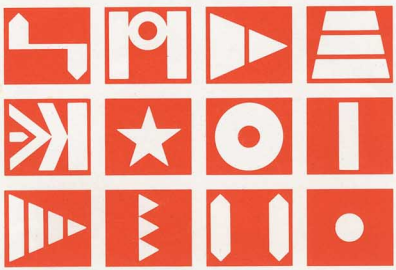
Campagnolo®

EUCLID ®



9/88

U.S.A

EUCLID ®







"All Terrain Bicycles": high performance machines for use in both normal conditions and in the most demanding off road conditions as well. These bicycles are where Campagnolo's renowned component reliability is seen to its best advantage: When the rider is alone in the midst of nature, where his sport becomes his lifestyle, and where he has to be able to trust every component of his bike. Finally there is a component group that he can truly rely upon: the Campagnolo EUCLID group for "All Terrain Bicycles".

FRONT AND REAR DERAILLEURS

The design of the rear derailleur is based on the highly successful Chorus changer. The jockey wheel cage is shaped to eliminate possible interference with the spokes of the rear wheel and is provided with two tabs to prevent the chain from coming off the cage.



The upper body of the rear derailleur contains a tension spring that can be preloaded either by adjusting the original position of the spring or with an adjusting screw that works against the derailleur hanger.



DOUBLE ADJUSTMENT FOR SAFE, EFFICIENT CHANGING

The hardened steel adjusting screw presses on a mobile steel bracket which varies the preload of the tension spring. The less the spring is preloaded, the tighter the chain wraps the freewheel, thus promoting quicker more accurate shifts. Between the mobile steel bracket and the body of the rear derailleur is a special anti-friction bushing which significantly reduces pivot friction and ensures the precise, flowing movement of the rear derailleur.

There is also an adjustment that varies chain tension to further increase shifting precision. In fact, it is possible to vary the preload of the jockey wheel cage spring either by varying the original position of the spring inside the derailleur body or by a fine adjustment screw located in the lower body of the parallelogram.
All pivot pins of the parallelogram have undergone an anti-friction treatment to provide the usual Campagnolo smoothness. The rear derailleur can handle freewheels up to 34 teeth.

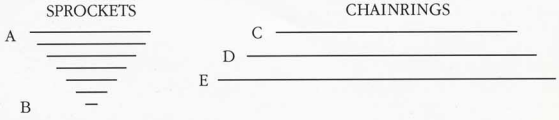


The shape of the front derailleur cage is particularly suited for use in difficult enviormental conditions allowing the changer to shift easily from the outermost to the innermost chainring, even under stress.
The changer is compatable with chainrings from 24 to 50 teeth.

Derailleur adjustment is very easy and extremely reliable thanks to a system of screws and retaining springs which ensure that the connect adjustment is maintained even when rough conditions subject the bike to knocks and jolts. There is also an "adjustable clamp-on" version for tubes with diameters from 28.5 to 33 mm.



EUCLID



Gear change capacity = (E + A) − (C + B) = 44
Biggest sprocket utilizable = A 34
Front changer capacity = (E − C) = 26



PERFECT SHIFTING CONTROL WITH THE I.G.A.S. SYSTEM

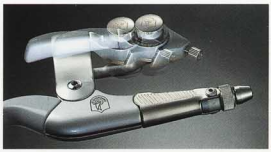
The EUCLID Syncro shift levers are incorporated into a brand new intergraded system of controls for brakes and derailleurs called the INTEGRADED GLOBAL ADJUSTMENT SYSTEM (I.G.A.S.). EUCLID Syncro levers allow either indexed or traditional friction shifting and are made of a special aluminium alloy then coated with an anti-acid, wear resistant material. Switching from index mode to friction mode and viceversa is surprisingly easy because all that is required is to lift a round knurled ring and rotate it 90°.
When using the friction mode, it is possible to adjust the amount of friction on the lever with a knurled knob, coaxed to the ring. When using the index mode, derailleur cable tension can be conveniently adjusted right at the Syncro levers themselves.

With the I.G.A.S., the patented shift lever anchoring system allows the lever various degrees of freedom and greatly improves its ergonomics and ease of use.

The levers operate on a cylindrical stalk attached to the brake lever body and thanks to this design they can be fitted either above or below the center plane of the handlebars. The cylindrical stalk can turn inside its hole so the cyclist can adapt his favorite shifting position.
The shift lever trim can also be regulated by rotating the lever assembly itself.
Both adjustments can be made via 2.5 mm allen head set screws.
Access, trim and maneuverability of the shift levers can all be adjusted to suit individual preference:



1) ROTATIONAL adjustment
EUCLID Syncro levers may assume any position at an angle with the handlebars by rotating the cylindrical stalk in its hole.



2) TRANSVERSAL adjustment
The shift levers can also be moved closer or farther away from the brake lever by sliding the cylindrical stalk inside its hole in the brake lever body. The shift levers are infinitely adjustable for any rider needs by either rotating or sliding the whole assembly on the brake lever body. This all can be easily done with a single 2.5 mm allen head set screw.

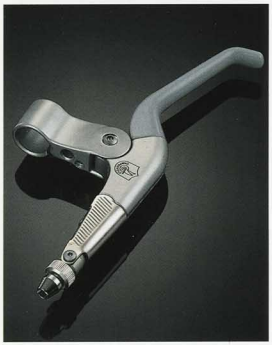


3) WORKING ANGLE adjustment
The relationship of the shift lever to the riders thumb can be varied by rotating the lever assembly inside a socket on the cylindrical stalk.

This allows the best working angle of the shift lever to be chosen by the rider for his most commonly use gear ratios.

A MORE VERSATILE AND SECURE BRAKING SYSTEM

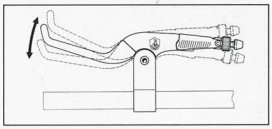
Brake levers made of high ductility aluminium alloy complete EUCLID set of controls. They are available in three versions: standard, BIOFITTING and for use with double rear brakes.



STANDARD LEVERS

These are composed of three pieces: the lever itself, the handlebar mount and the adjusting barrel assembly for the brake cable and casing. Their semi-cylindrical cross-section add strength and make them very practical to use. The distance between the lever and the handlebar grip can be varied by means of a patented adjustment system. This is composed of a dual set of allen head set screws which move the lever backward or forward in an adjustment space of 35 mm measured at the end of the lever.





BIOFITTING LEVERS

In harsh conditions it is essential for a mountain bike rider to be able to squeeze the brake lever while gripping both the lever and the handlebar simultaneously.
BIOFITTING levers use a patented system which allows the end of the lever to be rotated 180° so as to alter its geometric arrangement completely.





For the cyclist who prefers to brake with the forefinger and middle finger then we advise the position which places the end farthest away from the bar.
Rotating the lever end 180° so it's closer to the handlebar makes it ideal for braking with the ring finger and little finger.
The T-shape end of the lever considerably cuts down the risk of injury in the event of a fall.

BIOFITTING levers can be adjusted for reach just like the standard levers with the same system of allen head set screws.

BRAKE LEVERS FOR DUAL REAR BRAKES

Both standard and BIOFITTING levers are designed in such a way that they can be fitted for dual cables and calipers for the rear wheels.
The system includes an extra brake complete with two adapters to be fitted in place of the quick release device.



While the cables for front and one of the rear brakes have a T-shaped end, the third brake uses a cable with the traditional drop-shaped end.
This also makes it possible to use cables with either a T-shaped end or a drop-shaped end as the levers are made with attachments for both types.

QUICK RELEASE ANCHORING SYSTEM

A patented brake quick release system at the handlebars is available with the EUCLID group. The system is attached to the brake lever and allows easy opening of the brake caliper in order to remove the wheels without having to detach the yoke cable from the caliper.



For safety and convenience it is possible to adjust brake cable tension without having to get off the bike. Unlike other devices on the market today, the EUCLID brake lever is designed with a knurled ring nut having 2 cams at 180° that enables cable tension to be adjusted right at the lever with only one hand.



MONOPLANER BRAKE GEOMETRY TO REDUCE VIBRATION

The special EUCLID brake calipers are derived using the highly successful Chorus MONOPLANER geometry.
They are made of a special alloy and can be fitted either on the seat stays or under the chainstays.
The calipers are equipped with a new patented system for adjusting the reciprocal centering of the two caliper arms.
Thanks to the design any inperfections in the anchoring of the brake on the frame can be corrected, thus making assembly and tuning easier.
Once the retaining screw has been removed the brake can easily be attached using a 6 mm allen head screw which is coaxial to its cylindrical bronze housing.



It is also possible to vary the preload on each of the return springs in order to equalize the return force of each caliper arm. The brake pads can be turned and adjusted in any direction as they are anchored with a ball joints.



The cable guide plates for the front and rear calipers are the double screw type, one to anchor the cable and the other to act as a keeper so the guide plate stays attached to the yoke cable even when the brake is released to remove the wheel. This makes repair and maintenance operations much easier, especially those that involve the brake caliper.





PEDALS

An accurately shaped cage encloses an exceptionally sturdy pedal body. Campagnolo quality and reliability are very evident in the EUCLID pedal: the thick anodizing of the cage, the finishing of the body and especially the pedal axle are all derived from the Campagnolo pedals used on the racing bicycles of professional teams.
The internal mechanism of the pedal are protected against all kinds of infiltration with a special gasket that ensures an excellent seal. The serrated cage plates are slightly concave in order to perfectly accomodate the sole of the shoe. They also feature a broad surface to allow the use of special shoes and special knurled plates can be fitted to allow the use of ordinary training shoes without discomfort to the feet.



Special EUCLID resin toeclips with built in reflectors are also available.





CHAINWHEEL AND BOTTOM BRACKET: HIGHLY PROTECTED ROLLING MECHANISMS

The chainwheel is the traditional 5 spoke type with triple chainrings and bolt circles of 110 mm and 74 mm.
The main arm of the EUCLID crank is connected to two of the five spokes and forms a single surface with them, improving their rigidity, and optimizing the transmission of energy to the chain.
The chainrings are available with 46-48-50 teeth for the outer, 36-38 for the middle and 24-26-28 for the inner.
Cranklengths are 170, 175 and 180 mm. The thickness of the crank arm at the pedal hole is 14 mm, so pedals with an axle having a threaded portion 14 mm long are required.

Chainring teeth are made with a numerically controlled gear cutter, not stamped, giving them a very precise profile and allowing them to mesh perfectly with the chain. This eliminates unnecessary friction and energy loss.



The bottom bracket axle is 136 mm long, made of alloyed steel and is hollow on the chainwheel side to allow lubrication.
Grease can be injected through the axle and out a hole in its center to the inside of the bottom bracket assembly.
The bearing cups are also made of alloyed steel and their 1/4" ball bearings are selected with micron tolerance.
The entire rolling mechanism is protected against dust, mud and various other kinds of contaminants by a double seal made of a special material that ensures a superior quality seal.





HUBS

Hubs are available is small or large flange versions with your choice of 32 or 36 holes. EUCLID hubs are made of aluminium alloy and use Campagnolo's race proven cone, cup and ball system 3/16" hardened chromium steel balls are used in the front hub and 1/4" in the rear. The rolling mechanisms are fully protected against infiltration of atmospheric contaminants with special gaskets made of a new material to ensure a perfect seal. The hubs can be easily injected with lubricant through special holes in the dust caps. The quick release is the classic Campagnolo type with a new anti-slip resin cap on the lever.



If desired, solid axles with lock nuts can be fitted to the hubs for use in extreme conditions. A special derailleur guard, available in both short and long versions can also be fitted but a 4 mm longer rear axle or quick release skewer must be used.

HEADSET

The EUCLID headset represents the perfect synthesis of safety, smoothness and durability. It is based on the classic Campagnolo rolling mechanism of cones, balls and races. The hardened 3/16" chromium steel balls are selected to a tolerance of 1 micron.



Special dual seals are used between the cones and races to prevent against infiltration of dirt and water. The headset is supplied with a cable carrier for the front brake. This patented cable carrier is knurled on the inside so that it engages the flats of the headsets' lock nut to prevent road shock from causing it to loosen. The carrier is held in place with a recessed allen head bolt and nut.





SEATPOST

The 325 mm long EUCLID seatpost is available in diameters of 26.4-26.6-26.8-27-27.2 mm.
It is cylindrically shaped, made of forged aluminium alloy and uses a "friction" type system for saddle coupling.



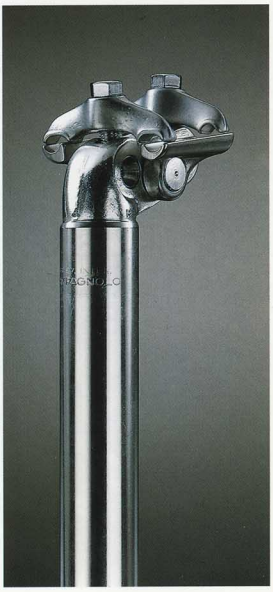
The saddle attachment system makes use of a quick release lever that controls both horizontal movement and the saddle trim angle.



It is important to bear in mind that these two adjustments are independent of one another; this means that the saddle can be moved horizontally without losing the pre-set trim angle.



The latter adjustment is made by means of the patented ANGLE TUNING SYSTEM which is composed of a bolt with a knurled head that can be turned to micrometrically vary the angular trim of the saddle.
The seatpost comes with a quick release binder bolt for the frame.



M000 **"EUCLID" Group Basic composition:**

M010 Gear

M022 Front changer with fixed clip (for pipes Ø 28.5)

M500-CP Subgroup brakes and gear/front changer levers: brake levers; Monoplaner brakes complete with central supports, cables and casings; Syncro levers for 6 speed gear (0118122) and for front changer

M040 Subgroup cranks: l.h. and r.h. crank with triple chainring

M0H0 Bottom bracket (with symmetric axle by 132mm.)

M600-PR Subgroup pedals (r.h. and lh. pedal, complete with support plates toe-clips)

M300 Subgroup small flange hubs for 7mm. fork ends, non-suitable for the fitting of the gear guard

M0R8 Subgroup seat pin with one fixing screw, and quick release with 50mm. skewer.

M0D0 Head set with guidecable bracket

1120007 Biodynamic bottle 900 complete with cage

Subgroups and alternative components:

M023 Front changer with adjustable clip (for pipes Ø: 28 - 33mm.)

M024 Front changer with fixed clip (for pipes Ø: 35 ÷ 36 mm.)

0118124 Syncro lever for 7 speed gear

M500-CP Subgroup brakes and gear/front changer levers: Biofitting brake levers; Monoplaner brakes complete with centrale supports, cables and casings; Syncro levers for 6 speed gear (0118122) and for front changer

M300 Subgroup small flange hubs for 9mm. ends, non-suitable for the fitting of the gear guard

M300P Subgroup small flange solid spindle and nuts hubs for 7 or 9mm. fork ends (specify in the order) non-suitable for the fitting of the gear guard

M300-FG Subgroup large flange hubs for 7 or 9mm. fork ends (specify in the order), non-suitable for the fitting of the gear guard

M300PFG Subgroup large flange solid spindle and nuts hubs for 7 or 9mm. fork ends (specify in the order) non-suitable for the fitting of the gear guard

M0H0 Bottom bracket with asymmetric axle (+4mm. right hand) by 136mm.

M0H0 Bottom bracket with increased asymmetric axle by 140mm.

M600-AM Subgroup pedals (r.h. and lh. pedal complete with steel toe-clips and straps)

M0RV Subgroup seat pin with 2 fixing straps and quick release with 50 mm. skewer

M0R8 Subgroup seat pins with one fixing screw and quick release with 60 mm. skewer

M0RV Subgroup seat pin with 1 fixing screw and quick release with 60mm. skewer

Optionals:

1390001 Long gear guard

1390002 Short gear guard

M2KD Kit for fitting the third brake: brake, double circuit adaptor, single adaptor, central support, cable and casing)

M300 Subgroup small flange hubs for 7 or 9mm. fork ends (specify in the order), suitable for the fitting of the gear guard

M300P Subgroup small flange solid spindle and nuts hubs for 7 or 9mm. fork ends (specify in the order), suitable for the fitting of the gear guard

M300-FG Subgroup large flange hubs for 7 or 9mm. fork ends (specify in the order) suitable for the fitting of the gear guard

M300PFG Subgroup large flange solid spinde and nuts hubs for 7 or 9 fork ends (specify in the order) suitable for fitting the gear guard

M065-PR Pair reflectors for pedals with resin toe-clips

M065 Pair reflectors for pedals without toe-clips

M065-A Pair reflectors for pedals with steel toe-clips

1291002 Spoke-guard disc

1328002 Mudguard screen for the rear brake placed on the horizontal chainstay

Campagnolo reserve the possibility to modify the technical specifications of the products without notice.
Failing order specifications, the basic composition will be supplied.
Campagnolo decline all responsabilities for any improper use or tampering of the products.

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