

Operating instructions



MBIQ-P

Compatible:

- TQ-HPR50

As of 11/2023

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1 Important safety instructions

Use the replaceable "tuning module" only for the purpose described in this manual. Otherwise, you may endanger yourself or damage parts of your e-bike.

You endanger yourself and others if you install or operate the replaceable equipment incorrectly, or if you fail to follow the safety instructions or warnings. Serious injury or significant property damage may result.

1.1 Signal words used

All safety and warning information in this manual has been clearly highlighted. The following symbols and signal words are used for warnings.

WARNING

Warns you of hazards that could result in death or serious injury if you ignore these instructions.

CAUTION

Warns you of hazards that may result in minor, usually reversible, injury to persons if you do not follow these instructions.

DANGER

Warns you of situations that may result in property damage and malfunctions during use if you do not follow these instructions.

IMPORTANT for your safety

Indicates safety-relevant descriptions and instructions.

1.2 Signs and symbols used

Mandatory symbols used in this operating manual:



Observe operating instructions



Wear protective goggles



Wear protective gloves

Other symbols used in this manual:



Tip

Reference to useful information when handling the interchangeable equipment.



Cross-references

Cross-references in this operating manual or references to other applicable documents are marked with this symbol or in italics.



Request to make entries

This symbol is always used when the operator or the user is asked to enter or document the results obtained in the operating instructions.

► Call to action

Individual requests for action, e.g. in safety and warning instructions, are marked with this symbol.

- a) **Action step**
- b) **Action step**
- c) ...

Step-by-step instructions are listed in lowercase letters according to the order of action.

✓ Intermediate or final result of an action or series of actions

The information makes it easier to determine whether the step-by-step procedure has been successfully completed.

■ Bullets

indicate lists in descriptive and instructive parts of the operating instructions.

2 Comply with the requirements for safe use

To use the tuning module in your Pedelec mountain bike safely, it is essential that you first read and understand this manual completely.

This operating manual

- informs you about the intended use,
- the installation and usage requirements,
- important restrictions on use,
- Obligations of the owner and the user,
- Warranty and liability conditions and
- guides you step by step to correct installation and safe use and
- warns you of potentially unsafe or dangerous situations and uses with conspicuous safety and warning notices.

IMPORTANT

Know and observe all contents of the operating instructions

- ▶ Please take the time to read this manual carefully before you begin installing the tuning module.
- ▶ Keep this manual in a safe place yet within easy reach so that you can access important and safety-relevant information for use at any time, even after installation.
- ▶ Please also make this manual available to any other person who is permitted to ride your tuned Pedelec mountain bike.
- ▶ Ensure that every person who is permitted to ride your tuned Pedelec mountain bike has read and understood this manual before each use.
- ▶ Before you allow other people to use your tuned Pedelec mountain bike, instruct the user in the safe use of the tuned Pedelec mountain bike using this manual.
- ▶ Be sure to pass this manual on to the future owner if you ever want to sell the tuning module or your tuned Pedelec mountain bike.

2.1 Know the intended use

The tuning module shifts the switch-off threshold of the motor support of your Pedelec mountain bike.

By installing the tuning module, higher speeds can be achieved with electric motor support.

However, proper use also includes strict compliance with all of the following

- Restrictions on use and
- Installation requirements and the
- Obligations of the owner and the user.

Intended use of the “interchangeable equipment”

According to European Union product regulations, the tuning module is placed on the market as “interchangeable equipment” within the meaning of Directive 2006/42/EC on machinery, Article 2 b).

Know the meaning

The tuned Pedelec mountain bike remains even after the installation of the Tuning modules within the scope of the European Machinery Directive. Provided the intended use is strictly observed, a “non-essential modification” of the “machine” can be assumed.

This means that the applicable safety requirements of the Pedelec mountain bike “machine” were examined by the manufacturer of the tuning module within a risk assessment and were assessed as still being complied with even with the use of the tuning module.

Safety and protective devices

The safety and protective features of the Pedelec mountain bike remain unaffected by the installation of the tuning module.

2.2 Know and comply with usage restrictions

IMPORTANT Strictly adhere to usage restrictions

Installing the tuning module in your Pedelec mountain bike is subject to restrictions on use.

The “machine” of the electric-assisted bicycle is being modified. While there is no increase in performance, the achievable speed of more than 25 km/h means that

- the use on public roads or public paths is no longer permitted,
- the use without appropriate protective clothing and helmet can release accident insurance companies from their obligation to pay benefits after a fall resulting in injuries,
- the permitted group of users, taking into account physical and mental suitability, must be further restricted by the owner of the vehicle before the Pedelec mountain bike is handed over to other persons,
- the owner of the tuned Pedelec must always prevent misuse and misuse, even by other persons, and
- necessary maintenance and inspection intervals according to the original manufacturer's specifications and usual or manufacturer-specified battery charging cycles can be significantly shortened.
- Due to the operating principle, the displayed speed may not correspond to the actual speed when driving at speeds greater than 25 km/h. Therefore, the total mileage displayed by your system will not correspond to the actual distance traveled when driving above this speed. Diagnostics/calculated values based on this will follow accordingly!

2.2.1 Do not use in public areas

Pedelecs for use on public roads or public paths with a permitted speed of > 25 km/h are subject in Europe to Regulation 168/2013/EU, the Vehicle Regulation.

Further approval requirements in non-European countries may apply.

Purchasing the tuning module does not grant any approval for operation in public areas. Therefore, participation in public road traffic and driving on public roads is prohibited after installing the tuning module.

This also applies despite the "non-significant change" to the "machine" Pedelec mountain bike recognized by the tuning module manufacturer when used as intended.

IMPORTANT

Prevent misuse and abuse

Due to the higher speeds with electric motor support, you lose the permission to use the tuned Pedelec on public roads or public paths without further legal authorization.

2.2.2 Use only with protective clothing and helmet

After installing the tuning module, a Pedelec mountain bike can reach speeds of up to 45 km/h with electric motor support.

WARNING

Reduce increased risk of accidents

Reaching such speeds increases the risk of a fall even with suitable vehicle strength and design.

Using the tuned Pedelec mountain bike without appropriate protective clothing and a helmet can release accident insurance companies from their obligation to pay benefits in the event of a fall resulting in injuries.

- ▶ Always wear suitable protective clothing and a helmet while using your tuned Pedelec mountain bike to protect yourself from increased risk of accidents.
- ▶ Insist that every user of your tuned Pedelec mountain bike always wears suitable protective clothing and a helmet while using it.

2.2.3 Restrict user group

After installing the tuning module, a Pedelec mountain bike can reach speeds of up to 45 km/h with electric motor support. Reaching such speeds may result in the permissible group of users determined by the pedelec manufacturer having to be further restricted. Such a restriction must be determined by the owner of the tuned Pedelec, taking into account the physical and mental suitability of the persons to whom the tuned Pedelec is made available for use.

IMPORTANT

Also consider the terrain to be driven on

An important factor in determining the permitted users should also be the consideration of the terrain to be traveled.

- ▶ Clearly state permission for use before handing it over to other people.
- ▶ Always lock your tuned Pedelec mountain bike when you park it.

This will prevent misuse and abuse by other people.

2.2.4 Prevent abuse and misuse

IMPORTANT

Use on public roads constitutes misuse

Due to the higher speeds with electric motor support, you lose the permission to use the tuned Pedelec on public roads or public paths without further legal authorization.

- ▶ Only use your tuned Pedelec mountain bike on private, secured property or race tracks.
- ▶ Never drive on public roads or areas that you have not previously been able to safely block off entry by other people.
- ▶ Also prevent anyone else from using your tuned Pedelec mountain bike on public roads or public paths.
- ▶ Always lock your tuned Pedelec mountain bike when you park it.

This will prevent misuse and abuse, even by other people.

2.2.5 Observe shortened maintenance and inspection intervals

Due to the higher speeds with electric motor support, higher loads and forces will act on all vehicle parts.

Reaching higher speeds increases the wear of all vehicle components, especially the braking system and all parts of the drive system, even if the vehicle is of suitable strength and design.

IMPORTANT

Define and implement shortened inspection and maintenance cycles

Shortened inspection and maintenance cycles must be determined independently by the owner of the tuned pedelec, taking into account the conditions of use.

- ▶ Before each use of your tuned Pedelec mountain bike, carry out a thorough inspection of the vehicle.
- ▶ Be sure to check the condition and function
 - the brakes and their functional components,
 - of the vehicle frame,
 - the steering and its functional components,
 - of the drive and its functional components as well as
 - of the saddle and its functional components.
- ▶ Please also observe all inspections not listed here that are prescribed by the manufacturer of your e-bike before each use. This list does not replace the e-bike manufacturer's original operating instructions.
- ▶ Specify further inspection and maintenance cycles according to the manufacturer's instructions for your Pedelec mountain bike.
- ▶ Shorten these according to your operating conditions.
- ▶ If necessary, coordinate this with your specialist company that will carry out the inspection and maintenance work.

This ensures that the shortened inspection and maintenance intervals are adhered to.

2.2.6 Note shortened battery charging cycles

The "machine" of the electric-assisted bicycle is being modified. While there is no increase in performance, the achievable speed of more than 25 km/h means that the maximum possible power is drawn from the battery regularly and over extended periods.

This will result in the available battery capacity being discharged earlier than you are used to with your Pedelec or than the manufacturer of the Pedelec mountain bike has specified in the operating instructions.

- ▶ Please take this into account when planning your trips.

2.3 Know and comply with installation requirements

Meet requirements regarding strength and design as well as the drive system

For safe use of the tuning module in your Pedelec mountain bike, your vehicle must also meet certain requirements.

City or tracking bikes are generally not equippable

City or tracking bikes often do not meet the requirements for strength and construction, or the requirements cannot be checked due to a lack of manufacturer information.

IMPORTANT

Prevent abuse and misuse

Furthermore, it cannot be assumed that tuned city or trekking bikes are actually only used on private, secured properties or race tracks.

Abuse and misuse contrary to the provisions under point 2. The intended use and restrictions mentioned would be feared.

For these reasons, the installation of the tuning module is only permitted for Pedelec mountain bikes that demonstrably meet the following requirements according to their manufacturer's specifications.

2.3.1 Check and confirm strength and design requirements

Requirements for strength and design are regulated by EN 15194 and EN ISO 4210-2 and must be confirmed as applied by the manufacturer of your Pedelec mountain bike.

! WARNING

Prevent increased accident risks due to insufficient strength

Due to the higher speeds with electric motor support, higher loads and forces will act on all vehicle parts.

Increased accident risks due to part breakage and failure of the entire vehicle can only be largely ruled out for vehicles that are demonstrably designed and built in accordance with both product standards.

- ▶ Check the EC declaration of conformity from the manufacturer of your Pedelec mountain bike.
- ▶ Only install the tuning module in your Pedelec mountain bike if the manufacturer of your Pedelec mountain bike states that the two product standards EN 15194 and EN ISO 4210-2 are applied.

This ensures that the necessary requirements for strength and construction are met.



Normative requirements met?

- ▶ Before installation, confirm the references in the EC Declaration of Conformity of the manufacturer of your Pedelec mountain bike:
 - Does the EC declaration of conformity demonstrably apply to the vehicle to be equipped?
 - EN 15194 mentioned in the declaration of conformity?
 - EN ISO 4210-2 mentioned in the declaration of conformity?
- ✓ Only if both standards are mentioned as being applied can it be assumed that the requirements for strength and design are met.
 - ▶ Never use the tuning module in vehicles for which you cannot clearly determine these requirements and prove them with the EC declaration of conformity from the Pedelec manufacturer.

2.3.2 Check and confirm drive system requirements

DANGER

Prevent damage and malfunctions

The tuning module is designed for specific drive systems. Use in vehicles with unsuitable drive systems will result in malfunctions or damage to the pedelec or the tuning module.

- ▶ Check the equipment of your Pedelec mountain bike.
- ▶ Only install the tuning module in your Pedelec mountain bike if you can determine that your Pedelec equipment is compatible with the drive systems listed below.

Drive system:

TQ-HPR50



Requirements for the drive system and display met?

- ▶ Confirm the equipment of your Pedelec mountain bike before installation.

The Pedelec mountain bike to be equipped is equipped with a

- the above-mentioned drive systems and
- equipped with the above-mentioned display type suitable for the drive system?

- ✓ Only if you can confirm both requirements can you assume that the application will work and be safe.
 - ▶ Never use the tuning module in vehicles for which you cannot clearly determine and prove that both requirements are met.

This operating manual describes a product for use with the described drive system. The MBIQ-P module can be used regardless of the speed sensor used in the system.

Tuning:	Variant:	Picture:	Description:
MBIQ-P	-		Module for integration into the current path of the existing speed sensor.

2.4 Owner's obligation

Each user must be instructed by the owner of the tuned Pedelec mountain bike using this manual and be informed about the special restrictions of use and increased risks due to the increased speed.

The owner of the tuned Pedelec mountain bike ensures that

- all requirements for safe use
- and for the intended use and
- This operating manual is always readily available to every user.

The owner of the tuned Pedelec mountain bike undertakes to

to make the tuned Pedelec mountain bike available only to persons who

- have read and understood these operating instructions and
- have been instructed in the safe and proper use of the tuned Pedelec mountain bike.

2.5 Obligation of each user

Each user is obliged

- to read and follow these operating instructions completely and
- to follow all safety and warning instructions without exception,
- to use the tuned Pedelec mountain bike only in technically perfect condition and as intended, with due regard for safety and dangers and in compliance with this operating manual and
- Any damage or malfunctions that may affect safety must be rectified immediately, or if necessary, have them rectified.

3 Warranty and liability

Warranty and liability of the manufacturer of the tuning module

Warranty and liability claims are excluded by the manufacturer of the tuning module for direct or indirect personal injury or property damage if they are due to one or more of the following causes:

- Increased wear or breakage of components of the Pedelec mountain bike, especially parts of the braking system and/or drive,
- Failure to follow these operating instructions or
- improper use of the tuning module or the Pedelec mountain bike with integrated tuning module or
- Failure to observe the operating restrictions in this manual or
- Use or operation with operating conditions that do not comply with these operating instructions or
- improper installation, commissioning, maintenance or repair not specified in these operating instructions or
- after unauthorized structural, hardware or software changes to the tuning module itself or to the Pedelec approved for the tuning module or its equipment.

IMPORTANT

The installation and operation of the tuning module is at your own risk

The manufacturer of the tuning module assumes no liability for damages related to the operation or installation of the tuning module.

The technical and legal consequences mentioned may be incomplete

In addition to the technical and legal consequences mentioned in these operating instructions, further requirements may apply depending on the place of operation.

- ▶ Before installing the device, inform yourself about possible further technical and legal consequences and requirements that you must comply with for the operation of the tuned Pedelec mountain bike.

Guarantee, warranty and liability by the manufacturer Pedelec mountain bikes

Due to the higher speeds with electric motor support, higher loads and forces will act on all vehicle parts.

Reaching higher speeds increases the wear of all vehicle components, especially the braking system and all parts of the drive system, even if the vehicle is of suitable strength and design.

For this reason, liability, warranty and guarantee claims against the dealer or manufacturer of the Pedelec mountain bike will expire or be severely limited with the use of the tuning module.

3.1 Personal injury – Further exclusions to be considered

After installing the tuning module, a Pedelec mountain bike can reach speeds of up to 45 km/h with electric motor support.

WARNING Reduce increased hazard risks

Reaching such speeds increases the risk of a fall and resulting injury to persons, even if the vehicle is of suitable strength and design.

Using the tuned Pedelec mountain bike without appropriate protective clothing and a helmet can release accident insurance companies from their obligation to pay benefits in the event of a fall resulting in injuries, or can significantly reduce their liability.

- ▶ Always wear suitable protective clothing and a helmet while using your tuned Pedelec mountain bike to protect yourself from increased risk of accidents.
- ▶ Insist that every user of your tuned Pedelec mountain bike always wears suitable protective clothing and a helmet for the entire duration of use.

Reduce accident risk financially

- ▶ Precisely determine your operating conditions and the user groups to be insured.
- ▶ Take out insurance for your tuned Pedelec mountain bike that is appropriate to the conditions of use and the user group.

This helps you prevent financial risks from injuries caused by falls.

3.2 Property damage – Further exclusions of liability to be considered

After installing the tuning module, a Pedelec mountain bike can reach speeds of up to 45 km/h with electric motor support.

Damage caused by the operation of a tuned pedelec may no longer be covered by private liability insurance. It is therefore advisable to take out a specifically designed insurance policy.

DANGER Reduce increased liability risks

Reaching such speeds increases the risk of causing property damage.

Monetarily reduce the risk of property damage

- ▶ Precisely determine your operating conditions and the user groups to be insured.
- ▶ Take out liability insurance for the use of your tuned Pedelec mountain bike that is appropriate to the conditions of use and the user group.

This way you can prevent monetary risks in case of damage to other people's property while using the tuned Pedelec mountain bike.

4 Functional description

After installation, the tuning module offers the following operating modes:

- Tuning permanently activated (loop closed)
- Tuning according to switch-on condition (loop open)



Setting options

All settings can optionally be made via the external cable loop.

Protected electronics

The electronics are encapsulated in the housing and are therefore safely protected from moisture.

Safety and protective devices

The safety and protective features of the Pedelec mountain bike remain unaffected by the installation of the tuning module.

**When delivered, the device is in the mode:
"Tuning permanently active"**

5 Technical data and connection values

Dimensions and weight	
Housing dimensions:	<ul style="list-style-type: none"> • approx. 25 mm x 8 mm x 8 mm
Cable length:	<ul style="list-style-type: none"> • approx. 100 mm
Weight:	<ul style="list-style-type: none"> • approx. 5 g

Electrical data	
Supply voltage:	No separate power supply required
Protection class of the housing:	IPX4 according to EN 60529
Display	Manipulated values from approx. 22 km/h (Display remains < 25km/h up to v-max)

6 Install

IMPORTANT

Before you start installation

- ▶ Confirm that you have carefully and completely read and understood all previous chapters of this operating manual before you begin installation.

This is the only way to ensure that you use the interchangeable equipment "Tuning Module" exclusively for the purpose described in these instructions and as intended.



Have you read and understood all previous chapters and their subsections?

- *1 Important safety instructions*
- *2 Comply with the requirements for safe use*
- *2.1 Know the intended use*
- *2.2 Know and comply with usage restrictions*
- *2.3 Know and comply with installation requirements*
- *3 Warranty and liability*
- *4 Functional description*
- *5 Technical data and connection values*

- ▶ Do not begin installation until you have read and understood all chapters and subsections.

6.1 Know installation example

In this operating manual, the installation can only be shown using an example vehicle and its equipment.

The installation described below and all associated instructions refer to the installation example:

TQ-HPR50

6.2 Know the tools you need

- Hexagon socket size 4



Additional tools may be necessary

Depending on the vehicle model, the engine cover can also be

- Torx or
- another Allen key.

Depending on the installation situation, it may also be necessary to dismantle the crank.

- In such a case, a suitable crank puller is required.

6.3 Remove engine protection cover

⚠ WARNING Prevent unexpected start-up

If the drive starts unexpectedly, hands and fingers can be sheared, crushed or pulled in.

- ▶ Turn off the Pedelec mountain bike and remove the battery.

This prevents any electric motor-assisted movement.

Parts may have sharp edges, protective particles may spray out

- ▶ Wear protective gloves and goggles when removing the engine cover.



illustration: Engine cover

Remove engine protection cover

- Ensure that your Pedelec mountain bike stands firmly and securely.
- Remove the battery.
- Loosen the two marked screws on the cover on the bottom of the motor.

✓ The engine cover/splash guard can now be removed.



illustration2: Search for cable connection

Find the speed sensor cable/connector

The speed sensor cable is usually routed through the frame, on the side where the brake disc is located.

Find the connector and disconnect it by pulling on the connector.

- The marking shows the motor-side bushing. (Image right)



6.4 Connect tuning module

- a) Insert the end of the speed sensor into the socket (2) of the MBIQ-P.
- b) The other end of the cable with the plug (1) goes into the socket on the motor side.

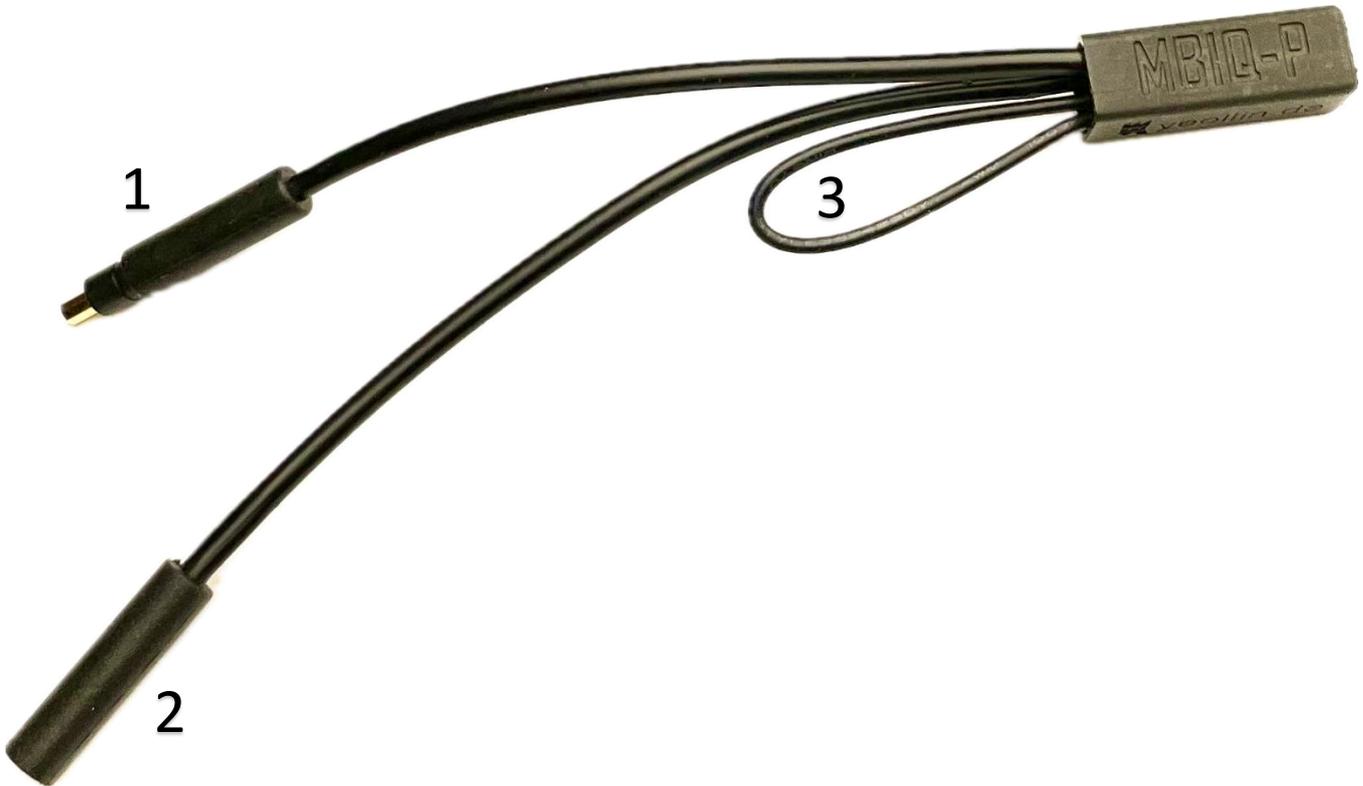


illustration3: Connect tuning module

Check the plug connection

- a) Push the plug into the socket as far as it will go so that it is secured and cannot come out.



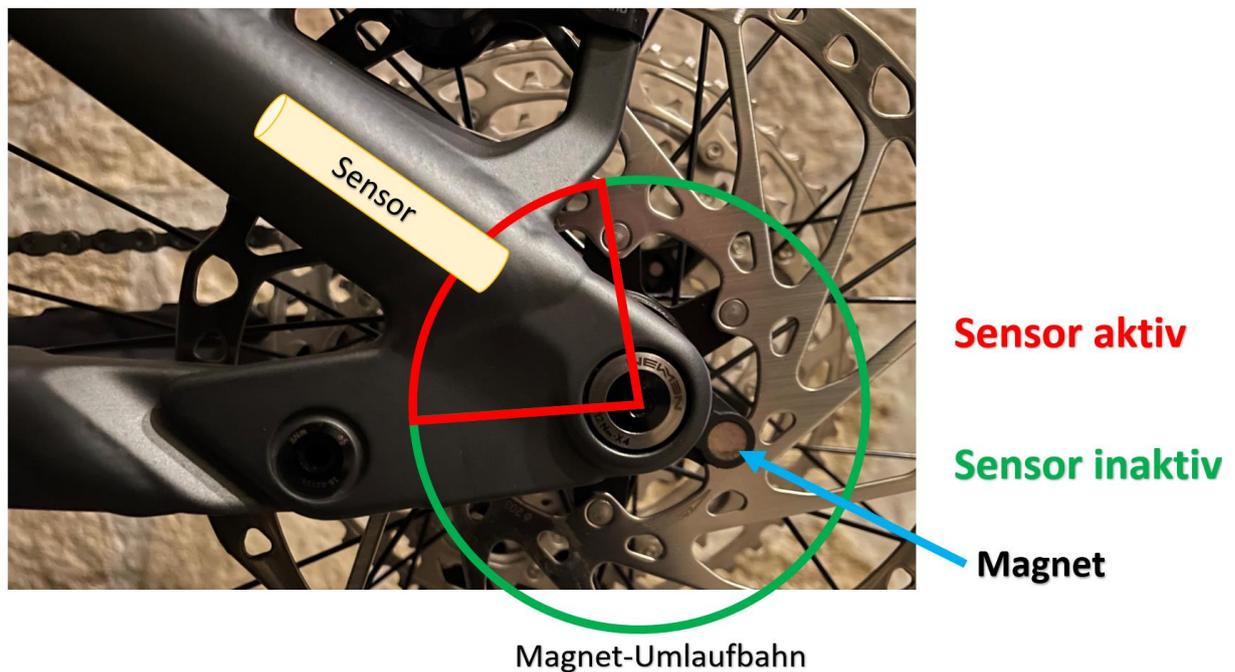
Plugging correctly

A little pressure is required to ensure the connectors fit together flush!

Cable loop (3)

- ▶ Tuning is permanently active as long as the cable loop (3) is not cut. If the loop is interrupted, tuning is deactivated and can be activated individually before each trip by positioning the magnet (which moves along the brake disc) in front of the sensor before switching on the system. If the system is switched on in this way and the magnet remains in this state for at least 4 seconds, tuning is active for that trip.

The image shows an example of the approximate trigger radius of the magnet on the sensor. The magnet must be positioned within this range before starting to activate the tuning.



To deactivate it is sufficient to shut down the system once and restart it without any power-on condition!

6.5 Complete installation

DANGER

Avoid crushing cables!

When dismantling, make sure that no signal cables get caught between screw connections.

- ▶ Check the cable routing before installation.

Place tuning module

- a) Find a suitable place to install the module below the engine compartment.
- b) Place the tuning module in a suitable location.

Route the cables so that the motor can be reinstalled without hindrance.

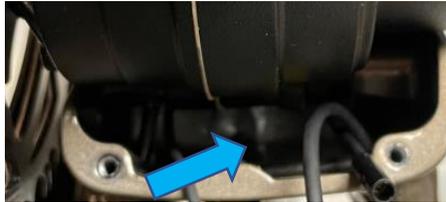


illustration4: Connect tuning module



No uniform installation location can be defined

Due to the large number of different drive systems and covers, it is not possible to define a uniform installation location.

It is often possible to place the module directly in the connection area of the motor.

It is also possible to install it in the frame tube, although this usually requires the motor to be removed from the frame.



illustration5: Engine protection cover reinstalled

Reinstall the engine protection cover

- a) Reinstall the engine guard as before. Observe the specified tightening torques.
Consult your dealer. If necessary, obtain new screws with appropriate locking compound.
- b) Make sure that no cables rub against it or are even crushed.
- c) If necessary, screw the motor protection cover back on.

7 Commissioning

IMPORTANT

Initial commissioning

Before using the module for the first time, it is recommended to check that it is functioning correctly.

- ▶ Ensure a secure footing
- ▶ Reinsert the battery into the system and start it.

If a display is available:

- ▶ If the rear wheel is now set in motion (without pedaling!), a speed display should appear on the display.



If the display remains at 0.0:

The module wiring is faulty.



If this is the case:

- ▶ Check your wiring.
- ▶ To do this, follow the instructions in chapter 6 *Install* this operating manual.
- ▶ Then repeat the setup.

The module can only function properly if a speedometer is present. Do not start a journey beforehand. Otherwise, your system will diagnose an error.

8 Check before each use

Due to the higher speeds with electric motor support, higher loads and forces will act on all vehicle parts.

Reaching higher speeds increases the wear of all vehicle components, especially the braking system and all parts of the drive system, even if the vehicle is of suitable strength and design.

IMPORTANT

Before each use

- ▶ Before each use of your tuned Pedelec mountain bike, carry out a thorough inspection of the vehicle.
- ▶ Be sure to check the condition and function
 - the brakes and their functional components,
 - of the vehicle frame,
 - the steering and its functional components,
 - of the drive and its functional components as well as
 - of the saddle and its functional components.
- ▶ Please also observe all inspections not listed here that are prescribed by the manufacturer of your e-bike before each use. This list does not replace the e-bike manufacturer's original operating instructions.
- ▶ Only use your tuned Pedelec mountain bike if you can determine and confirm that it is in perfect condition.

9 Riding the tuned Pedelec mountain bike

To use the tuning module in your Pedelec mountain bike safely, it is essential that you first read and understand this manual completely.

This operating manual

- informs you about the intended use,
- important restrictions on use,
- Obligations of the owner and the user,
- Warranty and liability conditions and
- warns you of potentially unsafe or dangerous situations and uses with conspicuous safety and warning notices.

IMPORTANT

Know and observe all contents of the operating instructions

- ▶ Please take the time to read this manual carefully before setting off on your tuned Pedelec mountain bike.
- ▶ Please also make this manual available to any other person who is permitted to ride your tuned Pedelec mountain bike.
- ▶ Ensure that every person who is permitted to ride your tuned Pedelec mountain bike has read and understood this manual before each use.
- ▶ Before you allow other people to use your tuned Pedelec mountain bike, instruct the user in the safe use of the tuned Pedelec mountain bike using this manual.



Intended use and restrictions of use must be strictly observed

- ▶ Strictly adhere to the intended use and restrictions of use.
- ▶ Please pay particular attention to the points
 - *2.1 Know the intended uses* as well as
 - *2.2 Know and comply with usage restrictions* and its subsections in this operating manual.

10 Dispose



Know the rules and regulations for disposal

- ▶ In any case, comply with the regional and internal regulations for waste disposal.
- ▶ If in doubt, ask your local waste disposal officer where you can properly dispose of electronic waste.



Disposal instructions

- ▶ Never throw electronic components into household waste.
- ▶ Dispose of electronic waste only in designated collection containers provided by a waste disposal company or your local authority.

The device must not be disposed of with household waste. This device is labeled in accordance with European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE). This directive sets the framework for the EU-wide return and recycling of old devices. Please use the return and collection systems available to you to return your old device.

You can also return the tuning kit to your dealer after use.

II EC/EU declaration of conformity

in the sense of

EC Machinery Directive 2006/42/EC, Annex II 1 A for interchangeable equipment according to Articles 1 b) and 2 b) and EU official L 157/24 from June 9, 2006

EMC Directive 2014/30/EU, EU official L 96/79 of February 26, 2014

RoHS Directive 2011/65/EU, EU official L 174/88 from July 1, 2011

We, as manufacturer and under our sole responsibility, hereby declare that the interchangeable equipment mentioned below, in its design and construction as well as in the version placed on the market by us, complies with the relevant provisions and harmonization legislation of the above-mentioned directives.

Product name Tuning module, TQ-HPR50 compatible

Article number MB1Q-P / 0767523734033

Date of manufacture from 11/2023

Interchangeable equipment exclusively for Pedelec mountain bikes

with the standards stated in the Pedelec manufacturer's declaration of conformity EN 15194 EN ISO 4210-2 (Mountain bikes)

Manufacturer and address



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Markus Bender
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Documentation representative Markus Bender

Applied harmonized standards, in particular: EN ISO 12100:2010
Risk assessment and risk reduction

EN 15194:2017
Bicycles - electric motor-assisted bicycles - EPAC

EN ISO 4210-2:2015
Bicycles - Safety requirements for bicycles Part 2: Requirements for city and trekking bicycles, youth bicycles, off-road bicycles (mountain bikes) and racing bicycles

Further regulations applied: UNECE Regulation No. 78
Brake requirements

Place and date of exhibition: Wettenberg 29.11.2023



Legally binding signature, Markus Bender

