

Campagnolo®



**REAR
DERAILLEUR**

La Campagnolo S.r.l. si riserva di modificare il contenuto del presente manuale senza preavviso.

La versione aggiornata sarà eventualmente disponibile su www.campagnolo.com.

Sul sito troverete inoltre informazioni sugli altri prodotti Campagnolo® e il catalogo ricambi.

Campagnolo S.r.l. reserves to modify the content of this manual without notice.

The updated version will always be available www.campagnolo.com.

On our website you will also find information on the other Campagnolo® products and the spare parts catalogue.

Die Campagnolo S.r.l. behält sich das Recht vor, den Inhalt des beiliegenden Handbuchs ohne vorherige Bekanntmachung zu ändern.

Die jeweils dem aktuellsten Stand entsprechende Ausgabe finden Sie unter www.campagnolo.com. Unsere Web-Site erhält außerdem Informationen über weitere Campagnolo® Produkte sowie den gängigen Ersatzteilkatalog.

Campagnolo S.r.l. se réserve le droit de modifier le contenu du présent manuel sans préavis.

La version ajournée sera éventuellement disponible sur le site www.campagnolo.com. Sur le site vous trouverez même des autres informations sur les produits Campagnolo® et le catalogue de Pièces de Rechange.

La Campagnolo S.r.l. se reserva el derecho a modificar el contenido del presente manual sin previo aviso.

La versión actualizada estará disponible en la web www.campagnolo.com. En la web, además, encontrareis información sobre otros productos Campagnolo® y el catálogo de recambio.

De firma Campagnolo S.r.l. behoudt zich het recht voor om de inhoud van deze handleiding zonder voorafgaande kennisgeving te wijzigen.

De aangepaste versie zal eventueel beschikbaar zijn op de site www.campagnolo.com.

Op deze site treft u verder informatie over de andere producten van Campagnolo® aan en catalogus met reserveonderdelen.



Campagnolo®



WARNING!

Carefully read, follow and understand the instructions given in this manual. It is an essential part of the product, and you should keep it in a safe place for future reference.

MECHANIC QUALIFICATION - Please be advised that many bicycle service and repair tasks require specialized knowledge, tools and experience. General mechanical aptitude may not be sufficient to properly service or repair your bicycle. If you have any doubt whatsoever regarding your service/repair ability, please take your bicycle to a qualified repair shop.

INTENDED USE - This Campagnolo® product is designed and manufactured for use only on road racing style bicycles that are ridden only on smooth road or track surfaces. Any other use of this product, such as off-road or on trails **is forbidden**.

"AN ACCIDENT" - Please note that throughout this manual, reference is made that "an accident" could occur. Any accident could result in damage to your bicycle, its components and, more importantly, could cause you or a bystander to sustain severe personal injury or even death.

LIFESPAN - WEAR - INSPECTION REQUIREMENT - The lifespan of Campagnolo® components depends on many factors, such as rider size and riding conditions. Impacts, falls, improper use or harsh use in general may compromise the structural integrity of the components and significantly reduce their lifespan. Some components are also subject to wear over time. Please have your bicycle and its components regularly inspected by a qualified mechanic for any cracks, deformation, signs of fatigue or wear (use of penetrating fluid or other visual enhancers to locate cracks on parts is recommended). Disassembly your bicycle components and especially the pedals, is required during these inspections. If the inspection reveals any deformation, cracks, impact marks or stress marks, no matter how slight, **immediately** replace the component; components that have experienced excessive wear also need **immediate** replacement. The frequency of inspection depends on many factors; check with your authorized representative of Campagnolo S.r.l. to select a schedule that is best for you. If you weigh 82 kg/180 lbs or more, you must be especially vigilant and have your bicycle inspected more frequently (than someone wei-

Campagnolo®



ghting less than 82 kg/180 lbs) for any evidence of cracks, deformation, or other signs of fatigue or stress. Check with your mechanic to discuss whether the components you selected are suitable for your use, and to determine the frequency of inspections.

Important PERFORMANCE, SAFETY and WARRANTY Notice - The parts and components of Campagnolo® 11s drivetrains, braking systems, rims, pedals and all other Campagnolo® products, are designed as a single integrated system. To avoid compromises in terms of safety, performance, durability, function, and to prevent voiding the WARRANTY, use only the parts and components supplied or specified by Campagnolo S.r.l., without interfacing them with or substituting them with products, parts or components manufactured by other companies.

Note: Tools supplied by other manufacturers for components similar to Campagnolo® components may not be compatible with Campagnolo® components. Likewise, tools supplied by Campagnolo S.r.l. may not be compatible with components supplied by other manufacturers. Always check with your mechanic or the tool manufacturer to insure compatibility before using tools supplied by one manufacturer on components supplied by another.

The user of this Campagnolo® product expressly recognizes that there are risks inherent in bicycle riding, including but not limited to the risk that a component of the bicycle can fail, resulting in an accident, personal injury or death. By his purchase and use of this Campagnolo® product, the user expressly, voluntarily and knowingly accepts and/or assumes these risks and agrees to hold Campagnolo S.r.l. harmless against any resulting damages.

If you ever have any questions, please contact your mechanic or your nearest Campagnolo® dealer for additional information.



Campagnolo

SAFETY RECOMMENDATIONS

- Please be advised that if the maintenance and repair procedures provided in this manual are not properly performed, or if the other instructions in this manual are not followed, an accident could occur.
- Never make any modifications whatsoever to any component of any Campagnolo® product.
- Parts which have been bent or otherwise damaged in an accident or as a result of any other impact must not be re-straightened. They must be replaced immediately with original Campagnolo® parts.
- Wear clothes which are snug-fitting and which make you visible to traffic, such as neon fluorescent or other bright colors.
- Avoid biking at night because it is more difficult for you to be seen by traffic, and it is more difficult for you to see obstructions on the ground. If you do ride at night, you should equip your bicycle with and use a headlight and a tail light.
- Never use a bicycle or bicycle component unless you are thoroughly familiar with its use and maintenance history. "Used" equipment may have been misused and abused, and can unexpectedly fail resulting in an accident.
- When riding in wet conditions, remember that the stopping power of your brakes is greatly reduced and that the adherence of the tires on the ground is considerably reduced. This makes it harder to control and stop your bicycle. Extra care is required when riding your bicycle in wet conditions to avoid an accident.
- Never spray your bicycle with water under pressure. Pressurized water, even from the nozzle of a small garden hose, can pass under seals and enter your Campagnolo components, thereby affecting its operation. Wash your bicycle and Campagnolo components by wiping them down with water and neutral soap.
- Always wear a properly fitted and fastened bicycle helmet that has been approved by ANSI or SNELL.



Campagnolo

BEFORE EVERY RIDE

DO NOT RIDE YOUR BICYCLE IF IT DOES NOT PASS THIS PRE-RIDE TEST CORRECT ANY CONDITION BEFORE YOUR RIDE.

- Be sure that all of the components of your bicycle, including but not limited to your brakes, pedals, handgrips, handlebars, frame and seating system, are in optimum condition and suitable for use.
- Be sure that none of the components of bicycle are bent, damaged or out of alignment.
- Check to be sure that all quick release fasteners, nuts and bolts are properly adjusted. Bounce the bicycle on the ground and listen and look for anything which may be loose.
- Be sure that your wheels are perfectly centred. Spin the wheels to be sure that they do not wobble up and down or from side to side, and that they do not make contact with the fork legs or brake pads while rotating.
- Check all reflectors to make sure that they are clean, straight and securely mounted.
- Check your brake pads and cables to be sure they are in good condition.
- Test your brakes in the beginning of your ride to make sure that they are operating properly.
- Learn and follow the local bicycle laws and regulations, and obey **all** traffic signals, signs and laws while you ride.

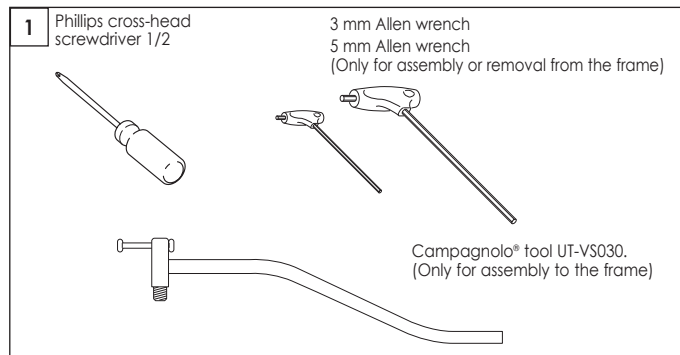
If you ever any comments, questions or concerns, please contact your nearest Campagnolo Service Center. A list of service centers may be found on our website at www.campagnolo.com.



Campagnolo

1. TOOLS

All assembly, adjustment and maintenance operations for the rear derailleur can be performed with the following wrenches (not included in the package) (Fig.1).



WARNING!

Always wear protective gloves and glasses while working on the rear derailleur.



2. TECHNICAL SPECIFICATIONS

NOTE

Recommended combinations for cranksets and rear derailleurs are set forth below. However, please note that these are only recommendations which must be verified for your particular bicycle. The variables introduced by the frame geometry can affect the effective adequacy of the recommended combinations. 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. If you are unsure about the suitability of a combination for your use, please see your bicycle mechanic or contact your nearest Campagnolo retailer.

RECOMMENDED COMBINATIONS

- Double crankset (52-39 o 53-39) or CT crankset (50-34) + short cage rear derailleur: all 11s Campagnolo sprocket sets



WARNING!

COMPATIBILITY

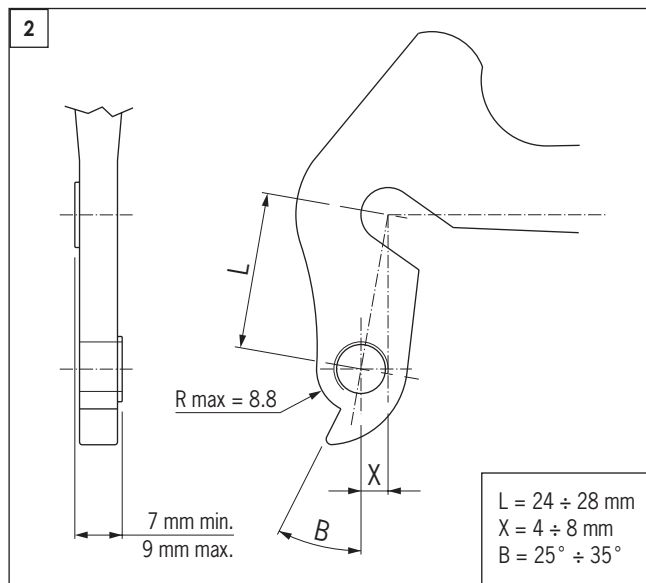
- The 11s front derailleurs are only compatible with Ultra-Shift Ergopower Campagnolo 11s controls.



Campagnolo

ATTENTION!

Campagnolo® rear derailleurs are designed to work with dropouts that have the dimensions shown in Fig. 2.
For your safety and for the performance of the drivetrain please make sure that the dropout of your bicycle has those dimensions.
If you have any doubts please have a qualified mechanic inspect your bike before using it.

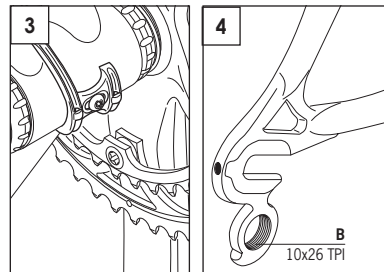


Campagnolo



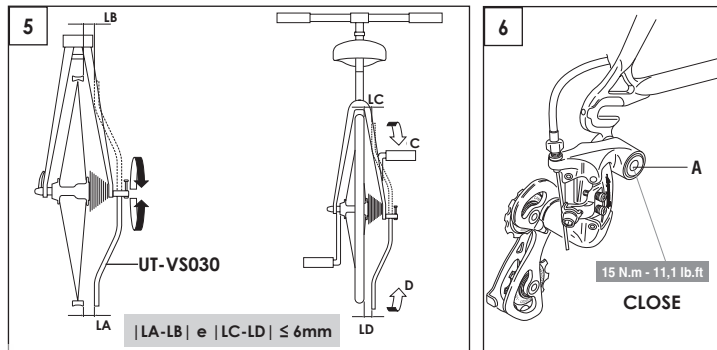
3. PREPARING THE FRAME

- Check that the Campagnolo® plate (Fig. 3) is fitted under the bottom bracket shell.
- Clear the threading of the rear derailleur connection fitting on the right rear dropout (B - Fig. 4) using a tool tap with threading 10x26 TPI.
- Check and, if necessary, realign the rear derailleur dropout using Campagnolo® tool UT-VS030 (Fig. 5).



4. INSTALLATION

- Secure the rear derailleur to the frame using screw (A - Fig. 6), and tighten with a 5 mm Allen key.
- Tightening torque: 15 N.m - 11,1 lb.ft

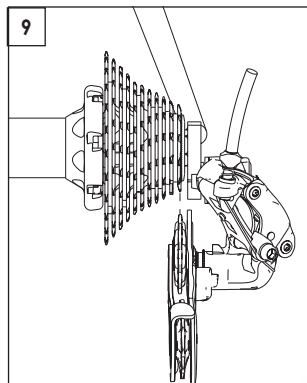
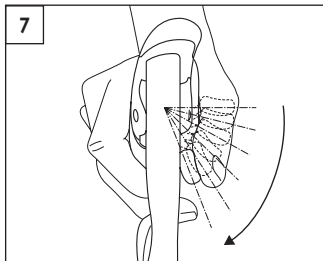
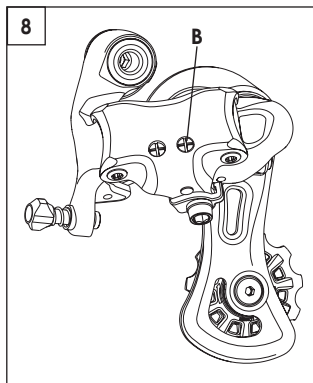




Campagnolo®

5. CABLE ASSEMBLING AND ADJUSTING

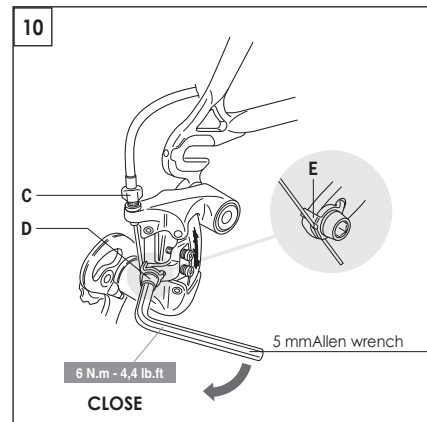
- Carry out this adjustment with the chain on the smallest freewheel sprocket and with the Ergopower control button zeroed (Fig. 7).
- Turn the screw (B - Fig. 8) until perfect alignment is obtained between the centreline of the top roller and the axis of the first sprocket (Fig. 9).
- Check the length and, if necessary, shorten the casing. Take care to cut it straight across without altering the configuration of the casing and without damaging the cable in any way. If the cable is damaged, please replace it before riding your bicycle. If the casing is too short, rear derailleur operation will be affected.



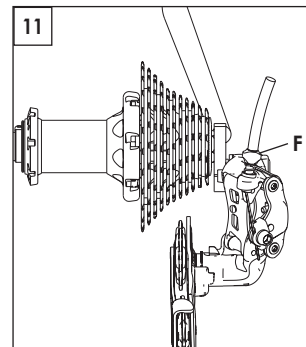
Campagnolo®

Cables and casings do not require lubrication since they are supplied already lubricated.

- Pass the cable through the adjustment screw (C - Fig. 10) and insert the end of the casing; then pass the cable underneath the plate (E - Fig. 10) and clamp it by tightening the Allen screw (D - Fig. 10) at a tightening torque of 6 N.m - 4.4 lb.ft. Cut the excess cable at about two cm. from the clamping screw and protect the end with a cable cap.
- Make sure that the screw (G - Fig. 12) is correctly adjusted: by operating the gear lever with the chain on the largest sprocket, the inner plate of the derailleur cage must **NOT** come into contact with the spokes.



- Position the chain on the 5th sprocket counting from the smallest.
- Turn the cable tension adjuster (F - Fig. 11) until perfect alignment is obtained between the centreline of the top roller and the centreline of the fourth sprocket.
- If centering between the centrelines of the roller and the fourth sprocket is not correct, turn the adjuster (F - Fig. 11) counterclockwise to shift the rear derailleur inwards. Turn clockwise to shift the rear derailleur outwards.





• Check that when the shifter is actuated accordingly, the rear derailleur positions the chain on the largest sprocket; if this does not occur, turn the screw (G - Fig. 12) repeatedly (slackening it until the chain is positioned on the largest sprocket without overshifting).

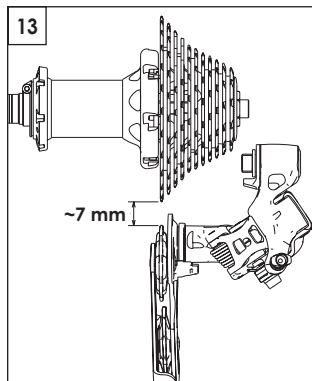
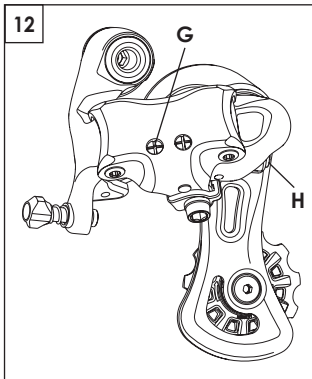
• Make sure that all gear ratios work perfectly.

• Fit the chain on the max. sprocket and on the smallest front chainring.

⚠ ATTENTION!

Deraillleur adjustments must be performed by skilled personnel: a badly adjusted deraillleur can result in an accident, personal injury or death.

Adjust the screw (H - Fig. 12) and position the derailleur cages as in Fig. 13. A distance which is too great or too small compared with the specifications indicated could have a negative impact on snappy shifting.



Campagnolo

Campagnolo

6. REAR DERAILLEUR MAINTENANCE

- Lubricate all the joints regularly.
- If the rollers do not rotate smoothly, clean thoroughly and replace if necessary.
- To remove the rollers, unscrew the screws (C - Fig. 14) with a 3 mm Allen screw.

ATTENTION!

The two rollers are different: on the upper section, fit the roller (A - Fig. 14) marked "UPPER" (with side play); in the lower section, fit the roller (B - Fig. 14) marked "LOWER": it is unidirectional and must be fitted so that it rotates in the direction indicated by the arrows (Fig. 15).

WARNING!

Comply with the following specifications when replacing the pulleys:

- **11s** rear derailleurs (Tightening torque: 3 N.m - 2,21 lb.ft).

