



**e-motion your bike
with add-e**



add-e NEXT User's Manual

GB

Vers. 1.0



USER'S MANUAL INDEX

USER'S MANUAL INDEX	p. 2
INTRODUCTION AND IMPORTANT INFORMATION	p. 3
LEGAL INFORMATION	p. 4
INFORMATION ON SAFETY	p. 5
WARRANTIES/EXCLUSIONS OF LIABILITY	p. 6
KEY TO SYMBOLS	p. 7
SCOPE OF SUPPLY	p. 8
ADD-E NEXT FITTING INSTRUCTIONS	p. 9-32
Fitting instruction index	p. 10
Chapter 1: Assessment of fitting options	p. 11-13
Chapter 2: The actual fitting	p. 14-24
Chapter 3: Mechanical settings	p. 24-29
Chapter 4: Features during assembly	p. 30-32
ADD-E NEXT OPERATING GUIDE	p. 33-59
Operating guide index	p. 34
1. add-e NEXT Drive	p. 35-40
2. add-e Battery	p. 41-47
3. add-e Charger	p. 48
4. add-e Sensors	p. 49-54
5. add-e NEXT Remote control	p. 55-57
6. Mapping add-e Sport	p. 58-59
7. add-e NEXT cell phone App	p. 59

INTRODUCTION AND IMPORTANT INFORMATION

Thank you that you chose to purchase an add-e NEX^T retrofit drive unit. This User's Manual contains information regarding its operation and fitting instructions.

Before we can start with the fitting it is very important to first get to know the various fitting alternatives available.

The User's Manual should be kept by the customer who, in the event of the add-e NEX^T changing hands, should be given to the new owner.

The concept of the add-e assistant drive is to allow it to be retro-fitted to almost any bike. Any special knowledge is not necessary. Although, we would recommend that the initial fitting is only done by someone having previous mechanical hands-on experience with bikes. If any difficulties do arise or there are deviations to this manual then our partners will be at your disposal. They are listed on our homepage which you can find at www.add-e.at/haendlersuche Additional information, pictures and videos can be found under www.add-e.at

All the indications mentioned in this manual relate to forward motion direction. The chain ring is on the right side and the saddle is situated above the bottom bracket.

Therefore it is possible to operate the add-e retro-fit drive on various types of bike (MTB, racing bike, trekking bike, City bike etc.). Although we cannot eliminate the fact that drastic frame design and/or additional accessories could make it impossible to use add-e. This is especially the case with pressed bottom brackets (press fit) and bikes with full suspension (fulllys) where the delivered parts cannot be utilised. More information on this topic can be found on website www.add-e.at

In certain cases there is need to use special tools to ensure of professional work. This is not that expensive and makes the work a lot easier. These can be purchased together at the online shop www.add-e.at/shop

Although the graphics and text in the manual have been created with great diligence we cannot accept liability nor be made accountable for possible mistakes and any consequences thereof.

LEGAL INFORMATION

According to the, the maximal allowed speed, assisted by an addition drive with a nominal permanent performance of 250W, is 25 km/h. The add-e Sport is equipped with mapping 2. This means that the maximum assisted speed is 25 km/h and a permanent performance of max. 600W. It therefore does comply with the above mentioned standard as the 600W relates to the peak performance value.

With the add-e Sport Edition it is possible to achieve higher average speeds (up to 45 km/h max.). So in order to stay within the law when riding with add-e Sport in the EU, it has been equipped and will be delivered with mapping 2 (25 km/h, 600W peak performance). A change of this parameter is only possible when a dongle is fitted to the drive unit case. If this dongle is not carried with you after parameters have been changed then, even in the event of an accident, there is no proof of any manipulation. This is because even the add-e Sport has been configured to the „Pedelec,, standard EN 15194/2017 which means that with a top speed of 25 km/h no registration is required.

If requested by the customer, the parameters can be changed using a fit able dongle (see page 59) whereby not only the motor performance but also the top speed is increased. This change however means that the add-e Sport no longer conforms to EN 15194/2017.

If the chosen configuration does not comply with the laws of the country, then add-e can only be used with special authority, for racing purposes or on private property.

Legal Authorities of different countries have a variety of laws to cover the use of electrically powered drives on bikes. In general however, it is usually the whole bike that is taken, for the assessment. The applicable rulings for retro-fitting bikes with an e-motor or illumination is country specific and can vary.

It is therefore the user's sole responsibility to be informed of the valid related laws of the country in question and to abide by them. Also the laws, related to electrical power, top speed and pedal assistance off-road use, should be observed.

INFORMATION ON SAFETY

Before operating, it is important to read through the whole manual. The manual will give you valuable information on the correct operation with the minimum of risk. The manufacturer will not be accountable for any damage incurred due to neglecting the content of this manual, and the guarantee / warranty will become null and void.

It is imperative that the bike, and the retrofit add-e, is in proper working order. This reduces the possibility of injurious or fatal accidents involving the rider and others.

One should wear the appropriate protective clothing and helmet for one's own safety. It is best to start with easy maneuvers on a closed area to get used to the new add-e riding experience with.

The add-e retro-fit set and parts must undergo an inspection and clean at regular intervals depending on how intense it is used.

Check the correct motor setting/tyre pressure the condition of the tyre and whether the add-e is properly fastened before every operation and adjust if necessary.

One must pay attention that no parts e.g. wires or other items, get between the drive unit and the tyre. Otherwise this could result in unforeseen incidents or even a block the back wheel.

The motor swing arm has to always be free to move and there should be nothing in the way which could get jammed in it. A jammed motor swing arm can result in the motor not being able to release itself which could cause serious unwanted damage.

The drive unit motor can get very hot during operation. It is advised not to touch it directly after use as this could cause burns and injuries.

WARRANTY / EXCLUSION OF LIABILITIES

In the jurisdiction of EU rights, the seller warrants the liability for material defects for at least the first two years after the date of purchase. In respect of the battery cells, this has been limited to 6 months after purchase date.

These are related to defects which were present on delivery. In addition it is assumed during the first six months that the defects were present at purchase. The condition that the buyer can utilize his claim is that by fitting, operation and maintenance all specified conditions have been adhered to.

This regulation only applies to countries underlying EU jurisdiction. Warranty in Switzerland is limited to one year after the date of purchase.

Excluded from the warranty are wearable parts like e.g. power pack casing (scratches, results of falls, malicious damage etc.) friction roll, scratches and damage caused by self-infliction.

Any manipulation or modification not specifically stated in the fitting or operating manual, installation video or by written authority from GP Motion GmbH will lead to the loss of warranty.

Damage to the due to total discharge (e.g. extended non-usage) or the use of an inferior charger is excluded from the warranty. If the add-e power pack is not going to be used over a longer period of time it must be removed from the bottle holder.

If a claim is made on the warranty this should be done through the sales agent. The defective parts will be either repaired by the manufacturer or authorised dealer, or replaced. For the warranty to be processed, the faulty parts or the add-e set must be made available to us.

The “**Repair order form**” can be found online at www.add-e.at/montage or at support@add-e.at. It should be filled out in detail and sent together with the returned items. Warranty claims could result in additional cost or delayed repair time without a correctly filled out repair order form. It is solely the customer's responsibility to ensure that the returned items are sufficiently packed to avoid any damage during transportation. The manufacturer take no responsibility for any damage occurred during transportation.

Removing the serial number from the add-e power pack or from the add-e drive itself will result the loss of warranty.

Spare parts can be purchased from your dealer.

In the event that the information given in the manual is neglected and the units is misused or not operated as intended. GP Motion GmbH will decline any responsibility or warranty for any damage caused to or by the product. Liability for consequential damages on any element or person whatsoever is excluded.

Any costs incurred due to improper use will not be taken over or reimbursed by the manufacturer.

KEY TO SYMBOLS



INDICATION!

This symbol indicates special/important information which has to be followed when fitting or operating.



TIP!

This symbol stands for special/exceptional tips which could be of use when fitting or when operating.



WARNING!

This symbol stands for IMPORTANT information indications for fitting and operation. These must be observed in order to avoid any dangerous situation.



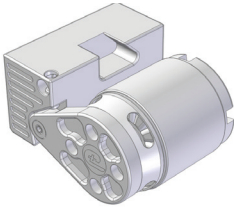
CLEANLINESS!

This symbol shows areas where special attention to cleanliness should be made.

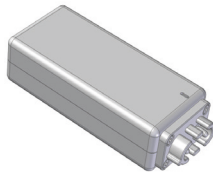


This symbol means that parts should not be discarded with household rubbish.

LIEFERUMFANG



add-e NEXT drive



add-e charger



Charger cable



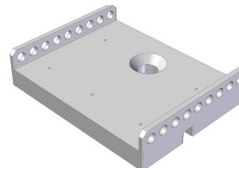
add-e battery



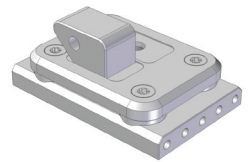
Fastening arms
long



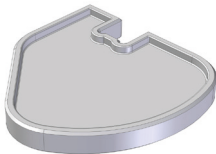
Fastening arms
short



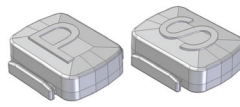
add-e kickstand
carrier plate



Fitting plate



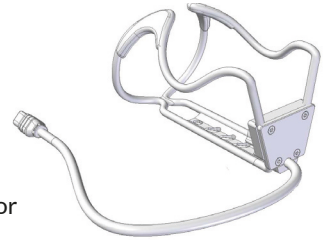
Setting gauge



add-e NEXT sensors



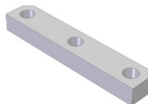
Scoring protector



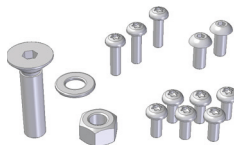
add-e bottle holder



Battery fuse



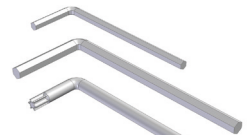
Spacer



6x LK M4 Torx
3x LK M4 Torx lang
2x M5 Allen screw
1x 8er Washer
1x M8 Nut
1x M8 Allen screw



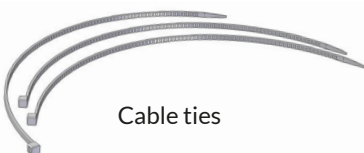
Dongle



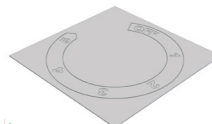
Torx 20
Size 3 allen key
Size 4 allen key



O-Rings



Cable ties



Self-adhesive
power setting
indicator



Spare battery
CR 2032 3V



add-e NEXT Fitting instructions

EN

FITTING INSTRUCTIONS INDEX

CHAPTER 1: ASSESSMENT OF FITTING OPTIONS	p. 11
Option 1: Kickstand fitting	p. 12
Option 2: Bottom bracket fitting	p. 13
Option 3: Fitting with a clamping plate	p. 13
CHAPTER 2: THE FITTING	p. 14
Step 1: Fitting the bottle holder	p. 14
Step 2: Attaching the sensors	p. 15
Step 3: Installing the mounting plate	p. 16
3.1. Option 1: Fitting on the kickstand attachment plate	p. 16
3.2. Option 2: Bottom bracket fitting using the fastening arms	p. 18
3.2.1. Removing the cranks	
and dismantling the bottom bracket bearing	p. 18
3.2.2. Assembling the mounting plate	p. 20
3.2.3. Fixing the mounting plate to the bottom bracket bearing	p. 21
3.3. Fitting with the clamping plate	p. 23
CHAPTER 3: MECHANICAL ADJUSTMENTS	p. 24
Preparation	p. 25
Setting 1: Upper stop	p. 26
Setting 2: Contact pressure setting screw	p. 27
Setting 3: Free wheel setting	p. 28
Setting 4: Lower stop	p. 29
To wind up	p. 29
CHAPTER 4: INSTALATIONS SPECIFIC FEATURES	p. 30
4.1. Fitting the bottle holder with the use of the Anywhere-Holder	p. 30
4.2. Bottom bracket fitting on Italian bottom brackets	p. 30
4.3. Synthetic bottom bracket cups	p. 30
4.4. Repositioning the wedge by grinding chain ring	p. 31
4.5. Fitting when the bottom bracket has a width of 73 mm	p. 32

INTRODUCTION

This part of the manual is devoted entirely to the fitting of the add-e retrofit drive unit to the bike. A more exact description of individual components, their operation and technical details can be found in the second part of the manual “Operating Manual”.

Fitting the add-e retrofit drive could require the use of special tools not included in our set. These can be purchased in our online shop www.add-e.at/shop or alternatively at a specialised cycle dealer.

It is important that the operating and installation manual are read prior to fitting the add-e. The steps for fitting must be done in the order shown. Only use the manufacturer’s original parts or parts suggested by them

CHAPTER 1: ASSESSMENT OF FITTING OPTIONS

Preparation

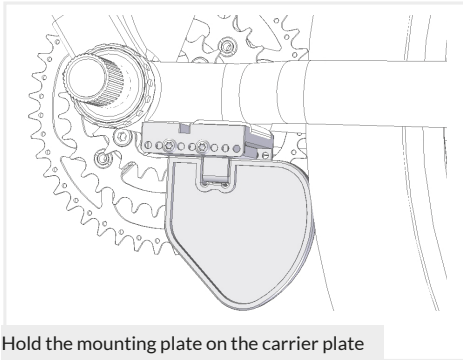
Before you look at which fitting option you need for your bike you have to consider the following:

- The rear tyre should not have a knobby tread. It is important that the tyre has a continuous middle groove like the Schwalbe Hurricane for example.
- Check whether there is enough room for the battery to be removed from its holder when mounted. Individual lengths of battery cable can be ordered in our online shop.
- A standard fitting with a Press-Fit bottom bracket is not possible. In this case please get in contact with our *support team at support@add-e.at* or alternatively an add-e partner.
- Fitting add-e to a bike with full suspension (Fully) is only possible when the distance between the rear tyre and the motor stays constant. This means that the rear wheel suspension must be completely block able. Alternatively, the drive unit can be fitted directly onto the rear wheel swing arm. In this case please contact our support team at *support@add-e.at* or alternatively, an add-e partner.

Fitting the mounting plate can differ because of the various types of bikes available. Before beginning with the fitting you must assess which of the fitting options will suit your bike. Basically there are 3 fitting options available as described hereafter. The optimal choice depends on many factors like, how the cables run, space available, bottom bracket type etc.

Option 1: Kickstand fitting

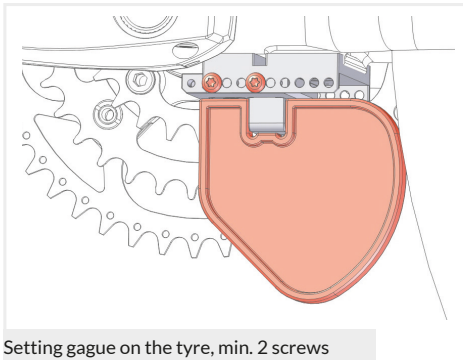
If the bike has a kickstand attachment plate, this can be used to fit the add-e on the bike. It is important that there is sufficient room to the rear wheel and that it has the right angle. This can be checked quite simply as follows:



Hold the mounting plate on the carrier plate

1) Put the mounting plate into the kickstand bracket and attach the adjustment tool.

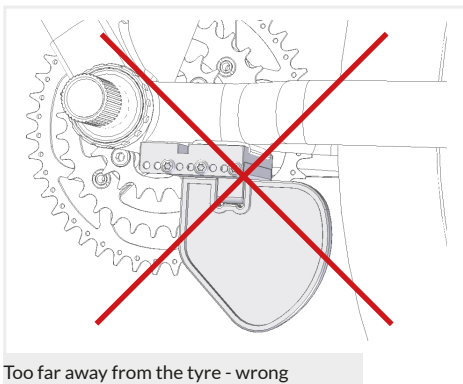
2) Now, using the setting gauge, position the whole mounting plate so that it can be fastened. The mounting plate can be slid back and forth on the kickstand bracket until the distance is correct.



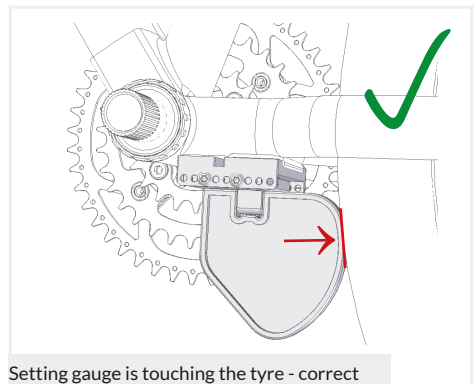
Setting gauge on the tyre, min. 2 screws

3) When the setting gauge touches the rear wheel, it should be possible to fasten the mounting plate with at least two M4 Torx screws on each side (ideally with three each side).

In order to achieve the correct position, the setting gauge (supplied) should be attached according to the diagrams below and the rounded side should be touching the rear tyre. .



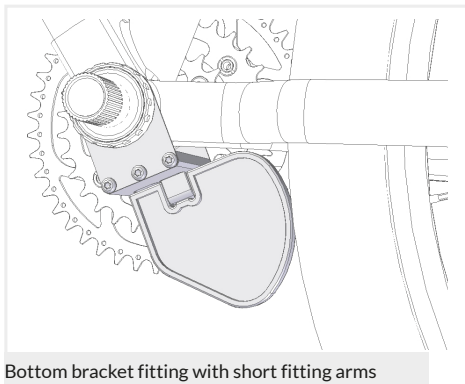
Too far away from the tyre - wrong



Setting gauge is touching the tyre - correct

Option 2: Bottom bracket fitting

You should choose this option if there is no kickstand attachment plate on the bike, the cables are in the way or just there is not enough space.



Bottom bracket fitting with short fitting arms

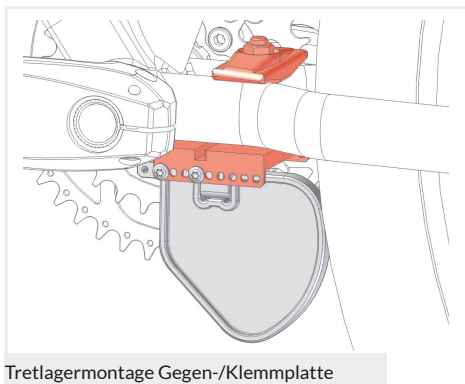
It is preferable to use the short fastening arms when fitting to the bottom bracket. If the distance to the tyre is too big then you should use the longer fastening arms.



INFORMATION!

In a few cases the left side bearing cup has no flange or is made of synthetic material. To ensure a safe and secure fitting, metal bearing cups with flanges on either side should be used. You can find a wide selection at our online shop www.add-e.at/shop

Option 3: Fitting with a clamping plate



Tretlagermontage Gegen-/Klemmplatte

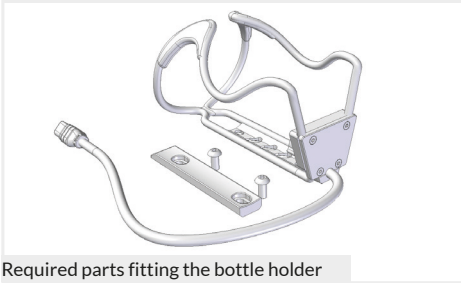
You can use this option when neither option 1 nor option 2 is possible. Please be aware that there is sufficient room available. For more details please refer to 6.6. *Fitting with a clamping plate.*

The Herbie clamping plate is not included in the standard fitting set, but can be bought at our online shop www.add-e.at/shop or specialised bicycle dealer.

CHAPTER 2: THE FITTING

After it has been decided which fitting option will be used then the actual installation of the retrofit drive can begin. It is important to follow the installation instructions exactly and the order of the steps set out in the manual.

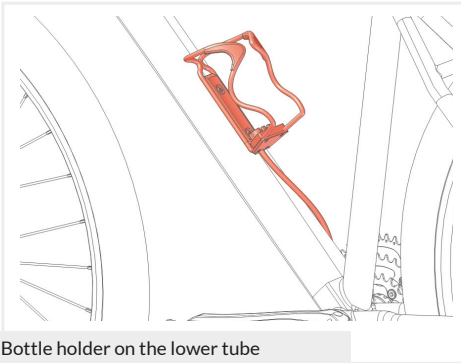
Step 1: Fitting the bottle holder



Required parts fitting the bottle holder

Parts required:

- Bottle holder incl. battery cable
- Scoring protector
- 2x M5 Allen screws



Bottle holder on the lower tube

Bikes normally have pre-prepared holes for fastening a bottle holder.

It is preferable to choose the fastening points on the lower tube.

Fasten the bottle holder onto the frame with the screws delivered with the set.



INFORMATION!

If there are no fastening points available, please do not drill into the frame by yourself. This can cause unwanted instability of the frame which could put yourself and other roads users in danger. Nevertheless, the water bottle holder can be fastened, without any damage to the frame, with a so-called Anywhere-holder. For more information on this please see Chapter 4: Features during fitting: Point 1: Fastening the water bottle holder with an Anywhere-holder.



INFORMATION!

It is important to only use the screws supplied with the set. The screws must be screwed in completely so that there is no possibility for them to scratch or damage the battery. .

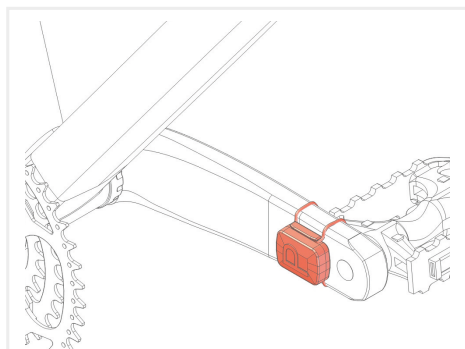
Step 2: Attaching the Sensors



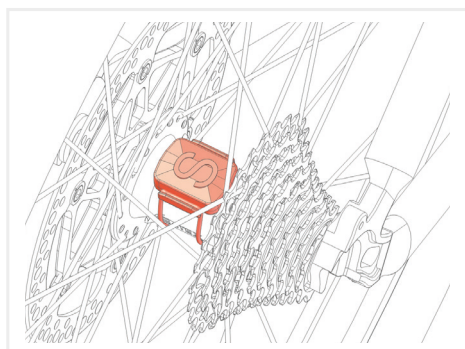
Parts required attaching the sensors

Parts required:

- PAS Sensor (P)
- Speed Sensor (S)
- O-Rings (various sizes)



PAS sensor on the inner side of the crank



Speed sensor on the rear wheel hub

Fasten the PAS sensor (P) with one of the appropriate O-rings supplied to the inside of the left hand crank.

Be careful that nothing is in the way when the crank is turned.

Fasten the speed sensor (S) to the rear wheel hub with the appropriate O-ring supplied.



INFORMATION!

The sensors are activated as soon as they register any movement. If no movement is registered after approx. 1 min. then they automatically deactivate themselves to the sleep-mode.



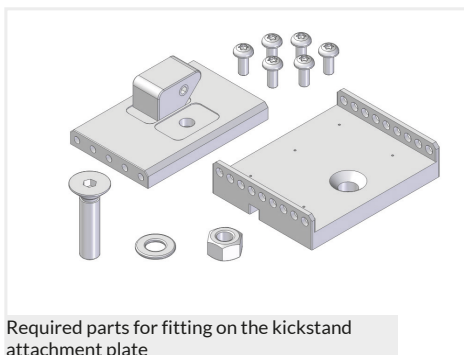
INFORMATION!

When an add-e set is purchased the supplied sensors have been pre-programmed to match the drive unit. See page 44.

Step 3: Installing the mounting plate

In diesem Schritt werden die verschiedenen Montagevarianten zum Anbringen der Montageplatte gezeigt. Abhängig vom jeweiligen Fahrradtyp kommt dennoch immer nur eine der drei Varianten zum Einsatz.

3.1. Option 1: Fitting onto the kickstand attachment plate



Parts required:

- Silent Block
- Kickstand carrier plate
- 6x M4 Torx screws short
- 1x M8 allen screw short
- Washer
- Nut M8

Required parts for fitting on the kickstand attachment plate



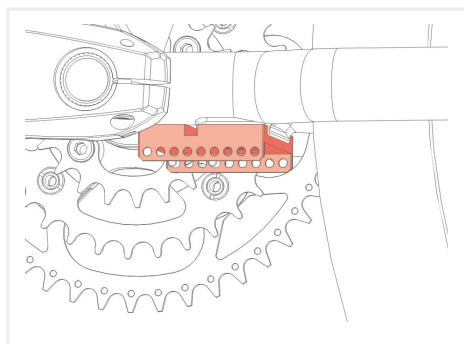
INFORMATION!

If the bike has a mounted kickstand, then remove it beforehand. An alternative rear-end kickstand can be fitted. One of these can be bought at our online shop www.add-e.at/shop or specialised bicycle dealer.



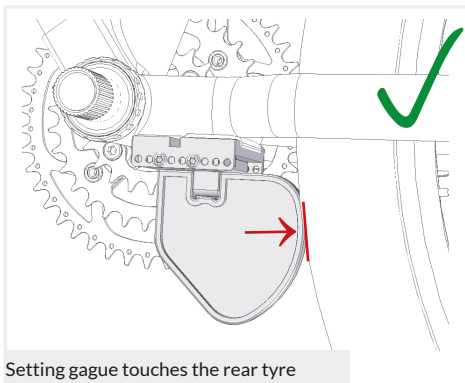
CLEANLINESS!

Make sure all surfaces are thoroughly clean before fitting the kickstand bracket to the kickstand attachment plate.



First of all, the kickstand bracket is held against the kickstand attachment plate then bolted on firmly with the supplied M8 Allen screw, washer and M8 nut.

Kickstand bracket on the kickstand attachment plate



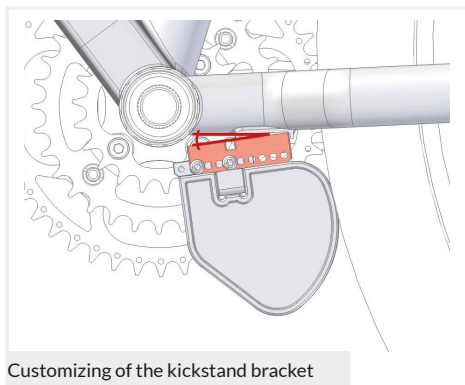
The ideal distance to the tyre can be determined in advance with the help of the setting gauge. The setting gauge should touch the rear tyre.

Slide the mounting plate back and forth until the setting gauge touches the tyre. If, because of the geometry, there is still insufficient room, then there is the opportunity to turn the mounting plate 180°.

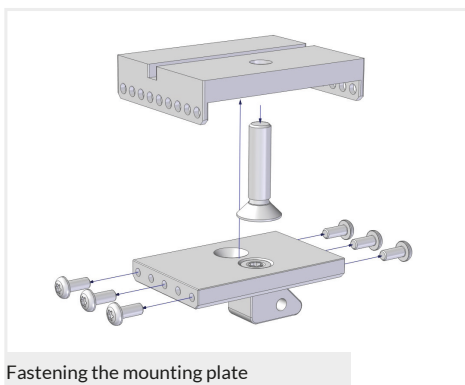


TIP!

If the angle is not suitable it can be adjusted by underlaying the kickstand bracket. For this, aluminium, plastic or synthetic material etc. can be used.

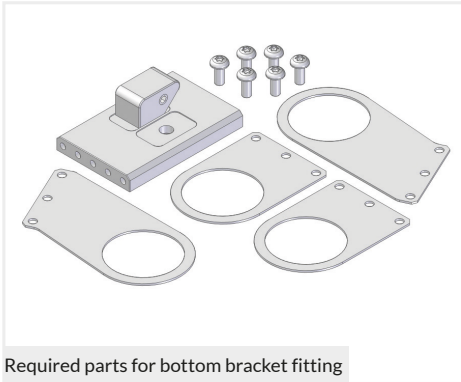


The angle must be regulated horizontally otherwise the upper stop cannot be properly adjusted later.



When the kickstand bracket is in the correct position the Silent Block is fastened to it using six M4 Torx screws (three on each side) but at least two screws each side.

3.2. Option 2: Bottom bracket fitting using the fastening arms



Required parts for bottom bracket fitting

Parts required:

- Silent Block
- 2x Fitting arms short
- 2x Fitting arms long (optional)
- 6x M4 Torx screws short



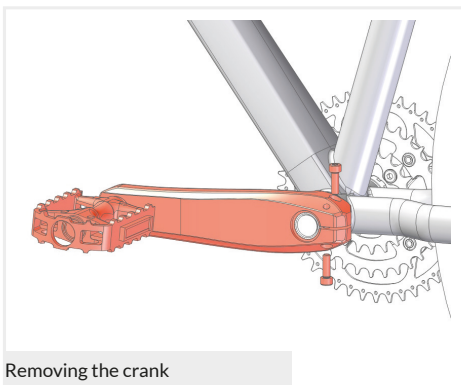
INFORMATION!

Special bike tools are necessary for this fitting option, because the bottom bracket bearing must be dismantled. These can be bought at our online shop www.add-e.at/shop. The following steps should only be done by an experienced mechanic.

3.2.1. Removing the cranks and dismantling the bottom bracket bearing

Depending on bicycle type and manufacturer, there could be a number of different types of cranks and bottom bracket bearings.

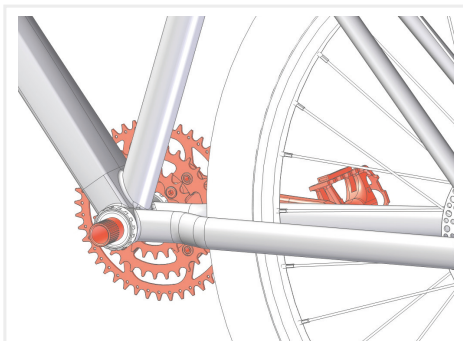
Exemplarily we have taken the Shimano Hollowtech II bottom bearing. This procedure could vary, depending on the type of bike and bottom bracket.



Removing the crank

First remove the left crank. Loosen the two screws on the clamp.

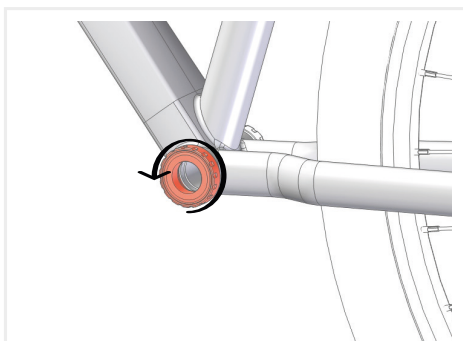
Remove the octagonal safety screw of the crank then pull the crank from the axel.



Removing the right crank

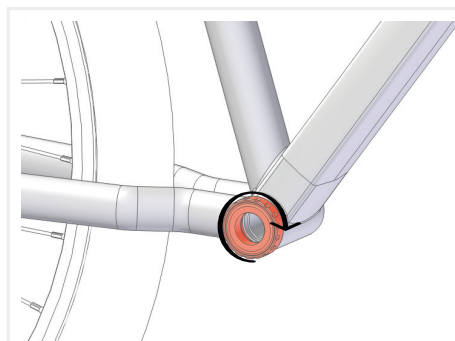
Now the right crank can be pulled out of the bottom bracket bearing. It may be necessary use light force and to give it a few taps.

Mind that the chain is lifted off the chain ring.



Dismantling the left bottom bearing cup

Dismantle the left bottom bearing cup.



Dismantling the right bottom bearing cup

Dismantle the right bottom bearing cup.

The thread for the bottom bracket bearing is left-handed on the chain ring side.



INFORMATION!

A few Italian and French frame manufacturers are an exception to the rule and have two right-handed threads. In the event that a bottom bracket bearing cannot be loosened then it may help to warm up the frame a little in this area with a blow drier. .

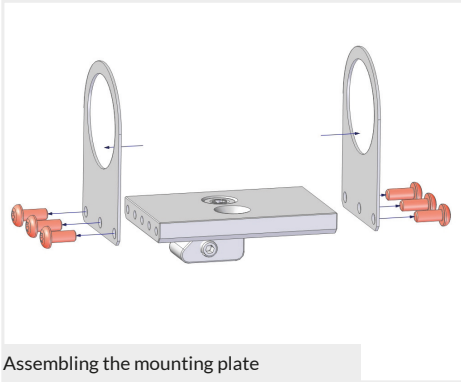


BE INFORMED!

If the bottom bearing is made of synthetic material or the left side bearing cup has no flange then it should be changed to a aluminium bottom bracket bearing before any fitting is done!

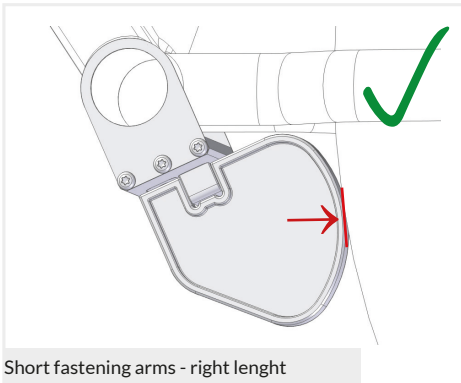
3.2.2. Assembling the mounting plate

In principle the **short fastening arms** should **always be used** when the frame geometry allows it.

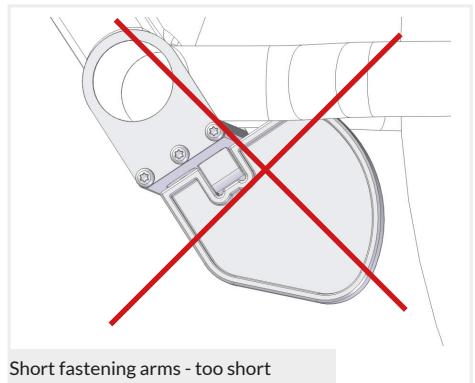


Screw the fastening arms to the mounting plate with the six M4 Torx screws provided.

When the mounting plate is assembled, attach the setting gauge to it and held up to the bottom bracket bearing. Then the setting gauge is held up to the rear tyre. The setting gauge must touch the rear tyre in this position.



Short fastening arms - right lenght

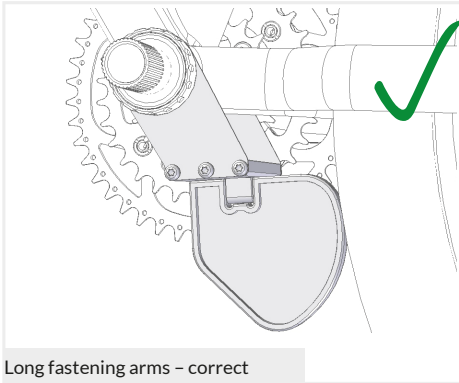


Short fastening arms - too short

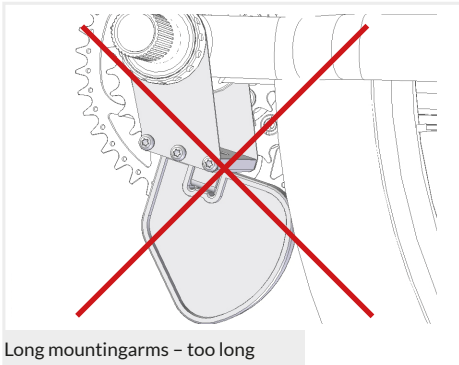


ATTENTION!

If the distance is too great, and the adjustemnt tool does not touch the rear tyre then the long fastening arms should be used. !



The mounting plate lies horizontally e.g. at a slight angle towards the rear wheel hub..



If the angle is too steep then the upper stop cannot be set properly at a later stage.

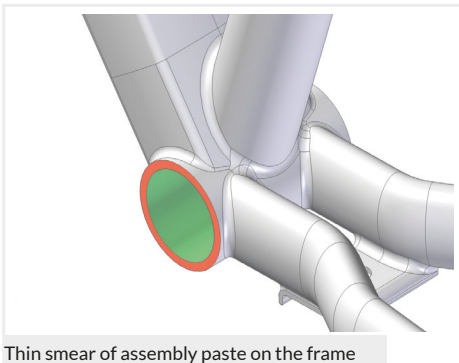
If the longer fastening arms are used then attention must be paid not to mount them mirror - inverted.

3.2.3. Fixing the mounting plate to the bottom bracket bearing



CLEANLINESS!

The surfaces around the bottom bracket must be thoroughly cleaned before fixing the mounting plate in position. There should be no grease or dirt especially between the fastening arms and the frame.

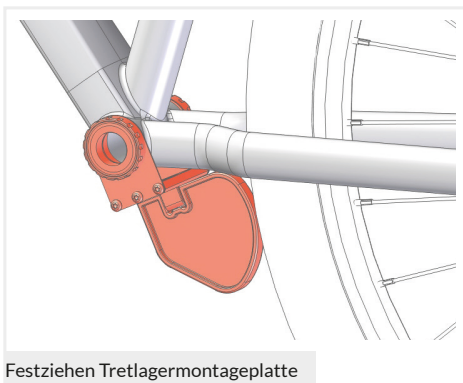


Additionally, a little assembly paste could be used on the connecting surface of the bottom bracket.

For this put a thin layer on the frame.

**TIP!**

At this point check the tyre pressure as this is important for settings at a later stage.



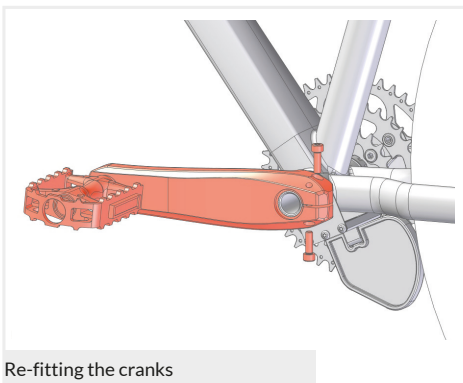
Festziehen Tretlagermontageplatte

The mounting plate will be pre-fixed to the frame, with both bottom bracket bearing cups, when the right configuration has been found.

With the setting gauge pressed lightly against the rear tyre, the bottom bracket bearing cups are tightened alternately until tight..

**ATTENTION VERY IMPORTANT!**

During tightening of the bottom take care that the setting gauge is still touching the rear tyre and has not moved.

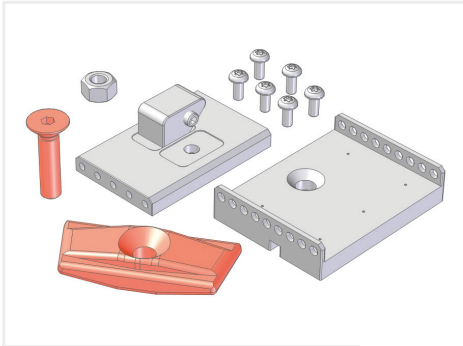


Re-fitting the cranks

Now the cranks can be fitted back on, in the reverse order.

Make sure that everything is properly tight. .

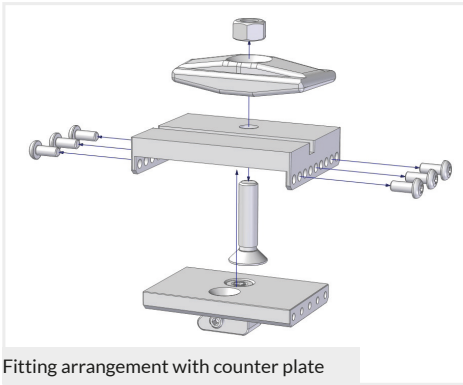
3.3. Option 3: Fitting with the clamping plate



Required parts fitting with counter plate

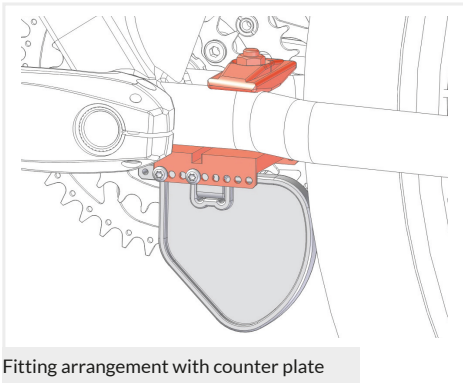
Parats required:

- Mounting plate
- Hebie - counter plate (not included in the set)
- Kickstand carrier plate
- 6x M4 Torx screws short
- 1x M8 Allen screws long
- Nuts M8



Fitting arrangement with counter plate

This fitting option is the same as fitting to the kickstand attachment. The only difference is, that a counter plate (the so called Hebie - counter plate) is used to fasten firmly to the frame.



Fitting arrangement with counter plate

Once the complete mounting plate is assembled together with the setting gauge is in position, the Hebie - counter plate is placed on top of the frame and fastened securely.

Slide the mounting plate together with the setting gauge along the kickstand carrier plate, until the setting gauge touches the rear tyre.

Now screw tight the mounting plate to the kickstand carrier plate. Be careful that the setting gauge is still touching the rear tyre after everything is tight.

CHAPTER 3: MECHANICAL ADJUSTMENTS

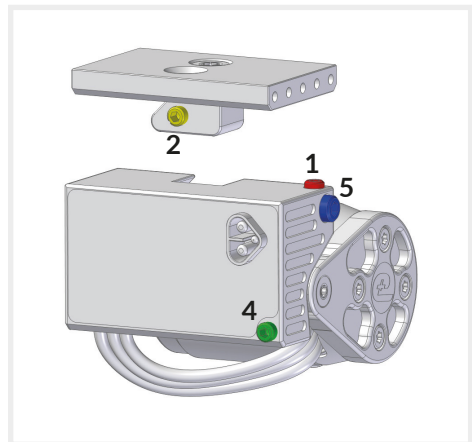
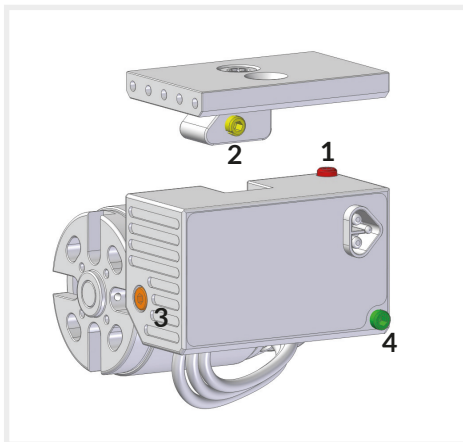
The initial fitting is now completely finished.

Here each screw and its functions used for adjustment are described, so that the correct mechanical setup can be done properly.



ATTENTION!

The bike must be standing on level ground in order to carry out the proper adjustments.



- 1** Upper stop setting screw
- 2** Contact pressure setting screw
- 3** Free wheel setting screw
- 4** Lower stop setting screw
- 5** Clamping screw

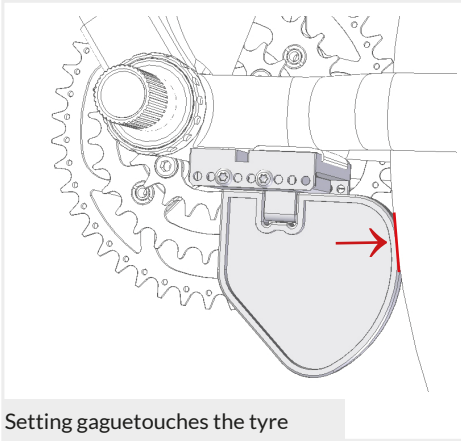


ATTENTION VERY IMPORTANT!

It is important to strictly follow the order of each adjustment step as mentioned in this manual!

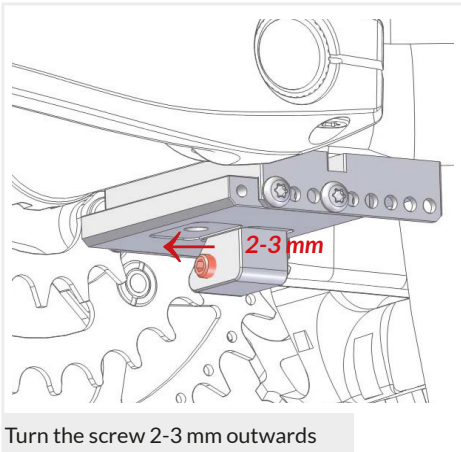
Now we come to the interesting and most important part of the installation. The mechanical setup and adjustment is to adapt the add-e drive to the bike.

Preparation

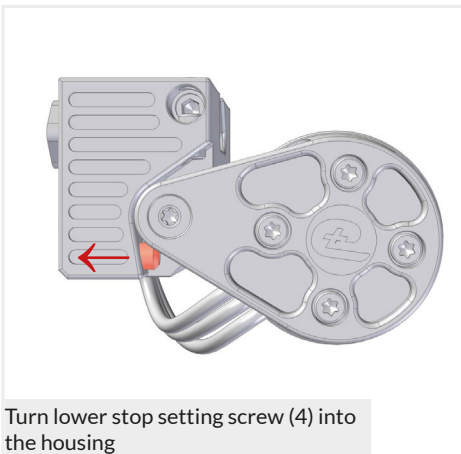


Check the tyre pressure and correct if necessary, according to the manufacturer's specifications.

Place the setting gauge one more time on the mounting plate and re-check if it touches the tyre.

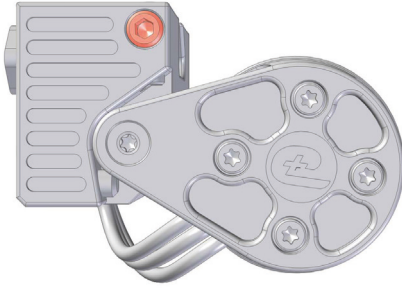


Remove the setting gauge and turn the setting screw on the wedge of the mounting plate, 2-3 mm outwards.



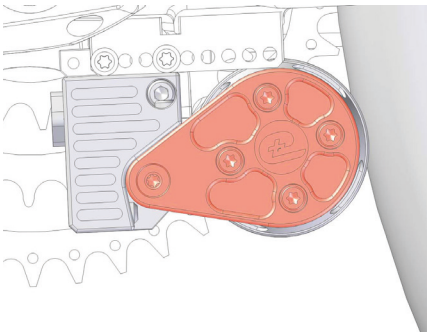
Turn the lower stop setting screw (4), back into the housing. This will allow the maximum deflection of the swing arm.

Setting 1: Upper stop



Fastening the drive unit

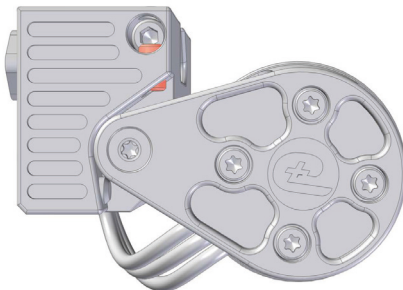
Position the drive unit and fasten it with the clamping screw (5).



Motor holds itself in its highest position

Push the motor to its highest position. The position is right when the motor just manages to hold itself on the tyre and does not drop down.

The slightest movement of the rear wheel should make the drive drop down.



Motor holds itself in the highest position

If this is not the case then adjust the upper stop.

If the upper stop setting screw(1) is too far up then the swing arm folds up too high, so that the motor does not uncouple itself in the off position.

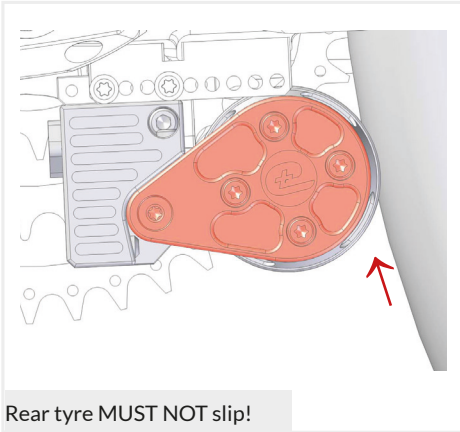
If it is too low then the swing arm will fall down unintentionally.

Setting 2: Contact pressure setting screw



IMPORTANT!

The right contact pressure is essential to ensure constant power to the rear wheel even in bad weather conditions. Do this especially when the tyre pressure varies, so that increased tire wear can be avoided.



Rear tyre **MUST NOT** slip!

Press the motor up to its highest position and hold the friction roll tightly. At the same time, try turning the rear wheel backwards.

The tyre **MUST NOT** slip! Not even a little bit.



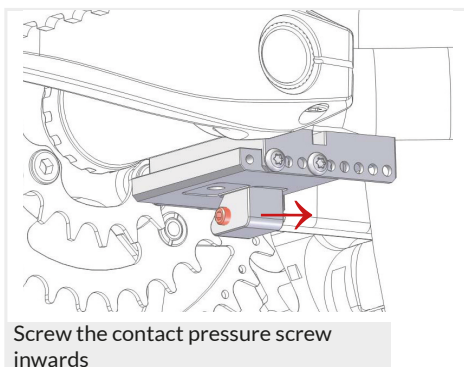
TIP!

The contact pressure should be as high as necessary and as low as possible.



ATTENTION!

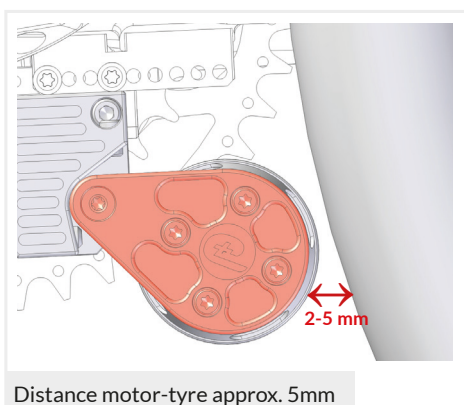
This check should be done at regular intervals to avoid a slipping tyre and consequently heavier tyre wear.



When necessary adjust the position with the contact pressure setting screw (2) on the wedge of the mounting plate.

When the screw is turned inwards, the motor moves toward the tyre and increases the contact pressure.

Setting 3: Free wheel setting



Check the distance between the friction roll and the tyre in a free wheel condition. This should be 2–5 mm.

IMPORTANT! For this the bike must be on a flat surface!



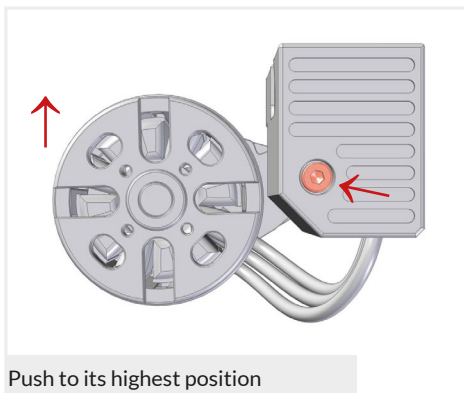
If this is not the case, loosen the free-wheel setting screw (3) until the motor drops down.

You will find this screw on the chain ring side of the drive unit.



IMPORTANT!

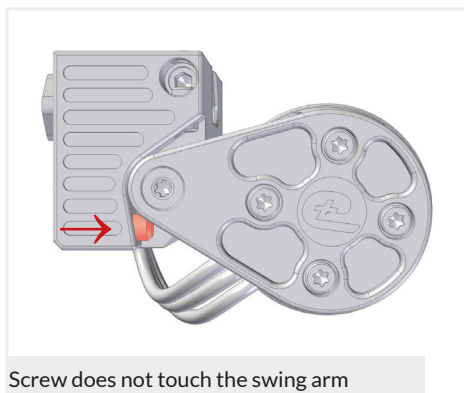
If the setting screw is covered by the chain ring then the drive unit must be taken off.



Push the motor to its highest position, and then tighten the screw hand-tight, with the motor in this position.

When the swing arm is released the motor swings to its final position. The distance to the rear tyre should be between 2-5 mm.

Setting 4: Lower stop



To avoid the arm to swing through, turn the setting screw for the lower stop (4) so far out so that it almost touches the pivot arm.



ATTENTION!

At www.add-e.at/montage you will find a video showing the fitting along with other useful tips for installing and setting up the drive unit.

To wind up

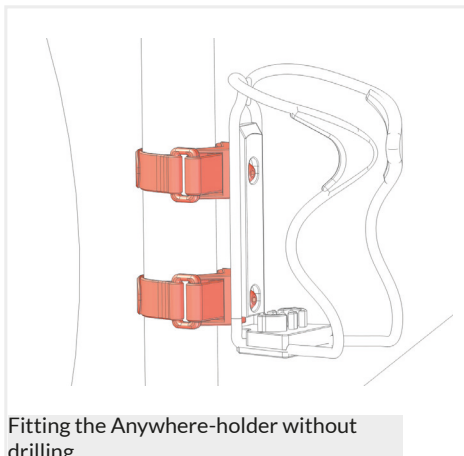
Now the battery cable can be connected to the drive unit. Fasten the battery cable to the bike with the cable ties supplied and cut off any excess. Check again that nothing can catch in any of the moving parts.

Put the battery into its holder and of you go

CONGRATULATIONS!
YOU HAVE SUCCESSFULLY INSTALLED ADD-E

CHAPTER 4: SPECIFIC FEATURES DURING INSTALLATION

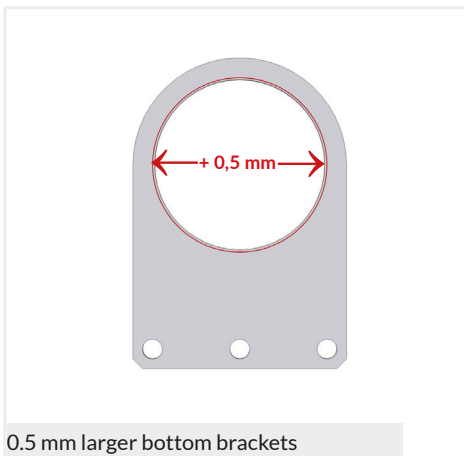
4.1. 4.1. Fitting the drinking bottle holder with the use of the Anywhere-Halters



Fitting the Anywhere-holder without drilling

If there are no pre-prepared fastening holes in the bike frame, the bottle holder can be fastened with the so-called anywhere-holder. This can be installed anywhere on the frame without drilling or damaging the bike frame.

4.2. Bottom bracket fitting on Italian bottom brackets



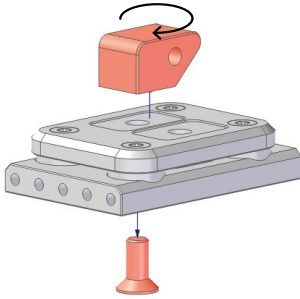
0.5 mm larger bottom brackets

The thread diameter of some Italian bottom brackets is 0.5 mm larger than usual. In this case fastening arms with a larger hole diameter are required. Should your bike have this kind of bottom bracket then please contact the Support at support@add-e.at or your dealer and the necessary fastening arms will be delivered.

4.3. Bottom bracket cups out of synthetic material

For installation sake, it is not an ideal situation if your bike has synthetic bottom bracket cups. After a certain period of time, the distance between rear tyre and motor can change / get bigger. We therefore recommend changing these, for ones made of aluminium like e.g. Shimano® BB UN 55. They are available at our online shop www.add-e.at/shop or simply contact Support at support@add-e.at

4.4. Repositioning the wedge if it rubs on the chain ring



Remove the wedge from the mounting plate

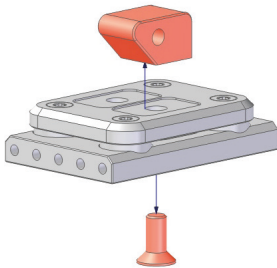
If the chain ring happens to rub on the block where the electronics are in then one can reposition the wedge on the mounting plate. In this way the distance to the chain ring can be increased by 4mm.

1. Remove the wedge from the mounting plate.



INFORMATION!

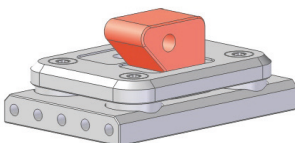
The screw has a high tensile screw locking device. Therefore it might be necessary to heat the mounting plate up to 60° C to loosen it



Turn the wedge and move to the second seat.

2. Turn the wedge through 180°, move it over to the second hole and screw it back on lightly.

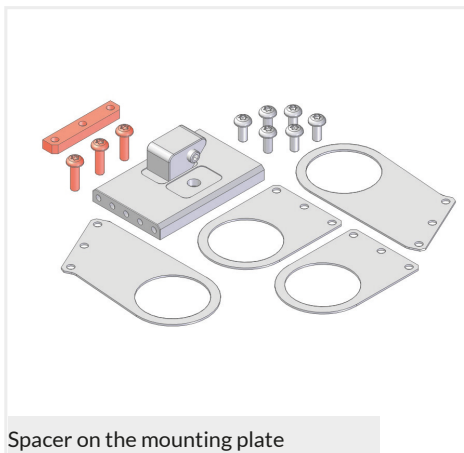
3. Before the wedge is tightly fastened, adjust it accordingly. It must sit properly in its seat



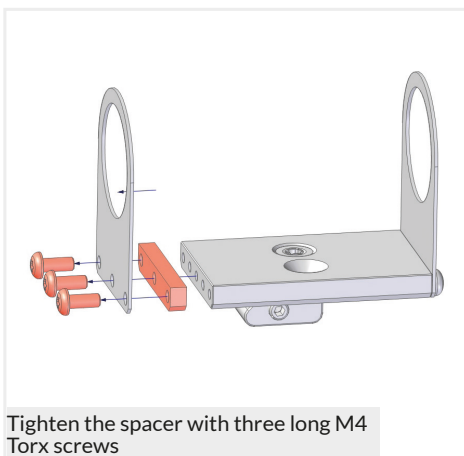
Tighten the wedge in its seat

4. Now tighten the wedge with the screw being careful that the wedge does not move. It is best to hold it whilst tightening.

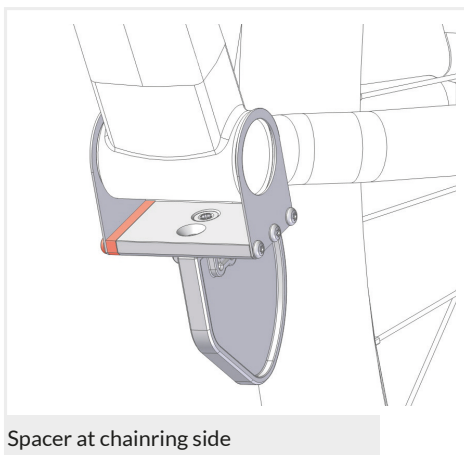
4.5. Fitting when the bottom bracket has a width of 73 mm.



When the bike has a bottom bracket width of 73 mm instead of the standard size of 68 mm the supplied spacer is used to widen the mounting plate to required 73 mm.



Tighten the spacer with the three long M4 Torx screws.



The spacer is mounted on the chain ring side.



add-e NEXT Operating Guide

AT / DE / CH



OPERATING GUIDE INDEX

1. ADD-E NEXT DRIVE UNIT

- 1.1. Technical Data p. 36
- 1.2. Difference between Lite and Sport p. 36
- 1.3. Explanation of the drive LEDs p. 37
- 1.4. Temperature regulation p. 40
- 1.5. Wear of friction roller coating p. 40
- 1.6. Maintenance and winter storage p. 40

2. ADD-E BATTERY

- 2.1. add-e battery technical data p. 41
- 2.2. Difference between 7,2 Ah and 9 Ah battery p. 42
- 2.3. add-e battery power levels p. 43
- 2.4. add-e battery charge level indicator p. 44
- 2.5. Information on the range p. 44
- 2.6. Charging the add-e battery p. 45
- 2.7. Removal / changing the battery fuse p. 46
- 2.8. Storing the add-e battery p. 46
- 2.9. What to do when the add-e battery gets damaged p. 47
- 2.10. Disposal of the add-e battery p. 47

3. ADD-E CHARGER

- 3.1. Technical Data p. 48
- 3.2. Disposal p. 48

4. ADD-E NEXT SENSORS

- 4.1. Technical Data p. 49
- 4.2. Function of the add-e sensors p. 49
 - 4.2.1. Check if the sensor is recognised p. 50
 - 4.2.2. Putting in / changing the sensors battery p. 51
 - 4.2.3. Loss of an add-e sensor p. 52
- 4.3. Pairing - Mode/ Programming the sensors p. 52
- 4.4. Disposal p. 54

5. ADD-E NEXT REMOTE CONTROL

- 5.1. Remote control parts p. 55
- 5.2. Technical Data p. 55
- 5.3. Attaching to the handlebar p. 55
- 5.4. Putting in / changing the battery p. 56
- 5.5. Activating und pairing the remote control p. 56
- 5.6. Remote control functions p. 57

6. MAPPING ADD-E SPORT

- 6.1. Mapping and set-up p. 58
- 6.2. Mapping settings p. 59

7. ADD-E NEXT CELL PHONE APP

p. 59

INTRODUCTION

The Operating Guide explains only the individual parts of the add-e retrofit drive, how to operate the add-e, technical data and function. Anything related to the installation can be found in the “Fitting Instructions”.

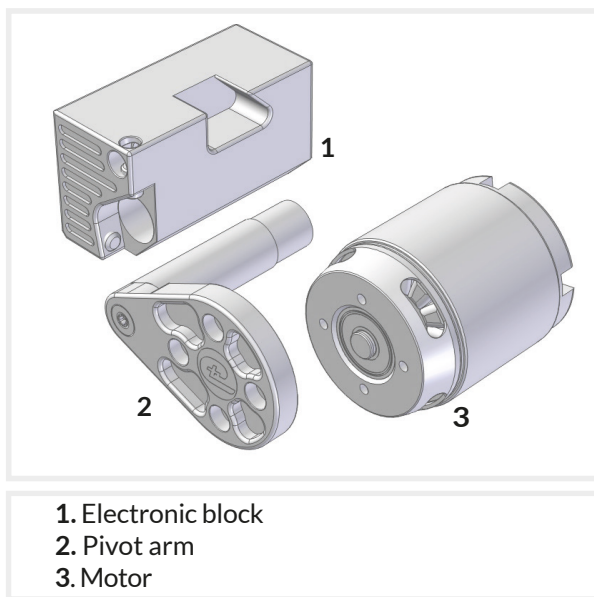
This explanation covers:

- | | |
|---------------------|-----------------------|
| 1. add-e NEXT Drive | 4. add-e NEXT sensros |
| 2. add-e Battery | 5. Pairing mode |
| 3. add-e Charger | 6. Mapping |

1. ADD-E NEXT DRIVE

The add-e drive is a small, light and powerful external rotor motor drive without brushes. There is no gearbox needed for the power transmission.

The drive itself comprises, in general, of the following components/parts.



All the electronics have been integrated into the drive unit. When the drive is switched off or in stand-by (battery setting “OFF”), then the drive is uncoupled and that the rear wheel is not driven. This means that, when the drive is switched off or the battery is disconnected with the drive, the bike can be ridden normally without any resistance from the retrofit drive. When the drive is switched on at one of the 5 power settings, the add-e drive is pulled up against the tyre as soon as the pedals are rotated. Power is then transmitted to the rear wheel at the selected power setting. If pedalling stops, the drive uncouples itself from the rear tyre automatically.

1.1. Technical Data

Dimensions (H/W/D)	7 x 8 x 8 cm
Weight	850 g
Motor	External rotor motor. Synchronous motor
Power settings	5
Power output	50 - 600 W
Supported speed	3 - 45 km/h
Torque	max. 8,5 Nm
Voltage input	17 - 26 V
Operating temperature	-20 bis 85 °C

1.2. The Difference Between Lite und Sport

Version	add-e NEXT Lite	add-e NEXT Sport
Power	max. 250 W	max. 600 W
Mapping	NO	YES
Bluetooth® 4.0	YES	YES
LED Display After connecting battery	Blue LED (6) comes on (approx. 5 Secs.)	Red LED blinks according to mapping setting <i>Mapping 2</i> <i>supplied</i>
Max supported speed	up to 25 km/h	up to 45 km/h (depending on mapping)

1.3. Explanation of the drive LEDs

The status of each component can be seen by the condition of the LED lights. The LED's are positioned under the tinted front cover and are not visible when the power is off.

Here is an overview of all LED's and their position:



1. Status LED (red))
2. Bluetooth LED (blue)
3. Indicator add-e Lite LED (blue)
4. Indicator add-e Sport LED (red)
5. PAS sensor LED (orange)
6. Speed sensor LED (green)
7. Power setting LED (white)

Overview of all LED's

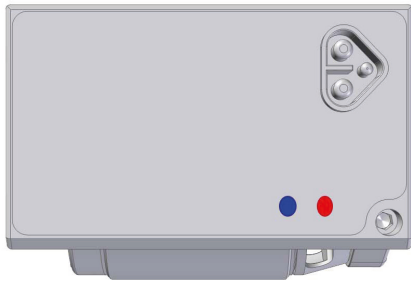
The following describes each LED.



Red energy LED

LED (1)–Energy LED

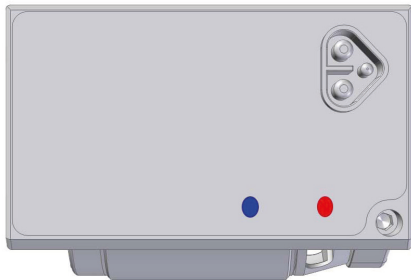
This stays on as long as the battery is connected to the drive unit and the battery has energy. Also in the OFF/stand-by setting.



Blue Bluetooth LED

LED (2)-Bluetooth LED

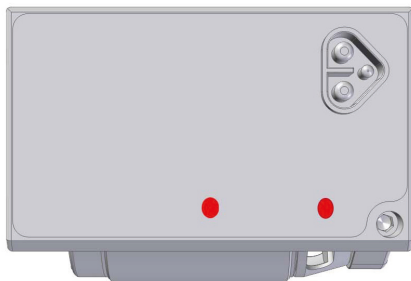
This LED is on when the cell phone is connected to the drive via the add-e App.



Indicator add-e Lite

LED (3) - Indicator add-e Lite

This LED is an indication that this drive is a Lite version. When the battery is connected, the blue LED (3) comes on for 5 Secs.



Indicator add-e Sport

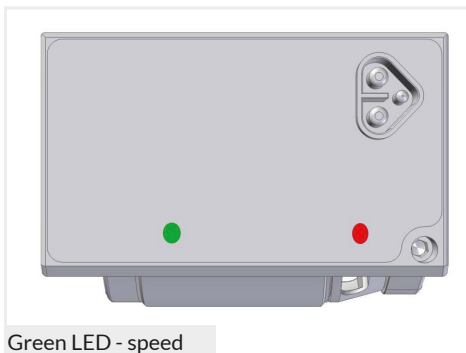
LED (4) - Indicator add-e Sport

This LED is an indication that this drive is a Sport version. When the battery is connected, the red LED (4) blinks according to the Mapping setting. e.g. Mapping 6-6 times, Mapping 5-5 times, Mapping 4-4 times etc.



LED (5)-PAS Sensor

This LED indicates that the PAS sensor is operable. This can be seen when the add-e battery is switched to the OFF/stand-by position. The orange LED (5) will only indicate the operation status in this position. When the pedals are turned, the orange LED will blink up to a speed of 10 km/h. When stationary it stays on permanently.



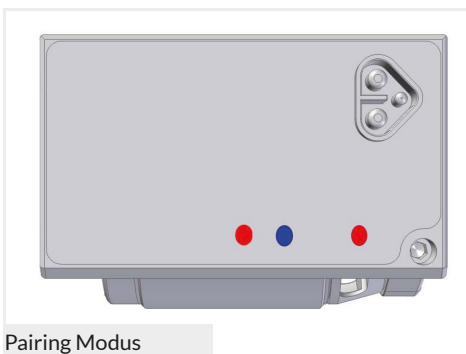
LED (6)-Speed Sensor

This LED indicates that the speed sensor is operable. This can be seen when the add-e battery is switched to the OFF/stand-by position. The green LED (6) will only indicate the operation status in this position. When the rear wheel is turning, the green LED will blink up to a speed of 10 km/h. When stationary it stays on permanently.



LED (7)-Power setting

This LED indicates that the power setting is operable. This can be seen when the power setting is changed either from the battery or the handlebar switch. The white LED (7) will blink according to the selected setting e.g. OFF/stand-by position – 1x blink, setting 1 – 2x blinks, setting 2 – 3x blinks etc.



Pairing mode:

The system is being programmed to match sensor or handlebar switch and the system is in pairing mode (see 4.3. pairing mode), then the red LED (4) and the blue LED (3) blink alternately.

1.4. Temperature regulation

There is an intelligent temperature regulator incorporated in the add-e drive unit. This is fully automatic and ensures that the electronics do not overheat and get damaged, even when riding at low speeds and with a high performance setting. When necessary the temperature regulator kicks in automatically and reduces the drive performance successively.

When riding, it is recommended to look ahead and anticipate gradients to counteract the performance loss. If there are longer and steeper gradients to climb then it is recommended to use a lower assisted power setting and get up the hill at a constant speed.

1.5. Wear of friction roller coating

The friction roller coating is a wearing part. As to how quickly the coating wears depends on many factors like, rear tyre settings, rubber composite, tyre profile, topography, frequency of usage etc. The rule of thumb though shows that the coating wears out after about 10,000 km.

In order to get the friction roller exchanged, please contact your dealer or GP Motion GmbH at support@add-e.at

If the friction roller has gotten clogged up with e.g. peaty soil, then it can be easily cleaned with water and a soft brush (do not use a steel brush or similar).

If cleaning is neglected then this could result in a skidding friction roller and assisted drive malfunction

1.6. Care, maintenance and winter conservation

The drive unit should be cleaned at regular intervals. It is especially necessary to clean the drive unit and motor after use on muddy roads, and peaty surfaces or similar. This avoids mud and dirt to set on the drive unit which could have a negative impact on the function of the unit.

A soft spray of water or wash under a tap is ideal for this purpose not forgetting to dry the unit afterwards. Never use solvents, alcohol (spirits) or aggressive cleansers for cleaning.

If add-e is used during the winter months then it should be cleaned at even shorter intervals. This is to wash off the salt from the roads and tracks, which could lead to damage.

If the drive is not used for a longer period of time then it is recommended to remove it from the bike, clean it and store it in a dry place, ideally at a temperature of 15°C. .

2. ADD-E BATTERY

The add-e battery is the energy package and control centre of the add-e retrofit drive unit. The ON/OFF switch and power regulation is done by twisting the battery cap. The battery status indicator is incorporated into the base of the battery.

The add-e battery is delivered partially charged and should be fully charged before initial use. The battery can be used at temperatures between 0 °C to 40 °C regardless. Lower temperatures however reduce the range of travel. It is generally recommended not to use the battery for longer periods at temperatures under 0 °C.

The battery technology we use (lithium-ion) does not have the memory effect that older batteries have. Therefore it is possible to charge the battery at any time. It is recommended however not to completely discharge the battery.

The add-e battery has an integrated BMS (battery management system) which protects against e.g. surges, short circuits, total discharging and temperature issues.

The battery should not be subject to force (e.g. dropping). If damaged in this way then it should not be used.

Misuse or incorrect handling could lead to injury or risk of fire.

If maintenance is carried out on a bike with add-e then the battery must be removed from the holder.

2.1. add-e Battery Technical Data



The battery status indicator and fuse is incorporated into the base of the battery.

Dimensions (H/Ø)	23/7,5 cm
Weight	1,1 kg
Battery cells	Lithium-Ionen
Voltage	22,2 V (nominal) 25,2 V (end of charge voltage)
Capacity	7,2 oder 9 Ah
Power regulation	Yes – Screw cap
Power settings	5
Housing	Aluminium
Charging time	3-4 h (depending on the battery capacity)
Battery status	YES - Battery base
Fuse	30 A
Intelligent BMS (Battery Management System)	Integrated
Memory effect	NO
Storage temperature	Optimum 7 °C
Storing voltage	Between 20 und 23 V

2.2. Difference between 7,2 Ah and 9 Ah battery

Version	7,2 Ah Akku	9 Ah Akku
Weight	1,1 kg	1,1 kg
Capacity	160 Wh (2x80 Wh)	200 Wh (2x99 Wh)
Power settings	5 + OFF/Stand-by <i>The exact power output depends on which drive is used for details see 2.3 Battery Power Settings</i>	5 + OFF/Stand-by <i>The exact power output depends on which drive is used For details see 2.3 Battery Power Settings</i>
Compatibles	Lite & Sport	Lite & Sport
Cell manufacturers	LG	Samsung
Charging times (original Ladegerät)	up to 3,5 h	up to h4h
Suitable for air travel	YES	YES

2.3. add-e Battery Power Settings



Anti-clockwise OFF/stand-by

The power of the battery is set by turning the battery cap. When the cap is turned anti-clockwise to its end position then it is OFF / in stand-by. Turning the cap in the clockwise direction increases the amount of power step by step. There are the settings 1 to 5 to choose from.

For easier identification, the supplied self-adhesive power setting indicator, showing OFF to setting 5, can be attached to the cap..



TIP!

For attaching the sticker: Turn the power setting cap in the OFF/stand-by position. Line "OFF" up with the add-e logo then attach the sticker. Now, the actual setting will always be the one next to the add-e logo.



Add-e power settings

add-e Sport

includes Mapping 2 as standard

Off	Stand-by	
1	25 km/h	50 W
2	25 km/h	150 W
3	25 km/h	250 W
4	25 km/h	400 W
5	25 km/h	600 W

add-e Lite

no Mapping possible

Off	Stand-by	
1	25 km/h	50 W
2	25 km/h	100 W
3	25 km/h	150 W
4	25 km/h	200 W
5	25 km/h	250 W

2.4. add-e Battery charge level indicator

There is a charge level indicator in the base of the battery. This is an indication of the actual charge level.



The charge level can be seen by pressing the "PUSH" button.

All LED's come on when the battery is full. 1x red, 2x orange and 2x green. The more the battery loses power the less LED's are on.

If only the red LED comes on then the battery is flat.



INFORMATION!

If none of the LED's come on and there is no acoustic melody, then either the battery is flat or the battery fuse has blown. To change the fuse, please refer to 2.7 "Changing the Battery Fuse".

2.5. Information on the travel range

The actual range of travel depends on many different factors, most of all on the riders own effort contribution. Furthermore, it also depends on the style of riding, topography and selected power setting. On average, the distance travelled on one battery charge is approximately 50 km. The more the assisted drive is used on gradients then the more drastic is the reduction in range.

As the add-e creates no resistance when uncoupled, day tours can usually be done on just one battery charge. This is possible when the add-e is only used for getting over steeper gradients which would otherwise need a lot of effort.

In this way, if lacking behind in a group, one can drastically reduce the distance lost with the least of power support (50W = setting 1) or e.g. a gradient with setting 4 (400W-add-e Sport), quite easily.

The actual distance travelled (total distance) can be calculated with the selected power [W] and the average speed [km/h] in relation to the time taken [h]. This is then the actual distance travelled with permanent power assistance.
Use this formula to calculate:

$$\frac{\text{Battery capacity in Wh}}{\text{Ø Power in W}} \times \text{Ø Speed in km/h} = \text{Gesamtwegstrecke in km}$$

Here is an example with an average speed of 25 km/h:

Power	Ø Speed	160 Wh	Dist. in km	200 Wh	Dist. in km
50 W	25 km/h	3,2 h	80	4 h	100
100 W	25 km/h	1,6 h	40	2 h	50
600 W	25 km/h	17 min	08	20 min	09

2.6. Charging the add-e Battery

Charging the add-e battery should only be done under supervision, in a well ventilated room and out of children's reach.

Before charging, check the socket, charger cable and the charger itself for possible damage.

When charging, only use the special charger supplied.

The battery can be charged intermediately at any time because it has no so-called memory effect. Meaning, after being fully charged it does not have to be completely discharged before re-charging.

If not fully charged, the battery LED will light up red. When the battery is fully charged the LED will light up green.



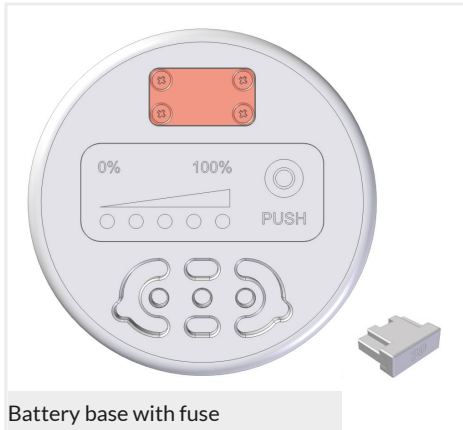
ATTENTION!

Connecting sequence. First connect the charger to the electric socket and then to the battery.

2.7. Removal/Changing the Battery Fuse

There is a 30A fuse built into the base of the battery. This serves as an additional safety feature and when removed creates a physical separation of the battery to drive unit for: e.g. being able to take the battery with you on a plane.

If the fuse has to be removed or changed, this can be done as follows:



Battery base with fuse

1. Loosen the screws shown on the rectangular cover, indicated in red, and lift the cover
2. Remove the blown fuse and dispose of it accordingly when necessary.
3. Replace with new fuse supplied.
4. Depress the charge status button and check whether the LED's light up
5. If this is the case replace the cover and screw it tight.



INFORMATION!

To check if the fuse has blown, connect the battery to the charger, depress the "PUSH" button and see if all LED's light up

2.8. Storing the add-e Battery

The battery is a wearing part. Its capacity and therefore travel range reduces with age and use. It is therefore important to store the battery correctly when not used over longer periods.

If not used for extended periods, especially during the winter months, the battery must be removed from its holder and stored correctly.

Ideally, the battery should be stored with a charge voltage of 20-23 V at about 7 °C. If not used for longer periods it is advised to check the charge status of the battery periodically and re-charge if necessary.

If the battery has been completely discharged during a ride then it should be recharged to the recommended level before being stored.

The battery should be stored in a well ventilated dry room above freezing point. The add-e battery should never be exposed to extensive heat.

2.9. What to do when the add-e battery gets damaged

In general, no force should ever be applied to the battery otherwise there is the chance it could explode.

Should the battery get damaged then please contact the seller.



ATTENTION!

Never try opening the add-e battery casing. The battery contains Li-ion battery cells together with electronic components which regulate the charging and discharging process (BMS). Any damage to the casing caused by opening can lead to a short circuit, general damage to parts and even the battery cells catching fire.

2.10. Disposal of the add-e Battery

Damaged or used batteries should not be disposed of with the usual household rubbish.

According to European Regulation 2006/66/EG, damaged and used batteries must be collected separately and recycled in an environmentally friendly way.

If the battery is to be disposed of after the end of the warranty then this can be done through an add-e partner, an authorised recycling company or the manufacturer free of charge. These organisations ensure that disposal is done professionally.



3. ADD-E CHARGER

The add-e charger is specifically for charging the add-e batteries. When charging, only use the cable supplied for the country in question.



The add-e charger has an LED, which shows the charging status of the battery.

LED is red – Battery is not fully charged.

LED is green – either there is no battery connected or the battery is fully charged.

3.1. Technical Data

Dimensions (H/W/D)	50/120/30 mm
Weight	200 g
Input	100-240-V AC/50-60 HZ
Output	25,2 V DC 2.0 A/50 W
LED indication	YES <i>green/red</i>
Polarity reversal protection	YES
Ventilator free, no buzzing	YES



INFORMATION!
For indoor use only. Protect against wet and dampness.

3.2. Disposal

If the charger has a defect, please contact your supplier

The charger should not be disposed of with the usual household rubbish.

According to European Regulation 2006/96/EG, defective and non-usable electrical goods must be collected separately and recycled in an environmentally friendly way.



4. DIE ADD-E NEXT SENSORS

This refers to Bluetooth sensors (without cables).

These sensors have been specially developed for the add-e retrofit drive and are only to be used in combination with these.

When the add-e retrofit drive was purchased the supplied sensors – 1x PAS sensor (P) and 1x speed sensor (S) had already been mated with the corresponding drive unit. This means that the drive unit recognises the sensors as soon as they move. Should a sensor get lost then both sensors must be re-programmed.

4.1. Technical Data

Dimensions (H/W/D)	11/36/33 mm
Weight (of both sensors)	20 g (incl. battery)
Battery	Lithium button cell CR 2032 3 V
System compatibility	Bluetooth ® 4.0
LED indication	YES <i>orange/green inside</i>
Range	3 m
Sleep-Mode automatically when not in use	YES
Battery life	Ø 1 year



Add-e sensors

Bestandteile der Sensoren:

1. P = PAS Sensor
2. S = Speed Sensor
3. Misc. rubber rings
4. Button cell

4.2. Function of the add-e sensors

The sensors of the add-e retrofit drive react to movement.

The corresponding drive unit recognises the mated sensors automatically.

If the bike is not used then the sensors go into sleep mode automatically after approx. 1 min. This means that there is no longer radio contact between drive unit and sensor. Once the bike is moved the sensors automatically jump into life and start sending data to the drive unit again.

4.2.1. Check to see if the sensor is recognised



Power setting cap turned OFF

1. Turn battery setting cap to OFF/Stand-by.



ATTENTION!

If the power setting cap not in the OFF/stand-by position then the LED's on the drive unit will not come on.



PAS is recognised – orange LED

2. PAS sensor is recognised – orange LED (5) comes on.

If there is no pedalling, then the orange LED stays on permanently and goes into Sleep-Mode after about 1 min.

If there is pedalling, the orange LED will blink up to a speed of about 10 km/h then goes out.



Speed sensor is recognised – green LED

3. Speed sensor is recognised – green LED (6) comes on.

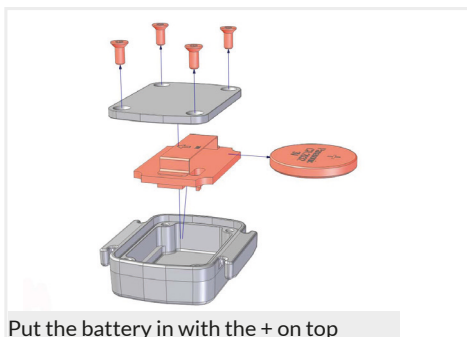
If the wheel is not moved then the green LED stays on permanently and after about 1 min. goes into Sleep-Mode

If the wheel is moved the green LED starts to blink up to a speed of about 10 km/h and then goes out.

4.2.2. Putting in/changing the sensor battery

The battery has an average life of about one year depending on the frequency of use and how often they are activated. The sensor battery can be easily changed should it go dead. After a battery has been changed it is not necessary to re-programme the sensor with the drive unit. They will recognise each other automatically.

The battery can be changed as follows:



Put the battery in with the + on top

1. Undo the 4 screws on the rear side and remove the cover.
2. Remove the printed circuit from the housing.
3. Remove the battery and replace with a new one ensuring that the polarity is correct. See information below.



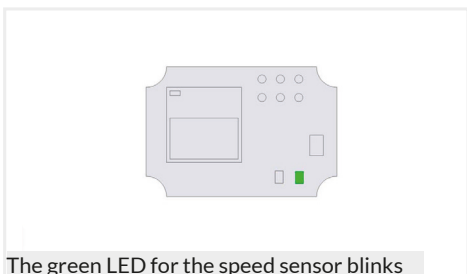
INFORMATION!

When the battery is inserted ensure that the (+) polarity is on top as on the diagram.



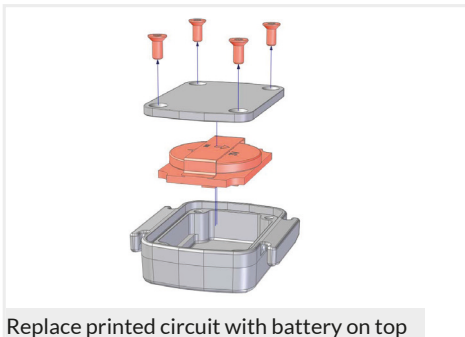
The orange LED blinks on the PAS sensor

When the battery of the PAS sensor is changed then the orange LED on the printed circuit will blink every 5 secs.



The green LED for the speed sensor blinks

When the battery of the speed sensor is changed then the orange LED on the printed circuit will blink every 5 secs.



Replace printed circuit with battery on top

4. The printed circuit can be put back into the housing correctly with the battery on top.

5. Screw the cover back on

4.2.3. Should an add-e sensor get lost

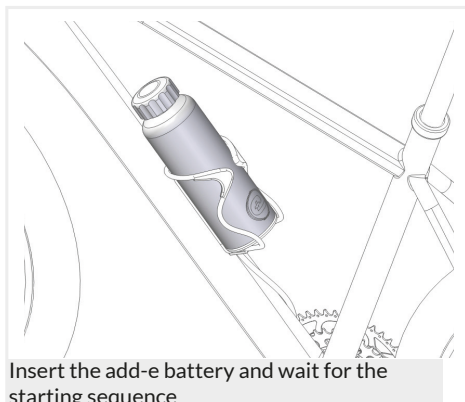
If an add-e sensor gets lost or has a defect, it can be purchased as a separate item. In this case both sensors must be re-mated, please refer to 4.3. *Pairing-Mode*.

4.3. Pairing Mode/Programming the sensors

What one understands with the expression sensor pairing is the mating of the add-e sensors to the drive unit.

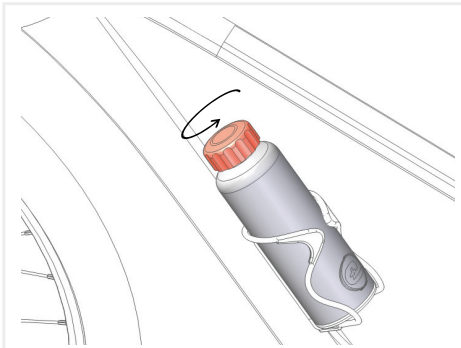
This can be necessary when sensors are changed or replaced after loss.

The sensor can be programmed for mating as follows:



Insert the add-e battery and wait for the starting sequence

1. Connect the battery to the drive unit and wait for the starting sequence. .



Power selector cap turned completely clockwise

2. Important! Within 10 Seconds! To turn the power selection cap clockwise as far as it will go and wait for the peep tone. Then turn it anti-clockwise as far as it will go and wait for the peep tone.

8x all together until:



Red LED 4 and blue LED 3 blink alternately

3. Both, the red LED (4) and die blue LED (3) on the drive unit, start to blink alternately. Then a tone sequence can be heard. When this happens, then the pairing mode has been reached



ATTENTION!

During the pairing scenario, no other active sensor nearby should be moved!

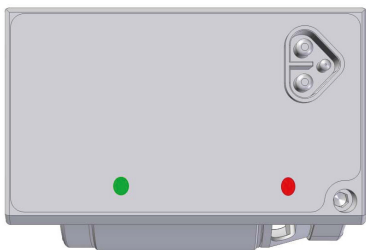


Sensor is recognised – orange LED comes on

4. Immediately afterwards start turning the pedals (it's best to turn them backwards) until the sensor has been recognised.

IMPORTANT! The rear wheel should not move during this operation!

The orange LED (5) comes on and a signal tone can be heard when the sensor has been recognised.



Sensor wurde erkannt - grüne LED leuchtet auf

5. Right after this, start turning the rear wheel either by hand or with the pedal, until the sensor is recognised

When the sensor is recognised the green LED (6) comes on and a signal tone can be heard.

6. The start sequence begins straight after both sensors have been recognised.



INFORMATION!

There is a time limit for the pairing/mating process of about 1 minute. If nothing happens within this time limit, or one of the sensors are not recognised, then there is an error tone and one must start from the beginning.



ATTENTION!

*Even though it seems like only one sensor needs pairing, in all cases **both sensor must be mated again**. It is also important to do this in the correct order. First of all the PAS sensor is mated and secondly the speed sensor.*

4.4. Disposal

Sollte beim Sensor ein Defekt vorliegen, wende Dich bitte an den Verkäufer. Ist ein Sensor zu entsorgen, so darf dieser nicht im Hausmüll entsorgt werden. Laut der europäischen Richtlinie 2002/96/EG müssen nicht mehr gebrauchsfähige Elektrogeräte sowie Batterien getrennt gesammelt und einer umweltgerechten Wiederverwendung zugeführt werden.



5. ADD-E NEX**T** HANDLEBAR SWITCH/REMOTE CONTROL



add-e NEX**T** handlebar switch

The handlebar switch or remote control is an option to control the add-e NEX**T** power setting directly from the handlebars instead of from the battery cap. In this case the battery can be fitted onto hard to get at places.

The handlebar switch is designed only as a sender. Which means it only sends data but cannot receive any. The power setting cap on the battery must be in the OFF/stand-by position in order to use the handlebar switch.

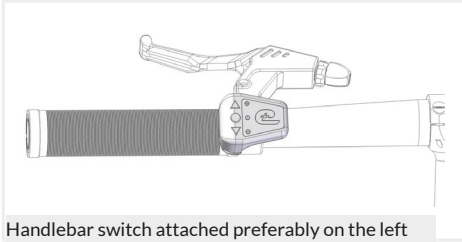
5.1. Handlebar switch parts

- 1. Handlebar switch/Remote control with 3 buttons ▼○▲
- 2. Rubber handlebar adapter
- 3. Various rubber rings
- 4. Button battery

5.2. Technical Data

Dimensions (H/W/D)	48/38/21 mm
Weight	15 g (incl. Battery)
Battery	Lithium button battery CR 2032 3 V
System compatibility	Bluetooth ® 4.0
LED indicator	YES <i>green/red</i>
Range	3 m
Sleep-Mode automatically when not in use	YES
Battery life	Ø 1 year

5.3. Attaching to the handlebars



The handlebar switch can be attached on the left (preferred) or right hand side of the handlebars. It is fastened with the supplied rubber adapter and O-ring.

5.4. Putting in/ Changing the battery

1. Open the round cover on the bottom of the remote control
2. Insert the battery making sure of the correct polarity
3. Close the cover securely

5.5. Pairing the handlebar switch with the drive unit



Rote LED 4 und blaue LED 3 blinken abwechselnd

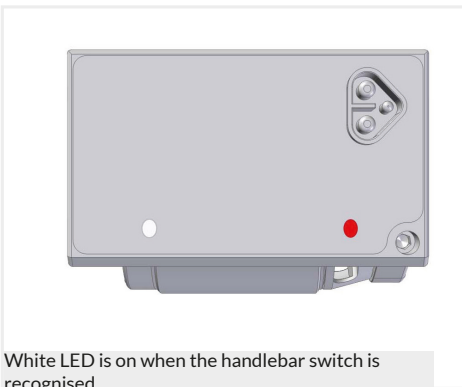
Initiating the pairing mode:

1. Put the battery into the bottle holder and wait for the start sequence to begin
2. Straight after the beginning of the start sequence, turn the power selection cap on the battery completely to the right as far as it will go. Wait for the signal tone then turn the power selection cap to the left, as far as it will go and wait for the signal tone.

8x altogether until:

3. When the red and blue LED'S on the drive unit blink alternately, then the pairing mode has been reached.

4. Turn the handlebar switch on with the O button and keep it pressed for 1 second until a signal tone is heard. The white LED on the drive unit is now permanently on.



White LED is on when the handlebar switch is recognised

5. Another signal tone is heard and the white LED goes out. The handlebar switch has now been mated.



ATTENTION!

The bike must not be moved during this phase otherwise the sensors will try to re-mate themselves.

5.6. Function of the handlebar switch

After a short time the handlebar switch goes into stand-by if it is not used. Pressing one of the three buttons automatically reactivates the switch. The power selection cap on the battery must be in the OFF/stand-by position in order to use the handlebar switch.



add-e NEXT Handlebar switch

Arrow pointing up ▲/+

- Increases power setting
- If the drive unit is in OFF/stand-by and this button is pressed then the power setting will move to setting 1
- If the arrow button up ▲ is kept depressed then the power setting of the drive will move to the highest setting (5).

Round button ○/⏻

- On/Off – Switches the drive into the On or Off/Standby-Modus.
If this switch is used to turn the drive unit on then the drive will start up with the last selected power setting.

Arrow pointing down ▼/-

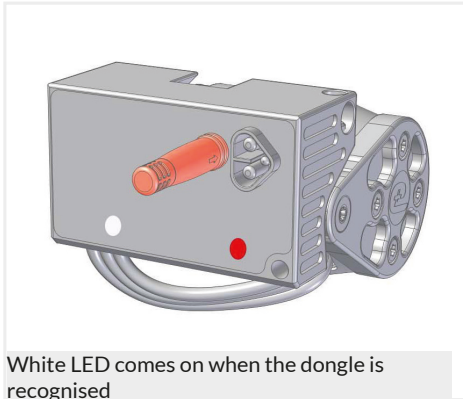
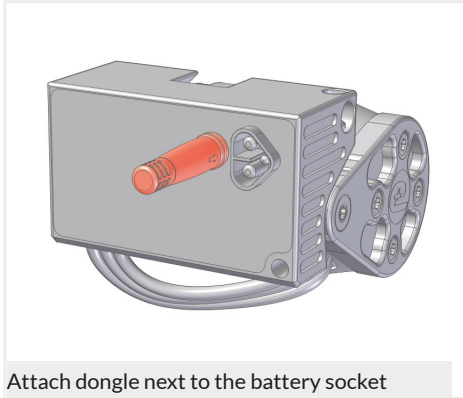
- Decreases power setting
- If the arrow button down ▼ is kept depressed then the drive will go to the OFF/stand-by condition.

6. MAPPING ADD-E SPORT

Mapping 2 is a standard feature of the add-e Sport Edition

6.1. Mapping und setup

Mapping is used to change the maximum speed and drive power settings accordingly. This is only possible with the add-e Sport Version.



1. Remove the add-e battery from its holder.
2. Attach the add-e dongle next to the battery socket (see dia.). It is held on by magne.
3. Replace the add-e battery and wait for the start sequence. When the dongle is recognised the white LED (7) will come on permanently.
4. The required Mapping setting can be selected by turning the selection cap on the add-e battery (see 6.2 Mapping settings). The required Mapping will be shown by the number of times the red LED (4) blinks and the number of peep tones heard: e.g:
Mapping 6: 6x red blinks + 6x peep
Mapping 5: 5x red blinks + 5x peep
etc.
5. The dongle can be removed when the required Mapping has been setup.
6. Now the start sequence is activated and the Mapping setting stored.



INFORMATION!

If the dongle is not removed, then the selected Mapping will blink periodically and repeatedly. During this time the drive cannot be used.

6.2. Mapping settings

The following mapping settings have already been pre-programmed:

Mapping 1 1x blink + 1x peep			
Off	<i>Stand-by</i>		
1	25 km/h	50 W	
2	25 km/h	100 W	
3	25 km/h	150 W	
4	25 km/h	200 W	
5	25 km/h	250 W	

Mapping 2 2x blinks + 2x peeps			
Off	<i>Stand-by</i>		
1	25 km/h	50 W	
2	25 km/h	150 W	
3	25 km/h	250 W	
4	25 km/h	400 W	
5	25 km/h	600 W	

Mapping 3 3x blinks + 3x peeps			
Off	<i>Stand-by</i>		
1	25 km/h	50 W	
2	25 km/h	150 W	
3	25 km/h	250 W	
4	30 km/h	400 W	
5	- km/h	600 W	

Mapping 4 4x blinks + 4x peeps			
Off	<i>Stand-by</i>		
1	30 km/h	50 W	
2	30 km/h	150 W	
3	35 km/h	250 W	
4	35 km/h	400 W	
5	- km/h	600 W	

Mapping 5 5x blinks + 5x peeps			
Off	<i>Stand-by</i>		
1	30 km/h	50 W	
2	35 km/h	150 W	
3	35 km/h	250 W	
4	40 km/h	400 W	
5	- km/h	600 W	

Mapping 6 6x blinks + 6x peeps			
Off	<i>Stand-by</i>		
1	- km/h	50 W	
2	- km/h	150 W	
3	- km/h	250 W	
4	- km/h	400 W	
5	- km/h	600 W	

W = Watt, Stand by = Drive unit is off, red status LED is on
- speed is unlimited (up to 45 km/h)

7. ADD-E NEXT CELL PHONE APP

The add-e NEXT cell phone Handy App is initially for displaying all riding relevant information clearly. In this way you can easily monitor momentary speed, daily drive supported kilometres e.g. kilometres in total, power setting, drive motor temperature and a lot much more.

Furthermore, the add-e NEXT cell phone App allows you to make effortless complicated programming adaptations possible quite quickly. For example, you can adapt the free programmable Mapping in such a way as to customise the top speed and power for every setting individually.

In a few cases it may be sensible to adapt the starting torque, responsible for the quick and efficient coupling of the motor to the tyre. This adaption possibility can only be done via this App and enables you to set various levels of the coupling effect from soft to firm. It could be meaningful to boost the starting torque when e.g. the pivot arm starts to jolt up and down at lower power settings.

An exact description of the add-e NEXT App can be downloaded at the homepage www.add-e.at/montage

Manufacturer:

GP Motion GmbH
Tiroler Str. 80
9500 Villach
Österreich
Vers. 1.0. 2019

Description and identification of the machine:

Function: Pedal assisted electric drive for bicycles (up to 25 km/h)
Type/Model: add-e
Serie: NEX**T**

Responsible for contents and images:

GP Motion GmbH
Tiroler Str. 80
9500 Villach
Austria

www.add-e.at

department:

Telefon: +43 (0)4242 59 003
Email: support@add-e.at