

# ***MATE.***

**OWNER'S MANUAL**

**ORIGINAL INSTRUCTIONS**

**READ BEFORE YOU RIDE**



# CONGRATULATIONS

You've just become an official owner of the MATE X eBike. We sincerely welcome you into the ever-growing worldwide MATE tribe.

We kindly request that you carefully read this manual from beginning to end and meticulously apply our instructions and suggestions in assembly of your MATE. Our safety warnings are especially key before you hop on your MATE.

Please also scan the QR code below to directly access your MATE Assistant. Its aim is to provide you with an in-depth MATE X experience that can be easily accessed through your mobile device. We also suggest that you register your new MATE here.

With love,  
the MATE team



## MODELS

MATE X 250 / 250W / 48V / 17.5AH / HYDRAULIC / MBK-MX-0250BF17CH-XXX  
MATE X 250 / 250W / 48V / 14.5AH / HYDRAULIC / MBK-MX-0250BF14CH-XXX  
MATE X 750 / 750W / 48V / 17.5AH / HYDRAULIC / MBK-MX-750BF17CH-XXX  
MATE X 750 / 750W / 48V / 14.5AH / HYDRAULIC / MBK-MX-750BF14CH-XXX

# FRAME NUMBER

Please take a moment to record your MATE's frame number located at the underside of the bottom bracket (encircled on the image).

Write down this number here in the manual in case your MATE is lost or stolen.

**It starts with WMAB followed by a numerical sequence that ends with a letter representing production year.**

In addition, it is wise to register these numbers with your insurance company and your local police station in the event of theft or loss. Hold onto your sales receipt/invoice for further proof of ownership.

Owner's name \_\_\_\_\_

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

Model and color \_\_\_\_\_

Date of purchase \_\_\_\_\_



# TABLE OF CONTENTS

Foreword	2	Setting up MATE for your perfect fit	43
Frame number	4	Saddle	43
Table of Contents	6	Handlebar	44
Safety First	8	Suspension and Brakes	46
Inside the MATE box	13	Gears and Pedal-Assist	48
Getting to know your MATE	14	Before you ride – checklist	50
Assembling your MATE for the first time	16	Maintenance	52
The Computer Display	22	Chain wear, Seatpost	52
How to operate your Mate	24	Tire pressure	52
Folding your MATE	26	Hydraulic Brakes	54
Unfolding your MATE	27	Replacement Parts	56
MATE specifications	28	General Tips	57
Battery	34	Warranty	58
Charging	36	Troubleshooting	60
Usage	40	Certification	64

# SAFETY FIRST

If you are unfamiliar with any aspect of the information included in this manual, it is recommended that you take your MATE and this manual to a local bike shop for inspection, assembly and instructions.

- It is extremely important that you follow the safety guidelines contained in this manual in order to ensure maximum safety for you as well as maximum durability of your MATE.
- **WARNING:** Before you ride your MATE for the first time, please be absolutely sure that it has been correctly assembled. You will find step by step instructions in this manual. For further clarification, you can also visit our helpdesk at [helpdesk.mate.bike](https://helpdesk.mate.bike). But if for any reason you are not completely certain, please bring it to your nearest bicycle shop.
- **WARNING:** Key assembly steps that must be properly completed with absolute certainty (to include secure fastening) are pedals, saddle height, handlebar (both rotation and height) and wheels.
- **WARNING:** Please ensure all safety latches, including quick releases and rings, are locked in place and snug without any movement.
- **WARNING:** Please ensure all bolts (including the front/rear wheels, saddle bolt and brake rotors) are properly tightened. When securely tightening handlebar bolts, be sure that the space between handlebar stem and top cap (exposing handlebar) is of even width on both sides of (the handlebar. Failure to do this can lead to stripped bolts, or handlebar coming loose. Certain components must be tightened to exact specifications using a torque wrench for safety assurance. Fixed front wheel axle nut: 28-32Nm, Fixed rear wheel axle nut: 30-35Nm, Handlebar bolts: 6-8Nm, Handlebar stem bolt: 13-15Nm, Bar end bolts: 4-5Nm, Saddle bolt: 22Nm.
- If you are unfamiliar with cycling, we suggest that you take a cycling course that includes safe riding.
- Test your brakes prior to using the MATE every time. In wet or icy conditions, use extra caution.
- Frequently check your tire pressures. They should be pumped to 2.0 bar (30 psi).
- Low tire pressures can result in damage to the tires and rims. It can shorten the lifespan of your MATE as well as cut your ride short if you suffer from a flat tire. It can also compromise the handling of your MATE which can make it more difficult to control.

- We recommend that you always wear a helmet when riding any MATE.
- Please observe all traffic regulations and other applicable laws, including any lighting laws.
- Don't drink and ride. Even a small amount of alcohol can impair your judgment, lowering your ability to remain safe on your MATE.
- Weather and nighttime operation can be tricky in inclement, icy or snowy weather and at night. Do take necessary precautions.
- Don't lend your MATE to anyone who is unfamiliar with it. If you choose to lend your MATE to anyone, make sure they have also read and fully understand this owner's manual.
- MATEs are not toys. All riders must be at least 16 years old.
- Minimum leg length allowance allows for no less than one inch of clearance between (1) the top tube of the bicycle and the ground plane and (2) the crotch measurement of the rider.
- All MATEs are meant to be ridden by a single person. Total recommended weight of rider, including all items such as backpack, is 150 kg (330 lbs) for the MATE X model.
- Your MATE is intended for riding on both street and light off-road. It is not recommended to be used on other surfaces as it can be dangerous and lead to an accident.
- It is advisable to be extremely cautious when riding in traffic. Cars are not used to the speed at which a MATE can travel, as compared to a regular bike.
- Since it is impossible to anticipate every situation or condition which can occur while on the MATE, this manual makes no representation about the safe use of the MATE under all conditions. There are risks associated with the use of any transportation vehicle like a MATE. These risks cannot be predicted or avoided, hence they remain the sole responsibility of the rider.
- When you need to replace the battery, please either dispose of it properly or send it back to us or your local bike shop to ensure that it is properly recycled.

**WARNING:** Do NOT take apart OR repair parts by yourself as this can compromise its safety and will void the warranty. Please go to your local bike shop that has experience with eBikes. If In doubt, please contact [hello@mate.bike](mailto:hello@mate.bike)

# SAFETY FIRST

## LEGAL PRINCIPLES

### US AND CANADA: FEDERAL LEGISLATION OF E-BIKES

Electric bikes such as MATE bikes are generally accepted and legal if they meet certain standards in every state in the US and every province in Canada.

In the United States under current federal law, an e-bike is not classified as a motor vehicle if it has an electric motor with a power output of 750 W or less and a maximum assisted speed of 20 mph. Individual states within the US have their own laws that also apply to e-bikes, and these laws vary significantly depending on the state and are changing often as e-bikes become more popular. They can cover a wide range of issues depending on the state, such as age restrictions, helmet use, driver's license requirements, and maximum power. You should become familiar with the laws in a particular state before using your MATE in that area.

In Canada under current federal law, an e-bike such as a MATE does not require a license to operate if it is a pedal-assist bike (or pedelec) with an electric motor having a power output of 500 W or less and a maximum assisted speed of 32 km/h. MATE bike riders must also wear a helmet while riding. Some provinces within Canada have their own laws that also apply to e-bikes. They can cover a wide range of issues depending on the province, such as age restrictions, helmet use, and vehicle license requirements. You should become familiar with the laws in a particular province before using your MATE in that area.

In both the US and Canada, the laws relating to e-bikes have been changing and may continue to do so. MATE.BIKE recommends that you keep informed as to the most current state of the law in your particular area before using your MATE.

### EU REGULATION

Within most EU countries, the MATE models are configured with: i) a maximum nominal power output of 250 W, ii) that only assist the rider when pedaling, iii) no throttle function – save for the walking assist function of maximum 6 km/h, iv) only providing

assistance to a maximum top speed of 25 km/h; are categorized as a “powered cycle” pursuant to the Machinery Directive 2006/42 EC. However, the specific regulation pertaining to powered cycles, other electric bikes and MATEs vary from country to country. Therefore, in EU countries the various MATEs are considered a bicycle, electric bicycle, moped, (speed) pedelec, motorbike or another separate class of transportation depending on the country, MATE model and your specific configuration.

Like all other bikes, each specific transportation category demands specific requirements and subjects your MATE to certain regulations depending on the specific MATE model and its specifications. Accordingly, the regulations pertaining to a MATE will vary from country to country (and from state to state, as the case may be), so please familiarize yourself with the specific regulations pertaining to your intended riding territory. The specific regulations may include (but are not limited to): obligation to wear a certain approved helmet, valid driver's license, speed limitations, age restriction, riding regulation (e.g. the use/non-use of cycle paths), limitations on bike weight and dimensions and compulsory insurance etc. In some cases, the legal classification of your MATE may restrict the use to private property.

**NOTE:** You should always familiarize yourself with the rules and regulations that apply to e-bikes and your specific MATE in your intended riding area. If you are uncertain of the rules, please contact the local motor vehicles authorities.

**Please note that you are solely responsible for the ownership and operation of your MATE in compliance with all applicable laws and regulations.**

If you have any further questions about the operation of your MATE, please consult your local e-bike shop or contact [hello@mate.bike](mailto:hello@mate.bike) – or check out the FAQs section on our website [www.mate.bike](http://www.mate.bike)





# INSIDE THE MATE BOX

BEFORE you open the carton packaging, please check to see if the box is damaged in any way that can compromise its contents. If you suspect its contents may be damaged, please contact your local delivery service right away to file a claim. This is key in case you need a full MATE or part replacement due to damage that has occurred during delivery.

Once you've confirmed that your MATE box is in good condition, then it's time to open it. Inside you will find the following items:

- Suspension bike frame/fork
- Front wheel
- Rear wheel with built-in hub motor
- Handlebar and handlebar stem
- Gears/chain
- Brakes
- Saddle and seatpost
- Left/right pedals
- Controller unit, inside frame
- Battery
- Battery keys
- Battery charger
- Wheel reflectors



For component manuals, please scan the QR-code and view online.

**IMPORTANT:** If you noticed that your MATE box was damaged in such a way that may have compromised its contents (damaged or lost items/components), we kindly ask that you contact your local delivery service right away to file a claim. This is key in case you need a full MATE or part replacement due to damage/loss that has occurred during delivery. Once the claim is filed, please contact us right away.

# GETTING TO KNOW YOUR MATE

1. Saddle
2. Seatpost
3. Saddle quick release
4. Rear suspension
5. Disc brake
6. Tire
7. Spoke
8. Motor
9. Freewheel
10. Rear derailleur
11. Chain
12. Handlebar height quick release
13. Pedal
14. Crankset
15. Charging hole (backside)

16. Key / Battery lock
17. Folding handle
18. LCD screen
19. Handlebar
20. Brake lever
21. Handlebar rotation quick release
22. Handlebar stem
23. Front suspension fork
24. Disc brake caliper
25. Hub
26. Rim
27. Wheel fixed axle
28. Hidden battery
29. Handlebar stem vertical locking mechanism
30. Throttle (default on 750 model)





# ASSEMBLING YOUR MATE FOR THE FIRST TIME

As your MATE is almost completely pre-assembled, there is very little left to do to get it ready to ride.

**WARNING:** If you are uncertain about any of the above instructions, or unfamiliar with bicycles or bicycle assembly, you should take your MATE and this manual to your local bike shop and have the assembly performed by a qualified bicycle mechanic. Failure to properly assemble your MATE could cause one or more parts of the bike to fail or to operate incorrectly, which could result in your injury or death.

## HOW TO ASSEMBLE YOUR MATE

1. Reconnect telescopic handlebar stem
  - a. Do this by inserting the stem tubing connected to the handlebar into the telescopic tubing attached to the frame, making sure to center the handlebar so that it is perpendicular to the frame.
  - b. Then securely tighten the quick release.
  - c. Once tight, try to manually move the handlebar from side to side to make sure it is securely in place.
  - d. **CAUTION:** You must slide the handlebar stem connecting the handlebar to frame far enough that the series of parallel grooves that mark the minimum insertion level in the tubing are hidden (NOT exposed). Do NOT raise the handlebar higher than this height. If the handlebar stem is not inserted, at minimum, to this line, serious injury or death can occur to the rider.
2. Remove excess packaging and take your MATE out of the box
3. Unfold your MATE
  - a. Pull up the handlebar stem safety locking mechanism (29), located on the handlebar stem (22), to unfold it back to its riding position (See the photo on page 14-15).
  - b. Next push the safety button on the metal folding handle (17) on the frame and pull the handle to unfold the frame so that it locks into place.
  - c. Open the seatpost quick release lever (3) to raise the saddle to its original height. Once raised, re-tighten the quick release (3) so the seatpost (2) stays in place. If it needs to be more firmly secured, open the quick release lever, tighten nut on opposite side of lever, then re-close lever. Test to confirm that it's secure before hopping onto the saddle.
  - d. Pull the pedals (13) back into riding position. You will hear a click when they are securely in place.

**WARNING:** Do not raise the seatpost (2) above the "minimum insert" line clearly printed on the backside of the seatpost (2). Raising the seatpost (2) above the minimum insert line can cause the seatpost to fail, which could in turn result in loss of control of your MATE and could cause you serious injury or death.

If something appears to be wrongly assembled - even if you have followed the instructions, please contact us before riding your MATE, or take your MATE to your local bike shop to have it thoroughly checked.



## HOW TO ADJUST FRAME-FOLDING LEVER

If your folding-frame lever does not strongly snap into place when locked, or is not flush against the frame, you will need to adjust the locking mechanism and/or lever-to-frame distance.

### Locking mechanism

To adjust locking mechanism (perform ONLY if your frame-folding lever does not strongly snap into place when locked or appears to come loose to allow frame to fold):

- Slide the mini knob on top of the silver frame-folding lever that releases this handle to open it.
- Once opened, locate the very small black pin that protrudes upwards. It is close to the round silver battery-release button.
- Now that you've located the pin, close the frame-folding lever by pushing it back against the frame.
- Grab a small 3mm size allen key and stick it into the tiny hole on the underside of the small black pin. Turn it clockwise. You'll know it is the correct direction if the pin protrudes upwards.
- Keep turning until the pin reaches the lever. You'll know you're there when you can no longer turn the pin.

### Lever-to-frame distance

To adjust lever-to-frame distance (perform only if your lever is protruding a bit too far outward or feels loose):

- Slide the mini knob on top of the silver frame-folding lever that releases this handle to open it.
- Once opened, locate the large silver button socket cap screw.
- Grab a size 3mm allen key and stick it into the screw. Turn counterclockwise ¼ of a turn to bring the lever closer to the bike and eliminate that loose feeling of the lever.
- If the lever still feels loose or is not flush solid against the frame, try another ¼ counter-clockwise turn and repeat until you get there.
- If you find the lever will no longer close easily, tighten the screw with ¼ clockwise turns until it's perfect.

**IMPORTANT:** As the folding mechanism is crucial for your safety on the MATE, please have a qualified mechanic double-check it for you to ensure that it locks securely – especially if you have adjusted it.



# THE COMPUTER DISPLAY



## HOW TO OPERATE THE COLOR DISPLAY

- |                       |  |
|-----------------------|--|
| Turn on display:      | Press on/off <b>(I/O)</b> button on top right corner of black remote box.  |
| Power assist levels:  | Push <b>+</b> and <b>-</b> on left side of remote box to increase/decrease levels.   |
| Adjust settings:      | Double tap on <b>"M"</b> (mode) button on bottom right corner of black remote box.<br>Toggle between settings using <b>+</b> and <b>-</b> buttons.<br>Click on <b>"M"</b> to open selected setting to adjust.<br>Click <b>+</b> and <b>-</b> to scroll through adjustment options.<br>Click on <b>"M"</b> to exit. |
| View data:            | Press <b>"M"</b> 1x to toggle between real, average, max speeds.   |
| Charge via USB port:  | Press and hold <b>"M"</b> . Screen will display USB icon.  |
| Turn on light:        | Hold the <b>+</b> button. To turn off, hold the <b>+</b> button.   |
| Activate walk assist: | Press and hold <b>-</b> button.  |





# HOW TO OPERATE YOUR MATE

Once you've assembled your MATE X and charged the battery for a full 8 hours straight, past when the indicator has turned green, you're ready to ride!

Just follow these simple steps, and you're off:

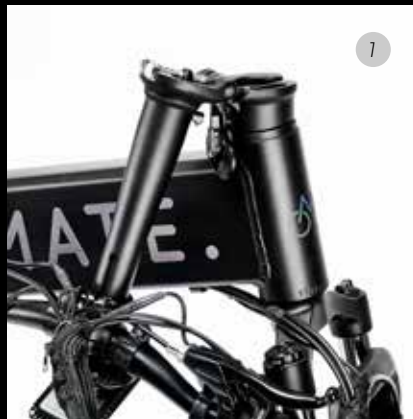
1. Reach down under the MATE tube of your bike and turn the key all the way clockwise. To confirm that you are turning in the correct direction, you will see the metal pin protrude from the frame towards the handle.
2. Next swing your leg over the MATE to get ready to ride, both feet securely on the ground.
3. Turn on your MATE X by holding down the upper right on/off button on the little black controller box located on the left side of your handlebar. As soon as the display turns on, release the button.
4. You will notice ASSIST on the right side of the display with a number underneath. By pressing the "+" or "-" button you can set your pedal assist to your desired level as these buttons increase and decrease your pedal-assistance. The higher the number, the more assistance you will have. Note that you can use your throttle and manually shift gears while in any of the PAS levels of "1" and above.
5. If you lower the assist level to "0" you will have no throttle or pedal assistance and your MATE will function like a normal non-motorized bike. By setting your MATE in the "0" position when not in use, you will help prevent forward acceleration caused by accidentally hitting the throttle.

6. By lowering the assistance level to "0", then continuing to hold down the "-" button, a "P" will appear as your assistance level. The "P" stands for parking so you are able to ride at very low speeds with minimal assistance. It also serves as a walk-assist when pushing your MATE uphill.
7. To start your ride, simply start pedaling. It is recommended to begin pedaling with the Assist level set to "1" until you get used to the acceleration. Once you are used to it, then you can also begin pedalling at a higher assist level or simply use the throttle for quicker acceleration.
8. When your ride is over, lower your assist level back down to "0", then hold down the upper right on/off button on the little black controller box located on the left side of your handlebar. As soon as the display switches off, release the button.
9. To lock your MATE, turn the key counterclockwise one click and remove the key. If you'd like to remove the battery, turn the key one more click, while pushing inward, to release the handle, open the frame and remove the battery. If your battery is lower than 60% charged or if you need to be sure to have a full charge before your next ride, be sure to charge the battery at this time.

**NOTE:** The "M" button controls the USB charger. Push this button before plugging your USB cable into the charger located directly on the display.



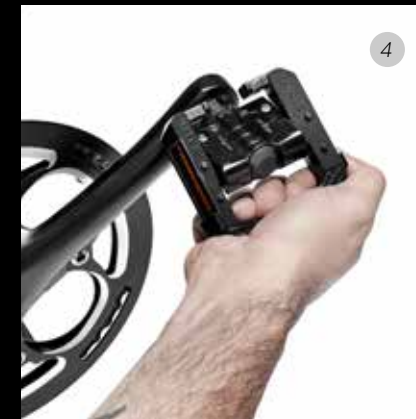
## FOLDING YOUR MATE



1. Pull up the handlebar stem vertical locking mechanism (29) on the handlebar safety locking mechanism (29) to fold the handlebar towards the right side of the front wheel.
2. Remove the key underneath so it is not damaged during the folding process.
3. Next slide the safety button on the locking mechanism's folding handle located in the middle of the frame and pull the handle to fold the frame. Hint: you can use your knee to help easily fold the frame.
4. Open the seatpost quick release lever (3) to lower the saddle, first making note of its height using the handy numbered lines on the back of the seatpost shaft (2). Once lowered, re-tighten the quick release (3) so the seatpost (2) stays in place.
5. Push the pedals (13) inwards to fold them.

**WARNING:** When folding the MATE, be careful to always turn the front wheel to the left and do not pinch the cables, as this may damage the cables. Damaged cables can result in loss of control of your MATE and could cause you serious injury or death.

## UNFOLDING YOUR MATE



1. Pull up the handlebar stem safety locking mechanism (29), located on the handlebar stem (22), to unfold it back to its riding position (See the photo on page 14/15).
2. Next push the safety button on the metal folding handle (17) on the frame and pull the handle to unfold the frame so that it locks into place.
3. Open the seatpost quick release lever (3) to raise the saddle to its original height. Once raised, re-tighten the quick release (3) so the seatpost (2) stays in place. If it needs to be more firmly secured, open the quick release lever, tighten nut on opposite side of lever, then re-close lever. Test to confirm that it's secure before hopping onto the saddle.
4. Pull the pedals (13) back into riding position. You will hear a click when they are securely in place.

**WARNING:** Do not raise the seatpost (2) above the "minimum insert" line clearly printed on the backside of the seatpost (2). Raising the seatpost (2) above the minimum insert line can cause the seatpost to fail, which could in turn result in loss of control of your MATE and could cause you serious injury or death.

<b>Model</b>	<b>250W</b>
Maximum speed	EU: 25 km/h · US: 15 mph
Range	Up to 90 km / 55 miles w/ pedal assist
Dimensions, unfolded	Length: 180 cm / 71" x Width: 65 cm / 26" x Height: 124 cm / 49"
Dimensions, folded	Length: 103 cm / 41" x Width: 59 cm / 23" x Height: 78 cm / 31"
Weight	39 kg / 86 lb
Carton size	Length: 108 cm x Width: 60 cm x Height: 79 cm
Carton weight	39 kg / 97 lb
Rider height range	150–215 cm / 4'9"–7'0"
Rider maximum weight	150 kg / 330 lb
Frame	6061 Aluminium alloy folding frame w/ flat welds, 20" tire size, 465mm frame size
Front suspension fork	Air suspension fork w/ lock, aluminium alloy 286 × 254 × 185 mm
Rear suspension	Black, 150 mm, max dynamic load 340 kg / 750 lb
Motor	48V 250W, brushless motor w/ 8-speed freewheel
Controller	250W 48V 15A
Battery	Lithium-Ion 48V 14.5Ah / 17.5Ah
Battery charger	54.6V 4A / 3A with 3-pin safety connection plug
Display	Color LCD
Sensor	Double hall, 12 magnet closed speed sensor
Throttle	No throttle included
Cable unifier	Quick zip cable unifier
Tires	20 × 4" all-terrain enhanced grip fat tires
Inner tubes	20 × 4" Schrader (auto) valve black
Crankset	170 mm arms
Bottom bracket	BB96 100MM-170
Front wheel	20" 13G x 36H 3/8 × 135 × 175 aluminium w/ protective rim strip

<b>Model</b>	<b>750W</b>
Maximum speed	EU: 32 km/h · US: 20 mph
Range	Up to 80 km / 50 miles w/ pedal assist
Dimensions, unfolded	Length: 180 cm / 71" x Width: 65 cm / 26" x Height: 124 cm / 49"
Dimensions, folded	Length: 103 cm / 41" x Width: 59 cm / 23" x Height: 78 cm / 31"
Weight	40 kg / 88 lb
Carton size	Length: 108 cm x Width: 60 cm x Height: 79 cm
Carton weight	45 kg / 99 lb
Rider height range	150–215 cm / 4'9"–7'0"
Rider maximum weight	150 kg / 330 lb
Frame	6061 Aluminium alloy folding frame w/ flat welds, 20" tire size, 465mm frame size
Front suspension fork	Air suspension fork w/ lock, aluminium alloy 286 × 254 × 185 mm
Rear suspension	Black, 150mm, max dynamic load 340 kg / 750 lb
Motor	48V 750W, brushless motor w/ 8-speed freewheel
Controller	750W 48V 25A
Battery	Lithium-Ion 48V 14.5Ah / 17.5Ah
Battery charger	54.6V 4A / 3A with 3-pin safety connection plug
Display	Color LCD
Sensor	Double hall, 12 magnet closed speed sensor
Throttle	Right L-shaped thumb-throttle w/ waterproof cabling
Cable unifier	Quick zip cable unifier
Tires	20 × 4" all-terrain enhanced grip fat tires
Inner tubes	20 × 4" Schrader (auto) valve black
Crankset	170 mm arms
Bottom bracket	BB96 100MM-170
Front wheel	20" 13G x 36H 3/8 × 135 × 175 aluminium w/ protective rim strip

Rear wheel	20" 12G x 36H x 100 aluminium w/ protective rim strip
Handlebar stem	Foldable two-section telescopic stem, 235-285 mm self-lock, 4-bolt
Handlebar	Straight handlebar 620 x 31.8 x 5°
Hand grips	L: 126 mm, R: 90 mm comfort ergo w/ aluminium clamp
Headset	28.6 x 44 mm 302 AC
Saddle	Ergo MTB saddle
Seatpost	33.9 x 500 mm w/ protector and quick-release clamp
Gear shifter	Twist-style shifter
Chainring	170 mm 53 tooth 3/32" chainring w/ bashguard
Freewheel	8 gears 13-32 teeth
Rear derailleur	8-speed shifting
Chain	High wear resistance 8 speed
Brakes front	Hydraulic 160mm disc brakes
Brakes rear	Hydraulic 160mm disc brakes
Brake levers & calipers	Hydraulic
Pedals	Foldable aluminium 9/16"
Kickstand	20" adjustable aluminium
Other carton content	White front reflector Red rear reflector Orange pedals Orange wheels Battery charger MATE X Owner's manual Keys

Rear wheel	20" 12G x 36H x 100 aluminium w/ protective rim strip
Handlebar stem	Foldable two-section telescopic stem, 235-285 mm self-lock, 4-bolt
Handlebar	Bent handlebar 620 x 31.8 x 7°
Hand grips	L: 126 mm, R: 90 mm comfort ergo w/ aluminium clamp
Headset	28.6 x 44 mm 302 AC
Saddle	Ergo MTB saddle
Seatpost	33.9 x 500 mm w/ protector and quick-release clamp
Gear shifter	Twist-style shifter
Chainring	170 mm 53 tooth 3/32" chainring w/ bashguard
Freewheel	8 gears 13-32 teeth
Rear derailleur	8-speed shifting
Chain	High wear resistance 8 speed
Brakes front	Hydraulic 160mm disc brakes
Brakes rear	Hydraulic 160mm disc brakes
Brake levers & calipers	Hydraulic
Pedals	Foldable aluminium 9/16"
Kickstand	20" adjustable aluminium
Other carton content	White front reflector Red rear reflector Orange pedals Orange wheels Battery charger MATE X Owner's manual Keys



# BATTERY



The battery (28) is the heart of your MATE's main energy source, so be sure to treat it with care at all times. We recommend that you recharge it only with the MATE charger provided with your MATE.

## BATTERY FUNCTIONS

1. When key is turned to the "loose" position (16) - battery is ready to be ejected
2. In the "locked" position (which can be found by turning key one click when in "loose" position) – battery cannot be ejected and motor cannot be switched on
3. In the "ignition" position, which can be found by turning key two clicks when in "loose" position – motor is unlocked as well as LCD screen (18) turns on when pushing the **"ON/OFF"** button

**IMPORTANT:** When parking your MATE, we recommend you lock your battery by setting it on "locked" position, then remove the key.



## INSERTING THE BATTERY

1. Open the frame (17)
2. Insert the battery with the ignition side facing down
3. Close the MATE's frame
4. Insert the ignition key (16) to secure battery's position in the frame

## REMOVING THE BATTERY

1. Turn off motor by turning key from "ignition" position to "loose" position. To do this, push the key (16) in to turn it all the way to the unlocked "loose" position.
2. Remove the key from the battery/frame
3. Open the frame
4. Slide the battery out of the frame, using the small finger hook
5. Close the MATE's frame again (17)



# CHARGING THE BATTERY

**WARNING:** Do not charge the battery with any chargers other than the one supplied with your MATE. Using a charger other than the MATE charger may result in battery damage and will void battery warranty. Follow all instructions provided with the charger supplied with your MATE. Failure to do so could result in damage to your battery or could create a fire hazard that could cause you serious injury or death.



## DIRECTLY FROM THE MATE

1. Make sure that the motor is turned off (“loose” or “locked” battery position) when charging directly from the MATE.
2. Plug the charger first directly into the frame/battery (15), then into the electrical socket.
3. When charging for the first time, it is recommended to charge for 12 hours straight to ensure current is flowing through all cells. See battery cell balancing section below for details on how to do this.
4. When recharging, we recommend a full discharge every 30-40 charges – otherwise charging when 20-60% charged is ideal for battery longevity.
5. After a charge cycle has been performed, the actual battery charge may not register immediately after you power up the MATE. It can take up to 30 seconds or 1km/.6mi. of riding for the battery to calibrate and display the correct charge amount.
6. When charging multiple batteries/MATEs on one charger, you will need to unplug the charger from the wall before attaching it to the next battery/MATE. This will help the charger register the battery BMS to provide a full charge.
7. Note: charging with a speed charger is much quicker, but is not able to reach 100% charge capacity and will impact the longevity of your battery. It is therefore strongly advised to use the speed charger sparingly, and use a regular charger as your main charger unit. In addition, never charge using a charger with more than 5A output.

## REMOVING THE BATTERY TO CHARGE

Simply remove the battery from the frame as explained above and plug the charger first directly into the battery, then into the electrical socket.

For further charging instructions, please refer to enclosed spec sheet inside your charger's box.

**NOTE:** For both charging methods, make sure the charger light turns green for a brief second when plugged into socket, then directly red. Once light returns to green, your battery is fully charged. You can then unplug the charger.

# CHARGING THE BATTERY

## CHARGING TIME OF THE BATTERY

### Regular (3.0A) battery charger:

6 hours\* to fully charge 14.5Ah / 17.5Ah from empty to full

### Speed (4.0A) charger:

4 hours\* to fully charge 14.5Ah / 17.5Ah from empty to full

\* Depends on current battery usage level, climate conditions, earlier charging cycles.

## HOW TO BALANCE THE BATTERY CELLS FOR A NEW BATTERY TO MAXIMIZE IT'S RANGE:

For a new battery, perform this for your first 3 rides/charges, regardless of how far you have ridden or the amount of battery that you have used.

1. Charge the battery outside of the bike and leave it on the charger **up to 4 hours after the light has turned green but no longer than 8 hours with a 4/5a speed charger and 12 hours with a 2/3a charger.**
2. Disconnect the charger from the outlet first, then from the battery.
3. Go ride the MATE like normal using the pedal assist and throttle (if you have one).
4. It's ok to discharge only part or all of the battery before the next charge is performed.
5. Repeat steps 1-3 for 3 rides only.
6. You can use your MATE normally after this has been performed.

### When to perform this cell balancing:

- When you first receive your MATE or a new battery
- If you have stored the battery for long-term
- If you experience a loss in range or charge amount
- To be proactive, you can perform this monthly but NO more than one time per month.

### Here are a few key points to know about keeping your battery in good condition and safe:

- Never leave the battery on the charger longer than specified
- Never leave the battery unattended while charging
- Never charge the battery when it is cold, be sure to always charge the battery when it is at room temperature
- Let your battery cool down after a charge before you use it
- Let your battery cool down after you have used it before you charge it
- Try not to "Top Off" charge every ride. It is better to discharge the battery between 20%-60% before recharging
- When storing the battery, always leave it with at least 70% charge and check monthly
- Check your fuse condition regularly, replace if you see signs of carbon buildup or a smokey look like it is burnt
- Never charge the battery if the battery itself is at or below freezing 0°C/32°F. Bring the battery up to room temperature before charging in cold conditions
- Never charge the battery if it is above 40°C/104°F. Bring the battery down to a cooler temperature before charging

**IMPORTANT:** Intended operation temperature is between -15°C/5°F and 45°C/113°F. If your MATE will be kept for an extended period in extreme temperatures (below 0°C/32°F or above 30°C/86°F) or if you plan to store it for long periods of time, remove the battery and keep it in a place where the temperature is between 0°C/32°F and 30°C/86°F. Do also charge the battery first to 70% charge for long storage periods. **Do not charge the battery when the temperature is below 0°C/32°F or above 40°C/104°F. Serious damage to the battery could result.**

# BATTERY USAGE

To reach the farthest distance on one charge, it is recommended to pedal the MATE while the Pedal Assist System is turned ON (18). It will help save the battery.

When battery power is low while riding your MATE, it is recommended to pedal as much as possible to minimize battery usage so you can get home on the charge that is left on the battery. Once home, charge it as soon as possible.

To further get the best distance out of your MATE, refrain from unnecessary braking; coast as much as possible.

When pedaling, try to keep a higher RPM (cadence) to further minimize strain on motor from torque overload.

When riding uphill, set it to the lowest (easiest) gear possible and help your MATE out by putting in at least 60% effort (especially on steep hills).

Use the throttle only for short periods of time - and only on flat or rolling terrain, not uphill. Using only throttle for extended periods of time or up hills will cause the battery to quickly drain and possibly overheat the motor which can lead to damage. The moment you notice your motor overheating, immediately stop and power down the MATE to let it cool down before continuing with your ride.

Always keep your tire pressure set at the correct value of 1.4 bar (20 psi). It is best to check pressure every week.

Periodically check that all cables are in good condition and securely connected.

Be sure to periodically inspect the brake pads to spot if they need to be replaced or are rubbing against the brake rotor (which can significantly lower battery range).

Turn off the power when parking. If you decide to push your MATE for any reason, make use of the "walk-assist" option (18) or push it without using the walk-assist.

## MATE BATTERY: IMPORTANT INFO

Type: Lithium-Ion battery · Voltage: 48V · Capacity: 14.5 / 17.5Ah · Battery lifespan: between 600 and 800 charges cycles (before dropping to ~70% of charge capacity).

## NOTE FOR MATE BIKES EQUIPPED WITH THROTTLES:

- Once the MATE is powered ON (18), when the rider presses down on the thumb throttle, the MATE will move forward. Do not power ON until you are ready to go.
- Squeezing the right / rear hand brake (20), or releasing the throttle, will automatically cut the power to the motor.
- When walking with the MATE, if you want to use the walk-assist be sure to turn it to "walk-assist" (18) by pressing the assist level arrow down for more than 3 seconds so you don't automatically turn the throttle on and make the MATE start suddenly and cause an accident.

**WARNING:** Do not take the battery apart. Do not burn, puncture, submerge in water or damage the battery in any way. Any such tampering with the battery can cause serious injury or death, and immediately voids its warranty. Do not use the battery if it appears to be damaged. In case of any noise, irregular heat or leakage from the battery, cease all use immediately. Keep the battery stored in a ventilated place and out of direct sunlight. Keep the battery stored above 0° C/32° F to avoid damage of battery or excess loss of battery power.



# **SETTING UP MATE FOR YOUR PERFECT FIT**

## SADDLE HEIGHT

To adjust saddle height, open the seatpost quick release lever (3) located on the frame where the seatpost (2) enters. Once loose, adjust the saddle to desired height, then align the saddle so that it is centered (in line with the MATE's frame). When desired height is set, firmly tighten the quick release (3) so that the saddle is securely in place. Try to manually move the saddle from left to right to be sure it is firmly secured.

**WARNING:** Do not raise the seatpost (2) above the "minimum insert" line clearly printed on the backside of the seatpost (2). Raising the seatpost (2) above the minimum insert line can cause the seatpost (2) to fail, which could in turn result in loss of control of your MATE and could cause you serious injury or death.

## SADDLE FORE/AFT/TILT POSITION

To move the saddle more forward/rearward or adjust the nose of the saddle to point slightly upward/downward, loosen the bolt located under the saddle, at the top of the seatpost (2). You can use the 6mm allen key provided. Once loosened, move the saddle to its ideal position. When desired position is set, firmly tighten the bolt to 22Nm for safety assurance. Try to manually move the saddle up/down as well as forward/rearward to be sure it is firmly secured.

# SETTING UP MATE FOR YOUR PERFECT FIT

## HANDLEBAR HEIGHT

To adjust height of handlebar (19) to match your comfort and riding style, first loosen the handlebar height quick release (12) located next to the front end of the frame. Adjust handlebar to desired height, making sure to center the handlebar so that it is perpendicular to the frame. Then securely tighten the quick release. Once tight, try to manually move the handlebar from side to side to make sure it is securely in place.



**CAUTION:** You must slide the handlebar stem connecting the handlebar to frame far enough that the series of parallel grooves that mark the minimum insertion level in the tubing are hidden (NOT exposed). Do NOT raise the handlebar higher than this height. If the handlebar stem is not inserted, at minimum, to this line, serious injury or death can occur to the rider.

## HANDLEBAR ROTATION

To adjust the rotating position of the handlebar (19) to match your comfort and riding style, first slightly loosen one of the handlebar bolts (21) located on the handlebar itself. Rotate the handlebar to desired position, making especially certain that the brake levers (20) are a comfortable reach for safe braking. Before tightening, double check that the handlebar is still centered. Then securely tighten the handlebar bolt (21). Next make sure that the spacing between handlebar stem and top cap is even on both sides of the handlebar. Once firmly tightened, try to manually rotate the handlebar to make sure it is securely in place.

**WARNING:** Make sure the handlebar is securely in place and that the brake levers are comfortably in reach. Failure to do so can result in loss of control of your MATE and could cause you serious injury or death. In addition, failure to have an even amount of spacing on both sides of stem clamp between the stem base and top cap can result in a loosened handlebar or stripped threads, both of which can result in loss of control of your MATE and lead to serious injury or death. If you are unsure that you did either of these correctly, please consult with your local bike shop.



# SETTING UP MATE FOR YOUR PERFECT FIT

## SUSPENSION ADJUSTMENT

The front (23) and rear suspension (4) are pre-adjusted for your convenience. To further adjust the front suspension fork to match your weight and riding style, simply add or release air from the air valve found on the left top side of the fork. The top right knob is to lock/unlock the active suspension. Refer to your fork manual for further information.



## BRAKE ADJUSTMENT

Hydraulic disc brakes (24) are pre-installed on both the front and rear wheels for braking control of the bike.

## BRAKE ADJUSTMENT

Note: Before making any adjustments, double-check that the screws fastening the brake rotors are very tight or torqued to 6.2nm.

As you ride, your brake pads will become thinner. With hydraulic brakes, the pads will automatically self-adjust closer to the rotor so micro-adjustments are usually not needed. But always keep an eye on them so you can replace them the moment they are worn out. If you are unsure of anything relating to your brakes, please take your MATE to your local bike shop for their expert advice.

### CAUTION

- Note which brake lever controls which wheel; left brake lever controls front wheel, right brake lever controls rear wheel
- Be sure to avoid abrupt or strong braking as it can cause you to fall off your MATE
- When braking, lean your body weight a bit rearward to counterbalance the braking inertia
- Keep an eye on the brake pads for wear as they wear out regularly. If they look as though they are worn out or close to it, please have a bicycle mechanic replace them right away to maintain safe braking control
- **IMPORTANT:** Before every ride, test the brakes to be sure they are working well
- **WARNING:** Inspect and test the brakes before each ride. Worn, dirty, damaged, or improperly adjusted brakes can reduce your ability to control your MATE and could cause you serious injury or death. Do not ride your MATE if your brakes are not working properly

## GEARS

All MATE's come equipped with 8 gears (9). To change gears, simply turn the shifter knob. One click per gear change. The higher the gear, the higher the resistance. Change gears to match your pedaling comfort level. Be sure to pedal when shifting gears to ensure a smooth gear change. In addition, when climbing steep hills, be sure to lower your gearing and increase your pedaling cadence. These recommendations will also prolong the life of your drivetrain components.



## GEAR ADJUSTMENT

To adjust shifting, if necessary, start by shifting chain (11) to the smallest sprocket (9). Then click once to move the chain to the next sprocket. Turn the pedals to test if it shifted successfully. If it did not move to the next sprocket, then turn the barrel adjuster 1/4 turn counter-clockwise to tighten inner wire tension and pedal again to test the shift.

If it still does not shift to the next sprocket, try another 1/4 turn and pedal until it shifts smoothly to the next sprocket.

Once on the second sprocket, test using the same method to make sure it goes up smoothly to each of the next larger sprockets, until you are up to the seventh (and largest) sprocket.

When you've successfully reached the largest sprocket, it is now time to make your way down the sprockets back to the smallest one. You will use the same technique, but in reverse.

Click once to move the chain from the largest sprocket to the next smaller one. Turn the pedals to test if it shifted successfully. If it did not move to the next sprocket, then turn the barrel adjuster 1/4 turn clockwise to loosen inner wire tension and pedal again to test the shift. If it still does not shift to the next sprocket, try another 1/4 turn and pedal until it shifts smoothly to the next sprocket.

Once on the second largest sprocket, test using the same method to make sure it goes down smoothly to each of the next smaller sprockets, until you are back down to the smallest sprocket.

Please also refer to the [helpdesk.mate.bike](https://helpdesk.mate.bike) for how-to videos on adjustment.

If after adjusting the shifting, your MATE remains unable to shift smoothly, be sure to check your derailleur hanger to confirm that it is straight. If the bike falls on its side, this is the part of the bike that will take the hit. It is designed to bend inward in order to prevent damage from occurring to the rest of the bike. To make sure that your hanger is straight, and not bent inward or twisted in any way, stand behind the MATE and look to see if the hanger is perfectly aligned with the derailleur's pulley wheels. There should also not be any visible bend in the hanger material. If the hanger appears to be bent in any way, visit [MATE.BIKE](https://MATE.BIKE) website to order a replacement.

If you are uncertain about any aspect of your gears or any of these instructions, take your MATE to a bicycle mechanic and have the mechanism checked.

## PEDAL-ASSIST

There are 9 pedal-assist level options with the color display (18). When switched to "0", there is zero pedal assist - completely human-powered. 9 is the highest level of pedal-assistance.

For display operating instructions, please refer to the enclosed display manual.

# BEFORE YOU RIDE CHECKLIST

**WARNING:** Follow this BEFORE YOU RIDE CHECKLIST each time you use your MATE. Failure to follow this checklist could lead to an undetected problem that could result in your serious injury or death.

- Check that the quick release lever (3) for the seatpost is tightly fastened. Check that bolt of saddle (1) is tight.
- Check that bolts holding handlebar in place are tightly fastened.
- Check that handlebar stem safety locking mechanism (29) is tightly fastened.
- Check that folding quick release handle (17) of frame and its clips are tightly fastened.
- Check that all other bolts and fasteners are tight, such as for the kickstand, front/rear wheels, and brake rotors.
- Check for proper functioning of brakes and gears.
- Check that the battery is fully charged.
- Check that the battery is correctly installed in the MATE and turned on using the ON/OFF button on the LCD screen. (18).
- Check that tire (6) pressure is pumped to 1.4 bar (20 psi).
- Check that tires are not damaged.
- Make sure that reflectors are in place.
- Some countries require bikes to be equipped with a bell. Be sure to check with your local authorities to learn if you need to install one. If riding at night, do adhere to your local rules for equipping bikes with lights.

# MAINTENANCE

## CHAIN WEAR

Using a ruler, a new chain (11) should measure exactly 12 inches across 12 links, from middle of pin to middle of pin. If your chain measures past 12 inches for 12 links by 1/16 inches (0.5 percent), it is time to replace the chain. If it is past 12 inches for 12 links by 1/8 inches (one percent), you may also need to replace the cassette (9) as well. If you are not keen on measuring, you can purchase a chain-wear tool from your local bike shop. And if there remains any uncertainty, it is best to take your MATE to your local bike shop.

Be sure to keep your chain and all moving parts lubed so that they work effectively at all times. Lubrication is necessary to use when the moving parts are dry. As for the chain, lubricate the dried chain after every bike wash, as well as after every wet weather ride – especially if there is any salt on the roads. Use a bike chain lubricant made for that purpose. All-purpose lubricants may attract and hold dirt and may reduce the life of your chain.

## SEATPOST

If the seatposts quick release becomes difficult to close, lubricate the lever's rotational pivot point with thin oil. Open and close it repeatedly until the pivot point loosens and you can securely fasten the seatpost.

## TIRE PRESSURE

Be sure to check it twice a month at minimum – ideally once a week. We suggest keeping it at 1.4 bar (20 psi). Riding with too low pressure can result in:

1. Lowered travel range per battery charge
2. Increased wear on the tires
3. Increased risk of a puncture
4. Compromised steering as fat tires with inadequate pressure tend to oversteer.



# MAINTENANCE



## HYDRAULIC BRAKES

If you experience a lack of braking power, follow the instructions below for troubleshooting tips. As the pads equipped with hydraulic brakes automatically self-adjust when they wear thin, distance from pad to rotor due to wear is usually not a factor.

## SQUEAKING BRAKES

- Rotor needs to be thoroughly cleaned with a clean rag dipped in rubbing alcohol to remove any oil or residue.
- Pads need to be filed down, and securely reinserted into pad holder. This removes the glazed over layer from debris or oils on the road. NOTE: When using hydraulic brakes, be sure NOT to pull on the lever while the wheel or pads are removed. If you are unsure of how to do this, please have a qualified mechanic do this.
- Pads worn out. If the pads are less than .5mm thick, it's time to buy new ones. See your brake manual for more information about your specific model.

## NO BRAKING POWER

This can often occur because there is not sufficient brake fluid in the braking system. This can be caused by:

- A system leak causing fluid to escape OR brakes need to be bled and brake fluid replaced. To fix this, please take your MATE to your local bike shop to fix the leak or bleed the brakes and replace the fluid. Brake fluid should be replaced once a year for optimal performance.
- Your MATE was turned upside down, causing fluid to migrate to the overrun chamber in the brake lever. To fix this, return your MATE to normal position with both wheels on the ground. Then repeatedly pull the brake lever until fluid returns back down to the brake caliper.
- Brake fluid was contaminated by air, which blocks the braking power to be transferred from lever to caliper. To fix this, please take your MATE to your local bike shop to either "bleed" the fluid or replace it.
- No braking power can also occur due to contaminated brake pads. To fix this, pads need to be removed, filed down, and securely reinserted. NOTE: When using hydraulic brakes, be sure NOT to pull on the lever while the wheel or pads are removed. If you are unsure of how to do this, please have a qualified mechanic do this.

**WARNING:** Do not ride your MATE if your brakes are not operating properly. Take your MATE to a local bike shop and have a bicycle mechanic repair the brakes. Failure to follow this instruction could result in your serious injury or death.

**NOTE:** Owners are responsible for all maintenance and service of the bicycle. Failure to do so may void your warranty, cause damage to the MATE or components and may cause an accident.



# REPLACEMENT PARTS

It is always good to keep spare tires, inner tubes, lube, chain, brake pads on hand as these items wear out most quickly.

If a product is in need of replacement and you are not completely certain how to do this, it is recommended to take it to your local bike shop. This includes cables/housing, bearing adjustments, brake adjustment and wheel adjustments. Be sure to replace parts with original MATE.BIKE components to ensure optimal level of performance.

**WARNING:** As with all mechanical components, the MATE is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injury to the rider. Any form of crack, scratches, or change of coloring in highly stressed areas indicate that the life of the component has been reached and it should be replaced.

Failure to repair or replace worn components could reduce your ability to control your MATE and could cause you serious injury or death.

# GENERAL TIPS

- It is recommended to take your MATE for a full tune-up and maintenance check by a bike mechanic on a regular basis, at least once a year. If you ride your MATE often, take your MATE in more often.
- While our MATE bikes are rain and splash-proof, their electrical components should not be submerged in water.
- When washing your MATE, use soap and water only. When rinsing with water, use nothing stronger than a normal low pressure garden hose. Be sure to avoid spraying directly into the motor as well as any pivot and connection points or areas where bearings are housed. This includes headset, bottom bracket and hubs. Never use a high pressure water hose under any circumstances.
- To prevent corrosion, dry the MATE and its components after every wet ride. Store the MATE and battery in a dry location.

**WARNING:** Do not attempt to open the casings of the battery, motor, or controller. This can be dangerous and will void any warranties by doing so. If you experience a problem, please contact our service department or your local bike shop. Always remove battery during maintenance. Failure to follow these instructions could result in your serious injury or death.

# WARRANTY

**MATE.BIKE shall in its sole discretion determine whether any damage, failure, malfunction, or other loss is due to a cause that is covered by the MATE.BIKE product warranty.**

## TERMS OF WARRANTY

- This warranty only applies to the original owner of the MATE bike unless otherwise determined by applicable mandatory legislation.
- Proof of purchase is required for all warranty claims. The bicycle must be registered with MATE.BIKE in order for a warranty claim to be processed.

### 1. LIMITED 14 DAYS FULL REPLACEMENT WARRANTY

In the event of a major defect (that significantly affects the owner's ability to operate the bike as intended) to your MATE bike that happens within the first 14 days after you have received your MATE bike, we will at our discretion repair or replace the defective part of your MATE bike or replace it completely within a reasonable period of time if it cannot be repaired.

As noted above, we shall in our sole discretion determine whether any claim of damage, failure, malfunction, or other loss is a "major defect." Any such repair or replacement will be at MATE.BIKE's expense.

### 2. LIMITED TWO-YEAR COMPONENTS WARRANTY

Includes only the following: forks, stem, handlebar, seatpost, saddle, brakes, bottom bracket, crankset, pedals,, rims, spokes, wheel hub, freewheel, sprockets, derailleur, shifter, motor, throttle, controller, wiring harness, kickstand, reflectors, and hardware.

These items are warrantied to be free from manufacturer defects in materials and/ or workmanship for a period of two years from the date you receive your MATE. This warranty does not cover normal wear and tear.

### 3. THIS LIMITED TWO-YEAR COMPONENTS WARRANTY COVERS REPLACEMENT PARTS ONLY AND DOES NOT COVER THE COST OF SHIPPING OR INSTALLING THE REPLACEMENT PARTS.

- If you believe your MATE needs service, or are experiencing problems with your MATE, MATE.BIKE encourages you to bring your bike to your nearest electric bike shop for warranty determination and assistance
- This warranty does not cover any damages or defects resulting from failure to follow instructions in the owner's manual, acts of God, accident, misuse, neglect, abuse, commercial use, modification, or improper assembly
- This warranty does not cover normal wear and tear of the MATE or its components (for example: tires, inner tubes, brake pads, chains, etc.)
- This warranty does not cover parts damaged by an attempted repair unless performed by an authorized MATE.BIKE repair center with MATE.BIKE's advanced knowledge
- This warranty does not cover any unauthorized modifications done to the MATE and/or its components
- Any warranty work done by a bike shop or any components replaced under warranty, MUST be pre-approved by MATE.BIKE. No exceptions
- MATE.BIKE reserves the right to refuse any warranty claim

### 4. LIMITED ONE YEAR BATTERY WARRANTY

Lithium-Ion batteries are warranted to be free from manufacturer defects in materials and/or workmanship for a 1-year-period from the date of original purchase. As it is impossible to know how a battery is cared for, we cannot warranty a battery for diminishing lifetime or charge capacity.

# TROUBLESHOOTING

<p><b>Bike does not power on or only powers on when connected to the charger</b></p>	<ol style="list-style-type: none"> <li>1. Check that the key is turned to the 3rd position "O" On</li> <li>2. Charge the battery completely for 4 hours past when the light turns green on the charger. *see charging battery section</li> <li>3. Inspect all cable connections, check for cable damage or contamination</li> <li>4. Consult the MATE.BIKE HelpDesk</li> <li>5. Contact customer support</li> </ol>
<p><b>Charger light stays green when connected to the battery or battery is not getting a full charge</b></p>	<ol style="list-style-type: none"> <li>1. Connect the charger to the battery first, then the wall</li> <li>2. If charging multiple batteries, unplug from the wall after each charge</li> <li>3. Charge the battery outside of the bike</li> <li>4. Check charger with a multimeter to see if it has power or if it is providing correct voltage, the correct voltage is listed on the charger</li> <li>5. See charging battery section</li> <li>6. Consult the MATE.BIKE HelpDesk</li> <li>7. Contact customer support</li> </ol>
<p><b>Error 21 or 24h pops up on display</b></p>	<ol style="list-style-type: none"> <li>1. Inspect all cable connections - including those into the controller, check for cable damage, burnt plastic smells or contamination</li> <li>2. Restart the bike after letting it cool down</li> <li>3. Use less throttle and put more effort into the pedals if on hills or loaded down</li> <li>4. Check display settings for current limit to match your bike model. If set too high, you will need to lower it to suit your terrain and needs.</li> <li>5. Contact customer support</li> </ol>

<p><b>Bike powers up but doesn't provide pedal assist or throttle use</b></p>	<ol style="list-style-type: none"> <li>1. Check that your power assist level is 1 or higher. Power is not activated on level 0.</li> <li>2. Restart bike and do not pull the brake levers when powering up (the brakes are 'Motor Kill Switch')</li> <li>3. Check display settings for assist level percentage, voltage level, and throttle level setting. *see display manual for your model</li> <li>4. Inspect all cable connections, check for cable damage or contamination</li> <li>5. Check for brake sensor issue by removing each brake sensor cable to find out which one is triggering it, next...</li> <li>6. If error 25 is on the display, try adjusting the brake sensor sensitivity, consult MATE.BIKE HelpDesk for instructions</li> <li>7. If a throttle was recently installed or it does not work after the above steps have been performed, then do a factory reset in the display</li> <li>8. Contact customer support</li> </ol>
<p><b>Error 25 pops up on the display</b></p>	<ol style="list-style-type: none"> <li>1. Check brake adjustment so that they are not too tight and pads rubbing</li> <li>2. Inspect all cable connections, check for cable damage or contamination</li> <li>3. Unplug each brake sensor cable at the lever one at a time to see which brake is causing the error, contact customer support with results</li> <li>4. Unplug brake light, if it goes away contact customer support with the results</li> <li>5. Contact customer support for a brake sensor adjustment guide</li> </ol>
<p><b>Error 30 or "Communication No Signal" on display</b></p>	<ol style="list-style-type: none"> <li>1. Inspect all cable connections, including those into the controller, check for cable damage, burnt plastic smells or contamination</li> <li>2. Restart the bike after letting it cool down</li> <li>3. Unplug display, inspect connection, re-plug display and restart the bike</li> <li>4. Unplug the PAS sensor by the cranks, re-plug back to controller and restart the bike</li> <li>5. Unplug any accessories that you may have added such as throttle, lights or remote. Do one at a time until the issue goes away.</li> <li>6. Perform a factory reset on your display. Restart the bike after the reset to see if error disappeared.</li> <li>7. Contact customer support</li> </ol>

# TROUBLESHOOTING

<p><b>Range is very low, bike steers funny or is hard to pedal</b></p>	<ol style="list-style-type: none"> <li>1. Inflate tires to correct amount as printed on tire</li> <li>2. Check brake adjustment to make sure pads are not rubbing (turn each wheel off ground to see if there is significant rubbing)</li> <li>3. Charge battery for longer or perform battery cell balance in the battery section</li> <li>4. Take your MATE to a bike shop to have it looked over for any issues causing this feeling</li> <li>5. Consult the MATE.BIKE HelpDesk</li> <li>6. Contact customer support</li> </ol>
<p><b>Battery does not take a full charge</b></p>	<ol style="list-style-type: none"> <li>1. If the battery is brand new, charge the battery for up to 4 hours past when the charger turns green</li> <li>2. Check voltage of charger to make sure it is putting out the correct amount to charge the battery</li> <li>3. Inspect the fuse on the battery, if it is damaged replace it</li> <li>4. Consult charging section</li> <li>5. Consult the MATE.BIKE HelpDesk</li> <li>6. Contact customer support</li> <li>7. If out of warranty consult an eBike/battery shop for diagnostic or replace battery</li> </ol>
<p><b>Display does not save clock settings or other settings after you restart the bike - Display needs to be charged</b></p>	<ol style="list-style-type: none"> <li>1. Turn on the bike, disable auto shut-off in the display then connect the bike to your charger for up to 36hours</li> <li>2. Consult the MATE.BIKE HelpDesk</li> <li>3. Contact customer support</li> </ol>

<p><b>Brakes are too soft or making a noise - Brakes need service or adjustment</b></p>	<ol style="list-style-type: none"> <li>1. See brake maintenance section</li> <li>2. Check brake adjustment, to see if they are centered and not rubbing</li> <li>3. Clean brake rotors with alcohol, make sure there is no oil, grease or residue on them</li> <li>4. Consult the MATE.BIKE HelpDesk on how to adjust them</li> <li>5. Take your MATE to a bike shop to have the brakes inspected</li> <li>6. Contact customer support</li> </ol>
<p><b>Gears do not shift correctly - Derailleur needs adjustment</b></p>	<ol style="list-style-type: none"> <li>1. Check that the rear derailleur hanger is aligned properly, especially after a fall, shipping or the bike has tipped over on that side</li> <li>2. Check cable tension of shifter cable to make sure it is adjusted correctly. *see derailleur adjustment section</li> <li>3. Consult the MATE.BIKE HelpDesk</li> <li>4. Take your MATE to a bike shop to have your gears and shifting adjusted</li> </ol>



## EC-DECLARATION OF CONFORMITY 2014/30/EU

**Company** MATE.BIKE International ApS  
Landemærket 29  
1119 Copenhagen  
Denmark

**Product** E-Bike  
**Brand** MATE.BIKE  
**Item** MATE II 25001/25002/25003/MATE X 250/MATE X 250+  
**Serial no.** WMAB6000001N-WMAB900000P

This declaration of conformity is issued under the sole responsibility of the manufacturer. The above-mentioned products are in compliance with the essential requirements of the following directive when used for its intended purpose:

### EMC Directive 2014/30/EC

#### Applied harmonized norms:

EN 14764:2005  
EN 15194:2009+A11:2011  
EN 55014-1:2006+A1  
EN 55014-2:1997+A1+A2  
EN 61000-3 2:2006+A1+A2  
EN 61000-3-3:2008

Copenhagen, January 15th 2019

Christian Adel Michael  
Founder

Julie Kronstrøm Carton  
Founder



## EC-DECLARATION OF CONFORMITY 2006/42/EU

**Company** MATE.BIKE International ApS  
Landemærket 29  
1119 Copenhagen  
Denmark

**Product** E-Bike  
**Brand** MATE.BIKE  
**Item** MATE II 25001/25002/25003/MATE X 250/MATE X 250+  
**Serial no.** WMAB6000001N-WMAB900000P

This declaration of conformity is issued under the sole responsibility of the manufacturer. The above-mentioned products are in compliance with the essential requirements of the following directive when used for its intended purpose:

### EMC Directive 2006/42/EC

#### Applied harmonized norms:

EN 15194:2009+A1

<sup>1</sup> MATE.BIKE models with: i) maximum output of 250W, ii) the motor must switch off once the bike reaches a speed of 25 km/h, iii) only "assist" the rider when pedaling (no throttle) – besides walking assist (up to 6 km/h).

Copenhagen, January 15th 2019

Christian Adel Michael  
Founder

Julie Kronstrøm Carton  
Founder








# ***GET IN TOUCH***

If you have any further questions/comments, please feel free to contact us. We are here for you and your new MATE:

**hello@mate.bike**

You can also become a part of our MATE tribe on social media:

 [facebook.com/matebikes](https://facebook.com/matebikes)

 [@mate.bike](https://instagram.com/mate.bike)

[#matebike](https://twitter.com/matebike)

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