottle holder is sold with a dedicated Campagnolo bottle with a sober and classy design but can also be used with other types of bottle.





### **CENTAUR SPROCKET SET**

10 speed, Ultra-drive and Chrome-Nickel-PTFE surface treatments for long-lasting performance.

#### **CENTAUR SEATPOST**

The Centaur seatpost confirms the high-end quality of the Centaur groupset, presenting a light alloy post and cold-forged aluminium top. Available in the 27.2 mm version.

#### **CENTAUR PEDALS**

The Centaur Pro-Fit Plus pedals are born from a very ambitious project that successfully combines lightness and performance with comfort.

Pedal dimensions are greatly reduced, despite being used with conventional cleat sizes. The ergonomics have been seen to in every detail. The result is a pedal with four evenly distributed contact points to assure maximum comfort on long rides too. The height of the pedal is greatly reduced, bringing the foot as close as possible to the pedal axle, thereby achieving a "circular" pedal stroke.

Worth mentioning is the solution employed for the fully independent shoe engagement and disengagement forces. The force required to engage the shoe is low and constant, assuring easy pedal engagement.

The force required to disengage the shoe is variable and may be altered via an adjusting screw. An indicator mounted on the pedal shows the spring tension. Fixed or floating cleats are available, depending on your needs.







New Chorus CT front derailleur: available in braze-on and Ø 32 or 35 mm clamp-on



#### CHORUS

The Chorus groupset is intended for use in competitions. The wide use of composite materials, the technical solutions adopted and the application of the most advanced technologies in its manufacture make it a product that fears no rivals, other than the Record groupset itself. 2005 offers many opportunities to Chorus users: 2x10 drivetrain, Compact drivetrain, 3x10 drivetrain and Ergopower Flat Bar controls.

#### **2X10 DRIVETRAIN**

The Chorus 2x10 drivetrain is to all intents and purposes a drivetrain for high-level racing, as demonstrated by a number of professional teams that use it under the most extreme conditions. Use of composite materials, manufactured within Campagnolo's Composites Department in Vicenza, has enhanced the technical content of the Chorus drivetrain. The crankset, rear derailleur and Ergopower controls share the same technology as the Record groupset.

# CHORUS FRONT DERAILLEURS FOR 2X10 DRIVETRAINS

The Chorus front derailleur consists of an aluminium cage that has undergone special surface treatment aimed at reducing chain friction and abrasion. Besides weighing less, the greater stiffness of aluminium makes for crisper and more precise shifting.

#### **COMPACT DRIVETRAIN**

Creating a compact crankset only would have meant to compromise on functionality that for us is complete no go. This is why we conceived the integrated Chorus CT drivetrain project which encompasses both the crankset and the front derailleur. The Chorus CT crankset consists of the cranks, created from the exclusive combination of Multidirectional Carbon Fiber and Unidirectional Carbon Fiber technologies, and the light alloy Ultra-Drive chainrings. The Chorus CT crankset is available with 34-48, 34-50 or 36-50 chainrings and with 170, 172.5 or 175 mm cranks. The chainrings have been created specifically for the Chorus CT crankset and are only compatible with Campagnolo CT cranksets. The diameters of the Chorus CT chainrings are considerably smaller than those used in traditional versions, whereas the tooth difference is considerably larger. In order to achieve the utmost in performance, a special front derailleur had to be conceived.

#### **NEW CHORUS FRONT DERAILLEURS FOR COMPACT DRIVETRAINS**

The cage of the special Chorus CT front derailleur is more curved in order to match the curvature of the smaller chainrings. In this way the tail of the cage does not distance itself too much from the chainrings.

The edge of the inner cage plate is higher so that the chain can be shifted easily from the smaller chainring to the larger one and is shaped like an inverted "S" for increased precision when shifting the chain from the larger chainring to the smaller one. Without this particular front derailleur the chain could drop onto the bottom bracket shell and shifting would prove more difficult when riding uphill.



#### **3X10 DRIVETRAIN**

The Chorus 3x10 drivetrain is a triple drivetrain that employs materials and technical solutions used in products meant for professional racing. Thanks to the 30 gear ratios available, the Chorus 3x10 drivetrain promises to become the ideal drivetrain for climb enthusiasts as well as for cycle tourists who wish to travel comfortably, taking advantage of the excellent materials and advanced technologies that set the Chorus groupset apart from others.

# ERGOPOWER FLAT BAR CONTROLS

Chorus Ergopower Flat Bar controls are the ideal product for those wishing to match high performance and maximum lightness with maximum comfort. In fact, they offer you precise control of both the drivetrain and the Campagnolo Chorus braking system. Chorus Ergopower Flat Bar controls incorporate the brake lever and gear shifter into one single component, yielding a more compact and lighter overall assembly. Chorus Ergopower Flat Bar controls feature two

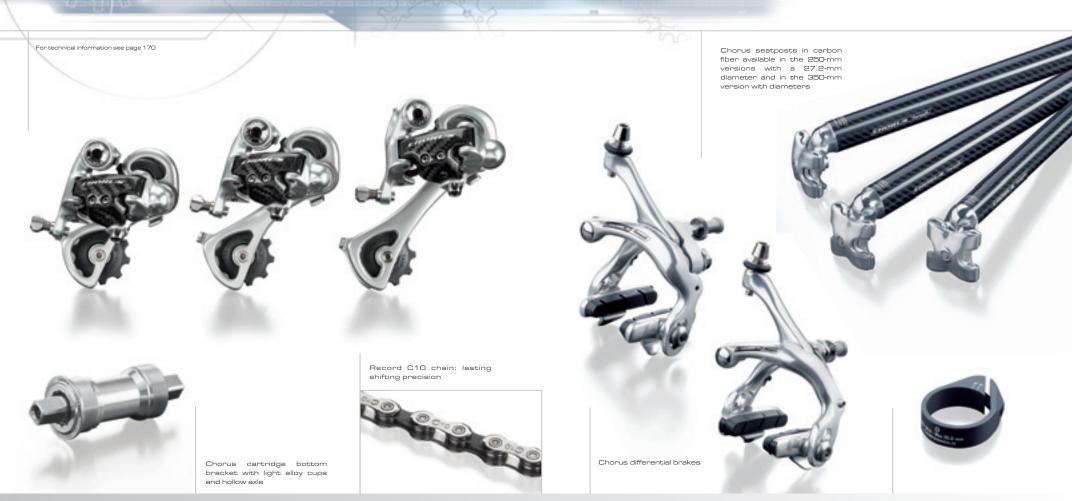
indicators that enable the chain position on the chainring and sprockets to be viewed at all times. The astonishing ease with which the chain is shifted up and down proves how much attention was dedicated by our engineers to the driving force necessary for chain shifting. Also worth noting is the multiple shifting option, i.e. the possibility of upshifting and downshifting by more than one gear in one single move. An adjusting barrel fitted on the brake lever allows the distance between the lever and the handlebar grip to be altered for better ergonomics.

# FRONT DERAILLEURS FOR ERGOPOWER FLAT BAR CONTROLS

Ergopower Flat Bar controls require the use of a special front derailleur to assure correct indexing. The driving mechanism of the Ergopower Flat Bar controls differs considerably from that of standard Ergopower controls, which is why a specially designed front derailleur is necessary.

Only thus can correct shifting be achieved. The Chorus FB front derailleurs are available for 2x10, Compact and 3x10 drivetrains in braze-on or clampon versions.





### CHORUS REAR DERAILLEUR

The Chorus rear derailleur is compact in design.

The parallelogram was designed to assure precise and regular shifting over all ten sprockets. The outer link in carbon fiber, manufactured in-house within Campagnolo's Composites Department, reduces the weight considerably and provides a racing and hi-tech look. The derailleur pulleys are made from a special material that renders the drivetrain particularly silent.

The rear derailleur is available in three versions:

Short cage derailleur for combining a double/compact crankset with a 13-26 sprocket set or smaller. Medium cage derailleur for combining a double/compact crankset with a 13-29 sprocket set or smaller or triple crankset with a 13-26 sprocket set or smaller. Long cage derailleur for combining a triple crankset with a 13-29 sprocket set or smaller.

#### **BRAKES**

The differential Chorus brakes stem from research on road bike braking dynamics conducted by our engineers. Results have shown that, during a braking action, 70% of the stress goes to the front brake while a mere 30% goes to the rear brake. Assuming that the front brake had to maintain all its characteristics, our design engineers concentrated on the alternative solutions that would improve the rear brake.

Thus it was made less powerful, yet much more modulating. The braking dynamics are visibly improved. In fact, this differentiation between the two brakes allows the bicycle to be stopped within the same distance with no risk of the rear wheel blocking. An enormous advantage both in terms of performance and safety.

#### **CHORUS SEATPOST**

A striking look and supreme functionality. The seatpost features a carbon-fiber post and a light alloy top that allows for fine-degree, millimetric saddle adjustment. Each model is furnished with the Campagnolo saddle clamp designed purposely for the Carbon seatpost. Besides being one of the lightest models found on the market, this type of saddle clamp offers a revolutionary ultra-safe fastening system.

The asymmetrical design, with the fastening bolt almost tangential to the seatpost, assures homogeneous pressure of the saddle clamp along the entire pipe circumference, preventing the latter from being damaged.





#### **CHORUS BOTTLE CAGE**

The Chorus bottle cage weighs less than 30 g thanks to the new constructive technology used for the support. The collar remains unchanged, preserving the typical appearance of 90°-braided carbon fiber.

The Chorus bottle holder is sold with a dedicated Campagnolo bottle with a sober and classy design but can also be used with other types of bottle.

#### HEADSET

The Chorus groupset proposes three types of headsets: traditional threaded headset, Threadless headset and Hiddenset headset.

The traditional threaded headset surely needs no further presentation – its smoothness, longevity and reliability characteristics have set the standard for years.

The Threadless headset is intended for unthreaded fork steerers. It is extremely light and allows quicker and more

precise adjustment than its threaded counterpart, besides being lighter and longer lasting. The Hiddenset headset is integrated into the head tube of the frame, providing an extremely elegant look thanks to the aesthetical balance achieved between the fork steerer and the frame and between the frame and the handlebar stem. The Chorus headset is light, smooth, long lasting and easy to install, and is available in the standard version or with a TTC cap.

#### **PEDALS**

Our engineers have succeeded where many others have failed: they have created a pedal that successfully combines lightness and performance with comfort. Despite its reduced weight and relatively compact dimensions, the Chorus Pro-Fit Plus pedal was designed with a painstaking eye to ergonomics. The result is a pedal with a large supporting surface, assuring excellent comfort on long rides too.

Pedal height is extremely reduced. In this way the foot is very close to the pedal axle and the pedal stroke is "rounder". The pedal engagement and disengagement forces are independent. While the pedal engagement force is constant, the force required to disengage the foot from the pedal can be adapted to the rider thanks to an adjustment screw that controls spring tension.

The Chorus Pro-Fit Plus pedal turns on three sealed bearings two on the inside and one on the outside. Two types of cleats are available: either fixed or floating, depending on your needs.







#### RECORD

The Record groupset is the obvious choice for professional racers. The best materials available and the most advanced technologies and technical solutions are employed in this hi-tech wonder which, besides its infinite contents, also sports a look beyond compare. This year the Record groupset is presented in three versions to meet all your needs: 2x10 drivetrain, Compact drivetrain, 3x10 drivetrain.

#### **2X10 DRIVETRAIN**

The Record 2x10 drivetrain is the drivetrain of professionals par excellence. The world's leading aces use it. Whether you want to sprint home in Alessandro Petacchi style, or race devastatingly uphill like Gilberto Simoni or Damiano Cunego, or perform perfect time trials, the choice can only be but one: a Record 2x10 drivetrain.

#### COMPACT DRIVETRAIN

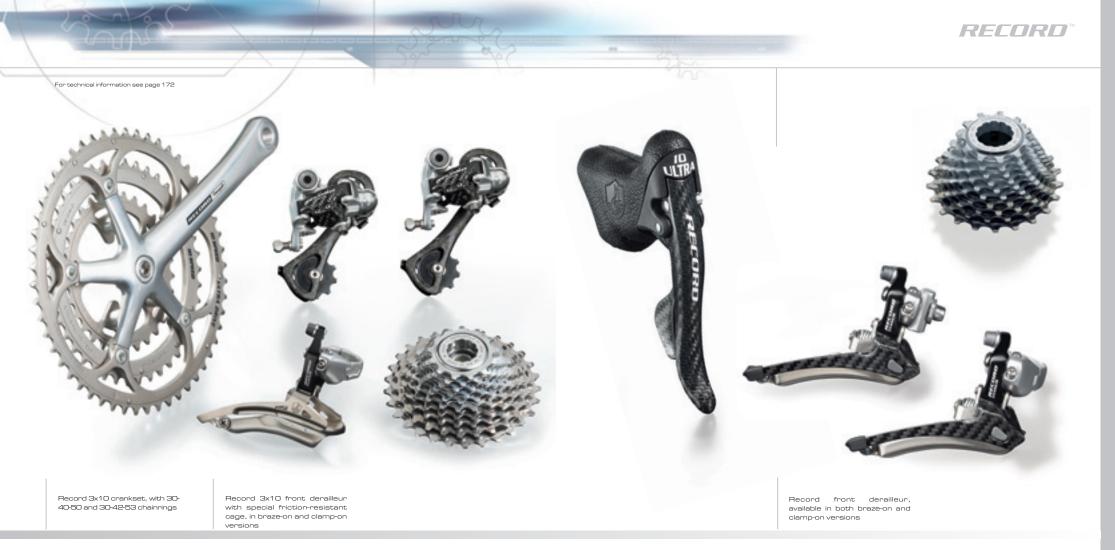
The compact drivetrain was the missing link between traditional double and triple drivetrains. In creating it, we wanted to design much more than a mere compact crankset, preferring to develop an integrated project that goes by the name of Record CT drivetrain, one that interfaces perfectly with the entire 10s drivetrain. This project has resulted in the new Record CT crankset and Record CT front derailleur.

The Record CT crankset is manufactured within Campagnolo's Composites Department in Vicenza, using a technology that exploits the finest characteristics of Multidirectional Carbon Fiber and Unidirectional Carbon Fiber technologies. The Record CT crankset is available with 34-48, 34-50 or 36-50 chainrings and with 170, 172.5 or 175 mm cranks. The chainrings, which have been specially treated for durability, are only compatible with Campagnolo CT cranksets.

#### NEW FRONT DERAILLEURS FOR RECORD CT DRIVETRAINS

This front derailleur has been created especially for the Record CT drivetrain. The smaller chainring dimensions required the cage to be more curved in order to prevent the tail from moving too far away from the chainrings. The edge of the inner cage plate in friction-resistant aluminium is higher so that the chain can be shifted easily from the smaller chainring to the larger one.

When viewed from the front, one will notice an inverted "S" shape which facilitates chain shifting from the larger chainring to the smaller one. If this particular front derailleur is not used, the chain could drop onto the bottom bracket shell and crisp shifting would not be possible when riding uphill.



#### **3X10 DRIVETRAIN**

The Record 3x10 drivetrain is, to all intents and purposes, a drivetrain for professional use. The materials employed and technical solutions adopted say it all.

Thanks to the 30 gear ratios available, the Record 3x10 drivetrain is the perfect solution both for those engaged in difficult climbs as well as for

cycle tourists who wish to travel comfortably, taking advantage of the excellent materials and advanced technologies that are specific to the Record groupset.

# RECORD ERGOPOWER CONTROLS

Record Ergopower controls have been in the hands of the world's leading racers since 1992. Unmistakable design, high performance, ergonomics and extreme lightness are the typical characteristics of this hitech product.

As with all Campagnolo models, the ergonomics were analysed from each and every angle with an eye to assuring access to the controls under all conditions, besides providing maximum comfort. The special surface treatments applied to internal components produce smooth, precise shifting.

#### RECORD FRONT DERAILLEURS FOR 2X10 DRIVETRAINS

The Record front derailleur has an external cage plate in carbon fiber and an inner cage plate in aluminium that is surface-treated to reduce friction.

For technical information see page 172

The Record rear derailleur is available in three versions:

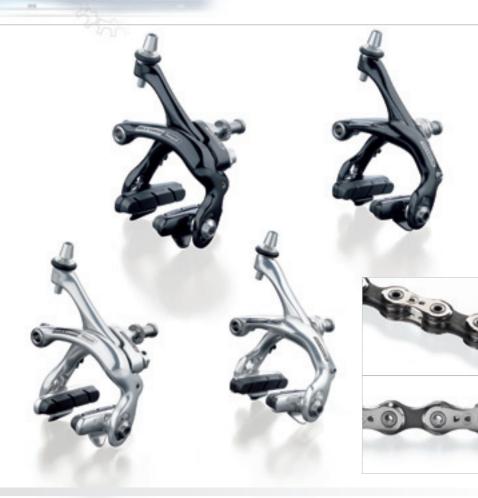
 Short cage derailleur for combining a double/compact crankset with a 13-26 sprocket set or smaller.

 Medium cage denailleur for combining a double/compact crankset with a 13-29 sprocket set or smaller or triple crankset with a 13-26 sprocket set or smaller.  Long cage derailleur for combining a triple crankset with a 13-29 sprocket set or smaller.













The Record rear derailleur is advanced technology and design condensed into one. For the outer link and short cage we used 90°-braided carbon fiber. For the medium and long cages, which have different mechanical requirements, we used the ultramodern Multidirectional Carbon Fiber technology that is normally employed in the aerospace industry.

The derailleur pulleys, which are made from a special material, make the entire drivetrain quieter whereas the threaded parts in titanium reduce the overall weight.

#### **DIFFERENTIAL BRAKES**

The differential Record brakes stem from research on road bike braking dynamics conducted by our engineers. Results have shown that, during a braking action, 70% of the stress goes to the front brake while a mere 30% goes to the rear brake. Starting from here, it was decided that while it was pointless to change the characteristics of the front brake, the design characteristics of the rear brake simply had to be improved.

Which is why a less powerful, though more modulating rear brake was created. The braking dynamics are now visibly improved. In fact, this differentiation between the two brakes allows the bicycle to be stopped within the same distance with no risk of the rear wheel blocking. An enormous advantage both in terms of performance and safety.

#### **RECORD C10 ULTRA CHAIN**

The Record C10 Ultra chain amazes us by its lightness, weighing in at an incredible 20 g below its already light counterpart Record C10. A result achieved thanks to the use of lighter chain links and hollow pins.

We really must emphasise that, despite this reduction in weight, the pin retention force is greater and the strength parameters and surface treatments remain unchanged, thereby assuring chain shifting precision in time.

For technical information see page 172

Record bottom bracket:
composite/light alloy cartridge,
hollow axle and light alloy cups





#### **PEDALS**

The Record Pro-Fit Plus pedal project is an all-out winner, successfully combining lightness and performance with comfort. Despite the relatively compact dimensions and reduced weight, the Record Pro-Fit Plus pedal does not forfeit ergonomics, distributing the four support points in the best possible manner.

In this way thorough comfort is assured on long rides too. The "circular" pedal stroke, which all cyclists long for, is now possible thanks to a design that brings the foot as close as possible to the pedal axle. The pedal engagement and disengagement forces are independent. In this way the disengagement force can be adapted to one's style of pedalling.

Record threaded headset.

The axle of the Record Pro-Fit Plus pedal turns on three sealed bearings - two on the inside and one on the outside. Two types of cleats are available: either fixed or floating, depending on your needs.

#### HEADSET

The Record groupset proposes three types of headsets: traditional threaded headset, Threadless headset and Hiddenset headset.

The traditional threaded headset surely needs no further presentation, seeing that its smoothness, longevity and reliability characteristics have set the standard for years. The Threadless headset was designed for unthreaded fork steerers.

It is extremely light and allows quicker and more precise adjustment than its threaded counterpart.

Weight and endurance also set it apart from others. The Hiddenset headset is integrated into the head tube of the frame, conferring an extremely elegant look to the bicycle. The Record headset is light, smooth, long lasting and easy to install, and is available in the standard version or with a TTC cap.

#### RECORD BOTTLE CAGE

18 g - this is what the Record bottle cage weighs.

A monocoque in carbon fiber that clearly demonstrates the level of excellence achieved by Campagnolo in the field of composites.

The Record bottle holder is sold with a dedicated Campagnolo bottle with a sober and classy design but can also be used with other types of bottle.





### **RECORD PISTA**

The Record Pista groupset is a collection of hi-tech components designed purposely to excel in velodromes. The groupset consists of a crankset, hubs and bottom bracket.

The other components, namely the seatpost, pedals and headset are borrowed directly from the Record roadbike groupset.

### **TIME-TRIAL COMPONENTS**

A race against time. Every detail is crucial. Nothing is left to chance. Lightness and aerodynamics are the watchwords of this sport.

Campagnolo also dedicates a number of special components to time-trial events: bar-end controls, chainrings with a larger number of teeth and ultra-light brake levers in composite material.









- · Stopwatch function
- · Gear development



- · Sprocket self-learning
- **STANDARD FUNCTIONS:**
- Average speed
- Trip distance
- Clock
- Cadence



- · Backlit screen
- · Acoustic functions





· display of chainring tooth number/sprocket in use and chain position display

## **ERGOBRAIN**

ErgoBrain10 is not a cyclecomputer, but a true and proper on-board computer. A simple click on the Ergopower integrated controls gives full access to its multiple functions without removing the hands from the bar.

ErgoBrain 10 is compatible with Campagnolo's 2x10 and 3x10 drivetrains when using the standard bracket and with 2x9 and 3x9 drivetrains if the optional bracket is used.

- Auto timer
- Current speed
- Maximum speed
- ODO

### **SPECIAL FUNCTIONS:**

- Sprocket self-learning
- Display of chainring/sprocket size (no. of teeth) in use and chain position
- Stopwatch function
- Gear development (rollout)
- Backlit screen

### **ACOUSTIC FUNCTIONS:**

- Speed threshold indicator
- Cadence threshold indicator
- Exertion period/recovery period
- Exertion period/recovery period+cadence threshold indicator

## LOW-PROFILE WHEELS



#### LOW-PROFILE WHEELS

Campagnolo's low-profile wheels are the answer to long-distance rides and steep mountain climbs. These wheels are laterally and torsionally stiff for better power transmission and greater steering precision, while being vertically elastic to absorb the jolts and bumps of badly surfaced roads. Campagnolo's low-profile wheels are distinguishable for the polygonal profile of both rims and the asymmetrical rear rim. The polygonal profile assures vertical elasticity that absorbs a good part of the vibrations transmitted by the ground, thereby providing optimal comfort during long rides. The asymmetrical rear rim, on the other hand, is a technical solution that helps improve wheel dish, hence making it much sturdier.





lymmetrical front wheel profile

Asymmetrical rear wheel profile

These wheels are built with meticulous care. Once assembled, the wheels are hand-inspected using special tools, and the following is checked:

- Lateral trueness
- Vertical trueness
- Dich

An automated phase then follows in which the wheel components are set by simulating a typical running-in period. At the end of this phase the wheels are checked yet again so as to make sure that all the quality parameters relative to trueness and dish comply with Campagnolo's rigorous standards. The Campagnolo wheels are finally ready to be put on the market.

The above procedure clearly explains why Campagnolo wheels perform exceptionally right from the very first stroke.







### **PROTON**

Light, solid and comfortable. These are the characteristics that distinguish the Proton lowprofile wheels.

The rear rim is asymmetrical to improve wheel dish and hence increase wheel sturdiness. The light alloy hubs feature an oversize body and axle besides

high-precision adjustable bearings. The spokes are differential and butted to reduce the wheel's overall weight.



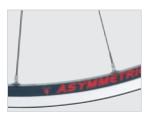
Asymmetrical rear wheel for better dish balancing



Light alloy front hub



Light alloy oversize rear hub



Differential butted spokes







#### **NEUTRON**

Campagnolo's Neutron wheels were conceived for climbs and long-distance racing. It is not a coincidence that the rim edge absorbs ground roughness, providing the rider with a feeling of comfort. In the clincher version, both rims have been designed especially for added lightness. The rear rim is asymmetrical to improve wheel dish. The Record-series hubs are oversize HPW models and

have a light alloy body and axle, a titanium pawl carrier and quick lubrication ports.

The butted aero spokes sport the Ultralinear geometry that distributes loads along the entire length of the spoke, contrary to conventional spoking which concentrates the loads on one point only.



Neutron rear clincher wheel: specially machined and asymmetrical



Record-class front hub



HPW oversize rear hub



Neutron tubular wheel

# **NEUTRON CARBON**





## **NEUTRON CARBON**

The Neutron Carbon wheels present the same valued qualities of their aluminium counterparts, yet have the additional esthetical and functional bonuses of a structural carbon hub.

Neutron Carbon wheels were designed with two objectives in mind: hard climbs and long rides. The wheels are very light and reactive, weighing 1500 g a pair, and are ideal for the sudden changes in rhythm when climbing.

The polygonal profile, coupled with Ultralinear spoking geometry, produces a laterally stiff wheel that yields the utmost during rapid bursts, while being vertically soft to absorb ground vibrations and roughness.

The structural carbon hub has a variable cross-section and is

manufactured in-house in Campagnolo's Composites Department. The aesthetical impact is amazing, the overall weight is around 45 g lower than that of aluminium models and the life span is greater, thanks to the intrinsic qualities of composite materials.



Front hub in structural carbon with variable thickness



Rear hub in structural carbon with variable thickness, with titanium pawl carrier



Rim in special aluminium alloy made lighter by a particular machining process







# **HYPERON TUBULAR**

Hyperon tubular wheels are meant for cyclists who want only the best, and are the same wheels used successfully by leading professionals.

The technological know-how in the field of composites has enabled our engineers to build a wheel that is as strong as its aluminium counterpart, though weighs much less. A pair of carbon-fiber wheels weighs 300 grams less than a standard aluminium pair. 300 grams that make themselves felt at the first attempt to accelerate or the first burst uphill. One simple pedal stroke is followed by a lightning reaction. The ease with which the pace changes is incredible.

The rims and hubs are made from full carbon. The rear rim is asymmetrical to improve wheel dish, and the HPW hubs sport Record-class mechanics.

The Ultralinear spoking presents butted aero spokes. In order to assure powerful and modular braking, special brake pads must be used on Hyperon tubular wheels.



Front hub in structural carbon with variable thickness



Structural carbon rim for tubular



Special brake pads for Hyperon tubular braking surfaces







# **HYPERON CLINCHER**

Hyperon clinchers consist of structural carbon rims and aluminium hubs similar to the Neutron series. The clincher rim is not a simple adaptation of the tubular rim, but has entailed a brand new engineering design. The needs of a clincher rim are completely different to those of tubular rims. Resistance to pumping pressure, high braking temperatures and impacts that

normally affect tubular wheels are not present or are present to a lesser degree.

This is why our engineers designed a rim employing materials that meet these new requirements.

Hyperon clincher wheels require the use of special brake pads.



Structural carbon rim for clincher tire



Record-class aluminium HPW front hub



HPW rear hub with light alloy axle and freewheel and titanium pawl carrier



Special brake pads for Hyperon clincher braking surfaces

# HYPERON ULTRA





# HYPERON ULTRA CLINCHER

Hyperon Ultra clinchers, as the name implies, are the non plus ultra of low-profile wheels. The asymmetrical rims are in structural carbon and are meant for use with clincher tires. Hyperon Ultra rims sport Ultralinear spoking and butted aero spokes.

The hubs are in structural

carbon with variable thickness and possess the Record-class mechanics, with one exception: ceramic spheres inside the adjustable bearings. When compared to traditional ones in steel, these spheres provide almost four times as much rolling capacity over time besides a greater resistance to wear.



Special brake pads for Hyperon clincher braking surfaces



Ceramic ball bearings assure greater smoothness and resistance to wear



Front hub in structural carbon with variable thickness and ceramic spheres



Rear hub in structural carbon with variable thickness, with titanium pawl carrier and ceramic spheres

# MEDIUM-PROFILE WHEELS



#### MEDIUM-PROFILE WHEELS

Campagnolo's medium-profile wheels are multipurpose wheels. As light and reactive as low-profile wheels and as aerodynamic and fast as high-profile wheels, these wheels distinguish themselves for their Campagnolo G3 spoking. This lacing pattern is recognisable for the way in which the spokes converge to one point in groups of threes two from the right side and one from the left. The results of this technical solution are extraordinary:

- Better transmission of the driving torque.
   Double spokes on the side of the cassette reduces wheel torsion considerably during the thrust action, with a net gain in terms of transfer of the driving torque.
- Improved lateral stiffness. Although, thanks to the G3 design, the spokes are not as tight as those in traditional wheels, the double spoking makes for higher wheel tension overall, thereby resulting in a wheel that has greater lateral stiffness.
- Less tension on the rear wheel spokes. Thanks to the doubling of spokes, the latter can be tensioned to much lower values when compared to a conventional wheel, thereby greatly reducing the risk of fatigue failure of spokes and rims.



G3 design

Campagnolo's medium-profile wheels are carefully built in the tiniest of details. After being hand-assembled, they are subjected to a thorough verification of lateral and vertical trueness and dish. The wheels then undergo a running-in period followed by a second check of the above-mentioned parameters. Only after these meticulous inspections have been completed are the wheels ready to be put on the market.







# **VENTO**

These are the entry-level wheels of Campagnolo's medium-profile range. The rims consist of a 24 mm medium-profile extrusion, the sides of which are ground to improve the quality of the braking action, and feature special eyelets that offer greater resistance to spoke tension.

The hubs are flanged and are mounted on high-precision bearings. Both wheels sport Campagnolo's exclusive G3 spoking.



24 mm light aluminium alloy medium-profile rim



Hubs with traditional flanges mounted on Hi-Precision bearings, G3 spoking



Machined braking surface for precise and modular braking







# SCIROCCO

Sirocco wheels offer an extraordinary quality-to-price ratio. They are the ideal wheels for daily training as well as for racing purposes.

The rims consist of a 30 mm medium-profile extrusion, the sides of which are ground.

The hubs are oversize and employ hi-precision bearings for improved smoothness and endurance. The wheels employ Campagnolo's effective G3 spoking.



30 mm medium-profile rim with matt black finish



Oversize front hub



Oversize rear hub



Machined braking surface







# ZONDA

Zonda wheels sport most of the technical solutions employed in our hi-tech wheels.

The rims consist of a 30 mm medium-profile extrusion, the sides of which are ground. The HPW hubs feature oversize light alloy bodies and axles and standard Record-class components.

Renowned for their excellent quality, Zonda wheel hubs can also be adjusted with the wheels mounted on the bike.

Radial spoking is used on the front wheel to achieve maximum aerodynamic penetration whereas G3 spoking is used on the rear wheel to optimise power transmission.



HPW front hub



HPW rear hub



G3 7x3 spoking



Front wheel with radial spoking







# **EURUS**

Eurus wheels are born with a racing spirit. Light and reactive, at the same time they are also aerodynamic and fast. The specially machined Eurus 30 mm rims weigh in at 1560 g. The wheels feature HPW oversize hubs together with Record-class components and quick lubrication ports. The spoking sports the Ultralinear design by

Campagnolo. Radial spoking is used on the front wheel to achieve maximum aerodynamic penetration whereas G3 spoking is used on the rear wheel to optimise power transmission.



Rims made lighter by a special machining process



Ultralinear geometry



Self-aligning nut and plate assembly for optimal load distribution



Easy to maintain ultra-light hubs





# **EURUS CARBON**

The new Eurus Carbon wheels are the crème de la crème of Campagnolo's medium-profile range. Light, reactive and aerodynamic, these wheels offer true quality indeed: great lateral and torsional stiffness and a unique balancing of spoke tensions. Eurus Carbon wheels employ the structural carbon hubs from the Bora series.

which proves particularly interesting where the rear wheel is concerned.

In fact the rear hub features an oversize flange on the right side which enhances the performance of the G3 spoking and Ultralinear geometry used. The wheels weigh a nominal 1520 g.



Front hub in structural carbon with variable thickness



Rear hub in structural carbon with variable thickness, with oversize flange



Rim with new "Silver" finish



Butted aero spokes with Ultralinear geometry

# HIGH-PROFILE WHEELS



# **HIGH-PROFILE WHEELS**

These wheels are destined to sheer speed, where hundredths of a second make all the difference. Aerodynamics and total power transmission... all the rest comes next. Every wheel component has been designed to provide the best aerodynamic penetration and the best transmission of leg power. It is not a coincidence that this range only features high-profile wheels or disc wheels. Shapes that offer a high stiffness coefficient and a low aerodynamic penetration index.



Bora wheel profile

Campagnolo's high-profile wheels are built with utmost attention given to detail. They are assembled by hand and monitored scrupulously throughout the manufacturing process. In fact, once they are assembled, they are checked carefully for dish and lateral and vertical trueness by means of special instruments. Once the check is complete, the wheels are subjected to a running-in period that sets each individual wheel component. An additional check for dish and trueness follows, forming the basis for wheel acceptance or otherwise by Campagnolo's Quality Control Department.







#### **BORA**

Bora wheels are the prime of wheels designed for speed. Perfect aerodynamics and extensive power transmission, combined with extraordinary lightness, make them the benchmark wheels for leading racing professionals.

The 50 mm rims are made from structural carbon which imparts great lightness and stiffness. The hubs, made from structural carbon of variable

thickness and sporting spherical surfaces, feature Record-class components with a light alloy axle and freewheel body and titanium pawl carrier. The rear hub features an oversize aluminium flange on the right side which enhances the characteristics of the G3 spoking.

Radial spoking and G3 spoking are used on the front and rear wheels respectively. The nominal weight is slightly greater than 1300 g.



High-profile rim for maximum aerodynamics



Front hub in structural carbon with variable thickness



Rear hub in structural carbon with oversize flange



Special brake pads for Bora braking surfaces







# **GHIBLI**

Ghibli wheels are the disc wheels par excellence.

They were designed by the wind to excel in races against time, where every hundredth of a second counts. Maximum aerodynamics, maximum lightness and maximum stiffness these are what make Ghibli wheels so special.

Ghibli is the one and only wheel of its kind: it features a tensile-structure design adapted from aerospace technology that confers exceptional power transmission while imparting extraordinary lightness. The oversize hub is specific to Ghibli. Ghibli wheels are also available in track versions.



Record-class oversize hubs for Ghibli wheels, in road and track versions

# **PISTA**

Pista wheels were designed with only one objective in mind: to convert the track racer's energy into pure and simple speed. In track events, weight is of relative importance. The difference is made by the wheel's ability to transmit the cyclist's power completely. With such a theory in mind, our

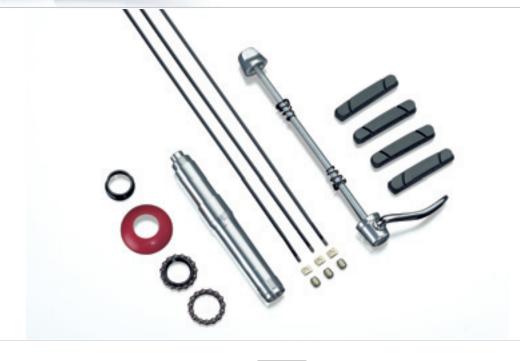
engineers created an extremely stiff high-profile rim and a spoking pattern that yields the utmost in power transmission. This is how Campagnolo's Pista was born.



High-profile rim with 20-hole spoking on the front and 24-hole spoking on the rear

SPARE PARTS
SPARE PARTS







Campagnolo cables and housing to get the most out of your components

## ORIGINAL SPARE PARTS BY CAMPAGNOLO

Campagnolo wheels and components are not at all disposable but can and should be subjected to maintenance. This is why Campagnolo boasts an extensive assortment of spare parts that are distributed through an efficient capillary network across the world. Campagnolo wheels and

components are part of an integrated project where each component has been studied and designed to interface readily with all the rest. The only way to obtain the most from Campagnolo components is to use original spare parts. Brake pads, spokes, bearings, sprockets, Ergopower hoods... these are but a few of the many articles available as spares. All our distributors across the world stock Campagnolo originals. In this way, wherever

you are, we can assure you the spare parts service and longlasting performance that is Campagnolo.

The Campagnolo spare parts catalogue, updated in real time, is available on line at www.campagnolo.com.

#### **CABLES AND HOUSINGS**

All Campagnolo components are part of a unique integrated project. Every component is designed and realized to interact at one with the remaining components.

The objective is to provide better-quality performance. Campagnolo cables are no exception. On the contrary, precisely because these provide the link between one component and another, the cables must be

designed to interface solely with the components they connect. Campagnolo cables employ stainless steel inner wires and friction-resistant housings that are lubricated with special grease.

Laboratory testing has shown that this solution provides unparalleled smoothness. Campagnolo cables maintain a constant friction value of 20-22 N at the most critical point, i.e. when the cable is actuated. A truly incredible value

when one considers that some systems produced by other manufacturers exhibit values in the range of 130-140 N. Perfection is only achieved by paying attention to detail of which the Campagnolo cables are but one.





# SUPERLATIVE LUBRICANT

Campagnolo Superlative chain lubricant is without equal.

Campagnolo's Superlative chain lubricant gets right inside the chain, bonds with it at the molecular level and lubricates it like no other lubricant. Result: chain wear is virtually eliminated.

Campagnolo's Superlative chain lubricant is totally synthetic, withstands high temperatures, does not dissolve in water, makes lubrication less frequent and makes the drivetrain run more silently.

The ideal lubricant for those who want top performance from their drivetrain.

#### **TOOLS**

Campagnolo tools are made from the best materials available and are designed specifically for use with Campagnolo components. Unlike the working instruments generally available over the counter, which are a compromise between various products offered by the market, Campagnolo tools are designed and constructed to be used specifically on Campagnolo products. The use of high-grade steel clearly explains why Campagnolo tools are known to last forever.

#### "BIG" CORKSCREW

The Campagnolo corkscrew faithfully reflects the genius of its inventor, Tullio Campagnolo. A really awkward bottle and a corkscrew that wasn't up to the job were the cause of this new stroke of genius that has not been bettered since 1966. The patented system of the telescopic self-aligning cover always places the screw in the central part of the cork. The large screw in hardened steel with a wide and sharp profile

provides maximum grip on the cork and the two large levers enable the corks to be pulled out of bottles of the finest vintages without disturbing the sediments that are typical of such wines.

These technical features and the use of the finest raw materials have made this corkscrew a must, a symbol of genius that is recognized throughout the world.

# MIRO CORKSCREW

The Miro corkscrew is made for trips out of doors.

It combines all the technical features of the "Big" Campagnolo screwdriver in more manageable proportions. Available in the colors: lobster, red and black.



A special transfer sticker shows that the store is part of the Pro-Shop Project and an annual stamp shows that its membership has not lapsed





Each Campagnolo bicycle is issued with the Pro-Shop booklet

#### **PRO-SHOPS**

Campagnolo Pro-Shops are carefully chosen by Campagnolo for their know-how regarding Campagnolo products and for their ability to provide a competent, rapid and efficient after-sales service.

The following requisites are an absolute must for Campagnolo Pro-Shops to be selected:

1. Skilled technical staff employed within the shop. Pro-Shop technicians are highly qualified and participate regularly in specialisation seminars on Campagnolo components and wheels, organized by Campagnolo itself

- 2. The shops must be fully equipped. Pro-Shop workshops are kitted out with all the tools necessary for effecting correct maintenance on a Campagnolo-equipped bicycle
- 3. Customer service. Pro-Shops do not limit themselves to offering a product, but assure a rapid and efficient after-sales service, also availing themselves of Campagnolo's Spare Parts Express Service
- 4. Constant commitment to technical updating. Pro-Shop staff regularly attend meetings and receive technical updates and information via e-mail
- 5. Use of the Pro-Shop logbook. Every bicycle equipped by Campagnolo must be returned to the user accompanied by a Pro-Shop logbook.

The "Worldwide Pro-Shop Project" is fundamental for Campagnolo. Seeing the high technological content of our components, it soon became necessary for us to organise a network of specialised Campagnolo shops all over the world.

Our scope is to bring Campagnolo's expertise right to your door through your trusted Campagnolo Pro-Shop.

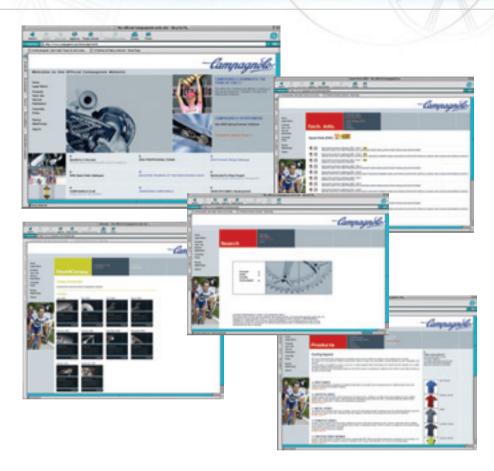
An updated list of Campagnolo Pro-Shops may be found on our website at:

www.campagnolo.com.



The updated list of stores taking part in the Project can be downloaded from the website www.campagnolo.com

# w.campagnolo.com



# WWW.CAMPAGNOLO.COM

The Campagnolo site is a mine of constantly updated information.

Campagnolo.com is graphically very attractive, easy to use and full of information: it covers products, technical information, corporate news, the press office and more sensational packed items such as racing or Mad 4 Campy, the rally of Campagnolo fans. But the most important aspect is the updating: Campagnolo.com is a living site. Each section changes, grows and is enriched with new content daily.

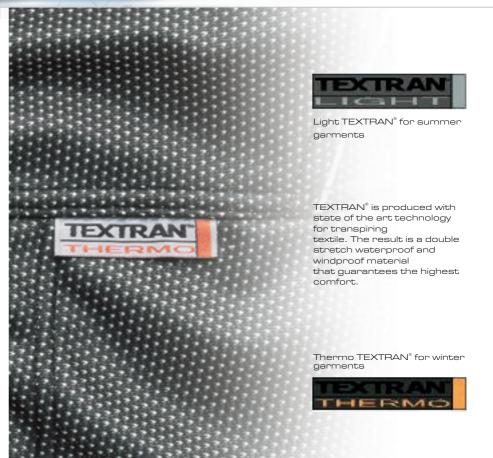
# CYCLING APPAREL COLLECTION 2004/2005 AUTUMN WINTER



Enhanced Pad Project, Textran, Dynaflex Series, Metal Series, Raytech Series, Next Series, Sensation Series, Emotion Series, Multi Season System are registered trademarks of Campagnolo S.r.l.







#### WOMAN MODEL



Seamless pad with thermoregulating foam

Thermoregulating micro capsules that cool by absorbing excess body heat

Permanent antibacterial made with silver

Highly stretchable in lenghway and crossway, anatomical fit and optimal breathability















3 Transpiring

4 Double Stretch (Single Stretch for jackets and vests)



# **NEXT** SERIES MAN





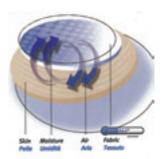
Exclusive photographic imaging



4Ways EPP 3 layer chamois

Jerseys made in Coolmax®Everyday

Fabric dries quickly and moves moisture away from body





Ziplock locking zipper

# NEXT SERIES MAN

# C301

NEXT Waterproof Jacket



# C315

NEXT Light Txn Jacket



# **C317** NEW

NEXT Printed Jersey



# C320

NEXT

Jersey

NEW

C322 (NEW)

Long Sleeve

NEXT Full Zip Jersey







Waterproof and breathable jacket. Taped seams Rainhood with velcro Self containing external waist bag with closure

S · XXL









Jacket made in Light Textran windproof, breathable and stretchable fabric Reflective Logo

S-XXL











Long sleeve jersey made in Coolmax® fabric Optimal breathability and fast moisture transport RECORD print

S-XXL















Long sleeve jersey made in Microfiber winter fabric with Coolmax® Dry faster thanks to Coolmax® Three rear pockets









# **NEXT** SERIES MAN

# C312

NEXT Thermo Bib



# C313

NEXT Thermo Knickers



Six panel bib made in Microfiber winter fabric

Reflective Logo Anatomical EPP with 3 layer chamois

#### S-XXL



BLACK





Bib knickers made in Microfiber winter

Anatomical EPP 3 layer chamois Reflective Logo

#### S-XXL







# C076

NEXT Thermo Txn Man Gloves



Man gloves made in water and windproof Thermo Textran fabric Transfer Logo

#### S-XXL



# TEXTRAN

# C232 NEW

NEXT Overshoes



Overshoes made in thermal material Teflon® water repellency treatment

#### S-XXL





# C124 NEW

NEXT Hood Neck Cover

Microfleece hood with coulisse closure to protect the neck.

#### **ONE SIZE**



# C233 NEW

NEXT Armwarmer



Armwarmer made in thermal, stretchable Microfiber fabric

Teflon® water repellency treatment

# S-XXL













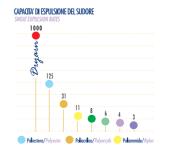
Reflective logos and tapes

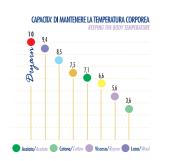




EPP 3 layer chamois with X-Static®

Bibs and shorts with contrasting colored stitchings





# RAYTECH SERIES N

# C106

RAYTECH Interseason Thermo Txn Jacket



#### C191

RAYTECH Convertible Light Tnx Jacket



# C094

RAYTECH Taped Tnx Jacket



# C090

RAYTECH Interseason Light Txn Vest





Jacket made in breathable and windproof Thermo Textran fabric.

Back panel made in thermal Microfiber winter fabric. Reflective Campagnolo tag Front cellular phone pocket Reflective logo and tape

S-XXL







RUBY ZEPHIR JADE



Jacket with Light Textran front panel, windproof, breathable and stretchable fabric. Removable zipped sleeves Back made with jersey fabric Back pocket with zip Reflective Campagnolo tag

S-XXL







RUBY ZEPHIR JADE



Waterproof jacket made in Light Textran, breathable and stretchable fabric Removable sleeves Taped seams Reflective Campagnolo tag

S-XXL

Rainhood with Velcro



GLASS



Vest with Light Textran front panel, windproof, breathable and stretchable fabric Back mesh.

Mesh back pocket with zip Reflective Campagnolo tag









# RAYTECH SERIES

C134 NEW

RAYTECH Wind Shield

### C108

RAYTECH Long Sleeve Jersey



RAYTECH Bicolor Jersey C140 NEW

RAYTECH Knickers











Light windshield jacket "Road like" reflective back tape Self containing external waist bag with closure

S-XXL



Long sleeve jersey made in thermal Microfiber winter fabric Reflective Campagnolo tag Double back pocket. Front cellular phone pocket

S-XXL



Long sleeve jersey made in Microfiber winter fabric Reflective Campagnolo tag Flat colored stitching

S-XXL



Bib Knickers in Polypropylene winter fabric. Flat contrasting stitchings. Reflective tape and tag. EPP 3 layer chamois with X-Static®.









# RAYTECH SERIES

C136 NEW RAYTECH

C141 NEW

RAYTECH No pad Thermo Textran Bib

C110

RAYTECH Interseason Thermo Txn Bib



RAYTECH Interseason Light Txn Bib



RAYTECH Legwarmer Thermo









Bib made in Polypropylene winter fabric Anatomical EPP 3-layer chamois with X-Static® silver fibre Permanent antimicrobial with thanks to X-Static<sup>®</sup> silver fibre

Flat colored stitching

S-XXL











Bib with Thermo Textran front panel Reflective Campagnolo tag Anatomical 3-layer EPP chamois with X-Static® silver fibre, permanent antimicrobial Reflective insert on the ankle

S-XXL





Six panel bib. Front made in Light Textran windproof, breathable and double stretchable fabric. Back made in Polypropylene. Reflective Campagnolo tag Anatomical 3-layer EPP chamois with X-Static<sup>®</sup>. Reflective insert on the ankle.

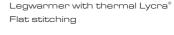
S-XXL













# RAYTECH SERIES MAN

# RAYTECH SERIES

# C186

RAYTECH Armwarmer Thermo

# C137

RAYTECH Thermo Glove

# C189

RAYTECH Overshoes

# C401

RAYTECH Thermo Txn Overshoes













Armwarmer with thermal Lycra® Flat stitching

S-XXL



Gloves made in Thermo Textran Reflective piping Watch window

S-XXL



RUBY ZEPHIR JADE





Overshoes made in water and windproof Light Textran fabric

S-XXL

Back reflective tape



BLACK



Overshoes made in water and windproof Thermo Textran fabric

Reflective tape on the front seam Reflective back velcro closure Flat stitching

S-XXL



BLACK







Zip with neck protection

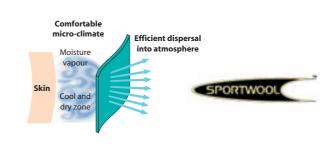




EPP three layer chamois with Cool Pad®

Reflective and stretching pipings

Electrically attracts moisture vapour from your skin





# METAL SERIES MA

# C200

METAL Light Txn X-S Waterproof Jacket



#### C040

METAL Thermo Txn Jacket



METAI Txn Windshield Jacket

# C056

METAI Color Thermo Txn Jacket





Waterproof jacket with removable insert External: Light Textran breathable, waterproof and stretchable

Internal: removable insert with silver fibre Permanent antimicrobial, antistatic and thermo-regulating

Self-containing back pocket. Taped seams Bottom with Campagnolo silicon gripper Stretchable and reflective piping

S-XXL



TITANIUM





Jacket made in Thermo Textran, windproof, breathable and stretchable Internal flap

Bottom with Campagnolo silicon gripper Back pocket with reflective insert Stretchable and reflective piping

S-XXL











Jacket made in Light Textran windproof fabric, breathable and stretchable Internal flap

Double back pocket with gripper. Bottom with Campagnolo silicon gripper Zip with neck protection Stretchable and reflective piping

3M Scotchlite™

S · XXL

















Jacket made in ThermoTextran windproof,

Bottom with Campagnolo silicon gripper

Cuff zipper. Back pockets and cellular

breathable and stretchable fabric

Neck closure with coulisse.

phone pocket on left arm





HERMAN

# METAL SERIES MA

# COOS

METAL Txn Windshield Vest C205 NEW

METAL X-S Jersey

# C201

METAL X-S Wool Long Sleeve

(NEW) C204

METAL Long Sleeve Jersey







Long sleeve jersey made in X-Static®

Permanent antimicrobial thanks to





Vest made in Light Textran windproof, breathable and stretchable fabric Internal flap. Drawcord sleeve closure with ministopper. Drawcord waist closure. Stretchable and reflective piping. Bottom with Campagnolo silicon gripper.

S-XXL





Zip with neck protection



3M Scotchlite™











RED COPPER



silver fibre

S-XXL

X-Static® silver fibre

Triple back pocket

Long sleeve jersey made in Merinos wool Maintains the natural micro-climate X-Static® panels with silver fibre Permanent antimicrobial, antistatic and thermo-regulating Waterproof triple back pocket

S-XXL









S-XXL



stretchable fabric.

Triple back pocket



ZIRCONIUM

Long sleeve jersey made in Microfiber

# METAL SERIES MA

# C042

METAL Thermo Txn Bib Pants



# C043

METAL Light Txn Bib Pants

# C043b

METAL Light Txn Bib Pants No Pad

# C044

METAL Light Txn Knickers



# **CO88**

METAL Thermo Textran Balaclava



Balaclava made in water and windproof Thermo Textran fabric Adjusting closure with coulisse

## M-L



TEXTRAN

# C081

METAL Light Textrar Cap



Under helmet cap made in water and windproof Light Textran fabric

# ONE SIZE



Bib pants made in Thermo Textran fabric, 6 panel construction

Anatomical 3-layer EPP chamois with Cool Pad®

Reflective insert on the ankles Stretchable and reflective piping

#### S-XXL















6 panel construction

Cool Pad®

S-XXL

ZIRCONIUM

Bib pants made in Light Textran fabric,

Anatomical EPP 3-layer chamois with

Stretchable and reflective piping





Bib knickers in Light Textran fabric Anatomical EPP 3-layer chamois with Cool Pad® Silicon ankle gripper with Campagnolo

logo











# METAL SERIES MAN

# C082

METAL Thermo Textran Headband



Headband made in water and windproof Thermo Textran fabric Reflective tape on the back

M-L



TEXTRAN





Legwarmer made in water and windproof Light Textran fabric with Lycra® Zip ankle closure

ONE SIZE



# C404

METAL Thermo Txn Mask



Facemask made in water and windproof Thermo Textran fabric Adjusting closure with velcro

#### ONE SIZE



TEXTRAN

# C096A

METAL Legwarmer



Legwarmer with Lycra® Flat stitching

# S-XXL





# **CO86**

METAL Light Textran Armwarmer



METAL Armwarmer







Armwarmer made in water and windproof Light Textran fabric with Lycra®

S-XXL

Armwarmer with Lycra® Flat stitching















Fabric dries quickly and moves moisture away from body



3 layer EPP Fusion chamois with Cool Pad®

Multipanel fit without central seams







Air Pocket Gear system

# DYNAFLEX SERIE

C514 NEW

DYNAFLEX Thermo Jacket C511

DYNAFLEX Jacket

C506 NEW

DYNAFLEX Combi Jersey









Jacket made of breathable, stretchable, waterproof thermal Nylon

Shoulder zippered ventilation openings APGs

Seamless protection on elbows Reflective inserts on forearm and back

S-XXL















Jacket made of breathable, stretchable and waterproof Nylon.

Reflective inserts on back and elbows Zippered ventilation openings on back and shoulders

Back zipped pocket

S-XXL



CARBON PLATINUM







Long sleeve jersey made in Polypropylene Rapid Dry®

Back pocket with pull-out windshield jacket Back reflective tape













# DYNAFLEX SERIES

C508 NEW

DYNAFLEX Waterproof Bib Pants



C509 NEW

DYNAFLEX Thermo Fusion Bib Pants



C512 NEW

DYNAFLEX Thermo Gloves



C513 NEW



Overshoes made in thermal stretchable Nylon. Reflective mesh and reflective stretchable piping. Reinforced with stretchable Kevlar® on the sole

S-XXL















C184

DYNAFLEX Overshoes



Overshoes made of honeycomb Lycra with Moovix<sup>®</sup>. Double stretchable mesh Reflective mesh and stretchable piping Reinforced with Keylar®

S-XXL











Bib made in waterproof Light Textran Taped seams EPP Seamless Fusion chamois with Cool Pad®

S-XXL



CARBON





Bib made in Thermo Textran Flat stitching EPP Seamless Fusion chamois with

Cool Pad® S-XXL

CARBON TITANIUM

TEXTRAN COOL PAD FUSION

Gloves made in Thermo Textran Stretchable mesh on fingers Reflecting piping







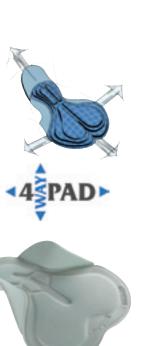
















# breathe

Jacket with breathable fabric



Reflective and stretching piping

C170 NEW

WOMAN

**EMOTION** Thermo Txn Jacket

### C160

**EMOTION** Woman Jacket C171 NEW

**EMOTION** Woman Long Sleeve Jersey C173 NEW

**EMOTION** Woman Bib Pants











Jacket made in Thermo Textran Reflective piping Double zippered pocket

XS-XL







Jacket made of breathable and waterproof Tactel® Nylon. Reflective piping Bib made in thermal stretchable Microfiber winter fabric Contrasting stitching

S-XXL









breathe

Long sleeve jersey Microfiber winter fabric Double back pocket

XS-XL









Bib made in thermal stretchable Microfiber winter fabric

Contrasting stitching

Anatomical stretchable EPP 4ways 3-layer chamois

XS-XL





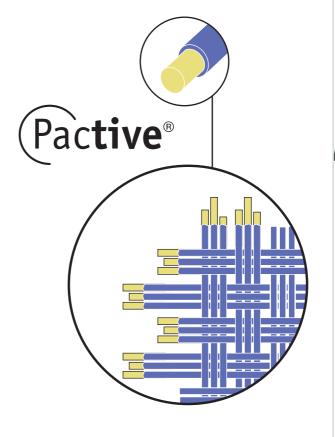














Reflective and stretching piping

Jacket made of water repellent ultra light fabric



EPP 3 layer chamois with X-Static®



Flat stitchings for bibs and pants

CO79 NEW

SENSATION Ladv Liaht Jacket

# C070

SENSATION Lady Long Sleeve Thermo Light





XS-XL





Windshield light jacket

Reflective piping

Self containing back pocket

Long Sleeve woman jersey made in microfiber winter fabric. Side opening with zip. Side pockets.

XS-XL









## C071

SENSATION Lady Convertible Pants

Bib pants made in thermal Microfibre Back reflective tape Removable suspenders Ankle zip closure Anatomical woman specific EPP 3-layer chamois with X-Static® Permanent antimicrobial thanks to X-Static® silver fibre

XS-XL











C175 (NEW)

SENSATION Lady Light TXN Bib Pants

Bib with Light Textran front panel Back panel in Polypropylene winter Anatomical EPP 3-layer chamois with X-Static®

XS-XL





EPP HERIKAN









SENSATION Lady Thermo Headband



Headband made in thermal stretchable Microfiber winter fabric

ONE SIZE





ZIRCONIUM TITANIUM

#### C076D

SENSATION Lady Thermo Txn Gloves



Woman gloves made in water and windproof Thermo Textran fabric

XS-XL







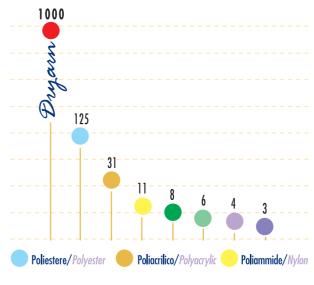


111-2411-2524

# C228 C403 C229 148

# CAPACITA' DI ESPULSIONE DEL SUDORE

SWEAT EXPULSION RATES





Seamless Polypropylene construction



Seamless Jacquard jerseys made with Polypropylene and X-Static® silver fiber

Polypropylene net with front Light Textran protection





Jerseys and socks made in X-Static® silver fiber thermoregulating and permanent antibacterial

# MULTI SEASON 5Y

## C228

M.S. SYSTEM Jacquard Long Sleeve



#### C227

M.S. SYSTEM Seamless X-S Long Sleeve



Jersey with Polypropylene

+ X-Static®

Underarm area with

X-Static®

Jacquard Logo

Seamless construction

XS-XXL



VISITIC SEAMLESS

## C229

M.S. SYSTEM Seamless X-S Boxer



Boxer with Polypropylene + X-Static® Seamless construction Jacquard Logo

XS-XXL





Long sleeve stretchable jersey with

Underarm made in X-Static® silver fibre

X-Static® + Polypropylene

Seamless construction

S-XXL

TITANIUM



XSTATIC SEAMLESS

## C402 NEW

M.S. SYSTEM X-S Overall Jersev



#### C028

M.S. SYSTEM Jacquard Long Sleeve



Long sleeve shirt in Polypropylene and Polyester double layer fabric. Keeps the body dry and regulates body temperature. Flat stitching

S-XXL



TITANIUM

## C027

M.S. SYSTEM Jacquard T-Shirt

T-shirt in Polypropylene and Polyester double layer fabric Keeps the body dry and regulates body temperature. Flat stitching

S-XXL



TITANIUM

Long sleeve jersey made in X-Static® silver

Permanent antimicrobial thanks to

X-Static® silver fibre Flat stitching

Neck opening with zip

S-XXL



Xslalic

# MULTI SEASON SY

# C100

M.S. SYSTEM Windshield Jersev



Jersey with Polypropylene net

Flat stitching

S-XXL

OXIDE

Front wind protection in Light Textran

## C098

M.S. SYSTEM Windshield Sleeveless



Sleeveless jersey with Polypropylene net Front wind protection in Light Textran Flat stitching

S-XXL



OXIDE

TEXTRAN

# C121

M.S. SYSTEM Seamless Net Jersey



XS-XXL



OXIDE





# C120

M.S. SYSTEM Seamless Net Sleeveless



C131 NEW

M.S. SYSTEM T-Shirt



S-XXL



C132 NEW

M.S. SYSTEM System Sleeveless



Underwear sleeveless jersey Flat stitching

S-XXL



Sleeveless jersey with Polypropylene stretchable net. Seamless construction.

S-XXL



**SEAMLESS** 

# MULTI SEASUN SYSTEM

# C403

M.S. SYSTEM X-S 2P Socks



\_ Socks made in X-Static® silver fibre and Polypropylene Permanent antimicrobial and thermo-

regulator thanks to X-Static® silver fibre

Front mesh

S-XXL







## C231 NEW

M.S. SYSTEM Thermo Net Socks



Socks made in Thermolite® fibre Net mesh

#### S-XXL



## TITANIUM



## C035

M.S. SYSTEM Thermo Socks



Thermal socks

Keeps the dry and regulates temperature. Front mesh

Sole gripper

## S-XXL



#### ZIRCONIUM



# C036

M.S. SYSTEM Light Socks



C102 NEW

M.S. SYSTEM No Friction Socks



No friction socks Protect toe and heel from friction Net mesh

#### S-XXL





## C230 NEW

M.S. SYSTEM C-Max Socks



Coolmax® socks Dry faster

## S-XXL



OXIDE

Socks made in special fabric cotton Fast wicking of sweat towards the outside. Keeps dry Front mesh

S-XXL

Sole gripper



















X-static® is a high performance fiber

system made with pure silver. Silver is

The new, in 4 ways stretchable cycling pad out of micro fine polyester filament is a special laminate. This high tech product guarantees for the following properties: highly stretchable in lenghways and crossways, anatomical fit. an optimal breathability provides the build up of heat, excellent moisture transport, durable hygienic, easy care, washable at 40°C

Superior moisture management properties. It dries faster than competitive fabrics. Proven to reduce body temperature and to lower heart rate. Surpasses competitive fabrics in comfort index rating. Meets the highest DuPont standards for performance certification

® DUPONT REGISTERED TRADEMARK USED UNDER LICENCE BY DUPONT SABANCI

The Cool Pad™ is a first in multifunctional cycling seat pads containing ComforTemp® foam for added seat comfort and protection. ComforTemp® foam incorporates Thermoasorb® micro capsules which cool by absorbing excessive body heat produced during rigorous activity. The permanent Hygienic® protection fabric of the Cool Pad™ combats perspiration odors and protects against bacterical attack

® REGISTERED TRADEMARK OF CHR. ESCHLER AG

The fabric has been treated with a lt Keeps the body dry. Transferring polyurethane coating containing thousands of tiny pores invisible to the naked eye. This microporous coating keeps out wind and rain, while allowing perspiration to escape freely at all times

perspiration to the exterior

nautrally antimicrobial, enabling X-static® to safely inhibit the growth of odorcausing bacteria and fungi in this product. Silver also has the best possible thermodynamic properties, so you will stay cooler in the summer and warmer in the winter. X-static® is safe and natural and will last for the life of the product.

® REGISTERED TRADEMARK OF NOBLE FIBER TECHNOLOGIES, INC.

® REGISTERED TRADEMARK OF CHR. ESCHLER AG







® REGISTERED TRADEMARK OF UCB



® BY CORTESSE



High-grade protection against UVA and UVB thanks to Meryl® Microfibre, a fiber that uses titanium to create an UV filter With its great opaqueness Meryl® Microfibre is a highly effective filter against the sun rays.

Seamless model with CoolPad® thermo regulating foam inside.

This permanent Hygienic® protection prevents the propagation of undesirable bacteria. Fabric damage and unpleasant odors are prevented. The result is a cleaner, more comfortable garment.

Decades of research are making their mark: schoeller®-keprotec®, the high-tech fabric meets the higest requirements in terms nf tear resistance and durability and offers maximum protection.

Pittard Hairsheep selection ensure the characteristic beauty of look and feel but with high tensile strength even at the lightest substance.

Dry skin and comfort in all climates. Super light fabric (from the lightest fiber in nature). Stain resistant, completely aseptic, anallergic, 100% recyclable. Easy to wash and dry.

® REGISTERED TRADEMARK BY NYLSTAR CD

® REGISTERED TRADEMARK OF SHOELLER TEXTIL AG ® REGISTERED TRADEMARK OF PITTARD PLC

@ REGISTERED TRADEMARK ΔΩΙΙΔΕΙΙ ΔΩΠΙΔ ΙΤΔΙΥ



Total comfort, high stretch and com-

pression in all directions. Improves skin



Greatly enhances your safety at night

and in bad visibility situations by creating

an extremely bright image that

motorists are able to see even from



Pittard Hairsheep selection ensure the characteristic beauty of look and feel but with high tensile strength even at the lightest substance.

Sportwool electrically attracts moisture

vapour molecules away from your skin

and expels them out to the atmosphere.

This maintains the natural, comfortable

micro-climate next to your skin. For best

results always check the care

@ SPORTWOOL BEGISTERED TRADEMARK

OF THE WOOLMARK COMPANY

instructions



Engineered hollow-core fiber technology

creates a lightweight, insulating layer of

warm air Warmer than other fabrics at



breathing and quickly removes sweat. Strong and adherent. Micromassage action on the skin. Sanitizer® anti-bacteria treatment quarantees a total hygiene.

® REGISTERED TRADEMARK OF INDUSTRIA CENTENARI E ZINELLI spa

@ 3M REGISTERED TRADEMARK

long distances

® REGISTERED TRADEMARK BY NYLSTAR CD





Lycra® in sportswear adds: performance through its technology, comfort, ease of movement and shape retention

Teflon® provides maximum water and stain repellence without affecting breathability of the fabric.

The Tactel® range adds the essential practical benefits demanded nowadays:

softness, lightness, strength, easy care and versatility.

® TACTEL IS A REGISTERED TRADEMARK OF INVISTA FOR TACTILE AND AESTHETIC SPECIALTY FIBERS AND FABRICS

® LYCRA IS A REGISTERED TRADEMARK OF INVISTA PREMILIM STRETCH FIBERS AND FARRICS.

® DUPONT REGISTERED TRADEMARK

157

Pactive© is based on a carefully thought-out technology to provide its many different functions permanently. The new characteristics: fibers with

Pactive are encased within an intelligent sleeve, which protects the fabric permanently against the loss of its special properties. Pactive can be folded down very compactly.

® DI IPONT REGISTERED TRADEMARK

equal weight.

® REGISTERED TRADEMARK BY PLOLICQUET

# LA GARANTIE CAMPAGNOLO SPORTSWEAR

Congratulations for purchasing a product of Campagnolo Sportswear S.r.l. (hereinafter "CAMPAGNOLO SPORTSWEAR").

Should your product be defective, it will be repaired or substituted, in accordance to what set forth in this warranty (hereinafter the "Warranty") within 30 (thirty) days from receipt of the product by CAMPAGNOLO SPORTSWEAR.



#### OBJECT

Products covered by this Warranty are all CAMPAGNOLO SPORTSWEAR's products bearing the Campagnolo trademark and listed in CAMPAGNOLO SPORTSWEAR's catalogues (hereinafter the "Products") sold on the market, in Italy and abroad, by CAMPAGNOLO SPORTSWEAR's resellers. CAMPAGNOLO SPORTSWEAR warrants, in accordance to what set forth in this Warranty, that the Products are free from defects in materials and workmanship.

This Warranty does not affect the consumer's rights towards the seller provided for under the applicable national legislation on sale of consumer goods (for purchases made in Italy, articles 1519 bis and following of the Italian Civil Code).



#### **FORFEITURE OF WARRANTY**

This Warranty shall apply only in favour of the first purchaser end-user of the Product (hereinafter the "Customer"), is not assignable and shall automatically cease to be effective as soon as the Product is transferred by the Customer to any third party.

This Warranty shall also not apply in case of non-compliance by the Customer with the Product's maintenance and washing instructions given by CAMPAGNOLO SPORTSWEAR or attached to the Product. Customer shall, subpoena of forfeiture, immediately report the existence of any defects in the Products by giving written notice thereof - within 60 (sixty) days from the date in which the defects have been (or should have been) discovered – to CAMPAGNOLO SPORTSWEAR's reseller who sold the defective Product to the Customer (hereinafter the "Reseller").



#### TERMS AND DURATION OF THE WARRANTY

This Warranty shall remain in full force and effect for a period of 2 years from the date in which Customer has purchased the Product.



## CONTENTS OF THE WARRANTY

Any weights, measures and dimensions as well as any other data contained in CAMPAGNOLO SPORTSWEAR's catalogues or provided to the Customer will be for information purposes only and will not be binding upon CAMPAGNOLO SPORTSWEAR if not accompanied by an express warranty or undertaking on its part.

in particular, any warranty by CAMPAGNOLO SPORTSWEAR regarding the technical and/or functional characteristics of the Products is excluded, unless such characteristics are the object of an express written warranty.

Should the existence of any defects covered by this Warranty be acknowledged by CAMPAGNOLO SPORTSWEAR, Customer shall be entitled to have -at CAMPAGNOLO SPORTSWEAR's discretion - the defective Product repaired and/or replaced free of charge, save for the relevant transport costs, which will be for the Customer's sole account.

Warranty on Products repaired or substituted according to the preceding paragraph shall remain in force until expiry of the original term of Warranty granted in relation to the defective Product initially purchased by the Customer.

CAMPAGNOLO SPORTSWEAR shall at any time and at its reasonable discretion be entitled to cease or suspend the production of certain Products as well as to modify the relevant technical specifications without it being obliged to incorporate such modifications in the Products already sold to Customer, even when such Products are returned to CAMPAGNOLO SPORTSWEAR due to defects covered by the Warranty.

This Warranty is the only warranty granted by Campagnolo Sportswear to the Customer, any other warranty, intervention and remedy as well as any responsibility for contractual and extra-contractual, direct, incliental or consequential damages being, to the extent permitted by law, expressly excluded and waived by the Customer.

CAMPAGNOLO SPORTSWEAR's resellers, agents and employees have not been granted any power to modify or in any way extend this Warranty.



#### CONDITIONS OF VALIDITY OF THE WARRANTY

The validity and effectiveness of this Warranty is conditional upon presentation by the Customer to the Reseller of: (a) a copy of this Warranty endorsed and stamped by the Reseller and duly signed by the Customer (also for acceptance of clauses under articles 1341 and 1342 of the Italian Civil Code) and (b) a short relation describing the nature of the defect and the maintenance and washing methods adopted by Customer, as well as upon (c) delivery to the Reseller of the asserted defective Product together with the relevant receipt and/or invoice attesting the date of purchase of the Product.



#### **EXCLUSION OF THE WARRANTY**

This Warranty only applies to original defects of the Products.

Therefore, this Warranty does not apply to defects of the Products deriving from transport, modifications, repairs or interventions carried out on the Products, negligent or improper use, lack of maintenance, non compliance with the washing instructions provided for by CAMPAGNOLO SPORTSWEAR, accidents, normal wear and tear and any other cause not ascribable to an original defect of the Product.



#### FINAL CLAUSES

This Warranty shall be governed and construed in accordance with the Italian law.

Any dispute concerning this Warranty or the usage of the Products shall be submitted to the exclusive jurisdiction and sole venue of the Courts of Vicenza, Italy.

Should any of the provisions of this Warranty be declared null and void or contrary to the applicable law, the remaining portions thereof shall continue in full force and effect.

Campagnolo Sportswear S.r.l.	The Reseller	The Customer
(stamp and signature)	(stamp and signature)	(signature)

Customer further states and declares to expressly approve, for the purposes and to the extent provided for by Articles 1341 and 1342 of the Italian Civil Code, the provisions contained in the following articles of this Warranty: 2 (Non-assignability and Forfeiture); 4 (contents and limitation of the Warranty); 5 (Conditions of validity of the Warranty); 6 (Exclusion of the Warranty); 7 (Governing Law and Competent Jurisdiction).

The Custome	٢
(signature)	

#### PERSONAL DATA PROCESSING (Law no. 675/96)

For the purposes and to the extent of Law no. 875/98 the undersigned declares he has received the information note provided for by articles 10 and 13 of the above mentioned law and has taken due note of the rights granted thereby. Therefore, the undersigned gives its unconditional acceptance to the processing, communication and diffusion in Italy and above of its personal data, including any "sensible data" to the extent that such data is used for the purposes of filing, processing or registering the same in the company files or for operational and promotional purposes, the transmission of commercial and technical information, the conduct of marketing surveys and in particular, without limitation, for all uses which may be deemed appropriate to guarantee greater protection and safety of the Product.

i ne Lustomer
(signature)

#### DISTRIBUTORS

#### AUSTRALIA

#### De Grandi Cycle & Sport

419 Moorabool

Street 3220 Geelong - Victoria Australia Tel. 0061 352215099 - Fax 0061 352223850

#### BELGIUM

#### Action Sports

Allée des Cerisiers 25 4840 Welkenraedt - Belgium

Tel. 0032 878997 - Fax 0032 87988771

#### CANADA

#### Cycles Marinoni Inc.

1067 Levis Lachenaie

J6W 4L2 Quebec - Canada

Tel. 001 450 4717133 - Fax 001 450 4719887

#### HOLLAND

#### E.R.P.

219 ws. Oosteinderwea

1432 AS Aalsmeer - Nederland

Tel. 0031 297321804 - Fax 0031 297321804

#### **JAPAN**

#### Nichinao Shokai

6-16-8 Sotokanda Chyodaku

00101 Tokyo - Japan

Tel. 0081 3 38326251 - Fax 0081 3 38326266

#### Kawashima Cycle Supply Corporation

3-3-16 Kitasho-cho, Sakai 00590 0007 Osaka - Japan

Tel. 0081 722 381557 - Fax 0081 722 386213

#### Yagami Corporation

151 Chome, Sakurayama-Cho, Showa-Ku

- 466-0044 Nagova - Japan

Tel. 0081 528533281 - Fax 0081 528421533

#### KOREA

AMPAGNIOLO IN THE WORLD

#### OD. Bike Inc.

380-14 Sungnae-Dong, Kangdong-Ku 134-030 Seul - Korea

Tel. 0082 2 4740818 - Fax 0082 2 4740656

#### TAIWAN

#### Coolmax International Ltd Taiwan Branch (H.K.)

No. 42, Alley 30, Lane 300, Sec. 2,

Jhong Hua S. Rd. Tainan City 702, Taiwan Tel. 00 886 6 265 6001 - Fax 00 886 6 265 1388

#### UNITED KINGDOM

#### Jim Walker & Co.

Unit 1. Pacemanor Business Centre, Brookside

TN221YA Uckfield - East Sussex - UK

Tel. 0044 1825 762400 - Fax 0044 1825 762455

#### USA

#### Ochsner Int., Inc.

246 East Marguardt Drive

60090 6430 Wheeling - Illinois - U.S.A.

Tel. 001 847 4658200 - Fax 001 847 4658282

#### Quality Bicycle Products Inc.

6400 West 105th Street

55438 2554 Bloominaton - MN, U.S.A.

Tel. 001 952 941 9391 - Fax 001 952 941 9799

# **AGENCIES**

#### ITALY GERMANY FRANCE AUSTRIA SWITZERLAND SPAIN

#### Campagnolo Sportswear srl

Via dell'Economia 103

36100 Vicenza - Italy

Tel. 0039 0444288960 - Fax 0039 0444289557

info@campagnolosportswear.it

## EAST EUROPE

#### Firma Gallizia

10 Oktoberstrasse 7 9800 Spittal/Drau - Austria

Tel. 0043 47622275 - Fax 0043 47622275

#### **SCANDINAVIA**

#### Marker Scandinavia

Assendlosevej 29

4130 Viby - Denmark

Tel. 0045 70228075 - Fax 0045 46498088

# TECHNICAL SPECIFICATIONS LIMITED WARRANTY



SYSTEMS, AND MOST CAMPAGNOLO® COMPONENTS, ARE DESIGNED AS A SINGLE INTEGRATED SYSTEM. TO AVOID COMPROMISES IN TERMS OF SAFETY, PERFORMANCE, DURABILITY, FUNCTION, AND TO PREVENT VOIDING THE WARRANTY, WE RECOMMEND THAT YOU ONLY USE THE COMPONENTS SPECIFIED BY CAMPAGNOLO SRL, WITHOUT INTERFACING THEM WITH OR SUBSTITUTING THEM WITH PRODUCTS MANUFACTURED BY OTHER COMPANIES.

# XENON™ 2005

#### WARNING!

The theories covering rear derailleurs lose value when applied to real-life situations. This is due to a certain number of variables that are beyond our control. The first variable is that the chain can only be lengthened or shortened by two links at a time (106/108/110 etc.), making it impossible for the optimal length to be achieved for each frame. As a result, each time a choice is made, this shall have to be a compromise based on the technical specifications of the chainwheels, front derailleurs and frame dimensions. Further, while emphasising that the relationships between the geometries and dimensions specified by ourselves in accompanying instructions must be observed, the size and geometry of each cage influence the functionality of the various rear derailleur combinations greatly. For this reason the combinations listed in the table below are to be considered merely indicative and must be verified each and every time, depending on the frame on which the components shall actually be mounted.

#### RECOMMENDED COMBINATIONS

- Double or CT crankset + short cage rear derailleur: all Campagnolo sprocket sets except the 13-29
- Double or CT crankset + medium cage rear derailleur: all Campagnolo sprocket sets \*
- Triple crankset + medium cage rear derailleur: all Campagnolo sprocket sets except the 13-29 set
- Triple crankset + long cage rear derailleur: all Campagnolo sprocket sets \*
- \* if compact sprocket sets are used (e.g. 11-23) it may be necessary to keep the chain length shorter than the values indicated in standard assembly instructions.



COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
	short cage	upper to lower pulley-axle: 55 mm	254
<b>XENDN™</b> 9s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	258
	long cage	upper to lower pulley-axle: 89 mm	263
<b>XENDI</b> V™ front derailleur	braze-on / clip-on: 32 mm	for double crankset - capacity 15 - ingr. max 54 - black finish	103
<b>XENON™</b> Triple front derailleur	braze-on / clip-on: 32 mm	for triple crankset - capacity 22 - ingr. max 52 - black finish	118
Ergopower™ <i>XENDI</i> V™		double/triple crankset compatible – composite body and levers	357
<b>XENDIV</b> ™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	249
<b>MIRAGE™</b> rear hub	32, 36 holes	9s/10s - light alloy freewheel body – high quality bearings lockring thread 27x1 - O.L.D. 130 mm	447
<i>MIRAGE</i> ™ UD™ 9s sprockets - steel	12-23, 13-23, 13-26	Ultra-Drive™ - single sprockets - galvanized - supplied without lockring	231
<i>RECORD</i> ™ UD™ C9™chain		9s - Ultra-Drive $^{\text{TM}}$ - "Floating Link Action" $^{\text{TM}}$ - Chrome-Nickel-PTFE finish - 114 links	300
<b>XENDIN™</b> crankset	170, 175 mm	Exa-Drive <sup>™</sup> chainrings – 39-52 - requires b.b. with L. 111 mm	793
<b>XENDI</b> V™ Triple crankset	170, 175 mm	for triple crankset-30-42-52 - Exa-Drive $^{I\!\!M}$ chainings requires b.b. with L. 111 or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	953
SC-S™ bottom bracket	ITA, ENG 111, 115.5 mm	cartridge b.b solid axle - steel cups - axle L. 111 mm for double crankset - axle L. 111 mm for triple crankset with seat tube Ø 28.6 mm - axle L.115.5 mm for triple crankset with oversize seat tube Ø 32 or 35 mm	358
<b>XENDN</b> ™ brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adj. ratio: 42÷52 mm (measured from brake fixing-bolt to brake-shoe-nut)	380
<b>CENTAUR™</b> cable guide plate		to fit under bottom bracket shell - resin	6

# MIRAGE<sup>TM</sup> 2005

COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
<i>MIRAGE</i> ™9s rear derailleur	short cage	upper to lower pulley-axle: 55 mm	269
	medium cage	upper to lower pulley-axle: 72,5 mm	274
	long cage	upper to lower pulley-axle: 89 mm	281
<i>MIRAGE™</i> front derailleur	braze-on / clip-on: Ø 28.6, 32 mm	for double crankset - capacity 15 - max. chainring 54	103
<b>MIRAGE™</b> Triple front derailleur	braze-on / clip-on: Ø 28.6, 32 mm	for triple crankset - capacity 22 - max. chainring 52	118
<b>MIRAGE™</b> Triple per FB front derailleur	braze-on / clip-on: Ø 28.6, 32 mm	for triple crankset - for Ergopower FB™ - capacity 23 - max. chaining 53	118
Ergopower™ <i>MIRAGE</i> ™ 9s		double/triple crankset compatible – composite body and levers - ErgoBrain $10^{\mbox{\scriptsize TM}}$ computer ready	406
Ergopower FB <sup>™</sup> <i>MIRAGE</i> ™ 9s x 2/3		double/triple crankset compatible – alu-composite body - composite brake lever - requires FB front derailleur	340
<b>MIRAGE</b> ™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	249
<b>MIRAGE™</b> rear hub	32, 36 holes	9s/10s - light alloy freewheel body – high quality bearings - lockring thread $27x1$ O.L.D. 130 mm	447

MIRAGE™ 12-23, 13-23, Ultra-Drive™ - single sprockets- galvanized - supplied without lockring	231
Ultra-Unive*** - single sprockets- galvanized - supplied without lockring 25 sprockets - steel	
PS - Ultra-Drive™ - "Floating Link Action"™ - Chrome-Nickel-PTFE finish - 114 links	300
Silver / black   170, 172.5,   Crankset   175 mm   39-53, 42-52   Exa-Drive™ – steel inner chainring - requires b.b. with L. 111 mm   71	13
MIRAGE™ Triple crankset silver / black 170, 175 mm silver / black or 115.5 mm [for oversize seat tube Ø 32 or 35 mm] 30-42-52 - Exa-Drive™ - steel inner chainring - requires b.b. with L 111 or 15.5 mm	69
SC-S™ bottom bracket  ITA, ING 111,115.5 mm  ITA, ING ITA,	158
Steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - metallized finish - left axle compatible with the ErgoBrain™ magnet	125
brakes MIRAGE™ front fixing bolt: brake-pad height adj. ratio: 42÷52 mm (measured from brake fixing-bolt to brake-shoe-nut)	80
CENTAUR™  cable guide plate  to fit under bottom bracket shell - resin	6

 $<sup>\</sup>star$  The indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

# VELOCE<sup>TM</sup> 2005

VELULE			
COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
	short cage	upper to lower pulley-axle: 55 mm	250
<b>VELOCE™</b> 10s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	259
	long cage	upper to lower pulley-axle: 89 mm	263
	short cage	upper to lower pulley-axle: 55 mm	250
<b>VELOCE</b> ™ 9s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	255
	long cage	upper to lower pulley-axle: 89 mm	263
<i>VELOCE</i> ™ 9s/10s front derailleur	braze-on/clip-on: Ø 32, 35 mm	capacity 15 - max. chainring 54	92
<b>VELOCE™</b> 9s front derailleur	braze-on / clip-on: Ø 28.6, 32 mm	capacity 15 - max. chainring 54	93
<b>VELOCE™</b> Tripla front derailleur	9s/10s braze-on/clip-on: Ø 32, 35 mm	capacity 22 - max. chainring 52	100
<b>VELOCE™</b> per FB front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	capacity 15 - for Ergopower FB™ - max. chainring 54	93
<b>VELOCE™</b> Triple front derailleur	braze-on/clip-on: Ø 28.6, 32, 35 mm	capacity 23 - for Ergopower FB <sup>™</sup> - max. chainring 53	100
Ergopower™ <i>VELOCE</i> ™	9s / 10s	double/triple crankset compatible - composite body - anodized lever- ErgoBrain 10 <sup>™</sup> computer ready	402
Ergopower FB™ <i>VELOCE</i> ™ 10s x 2/3	32, 36 holes	double/triple crankset compatible - alu-composite body - aluminium brake lever - requires FB front derailleur	340
<b>VELOCE</b> ™ front hub	32, 36 holes	high quality bearings - O.L.D. 100 mm	249
<b>VELOCE™</b> rear hub	12-23, 13-23, 13-26, 13-28, 14-28	$9s/10s$ - light alloy freewheel body – high quality bearings - lockring thread $27x1$ - O.L.D. $130\ mm$	458
<b>VELOCE™</b> UD™ 9s sprockets - steel	1223, 1225, 1326, 1329, 1423	$\label{eq:likelihood} \mbox{Ultra-Drive}^{\text{TM}} \mbox{-} \mbox{single sprockets - nickel-chromed finish - supplied without lockring}$	231
<b>VELOCE™</b> UD™ 10s sprockets - steel		$\label{eq:Ultra-Drive} \textbf{Ultra-Drive}^{\text{TM}} \text{ - single sprockets - nickel-chromed finish - supplied without lockring}$	250

COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
<i>RECORD</i> ™ C9™ chain		9s - Ultra-Drive™ - "Floating Link Action"™ - Chrome-Nickel-PTFE finish - 114 links	300
<b>RECORD™</b> C10™ chain		10s - Ultra-Drive™ - Chrome-Nickel-PTFE Finish - 114 links - HD-Link™	279
<b>VELOCE</b> ™10s crankset	170, 172.5, 175 mm 39-53, 42-52	Exa-Drive™ chainnings - requires b.b. with L. 111 mm	659
<b>VELOCE™</b> 9s crankset	170, 172.5, 175 mm 39-53	Exa-Drive <sup>™</sup> chainnings - requires b.b. with L. 111 mm	659
<b>VELOCE™</b> Triple crankset	9s / 10s 170, 175 mm	30-42-52 - Exa-Drive™ chainrings - requires b.b. with L. 111 or 115.5 mm (for oversize seat tube Ø 32 or 35 mm)	731
AC-S™ bottom bracket	ITA, ING 111, 115.5 mm	cartridge b.b solid axle - light alloy cups - axle L. 111 mm for double crankset - axle L.111 mm for triple crankset with seat tube Ø 28.6 mm - axle L. 115.5 mm for triple crankset with oversize seat tube Ø 32 or 35 mm	299
<b>CENTAUR™</b> Pro·Fit PLUS™ pedals		steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - metallized finish - left axle compatible with the ErgoBrain™ magnet	325
<i>VELOCE</i> ™ brakes	front fixing bolt: 13,5-18,5-24 mm	brake-pad height adjustment ratio: 42÷52 mm (measured from brake fixing-bolt to brake-shoe-nut) - black anodized shoe-holder - brake pads orbital adjustment	368
<b>CENTAUR™</b> cable guide plate		to fit under bottom bracket shell - resin	6

<sup>\*</sup>The indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

# CENTAUR™ 2005

LENIAL			
COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
	short cage	upper to lower pulley-axle: 55 mm	223
<b>CENTAUR™ 10</b> s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	229
	long cage	upper to lower pulley-axle: 89 mm	241
<b>CENTAUR™</b> front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	9s/10s - for double crankset - capacity 15 - max. chainring 54 - antifriction insert	85
<b>CENTAUR™</b> CT™ front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	$9s/10s$ – for $CT^{\sc tot}$ crankset - capacity $16$ – max. chaining $50$ - antifriction insert	94
<b>CENTAUR™</b> Triple front derailleur	braze-on / clip-on: Ø 32, 35 mm	9s/10s - for triple crankset - capacity 22 - max. chainring 52	98
<b>CENTAUR™</b> FB front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	10s – for Ergopower FB™ - for double crankset - capacity 15 – max. chainring 54 - antifriction insert	87
<b>CENTAUR™</b> FB Triple front derailleur	braze-on / clip-on: Ø 32, 35 mm	10s - for Ergopower FB™ - for triple crankset - capacity 23 - max. chainring 53	99
<b>CENTAUR™</b> CT™ for FB front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	10s - for Ergopower FB™ - for CT™ crankset - capacity 16 - max. chainring 50 - antifriction insert	95
<i>CENTAUR</i> ™ 10s Ergopower™		double/triple crankset compatible – composite body - anodized lever-lightened shifting levers - ErgoBrain $10^{\rm M}$ computer ready	399
<i>CENTAUR</i> ™ 10s x 2/3 Ergopower FB™		double/triple crankset compatible - alu-composite body - leva freno alluminio - requires FB front derailleur	327
<b>CENTAUR™</b> front hub	32, 36 holes	light alloy axle and body - adjustable bearings - O.L.D. 100 mm	200
<b>CENTAUR™</b> rear hub	32, 36 holes	9s/10s - light alloy body, axle and freewheel body – adjustable bearings lockring thread $27x1$ - O.L.D. 130 mm	332
<b>CENTAUR™</b> UD™ 10s sprockets - steel	11-23, 12-25, 13-26, 13-29	Ultra-Drive $^{\rm IM}$ - nickel-chromed finish - light alloy carrier "macro" spacers supplied without lockring	233
<i>RECORD</i> ™ C10™ chain		10s - Ultra-Drive™ - Chrome-Nickel-PTFE Finish - 114 links - HD-Link™	279
<b>CENTAUR</b> ™10s crankset	170, 172.5, 175 mm 39-52, 39-53, 42-52	Ultra-Drive™ chainnings - requires b.b. with L. 111 mm	646
CENTAUR™10s Carbon crankset	170, 172.5, 175 mm 39-52, 39-53, 42-52	composite cranks - Ultra-Drive $^{\text{\scriptsize IM}}$ chainrings - requires b.b. with L. 111 mm	579

COMPONENT	OPTIONS	DESCRIPTION	Indicative* weight (g)
<b>CENTAUR</b> ™ CT™10s Carbon crankset	170, 172.5, 175 mm 34-48, 34-50, 36-50	composite cranks - Ultra·Drive $^{\rm IM}$ chainrings - requires b.b. with L. 111 mm - requires CT $^{\rm IM}$ or CT $^{\rm IM}$ -FB front derailleur	565
CENTAUR™ 10s Triple crankset	170, 175 mm 30-40-50, 30-42-53	Ultra-Drive™ chainrings - requires b.b. with L. 111 or 115.5 mm (for oversize seat tube Ø 32 or 35mm)	730
<b>CENTAUR</b> ™ bottom bracket	ITA, ENG 111 mm	cartridge b.b hollow axle - light alloy cups and spacer - for double and triple cranks with seat tube $028.6~\text{mm}$	233
AC-H <sup>™</sup> bottom bracket	ITA, ENG 111 mm, 115.5 mm	cartridge b.b hollow axle- light alloy cups - axle L. 111 mm for double crankset - axle L.111 mm for triple crankset with seat tube Ø 28.6 mm - axle L. 115.5 mm for triple crankset with oversize seat tube Ø 32 or 35 mm	288
AC-S™ bottom bracket	ITA, ENG 111 mm, 115.5 mm	cartridge b.b solid axle - light alloy cups - axle L. 111 mm for double crankset - axle L.111 mm for triple crankset with seat tube Ø 28.6 mm - axle L. 115.5 mm for triple crankset with oversize seat tube Ø 32 or 35 mm	299
<b>CENTAUR</b> ™ Pro·Fit PLUS™ pedals		steel axle - light alloy body - with floating (standard) or fixed (optional) cleats composite axle fixing nuts - metallized finish - left axle compatible with the ErgoBrain $^{\rm IM}$ magnet	325
<i>CENTAUR</i> ™ brakes	front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 42÷52 mm (measured from brake fixing-bolt to brake-shoe-nut) - brake pads orbital adjustment	376
<b>CENTAUR</b> ™ seat post		Ø 27.2 mm - L. 250 mm - light alloy tube	221
<b>CENTAUR™</b> HIDDENSET™ headset	1 - 1/8"	1-1/8" - internal headset for unthreaded fork tube - height 5.9 mm - patent pending system - composite cap $$	73
<b>CENTAUR™</b> waterbottle carrier		carbon and composite, supplied with water-bottle	35
Ergobrain™ Computer		10s - double/triple crankset compatible	
<b>CENTAUR</b> ™ cable guide plate		to fit under bottom bracket shell - resin	6

 $<sup>\,^*</sup>$  The indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

# CHORUS<sup>TM</sup> 2005

COMPONENT	OPTIONS	DESCRIPTION	Indicative* weight (g)
	short cage	upper to lower pulley-axle: 55 mm composite outer plate	202
<b>CHORUS™</b> 10s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm composite outer plate	205
	long cage	upper to lower pulley-axle: 89 mm composite outer plate	217
<b>CHORUS</b> <sup>™</sup> front derailleur	braze-on/clip-on: Ø 32, 35 mm	9s/10s - for double crankset - capacity 15 - max. chainring 54 - light alloy fork with antifriction treatment	74
<b>CHORUS</b> <sup>™</sup> Triple front derailleur	braze-on / clip-on: Ø 32, 35 mm	10s – for triple crankset - capacity 23 – max. chainring 53 - with antifriction treatment	98
<b>CHORUS</b> <sup>™</sup> CT <sup>™</sup> front derailleur	braze-on/clip-on: Ø 32, 35 mm	10s – for CT <sup>TM</sup> crankset - capacity 16 – max. chainring 50 - light alloy fork with antifriction treatment	78
<b>CHORUS</b> ™ FB front derailleur	braze-on / clip-on: Ø 32, 35 mm	10s – for Ergopower FB <sup>™</sup> - for double crankset - capacity 15 – max. chainring 54 - light alloy fork with antifriction treatment	76
<b>CHORUS</b> <sup>™</sup> FB Triple front derailleur	braze-on/clip-on: Ø 32, 35 mm	10s - for Ergopower FB™ - for triple crankset - capacity 23 - max. chainring 53 - with antifriction treatment	98
<b>CHORUS</b> ™CT™- FB front derailleur	braze-on/clip-on: Ø 32, 35 mm	10s – for CT <sup>™</sup> crankset - for Ergopower FB <sup>™</sup> - capacity 16 – imax. chainring 50 - light alloy fork with antifriction treatment	79
<b>CHORUS™</b> 10s Ergopower™		double/triple crankset compatible - composite body - composite levers - light alloy hardware - ErgoBrain 10 <sup>™</sup> computer ready	348
<b>CHORUS</b> <sup>™</sup> 10s x 2/3 Ergopower FB <sup>™</sup>		double/triple crankset compatible- alu-composite body - aluminium brake lever - light alloy small parts - requires FB derailleur	320
<b>CHORUS</b> ™ front hub	32,36 holes	light alloy axle and body – adjustable bearings – quick-release with aluminium lock nuts - O.L.D. 100 mm	180
<b>CHORUS</b> ™ rear hub	32,36 holes	9s/10s - light alloy body, axle and freewheel body – adjustable bearings-quick-release with aluminium lock nuts - lockring thread 27x1 - O.L.D. 130 mm	326
<b>CHORUS</b> ™ UD™ 10s sprockets - steel	11-23, 12-25, 13-26, 13-29	Ultra·Drive™ - nickel-chromed finish - light alloy carrier - supplied without lockring	220
<b>RECORD</b> ™ C10™ chain		10s - Ultra-Drive™ - Chrome-Nickel-PTFE Finish - 114 links - HD-Link™	279
<b>CHORUS</b> <sup>™</sup> 10s crankset		Ultra-Drive™ EPS™ chainrings - requires b.b. with L. 102 mm axle	647
<b>CHORUS</b> <sup>™</sup> CARBON 10s crankset	170, 172.5, 175 mm 39-52, 39-53, 42-52	composite crankarms - Ultra-Drive $^{\text{TM}}$ EPS $^{\text{TM}}$ chainings - requires b.b. with 102 mm axle	540

COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
<b>CHORUS™</b> CT™ CARBON 10s crankset	170,172.5, 175 mm 34-48, 34-50, 36-50	composite crankarms - Ultra·Drive™ EPS™ chainrings - requires b.b. with 102 mm axle - requires CT™ or CT™ - FB front derailleur	551
<b>CHORUS</b> ™ 10s Triple crankset	170, 172.5, 175 mm 30-40-50, 30-42-53	Ultra·Drive™ chainrings - requires b.b. with 102 mm axle (asymmetrical) for triple cranks	730
<b>CHORUS</b> ™ bottom bracket	ITA, ENG	Ultra-Drive™ chainrings - requires b.b. with L. 111 mm (asymmetrical) hollow axle L. 102 mm - only for double crankset - light alloy cartridge - light alloy cups	220
<b>CHORUS</b> ™ Triple bottom bracket	ITA, ENG	steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain <sup>TM</sup> magnet	233
<b>CHORUS</b> ™ Pro·Fit PLUS™ pedals		steel axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain <sup>TM</sup> magnet	325
<b>CHORUS</b> ™-D brakes		brake-pad height adjustment ratio:40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut)-brake pads orbital adjustment-lightened rear brake	340
<b>CHORUS</b> ™ CARBON seat post	front fixing bolt: 13,5 - 18,5 - 24 mm	composite tube - clamp for seat tube - knurling pitch: 0.5 mm	195
<b>CHORUS™</b> headset	27,2 / 250- 31,6 / 350 32,4 / 350	BC 1"x24tpi - height 36.5 mm	106
<b>CHORUS™</b> THREADLESS™ headset		1" - for unthreaded fork tube - height 24.5 mm - patent pending system steel and light alloy fixing screw	117
<b>CHORUS™</b> HIDDENSET™ headset		internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC™: height 15,9 mm - patent pending system - steel and light alloy fixing screw light alloy cap	82
<b>CHORUS</b> ™ water-bottle carrier	1-1/8", 1-1/8" TTC <sup>TM</sup>	carbon and composite, supplied with water-bottle	29
ERGOBRAIN™ Computer		10s - double/triple crankset compatible	
<b>RECORD</b> <sup>™</sup> cable guide plate		to fit under bottom bracket shell - stainless steel with $\ensuremath{QPQ}$ antifriction treatment	9

<sup>\*</sup>The indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

# RECORD™ 2005

COMPONENT	OPTIONS	DESCRIPTION	Indicative* weight (g)
	short cage	upper to lower pulley-axle: 55 mm	184
<b>RECORD™</b> 10s rear derailleur	medium cage	upper to lower pulley-axle: 72,5 mm	193
	long cage	upper to lower pulley-axle: 89 mm composite outer plate - Titanium hanger and pivot bolt - composite outer cage	195
<b>RECORD™</b> front derailleur	braze-on / clip-on: Ø 28.6, 32, 35 mm	9s/10s - for double crankset - capacity 15 - max. chainring 54 - composite and aluminum fork - Titanium bolts	69
<b>RECORD</b> <sup>™</sup> Triple front derailleur	braze-on / clip-on: Ø 32, 35 mm	9s/10s – for triple crankset - capacity 23 – max. chainring 53 - Titanium bolts - antifriction treatment	94
<b>RECORD</b> ™ CT <sup>™</sup> front derailleur	braze-on / clip-on: Ø 32, 35 mm	9s/10s – for CT <sup>™</sup> crankset - capacity 16 – max. chainring 50 - composite + alumiinium fork - Titanium bolts	75
<b>RECORD</b> ™ 10s Ergopower™	28, 32, 36 holes	double/triple crankset compatible – composite body and levers – ball bearings light alloy hardware - ErgoBrain 10™ computer ready	324
<b>RECORD</b> ™ front hub		light alloy body and axle - adjustable bearings - ubrication port - quick-release with light alloylock nuts - O.L.D. 100 mm	181
<b>RECORD</b> ™ rear hub	28, 32, 36 holes	9s/10s - light alloy body, axle and freewheel body – Titanium pawl - adjustable bearings - lubrication port – quick-release with aluminium lock nuts – lockring thread 27x1 - O.L.D. 130 mm	316
<b>RECORD™</b> UD™ 10s sprockets - steel+ti	11-21, 11-23, 12-23, 12-25, 13-26, 13-29	Ultra-Drive $^{\text{TM}}$ - nickel-chromed finish for steel sprockets - light alloy carrier - supplied without lockring	188
<b>RECORD™</b> UD™ 10s sprockets - titanium	11-23, 12-25, 13-26	Ultra·Drive™ - light alloy carrier - supplied without lockring	156
<b>RECORD</b> ™ C10 <sup>TM</sup> chain		10s - Ultra-Drive™ - Chrome-Nickel-PTFE Finish - 114 links - HD -Link™	279
<i>RECORD</i> <sup>™</sup> C10 <sup>™</sup> ULTRA <sup>™</sup> chain		10s - Ultra-Drive™ - Chrome-Nickel-PTFE Finish - 114 links - HD-Link™ - hollow pins - lightened links	259
<b>RECORO</b> ™ 10s crankset	170,172.5,175, 177.5,180 39-52, 39-53, 42-52	light alloy fixing bolts and nuts - Ultra-Drive™ EPS™ chainrings with antifriction treatment - requires b.b. with 102 mm axle	632
<b>RECORD™</b> CARBON 10s crankset	170,172.5, 175 mm 39-52, 39-53, 42-52	composite crankarms - light alloy fixing bolts and nuts - Ultra∙Drive™ EPS™ chainrings with antifriction treatment - requires b.b. with 102 mm axle	520
<b>RECORD</b> <sup>™</sup> CT <sup>™</sup> CARBON 10s crankset	170,172.5, 175 mm 34-48,34-50, 36-50	composite crankarms - light alloy fixing bolts and nuts - Ultra-Drive™ EPS™ chainnings with antifriction treatment - requires b.b. with 102 mm axle - requires CT™ front derailleur	540

COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
<b>RECORD™</b> Triple 10s crankset	170, 172.5, 175 mm 30-40- 50, 30-42-53	light alloy fixing bolts and nuts - Ultra∙Drive™ chainnings with antifriction treatment- requires b.b. with 111 mm axle (asymmetrical)	715
<b>RECORD™</b> bottom bracket	ITA, ENG	oversize hollow axle L. 102 mm - only for double crankset - composite/light alloy cartridge	190
<b>RECORD™</b> Triple bottom bracket	ITA, ENG	oversize steel hollow axle L. 111 mm [ asymmetrical] - light alloy cups-only for Record™ Triple crankset - composite and light alloy cartridge	198
<b>RECORD™</b> Pro·Fit PLUS™ pedals		Titanium axle -light alloy body - with floating (standard) or fixed [optional] cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain™ magnet	266
<b>RECORD™-</b> D brakes	silver/black front fixing bolt: 13,5 - 18,5 - 24 mm	brake-pad height adjustment ratio: 40÷50 mm (measured from brake fixing-bolt to brake-shoe-nut) - ball bearings - light alloy and titanium hardware - brake pads orbital adjustment - lightened rear brake	308
<b>RECORD™</b> CARBON seat post	27,2 / 250 31,6 / 350 32,4 / 350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	185
<b>RECORD™</b> headset		BC 1"x24tpi - height 36.5 mm - lubrication port	104
<b>RECORD™</b> THREADLESS™ headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	110
<b>RECORD™</b> HIDDENSET™ headset	1-1/8", 1-1/8" TTC <sup>TM</sup>	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm, version 1-1/8" TTC <sup>IM</sup> : height 15.9 mm - patent pending system - composite and light alloy fixing screw and cap	73
<b>RECORD™</b> brake levers		composite body and lever	210
Bar-End 10s shift. levers			163
<b>RECORD™</b> water-bottle carrier		monocoque carbon, supplied with water-bottle	18
Ergobrain™ Computer		10s - double/triple compatible	
<b>RECORD™</b> cable guide plate		to fit under bottom bracket shell - stainless steel with QPQ antifriction treatment	9

 $<sup>\</sup>star The$  indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

# RECORD™ PISTA 2005

COMPONENT	OPTIONS	DESCRIPTION	Indicative* weight (g)							
<b>RECORD</b> ™PISTA™ front hub	32, 36 holes	light alloy body – lubrication port - small flanges - O.L.D. 100 mm								
<b>RECORD™</b> PISTA™ rear hub	32, 36 holes	light alloy body – lubrication port - small flanges - O.L.D. 120 mm	284							
<b>RECORD</b> ™ PISTA™ crankset	165,170 mm 46,47,48,49,50 51,52	requires b.b. L. 111 mm (asymmetrical)	592							
<b>RECORD</b> ™ PISTA™ bottom bracket	ITA, ENG	axle L. 111 mm (asymmetrical) - composite and light alloy cartridge light alloy cups - without sealings	220							
<b>RECORD™</b> Pro·Fit PLUS™ pedals		Titanium axle -light alloy body - with floating (standard) or fixed (optional) cleats - composite axle fixing nuts - polished aluminium finish - left axle compatible with the ErgoBrain™ magnet	266							
<b>RECORD™</b> CARBON seat post	27,2/250-31,6 350-32,4/350	composite tube - clamp for seat tube - knurling pitch: 0.5 mm - composite upper clamp	185							
<b>RECORD™</b> headset		BC 1"x24tpi - height 36.5 mm - lubrication port	104							
<b>RECORD™</b> THREADLESS™ headset	1", 1-1/8"	for unthreaded fork tube - height 24.5 mm - composite cover and light alloy fixing screw - lubrication port	110							
<b>RECORD™</b> HIDDENSET™ headset	1-1/8" 1-1/8" TTC™	internal headset for unthreaded fork tube - version 1-1/8": height 5.9 mm,version 1-1/8" TTC <sup>TM</sup> : height 15.9 mm - patent pending system - composite cover and light alloy fixing screw - composite/light alloy cap	73							

# TIME TRIAL 2005

COMPONENT	OPTIONS	DESCRIPTION	Indicative* weight (g)
bar-end 10s shift. levers		composite body and lever	163
<b>RECORD™</b> brake levers		composite body and lever	210
<b>RECORD™ 10s</b> inner chainrings	42,44	Exa-Drive <sup>™</sup> system	51
<b>RECORD™10</b> s outer chainrings	54, 55	Exa-Drive™ system	88
<b>CHORUS™</b> 10s outer chainrings	54, 55	Exa-Drive™ system	88
<b>RECORD™</b> ED™ 8s sprockets - steel	12-23, 13-23, 13-26	Exa-Drive <sup>™</sup> - single sprockets- chromed - supplied without lockring	262
sprockets for GHIBLI™ 9s	11-19, 11-21	steel-titanium - for Ghibli™ with O.L.D. 132 mm - 9s [10s spacing]	165

# RECORD™-CHORUS™-CENTAUR™ 95

COMPONENT	OPTIONS	DESCRIPTION	Indicative * weight (g)
<b>RECORD™</b> 9s rear derailleur		composite outer plate – lightened inner plate – Titanium hanger and pivot bolt - lightened upper body	190
<b>CHORUS™</b> 9s rear derailleur		lightened upper body	211
<b>CENTAUR™</b> 9s rear derailleur			223
<b>CENTAUR™</b> Triple 9s rear derailleur			229
<b>RECORD</b> ™ 9s Ergopower™		double∕triple crankset compatible – composite body and levers – ball bearings light alloy hardware - ErgoBrain 10 <sup>™</sup> computer ready	342
<b>CHORUS</b> <sup>™</sup> 9s Ergopower <sup>™</sup>		double/triple crankset compatible – composite body – anodized leverball bearings - light alloy hardware - ErgoBrain 10 <sup>™</sup> computer ready	365
<b>CENTAUR™</b> 9s Ergopower™		double/triple crankset compatible – composite body – anodized lever- lightened shifting levers - ErgoBrain 10 <sup>™</sup> computer ready	399
<b>CENTAUR</b> ™ 9s crankset	170, 172.5 mm 39-52, 39-53, 42-52	Exa-Drive™ chainrings - requires b.b. with L. 111 mm	646
	175 mm 39-52, 39-53		
<b>CHORUS</b> ™ UD™ 9s sprockets - steel	12-23, 13-23, 13-26	Ultra·Drive™ - nickel-chromed - light alloy carrier - supplied without lockring	197

<sup>\*</sup> The indicative weight refers to the lighter specification among the available options. The weight of the hubs includes the quick-release.

● = yes  * = with special sprockets/ adapter kit  h = only hub  RE = Record™  CE = Centaur™  VE = Veloce™  LOW-PROFILE WHEELS	nominal weight (g)**	carbon rim	aluminum rim	aluminum braking surface	machined braking surface	low profile	medium profile	high profile	disc wheel	front/rear differential rims	asymmetrical rear rims	nominal width (mm)	● HPW™ / ●● HPW™ carbon hub	hub with flanges	titanium pawl carrier	steel pawl carrier	"OS" hub body	"OS" light alloy spindle	light alloy fw body	quick lubrication port	QR type	10s compatible	9s compatible	8s compatible	requires special sprocket sets	O.L.D. (mm)	"G3™" system	Ultralinear <sup>m</sup> geometry	number of spokes	double butted spokes	"AERO" type spokes	L/R differential spokes	spherical coupling sl nuts	nipples	black anodized	
PROTON™ front clincher 28" PROTON™ rear clincher 28"	680 960		:	:	:	:				:	•	20 20	,	•		•	•	:	•		CE CE	•	•	*		100 130			22 24	•		•		•	•	
NEUTRON™ front clincher 28" NEUTRON™ rear clincher 28"	655 895		•	•	•	•				•	•	20 20	•		•		•	•	•	•	RE RE	•	•	*		100 130		•	22 24	•	•	•	•		:	
NEUTRON™ front tub. 28" NEUTRON™ rear tub. 28"	645 895		•	•	•	•				•	•	20 20	•		•		•	•	•	•	RE RE	•	•	*		100 130		•	22 24	•	•	•	•		:	
NEUTRON™ CARBON front cl. 28" NEUTRON™ CARBON rear cl. 28"	630 870		:	•	•	•				:	•	20 20	00		•		•	:	•		RE RE	•	•	*		100 130		•	22 24	•	•	•	•		:	
HYPERON™ front tub. 28" HYPERON™ rear tub. 28"	525 715	:				•				:	•	20 20	00		•		•	:	•		RE RE	•	•	*		100 130		•	22 24	•	•	•	•			
HYPERON™ front clincher 28" HYPERON™ rear clincher 28"	595 800	:				•				:	•	20 20	:		•		•	:	•	•	RE RE	•	•	*		100 130		•	22 24	•	•	•	:			
HYPERON ULTRA™ front clincher 28" HYPERON ULTRA™ rear clincher 28"	575 775					•				:	•	20 20	00		•		•	:	•		RE RE	•	•	*		100 130		•	22 24	•	•	•	•			
																																			1.	77

h = RE = CE =	yes with special sprockets/ adapter kit only hub Record™ Centaur™ Veloce™	nominal weight (g)**	carbon rim	aluminum rim	aluminum braking surface	machined braking surface	low profile	medium profile	high profile	disc wheel	front/rear differential rims	asymmetrical rear rims	nominal width (mm)	● HPW™ / ●● HPW™ carbon hub	hub with flanges	titanium pawl carrier	steel pawl carrier	"OS" hub body	"OS" light alloy spindle	light alloy fw body	quick lubrication port	QR type	10s compatible	9s compatible	8s compatible	requires special sprocket sets	O.L.D. (mm)	"G3™" system	Ultralinear <sup>™</sup> geometry	number of spokes	double butted spokes	"AERO" type spokes	L/R differential spokes	spherical coupling sl nuts	nipples	black anodized	
MED	IUM-PROFILE WEELS																																				
	TO™ front clincher 28" TO™ rear clincher 28"	890 1110		•	•	•		•					20 20		•		•			•		VE VE	•	•	*		100 130			24 27					•	•	
	OCCO™ front clincher 28" OCCO™ rear clincher 28"	790 1040		•	•	•		•					20 20	,	•		•			•		VE VE	•	•	*		100 130			24 24	•				•	•	
	DA™ front clincher 28" DA™ rear clincher 28"	770 960		•	:	•		:					20 20	:			•	:	•	•		CE	•	•	*		100 130	•		26 21	•				•	•	
	JS™ front clincher 28" JS™ rear clincher 28"	695 865		•	•	•		•					20 20	:		•		:	•	•	•	RE RE	•	•	*		100 130	•	:	26 21	•	•		:		:	
EURU EURU	JS™ CARBON front cl. 28" JS™ CARBON rear cl. 28"	670 840		:	:	:		:					20 20	••		•		:	•	•		RE RE	•	•	*		100 130	•	•	16 21	•	•		•			
HIGH	I-PROFILE WHEELS																																				
	A™ front tub. 28" A™ rear tub. 28"	570 750							•				20 20	••		•		•	•	•		RE RE	•	•	*		100 130	•	•	18 21	•	•		•			
	Ll™ rear road 28" Ll™ front track 26"	995 860		•	•					•			19 19		•	•		•	•	•		RE	* / <b>VE</b>	*	*	•	132 100										
	Ll™ front track 28" Ll™ rear track 28"	955 995		•						:			19 19		•												100 120										
	A™ front tub. 28" A™ rear tub. 28"	995 1110		•					•				20 20		•						•						100 120			20 24		•		•		:	

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#### **OBJECT**

Campagnolo S.r.I., Via della Chimica 4, 36100 Vicenza, Italy (hereinafter "Campagnolo"), guarantees its products to be free from defects in materials or workmanship within the terms and conditions of this Limited Warranty. A product found by Campagnolo to be defective will be repaired or replaced, at the option of Campagnolo, free of charge, within thirty (30) days after receipt of the product by an authorized Campagnolo Service Center. Please note that in addition to this policy you may have specific legal rights granted by your national or state laws regarding warranties of consumer products.

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#### **NOT COVERED**

This warranty does not cover products which reached the end of their normal lifespan, does not cover damage resulting from accidents, alteration, neglect, misuse or abuse, lack of reasonable or proper maintenance, corrosion, improper assembly, repairs improperly performed or replacement parts improperly installed, use of replacement parts or accessories not conforming to Campagnolo's specifications, use of component parts not manufactured or supplied by Campagnolo, modifications not recommended or approved in writing by Campagnolo, normal wear and deterioration occasioned by the use of the product, activities such as acrobatics, competitive use or commercial use. This warranty also does not cover cosmetic imperfections in the surface, finish, or appearance of the product which were apparent or discoverable at the time of purchase of the product or damage occurring during shipment or transport of the product. This warranty also does not cover tools, lubricants, brake pads, and other consumables or any expenses related to the transportation of the product to or from an authorized Campagnolo Service Center, labor costs to remove the product from the bicycle, or compensation for inconvenience or loss of use while the product is being repaired or replaced.



#### PURCHASER

This warranty is made only with the original Purchaser of the product and does not extend to any third parties. The rights of the Purchaser under this warranty may not be assigned.



#### **TERM**

The term of this warranty shall commence on the date of retail purchase and shall continue for a period of two (2) or three (3) years, depending on the product (see the applicable term in the product's package).



#### **ENTIRE AGREEMENT**

This warranty supersedes any and all oral, express or written warranties, statements or undertakings that may previously have been made, and contains the entire Agreement of the parties with respect to the warranty of the product. Any and all warranties not contained in this Agreement are specifically excluded.



#### **DAMAGES**

Except as expressly provided by this warranty, Campagnolo SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ASSOCIATED WITH THE USE OF THE PRODUCT OR A CLAIM UNDER THIS AGREEMENT, WHETHER THE CLAIM IS BASED ON CONTRACT, TORT OR OTHERWISE. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you.



#### DISCLAIMER

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL IMPLIED WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE OF TRADE, BY STATUTE OR OTHERWISE, IS HEREBY STRICTLY LIMITED TO THE TERM OF THIS WRITTEN WARRANTY. This agreement shall be the sole and exclusive remedy available to the Purchaser with respect to the purchaser. In the event of any alleged breach of any warranty or any legal action brought by the purchaser based on alleged negligence or other tortuous conduct by Campagnolo, the Purchaser's sole and exclusive remedy will be repair or replacement of defective materials as stated above. No dealer and no other agent or employee of Campagnolo is authorized to modify, extend or enlarge this warranty. The performance of any warranty service under this Agreement is not an admission or agreement that the design or manufacture of a product is defective.



#### PROCEDURE

In the event of a defect covered by this warranty, the Purchaser should contact an authorized Campagnolo Service Center (authorized Service Centers are listed in this catalog and in our web-site: www.campagnolo.com) or:

Campagnolo S.r.l., Service Center, Via Della Chimica 4, 36100 Vicenza, Italy,

Telephone: +39-0-444-225604/5; Fax:+39-0-444-225400.

To be honored, claims must be submitted within the two or three years warranty period (depending on the product) and within eight (8) days of discovery of the defect. The determination whether the defect is covered by this warranty is within the sole discretion of Campagnolo.

Campagnolo reserves the right to discontinue products and to change specifications for existing products at any time without notice and shall not be obligated to incorporate new features into products previously sold, even if those products are returned under a warranty claim. Campagnolo may replace defective parts with similar parts of similar quality in the event that identical parts are unavailable. The Purchaser must obtain advance authorization in writing before returning any product to a Campagnolo Service Center for warranty inspection.

A return authorization number will be issued and must conspicuously appear on the outside of the product's packaging. The issuance of an authorization number does not constitute acceptance of the claim, which will be evaluated by the Service Center upon its inspection of the product.

The product should be cleaned and securely packed to prevent damage during shipment and must be accompanied by a letter specifying or including the following items of information:

- a) dated receipt or other proof of date of retail purchase;
- b) a copy of the warranty;
- c) Campagnolo part number;
- d) detailed description of the problem experienced with the product, including a chronology of efforts made to correct the problem;
- e) identification of the components used in conjunction with the product;
- f) estimate of product usage: (i.e. accumulated mileage or time in service);
- g) your name, address, and written authorization to ship the repaired product back to you freight collect ("C.O.D.").



#### APPLICABLE LAW

Any disputes arising out of this Agreement or the use of this product will be governed by the laws of the country of Italy and will be decided by the Courts of Vicenza, Italy.



#### WARNING

Always install, repair and use your product in strict compliance with the product's instructions, which are also available as a downloadable file from our web site: www.campagnolo.com.

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# SERVICE CENTER

# CAMPAGNOLO IN THE WORLD

#### SERVICE CENTER

The Service Center is the reference point for all Campagnolo dealers and its aim is to provide an adequate after-sales service to Campagnolo users. Service Centers are a territorial extension of Campagnolo srl and work exclusively with dealers, no exceptions made.

The Service Centers handle two activities: After-sales Service and Spare Parts Service

The After-sales Service provides technical assistance for products under guarantee or otherwise, enabling cyclists to enjoy the first-class characteristics of Campagnolo products for long, without forfeiting safety, performance and endurance.

The Spare Parts Service handles the distribution of spare parts. Campagnolo possesses a large inventory of spare parts and is able to replenish its distribution system adequately in relatively short times.

We therefore advise you to refer to your Campagnolo dealer for any expert action required by your bikes - these dealers are the only ones supported by the constant, skilled collaboration of Campagnolo Service Centers.

#### ITALY

CAMPAGNOLO SRL HEADQUARTERS Via della Chimica, 4 - 36100 VICENZA Tel. +39-0-444-225605 Fax +39-0-444-225400

#### AUSTRALIA

CYCLING PROJECTS 80 King Street - NSW 2193 Ashbury Fax +61-2-97879940

#### AUSTRIA - GERMANY

CAMPAGNOLO DEUTSCHLAND GMBH An der Schusterinsel, 15-51379 LEVERKUSEN Tel. +49-2171-72430 Fax +49-2171-724315

#### RENELLIX

CARD BENELUX BV Vaartveld 19 - 4704 SE ROOSENDAAL Tel. +31-165-564241 Fax +31-165-563248

FA. WOUT VERHOEVEN Rodenrijseweg 409 -2651 AM BERKEL EN RODENRIJS Netherlands Tel. +31-10-5115014 Fax +31-10-5117708

INTERNATIONAL CYCLE CONNECTION - I.C.C. Weststraat 42 P.O. Box 73 - 4527 ZH AARDENBURG Netherlands Tel. +31-117-492820 Fax +31-117-492835

# CANADA

CYCLES MARINONLING 1067, Levis - LACHENAIE - QUEBEC J6W 4L2 Tel. +1-450-4717133 Fax +1-450-4719887

GREAT WESTERN BICYCLE CO. LTD.

233 West Broadway - VANCOUVER , BC V5Y 1P5 Tel. +1-604-8722424 Fax +1-604-87202226

CZECH REPUBLIC

## KOLA SIRER

D D Boy 107 26601 BEROUN 1 Tel. 00420 311 611464 Fax 00420 311 625492

## DENMARK - FINLAND - NORWAY - SWEDEN

MARKER SCANDINAVIA Industrivej 1 D - DK-4000 ROSKILDE- DENMARK Tel. +45 - 70228075 Fax +45 - 46498088

#### FRANCE

CAMPAGNIOI O FRANCE B.P. 148 - 42160 Andrézieux - Bouthéon Cedex Tel +33-477-556305 Fax +33-477-556345

#### GREECE

CYCLES FIDUSA - GIORGIO VOYATZIS & CO. Th. Sofuli 97 85100 Rhodos Tel. +30-2241 021264 Fax +30-2241 021519

#### JAPAN

CAMPAGNOLO JAPAN LTD 65 Yoshida-cho, Naka-ku, Yokohama 231-0041 JAPAN Phone: +81-45-264-2780 Fax: +81-45-241-8030

KAWASHIMA CYCLE SLIPPLY CO. No. 3-3-16 Kitasho-cho, Sakai Osaka, 590-0007 Tel. +81-722-38-6126 Fax +81-722-21-4379

NICHINAO SHOKAI CO., LTD 6-16-8, Sotokanda, Chiyodaku - TOKYO 101 Tel. +81-3-38326251 Fax +81-3-38326266

#### NEW ZEALAND

WH WORRALL CO. LTD. 43 Felix St./Penrose - P.O. Box 12481 Tel. +64-9-6360641 Fax +64-9-6360631

#### SOUTH AFRICA

RIBBENS INTERNATIONAL CC 169 Meerlust Street – Willow Glen - PRETORIA Tel. +27-012-8075570 Fax +27-012-8074267

CAMPAGNOLO IBERICA S L Avda. de Los Huetos 46 Pab. 31 - 01010 VITORIA Tel +34-945-217195 Fax +34-945-217198

## SWITZERLAND

PIERO ZURINO AG Flawilerstrasse 3a - 9500 WIL SG Tel +41-71-9236001 Fax +41-71-9236353

U.G.D. SPORT DIFFUSION S.A. La Taille - 2053 CERNIER Fax +41-32-8536464

#### UNITED KINGDOM

ITALIAN CYCLE PRODUCTS LIMITED Unit 3. Napoleon Business Park Wheterby Road - DERBY - DE24 8HL Tel +///01339.371176 Fax +44-01332-371179

#### UNITED STATES

CAMPAGNOLO USA INC. 2105-L Camino Vida Roble - CARLSBAD -CA 92009 Tel +1-760-9310106 Fax +1-760-9310991

OCHSNER INT. INC 246 E. Marquardt Drive - WHEELING II. 60090-6430 Tel +1-847-4658200 Fax +1-847-4658282

QUALITY BIC. PRODUCTS 6400 W. 105th Street - BLOOMINGTON, MN 55438-2554 Tel. +1-952-9419391 Fax +1-952-9419799

THE HAWLEY COMPANY, INC. 1181 South Lake Drive Lexington, SC 29073-7744 Tel. +1-803.359.3492 x 192 Fax +1-803.359.1343

#### ITALY

CAMPAGNOLO S.R.L. Via della Chimica, 4 - 36100 Vicenza - ITALY Phone: +39-0444-225500 Fax: +39-0444-225400

#### FRANCE

CAMPAGNOLO FRANCE SARL Rue Jean Autelin B.P. 148 - 42160 Andrézieux-Bouthéon Cedex - FRANCE Phone: +33-477-556305 Fax: +33-477-556345

#### GERMANY

CAMPAGNOLO DEUTSCHLAND GMBH An der Schusterinsel 15-51379 Leverkusen - GERMANY Phone: +49-2171-72430 Fax: +49-2171-724315

#### JAPAN

CAMPAGNOLO JAPAN LTD 65 Yoshida-cho, Naka-ku, Yokohama 231-0041 JAPAN Phone: +81-45-264-2780 Fax: +81-45-241-8030

#### SPAIN

AUSTRALIA

BENELUX

NEDERLAND

FIRMA GALLIZIA

Tel +43-4762/2275

Fax +43-4762/2275

CYCLING PROJECTS

Tel. +61-2-97992407

Fax +61-2-97879940

Tel. +31-11-7492820

Fax +31-11-7492835

CAMPAGNOLO IBERICA S.L. Avda. de Los Huetos 46 Pab. 31-01010 Vitoria - SPAIN Phone: +34-945-217195 Fax:+34-945-217198

#### UNITED STATES

CAMPAGNOLO USA INC. 2105-L Camino Vida Roble - Carlsbad CA 92009 - U.S.A. Phone: +1-760-9310106 Fax: +1-760-9310991

80 King Street - NSW 2193 Ashbury - AUSTRALIA

INTERNATIONAL CYCLE CONNECTION - LC.C.

Weststraat 42 - P.O. Box 73 - 4527 ZH Aardenburg

BULGARIA - CZECH REPUBLIC - POLAND - RUMANIA -

SLOVAKIAN REPUBLIC - SLOVENIA - HUNGARY

10. Oktoberstraße 7 - 9800 Spittal/Drau - AUSTRIA

#### SERVICE AND TECHNICAL INFORMATION:

## ITALY (CENTRAL)

**Technical Information** Phone: +39-0444-225600

Fax: +39-0444-225400 Service Center

Phone: +39-0444-225605 Fax: +39-0444-225400

FRANCE Phone: +33-477-554449 Fev: +33-477-556345

## GERMANY

Phone: +49-2171-724320 Fax: +49-2171-724315

## SPAIN

Phone: +34-945-217195 Fax:+34-945-217198

#### U.S.A

Phone: +1-760-9310106 Fax: +1-760-9310991

# AGENCIES

# SOUTH AMERICA AND MEXICO

GEORGE PANARA Sao Paulo - BRASIL Tel.: +55 11 4436 9123

# Fax: +55 11 4436 12 13

COLMAX INTERNATIONAL LTD

2F, No.23 Lane 229, Kuang Hwa Street Tainan, TAIWAN

TAIWAN, MAINLAND CHINA, VIETNAM

Tel. +886-6-265 6001

Fax +886-6-265 1388

# UNITED KINGDOM

SELECT CYCLE COMPONENTS Unit 3. Napoleon Business Park

Wheterby Road - DERBY - DE24 8HL - ENGLAND Tel. +44-0780260628

Fax +44-1949-829039

#### DENMARK - SWEDEN - NORWAY- FINLAND

MARKER SCANIDINIAWA

Industrivej 1D - DK-4000 Roskilde - DENMARK Tel +45-70228075

Fax +45-46498088