

BAR END SHIFTERS

1 - TECHNICAL SPECIFICATIONS

REAR DERAILEUR CONTROL	10S	11S	REAR DERAILEUR CASING	REAR DERAILEUR CABLE
Bar - End	3 UP 3 DOWN	3 UP 3 DOWN	Ø 4.1 mm Campagnolo Ultra-low friction	Ø 1.2 mm
FRONT DERAILEUR CONTROL	DOUBLE		FRONT DERAILEUR CASING	FRONT DERAILEUR CABLE
Bar - End	3 UP 3 DOWN		Ø 4.1 mm Campagnolo Ultra-low friction	Ø 1.2 mm

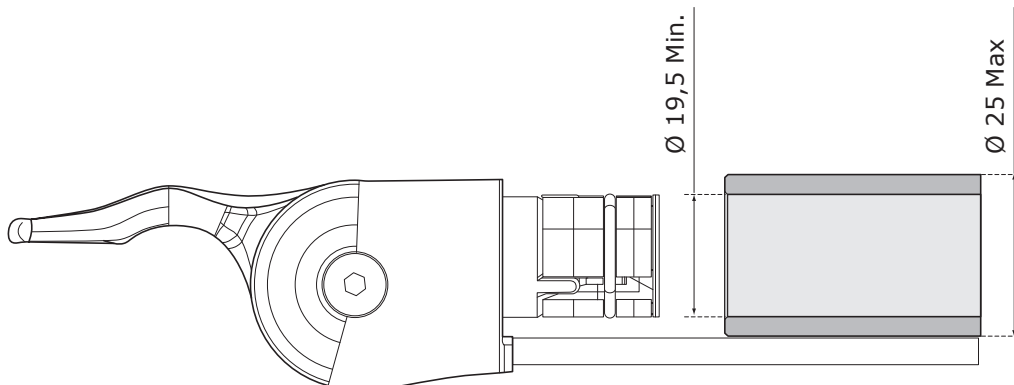
2 - COMPATIBILITY

BAR END SHIFTERS ONLY UP TO 2014 RANGE	REAR DERAILEUR ONLY UP TO 2014 RANGE	FRONT DERAILEUR ONLY UP TO 2014 RANGE	CRANKSET
10s	10s	10s	Power-Torque System 10s
11s	11s	11s	Ultra-Torque 11s
			Bora Ultra 11s
			Power-Torque System 11s
			Bullet Ultra 11s
			Comp One 11s
			Comp Ultra 11s

WARNING!

Different combinations from those included in the table could cause the malfunction of the drivetrain and result in an accident, personal injury or death.

3 - INTERFACE WITH HANDLEBAR

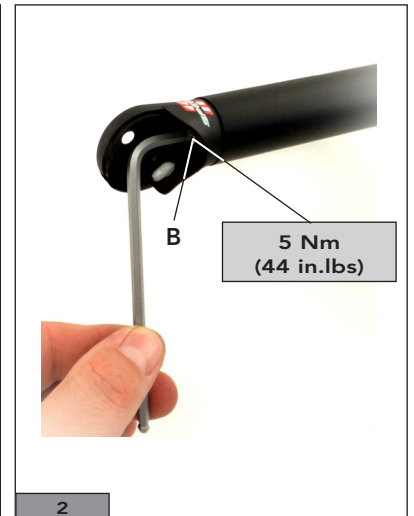
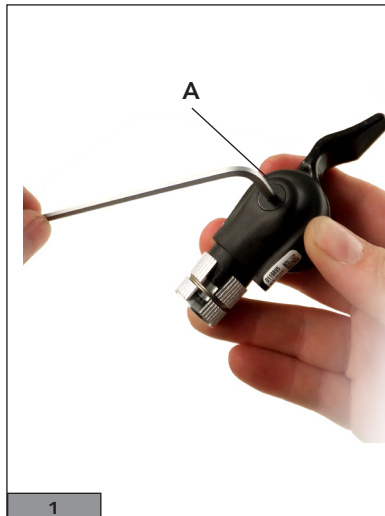


4 - ASSEMBLY

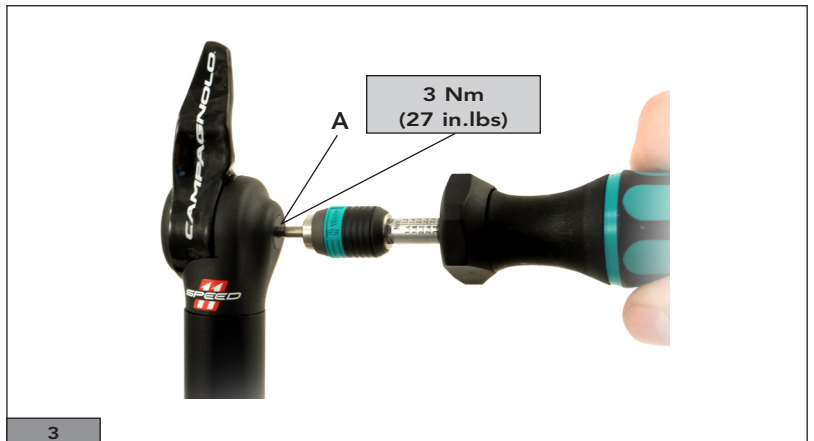
WARNING

The Bar End shift lever assembly must be separated from the body as a single piece.

- Remove the 3mm countersunk screw (A – Fig. 1) of the transmission control to separate the shift lever assembly from the body.
- Insert the expander into the handlebar extension as far as it goes. Tighten the 4 mm internal locking screw (B – Fig. 2) to **5 Nm (44 in.lbs)**.



- Refit the the shift lever assembly onto the body. Tighten the 3mm locking screw (A – Fig. 3) to **3 Nm (27 in.lbs)**.



4.1 - TILT ADJUSTMENT

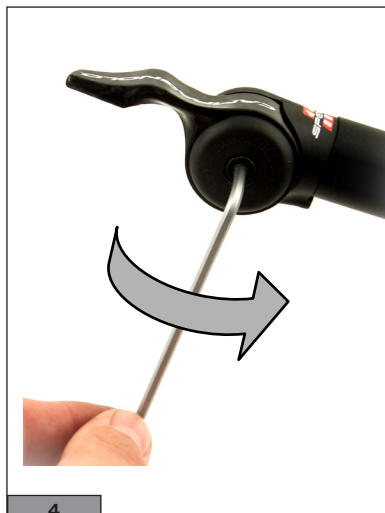
The Campagnolo BAR END controls let you change gear starting from the most aerodynamic position. After changing, the lever returns automatically to the "central" starting position.

To modify the central starting position of the shift lever, proceed as follows:

Loosen, without removing it, the 3 mm tilt adjustment screw (Fig. 4).

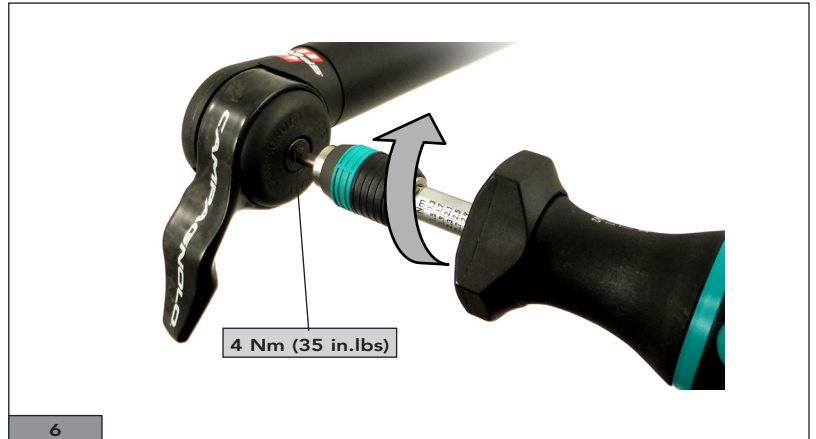
⚠ WARNING!

Do not remove the 3mm tilt adjustment screw. If the screw is removed, the shift lever assembly will disassemble.



- Position the gear change lever with an aerodynamic tilt that is easily reachable (Fig. 5).

- Tighten the 3mm tilt adjustment screw to **4 Nm (35 in.lbs)**.



4.2 - CABLE INSTALLATION

- Measure the shift cable housing and cut it, making sure it is long enough to allow the handlebar to move freely.

⚠ WARNING!

Before cutting the cable housing, check the selected length is suitable to the size of your frame. An incorrect length of cable and sheathing might jeopardize your ability to steer or control the bike and might cause accidents, injuries and even death.

NOTE

The housing must be cut so that the end is perpendicular to the length (Fig. 7). In addition, the cross section of the housing must not change. After cutting the housing, check that you have restored its roundness to ensure that there is no friction between the cable and housing.

To cut the casings we suggest you to use the specific tool Park Tool CN-10.

NOTE

The **BAR-END** controls do not need any housing end cap.

- Operate the shift lever, moving it to the lowest gear.
- Operate the derailleur lever, moving it to the lowest gear.
- Insert the cable through inlet (C – Fig. 8), making it exit from the shift assembly into the shift housing.
- Fix the cable onto the derailleur and adjust indexing following the instructions supplied by the derailleur manufacturer.

⚠ WARNING!

Once the cable is installed, check it doesn't foul steering or any other bike function. Any fouling might jeopardize your ability to steer or control the bike and might cause accidents, injuries and even death.



5 - MAINTENANCE

The cables and housings must be replaced every 2 years or after 20,000 km maximum.

If the bike is used in competitions, the cables and sheaths must be replaced every year or after 15,000 km maximum.

Dirt damages the bike and its components seriously. Clean, rinse and dry your bike accurately after using it.

The intervals stated are just an indication and might vary significantly according to the conditions and intensity with which the bike is used (i.e. significant factors are: competitions, rain, salted roads during the winter, cyclist's weight, etc.). To identify the best intervals for your characteristics, contact your mechanic.

Never wash your bike with a pressure washer. Pressurized water, even the water coming out of a garden hose, may penetrate gaskets and enter your Campagnolo® components, damaging them irreparably. Wash your bike and Campagnolo® components with water and a neutral detergent. Dry with a soft cloth: never use abrasive or metal brushes.