

# ADJUSTMENT ZERO SETTING RIDING SETTING (WITH POWER UNIT V2 / V3 / V4)

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#### THIS TECHNICAL MANUAL IS INTENDED FOR USE BY PROFESSIONAL MECHANICS.

Anyone who is not professionally qualified to assemble bicycles should not attempt to install and operate on the components because of the risk of carrying out incorrect operations that could cause the components to malfunction with the consequent risk of 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

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## 1 - ZERO SETTING OF THE REAR DERAILLEUR

#### **IMPORTANT!**

Resetting the rear derailleur to zero is a particularly delicate operation and must be carried out when the bicycle is stationary and placed on a stand. This is why it should be conducted only and exclusively by a Campagnolo Service Center, a Campagnolo Pro-shop or a mechanic specialised in mounting EPS groupsets.

### 3.1 - HOW TO ZERO THE EPS 12s / 11s REAR DERAILLEUR

During the first installation and in some cases when the rear wheel is replaced, if the set of sprockets of the new wheel is very different from the set of sprockets previously installed, it is necessary to conduct a more accurate adjustment by resetting the rear derailleur to zero.

• During the resetting, the rear derailleur is shifted continuously and this depends on how long the levers 2 (B - Fig.1) and 3 (C - Fig.1), located on the rear derailleur control, are pressed. The position can be changed by even just a hundredth.

• All the operations described below must be conducted with the chain placed on the biggest chainring.

• Press both MODE buttons on your EPS controls (for approximately six seconds) until the blue LED turns on (D - Fig. 1).

• Press lever 2 (B - Fig.1) or lever 3 (C - Fig.1) located on the rear derailleur control (Fig. 1).

• Change the position of the rear derailleur by pressing lever 2 (B - Fig.1) to move up and/or lever 3 (C - Fig.1) to move down, until you centre the chain on the 2nd sprocket (Fig. 2).

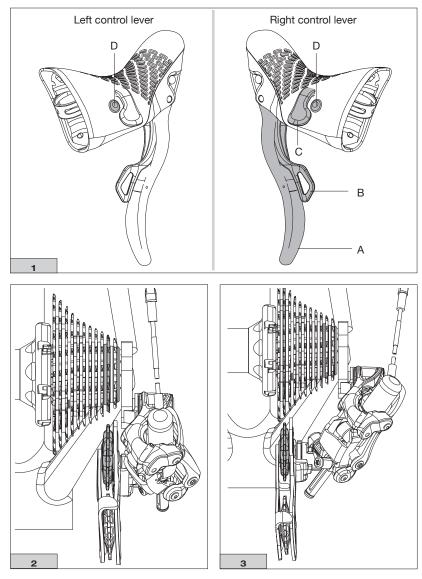
Press a MODE button on the controls (D - Fig. 1) to save the position of the 2nd sprocket. At this point the blue LED becomes white.

• Using lever B (Fig.1) and lever C (Fig.1), position the rear derailleur (Fig. 3):

- on the 10th sprocket (with a 11s drivetrain)

- on the 11th sprocket (with a 12s drivetrain)

At this point, move both of the levers until the chain is perfectly centred.





Take particular care when moving lever 2 (B - Fig.1) to move only as far as the 10th sprocket (with a 11S drivetrain) or to the 11th sprocket (with a 12S drivetrain); the shifting speed of the rear derailleur is not constant, and as such, the rear derailleur could overshoot the biggest sprocket and come into contact with the spokes.

Pressing the MODE button (D - Fig. 1) briefly (located on the EPS controls) enables the position of the 10th sprocket (for 11S drivetrains) or the 11th sprocket (for 12S drivetrains) to be memorised; you can then exit the reset procedure.

The flashing blue LED indicates that you have exited the reset procedure.



After resetting the rear derailleur to zero it is essential to adjust the mechanical stop screw (E - Fig. 4), which ensures that whatever situation may arise, the rear derailleur does not shift inwards and touch the spokes of the wheels.

To adjust correctly:

 $\boldsymbol{\cdot}$  move the rear derailleur onto the biggest sprocket

• tighten the grub screw until it touches the surface of the travel limit.

• loosen the grub screw by approximately ½ turn to prevent it from touching the contact surface when the rear derailleur is on the biggest sprocket.

#### **IMPORTANT!**

Once you have completed the procedure, we recommend shifting on each sprocket to make sure this is carried out properly. Otherwise repeat the resetting procedure.

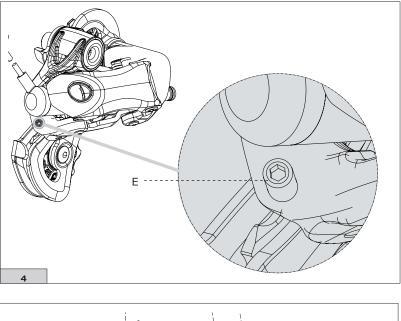
#### CAUTION!

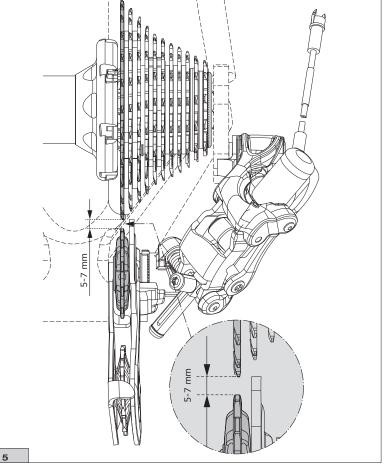
• Operating the rear derailleur activates the motor moving the front derailleur. Keep the fingers away from the front derailleur when operating the rear derailleur to prevent the risk of crushing.

• While the rear derailleur moves / over-runs from the 2nd to the 1st sprocket, the chain hasn't get in touch all with the frame.

In order to obtain a more rapid and accurate shift, the distance of the top jockey wheel from the largest sprocket must be adjusted.

The adjustment screw is in the same position as the mechanical rear derailleurs (Fig. 5).





# 2 - ZERO SETTING OF THE FRONT DERAILLEUR

#### **IMPORTANT!**

Resetting the front derailleur to zero is a particularly delicate operation and must be carried out when the bicycle is stationary and placed on a stand. This is why it should be conducted only and exclusively by a Campagnolo Service Center, a Campagnolo Pro-shop or a mechanic specialised in mounting EPS groupsets.

### 2.1 - HOW TO ZERO THE EPS 12s / 11s FRONT DERAILLEUR

All the operations described below must be conducted with the chain placed on the biggest sprocket.

• Press both MODE buttons on your EPS controls (for approximately six seconds) until the blue LED turns on (D - Fig. 6).

• Exert pressure on lever 2 (B - Fig. 6) or lever 3 (C - Fig. 6) located on the front derailleur control.

• Adjust the position, pressing lever 2 (B - Fig. 6) and/or lever 3 (C - Fig. 6) until you are centred on the smallest chainring, leaving an 0.5 mm gap between the inside of the cage and chain (Fig. 7).

#### Note (only for 11S)

If you are using Ergopower H11 controls, when you depress the levers on the left-hand Ergopower control in order to reset it, the LED will switch off twice for one second, and then come on again definitively. This indicates that the system has recognised the Ergopower H11 disc brake controls, and will correctly calculate the position of the larger chainring for the H11 crankset. In order to ensure that the Ergopower controls are recognised, the components must be updated as follows:

Interface unit firmware version 0.1.24

Wireless module firmware version 1.7.5

Power unit firmware version 0.0.33

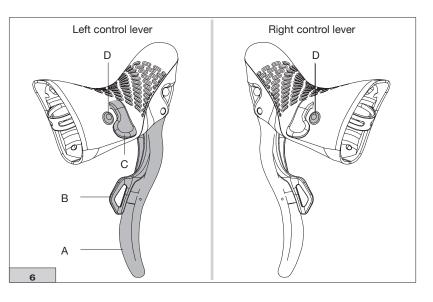
• Press a control MODE key (D - Fig. 6) to memorise the front derailleur's zero position on the small chainring; when the blue LED flashes it means zero has been acquired and the resetting procedure is finished.

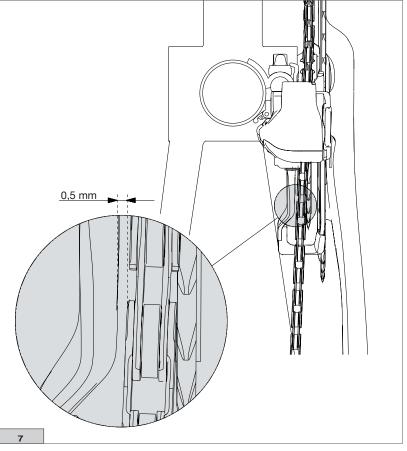
#### **IMPORTANT!**

Once the procedure is finished we suggest carrying out a derailing on each chainring with the rear derailleur positioned on several pinions in order to ensure it is optimum. If it is not, repeat the resetting procedure.

• With the chain positioned on the smallest sprocket and the largest chainring, check that the distance between the chain and the outer cage plate is 0.5 mm.

If this is not the case, adjust the front derailleur on the largest chainring (as described in chapter 4).





# 3 - RIDING SETTING OF THE REAR DERAILLEUR

### 🕂 WARNING!

Setting the rear derailleur when the bicycle is in motion may result in dangerous situations and cause accidents. Therefore please be very careful if you decide to carry out this operation.

### 3.1 - HOW TO ADJUST THE EPS 12s REAR DERAILLEUR

The setting procedure allows to adjust the reference position of the rear derailleur and is particularly useful if you intend to change the wheel with one with a set of sprockets that are positioned differently with respect to the drop-out.

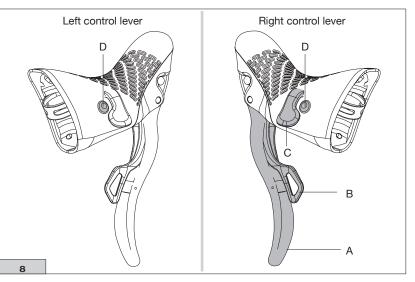
• To adjust the rear derailleur, press and hold the right-hand MODE button located on the Ergopower EPS controls (D - Fig. 8) for approximately 6 seconds until the purple LED is illuminated.

• Adjust the position by pressing lever 2 or lever 3 (C - Fig. 8 on the right control (B - Fig. 8).

#### Note

Every time lever 2 (B - Fig. 8) or lever 3 (C - Fig. 8) is briefly pressed, this allows the system to carry out a fixed shift of approximately 0.2 mm.

When you have completed the procedure, the system will correct the established positions of all the sprockets based on the new settings.



If the chain is perfectly centred, from the 2nd to the 10th sprocket:

- · the chain moves closer to the lower sprocket by moving 3 times downwards
- · the chain moves closer to the upper sprocket by moving 3 times upwards

To save the adjustment, briefly press the MODE button located on the EPS controls (D - Fig. 8).

#### **IMPORTANT!**

If you do not press the MODE key briefly, which allows to complete the setting procedure, the system will automatically exit the procedure after 90 seconds and will save the new setting.

Every time a resetting to zero is conducted, previous adjustments are reset.

### 3.2 - HOW TO ADJUST THE EPS 12S REAR DERAILLEUR ON A SINGLE SPROCKET

The adjustment procedure allows the rear derailleur reference position to be adjusted on a single sprocket, and is particularly useful when it is difficult to move the rear derailleur onto a specific sprocket.

• To adjust the rear derailleur on a specific sprocket, press and hold the left-hand MODE button located on the Ergopower EPS controls (D - Fig. 8) for approximately 6 seconds until the purple LED starts flashing.

• Adjust the position by pressing lever 2 or lever 3 (C - Fig. 8 on the right control (B - Fig. 8).

#### Note

Every time lever 2 (B - Fig. 8) or lever 3 (C - Fig. 8) is briefly pressed, this allows the system to carry out a fixed shift of approximately 0.2 mm.

To save the adjustment, briefly press the MODE button located on the EPS controls (D - Fig. 8).

#### **IMPORTANT!**

If you do not press the MODE key briefly, which allows to complete the setting procedure, the system will automatically exit the procedure after 90 seconds and will save the new setting.

Every time a resetting to zero is conducted, previous adjustments are reset.

Once the procedure is complete, the system implements the change to the individual sprocket position according to which the procedure has been carried out.

# 3.2.1 - PRIORITY BETWEEN THE ADJUSTMENTS AND RESETTING OF THE EPS 12s REAR DERAILLEUR

#### **IMPORTANT!**

If the rear derailleur's adjustments are changed, any previous adjustments made on the single sprockets are cancelled. Similarly, if a zero setting has been carried out for the rear derailleur, any changes made to the rear derailleur and to the single sprockets are cancelled.

### 3.3 - HOW TO ADJUST THE EPS 11s REAR DERAILLEUR

The setting procedure allows to adjust the reference position of the rear derailleur and is particularly useful if you intend to change the wheel with one with a set of sprockets that are positioned differently with respect to the drop-out.

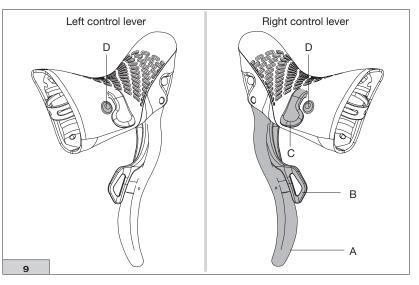
• To adjust the rear derailleur, press and hold the MODE button on the EPS controls (Fig. 9) for approximately 6 seconds until the purple LED turns on.

• Adjust the position by pressing lever 2 or lever 3 (C - Fig. 9 on the right control (B - Fig. 9).

#### Note

Every time lever 2 (B - Fig. 9) or lever 3 (C - Fig. 9) is briefly pressed, this allows the system to carry out a fixed shift of approximately 0.2 mm.

• When you have completed the procedure, the system will correct the established positions of all the sprockets based on the new settings.



If the chain is perfectly centred, from the 2nd to the 10th sprocket:

- · the chain moves closer to the lower sprocket by moving 3 times downwards
- the chain moves closer to the upper sprocket by moving 3 times upwards

To save the adjustment, briefly press the MODE button located on the EPS controls (D - Fig. 9).

#### **IMPORTANT!**

If you do not press the MODE key briefly, which allows to complete the setting procedure, the system will automatically exit the procedure after 90 seconds and will save the new setting.

Every time a resetting to zero is conducted, previous adjustments are reset.

## 4 - RIDING SETTING OF THE FRONT DERAILLEUR

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Setting the front derailleur when the bicycle is in motion may result in dangerous situations and cause accidents. Therefore please be very careful if you decide to carry out this operation.

### 4.1 - HOW TO ADJUST THE EPS 12s / 11s FRONT DERAILLEUR

The setting adjustment procedure is used to change the position of the front derailleur relative to the individual chainrings.

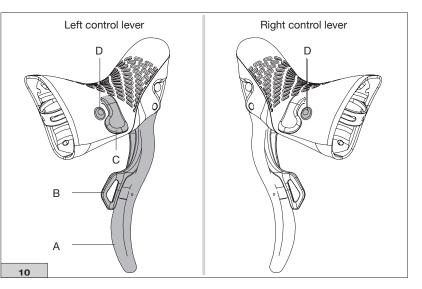
• Place the front derailleur on the chainring for which you intend to adjust the position. To adjust the setting, press and hold the MODE (D - Fig.10) button on the Ergopower EPS controls for approximately 6 seconds until the purple LED illuminates.

• Adjust the position by pressing lever B or C on the left hand control set (Fig. 10).

#### Note

The system moves the front derailleur by a fixed increment of approximately 0.1 mm each time lever B or C is pressed (Fig. 10).

To store the new setting, press the MODE button on the Ergopower EPS controls briefly (D - Fig.10).



Once the procedure is complete, the system implements the change to the individual chainring position adjusted.

#### **IMPORTANT!**

If you do not press the MODE key briefly, which allows to complete the setting procedure, the system will automatically exit the procedure after 90 seconds and will save the new setting.

Every time a resetting to zero is conducted, previous adjustments are reset.



Keep your fingers clear while moving the front derailleur and the rear derailleur.