

*Campagnolo*®



**REAR  
DERAILLEUR**





## 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.

**"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.

**INTENDED USE** - This product by Campagnolo® has been designed and manufactured to be fitted and used **exclusively** on "racing" or "cyclo-cross" bicycles, with any other use explicitly excluded. Any different use of this product (like, for instance, but without any limitation, cross-country, all mountain/enduro, off-road acrobatic, downhill, four-cross, freeride, free-style, or any other type of extreme off-road cycling as defined by UCI) might cause accidents, physical injuries or even death and must therefore be considered totally inappropriate, unsuitable and not recommended.

**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 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). 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 Campagnolo® representative 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 weighting 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, including but not limited to the risk of passive or active negligence of Campagnolo S.r.l. or hidden, latent or obvious defects in the product, and agrees to hold Campagnolo S.r.l. harmless to the fullest extent permitted by law against any resulting damages.*

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

## 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.
- Always wear a properly fitted and fastened bicycle helmet that has been approved by ANSI or SNELL.

## 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 all reflectors to make sure that they are clean, straight and securely mounted.
- Check you 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](http://www.campagnolo.com).**

## 1. TOOLS

Phillips cross-head screwdriver 1/2 - Campagnolo® tool UT-VS030 - 3 mm Allen wrench, 5 mm Allen wrench - Torx T-25.

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

**WARNING!****COMPATIBILITY**

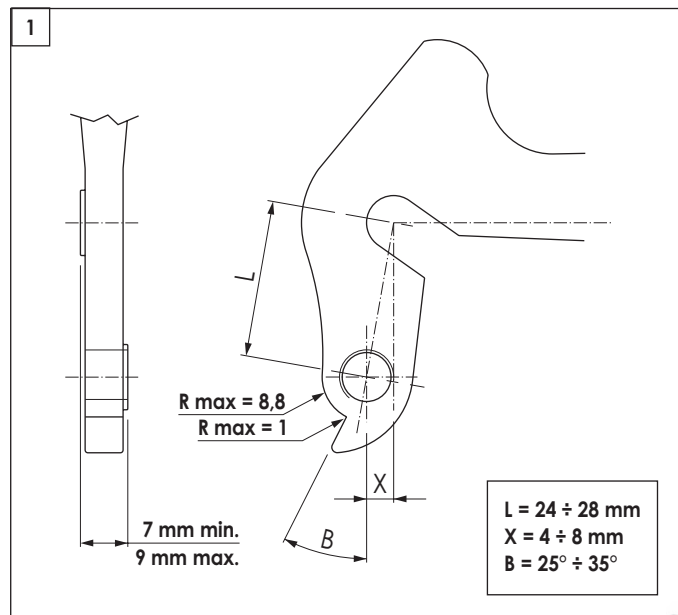
- The 11s front derailleurs are only compatible with Ergopower Campagnolo 11s controls.
- The 11s front derailleurs are compatible with sprocket sets from 11-23 to 12-29.

# ATTENTION!

Campagnolo® rear derailleurs are designed to work with dropouts that have the dimensions shown in Fig. 1.

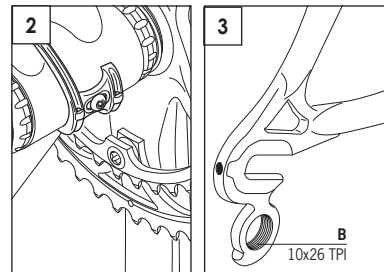
For your safety and for the performance of the drivetrain please make sure that the dropout of your bicycle has those dimensions.

If you have any doubts please have a qualified mechanic inspect your bike before using it.



## 3. PREPARING THE FRAME

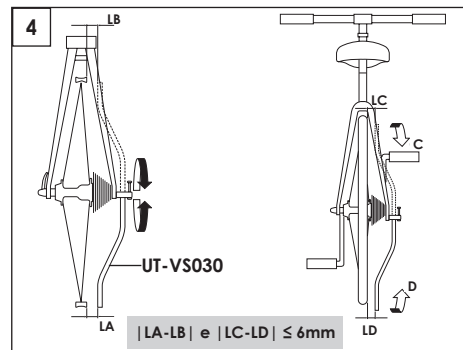
- Check that the Campagnolo® plate (Fig. 2) is fitted under the bottom bracket shell.
- Clear the threading of the rear derailleur connection fitting on the right rear dropout (B - Fig. 3) using a tool tap with threading 10x26 TPI.



## CAUTION

*Check and, if necessary, realign the rear derailleur dropout only be using Campagnolo® tool UT-VS030 (Fig. 4).*

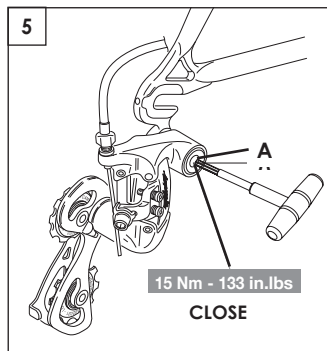
**NEVER** straighten the dropout with therear derailleur assembled because you could damage the dropout and cause irreparable damage or loss in functionality to your rear derailleur.



## 4. INSTALLATION

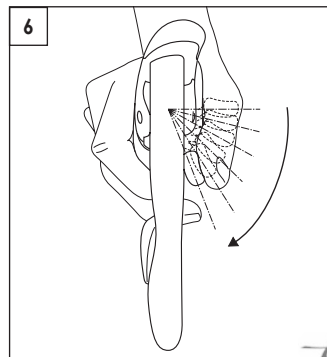
- Secure the rear derailleur to the frame using screw (A - Fig. 5), and tighten with a TORX T-25 key.

Tightening torque: **15 Nm - 133 in.lbs**

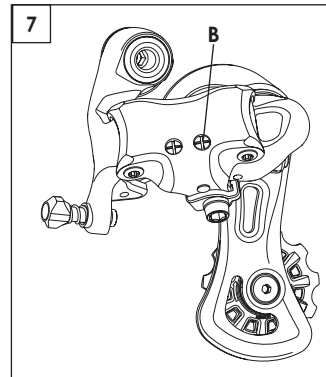


## 5. CABLE ASSEMBLING AND ADJUSTING

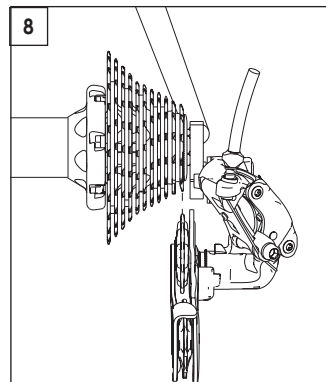
- Carry out this adjustment with the chain on the smallest freewheel sprocket and with the Ergopower control button zero-ed (Fig. 6).



- Turn the screw (B - Fig. 7) until perfect alignment is obtained between the centreline of the top roller and the axis of the first sprocket (Fig. 8).



- 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.



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

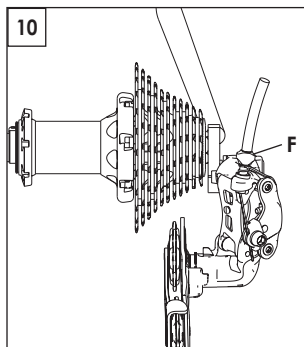
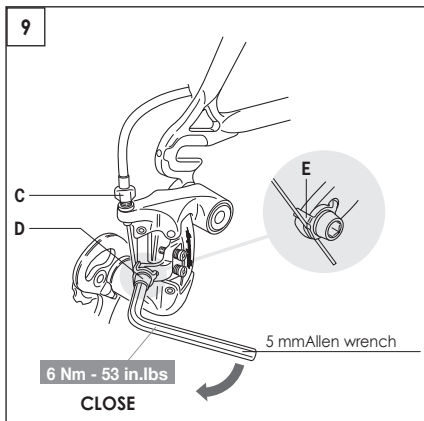
- Pass the cable through the adjustment screw (C - Fig. 9) and insert the end of the casing; then pass the cable underneath the plate (E - Fig. 9) and clamp it by tightening the Allen screw (D - Fig. 9) at a tightening torque of **6 Nm - 53 in.lbs**. Cut the excess cable at about two cm. from the clamping screw and protect the end with a cable cap.

- Make sure that the screw (G - Fig. 11) 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 5<sup>th</sup> sprocket counting from the smallest.

- Turn the cable tension adjuster (F - Fig. 10) 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. 10) 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. 11) repeatedly (slackening it until the chain is positioned on the largest sprocket without overshifting).

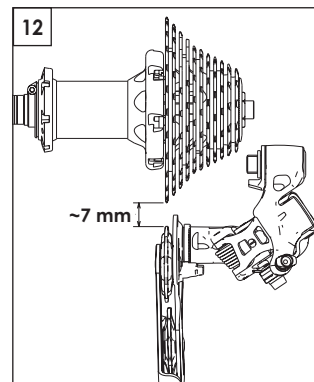
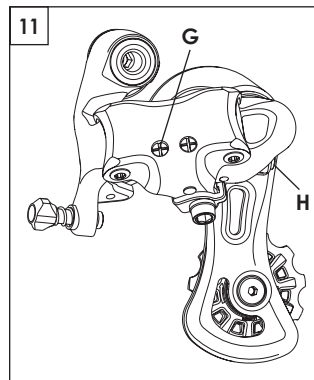
- Make sure that all gear ratios work perfectly.

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

### ⚠ ATTENTION!

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

Adjust the screw (H - Fig. 11) and position the derailleur cages as in Fig. 12. A distance which is too great or too small compared with the specifications indicated could have a negative impact on snappy shifting.



## 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. 13) with a 3 mm Allen screw.

### ATTENTION!

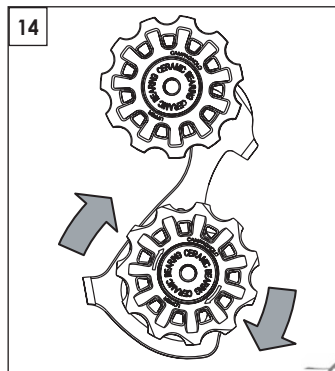
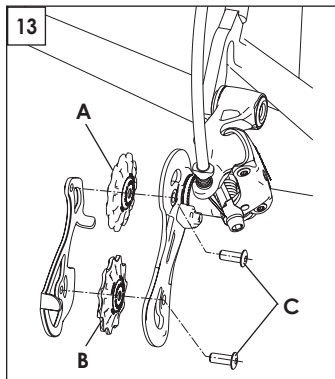
The two rollers are different: on the upper section, fit the roller (A - Fig. 13) marked "UPPER" (with side play); in the lower section, fit the roller (B - Fig. 13) marked "LOWER": it is unidirectional and must be fitted so that it rotates in the direction indicated by the arrows (Fig. 14).

### WARNING!

Comply with the following specifications when replacing the pulleys:

#### Tightening torque

2,7 Nm - 24 in.lbs



- The life of the components depends on conditions of use and on the frequency and quality of maintenance. To keep the components in good condition, cleaning and lubrication must therefore be repeated frequently, especially if it is subjected to heavy-duty use (i.e. after washing your bicycle, after every ride in wet, dusty or muddy conditions etc.).

- Salt, mud and sand seriously damage bicycles and their components. Thoroughly rinse, clean and dry your bike after using it in these conditions.
- Never spray your bicycle with water under pressure. Pressurized water, even from the nozzle of a small garden hose, can pass seals and enter into your Campagnolo® components, damaging them beyond repair. Wash your bicycle and Campagnolo® components by wiping them down with water and neutral soap. Dry them using a soft cloth. Never use abrasive or metal pads.
- Before lubricating, thoroughly clean the drive system (chain, sprocket set, chainrings and derailleur pulleys) with a brush or cloth saturated with an appropriate degreaser or detergent.
- Relubricate the components carefully using a lubricant suitable to purpose.
- Using poor-quality or incorrect lubricant may damage the chain and cause excessive wear or damage to the system. A damaged drive system can malfunction, resulting in an accident, personal injury or death.
- After applying the lubricant move the cranks and engage all possible gear combinations in order to thoroughly lubricate the entire drive system.
- Thoroughly clean any residual lubricant from the bicycle and floor.
- At the end of the lubrication operation, CAREFULLY degrease rims and brake pads.



### WARNING!

Traces of lubricant on the rims and brake pads can reduce or eliminate the braking capabilities of your bicycle, resulting in an accident, personal injury or death.