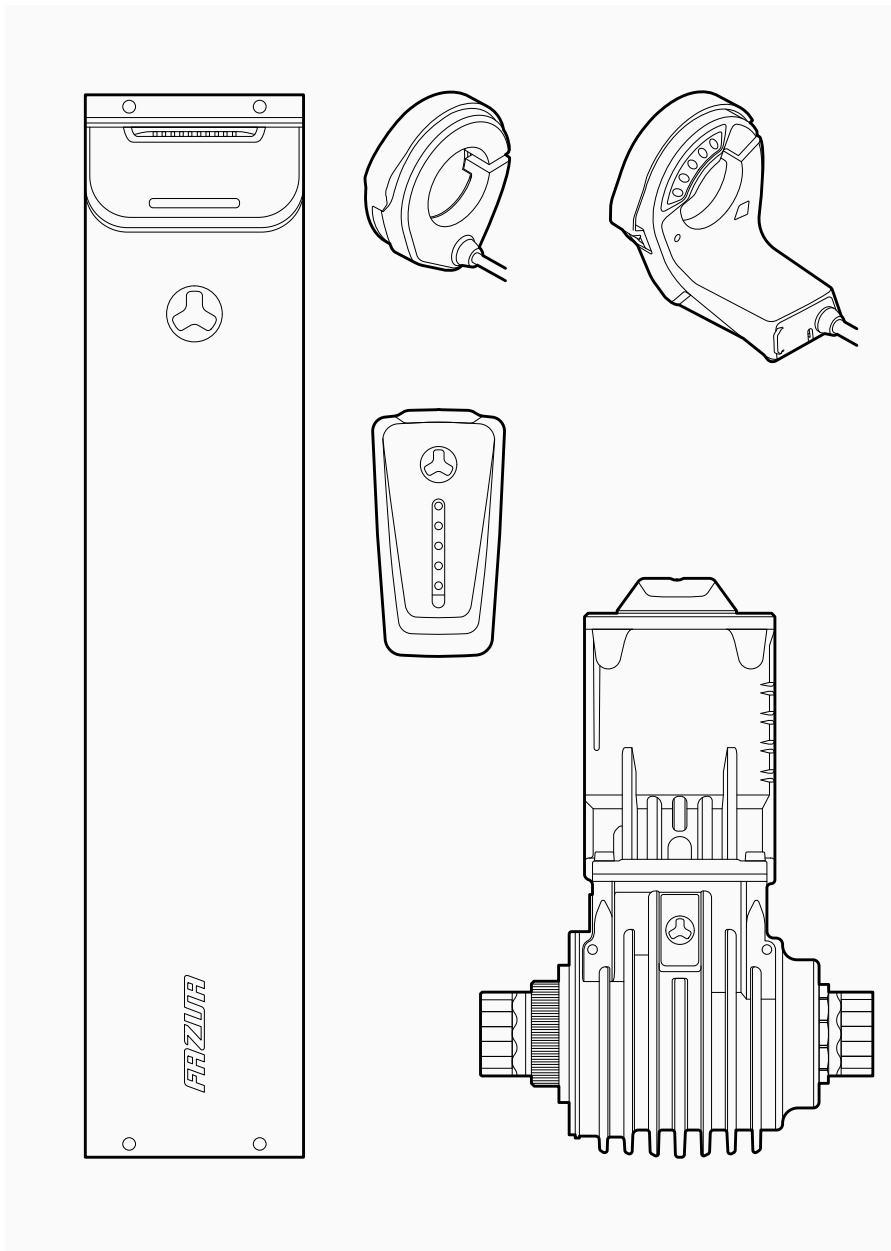


ORIGINAL INSTRUCTIONS
Edition 2022 | US 10.2022



FAZUA *RIDE 60 DRIVE SYSTEM*



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1 ABOUT THESE INSTRUCTIONS

1.1 Read and keep the instructions

These original instructions* are part of the scope of supply of the FAZUA RIDE 60 drive system. They contain all important information on the safety and use of the individual components and the drive system as a whole. These instructions are based on the laws applicable in the United States, as well as national regulations such as UL® and ANSI testing standards.

Be sure to read the complete instructions carefully before using the components or the drive system installed in your e-bike for the first time. Failure to follow the instructions could result in serious injury to you or others and/or damage to the drive system or individual components.

Always keep these instructions handy for further use and pass them on if you pass on the drive system or the equipped e-bike to third parties.

In addition to these instructions for the drive system, always observe the manufacturer's instructions for the e-bike in which the drive system is installed.

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1.2 Description of signs and symbols

Certain types of notes and information in these instructions are identified by signs or symbols, which are listed below together with their meaning.

DANGER

High risk level! Risks that result in death or serious injury are indicated by the signal word "Danger".

WARNING

Risks that could result in death or serious injury are marked with the signal word "Warning".

CAUTION

Risks that could result in moderate or minor injuries are indicated by the signal word "Caution".

* These "original instructions" will be referred to as "instructions" in the further course.

NOTE

Risks relating to damage to the product itself or to property damage to other objects are indicated by the signal word "Notice".



Useful additional information is marked with this information symbol.

2 SAFETY

2.1 Functionality & intended use

FAZUA drive systems are designed as electric drive systems for e-bikes used as a means of transport. As intended, the electric pedal assist switches off as soon as you reach or exceed a certain (country and product specific) speed*. When you ride at a speed that exceeds the switch-off point, you pedal without assistance from the motor, using only your own muscle power.

The drive system as a whole consists of several components:

A → **Drive unit**

→ You can find detailed information here in section "Drive unit"

B → **Remote**

→ You can find detailed information here in section "Control element and display"

C → **Battery and charger**

→ You can find detailed information here in section "Battery and charger"

The individual components are available in different model versions, which partly differ from each other due to their design and handling. Detailed information on the function of the individual components as part of the drive system, as well as on special features and handling of the specific models can be found in the component sections of these instructions.

The version of the drive system installed in your e-bike, i.e. the specific combination of component models, is specially adapted to your e-bike and must therefore not be changed.

Categorically, the installation of the drive system and certain work on it may only be carried out in the ways planned by the manufacturer or by an authorized specialist. Authorized specialists for repair and maintenance work can be found with the official FAZUA service partners (See Chapter 10 "Service").

* In the United States, the speed at which the electric pedal assist automatically switches off is 20 mph (32 km/h).

For information on which work you can carry out yourself and which work must be carried out by an authorized specialist, refer to the sections on the individual components of this manual.

2.2 Limitation of liability

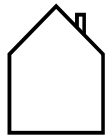
Porsche eBike Performance GmbH accepts no liability for damage caused by incorrect or improper installation or use other than that intended. Only use the components of the drive system as described in this manual. Any other use is considered improper and may result in accidents, serious injury and damage to the drive system.

2.3 Symbols & pictograms of the drive system

On individual components of the drive system you will find certain symbols and pictograms, which are listed below including their meaning.



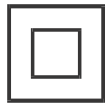
This symbol indicates that the user of the drive system or the individual components must have read and understood this original instructions before using it.



A device marked with this symbol (here: the charger) may only be used in dry indoor areas.

! DANGER

When used in a humid environment and in contact with liquids, there is a risk of electric shock!



An electrical appliance marked with this symbol corresponds to protection class II: The device has double or reinforced insulation to protect against electric shock.



! DANGER

This symbol warns of hot surfaces.

There is a burning risk if touched, contact with combustible materials may cause a fire.



These symbols indicate that the battery (lithium-ion battery) must be disposed of separately at the end of its service life and may not be disposed of with household waste.



Li-ion

The symbols must be affixed in the European Union in accordance with the laws and directives in force there.



This symbol indicates that the marked component must be disposed of separately as electrical or electronic equipment at the end of its service life and may not be disposed of with household waste.

The symbol must be affixed in the European Union in accordance with the laws and directives in force there.



This symbol indicates products that meet all the requirements for obtaining the European CE marking.



This symbol identifies products that meet all requirements for obtaining the British UKCA marking.



The test seal "Geprüfte Sicherheit" (GS mark) is awarded by independent certification bodies.

A device marked with the GS test seal complies with the safety-relevant requirements of the German Product Safety Act (ProdSG).



The "UL®-Listed" seal of approval is awarded by the US UL® Certification Body.

A device marked with the "UL®-Listed" test seal shown corresponds to the safety-relevant requirements for Canada and the USA.



The accompanying test seal is awarded by the SGS certification body.

A device marked with this test seal complies with the safety-relevant requirements for Canada and the United States in accordance with UL Standards.

The drive system and the battery were tested according to UL Standards. The following UL Standards were applied: UL 2271 - Standard for Batteries for Use in Light Electric Vehicle (LEV) Applications, UL 2849 - Outline of Investigation for Electric Bicycles, Electrically Power Assisted Cycles (EPAC Bicycles), Electric Scooters, and Electric Motorcycles.



The FCC seal is awarded by the Federal Communications Commission, an independent U.S. government agency responsible for implementing and enforcing U.S. communications laws and regulations.

An electrical device marked with the FCC seal complies with American standards for electromagnetic compatibility.

2.4 Important safety instructions

READ AND KEEP ALL IMPORTANT SAFETY INSTRUCTIONS!

The general safety instructions listed below refer to the drive system as a whole and must always be taken into account when using the e-bike equipped with it.



DANGER

Dangers for users of e-bikes!

Basically there are specific dangers for the users of e-bikes. Depending on the e-bike model in which the drive system is installed, additional dangers may arise which are not mentioned here.

- ▶ Read and follow the manufacturer's instructions for your e-bike.
- ▶ Find out about and observe any applicable national regulations regarding e-bikes.



DANGER

Dangers due to unauthorized changes!

If you make unauthorized changes to the drive system or components, you may cause an explosion, electric shock, or serious injury to yourself or others.

- ▶ Under no circumstances should you modify or alter individual components of the drive system autonomously.
- ▶ Never replace any drive system components independently.
- ▶ Never open the drive system components without authorization. The drive system components do not require any maintenance.
- ▶ Only allow repairs to the drive system to be carried out by an authorized specialist.
- ▶ Only allow components of the drive system to be replaced by an authorized specialist with permissible original spare parts.



DANGER

Risk of electric shock and fire if handled incorrectly!

If you handle the battery and/or charger improperly or use incompatible

batteries and chargers together, they may cause a fire. The battery may explode if handled incorrectly.

- ▶ Only use the battery in e-bikes equipped with an original FAZUA RIDE 60 drive system. Never use the battery for other purposes or in other drive systems.
- ▶ Follow all charging instructions and do not charge the battery pack (battery) outside of the temperature range specified in the instructions. Charging improperly or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- ▶ Do not modify or attempt to repair the charger or the battery pack.



WARNING

Danger from accidental starting!

Starting the drive system in unsuitable situations can result in accidents and serious injury.

- ▶ To prevent the drive system from starting up, switch off the drive system and, if necessary, secure it against being switched back on unintentionally or unnoticed when the e-bike is being transported or stored and during all work on the e-bike.
- ▶ If possible, remove the battery.*

NOTE

Risk of damage!

Improper handling can damage the drive system or individual components.

- ▶ Only have individual components of the drive system replaced with components of identical design or other components expressly approved by the manufacturer of the drive system. This will protect the other components from possible damage.
- ▶ Have individual components of the e-bike replaced exclusively by identical components or other components expressly approved by the e-bike manufacturer. This will protect your e-bike (incl. drive system) from possible damage.

* This applies only if your e-bike is equipped with a removable battery (See Chapter 23 "Function and model variants of the battery").

2.5 Notes on safe riding in road traffic

By following the road safety precautions listed below, you can reduce the risk of accidents and injuries when riding a bicycle or e-bike in road traffic.



The term "road traffic" also refers to private areas open to the public and to field or forest paths open to the public.

- Only ride your e-bike on the road if the equipment complies with national road traffic regulations. Please contact your e-bike manufacturer for more information.
- Find out about the regulations applicable to road traffic in your country or region, e.g. from the Ministry of Transport. You should also keep yourself informed about any changes to the contents of the valid regulations.
- Observe and follow national and regional road traffic regulations.
- When riding, use a suitable bicycle helmet that complies with national and regional regulations [CPSC (Consumer Product Safety Commission, 16 CFR Part 1203 or ASTM F1447-06)].
- When riding, wear light-colored clothing with reflective elements to attract the attention of other road users.
- Do not ride your e-bike if you are under the influence of alcohol, narcotics or medications.
- Do not use mobile devices such as smartphones, MP3 players, etc. while riding.
- Do not distract yourself while riding by other activities such as switching on the light. Stop to carry out such activities.
- Never ride without your hands, under any circumstances. Always keep both hands on the handlebars.
- Ride carefully and be considerate of other road users.
- Ride in such a way that nobody is harmed, endangered, obstructed or annoyed.
- Ride on prescribed lanes for bicycles.

3 INSTRUCTIONS FOR RIDING a E-BIKE WITH THE FAZUA DRIVE SYSTEM

Observe the following instructions for riding your e-bike equipped with the FAZUA drive system.

Gear change:

The gearshift of your e-bike can be operated in the same way as that of a conventional bicycle. Selecting a suitable gear increases the speed, power and range of your e-bike while maintaining pedal frequency.

Irrespective of the type of gearshift mounted, the following applies:

→ Stop pedaling when you change gears. This relieves the load on the rear derailleur and the drive of your e-bike.

Range/trip planning:

How long or how far you can ride your e-bike before you need to recharge the battery depends on several factors.

These factors include, but are not limited to:

- the set assistance level;
- the (riding) speed with which you move;
- your gear changing;
- the type of tire and the tire pressure set;
- the selected route and the weather conditions;
- the weight of driver and e-bike (total weight);
- the condition and age of the battery.

The following therefore applies as a matter of principle:

- Familiarize yourself with your e-bike step by step and away from roads and heavy traffic.
- Test the maximum range of your e-bike under various external conditions before planning longer trips. An exact statement about the range of your system is neither possible before nor during a trip.

Storage and operating temperatures

- Observe the operating and storage temperatures for the components of the drive system and for the components of your e-bike - especially for the battery, as it can be damaged by extreme temperatures.
- For more detailed information on operating and storage temperatures, refer to the technical data of the individual components on Page 22, Page 26 and Page 36, as well as in Chapter 4 "Storage and transport of e-bikes with the FAZUA drive system".



If you do not handle the battery properly, it may explode!

4 STORAGE AND TRANSPORT OF E-BIKES WITH THE FAZUA DRIVE SYSTEM



WARNING

Danger from accidental starting!

Starting the drive system in unsuitable situations can result in accidents and serious injury.

- To prevent the drive system from starting up, switch off the drive system and, if necessary, secure it against being switched back on unintentionally or unnoticed when the e-bike is being transported or stored.
- If possible, remove the battery.*

- When transporting and storing your e-bike or the components of the drive system, observe the specified temperature ranges for the components.
- If your e-bike has a removable battery, always transport and store the battery separately from the e-bike.

Batteries are subject to the dangerous goods regulations. Undamaged batteries may be transported by private individuals in road traffic. Commercial transport requires compliance with the rules on the packaging, labeling and transport of dangerous goods. Open contacts must be covered and the battery securely packed. When sending, the parcel service must be informed of the presence of dangerous goods in the packaging.

- Please note the following information on the charge level of the battery during prolonged non-use and the information on the temperature ranges for the corresponding storage periods.

If you do not intend to use the battery for an extended period of time, it should have a minimum charge level of 60% before you stop using it.

Check the charge status of the battery after 6 months of non-use: If the check reveals that the charge level is 20% or less, recharge the battery to a charge level of 60% or more.

Consider the following storage time-dependent temperature ranges for the battery [charge level 60 %]:

- < 1 month storage time: 5 to 140 °F [-15 to 60 °C]
- 3 months storage time: 5 to 113 °F [-15 to 45 °C]
- 1 year storage time: 5 to 70 °F [-15 to 25 °C]

* This applies only if your e-bike is equipped with a removable battery (See Chapter 23 "Function and model variants of the battery").

→ If you have further questions, please contact a FAZUA Certified Partner or visit the official FAZUA service platform (<https://fazua.com/de/support>).

5 **FAZUA APP**

Your control element is equipped with a Bluetooth® function. As a result, you can connect a mobile device to the remote and utilize other features using the FAZUA app. You can download the FAZUA app from the FAZUA homepage, which provides detailed information about the FAZUA app and its functions. You can access the corresponding website directly by scanning the following QR code:



fazua.com/energy/app-connectivity

6 **PERFORMING a FIRMWARE UPDATE**



To update the firmware, connect the drive system to your computer. You will need a USB cable for this purpose*.

Depending on the model, the USB socket for connection is located on the control element or on the separate display (see chapter 18 “Control element and display illustrations” | 18.2 “Positions on the e-bike”).

Visit the FAZUA homepage for a detailed description of how to perform the firmware update. You can access the corresponding website directly by scanning the following QR code:



fazua.com/firmware

* The USB cable is not supplied.

7 TROUBLESHOOTING

1. If your e-bike or drive system does not function as desired, first check whether the fault can be rectified using the "Troubleshooting" overview table below.
2. If necessary, contact a FAZUA Certified Partner or visit the FAZUA service platform (<https://fazua.com/de/support>), if:
 - the error is not listed in the overview table,
 - the error is listed in the overview table, but it cannot be corrected in the way described here or you are unsure.

TROUBLESHOOTING" OVERVIEW TABLE	
Problem	possible Reason / Solution
The engine feels weaker than usual.	The drive system is brand new. → Wait until the drive system is "run in". The drive system needs a few miles to develop its full power
	It is very hot and the heat management of the battery and/or drive unit limits the performance.
	It is very cold and the battery (=lithium-ion battery) does not deliver the usual performance.
The upper LED on the control element/display lights up/ flashes red.	There is a connection error between the drive unit and battery. Dirt on the connectors or jammed cables may be preventing the connection. → Clean the connectors to be able to insert the battery properly.*
The upper LED on the control element/ display lights up/ flashes yellow.	There may be a bad connection between the speed sensor and the bottom bracket. → Check that the speed sensor and magnet are correctly located in their receptacle on the rear wheel. If you cannot find any faults, contact a FAZUA Certified Partner.
The white LEDs of the control element/ display flash.	Software update → After a new firmware update, the control element is updated automatically. In this case, please wait and do not switch off the control element until the LEDs stop flashing

* This applies only if your e-bike is equipped with a removable battery (See Chapter 23 "Function and model variants of the battery").

TROUBLESHOOTING" OVERVIEW TABLE	
Problem	possible Reason / Solution
The control element/display cannot be switched on.	<p>The battery is flat or has switched off due to a longer rest period (standstill).</p> <p>→ Try turning on the battery using the on/off button.</p> <p>→ Charge the battery if necessary.</p>
	<p>The interface between the battery and the drive unit may be dirty.</p> <p>→ Clean the interface between the battery and the drive unit.*</p>
The battery cannot be inserted or does not engage in the battery holder.	<p>The interface between the battery and the drive unit may be dirty. / It is possible that the engagement of the battery is obstructed by a cable, hydraulic line or Bowden cable.</p> <p>→ Clean the interface between the battery and the drive unit.</p> <p>→ Make sure that no cable prevents the battery from engaging.</p>
The pedal support suddenly fails during the ride.	<p>BMS protection function</p> <p>→ Shut down the drive system by pressing and holding the control switch down for 8 seconds. When the drive system is ready to be switched on again, the status indicator LED flashes green: Now you can restart your drive system as usual.</p>

8 DISPOSAL INFORMATION

According to the EU Directives for waste electrical and electronic equipment (Directive 2012/19/EU) and spent batteries (Directive 2006/66/EC), the relevant components must be collected separately and disposed of in an environmentally sound manner.

→ Before disposing of your e-bike, remove the battery and any other batteries installed on the e-bike as well as all components and controls that contain batteries.

8.1 Disposal of your e-bike

After you have removed all batteries, the e-bike is considered an old electrical appliance and must be recycled.

→ Find out from your city or municipal administration (municipality, district) about free collection points for old electrical appliances and/or collection points, via which the components or the e-bike can be recycled.

* This applies only if your e-bike is equipped with a removable battery (See Chapter 23 "Function and model variants of the battery").

- When disposing of the product, observe the requirements of the United States Environmental Protection Agency (www.epa.gov).
- If necessary, make sure to delete any personal data stored on the device before you return the electrical or electronic equipment to the collection point. This task is your responsibility.

8.2 Battery disposal

The drive system battery is a lithium-ion battery that must be disposed of as hazardous waste.

- Dispose of the battery of the drive system and any other batteries installed in the e-bike at a recycling center or a collection point in your town or municipality.
- If required, visit the website of call2recycle: www.call2recycle.org. You will find extensive content here on the subject of "Recycling batteries", as well as a search function for collection points in your area.

9 CONSUMER WARRANTY IN THE UNITED STATES

Porsche eBike Performance GmbH, warrants to the end customer (hereinafter referred to as "customer"), in accordance with the provisions set forth below, that the drive system integrated in the bicycle purchased by the customer, including the components of the drive system, (hereinafter collectively referred to as "product") will remain free of construction, material and manufacturing defects and be fully functional for a period of two years following delivery to you (warranty period).

However, in the event that a defect should occur, or if the drive system does not remain fully functional, the Porsche eBike Performance GmbH shall, at its own discretion, remedy the defect(s) at its own expense by either performing repairs or providing new or refurbished parts.

However, claims under this warranty shall only be deemed valid if:

- The product does not exhibit any damage or signs of wear caused by a form of use deviating from normal intended use or the specifications provided by Porsche eBike Performance GmbH in the user manual.
- The product does not exhibit any signs indicating that repairs or other procedures were performed by anyone not authorized by Porsche eBike Performance GmbH.
- The damage is not due to improper assembly or follow-up maintenance or lack of skill, competence or experience of the user or assembler.
- The product was assembled or serviced by an authorized Fazua dealer.
- The product has not been modified, neglected, used in competition, or for commercial purposes such as rental, courier, police, security, etc., misused or abused, involved in accidents or anything other than normal use.

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- There was no installation of components, parts, or accessories not originally intended for use with or compatible with Fazua Products.
- The serial number has not been removed or rendered illegible.
- Notice of the defect has been given within fourteen (14) days of the discovery of the defect.

Claims under this warranty require that,

- prior to returning the product, the customer contact either the dealer from whom the customer purchased the bicycle or Porsche eBike Performance GmbH, and that the customer gives the dealer or Porsche eBike Performance GmbH an opportunity to perform a fault analysis over the telephone within a period of eight days.
- the product is delivered or returned to Porsche eBike Performance GmbH.
- the original invoice containing the date of purchase is presented.
- the shipping is carried out by a carrier designated by Porsche eBike Performance GmbH. The customer may use a different carrier at his or her own expense.

In the event of resale, this warranty shall also apply within the aforementioned scope, and under the conditions stated above (including the requirement to provide proof of purchase) to any subsequent future owner of the Product. Each new owner assumes the warranty based on the time remaining from the original date of purchase. In consideration of the above warranties by Porsche eBike Performance GmbH, the buyer agrees to and accepts the following conditions:

- This warranty is subject to the law of the US, provided that mandatory consumer protection regulations in the country of the respective Customer are not in conflict therewith.
- That this warranty is in lieu of all other warranties, expressed or implied.
- That ALL WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY EXCLUDED AND/OR WAIVED.
- That this remedy is in lieu of all other remedies or claims for damages, consequential or otherwise, which the buyer may have against Porsche eBike Performance GmbH.
- Porsche eBike Performance GmbH shall have no liability for any loss or injury caused, in whole or in part, by its actions, omissions, or negligence, or for contingencies beyond its control.

10 SERVICE



Authorized specialists for repair and maintenance work can be found with the official Fazua service partners. Contact the Fazua service team or visit the Fazua service platform to find Fazua service partners for your region.