



TEKAR™
13S CHAIN

WARNING!

ALWAYS wear protective gloves and glasses while working on the bicycle.



13s CHAIN

THIS TECHNICAL MANUAL IS INTENDED FOR USE BY PROFESSIONAL MECHANICS.

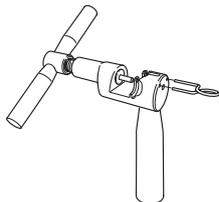
Anyone who is not a qualified professional for bicycle assembly must not attempt to install and operate on the components independently due to the risk of carrying out incorrect operations which could cause the components to malfunction, resulting in accidents, physical injury or even death.

The actual product may differ from what is illustrated, as the specific purpose of these instructions is to explain the procedures for using the component.

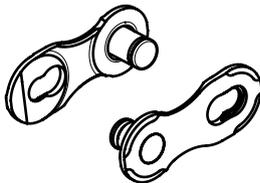


1 - TECHNICAL SPECIFICATIONS / COMPATIBILITY

1.1 - VERSION WITH CLOSING PIN

WIDTH	LENGTH	FASTENING SYSTEM	TOOL
4,9 mm	118 LINKS	5-CN-SR700	UT-CN400
			

1.2 - C-LINK™ VERSION

WIDTH	LENGTH	FASTENING SYSTEM	TOOL
4,9 mm	117 LINKS + C-Link™	CN-SR701	Connecting link closing caliper with teeth less than 1.8 mm thick
			



WARNING!

Combinations other than those in the tables could cause the drivetrain to malfunction and result in accidents, physical injury or death.

**WARNING!**

The 13s chain is not compatible with 12s and 11s drivetrains. Use the 13s chain only and exclusively with components specifically designed by Campagnolo for the Campagnolo® 13s drivetrain; using other combinations could lead to accidents, physical injury or death.

The use of components that do not belong to this drivetrain may significantly reduce the overall performance of the drivetrain and it is therefore advisable not to use components that do not belong to this drivetrain.

**WARNING!**

The use of sprockets or chainrings which are not marked Campagnolo® can damage the chain. This may result in its unexpected opening of the chain and cause accidents, personal injury or death.

2 - CHAIN INSTALLATION (VERSION WITH CLOSING PIN)

WARNING!



All connecting and disconnecting of the Campagnolo® 13 speed chains should be performed using the special Campagnolo® UT-CN400 tool, not included in this kit. Use of other tools could damage the chain and/or provoke unexpected chain failure resulting in an accident, personal injury or death.

WARNING!



The pusher of the Campagnolo® tool UT-CN400 is fitted with a pin with a replaceable tapered tip which is of fundamental importance for correct assembly of the bushing ULTRA-LINK; if the pin is worn or damaged, replace it with the special Campagnolo® UT-CN301 spare pin. Failure to timely replace the tip pin can damage your chain, resulting in an accident, personal injury or death.

2.1 - CHAIN LENGTH

Determine the correct chain length without passing it through the rear derailleur, positioning it on the largest sprocket and on the chainring.

Pulling the chain, locate the correct pin aligned with the hole (where there is a clamp-on with label); if it does not line up exactly, always select the pin on the next internal link (**Fig. 1A**).

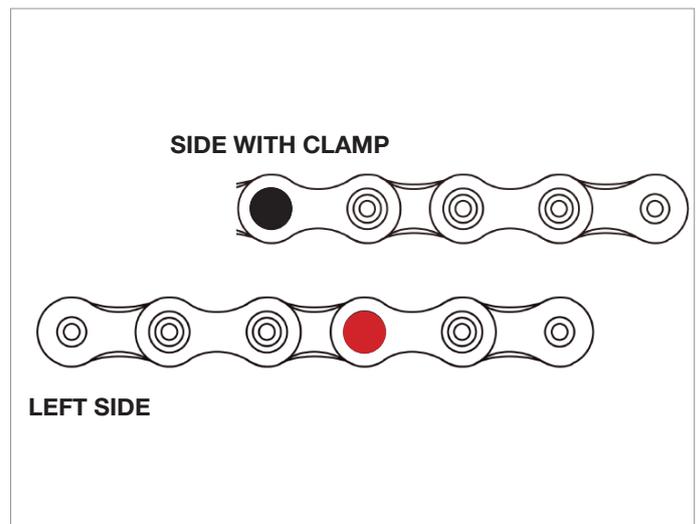


Fig.1A

Once you have identified the correct pin on the inner link, from the opposite side to the outer one with the plastic clamp and the adhesive "Warning!" label, add 4 more links, two outer and two inner, to obtain the exact pin onto which to shorten the chain (**Fig. 1B**).

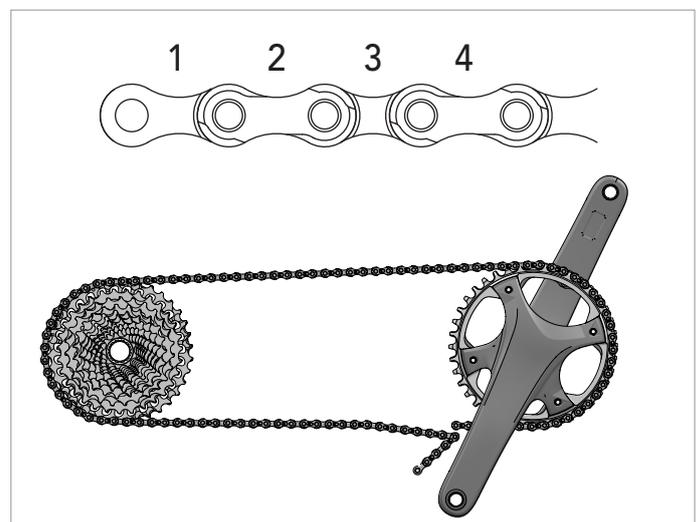


Fig.1B

2.2 - HOW TO SHORTEN THE CHAIN

!

Perform all of the following operations and remove extra links from the side of the chain opposite the external link, which is identified by the plastic band and the adhesive "WARNING!" label (Fig. 2).

- Prepare the tool UT-CN400 by positioning the tongue in open mode (X - Fig. 3).

- fit the link to be opened in tool **UT-CN400** (Fig. 3) taking care to end with an internal link;

- clamp the link with the special clamping device (Z) (Fig. 4);

- tighten the tool until the small pin emerges completely from the hole in the link (Fig. 5).

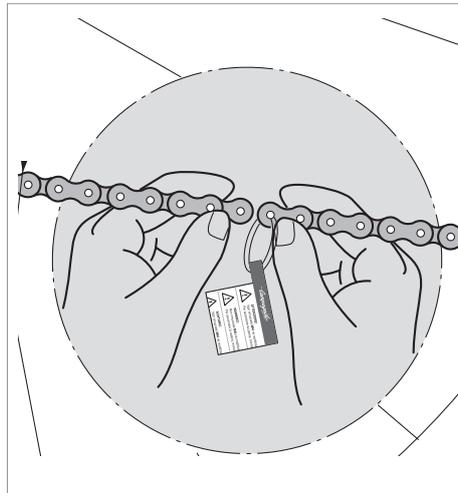


Fig.2

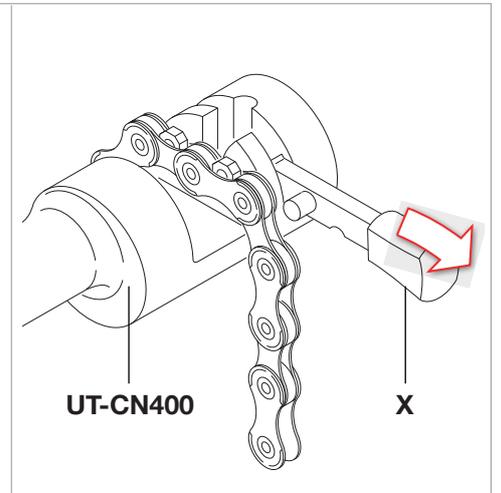


Fig.3

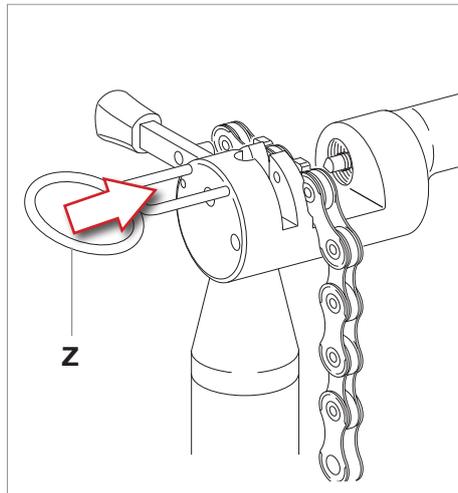


Fig.4

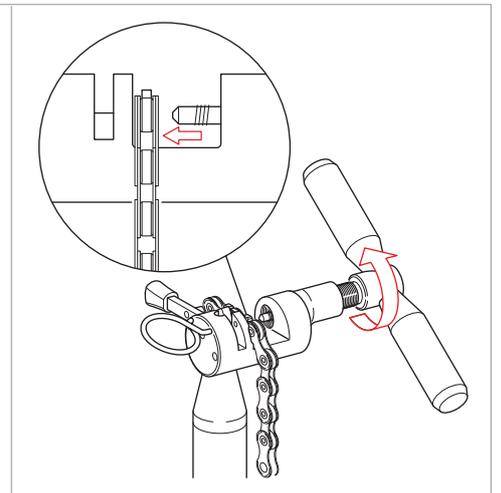


Fig.5

2.3 - INSERTING THE BUSHING ULTRA-LINK 5-CN-SR700

- Remove the plastic band and the adhesive "Warning" label.

- To assembly the closing pin ULTRA-LINK 5-CN-SR700, place the chain on the bottom bracket shell.

- Insert the inner link (B - Fig. 6) into the outer link (C - Fig. 6), and then insert the drive part of the union bushing ULTRA-LINK 5-CN-SR700 (D - Fig. 6) into the hole of the link from the inside of the chain towards the outside.

- Move the chain onto the smallest sprocket, then position the links to close in the area indicated in Fig.7.

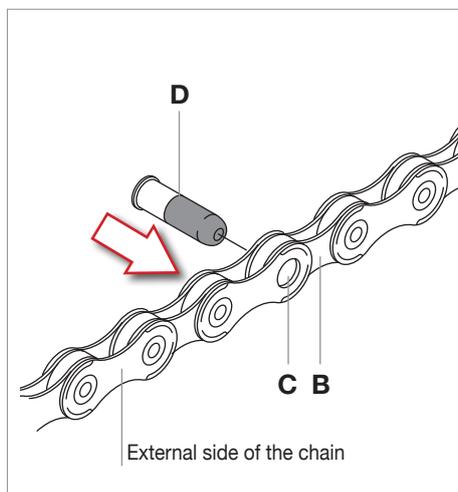


Fig.6

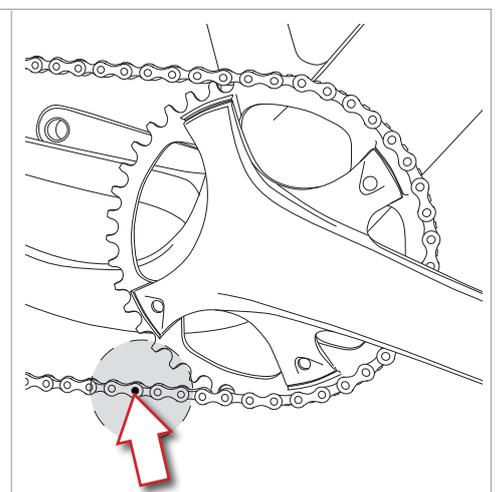
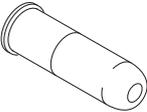


Fig.7

IMPORTANT! COMPATIBILITY	FASTENING SYSTEM	
<p>The 13s closing pin is not compatible with 11s and 12s drivetrains. <u>Use pin 5-CN-SR700 solely with 13s chains.</u></p>	13s	12s
		
	5-CN-SR700	5-CN-SR600

- Unscrew tool **UT-CN400**.
- Position the tool **UT-CN400** as shown in **Fig. 8**.

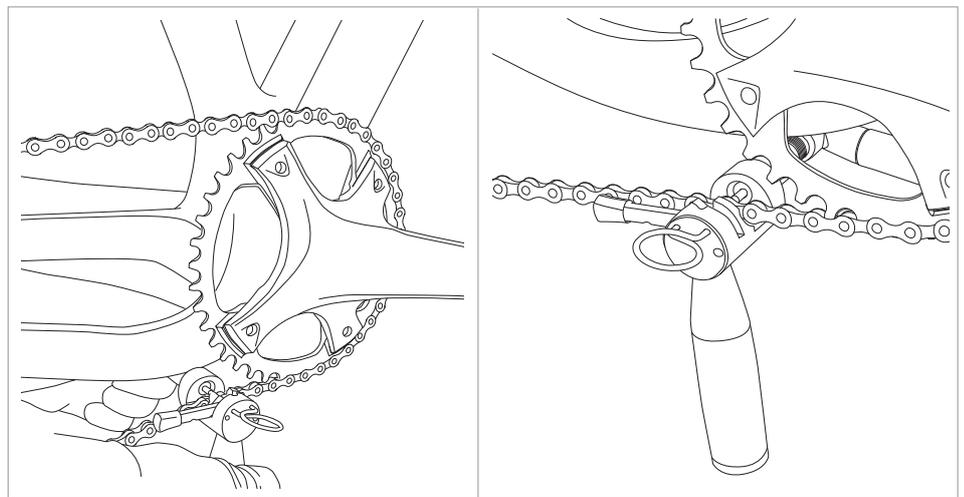


Fig.8

- Fit the link to be closed in the relative seats (**Fig. 9**).
- Clamp the link with the special clamping device (Z - **Fig. 10**).
- Check that the tongue of tool **UT-CN400** is in the external position (Y - **Fig. 10**).

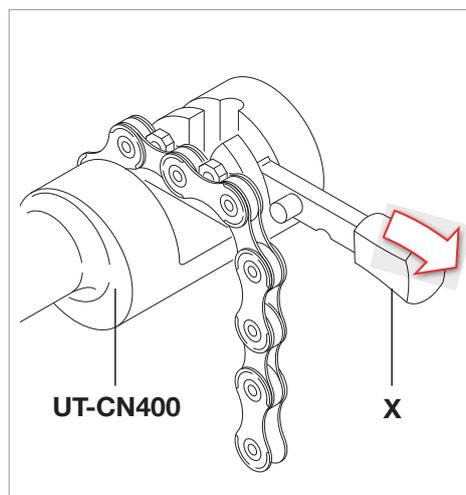


Fig.9

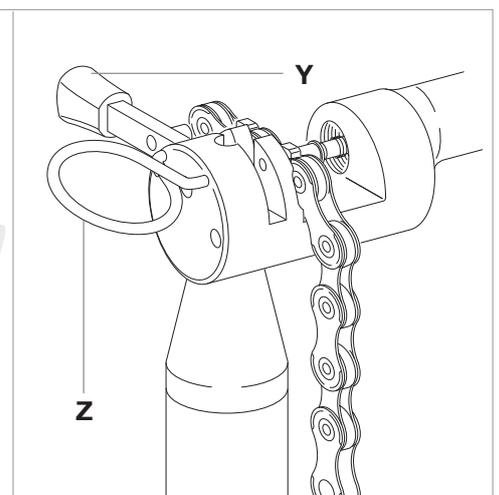


Fig.10

- Check that the tapered tip of the pusher (F) (**Fig. 11**) is in line with the centre of the bushing 5-CN-SR700 (E) (**Fig. 11**).

- While exerting a uniform force, screw in the tool (**Fig. 12**) so that the bushing ULTRA-LINK 5-CN-SR700 (E) has completely entered the thickness of the chain.

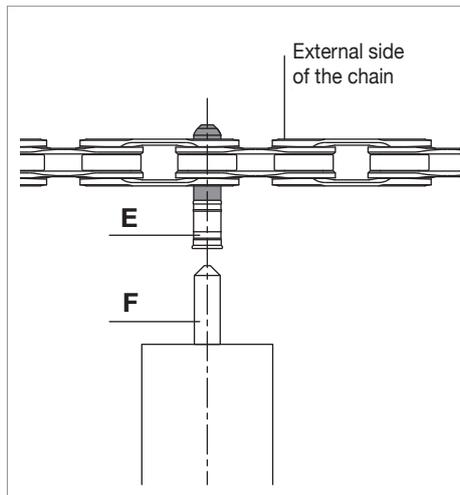


Fig.11

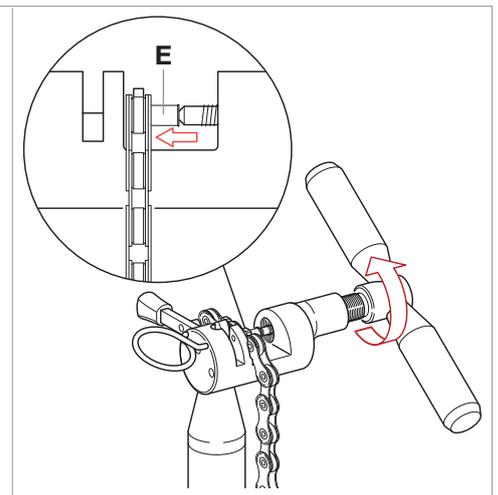


Fig.12

Note

In order to minimize the possibility of damaging the chain irreparably, DO NOT TIGHTEN the tool beyond the beat. Let the bushing ULTRA-LINK 5-CN-SR700 (E) protrude 0.1 mm from the inner side of the chain (**Fig. 13**).

- Insert the protruding part of the guide into the hole provided at the base of the tool and split it by bending (**Fig. 14**).

The terminal part of the split guide must always remain inside the bushing.

• Remove the clamping device and remove the chain from the tool.

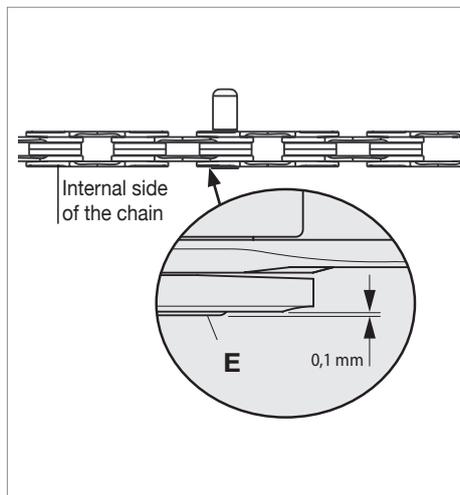


Fig.13

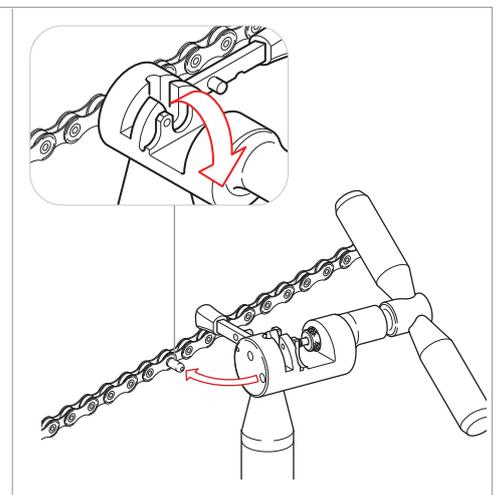


Fig.14

2.4 - LOCKING THE BUSHING ULTRA-LINK 5-CN-SR700

- Prepare the tool UT-CN400 by positioning the tongue in closure mode (Y - **Fig. 15**).

- Position the tool UT-CN400 as indicated in **Fig. 16** (from the outside of the chain towards the inside).

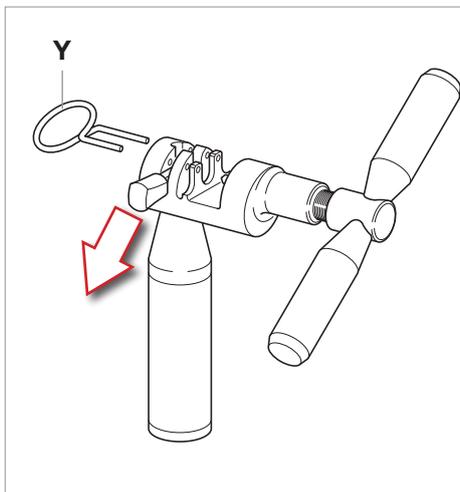


Fig.15

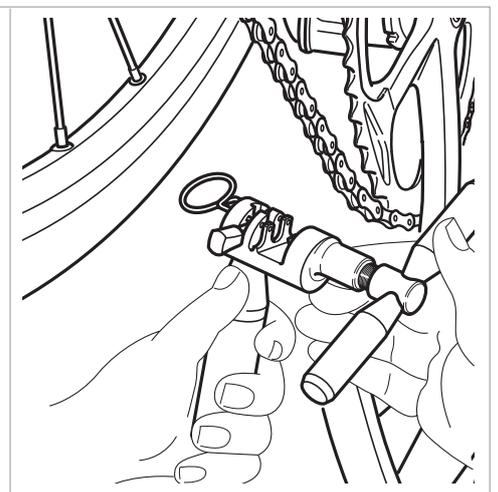


Fig.16

- Insert the link to close into the provided seats (**Fig. 17**).
- Lock the link by means of the special locking device (Z - **Fig. 17**).
- Check that the tapered tip of the pusher is in line with the centre of the bushing ULTRA-LINK 5-CN-SR700 (**Fig. 18**).

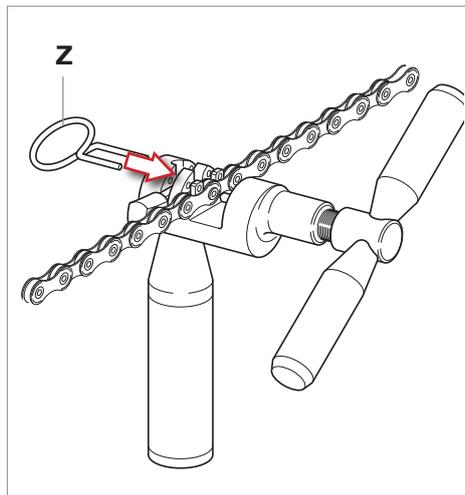


Fig.17

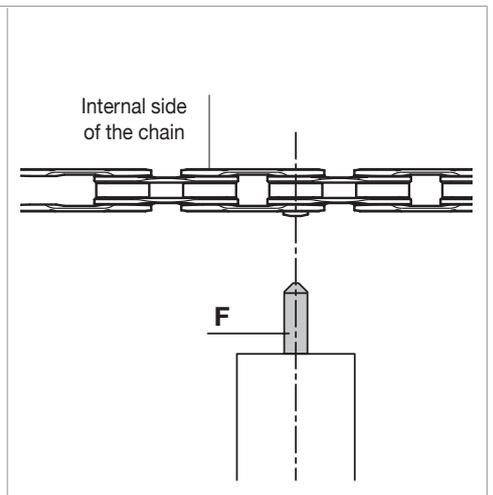


Fig.18

- Screw in the tool to bring the pusher into contact with the protruding end of the ULTRA-LINK 5-CN-SR700 bush, turning it by about 3/4 of a turn and exerting moderate force till distorted (**Fig. 19**).

- The slight protrusion (X) (towards the external side of the chain) of the small pin (E) from the link (**Fig. 20**) is entirely normal and does not obstruct normal chain movement.

! NEVER try to eliminate this protrusion!

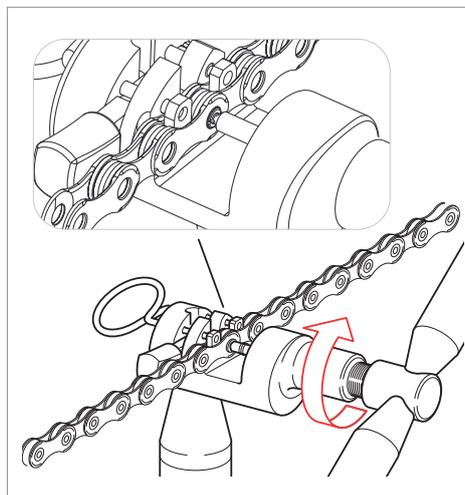


Fig.19

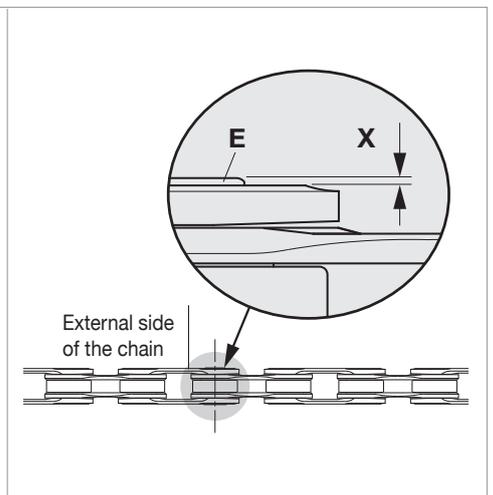


Fig.20

- Make sure that chain closure does not present any "harsh points" or links that do not bend freely (**Fig. 21**).

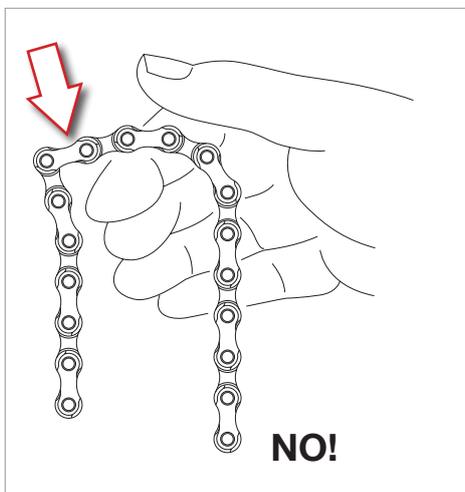


Fig.21

- Free the joints as required with delicate lateral bending of the links (**Fig. 22**).

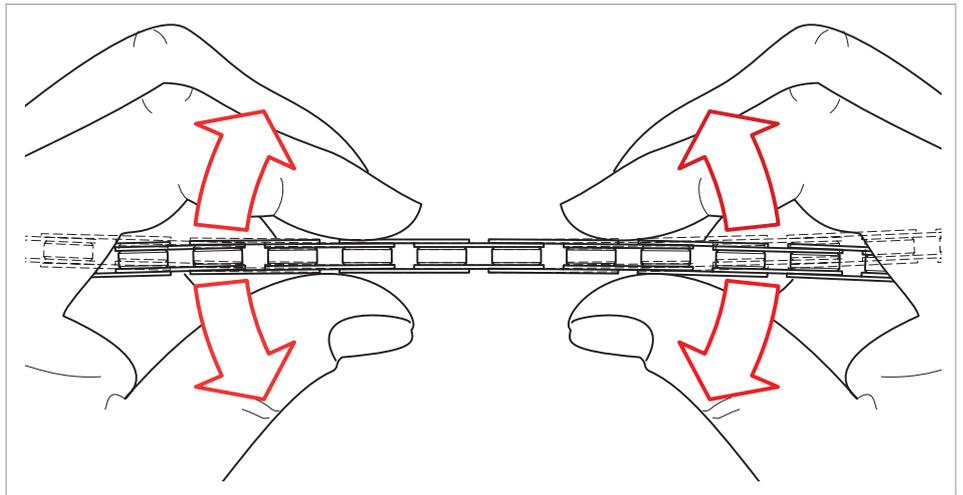


Fig.22

WARNING!



A poorly joined chain could open suddenly when using the bicycle, causing accidents, physical injury or death. If you have any doubt over your ability to follow the instructions in this manual correctly, contact a specialist mechanic.

2.5 - CHAIN OPENING

WARNING!



If it becomes necessary to open and close the chain (which can be done only twice), use only the special Campagnolo Ultra-link 5-CN-SR700 pin with Campagnolo UT-CN400 tool. The use of pin produced by different manufacturers can damage the chain. A damaged chain can break, even suddenly, and cause accidents, injuries and even death.

WARNING!



Opening and closing the chain on more than two occasions can result in the chain unexpectedly failing while riding, resulting in an accident, personal injury or death.

- Get the special Campagnolo® bushing ULTRA-LINK 5-CN-SR700.
- Only and exclusively use the tool **UT-CN400**.
- Identify the opening link on the chain; this must be different and away from the one used for closing the first time (a link that can be recognizable from the impression showing the production batch).

Note

To open the chain, carry out the operations indicated in chapter 5 “Chain installation”, using the Campagnolo® tool **UT-CN400** only.

3 - CHAIN INSTALLATION (C-LINK™ VERSION)

3.1 - CHAIN LENGTH

Determine the correct chain length without passing it through the rear derailleur, positioning it on the largest sprocket and on the chainring.

If the pins are not perfectly aligned, the length of the chain must be increased until it crosses the right hand pin of the next external link; inasmuch, in the example in **Fig 1**, the correct length is obtained at point A.

Starting from this point, add another 3 links (two inner and one outer) to obtain the exact pin when the chain can be shortened (point B **Fig. 1**).

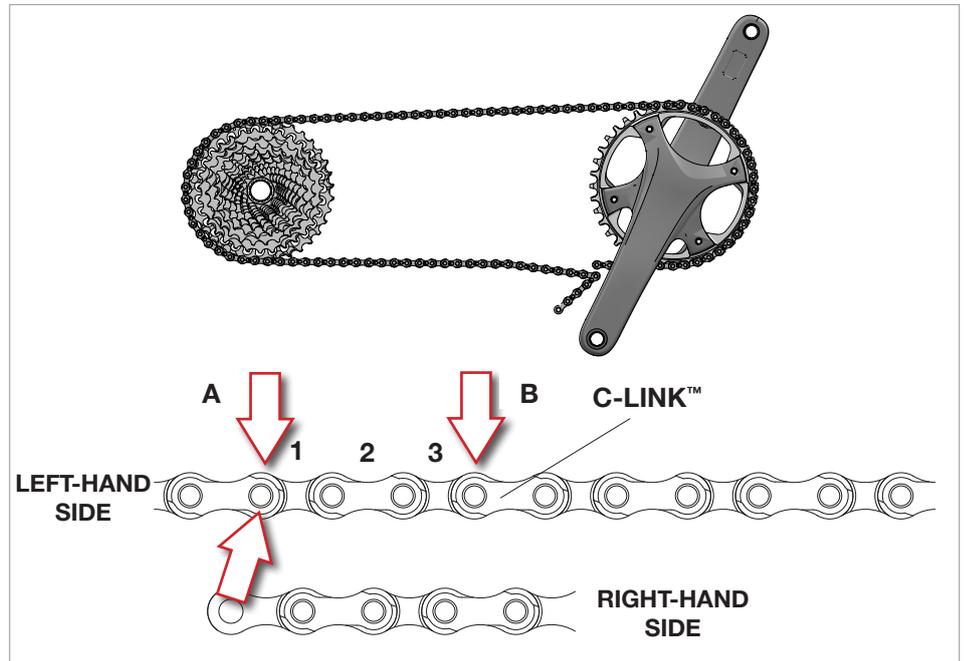


Fig.1

3.2 - HOW TO SHORTEN THE CHAIN

Fit the link to be opened in tool (**Fig. 2**) taking care to end with an internal link;

- tighten the tool until the small pin emerges completely from the hole in the link (**Fig. 3**).

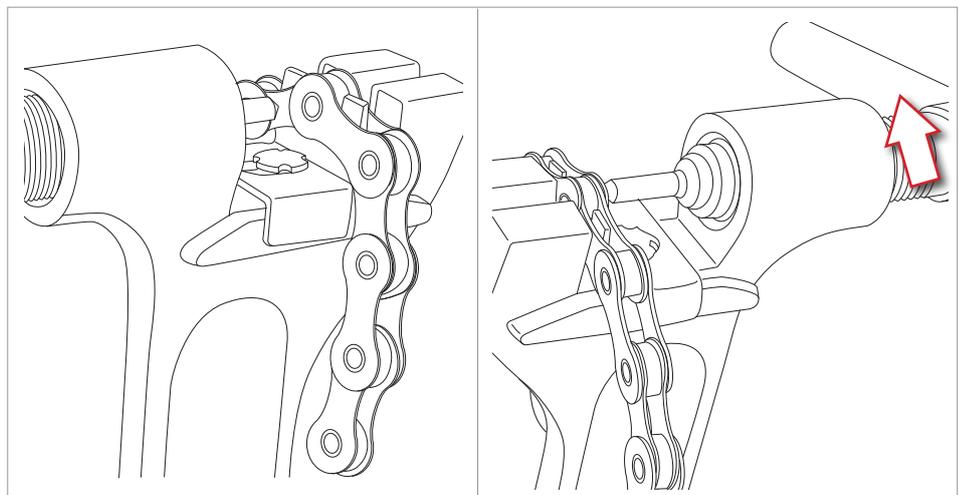


Fig.2

Fig.3

3.3 - CLOSING THE CHAIN WITH C-LINK™ (CONNECTING LINK)



DANGER!

If you open the chain by removing the C-Link™ (connecting link), even for chain cleaning and maintenance tasks, you must use a new C-Link™ to close the chain. The C-Link™ is damaged during disassembly: it is therefore mandatory ALWAYS to use a new C-Link™ to close the chain. Failure to follow these instructions may cause the chain to fail, even suddenly, with consequent accidents, physical injury or death.

- Lubricate the pins of the C-Link™ using a specific chain lubricant (Fig. 4).

- Fit each pin of the C-Link™ in the two free holes on the inner links of the chain (Fig. 5).

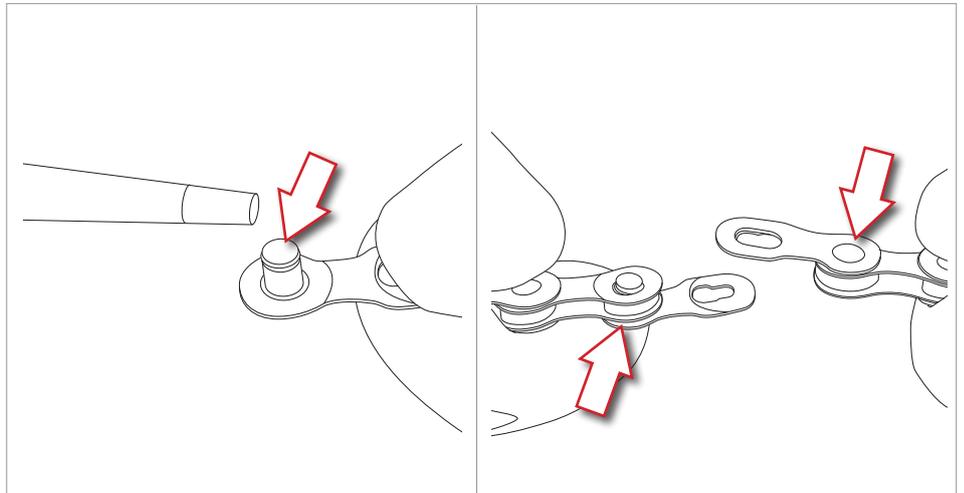


Fig.4

Fig.5

- Fit the pins into the area with the largest slot diameter of the C-Link™ (Fig. 6).

- Press the C-Link™ to make sure that the pins are fully inserted (Fig. 7).

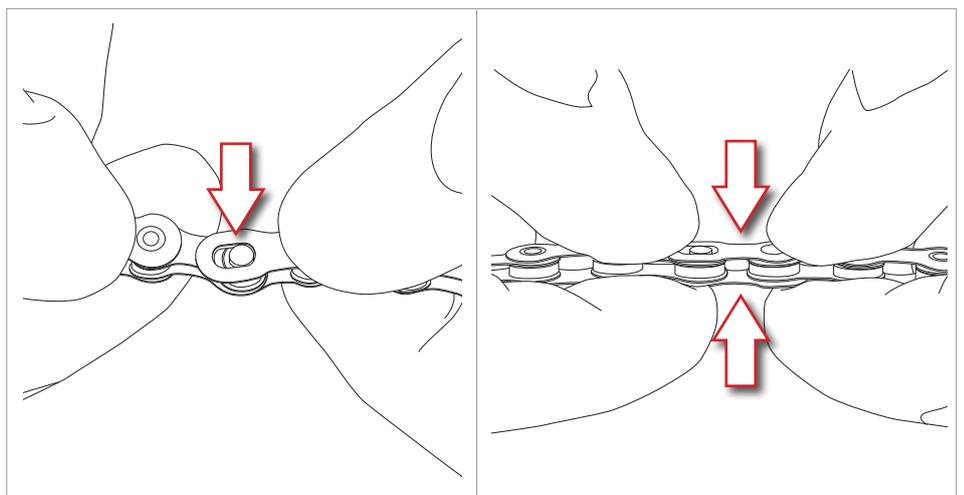


Fig.6

Fig.7

- Fit the connecting link closing calliper with teeth less than 1.8 mm thick into the inner links adjacent to the C-Link™ (Fig. 8).

- Press the calipers until you hear a click indicating that the two pins have been positioned in the smaller diameter slot area (Fig. 9).

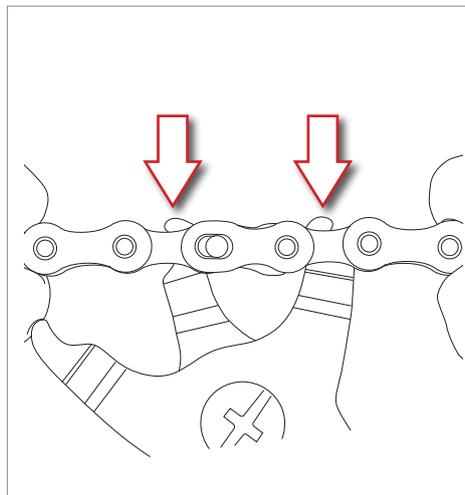


Fig.8

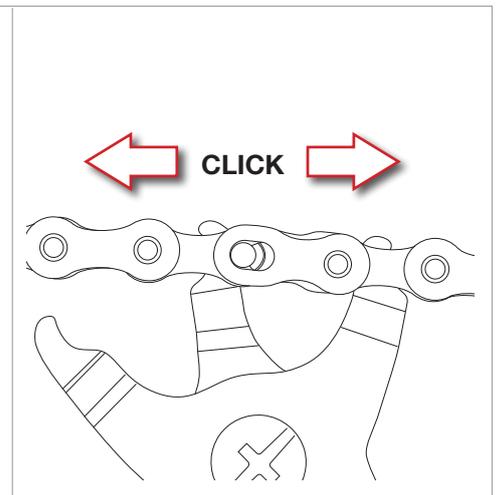


Fig.9

3.4 - OPENING THE CHAIN WITH C-LINK™ (CONNECTING LINK)

- Insert the false link opening tool with teeth less than 1.8 mm thick into the inner links adjacent to the C-Link™ (Fig. 10).

- Compress the C-Link™ by pushing on both sides (inner and outer) and simultaneously operate the callipers to bring the two pins closer together (Fig. 11).

- Remove the C-Link™ from the inner and outer sides (Fig. 12).

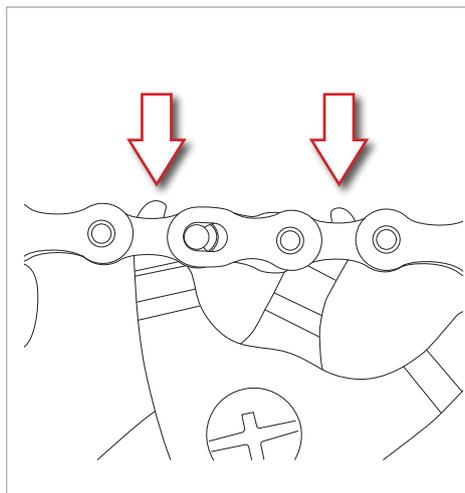


Fig.10

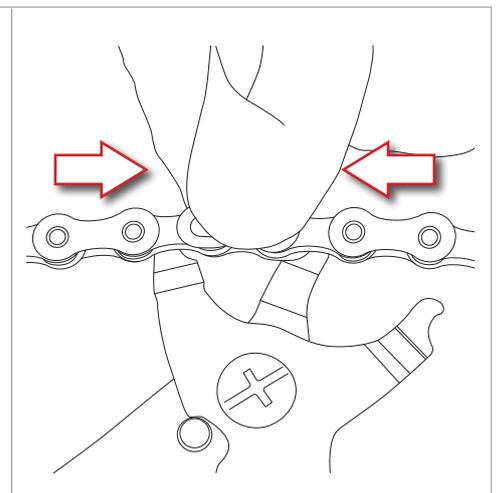


Fig.11

DANGER!

If you open the chain by removing the C-Link™ (connecting link), even for chain cleaning and maintenance tasks, you must use a new C-Link™ to close the chain.

The C-Link™ is damaged during disassembly: it is therefore mandatory **ALWAYS** to use a new C-Link™ to close the chain. Failure to follow these instructions may cause the chain to fail, even suddenly, with consequent accidents, physical injury or death.

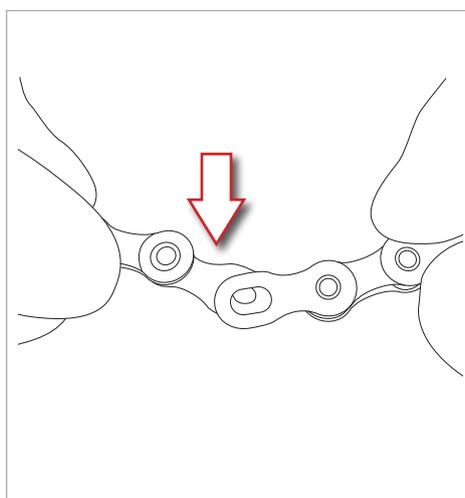
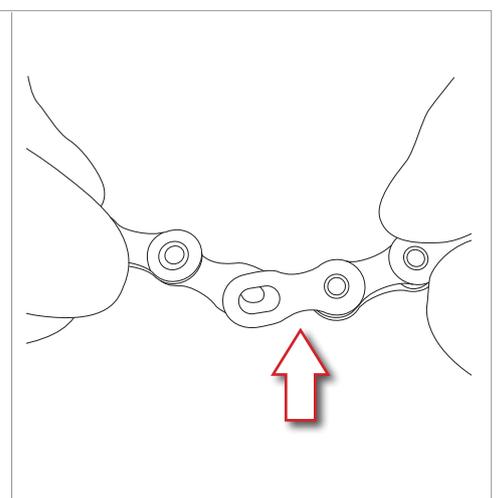


Fig.12



4 - CHAIN MAINTENANCE

The life of the chain depends on conditions of use and on the frequency and quality of maintenance. To keep the chain 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.).

! | **To increase the service life of the chain-rings and the chain, the chain can be cleaned with neutral detergent (avoiding the use of degreasers) and thoroughly lubricate it.**

- Do not remove the chain to clean and/or lubricate it.
- Before lubricating, thoroughly clean the drive system (chain, sprocket set, chain-rings and derailleur pulleys) with a brush or cloth saturated with a neutral detergent. Never use alkaline or acid based solvents, such as rust preventive products, as they could break the chain, resulting in possible serious injuries.

! | **for cleaning the bicycle only use environmentally-friendly and neutral products without caustic substances and safe to use for you and for the environment.**

- Lubricate each individual roller drop by drop, so that the oil penetrates to the pin inside. Avoid using spray oils, which can easily come into contact with brake pads.

! | **During the operations of the chain lubrication pay special attention that the lubricant goes inside the rollers. A chain without proper lubrication causes abnormal noise and excessive wear of the drive system.**

- 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.



WARNING!

Lubricant residues on the rims, brake shoes, discs and brake pads can decrease or nullify your bicycle's braking capacity, and can lead to accidents, physical injuries, or even death.

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.

NOTE

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.



WARNING!

Salt water environments (as found on winter roads and near the seaside) can cause galvanic corrosion on most bike parts. Carefully rinse, clean, dry and re-lubricate all exposed parts to avoid damage, malfunctions and accidents.

4.1 - CHAIN REPLACEMENT

A chain typically lasts, depending on the conditions of use and on the frequency and quality of maintenance operations. Use a high precision caliper gauge to measure, in different points of the chain, the length as indicated in fig. 1. If even one of the measurement is longer than 132.60 mm the chain must immediately be replaced.

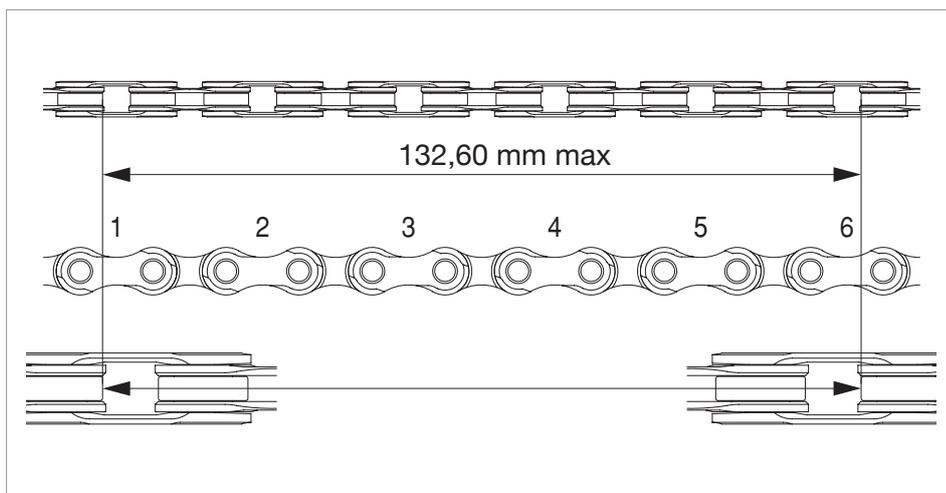


Fig.1



If even one of the measurement is longer than 132.60 mm the chain must immediately be replaced.



WARNING!

Failure to timely replace the chain can result in unexpect chain failure while riding, resulting in an accident, personal injury or death.

5 - PERIODIC MAINTENANCE TABLE

Maintenance intervals are strictly approximate and may vary significantly in relation to the intensity and conditions of use (for example: competitions, rain, winter roads with salt, weight of the athlete, etc.). Schedule the appropriate maintenance with your mechanic.

PROCEDURE	MILEAGE IN KM (MAX)	TIME (MAX)	METHOD FOR CHECKING
Check lengthening	3000	1 MONTH	High precision caliper