



**TRANSLATION OF THE ORIGINAL OPERATING INSTRUCTIONS**  
E-BIKE, EPAC, S-PEDELEC

EN 15194



# TRANSLATION OF THE ORIGINAL OPERATING INSTRUCTIONS EN 15194

## E-BIKE, EPAC, S-PEDELEC

Read pages 2 to 18 before your first ride!

Perform the functional check on pages 19 to 22 before every ride!

For more information see the chapter **“Service and maintenance schedule for your Velo de Ville bike”** in your general Velo de Ville user manual.

### **i** Notice

In any case, also read the general Velo de Ville user manual and the system instructions of the drive system manufacturer that you received from your Velo de Ville dealer. Also observe the enclosed operating instructions of the component manufacturers.

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# THE EPAC AND ITS COMPONENTS

## Frame:

- (a) Top tube
- (b) Down tube
- (c) Seat tube
- (d) Rear stay
- (e) Chainstay
- (f) Head tube

## Suspension fork:

- (A) Fork crown
- (B) Stanchion tube
- (C) Lower leg
- (D) Dropout

- (I) Motor/drive unit
- (II) Rechargeable battery
- (III) Display



## Wheel:

# THE EPAC AND ITS COMPONENTS

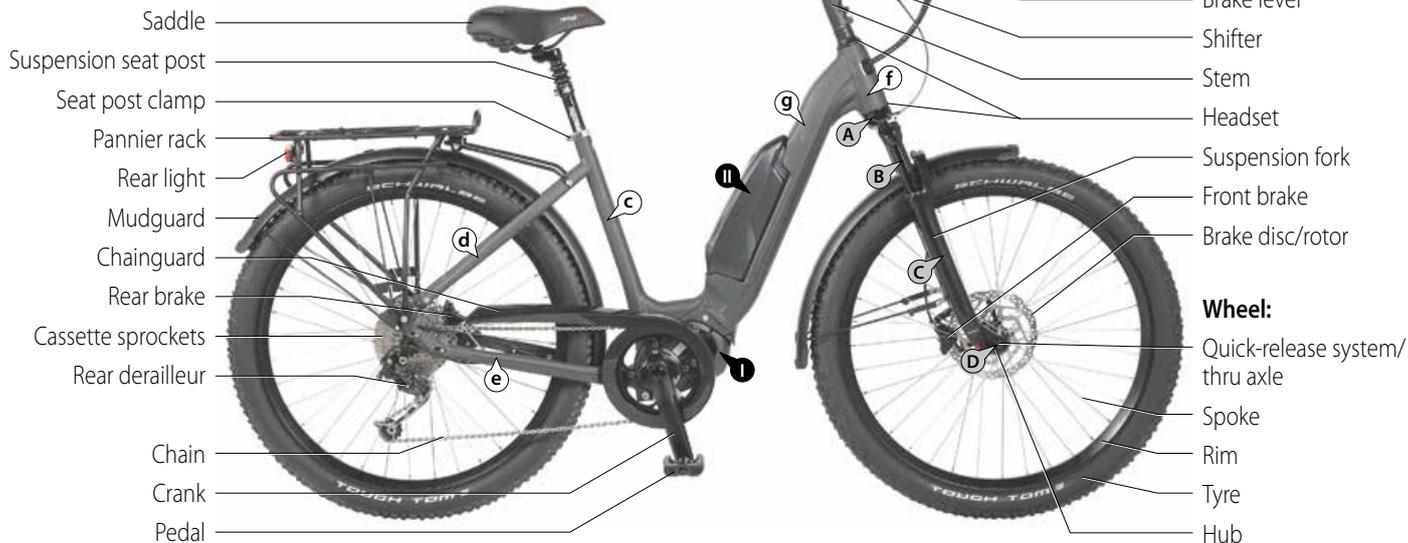
## Frame:

- Ⓒ Seat tube
- Ⓓ Rear stay
- Ⓔ Chainstay
- Ⓕ Head tube
- Ⓖ Central tube

## Suspension fork:

- Ⓐ Fork crown
- Ⓑ Stanchion tube
- Ⓒ Lower leg
- Ⓓ Dropout

- Ⓘ Motor/drive unit
- Ⓚ Rechargeable battery
- Ⓛ Display



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**a**

## NOTES ON THE TRANSLATION OF THESE VELO DE VILLE ORIGINAL OPERATING INSTRUCTIONS

The illustrations [a-f] show typical Velo de Ville EPACs – one of these types may look similar to the EPAC you have purchased. Today's bicycles come in various types that are designed for specific uses and equipped accordingly.

The described possible consequences will not be repeated in the operating instructions every time one of the symbols appears.

Also observe the enclosed operating instructions of the component manufacturers.

The translation of these original operating instructions is subject to European law. If delivered to countries outside Europe, supplementary instructions have to be provided by the manufacturer of the Velo de Ville EPAC.

The translation of these Velo de Ville original operating instructions includes supplementary instructions as to the characteristics of EPACs. Together with the drive system manufacturer's system instructions and your general Velo de Ville user manual that you obtained with your Velo de Ville EPAC it forms a system.

**b**

**Pay particular attention to the following symbols:**

### **Danger**

**This symbol indicates an imminent risk to your life or health unless you comply with the instructions given or take preventive measures.**

### **Caution**

**This symbol warns you of wrongdoings which may result in damage to property and environment.**

**c**

### **Notice**

**This symbol provides you with information about how to handle the product or refers to a passage in the operating instructions that deserves your special attention.**



**⚠ Caution**

**In all cases the operating instructions of the component manufacturers referring to the individual components have priority over the translation of these Velo de Ville original operating instructions. This applies in particular in the case of contradicting instructions between the operating instructions of the component manufacturer and the translation of these Velo de Ville original operating instructions. This also applies to the indicated torque values of bolts.**

**i Notice**

**For easier readability, the words of one gender used in the translation of these Velo de Ville original operating instructions, such as Velo de Ville dealer, rider, mechanic, manufacturer, include all genders. This is in no way intended to express gender discrimination or a violation of the principle of equality.**

**i Notice**

**Keep the translation of these Velo de Ville original operating instructions for your records and future reference and share it with the new user, if you sell, lend or leave your Velo de Ville EPAC to anybody else.**

The translation of these supplementary instructions together with the additional manuals comply with the requirements of the EN ISO standards 4210-2, the EN 15194 Cycles – Electrically power assisted cycles – EPAC bicycles as well as with the Machinery Directive 2006/42/EC.

The bicycles with drive assistance designated as EPAC cycles in the European standards EN 15194 and prEN 17404 (draft) are referred to as EPACs in the translation of these original operating instructions. In the UK these bicycles are also referred to as EAPCs. For a precise description of the different EPAC types see the chapter “**Intended use**”.

These original operating instructions are not intended to help you assemble a Velo de Ville EPAC from individual components, to repair it or to make a partly assembled Velo de Ville EPAC ready-for-use.

**The translation of these Velo de Ville original operating instructions is not applicable to any other than the displayed EPAC types.**

Technical details in the text and illustrations of the translation of the original operating instructions are subject to change.



## GENERAL SAFETY INSTRUCTIONS

Dear Velo de Ville customer,

In purchasing this Velo de Ville EPAC [a-c] – Made in Germany – you have chosen a product of high quality. Each component of your new Velo de Ville EPAC has been designed, manufactured and assembled with great care and expertise. It has been fully assembled and subjected to a functional check by your Velo de Ville dealer. So you can pedal with joy and a secure feeling from the very first metres and enjoy the tailwind from the auxiliary drive.

This manual contains a wealth of information on the proper use of your Velo de Ville EPAC, its maintenance and operation as well as interesting information on bicycle and pedelec design and engineering. Read this manual thoroughly. We are sure that even if you have been cycling (bicycle or EPAC) all your life you will find useful and detailed information. Especially e-bike technology has developed at a rapid pace during recent years. Therefore, before setting off on your new Velo de Ville EPAC, be sure to read at least the chapter **“Before the FIRST ride with your Velo de Ville EPAC”**.

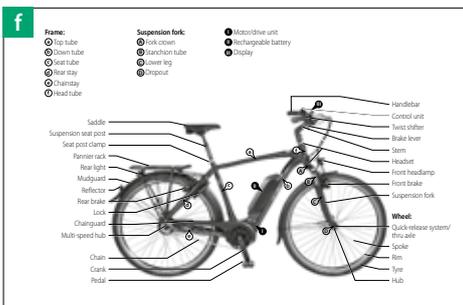
To have as much fun as possible during cycling, be sure to carry out the functional check described in the chapter **“Before EVERY ride with your Velo de Ville EPAC”** before setting off on your Velo de Ville EPAC.

Even a manual as big as an encyclopaedia could not describe any possible combination of pedelec models and components or parts on the market. Therefore, these operating instructions together with the system instructions of the drive system manufacturer and your general Velo de Ville user manual focus on your newly purchased Velo de Ville EPAC and standard components and provide useful information and warnings.

When doing any adjusting and servicing, be aware that the detailed instructions provided in your manual only refer to this EPAC. The information included here is not applicable to any other EPAC or e-bike type. As bicycles come in a wide variety of designs with frequent model changes, the described operations may require complementary information. Be sure to also observe the operating instructions of the component suppliers that you received from your Velo de Ville dealer.

Be aware that these instructions may require further explanation, depending on the experience and/or skills of the person doing the work. For some jobs you may require additional (special) tools or supplementary instructions. This manual cannot teach you the skills of a bicycle mechanic. If you have the slightest doubt ask your Velo de Ville dealer.

Always ride carefully on public roads and observe the traffic rules so as not to endanger yourself or others.



Before you set off, let us point out a few things to you that are very important to every cyclist: Never ride without a properly adjusted helmet and without glasses [d] and take care to always wear suitable, bright clothing. As a minimum you should wear straight cut trousers or use trouser clips and shoes [e] fitting the pedal system.

This manual cannot teach you how to ride an EPAC. Be aware that riding an EPAC is a potentially dangerous activity, that may be especially dangerous when riding on public roads. That requires the rider to stay in control of his or her EPAC at all times. Be aware from the moment you set off that you ride at a higher speed. Always keep this fact in mind and ride considerately!

Like any sport, riding an EPAC involves the risk of injury and damage. When you set off on an EPAC you should be aware and accept this risk. Please note that on an EPAC you have no safety devices around you (e.g. bodywork, ABS, airbag) like you have in a car. Therefore, always ride carefully and respect the other traffic participants. Never ride under the influence of drugs, medication, alcohol or when you are tired. Do not ride with a second person on your EPAC and never ride without having both hands on the handlebar.

Observe the legal regulations concerning cycling with EPACs off public roads. These regulations differ in the different countries.

Respect nature when riding through the forest and meadows. Be sure to only ride on signposted, well maintained trails and hard-surface roads.

Always bear in mind that you travel rapidly and quietly. Do not startle pedestrians or other cyclists. Always make others aware of your presence well ahead of time and by ringing your bell or make use of the brakes so as to avoid accidents. Familiarize yourself with your EPAC.

First we would like to familiarise you with the various components of your Velo de Ville EPAC. Unfold the cover of these operating instructions. There you find two Velo de Ville EPACs showing all necessary components [f]. Leave the page unfolded as you read so that you can easily locate the components as they are referred to in the text.

**⚠ Danger**

**For your own safety, never do any maintenance work or adjusting on your EPAC unless you feel absolutely sure about it. If you are in doubt or if you have any questions, contact your Velo de Ville dealer.**

**⚠ Danger**

**Keep in mind: During cycling you must not hold onto a moving vehicle or trailer. Keep both hands on the handlebar. Take your feet off the pedals only if required by the condition of the road. Also bear in mind that riding with headphones is in some countries allowed as long as the acoustic perception is not impaired. Inform yourself about the law situation in the country where you use your EPAC.**



**b**

<b>BIKE CARD</b>	
Manufacturer	AT Zweilad GmbH
Serial no.	_____
Model	_____
Frame no.	_____
Drive system	_____
<input type="checkbox"/> Front wheel motor	<input type="checkbox"/> Mid-mounted motor
<input type="checkbox"/> Rear wheel motor	<input type="checkbox"/> Rear wheel motor
Battery model	_____
Key no.	_____
Voltage (Volt)	_____
Ampere hour (Ah)	_____
Capacity (last hour)	_____
Suspension fork	_____
(manufacturer/model)	_____
Serial no.	_____
Rear shock (manufacturer/model)	_____
Frame type	_____
Frame size	_____
Size of wheels and tyres	_____
Colour	_____
Frame number	_____

<b>Intended use</b>	
Use in accordance with	
<input type="checkbox"/> category 1	<input type="checkbox"/> category 2
<input type="checkbox"/> category 3	
<b>Empty weight EPAC (incl. battery)</b>	_____ kg
<b>Maximum permissible overall weight</b>	_____ kg
EPAC, rider, luggage and basket, if available	
Permitted load (permitted)	<input type="checkbox"/> yes <input type="checkbox"/> no
Permissible load	_____ kg
Child seat allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Stair allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Permissible trailer load	_____ kg
<b>Brake levers - Brake assignment</b>	
Right lever	<input type="checkbox"/> front wheel brake
<input type="checkbox"/> rear wheel brake	<input type="checkbox"/> rear wheel brake
Left lever	<input type="checkbox"/> front wheel brake
<input type="checkbox"/> rear wheel brake	<input type="checkbox"/> rear wheel brake
<b>⚠ Danger</b>	
<b>Read at least the chapters "Before the first ride with your Velo de Ville - EPAC - intended use" and "Before every ride with your Velo de Ville - EPAC" in the transition of these Velo de Ville original operating instructions.</b>	
Stamp and signature of the Velo de Ville dealer	
<small>Use for the velo de ville dealer. Copy this bike card and the technical manual and keep them close to your operating and maintenance instructions. A separate sheet will be provided with the original operating instructions and the technical manual for the purpose of the technical support.</small>	



## INTENDED USE

Note that each type and/or kind of EPAC, referred to as category in the following, is designed for a specific use. Use your Velo de Ville EPAC **[a]** only according to its intended use, as it may otherwise not withstand the loads, fail and cause an accident with unforeseeable consequences! In addition, improper use will invalidate the warranty. Ask your Velo de Ville dealer to confirm the category to which your Velo de Ville EPAC belongs. Have a look at your bike card **[b]**.

### ⚠ Danger

Note that there are different types of EPACs and e-bikes which are subject to different legal framework conditions. Therefore, check the class or category of your Velo de Ville EPAC or e-bike in the bike card. Keep the specific regulations for your EPAC/e-bike class in mind when riding on public roads and through the landscape.

### i Notice

In any case, also read the general Velo de Ville user manual **[c]** and the system instructions of the drive system manufacturer that you received from your Velo de Ville dealer.

### i Notice

For more information about the intended use of your Velo de Ville EPAC as well as the maximum permissible overall weight (rider, Velo de Ville EPAC and luggage) see the system instructions of the drive system manufacturer, the bike card and read the chapter "Before the first ride with your Velo de Ville EPAC".

1. EPACs (Electrically Power Assisted Cycles), in the UK also referred to as EAPCs (Electrically Assisted Pedal Cycles), are bicycles with auxiliary motor that only switches on when the pedals are moved by the rider. When you stop pedalling, the motor switches off. The legal regulations for riding an EPAC with regard to driving licence, registration, type approval, requirement to wear a helmet, insurance, regulations on the use of cycle lanes, etc. are listed in the "Overview on EPACs/EAPCs, speed pedelecs and 'twist and gos' – legal regulations in Great Britain" at the end of this chapter. Do not confuse your Velo de Ville EPAC with a "Velo de Ville Speed Pedelec" 45 km/h (28 mph, see item 2).

Today, you find nearly all types of bicycles also as electric bicycles. The types of bicycles are subdivided in the following categories:



f Models	Additional load/ overall weight
EPAC 25 category 1+2	140 kg
eMTB category 3	115 kg
Speed pedelec category 1+2	140 kg
EPAC (incl. Happy Size XXL-package) category 1+2	160 kg

**Category 1:** city and urban bikes [d]

**Category 2:** trekking and travel bikes

**Category 3:** cross-country and marathon bikes

It is imperative that you read the chapters “Intended use” and “Before the first ride with your Velo de Ville bike” of your general Velo de Ville user manual. There you will find detailed information on the use of the bicycles of the respective category.

The starting or pushing aid [e] provides assistance when pushing your Velo de Ville EPAC or when doing a hill start, even without pedalling, up to a speed of 6 km/h (3.7 mph).

You find the maximum permissible overall weight for Velo de Ville EPACs including rider, Velo de Ville EPAC, luggage and possibly trailer in the following table [f].

### Danger

**Do not modify or manipulate (“tuning”) your Velo de Ville EPAC. Risk of accident! Modifications and manipulations will render the warranty void and result in a loss of the private liability insurance cover. The Velo de Ville EPACs are then possibly no longer approved for use on public roads and on forest trails.**

### Notice

The regulations and rules for EPACs and speed pedelecs are continuously revised. Read the daily press to keep yourself informed about current legislative changes.

### Notice

You find more information on the approval of using trailers and child seats on your Velo de Ville EPAC in the system instructions of the drive system manufacturer and the bike card.

### Notice

We strongly recommend that you take out private liability insurance. Make sure that coverage for damage caused during riding the Velo de Ville bike or Velo de Ville EPAC is provided by your insurance. Contact your insurance company or agency.



2. **Speed pedelecs [a]** are bicycles with an auxiliary motor which provides assistance to the rider even beyond a speed of 25 km/h to max. 45 km/h (15.5 mph to max. 28 mph), as long as you continue pedalling. Without pedalling a speed pedelec provides assistance to a maximum speed of 20 km/h (12.4 mph).

The legal regulations for riding a speed pedelec with regard to driving licence, registration, type approval, requirement to wear a helmet, insurance, etc. are listed in the **“Overview on EPACs/ EAPCs, speed pedelecs and ‘twist and gos’ – legal regulations in Great Britain”** at the end of this chapter. Speed pedelecs are considered motor vehicles and therefore subject to strict regulations relating to the replacement of components and to changes.

One-way streets with signs stating it is permitted for cyclists to ride the wrong way down are not open for speed pedelec riders. Roads which are closed for motor vehicles, motor cycles and mopeds, must neither be used by speed pedelecs.

Inform yourself in the country where you intend to use your speed pedelec about the requirements to wear a helmet. When you ride a speed pedelec in the UK, wearing a motorcycle helmet [c] is compulsory. Be sure to also read the chapter **“Riding a Velo de Ville Speed Pedelec: special features”**.

Most of the speed pedelecs are designed for cycling exclusively on lanes and roads with a smooth surface. Only use trails and tracks that are open to speed pedelecs. Typical speed pedelecs are in general not suitable for off-road use. Using typical speed pedelecs off-road can result in crashes with unforeseeable consequences.

Today, many types of bicycles are also available as electric speed bicycles which belong to different categories. It is imperative that you read the chapters **“Intended use”** and **“Before the first ride with your Velo de Ville bike”** of your general Velo de Ville user manual. There you will find detailed information on the use of the bicycles of the respective category.

#### **Danger**

**Do not modify or manipulate (“tuning”) your speed pedelec. Risk of accident! Modifications and manipulations will render the warranty void and result in a loss of the private liability insurance cover. The speed pedelecs are then possibly no longer approved for use on public roads.**

#### **Notice**

**The regulations and rules for EPACs and speed pedelecs are continuously revised. Read the daily press to keep yourself informed about current legislative changes.**

## Overview on EPACs/EAPCs, speed pedelecs and 'twist and gos' – legal regulations in Great Britain

	EPAC/EAPC (also with pushing aid)	Speed pedelec	'Twist and go' EAPC
Pedal assistance up to max. km/h (mph)	25 km/h (15.5 mph) MDS <sup>2</sup> without pedal assistance 6 km/h (3.7 mph)	45 km/h / 28 mph (with pedalling) 20 km/h / 12.4 mph (without pedalling) MDS <sup>2</sup>	Propulsion without pedalling, with throttle
Helmet	recommended	compulsory (motorcycle helmet) <sup>3</sup>	compulsory (motorcycle helmet) <sup>3</sup>
Rear-view mirror	no	yes	yes
Horn	no	yes	yes
Driving licence	no	yes (cat. AM)	yes (cat. AM)
Registration or type approval	no, however UKCA mark <sup>4</sup> and UKNI mark <sup>4</sup> (North Ireland) and/or CE mark (until 2021/12)	yes, tax disc, number plate, MOT certificate	yes, tax disc, number plate, MOT certificate
Insurance	no	yes	yes
Riding on cycle lanes permitted	in town: yes out of town: yes	in town: no out of town: no	in town: no out of town: no
Riding on forest trails	yes	no	no
Vehicle class	bicycle	moped	moped
Legal age	14 years	16 years	16 years
Child seat	yes <sup>5</sup>	forbidden	forbidden
Child trailer	yes <sup>5</sup>	forbidden	forbidden

<sup>1</sup> In accordance with [www.gov.uk/electric-bike-rules](http://www.gov.uk/electric-bike-rules)

The regulations and rules are continuously revised. Read the daily press to keep you informed about current legislative changes.

<sup>2</sup> MDS – maximum design speed

<sup>3</sup> The requirements are changing. Don't take a risk with safety! Read the daily press.

<sup>4</sup> UKCA (UK conformity assessed) plus UKNI where North Ireland is involved

<sup>5</sup> For many bike models this legal authorisation is restricted. Observe the bike card.

Last update 2021/01



**Danger**

**Tuning, i.e. improvement in performance and speed, is not a trivial offence, but has far-reaching consequences ranging from loss of insurance cover, prohibition of use on public roads and paths, to possible material failure due to overload, see „Risks of pedelec/e-bike 25 tuning“ in the chapter „Guidelines“.**

# GUIDELINES

## Guidelines for the parts replacement of CE marked e-bikes / pedelecs up to a pedal assist of 25 km/h (15.5 mph)

CATEGORY 1	CATEGORY 2	CATEGORY 3*	CATEGORY 4	CATEGORY 5
Components which require the approval of the vehicle manufacturer/ system provider before the replacement	Parts which must not be replaced without approval of the vehicle manufacturer	Parts which may be replaced upon approval of the vehicle or component manufacturer	Components which do not require a specific approval	Special notes for mounting accessories
<ul style="list-style-type: none"> <li>&gt; Motor</li> <li>&gt; Sensors</li> <li>&gt; Electronic control unit</li> <li>&gt; Electric cables</li> <li>&gt; Operating unit on the handlebar</li> <li>&gt; Display</li> <li>&gt; Battery pack</li> <li>&gt; Charger</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Frame</li> <li>&gt; Rear shock</li> <li>&gt; Rigid and suspension fork</li> <li>&gt; Wheel for hub motor</li> <li>&gt; Brake system</li> <li>&gt; Brake pads (<i>rim brakes</i>)</li> <li>&gt; Luggage carrier (Luggage carriers directly affect the load distribution on the bicycle. Both negative and positive modifications will result in a riding behaviour potentially different from that intended by the manufacturer)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Crank arm (Provided that the distances crank arm – frame centre (Q Factor) are observed)</li> <li>&gt; Wheel without hub motor (Provided that the ETRTO is observed)</li> <li>&gt; Chain / Toothed belt (Provided that the original width is observed)</li> <li>&gt; Rim tape (Rim tapes and rims must be compatible. Modified combinations may result in rim tape shifting and thus in defective inner tubes)</li> <li>&gt; Tyres (The stronger acceleration, the additional weight and more dynamic cornering require the use of tyres approved for e-bike use. In this respect, observance of the ETRTO is essential)</li> <li>&gt; Brake cables / Brake hoses</li> <li>&gt; Brake pads (Disc, roller, drum brakes)</li> <li>&gt; Handlebar-stem unit (Provided that there is no need to change the lengths of cables and/or hoses. A modification of the seating position for the benefit of the consumer should be possible within the original cable lengths. A modification beyond results in a significantly changed load distribution on the bicycle and entails potentially critical steering properties)</li> <li>&gt; Saddle and seat post unit (Provided that the offset to the rear does not exceed 20 mm with regard to the series / original field of use. In this case, as well, a modified load distribution beyond the intended setting range may possibly lead to critical steering properties. The length of the saddle rails at the saddle structure as well as the saddle form are also important)</li> <li>&gt; Headlights (Headlights are designed for a specific voltage which must be compatible with the rechargeable battery of the vehicles. In addition, the electromagnetic compatibility (EMC) must be ensured whereas the headlight may be responsible for a part of the potential disturbance)</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Headset</li> <li>&gt; Bottom bracket</li> <li>&gt; Pedals (Provided that the pedal is not wider than the series / original pedal)</li> <li>&gt; Front derailleur</li> <li>&gt; Rear derailleur (All gear change parts must be suitable for the number of gears and compatible with one another)</li> <li>&gt; Shift levers / Twist grip</li> <li>&gt; Cables and housings</li> <li>&gt; Chainwheels / Belt sprockets / Cassette sprocket (Provided that the number of teeth and the diameter is identical to the series / original field of use)</li> <li>&gt; Chainguard</li> <li>&gt; Mudguards (Provided that the width is not smaller than the series / original parts and the clearance to the tyre is 10 mm at least)</li> <li>&gt; Spokes</li> <li>&gt; Inner tube with identical design and identical valve</li> <li>&gt; Dynamo</li> <li>&gt; Rear lamp</li> <li>&gt; Reflector</li> <li>&gt; Spoke reflector</li> <li>&gt; Kickstand</li> <li>&gt; Grips with screw clamps</li> <li>&gt; Bell</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Bar ends are permissible, provided that they are mounted appropriately towards the front (The load distribution must not be modified severely)</li> <li>&gt; Rear-view mirrors are permissible.</li> <li>&gt; In Germany additional battery/rechargeable battery-operated headlights are permissible according to §67 of German road traffic licensing regulations. (Inform yourself about the legislation in your country).</li> <li>&gt; Trailers are permissible upon approval of the vehicle manufacturer only.</li> <li>&gt; Child seats are permissible upon approval of the vehicle manufacturer only.</li> <li>&gt; Front baskets are to be considered critical due to the undefined load distribution. Permissible upon approval of the vehicle manufacturer only.</li> <li>&gt; Pannier bags and top cases are permissible. Permissible total weight, maximum loading of pannier rack and a correct load distribution has to be observed.</li> <li>&gt; Permanently mounted weather protection devices are permissible upon approval of the vehicle manufacturer only.</li> <li>&gt; Front and rear luggage carriers are permissible upon approval of the vehicle manufacturer only.</li> </ul>

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Last update: 2018/05/08

\* **Note for category 3:** An approval can only be given by the component manufacturer, if the component was tested sufficiently according to its intended use and the respective standards in advance and if a risk analysis was made.

**!** This is the translation of the original guidelines issued by ZfV, VSF and BIV (German umbrella organisation for the German cycle industry guilds) in cooperation with Zedler-Institut, updated in 2018. In the event of any misunderstandings, the original German version (Leitfaden für den Bauteiletausch bei CE-gennzeichneten E-Bikes / Pedelecs mit einer Tretunterstützung bis 25 km/h) shall be applicable.

Experts of the following associations / companies were involved in drawing up the present guidelines: (in alphabetical order)



# Guidelines for the parts replacement of speed e-bikes / pedelecs up to a pedal assist of 45 km/h (28 mph)

CATEGORY 1	CATEGORY 2	CATEGORY 3	CATEGORY 4
Important basic information	Components which may only be replaced upon presentation of a valid test report (parts approval (ABE*, EC, ECE) or part certificate**)	Components which may be replaced in consideration of the conditions described further below	Special notes for mounting accessories
<p>&gt; Speed e-bikes with a motor assistance of up to 45 km/h (28 mph) are considered motor vehicles and subject to the EU Directive 2002/24/EC or the EU Regulation No. 168/2013.</p> <p>&gt; Depending on the vehicle there may be different requirements which must be strictly observed when replacing a component. Therefore, always check the indications given in the vehicle documents prior to doing any work on the vehicles.</p> <p>&gt; Note: At present, vehicles with an individual operating licence are mainly subject to the regulations of the EU Directive 2002/24/EC.</p> <p>&gt; All components which are not included in the list must only be replaced by original spare parts of the vehicle and/or component manufacturer.</p>	<p>&gt; Brake systems</p> <p>&gt; Brake discs / Brake hoses / Brake pads (With valid type approval acc. to ECE-R 90 or general operating licence only).</p> <p>&gt; Handlebar-stem unit (Provided that there is no need of changing the lengths of cables and/or hoses. A modification of the seating position for the benefit of the consumer should be possible within the original cable lengths. A modification beyond results in a significantly changed load distribution on the bicycle and entails potentially critical steering properties).</p> <p>&gt; Seat post (Provided that the offset to the rear does not exceed 20 mm with regard to the series / original field of use. Note that a modified load distribution beyond the intended setting range may possibly lead to critical steering properties. The length of the saddle rails at the saddle structure as well as the saddle form are also important).</p> <p>&gt; Headlight (With valid type approval, identical mounting position as well as EMC proof only).</p> <p>&gt; Rear light with brake light and licence plate light, if available (With valid type approval and identical mounting position only, as far as tested in accordance with ECE-R 50 as well as EMC proof).</p> <p>&gt; Reflector (With valid type approval only).</p> <p>&gt; Rear view mirror (Only if tested in accordance with ECE-R 81 and identical mounting position).</p> <p>&gt; Acoustic signalling device (horn) (Only if tested in accordance with ECE-R 28 and identical mounting position).</p> <p>&gt; Pedals (Vehicles with 168/2013 approval).</p>	<p>&gt; Pedals (Incl. approved reflectors, provided that the pedal is not wider than the series / original pedal (vehicle with 2002/24/EC approval)).</p> <p>&gt; Tyres (As specified in vehicle documents, either in accordance with ECE-R 75 or with approval of tyre manufacturer).</p> <p>&gt; Grips with screw clamps (In this case, the vehicle width must not be modified).</p> <p>&gt; Headset</p> <p>&gt; Bottom bracket</p> <p>&gt; Rear and front derailleur (All gear change parts must be suitable for the number of gears and compatible with one another).</p> <p>&gt; Shift levers/Twist grip (Provided that position on handlebars remains unchanged).</p> <p>&gt; Cables and housings</p> <p>&gt; Chainwheels / Belt sprockets / Cassette sprocket (Provided that the number of teeth and the diameter is identical to the series / original field of use).</p> <p>&gt; Chainguard (Provided that it is free of sharp outer edges and complies with the Delegated Regulation No. 44/2014, Annex VIII).</p> <p>&gt; Mudguard (Provided that it is free of sharp outer edges and complies with the Delegated Regulation No. 44/2014, Annex VIII). The clearance to the tyre, which should be 10 mm at least, must also be taken into account).</p> <p>&gt; Spokes (Provided that the dimensions correspond to the original part).</p> <p>&gt; Inner tube (Provided that the design and the valve are identical).</p> <p>&gt; Crank arm (Provided that the length and the dimensions, e.g. crank arms / frame centre (Q-Factor) are observed).</p> <p>&gt; Chain /Toothed belt (Provided that the original width is observed).</p> <p>&gt; Rim tape (Rim tapes and rims must be compatible. Modified combinations may result in rim tape shifting and thus in defective inner tubes).</p> <p>&gt; Saddle (Provided that the offset to the rear does not exceed 20 mm with regard to the series / original field of use. Note that a modified load distribution beyond the intended setting range may possibly lead to critical steering properties. The length of the saddle rails at the saddle structure as well as the saddle form are also important).</p>	<p>&gt; Additional battery/rechargeable battery-operated headlights are <b>not permissible</b>.</p> <p>&gt; Trailers are only permissible, if a trailer load is entered under no. 17 of the certificate of conformity and a coupling device under no. 43.1. Note: The maximum permissible trailer load is 50% of the tractor vehicle's empty weight (without batteries). There are only 50 mm ball coupling devices possible.</p> <p>&gt; Transporting children in a trailer is <b>forbidden</b> in general!</p> <p>&gt; Front baskets are to be considered critical due to the undefined load distribution. Permissible upon approval of the vehicle manufacturer only.</p> <p>&gt; Removable pannier bags and top cases are permissible. The permissible total weight, maximum loading of pannier rack and a correct load distribution has to be observed.</p> <p>&gt; Bar ends are not permissible.</p>

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\* ABE: general type approval

\*\* Note: In the case of components with part certificate the field of application must be observed. The proper assembly must be certified by a testing engineer or an expert of a technical control board like TÜEV or DEKRA in Germany.

 This is the translation of the original guidelines issued by ZIV, VSF, BIV (German umbrella organisation for the German cycle industry guilds), velotech.de and the German Association for Technical Inspection (TÜV Rheinland) in cooperation with Zedler-Institut, updated in 2018. In the event of any misunderstandings, the original German version (Leitfaden für den Bauteiletausch bei schnellen E-Bikes / Pedelecs mit einer Tritunterstützung bis 45 km/h) shall be applicable.

Experts of the following associations / companies were involved in drawing up the present guidelines (in alphabetical order):



## Risks of pedelec/e-bike 25 tuning

Pedelecs/e-bikes 25 are limited to a continuous rated power of 250 Watt and a maximum design speed through electrical pedal assistance of 25 kmh (15.5 mph). **In this case only they are equivalent to bicycles in terms of road traffic law. (§ 63a, paragraph 2 of German road traffic licensing regulations, inform yourself about the legislation in your country).**

Raising the output and/or the maximum design speed beyond this limit will result in the fact that the vehicle becomes a motor vehicle.

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Last update: 2018/07

The consequences are as follows\*:

- > Subject to compulsory operating licence
- > Subject to compulsory driving licence (class depends on maximum speed)
- > Subject to compulsory insurance (insurance tag)
- > Helmet compulsory
- > Using cycle lanes not permissible
- > Proof of fatigue strength for all safety-relevant components must be submitted

Possible legal consequences in case of tuning for users\*:

- > Administrative offence and fine
- > Criminal offence (§ 21 of German road traffic act: "Riding without driving licence"; infringement of obligatory insurance law)
- > Caution: in the event of repetition, your criminal record certificate may no longer be clean (criminal record!)
- > In case of infringement of § 21 German road traffic act: Withdrawal of driving licence
- > Loss of insurance cover (private liability)
- > Loss of materials defect liability and warranty claims
- > Loss of driving licence
- > Regularly, partial responsibility in case of accident

Possible legal consequences in case of tuning for retailers\*:

- > Aiding and abetting of an offence, participating in an administrative offence
- > Retailer liable for personal and material damage
- > Loss of business liability insurance cover

\* for example in Germany, inform yourself about the legislation in your country

 This is the translation of the original guidelines issued by ZIV, VSF and BIV (German umbrella organisation for the German cycle industry guilds) in cooperation with Zedler-Institut, updated in 2018. In the event of any misunderstandings, the original German version (Leitfaden: Wissenswertes über Tuning von Pedelecs/E-Bikes 25) shall be applicable.

Experts of the following associations / companies were involved in drawing up the present guidelines: (in alphabetical order)



velotech.de  
Werte • Innovationen • Verbindungen



zedler-Institut  
Technology and Passion for Bicycles







**c**

BIKE CARD	
Manufacturer	AT Zweiflrad GmbH
Serial no.	_____
Model	_____
Frame no.	_____
Drive system	_____
<input type="checkbox"/> Front wheel motor	<input type="checkbox"/> Mid-mounted motor
<input type="checkbox"/> Rear wheel motor	
Battery model	_____
Key no.	_____
Voltage (Vdc)	_____
Ampere hour (Ah)	_____
Capacity (max. hours)	_____
Supporter file (Manufacturer/model)	_____
Serial no.	_____
Rear shock (Manufacturer/model)	_____
Frame type	_____
Frame size	_____
Size of wheels and tyres	_____
Colour	_____
Frame number	_____

Intended use	
Use in accordance with	
<input type="checkbox"/> category 1	<input type="checkbox"/> category 2
<input type="checkbox"/> category 3	
Empty weight EPAC (incl. battery)	
_____ kg	
Maximum permissible overall weight	
EPAC, incl. luggage and trailer, if available	_____ kg
Permitted use	<input type="checkbox"/> yes <input type="checkbox"/> no
Permitted load	<input type="checkbox"/> yes <input type="checkbox"/> no
Child seat allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Trailer allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Permissible trailer load	_____ kg
Brake levers - Brake assignment	
Right lever	<input type="checkbox"/> Front wheel brake
Left lever	<input type="checkbox"/> Rear wheel brake
<input type="checkbox"/> Rear wheel brake	
<input type="checkbox"/> Rear wheel brake	
<b>⚠ Danger</b>	
Read at least the chapter "Before the first ride with your Velo de Ville EPAC - Intended use" and "Before every ride with your Velo de Ville - EPAC" in the translation of these Velo de Ville original operating instructions.	
Stamp and signature of the Velo de Ville dealer	
<small>Read the Velo de Ville user manual. Copy the bike card and the handbook together and keep them safe in your possession. We shall not be liable for any damage or injury caused by the use of the bicycle. In the event of an accident, please contact your local police or the manufacturer.</small>	

## BEFORE THE FIRST RIDE WITH YOUR VELO DE VILLE EPAC

1. Have you ever ridden an EPAC? Observe the particular riding characteristics of this revolutionary hybrid drive concept [a]. Set off for your first ride by selecting the lowest level of drive assistance [b]. Slowly approach the potential of your EPAC in an area free of traffic.

For more information in this regard, read the chapter "Useful tips for riding a Velo de Ville EPAC" or "Riding a Velo de Ville Speed Pedelec: special features".

2. Your Velo de Ville EPAC is designed for a maximum overall weight including the rider, the EPAC and the luggage as well as child seat or trailer, if approved. The maximum overall weight is specified in the system instructions of the drive system manufacturer, in the bike card [c] and in your general Velo de Ville user manual. For more information contact your Velo de Ville dealer.

### ⚠ Danger

Do not hang any bags or other heavy or big objects (such as umbrellas) to the handlebar of your Velo de Ville EPAC. Risk of falling!

### ⚠ Danger

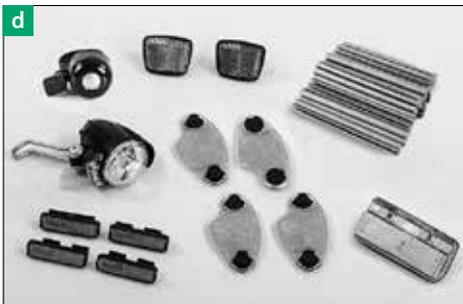
The weight distribution on EPACs differs markedly from the weight distribution on bicycles without drive assistance. A Velo de Ville EPAC is clearly heavier than a bicycle without drive assistance. For this reason parking, pushing, lifting and carrying your Velo de Ville EPAC is more difficult. Bear this in mind when loading your EPAC into a car and unloading it or when mounting it on a bicycle carrier system.

### ⚠ Danger

Strictly observe the category to which your Velo de Ville bike/EPAC belongs. From the category you can conclude which grounds and riding actions are suitable for your Velo de Ville bike/EPAC. You find the categories in the chapter "Intended use" as well as in the same chapter in your general Velo de Ville user manual as well as in the bike card.

### ⚠ Danger

Do not wear long skirts, flared trousers or ponchos and do not hang long cords, ribbons or the like to your Velo de Ville EPAC during the ride on your Velo de Ville EPAC. There is the risk that they get caught in the wheels or in the drive unit. Risk of falling!



3. If you want to ride on public roads, observe the respective legal requirements, in particular as regards the lighting. These requirements vary in each country. The equipment of your Velo de Ville EPAC is, therefore, not necessarily complete. Ask your Velo de Ville dealer for the laws and regulations applicable in your country or in the country you intend to use your Velo de Ville EPAC. Have your Velo de Ville EPAC equipped accordingly [d], before using it on public roads.



4. The rechargeable battery of your Velo de Ville EPAC must be charged before you set off for the first time [e]. Are you familiar with the handling and mounting of the rechargeable battery? Before you set off for the first time, check that the battery is properly mounted, that it has engaged audibly and that it is locked.

More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Inserting and removing the battery pack

**FAZUA** – Battery Pack 7000/

*First check of the Battery Pack*

**SHIMANO STEPS** – Charging the battery



### **i** Notice

**Note that the rechargeable battery of some systems switches into the sleep mode after a few days of non-use. If you want to know how to awake the battery, read the chapters**

**BOSCH** – Operation

**FAZUA** – Battery Pack 7000/Operation

**SHIMANO STEPS** – Handling the battery

### **⚠** Danger

**We recommend that you charge your battery during the day and only in dry rooms which have a smoke or a fire detector; but keep it off your bedroom. Place the battery during the charging process on a big, non-inflammable plate made of ceramics or glass!**

### **⚠** Danger

**Charge your battery only with the supplied charger. Do not use the charger of any other manufacturer, not even when the connector of the charger matches your rechargeable battery. The rechargeable battery can heat up, catch fire or even explode!**

### **⚠** Danger

**Do not park your Velo de Ville EPAC in the blazing sun.**

5. The functions of your Velo de Ville EPAC are operated with the buttons on the control element on the handlebar [f]. Are you familiar with all functions and displays? Check whether you know the functions of all buttons. More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Product Description and Specifications

**FAZUA** – Remote/Operation

**SHIMANO STEPS** – Operation



6. Are you familiar with the brake system? Have a look at the bike card and check whether you can actuate the front brake with the brake lever or brake lever/shifter you are used to (right or left). If this is not the case, have it modified by your Velo de Ville dealer before you set off for the first time!

Under certain circumstances modern brakes of EPACs [a] can be far more powerful than those you were used to so far. Be sure to first practise using the brakes on a level, non-slip surface in an area free of traffic! If you have an e-mountain bike also practise on loose ground.

Slowly approach higher brake performances and speeds. For more information see the chapter “**Brake system**” of your general Velo de Ville user manual and the enclosed operating instructions.

**⚠ Danger**

**Be aware that the brakes of your Velo de Ville EPAC are always more effective than the drive system. If you face any problems with your drive system (e.g. because it pushes you forward in front of a turn), slow down your Velo de Ville EPAC carefully.**

**⚠ Danger**

**Pull the brake lever of the rear brake and stop pedalling. The EPAC stops. Emergency stop! However, if you have a front motor, you must actuate the front brake carefully. The shortest possible stopping distance requires controlled braking with both brakes.**

7. Are you familiar with the type and functioning of the gears [b]? Ask your Velo de Ville dealer to explain the gear system to you and make yourself familiar with your new gears in an area free of traffic. For more information see the chapter “**Gears**” of your general Velo de Ville user manual and the enclosed operating instructions.

8. Are both saddle and handlebar properly adjusted? The saddle should be set to a height from which you can just reach the pedal in its lowest position with your heel. Check whether your toes reach to the floor when you are sitting on the saddle [c].

Your Velo de Ville dealer will be pleased to help you, if you are not happy with your seating position. For more information see the chapter “**Adjusting the Velo de Ville bike to the rider**” of your general Velo de Ville user manual.



9. If your Velo de Ville EPAC is equipped with clipless or step-in pedals [d]: Have you ever tried the shoes they go with? Do not set off until you have practised engaging and disengaging the shoes from the pedals at standstill. Ask your Velo de Ville dealer to explain the pedals to you. For more information see the chapter **"Pedals and shoes"** of your general Velo de Ville user manual and the enclosed operating instructions.

10. If you bought a Velo de Ville EPAC with suspension [e], you should ask your Velo de Ville dealer to adjust the suspension mechanism to your needs before delivery. Improperly adjusted suspension forks or suspension elements can result in malfunction or damage to the suspension elements. In any case, the riding behaviour deteriorates and you do not achieve maximum riding safety and riding pleasure.

For more information see the chapters **"Suspension forks"**, **"Rear shock"** and **"Suspension seat posts"** of your general Velo de Ville user manual. Further instructions regarding suspension forks are possibly enclosed with these operating instructions.

11. Are parts of your Velo de Ville EPAC made of carbon? Note that this material requires special care and must be used carefully. Read in any case the chapter **"Carbon – important information"** in your general Velo de Ville user manual.

**⚠ Danger**

**When getting on your Velo de Ville EPAC make sure not to step in the pedals until you sit in the saddle and have a firm grip on the handlebar or the pedal is at its lowest point when getting on. The motor assistance may switch on unexpectedly and result in an uncontrolled start of your Velo de Ville EPAC. Risk of falling!**

**⚠ Danger**

**Be aware that the distance you need to stop may increase, when you are riding with your hands on bar ends or multi position handlebars. The brake levers are not in all gripping positions within easy reach.**

**⚠ Danger**

**In particular, make sure there is enough clearance between your crotch and the top tube [f] so that you do not hurt yourself, if you have to get off quickly.**



### **⚠ Danger**

Please note that in wet conditions the brake performance is less effective and the tyre grip reduced. Look well ahead when riding on wet roads and on loose ground and ride clearly slower than you would in dry conditions.

### **⚠ Danger**

A lack of practice when using cliless pedals or too much spring tension in the mechanism [a] can lead to a very firm connection, from which you cannot quickly step out. Risk of falling!



### **⚠ Danger**

The weight distribution on your Velo de Ville EPAC differs markedly from the weight distribution on Velo de Ville bikes without drive assistance. A Velo de Ville EPAC is clearly heavier than a Velo de Ville bike without drive assistance. For this reason parking, pushing, lifting and carrying your Velo de Ville EPAC is more difficult. Bear this also in mind during loading and unloading it or when mounting it on a bicycle carrier system [b].



### **⚠ Caution**

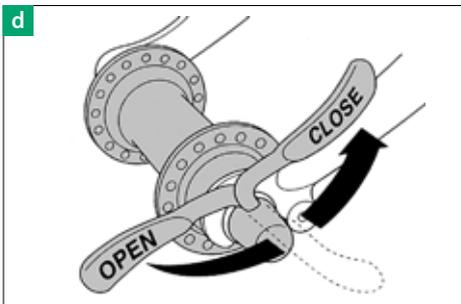
Note that not all Velo de Ville EPACs are equipped with a kickstand [c]. Therefore, when parking your Velo de Ville EPAC, make sure it stands safe and secure and is not at risk of toppling over or being knocked over. If your Velo de Ville EPAC topples over, it can suffer from damage.

### **i Notice**

You find more information on the approval of using trailers and child seats on your Velo de Ville EPAC in the bike card or contact your Velo de Ville dealer.

### **i Notice**

Check with your insurers that the EPAC as well as the storekeeping and the charging of lithium-ion batteries are covered by your household and fire insurance. Read the daily press to keep yourself informed about current legislative changes.



## BEFORE EVERY RIDE WITH YOUR VELO DE VILLE EPAC

Your Velo de Ville EPAC has undergone numerous tests during production and a final check has been carried out by your Velo de Ville dealer.

Nevertheless, be sure to check the following points before every ride to exclude any malfunctioning that may be due to the transport of your Velo de Ville EPAC or to modifications a third person may have performed on your Velo de Ville EPAC during a standing time:

1. Are the quick-release levers [d], thru axles or the bolts of the front and rear wheel, the seat post and other components properly closed?

For more information see the chapter “How to use quick-release systems and thru axles” of your general Velo de Ville user manual and the enclosed operating instructions.

### Danger

**Remove the rechargeable battery or the display before doing any work on your Velo de Ville EPAC (e.g. servicing, repairs, assembly, maintenance, work on your drive unit etc.). Activating the drive systems unintentionally bears the risk of injury!**

2. Is the battery tight in its holder [e] and properly locked up? Never set off with a loose and unlocked battery. More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Operation

**FAZUA** – Battery Pack 7000/

*Inserting/Removing the Battery Pack*

**SHIMANO STEPS** – Installing and removing the battery

3. Does the display of the control element on the handlebar show all values? Is there any error message or warning on the display? Check the values are correct before every ride. Do not set off on your Velo de Ville EPAC when the control element shows a warning. More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Operation

**FAZUA** – Remote/Notification indicator

**SHIMANO STEPS** – Preparation

4. Are the plug connections on the rechargeable battery, on the control element on the handlebar [f] and on the drive unit properly connected? More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Operation

**FAZUA** – Drivepack 25 km/h/Assembly

**SHIMANO STEPS** – Preparation



5. Is your battery fully charged? Remember to fully recharge the battery after each longer ride (e.g. less than 50% charged). Modern lithium-ion batteries have no memory effect. But leaving your Velo de Ville EPAC with a state of charge less than 50% at short-term (e.g. overnight) will not impair the battery. However, you should not wait until the battery is fully discharged! More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Operation

**FAZUA** – Battery Pack 7000/

*Charging the Battery Pack*

**SHIMANO STEPS** – Charging the battery



6. Are the tyres in good condition and do they have sufficient pressure [a]? Note that a Velo de Ville EPAC weighs heavier and that your usual tyre pressure may be insufficient. A higher pressure gives a better riding stability and reduces the risk of a puncture. The minimum and maximum pressure (in bar or PSI) is indicated on the tyre side.

For more information see the chapter “**Wheels and tyre equipment**” of your general Velo de Ville user manual and the enclosed operating instructions.



7. Let both wheels rotate freely [b] to check whether the rims run true. If you have disc brakes, watch the gap between frame and rim or tyre and, if you have rim brakes, between brake pad and rim. Poor concentricity can also be an indication of laterally burst tyres, broken axles or torn spokes.

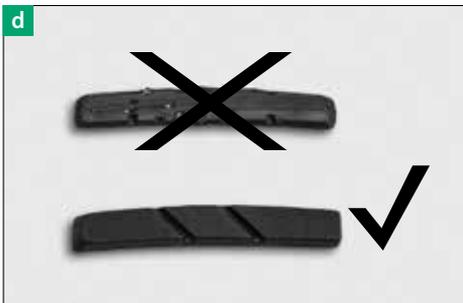
For more information see the chapter “**Wheels and tyre equipment**” of your general Velo de Ville user manual and the enclosed operating instructions.

8. Test the brakes in standing by firmly pulling the brake levers or brake levers/shifters towards the handlebar [c]. You should not be able to pull the lever all the way to the handlebar. If you have hydraulic brakes, check the hydraulic brake hoses for oil or brake fluid leaks! Also check the thickness of the brake pads [d].

With disc brakes you should have a stable pressure point at once. If a stable pressure point can only be felt after repeated actuation of the brake lever, have your Velo de Ville EPAC checked by your Velo de Ville dealer before your next ride.

The brake pads of rim brakes must hit the rim evenly with their entire surface without touching the tyre during braking, in open condition or in between.

For more information see the chapter “**Brake system**” of your general Velo de Ville user manual and the enclosed operating instructions.



- Let your Velo de Ville EPAC bounce on the ground from a small height. If there is any rattling, check where it comes from. Check the bearings, the bolts and the proper seat of the battery, if necessary.
- If you want to ride on public roads, make sure your Velo de Ville EPAC is equipped according to the regulations of your country. Riding without lights and reflectors in poor visibility and in the dark is very dangerous.

You will be seen too late or not at all by other road users. If you ride on public roads, you always need an approved lighting system. Switch on the light as soon as it gets dark.

For more information see the chapter **“Legal requirements for riding on public roads”** of your general Velo de Ville user manual.

- If your Velo de Ville EPAC has suspension **[e]**, check it as follows: Press down on your Velo de Ville EPAC and see whether the spring elements retract and extend as usual.

For more information see the chapters **“Suspension forks”**, **“Rear shock”** and **“Suspension seat posts”** of your general Velo de Ville user manual and the enclosed operating instructions.

- If necessary, make sure the kickstand is fully raised before you set off. Risk of falling!
- Do not forget to take a high quality folding **[f]**, D- or chain lock with you on your ride. The only way to effectively protect your Velo de Ville EPAC against theft is to lock it to an immovable object.



**⚠ Danger**

Improperly closed fastenings [a] can cause components of your Velo de Ville EPAC to come loose and result in serious accidents!

**⚠ Danger**

Do not use your Velo de Ville EPAC, if it fails on one these points! Riding a defective EPAC can result in serious accidents! If you are in doubt or if you have any questions, contact your Velo de Ville dealer.



**⚠ Danger**

The drive is free of vibrations. During use your Velo de Ville EPAC is undergoing stress resulting from the surface of the road and from the rider's action. Due to these dynamic loads, the different components are affected by wear and fatigue. Check your Velo de Ville EPAC regularly for wear marks, scratches, deformations, colour changes and any indication of cracking [b]. Components which have reached the end of their service life may suddenly fail. Let your Velo de Ville dealer maintain and service your Velo de Ville EPAC regularly and in cases of doubt it is always best to replace components.



**⚠ Caution**

Remove, if possible, the display [c] when parking your Velo de Ville EPAC. This is a first step to protect your Velo de Ville EPAC against theft; in addition, it cannot be used with drive assistance ad hoc.



## USEFUL TIPS FOR RIDING A VELO DE VILLE EPAC

Your Velo de Ville EPAC is designed to be used like a conventional bicycle. The unique riding experience, however, only starts when you activate the drive system [d+e], when the powerful motor/drive unit with its high torque provides you assistance all the more the stronger you pedal yourself.

Set off for your first ride by selecting the lowest level of drive assistance. Gradually get used to the additional propulsion. Slowly approach the potential of your Velo de Ville EPAC in an area free of traffic.

Practise typical riding situations such as starting and braking, tight corners and riding on narrow cycle paths and lanes. This is where your Velo de Ville EPAC clearly differs from a conventional bicycle.



### **Danger**

**Be aware that the brakes of your Velo de Ville EPAC are always more effective than the drive system. If you face any problems with your drive system (e.g. because it pushes you forward in front of a turn), slow down your Velo de Ville EPAC carefully.**



### **Danger**

**Pull the brake lever of the rear brake and stop pedalling. The EPAC stops. Emergency stop! However, if you have a front motor, you must actuate the front brake carefully. The shortest possible stopping distance requires controlled braking with both brakes.**

## Riding with drive assistance

You can switch on and off the system at the buttons of the control element on the battery or on the handlebar. Furthermore, different assistance modes can be selected, the remaining capacity of the rechargeable battery is displayed and different functions of the cycle computer (f) can be selected, if necessary.

When switched on, the system is activated by pedalling and the drive assistance is available. Sensors measure your pedalling movements and control the fully automated drive assistance according to the selected assistance mode. The level of the additional propulsion depends on the assistance mode, your speed and possibly the amount of force applied to the pedals.

The assistance switches off when you reach a speed of more than 25 km/h (15.5 mph).



Keep in mind that you may have to change your riding habits:

Do not get on the EPAC by placing one foot on the pedal and by trying to throw the other leg over the saddle. Your Velo de Ville EPAC would start suddenly. Risk of falling.

Stop pedalling earlier than you are used to before riding a turn or bend. Otherwise there may be too much propulsion and your cornering speed may be too high.

Do not allow yourself to always ride in a high gear, due to the powerful motor/drive unit. Shift gears frequently [a] as you might be used to from a conventional bicycle so as to make your contribution of moving forward as efficient as possible. Your cadence should always be in a smooth flow. In other words, you should pedal at more than 60 crank rotations per minute. Shift before stopping in a lower gear.

Keep in mind that the other road users are not yet used to the EPACs and their higher speeds. Ride with this fact in mind and anticipate the actions of other road users. Be aware that the speed you ride at will be clearly faster than you are used to. Therefore, keep these facts in mind and be ready to brake whenever an unclear or a possibly dangerous situation comes into your field of vision.

**⚠ Danger**

**Do a test ride in an unfrequented area to make yourself familiar with the riding characteristics of your Velo de Ville EPAC and the possibly higher speed and acceleration, before riding on public roads. Risk of accident! Never ride without a helmet [b]!**

**⚠ Danger**

**Do not step on the pedals before sitting in the saddle, select the lowest drive assistance [c] and be ready to brake when you set off. Risk of falling!**

**⚠ Danger**

**Keep in mind that due to the higher drive power at the rear wheel the risk of an accident increases with slippery roads (due to wetness, snow, gravel, etc.). This applies all the more when riding bends. Risk of falling!**

**⚠ Danger**

**Please note that car drivers and other road users may underestimate your speed. Always wear bright clothing. Therefore, always ride on public roads with this fact in mind and anticipate the actions of other road users. Risk of accident!**



### **Danger**

Keep in mind that pedestrians do not hear you when you approach at high speed. Therefore, ride particularly defensive and anticipating when using cycle lanes and cycle/footpaths to avoid accidents. If necessary, use the bell [d] or the horn of your speed pedelec early enough to warn others.

### **Range – useful information for a long ride with your Velo de Ville EPAC**

How long and how far you can benefit from the auxiliary drive depends on several factors: i.e. the road conditions, the weight of the rider and any additional load, the rider's own pedal force, the degree or mode of assistance, (head)winds, frequent stops, temperature, weather conditions, topography, tyre pressure etc.

The charge state of your rechargeable battery [e] can be read from the display of the control element on the handlebar or, additionally, on the rechargeable battery.

More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Battery Charge-Control Indicator

**FAZUA** – Battery Pack 7000/Charge-control indicator

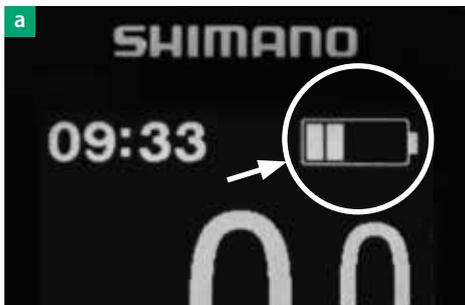
**SHIMANO STEPS** – Battery LED lamp



To extend the range it is recommended that you ride with low or no assistance at all on level or downhill trails and only select maximum drive assistance [f] with headwinds, heavy additional loads and/or when climbing hills.

Furthermore, you can affect the range by

- checking the tyre pressure regularly, i.e. once a week with pressure gauge, and changing it, if necessary
- shifting gears down in front of traffic lights and intersections or in general in cases of stops and by setting off in low gears
- shifting regularly, as you might be used to from a bicycle without drive system, i.e. by not only riding in high gears
- riding with these facts in mind and always looking ahead to avoid any unnecessary stops
- reducing your additional load, i.e. riding without unnecessary luggage
- storing your battery in your home and installing it only shortly before you set off on your Velo de Ville EPAC in cooler weather, in particular when it is cold
- not parking your Velo de Ville EPAC in the blazing sun



If your battery has not enough capacity [a] to reach your destination, benefit from the decisive advantage of the hybrid concept of your Velo de Ville EPAC: Without drive assistance you can ride it like a conventional bicycle with an unlimited range and nearly without loss of riding characteristics.

**⚠ Danger**

If your battery runs empty during the ride, do not recharge the battery [b] with any charger, even if it happens to be fitted with an identical connector type. Risk of explosion [c]! Make it a habit to charge your battery only with the supplied charger.

**⚠ Danger**

Tuning, i.e. improvement in performance and speed is not a trivial offence, but has far-reaching consequences ranging from loss of insurance cover, prohibition of use on public roads and paths, to possible material failure due to overload, see "Risks of pedelec/e-bike 25 tuning" in the chapter "Guidelines".



**⚠ Caution**

In general, the batteries of Velo de Ville EPACs have no memory effect. It is recommended that you charge the battery after every long ride. Avoid any deep discharge of the rechargeable battery.

**⚠ Caution**

Keep in mind that the battery of your Velo de Ville EPAC shows signs of wear over the years. This results in a continuous reduction of the battery's capacity and in a reduced range compared to its state as new. After a certain period of time the battery even needs to be replaced.

**i Notice**

Fully discharge your rechargeable battery every three months and recharge it then immediately. This calibrates the capacity indicator and restores its accuracy.

**i Notice**

Tips on how to exploit the battery's capacity to the maximum are given in the chapter "Useful information for proper handling of the rechargeable battery".



## Riding without drive assistance

You can also use your Velo de Ville EPAC without drive assistance, i.e. just like a conventional bicycle.

Observe the following points when riding with the drive system switched off or with a discharged rechargeable battery:

Switch on the control element of your Velo de Ville EPAC at the handlebar, even when riding without drive assistance; the functions are then available.

If the lighting system (d) is powered by the rechargeable battery, it can also be used when the battery is empty [e]. It is, however, recommended that you recharge the battery immediately after you have returned.



After you have removed the battery of your Velo de Ville EPAC from the down tube or the pannier rack: Keep the connections of the rechargeable battery [f] free of dirt and moisture. Protect the connections of your rechargeable battery with the protective covers, if supplied. With the battery removed the display and in particular the lighting system will, however, no longer work. Do not use your Velo de Ville EPAC on public roads any longer.



## RIDING A VELO DE VILLE SPEED PEDELEC: SPECIAL FEATURES

Basically, a Velo de Ville Speed Pedelec [a] is a Velo de Ville EPAC, but a clearly faster one (up to 45 km/h / 28 mph). Read the chapter **“Useful tips for riding a Velo de Ville EPAC”** before you start reading this chapter. Keep in mind that all tips and warnings given in the mentioned chapter apply all the more and with still greater importance to Velo de Ville Speed Pedelecs. Practise the handling of the still more powerful and faster Velo de Ville Speed Pedelec and always ride with particular foresight.

Inform yourself in the country where you intend to use your Velo de Ville Speed Pedelec about the requirements to wear a helmet. In the UK wearing a motorcycle helmet [b] is compulsory.

In contrast to Velo de Ville EPACs Velo de Ville Speed Pedelecs are classified as motor vehicles. This implies a number of regulations according to which your Velo de Ville Speed Pedelec must be equipped:

- In addition to the components typical of bicycles it must be equipped with a rear view mirror [c], a horn and a kickstand [d].
- The Velo de Ville Speed Pedelec must be registered and requires type approval, insurance, MOT certificate and the tax disc must be attached.
- The tyres must have a minimum tread depth of 1.00 mm, as is well known for motor vehicles. Every tyre worn down to this minimum depth must be replaced by an identical one; otherwise this will void the registration.
- Like motorcycles Velo de Ville Speed Pedelecs must be used with the lights permanently on.



**⚠ Danger**

Be aware that the brakes of your Velo de Ville Speed Pedelec are always more effective than the drive system. If you face any problems with your drive system (e.g. because it pushes you forward in front of a turn), slow down your Velo de Ville Speed Pedelec carefully.

**⚠ Danger**

Pull the brake lever of the rear brake [e] and stop pedalling. The EPAC stops. Emergency stop! However, if you have a front motor, you must actuate the front brake carefully. The shortest possible stopping distance requires controlled braking with both brakes.



**⚠ Danger**

For your own safety, always ride your Velo de Ville Speed Pedelec with the light switched on, wear bright clothing as well as a properly fitting motorcycle helmet and glasses.



**⚠ Danger**

If a component needs to be replaced, make it a rule to only use original spare parts. Wearing parts of other manufacturers, e.g. brake pads [f] or tyres that are not of identical size, may cause harm to the safety of the Velo de Ville Speed Pedelec. Risk of accident! In the case of Velo de Ville Speed Pedelects be sure to only assemble original spare parts, otherwise the registration and the insurance cover will expire. Read the respective information in the system instructions of the drive system manufacturer.



BIKE CARD	
Manufacturer	AT Zweiflrad GmbH
Serial no.	_____
Model	_____
Frame no.	_____
Drive system	_____
<input type="checkbox"/> Front wheel motor	<input type="checkbox"/> Mid-mounted motor
<input type="checkbox"/> Rear wheel motor	
Battery model	_____
Key no.	_____
Voltage (Vdc)	_____
Ampere hour (Ah)	_____
Capacity (maxt hours)	_____
Suspension fork (Manufacturer/model)	_____
Serial no.	_____
Rear shock (Manufacturer/model)	_____
Serial no.	_____
Frame type	_____
Frame size	_____
Size of wheels and tyres	_____
Colour	_____
Frame number	_____

Intended use	
Use in accordance with	<input type="checkbox"/> category 1 <input type="checkbox"/> category 2 <input type="checkbox"/> category 3
Empty weight EPAC (incl. battery)	_____ kg
Maximum permissible overall weight (EPAC, incl. luggage and trailer, if available)	_____ kg
Permitted use	<input type="checkbox"/> yes <input type="checkbox"/> no
Permitted load	_____ kg
Child seat allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Trailer allowed	<input type="checkbox"/> yes <input type="checkbox"/> no
Permissible trailer load	_____ kg
Brake levers - Brake assignment	
Right lever	<input type="checkbox"/> Front wheel brake <input type="checkbox"/> Rear wheel brake
Left lever	<input type="checkbox"/> Front wheel brake <input type="checkbox"/> Rear wheel brake
<p><b>⚠ Danger</b>            Read at least this chapter: "Before the first ride with your Velo de Ville - EPAC" intended use" and "Before every ride with your Velo de Ville - EPAC" in the translation of these Velo de Ville original operating instructions.</p>	
<p>Stamp and signature of the Velo de Ville dealer            (Use for the Velo de Ville dealer. Copy the bike card and the handbook together and keep your copy in your country of residence and your copy in the country of destination. Please keep both in the original language. In the signature on the handbook report the personal data made available to the manufacturer.)</p>	

Inform yourself in the country where you intend to use your Velo de Ville Speed Pedelec about the regulations of:

- using cycle lanes and paths in towns,
- cycling one-way streets the wrong way down, even if allowed for bicycles,
- cycling through pedestrian areas, even if permitted for bicycles,
- using bicycle parking facilities,
- cycling on forest trails and
- cycling on lanes which are not allowed for motor vehicles, motorcycles and mopeds.
- If you have a speed mountain bike inform yourself in the country where you intend to ride whether you are allowed to ride on public roads and on forest trails.

Check in the country where you intend to use your speed pedelec whether towing child trailers [a] and mounting and using child seats [b] is allowed or not. Look in the bike card [c] and ask your Velo de Ville dealer whether you are permitted to mount a child seat to your Velo de Ville Speed Pedelec, and if so, which model.

**i Notice**  
**Speed pedelecs must be ridden on the road. Do not cycle on cycle paths.**

**i Notice**  
**The regulations and rules for EPACs and speed pedelecs are continuously revised. Read the daily press to keep yourself informed about current legislative changes.**



## USEFUL INFORMATION FOR PROPER HANDLING OF THE RECHARGEABLE BATTERY

When you do not use your Velo de Ville EPAC for a longer period of time (e.g. during the winter season) observe some particularities. Store the rechargeable battery or the complete Velo de Ville EPAC when the battery is integrated in the frame in a dry room at temperatures between 5 and 20 degrees Celsius. The state of charge [d] should be 50 to 70 % of the charging capacity. Check the state of charge, if the rechargeable battery is left unused for more than two months, and recharge it in between, if necessary.

Clean the battery housing with a dry or, if at all, a slightly moist cloth [e]. Look out for possible defects of the housing. Do not direct the water jet of a high-pressure cleaner at the rechargeable battery, as there is a risk of water entry and/or short-circuit. Check after every cleaning whether the area around the rechargeable battery is free of water and whether the contacts are dry.

For more information on the proper handling of your rechargeable battery see the system instructions of your drive system manufacturer, e.g. the chapter

**BOSCH** – Operation

**FAZUA** – Battery Pack 7000/

Cleaning, Maintenance and Service

**SHIMANO STePS** – Handling the battery

### Danger

Charge your battery only with the supplied charger [f]. Do not use the charger of any other manufacturer, not even when the connector of the charger matches your rechargeable battery. The rechargeable battery can heat up, catch fire or even explode!

### Danger

Charge the battery with an ambient temperature of 15 to 25 degrees Celsius. Let hot batteries cool down beforehand. You should also let the battery warm up to room temperature before connecting it to the charger in winter or after a ride in cold weather.

### Danger

We recommend that you charge your battery during the day and only in dry rooms which have a smoke or a fire detector; but keep it off your bedroom. Place the battery during the charging process on a big, non-inflammable plate made of ceramics or glass! Unplug the battery once it has been charged up.

### Danger

Make sure your rechargeable battery is in sound condition. Do not open, disassemble or crush the battery. Risk of explosion!



**⚠ Danger**

Do not use a rechargeable battery or a charger that is defective. If you are in doubt or if you have any questions, contact your Velo de Ville dealer.

**⚠ Danger**

Keep the rechargeable battery and the charger out of the reach of children!

**⚠ Danger**

Do not charge any other electrical devices with the supplied charger of your Velo de Ville EPAC.

**⚠ Danger**

Keep your battery away from fire and heat. Risk of explosion!

**⚠ Danger**

The drive is not approved for steam cleaning, high-pressure cleaning [a] or cleaning with a water hose. The penetration of water into the electrics or the drive system can destroy the devices. Risk of explosion!



**⚠ Danger**

Do not short-circuit rechargeable batteries. Store them therefore in a safe storage place and make sure there is no accidental contact with other conductive materials, e.g. metal parts, which may cause a short-circuit with each other. Do not deposit any objects in the storage area (e.g. clothes).

**⚠ Danger**

Keep the rechargeable battery and the charger during the charging process away from moisture and water to exclude electric shocks and short circuits.

**⚠ Danger**

Do not expose your battery or the charger to the blazing sun during charging.

**⚠ Danger**

Make sure to use the battery only for the Velo de Ville EPAC for which it is designed.

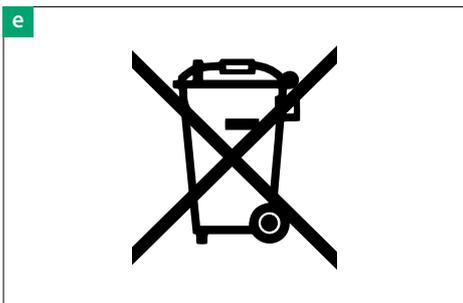
**⚠ Caution**

When you remove your battery (b) from the holder for charging it with your Velo de Ville EPAC left in the open during the charging process, you should protect the connections, e.g. with a plastic bag [c] against rain, water, moisture and dirt. If the connections of the rechargeable battery are soiled, clean them with a dry cloth.



**⚠ Caution**

Make sure not to discharge your rechargeable battery completely (also referred to as depth discharge). This occurs often when the battery has run out completely and your Velo de Ville EPAC was left standing for some days. Deep discharge will affect the rechargeable battery of your Velo de Ville EPAC permanently. A deep-discharged battery can only be recharged in exceptional cases and with special chargers. Contact your Velo de Ville dealer.



**⚠ Caution**

If possible, remove the rechargeable battery [d] from your Velo de Ville EPAC or e-bike if you do not use your Velo de Ville EPAC for a longer period of time and keep it clean and dry.

**⚠ Caution**

If the rechargeable battery or the charger (or parts of it) must be replaced, only use original spare parts. In such a case, contact your Velo de Ville dealer.

**⚠ Caution**

Do not charge your battery over a long period of time, if you do not need it. When the battery is fully charged, remove the charger at short term.



**⚠ Caution**

Do not dispose of your rechargeable battery in the normal household rubbish [e]! It must be disposed of according to battery disposal regulations. Therefore, sellers of new rechargeable batteries must provide collection of old batteries and appropriate disposal. If you are in doubt or if you have any questions, contact your Velo de Ville dealer.

**i Notice**

Lithium-ion batteries have no memory effect; they can therefore be charged at any time without affecting battery life.

**i Notice**

Also observe any instructions on the respective stickers on the rechargeable battery [f] or on the charger.



## TRANSPORT OF YOUR VELO DE VILLE EPAC

### By car

Velo de Ville EPACs can be transported like conventional bicycles outside or inside the car. Always make sure your Velo de Ville EPAC is securely fastened outside or inside the car and check the fastenings regularly. In addition, you should always remove the battery from your Velo de Ville EPAC [a], as far as possible, prior to transporting your Velo de Ville EPAC on the car roof. Stow the battery in its original cardboard box (from the Velo de Ville dealer) and, if mounted, the removable display unit inside the car and secure it appropriately to avoid any damage during transport. Also dismount accessories, such as a tyre pump, panniers, etc.

For more information see the chapter “Adjusting the Velo de Ville bike to the rider” of your general Velo de Ville user manual.

### Danger

The weight distribution on your Velo de Ville EPAC differs markedly from the weight distribution on bicycles without drive assistance. A Velo de Ville EPAC is clearly heavier than a bicycle without drive assistance. For this reason parking, pushing, lifting and carrying your Velo de Ville EPAC is more difficult. Bear this in mind when loading your EPAC into a car and unloading it or when mounting it on a bicycle carrier system.

### Caution

Before transporting several EPACs with a roof mounting or a rear mounting carrier system, inform yourself about the maximum load capacity of the bicycle carrier. Keep in mind that the weight of an EPAC is higher than the weight of a bicycle without drive unit. It could be that you are only allowed to transport one or two instead of three EPACs without drive system.

### Caution

Make sure to remove all movable and loose parts and above all the rechargeable battery, the control element and the cycle computer on the handlebar before transporting it inside or outside the car. If you transport your Velo de Ville EPAC without its battery on a bike carrier system, protect the connections against water, moisture and dirt, e.g. with a plastic bag [b].

### Notice

If necessary, inform yourself about the laws and regulations concerning bicycle/EPAC transport in the countries that you intend to transit during your journey. The laws and regulations differ, e.g. with regard to the marking [c].



## By train / by public transport

Velo de Ville EPACs [d] can be transported like conventional bicycles by public transport.

Taking bicycles or EPACs with you by public transport is permitted, the regulations applicable in the cities may differ, however. There are e.g. some places where you are only allowed to travel with your Velo de Ville EPAC during off-peak hours and with an additional ticket. Inform yourself in time about the regulations of transport before you start the trip!

In some countries regional trains have special spaces for the storage of EPACs and other things. This is an option to take your Velo de Ville EPAC with you. They are often at the front or end of a train and marked with a bicycle sign.

When taking a high-speed train check whether you can take your EPAC or bicycle with you.

### **i** Notice

If the rechargeable battery of your EPAC is mounted to the down tube [e] or to the pannier rack, you can remove the battery for an easier boarding and disembarking [f].

### **i** Notice

Before you start your trip inform yourself in time about the conditions of carriage and also observe the regulations and rules about bicycle transport in the countries through which you intend to travel.



## By plane

If you intend to take your Velo de Ville EPAC by plane or to dispatch it by a forwarding agent, you have to observe particular packing and labelling requirements for rechargeable batteries which are considered as hazardous goods. Contact the airline, an expert for hazardous items or the forwarding agent in time.

### **i** Notice

Contact the airline with which you intend to travel in time and inform yourself about conditions and possibilities of taking your Velo de Ville EPAC with you.



## AFTER AN ACCIDENT WITH YOUR VELO DE VILLE EPAC

1. Check the rechargeable battery [a]. If the rechargeable battery is no longer properly in its holder or shows any damage, do not use your Velo de Ville EPAC any longer, at least not in the assistance mode. Switch off the motor/drive unit and the battery separately, if necessary. A damaged battery can lead to a short-circuit resulting in a sudden failure of the assistance of the Velo de Ville EPAC right at the moment when you need it.

Damage to the outer housing of the rechargeable battery can result in water or moisture entry which can lead to short circuits or electric shocks. The rechargeable battery may catch fire or even explode! In such a case, contact your Velo de Ville dealer immediately.



2. Check the display [b]. Are all values displayed as usual? Do not use your Velo de Ville EPAC, if the display shows an error message or a warning. If necessary, switch off the system and wait ten seconds at least before you check it again.

Do not set off on your Velo de Ville EPAC with motor assistance when a warning is displayed. In such a case, contact your Velo de Ville dealer immediately.



More information is provided in the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Error Code Indication

**FAZUA** – Remote/Notification indicator

**SHIMANO STEPS** – Errors and remedies

3. Check that the wheels are still firmly fixed in the dropouts [c] and that the rims are still centred with respect to the frame or fork. Spin the wheels and observe the gap either between frame and tyre or between brake pads and rim sides.

If the width of the gap changes markedly and you have no way to true the wheel where you are, you will need to release the rim brakes a little so that the rim can run between the brake pads without touching them. Note that in this case the brakes may not act as powerfully as you are used to.

For more information see the chapters “How to use quick-release systems and thru axles”, “Brake system” and “Wheels and tyre equipment” of your general Velo de Ville user manual and the enclosed operating instructions.



4. Check that handlebar and stem are neither bent nor broken and that they are level and aligned. Check whether the stem is firmly fixed in the fork by trying to turn the handlebar relative to the front wheel [d]. Briefly lean on the brake levers or brake levers shifters to make sure the handlebar is firmly fixed in the stem.

Realign the components, if necessary, and gently tighten the bolts to ensure a reliable clamping of the components. The maximum torque values are printed directly on the components or specified in the enclosed operating instructions.

For more information see the chapters **“Adjusting the Velo de Ville bike to the rider”** and **“Headset”** of your general Velo de Ville user manual and the enclosed operating instructions.



5. Check that the chain still runs on the chainrings and the sprockets. If your Velo de Ville EPAC fell over to the chain side, verify the proper functioning of the gears. Ask somebody to lift your Velo de Ville EPAC by the saddle and carefully shift through all the gears. Pay particular attention when shifting to the small gears and make sure the rear derailleur does not get too close to the spokes [e+f] as the chain climbs onto the larger sprockets.

If the rear derailleur or the dropouts/derailleur hanger are bent, the rear derailleur may collide with the spokes. This can result in damage to the rear derailleur, the rear wheel and the frame. If necessary, check the function of the front derailleur, as a displaced front derailleur can throw off the chain, thus interrupting suddenly the drive of your Velo de Ville EPAC.

For more information see the chapter **“Gears”** of your general Velo de Ville user manual and the enclosed operating instructions.





6. Make sure the saddle is not out of alignment using the top tube [a] or the bottom bracket shell as a reference. If necessary, open the clamping, realign the saddle and retighten the clamping [b].

For more information see the chapters “**How to use quick-release systems and thru axles**” and “**Adjusting the Velo de Ville bike to the rider**” of your general Velo de Ville user manual and the enclosed operating instructions.



7. Let your Velo de Ville EPAC bounce on the ground from a small height [c]. If there is any rattling, check where it comes from. Check the bearings, the bolts and the proper seat of the battery and the connector [d], if necessary.

For more information see your general Velo de Ville user manual and the system instructions of the drive system manufacturer, e.g. in the chapter

**BOSCH** – Operation

**FAZUA** – Drivepack 25 km/h/Assembly

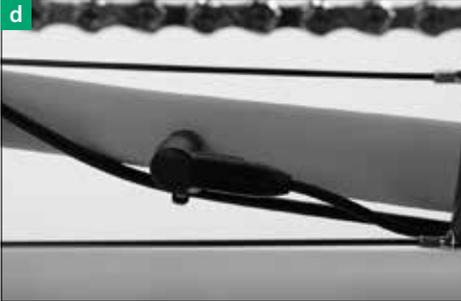
**SHIMANO STEPS** – Preparation



8. Finally, take a good look at the whole Velo de Ville EPAC to detect any deformations, colour changes or cracks [e].

Ride back very carefully by taking the shortest route possible, even if your Velo de Ville EPAC went through this check without any problems. Do not accelerate or brake hard and do not ride out of the saddle. If you are in doubt about the performance of your Velo de Ville EPAC, have yourself picked up by car, instead of taking any risk.

Back home you need to check your Velo de Ville EPAC thoroughly. The damaged parts must be replaced. Ask your Velo de Ville dealer for advice.



### **⚠ Danger**

Deformed components can break without previous warning. They must not be repaired, i.e. straightened, as the imminent risk of breakage will remain. This applies in particular to the fork, the handlebar, the stem, the cranks, the seat post and the pedals. When in doubt, it is always recommendable to have these components replaced, as your safety comes first. Ask your Velo de Ville dealer for advice.



### **⚠ Caution**

After an accident or after your Velo de Ville EPAC has toppled over, make it a rule to check the functioning and in particular the limit stops of the rear derailleur [f].





**c**

**SERVICE SCHEDULE (TO BE STAMPED)**

1st service	2nd service
After 100-200 kilometres (60-180 miles) or 5-15 hours of initial use at the latest or after three months from date of purchase	After 2,000 kilometres (1,240 miles) or 100 hours of use at the latest or after one year
Order no.: _____	Order no.: _____
Date: _____	Date: _____
Mileage: _____	Mileage: _____
<input type="checkbox"/> All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville - eBike) replaced or repaired components:	<input type="checkbox"/> All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville - eBike) replaced or repaired components:
_____	_____
_____	_____
Stamp and signature of the Velo de Ville dealer	Stamp and signature of the Velo de Ville dealer
<div style="border: 1px solid black; width: 100%; height: 40px;"></div>	<div style="border: 1px solid black; width: 100%; height: 40px;"></div>

## SERVICE AND MAINTENANCE

Your Velo de Ville dealer will have assembled and adjusted your Velo de Ville EPAC for use when you come to collect it. Nevertheless, your Velo de Ville EPAC needs regular servicing [a]. Have your local Velo de Ville dealer do the scheduled maintenance work. This is the only way to ensure the durable functioning of all components.

A first inspection is due already after 100 to 300 kilometres (60 to 180 miles) or 5 to 15 hours of use and/or three to six weeks. Your Velo de Ville EPAC must be serviced, because in this initial “break-in” period of use, safety-relevant bolted connections and spokes can slightly lose tension or gears may go out of adjustment. This “break-in” period is unavoidable. Therefore, remember to make an appointment with your Velo de Ville dealer for the first inspection of your new Velo de Ville EPAC. The first service is very important for both functioning and durability of your Velo de Ville EPAC.

### Danger

The individual drive components can be cleaned with a soft cloth and commercial neutral detergents or moistened with water, but do not use excessive water. Keep the rechargeable battery dry and do not submerge it! Risk of explosion!

### Caution

Keep in mind that the battery of your Velo de Ville EPAC shows signs of wear over the years. This results in a continuous reduction of the battery's capacity and in a reduced range compared to its state as new. After a certain period of time the battery even needs to be replaced.

### Caution

Keep in mind that the auxiliary drive may lead to partly higher wear than you are used to. This applies in particular to the brakes and the tyres and in the case of mid-mounted motors/drive units to the chain and the sprockets [b].

The intended use of the Velo de Ville EPAC includes regular servicing and the replacement of worn out parts in time, e.g. chains, brake pads or shift and brake cables, and therefore has an influence on the warranty and the guarantee, as well.



You should have your Velo de Ville EPAC serviced regularly by your Velo de Ville dealer after the initial “break-in” period of use. If you ride often on poor road surfaces and with adverse weather conditions, the time between the service intervals [c] will shorten according to the harder use. The off-season during the winter months is a very good time to take your Velo de Ville EPAC to your Velo de Ville dealer for the strongly recommended, comprehensive annual inspection, as they will have plenty of time for you and your Velo de Ville EPAC.



If in case of a repair no original spare parts are available, observe the “Guidelines for the parts replacement of CE marked e-bikes / pedelecs up to a pedal assist of 25 km/h (15.5 mph)” issued by the German service and bicycle association (VSF), the German Bicycle Association (ZIV), the German umbrella organisation for the cycle industry guilds BIV and Zedler-Institut, see the chapter “Guidelines”. In case of inquiries contact your Velo de Ville dealer.

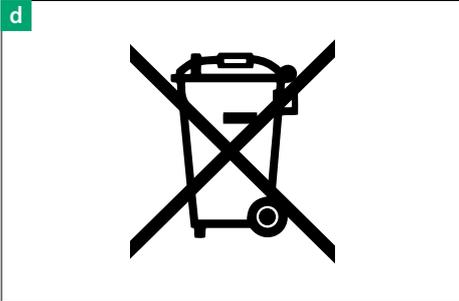


Note that the components of your **Velo de Ville Speed Pedelec** must be replaced by original spare parts only to grant type approval and provide insurance cover.

Components which must not be replaced or only after a type test, e.g. carried out by a technical inspection authority: frame, fork, drive unit, rechargeable battery, tyres, rims, brake system, front and rear light, kickstand, handlebars, stem [d], control unit/display. If a component needs to be replaced, make it a rule to only use original spare parts [e].

The following components may be replaced, even without any further test: pedals (pedal reflectors are compulsory), mudguards (with rounded edge at the front mudguard), pannier rack [f], saddle and rubber grips on the handlebar, gear components (provided the highest transmission remains identical), seat post, chain, headset, inner tube and hub as well as bell and rear-view mirror (when replaced by equivalent models).





**⚠ Danger**

Remove the rechargeable battery [e] or the display [f] before doing any work on your Velo de Ville EPAC (e.g. servicing, repairs, assembly, maintenance, work on your drive unit etc.). Activating the drive systems unintentionally bears the risk of injury!

**⚠ Caution**

Only use original spare parts for servicing and repair. If you do not, the CE marking as well as your warranty will become null and void. Ask your Velo de Ville dealer for advice.

**⚠ Caution**

If in case of a repair no original spare parts are available, observe the “Guidelines for the parts replacement” issued by the German service and bicycle association (VSF), the German Bicycle Association (ZIV) and the German umbrella organisation for the cycle industry guilds BIV. It can be downloaded on the websites. In case of inquiries contact your Velo de Ville dealer.

**⚠ Caution**

If necessary, make sure to delete stored personal data before handing over the battery or the display to your Velo de Ville dealer. This deletion is your responsibility.

**ⓘ Notice**

For your own safety, bring your newly bought Velo de Ville EPAC to your Velo de Ville dealer for its first inspection after 100 to 300 kilometres (60 to 180 miles), 5 to 15 hours of initial use or four to six weeks, at the very latest, however, after three months.

**ⓘ Notice**

Note and follow the instructions given in the chapters on service and maintenance of the system instructions of the drive system manufacturer and in your general Velo de Ville user manual.

## WARRANTY AND GUARANTEE

Your Velo de Ville EPAC was manufactured with care and delivered to you by your Velo de Ville dealer fully assembled.

As direct purchaser you have full warranty rights within the first two years after purchase. Contact your Velo de Ville dealer in the event of defects.

To ensure a smooth handling of your complaint, it is necessary to present your receipt, your bike card, the handover report and the service reports. Therefore, keep these documents in a safe place.

To ensure a long service life and good durability of your Velo de Ville EPAC, use it only for its intended purpose (see the chapter **“Before the first ride with your Velo de Ville EPAC”**). Observe the permissible weight specifications indicated in the bike card. In addition, be sure to follow the manufacturers’ mounting instructions (above all, the torque values of the bolts) as well as the prescribed maintenance schedule.

Observe the checks and routines listed in the translation of these Velo de Ville original operating instructions, the system instructions of the drive system manufacturer, your general Velo de Ville user manual and in any other operating instructions enclosed with this EPAC (see the chapter **“Service and maintenance schedule for your Velo de Ville bike”** in your general Velo de Ville user manual) as well as any instructions as to the replacement of safety-relevant components, such as handlebars, brakes etc.

### **Danger**

**Keep in mind that accessories can impair the functioning your Velo de Ville EPAC. If you are in doubt or if you have any questions, contact your Velo de Ville dealer.**

### **Notice**

**This warranty law is only valid in the countries where the law has been ratified according to the renewed European regulations. Inform yourself about the regulations in your country.**

## **A note on wear**

Some components of your Velo de Ville EPAC are subject to wear due to their function. The rate of wear will depend on care and maintenance and the way you use your Velo de Ville EPAC (mileage, riding in the rain, dirt, salt, additional load etc.). Velo de Ville EPACs that are often left standing in the open may also be subject to increased wear through weathering.

Regular care and maintenance increase the service life. Parts that have reached their limit of wear must be replaced.

### **This concerns:**

- Rechargeable battery
- Drive chain
- Brake pads
- Brake fluid (DOT)
- Brake discs/rotors
- Brake cables
- Brake cable housings
- Seals of suspension elements
- Rims of rim brakes
- Rubber grips
- Cables/connectors
- Chainrings
- Illuminants
- Tyres
- Sprockets
- Saddle covering
- Shift cables
- Shift cable housings
- Pulleys
- Lubricants

# GUARANTEE CONDITIONS AT ZWEIRAD GMBH

## Article 1: Guarantee

- 1.1. The manufacturer grants a guarantee to the first owner of the bicycle.
- 1.2. The guarantee expires in accordance with the articles 4 and 6.
- 1.3. The guarantee is not transferable.
- 1.4. Guarantee claims can only be asserted with the seller or at a recognised specialist workshop upon presentation of the duly completed guarantee certificate.

## Article 2: Guarantee period

- 2.1. The guarantee period is 2 years from the date of purchase.

## Article 3: Guarantee

- 3.1. Beyond the guarantee period the manufacturer grants a voluntary manufacturer's guarantee on the bicycle frame. Under the condition of article 3.2 the guarantee period is extended as follows:
  - frame steel 10 years
  - frame aluminium 5 years
- 3.2. Prerequisites for granting the guarantee period are:
  - The Bike Card attached to the user manual was filled in completely.
  - Observance of the service intervals as defined in the user manual.

## Article 4: Guarantee exclusions

- 4.1. The guarantee expires in the following cases:
  - a) Damage resulting from accident, use other than the intended use of the bicycle and/or improper and/or negligent use
  - b) The bicycle is not maintained in accordance with the present user manual.
  - c) The prescribed service intervals are not observed.
  - d) Repairs are not performed in a professional way.
  - e) Retrofitted spare parts do not comply with the technical specification of the bicycle or were mounted improperly.
- 4.2. The manufacturer's liability for damage as a result of the following is explicitly excluded:
  - a) wrong adjustment of handlebar, brakes, saddle, seat post, derailleurs gears
  - b) if individual parts, such as brake and shift cables, brake pads, tyres, chain, sprockets are not replaced in due time
  - c) normal wear and tear
  - d) climatologic influences, such as normal weathering of paint and chrome rust

## Article 5: Scope of guarantee

- 5.1. During the guarantee period, all material and construction defects detected by the manufacturer will be repaired or replaced free of charge. The choice is at the manufacturer's discretion.
- 5.2. During the extended guarantee period the manufacturer will provide a bicycle frame free of charge. Costs of assembly and disassembly as well as any transport costs shall be borne by the owner.

## Article 6: Making a claim

- 6.1. Claims under this guarantee must be made to the bicycle dealer immediately after the defect has been discovered.
- 6.2. The proof of purchase (invoice receipt) and the user manual with the maintenance booklet must be handed over to the dealer.

## BIKE CARD

Manufacturer AT Zweirad GmbH

Serial no. \_\_\_\_\_

Model \_\_\_\_\_

Frame no. \_\_\_\_\_

Drive system \_\_\_\_\_

Front wheel motor    Mid-mounted motor    Rear wheel motor

Battery model \_\_\_\_\_

Key no. \_\_\_\_\_

Voltage (Volt) \_\_\_\_\_

Ampere-hour (AH) \_\_\_\_\_

Capacity (watt hours) \_\_\_\_\_

Suspension fork  
(manufacturer/model) \_\_\_\_\_  
– serial no. \_\_\_\_\_

Rear shock (manufacturer/model) \_\_\_\_\_

Frame type \_\_\_\_\_

Frame size \_\_\_\_\_

Size of wheels and tyres \_\_\_\_\_

Colour \_\_\_\_\_

Frame number \_\_\_\_\_

## Intended use

### Use in accordance with

category 1       category 2       category 3

**Empty weight EPAC** (incl. battery) \_\_\_\_\_ kg

### Maximum permissible overall weight

EPAC, rider, luggage and trailer, if available \_\_\_\_\_ kg

Pannier rack permitted       yes       no

Permissible load \_\_\_\_\_ kg

Child seat allowed       yes       no

Trailer allowed       yes       no

Permissible trailer load \_\_\_\_\_ kg

### Brake levers – Brake assignment

Right lever:       front wheel brake       rear wheel brake

Left lever:       front wheel brake       rear wheel brake

### **Danger**

**Read at least the chapters “Before the first ride with your Velo de Ville EPAC”, “Intended use” and “Before every ride with your Velo de Ville EPAC” in the translation of these Velo de Ville original operating instructions.**

\_\_\_\_\_  
Stamp and signature of the Velo de Ville dealer

(Hint for the Velo de Ville dealer: Copy the bike card and the handover report and keep one copy in your customer file. Send another copy to the bike manufacturer, if necessary. Make sure the customer confirms by his signature on the handover report that his personal data are made available to the manufacturer.)

# HANDOVER REPORT

The above-described EPAC was delivered to the customer ready for use, i.e. after its final assembly, inspection and functional check as described below (additionally required routines in parentheses).

- Battery partially charged
- Lighting
- Brakes front and rear
- Suspension elements (adjusted to suit customer)
- Wheel set (trueness/spoke tension/tyre pressure)
- Handlebar/stem (position/bolts checked with torque wrench)
- Pedals (adjustment of release force if necessary)
- Saddle/seat post (saddle height and position adjusted to suit customer, bolts checked with torque wrench)
- Gears (limit stops!)
- Bolted connections of add-on parts (check with torque wrench)
- Motor/drive unit/display
- Test ride
- Other routines performed

Velo de Ville  
dealer \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Delivery date, stamp,  
signature of the  
Velo de Ville dealer

The customer confirms with his/her signature that he/she received the EPAC in proper condition along with the accompanying documents specified below and that he/she was instructed on the proper use of the EPAC.

- Translation of the original operating instructions EPAC

Additional instructions

- Brake system
- Suspension fork
- Gear system
- System instructions of the drive system manufacturer
- Motor/drive unit
- Pedal system
- General bicycle user manual
- Battery
- Seat post, stem
- Others

Customer last name \_\_\_\_\_

first name \_\_\_\_\_

Street \_\_\_\_\_

ZIP code/city \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

City, date \_\_\_\_\_

Signature \_\_\_\_\_

- I hereby expressly consent that my above-mentioned data are stored by the Velo de Ville dealer and made available to the manufacturer so that I can be contacted directly e.g. in the event of a recall. The data will not be transmitted to third parties or used otherwise.

Signature customer \_\_\_\_\_

## SERVICE SCHEDULE (TO BE STAMPED)

### 1st service

After 100–300 kilometres (60–180 miles) or 5–15 hours of initial use at the latest or after three months from date of purchase

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

### 2nd service

After 2,000 kilometres (1,240 miles) or 100 hours of use at the latest or after one year

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

### 3rd service

After 4,000 kilometres (2,480 miles) or 200 hours of use at the latest or after two years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

### 4th service

After 6,000 kilometres (3,720 miles) or 300 hours of use at the latest or after three years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

## 5th service

After 8,000 kilometres (4,970 miles) or 400 hours of use at the latest or after four years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

## 6th service

After 10,000 kilometres (6,210 miles) or 500 hours of use at the latest or after five years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

## 7th service

After 12,000 kilometres (7,450 miles) or 600 hours of use at the latest or after six years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

## 8th service

After 14,000 kilometres (8,700 miles) or 700 hours of use at the latest or after seven years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Stamp and signature of the Velo de Ville dealer:

## 9th service

After 16,000 kilometres (9,940 miles) or 800 hours of use at the latest or after eight years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

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Stamp and signature of the Velo de Ville dealer:

## 10th service

After 18,000 kilometres (11,000 miles) or 900 hours of use at the latest or after nine years

Order no.: \_\_\_\_\_

Date: \_\_\_\_\_

Mileage: \_\_\_\_\_

- All necessary maintenance work carried out (see Service and maintenance schedule for your Velo de Ville bike); replaced or repaired components:

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Stamp and signature of the Velo de Ville dealer:

# DECLARATION OF CONFORMITY

## EC - Declaration of Conformity

# VELOBIVILLE

**Manufacturer** AT Zweirad GmbH  
Zur Steinkuhle 2 | 48341 Altenberge | Germany  
+49 (0) 2505 9305 0

The manufacturer hereby declares that the product with the type designation as shown on the right side complies in its design and construction the essential requirements of the following relevant EC directives at the time of declaration.

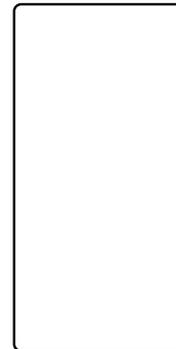
**Machinery Directive - 2006/42/EC**  
**EMC Directive - 2014/30/EC**  
**Low Voltage Directive - 2014/35/EC**  
**RoHS Directive - 2011/65/EC**  
**2012/19/EU waste electrical and electronic equipment (WEEE Directive)**

The following standards were applied:  
DIN EN ISO 12100, DIN EN 15194:2017, EN ISO 4210-2:2015, EN 11243:2016,  
DIN EN 20607, DIN EN 17404 (Draft)

If the machine is modified without our agreement, this declaration loses its validity.

**Person in charge of technical documentations**  
Christof Bödiger  
AT Zweirad GmbH | Zur Steinkuhle 2  
48341 Altenberge - Germany

  
\_\_\_\_\_  
Christof Bödiger  
CE documentation officer  
Altenberge, 15.12.2020



# VELODEVILLE

AT Zweirad GmbH  
Zur Steinkuhle 2  
48341 Altenberge  
Phone: +49 (0) 2505 93 05 0  
Fax: +49 (0) 2505 93 05 900  
E-Mail: [info@velo-de-ville.com](mailto:info@velo-de-ville.com)  
[www.velo-de-ville.com](http://www.velo-de-ville.com)

Your Velo de Ville dealer:

