



MATE.BIKE

2017 EBIKE OWNER'S MANUAL

MODELS

MATE CITY (25001): 250W, 36V 10.4Ah Li-Ion battery

MATE CITY+ (25002): 250W, 36V 13Ah Li-Ion battery

MATE CITY+ w/Booster upgrade (25003): 250W, 36V 17Ah Li-Ion battery

MATE S (35001): 350W, 36V 13Ah Li-Ion battery

MATE S w/Booster upgrade (35002): 350W, 36V 17Ah Li-Ion battery

Please read before operating your new bike.



FOREWORD

Congratulations! You've just become one of the very first owners of a MATE bike in the world! We want to thank you for your support through your generous contribution and patience.

MATE wouldn't have seen the light of day without the support from thousands of backers around the world who believed in our dream of bringing to the world a cool and affordable ebike - made for any rider, any journey, any situation.

We kindly request that you please read this manual from beginning to end. Our safety warnings are especially key before you hop on your MATE.

With love,
Christian, Julie & the rest of the MATE team

SERIAL NUMBER

Please take a moment to record your bicycle's engraved serial number located at the top of the head tube (the tube at the front end of the frame), just above the MATE logo. Write down that number here in the manual in case your bicycle is lost or stolen. In addition, it is wise to register this number 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: _____

Serial number: _____

Color: _____

Date of purchase: _____



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SAFETY FIRST

If you are unfamiliar with any aspect of this manual, it is recommended that you take your bike 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.
- 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. But if for any reason you are not completely certain, please bring it to your nearest bicycle shop.
- Key assembly steps that must be completed with absolute certainty (to include secure fastening) are pedals, saddle height, handlebar (both rotation and height) and wheels according to below specifications.
- Please ensure all safety latches, including quick releases and rings, are locked in place and snug without any movement according to below specifications.
- Please ensure all bolts (including the front/rear wheels and saddle bolt) are properly tightened according to below specifications.
- If you are unfamiliar with cycling, we suggest that you take a cycling course that includes riding safely.
- Test your brakes prior to using the bike every time. In wet or icy conditions, use extra caution.
- Frequently check your tire pressures. They should be approximately between 4 and 6.5 bar (58 and 94 psi). Low tire pressures will result in damage to the tires and rims. It can shorten the lifespan of your bike as well as cut your ride short if you suffer from a flat tire.
- We recommend you to always wear a helmet when riding any bicycle.

- Please observe all traffic regulations and bicycle laws, including any applicable lighting laws.
- Don't drink and ride. Even a small amount of alcohol can impair your judgement, lowering your ability to remain safe on the bike.
- Weather and nighttime operation can be tricky. Please use extra caution in inclement, icy or snowy weather and at night.
- Don't lend your bicycle to anyone who is unfamiliar with it. If you choose to loan your MATE bike to anyone, make sure they have also read and fully understand this owner's manual.
- E-bikes are not toys. All riders must be at least 16 years old.
- This bike is meant to be ridden by a single person. Total recommended weight of rider, including all items such as backpack, is 120 kg (264 lbs.)
- This bicycle is intended for riding primarily on the street. Be extra careful if you decide to use it on other surfaces.
- It is advisable to be extremely cautious when riding in traffic. Cars are not used to the speed at which an e-bike can travel, as compared to a regular bike.
- Since it is impossible to anticipate every situation or condition which can occur while on the bike, this manual makes no representation about the safe use of the bicycle under all conditions. There are risks associated with the use of any bicycle. 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. Please go to your local bike shop that has experience with e-bikes. If in doubt, please contact support@mate.bike.

US AND CANADA: FEDERAL LEGISLATION OF E-BIKES

Due to recent changes in federal legislation, an electric bike is no longer classified as a motor vehicle. However, e-bike laws vary from country to country, as well as state to state, so please familiarize yourself with the specific laws pertaining to your intended riding territory. These regulations may include, but are not limited to, being at least 16 years of age and/or having a valid driver's license. For further clarification, please consult your local department of motor vehicles.

For all other countries, please contact the local motor vehicles authorities to familiarize yourself with the rules and regulations that apply to e-bikes in your intended riding area.

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

If you have any further questions about the operation of this MATE e-bike, please consult your local dealer or contact MATE Bike directly by email at support@matebike.com or check out the FAQs section on our website <http://www.matebike.com>.

INSIDE THE MATE BOX

When you receive your MATE box, it will include the following items:

- Suspension bike frame/fork
- Rear wheel
- Front wheel
- Stem/handlebar
- Gears/chain
- Brakes
- Seat (saddle) / seatpost
- Left/right pedals
- Battery
- Battery keys
- Battery charger
- Front fender
- Rear fender
- Wheel reflectors
- Front bike reflector
- Rear bike reflector
- Assembly tools: 3 allen keys

Please contact us right away if something is missing or appears to be damaged.

GETTING TO KNOW YOUR MATE



1. Saddle
2. Seatpost
3. Seatpost quick release
4. Rear suspension
5. Disc brake
6. Tire
7. Spoke
8. Motor
9. Cassette
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. Display 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 quick release
28. Hidden battery
29. Handlebar stem vertical locking mechanism

ASSEMBLING YOUR MATE FOR THE FIRST TIME

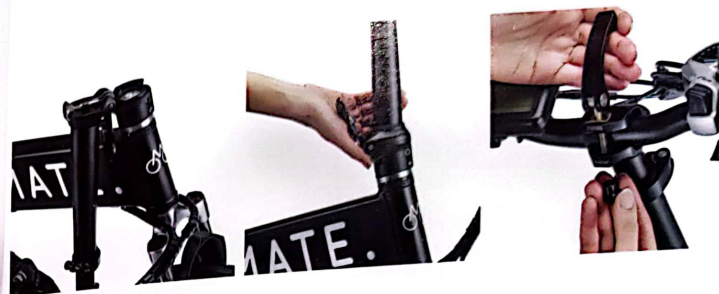


How to assemble the front wheel

1. Remove the quick release axle (27) from the front wheel's spokes (7).
2. Unscrew the nut and remove the one spring closest to the nut.
3. Lift the frame/fork (23) and place the front wheel in the bike's fork (23).
4. Make sure that the disc brake (24) is well placed in the middle of the brake caliper.
5. Insert the axle (27), making sure to keep one spring on each side of the wheel, broad side of spring facing outward.
6. Firmly screw the nut back on and securely tighten the wheel using the quick release lever, closing it to the right either before or after the fork for easy re-opening.

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

IMPORTANT: Attach the wheel securely. A loose or detached wheel can cause you to lose control of your MATE and fall, and could cause you serious injury.



How to assemble the handlebar

1. Straighten the handlebar (19) until it is perpendicular to the ground and lock the handlebar stem safety locking mechanism in place.
2. Insert the loose handlebar (19) into the handlebar stem (22) with the brakes (20) facing outward, and push down. You may raise and lower the handlebar as you wish until you find a height comfortable for riding. This means that you can easily reach the brakes for safe control of the bike. When this is complete, simply screw the nut firmly back on then pull the handlebar rotation quick release (shown above) backward to secure the handlebars in place. Please ensure the lever is snug and there is no movement.

IMPORTANT: Make sure the handlebar fits tightly into the handlebar rotation quick release (21), and that the handlebar height quick release (12) and handlebar stem locking mechanism are securely fastened. Failure to do so could result in loss of control of your MATE and could cause you serious injury.

ASSEMBLING YOUR MATE FOR THE FIRST TIME CONTINUED



How to assemble the saddle (seat) & seatpost

1. Remove the seatpost wrapping.
2. Loosen the seatpost quick release (3).
3. Insert the seatpost (2) to the desired height before securing it in place by screwing the nut in firmly then tightening it into place with the quick release (3).

IMPORTANT: 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.

Assembling the pedals

1. Each pedal has an "L" sticker or "R" sticker to indicate left or right side of the bike.
2. Screw "L" pedal into the left crank arm, turning counterclockwise.
3. Use the largest of the allen keys provided to tighten the pedal in place (see photo). Do this by sticking the allen key into the pedal via the backside of the crank arm and turning clockwise.
4. Repeat process for the "R" pedal, but with opposite turning directions. Screw the "R" pedal in clockwise, turn the allen key counterclockwise.

IMPORTANT: Make sure the pedals are tightly attached to each crank arm. Failure to tightly attach the pedals could result in the pedals becoming loose while riding. A loose or detached pedal can cause you to lose control of your MATE and fall, and could cause you serious injury.

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. Next push the safety button on the folding handle located on the middle of the frame and pull the handle to fold the frame. Hint: you may use your knee to help easily fold the frame.
3. 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.
4. Push the pedals (13) inwards to fold them.

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

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 12).
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 the nut on the opposite side of the lever, then re-close the quick release lever.
4. Pull the pedals (13) back into riding position. You will hear a click when they are securely in place.

IMPORTANT: 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.

MATE SPECIFICATIONS

Model Number	MATE S (35001)	MATE S (35002)
Motor	350W brushless geared rear-drive	350W brushless geared rear-drive
Battery	Samsung Li-Ion Battery 36V 13Ah	Sanyo/Panasonic Li-Ion 36V 17Ah
Max speed	32 km/h / 20 mph	32 km/h / 20 mph
Battery range* <small>*(w/pedal-assist, dependent upon usage, weather, conditions, terrain and rider's total weight)</small>	Up to 80+ km / 55+ mi	Up to 120+ km / 75+ mi
Bike weight w/o battery	20.2 kg / 44.5 lbs	20.2 kg / 44.5 lbs
Bike weight w/ battery	23.7 kg / 52.2 lbs	24 kg / 52.8 lbs
Bike dimensions	160 cm / 63" L x 57 cm / 22.5" W x 108 cm / 42.5" H	
Bike dimensions when folded	90 cm / 35.4" L x 40 cm / 15.7" W x 68 cm / 26.7" H	
Front suspension	Lightweight forged alloy. Responsive adjustable spring tension. 30mm travel. Mechanical lock-out. 1.5 kg	
Rear suspension	125L x 750 LBS - Pre-adjusted with 24 +/- 2 mm travel	
USB-port	5V output	
Rims	20" x 1.5" 32-hole F, 36-hole R, black	
Front hub	100 mm, 20" 32-hole	
Rear hub	20" 135 mm 36-hole	
Tires	20" x 1.95" all-terrain profile	
Crankset	170 mm alloy crank arms, 52-tooth chainring	
Bottom bracket	BB988 68 mm x 118 mm, threaded	
Rear derailleur	7-speed Shimano	
Shifters	7-speed Shimano SIS index shifting	
Disc brakes F / R	Mechanical, aluminum G3 rotors, 160/160	
Rider size range	142-195 cm	
Rider max weight	120 kg / 250 lbs	
Rider minimum age	16 years old	

MATE CITY (25001)	MATE CITY+ (25002)	MATE CITY+ (25003)
250W brushless geared rear-drive	250W brushless geared rear-drive	250W brushless geared rear-drive
Samsung Li-Ion Battery 36V 10.4Ah	Samsung Li-Ion Battery 36V 13Ah	Sanyo/Panasonic Li-Ion Battery 36V 17Ah
25 km/h / 15 mph	25 km/h / 15 mph	25 km/h / 15 mph
Up to 55+ km / 35+ mi	Up to 80+ km / 55+ mi	Up to 120+ km / 75+ mi
19.0 kg / 41.9 lbs	19.0 kg / 41.9 lbs	19.0 kg / 41.9 lbs
21.5 kg / 47.4 lbs	22.5 kg / 49.6 lbs	23 kg / 50.5 lbs
160 cm / 63" L x 57 cm / 22.5" W x 108 cm / 42.5" H		
90 cm / 35.4" L x 40 cm / 15.7" W x 68 cm / 26.7" H		
Lightweight forged alloy. Responsive adjustable spring tension. 30mm travel. Mechanical lock-out. 1.5 kg		
125L x 750 LBS - Pre-adjusted with 24 +/- 2 mm travel		
5V output		
20" x 1.5" 32-hole F, 36-hole R, silver (black for metallic red model)		
100 mm, 20" 32-hole		
20" 135 mm 36-hole		
20" x 1.95" all-terrain profile		
170 mm alloy crank arms, 52-tooth chainring		
BB988 68 mm x 118 mm, threaded		
7-speed Shimano		
7-speed Shimano SIS index shifting		
Mechanical, aluminum G3 rotors, 160/160		
142-195 cm		
120 kg / 250 lbs		
16 years old		

BATTERY

The battery (28) is the heart of your e-bike'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 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 "ignited" position, which can be found by turning key two clicks when in "loose" position - motor unlocked and LCD screen (18) turns on when pushing the ON/OFF button.

Inserting the battery

1. Open the frame (17).
2. Insert the battery with ignition side facing down.
3. Close the bike'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 bike's frame again (17).

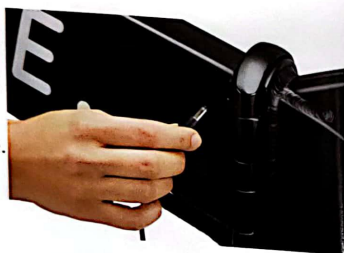
When parking MATE, we recommend you lock your battery by setting it on "locked" position, then remove the key.

CHARGING THE BATTERY

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

Directly from the bike

1. Make sure that the engine is turned off ("loose" or "locked" battery position) when charging directly from the bike.
2. Plug the charger directly into the frame (15).



Removing the battery to charge

Simply remove the battery from the frame as explained above and plug the charger into the battery. For further charging instructions, please refer to enclosed spec sheet inside your charger's box.

Charging time of the battery

With standard charger (2.0 A) : between 4 to 6 hours*
With speed charger (4.0 A) : between 2 to 3 hours*

IMPORTANT: If your MATE will be kept for a long period in extreme temperatures (below 0°C/32°F or above 35°C/95°F), remove the battery and keep it in a place where the temperature is between 4°C/40°F and 32°C/90°F. Do not charge the battery when the air temperature is below 0°C/32°F or above 40°C/104°F. Serious damage to the battery could result.

* Depends of current battery usage level, climate conditions, earlier charge

BATTERY USAGE

- To reach the furthest distance on one charge, it is recommended to pedal the bicycle while the Pedal Assist System is turned ON (18). It will help save the battery.
- When battery power is low while riding your e-bike, 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 e-bike, refrain from unnecessary braking; coast as much as possible.
- Turn off the power when parking. If you decide to push your bike for any reason, make use of the "walk-assist" option (18).

NOTE for MATE S owners:

- Once the bike is powered ON (18), when the rider presses down on the thumb throttle, the bike 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 bike, 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 electric bicycle start suddenly and cause an accident.

MATE battery: Important info

Type: Lithium battery. Voltage: 36V. Capacity: varies between 10.4 Ah, 13 Ah and 17 Ah - Please check directly on the battery's label. Battery lifecycle: between 400 and 600 charges

Warning: Do not take the battery apart. Do not burn, puncture, submerge in water or damage the battery in any way. If the battery appears to be damaged, in case of any noise, irregular heat or leakage from the battery, cease all use immediately. Keep the battery in a ventilated place and out of direct sunlight. Keep the battery stored above 0°C to avoid excess loss of battery power.

SETTING UP MATE FOR YOUR 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 saddle to desired height, then straighten saddle so that it is centered (parallel to bike frame). When desired height is set, firmly tighten the quick release (3) so that saddle is securely in place. Try to manually move saddle from left to right to be sure it is firmly secured. If it is not firmly secured, open the quick release lever, tighten the nut on the opposite side of the lever, then re-close the quick release lever.

IMPORTANT: 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.

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 silver bolt located under the saddle, at the top of the seatpost (2). You can use one of the allen keys provided. Once loosened, move the saddle to its ideal position. When desired position is set, firmly tighten the bolt, using a torque wrench, to 18 nm. Try to manually move the saddle up/down as well as forward/rearward to be sure it is firmly secured.

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 by screwing the nut firmly into place then tightening 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 handlebar to frame in 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 can occur to the rider.

Handlebar rotation

To adjust rotating position of handlebar (19) to match your comfort and riding style, first loosen the handlebar rotation quick release (21) located on the handlebar itself. Rotate 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 by screwing the nut of the handlebar rotation quick release firmly into place then tightening the quick release lever (21). Once tight, try to manually rotate the handlebar to make sure it is securely in place.

IMPORTANT: Make sure the handlebar is securely in place and that the brake levers are comfortably in reach. Failure to do so could result in loss of control of your MATE and could cause you serious injury.

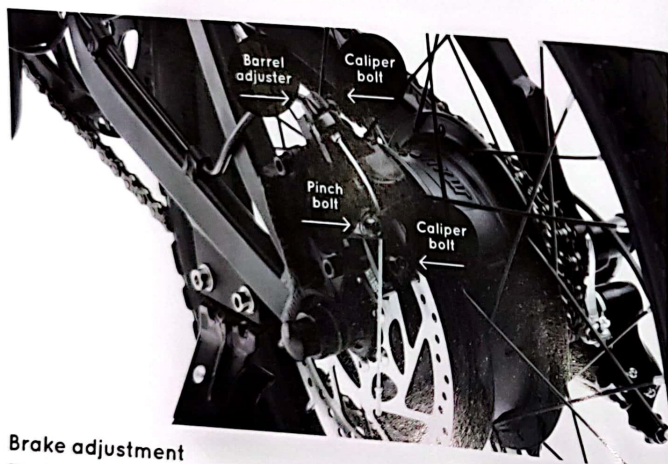
SETTING UP MATE FOR YOUR FIT CONTINUED

Suspension adjustment

The front (23) and rear suspension (4) are pre-adjusted for your convenience. To further adjust the front suspension fork's spring tension to match your weight and riding style, simply turn the knob on the top of the fork.

Brakes

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



Brake adjustment

First step in mechanical disc brake adjustment is to position the caliper (24). By loosening the two bolts that hold the caliper in place, you can adjust it slightly side to side.

With the brake lever (20) (on the handlebar) NOT engaged, adjust the caliper so that the moving pad (outside) is as close to the rotor as possible without rubbing. Then tighten the caliper bolts to hold it in place, alternating until both are tight. Spin the wheel to be sure there is no rubbing anywhere on the rotor.

Next is to set the position of the stationary pad (inside). On the back side of the rotor, you will find an adjusting nut that moves the pad in or outward. Turned clockwise, it will move it toward the rotor, counter-clockwise will move it away. It is important that the stationary (inside) pad be about twice the distance farther away from the rotor than the moving (outside) pad.

Now squeeze the brake lever to test. The brake should fully engage before the lever reaches the handlebar. If you can pull the lever all the way to the handlebar, then move the stationary pad closer to the rotor.

If you cannot adjust the moving pad to be as close to the rotor as you would like by simply positioning the caliper, you can move that one in by turning the barrel adjuster counter-clockwise. This will put more tension on the brake cable. (If you need less tension on the brake cable, turn the adjuster clockwise). If you still need more tension, you can loosen the cable pinch bolt to pull more cable through. This will actually cause the brake arm to be slightly engaged in the rested position (however this isn't usually recommended by brake manufacturers, so please take your bike to your local dealer if it comes to this step).

SETTING UP MATE FOR YOUR FIT CONTINUED

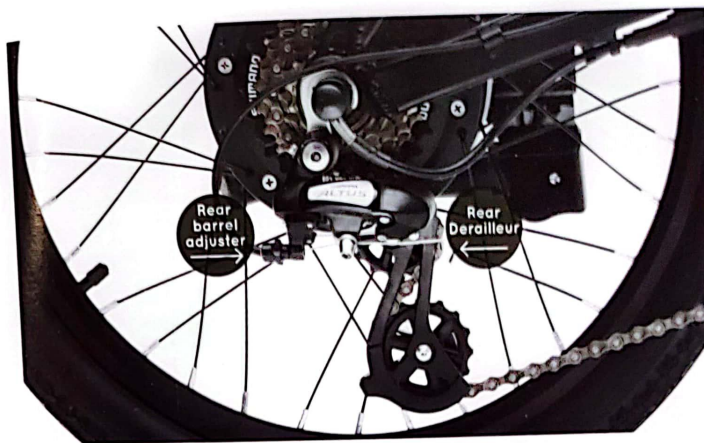
As you ride, your brake pads will become thinner. When you notice that braking power decreases, adjust the pads closer to the rotor. Always keep an eye on them so you can replace them the moment they are worn out. If you are unsure of anything relating to your brakes, please take your bike to your local dealer 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 the bike.
- When braking, lean your body weight a bit rearward to counter balance 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 replace them right away to maintain safe braking control.
- Before every ride, test the brakes to be sure they are working well.
- 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.

Gears

All MATE bikes come equipped with 7 gears (9). To change gears, simply click the shifter. 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. This will also prolong the life of your drivetrain components.



Gear adjustment

To adjust shifting, if necessary, start by shifting chain (11) to smallest sprocket (9). Then click once to move chain to next sprocket. Turn the pedals to test if it shifted successfully. If it did not move to the next sprocket, then turn 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 the next larger sprockets, until you are up to the seventh (and largest) sprocket.

SETTING UP MATE FOR YOUR FIT CONTINUED

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 chain from largest sprocket to next smaller one. Turn the pedals to test if it shifted successfully. If it did not move to the next sprocket, then turn 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 Shimano Shifting Lever user's manual.

Pedal-Assist

There are 6 pedal-assist level options (18). When switched to "0", there is zero pedal assist - completely human-powered. 5 is the highest level of pedal-assistance.

NOTE: For Electric Assist - LCD Operating Instr

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C sheet.

BEFORE YOU RIDE...CHECKLIST

- Check that quick release lever (3) for seatpost is tightly fastened.
- Check that bolt of saddle (1) is tightened to 18 nm using a torque wrench.
- Check that quick release lever (12) on handlebar (19) is tightly fastened.
- Check that both rear wheel axle bolts are tightened to 20-25 nm using a torque wrench.
- 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 kickstand and motor.
- Check for proper functioning of brakes and gears.
- Check that battery is fully charged.
- Check that battery is correctly installed in bike and turned on using the ON/OFF button on the LCD display (18).
- Check that tire (6) pressure is between 4 and 6.5 bar (58 and 94 psi).
- Check that tires are not damaged.
- Make sure that reflectors are in place.
- Some countries require bikes be equipped with a bell.
Be sure to check with your local authorities to learn if you need to install one.

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, by 1/16 inches (0.5 percent), it is time to replace the chain. If it is past 12, 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.

PRODUCT REPLACEMENT

It is always good to keep spare tires, inner tubes, lube, chain, brake pads on hand as these items are worn 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 dealer. This includes cables/housing, bearing adjustments, brake adjustment and wheel adjustments. Be sure to replace parts with original bike components to ensure optimal level of performance.

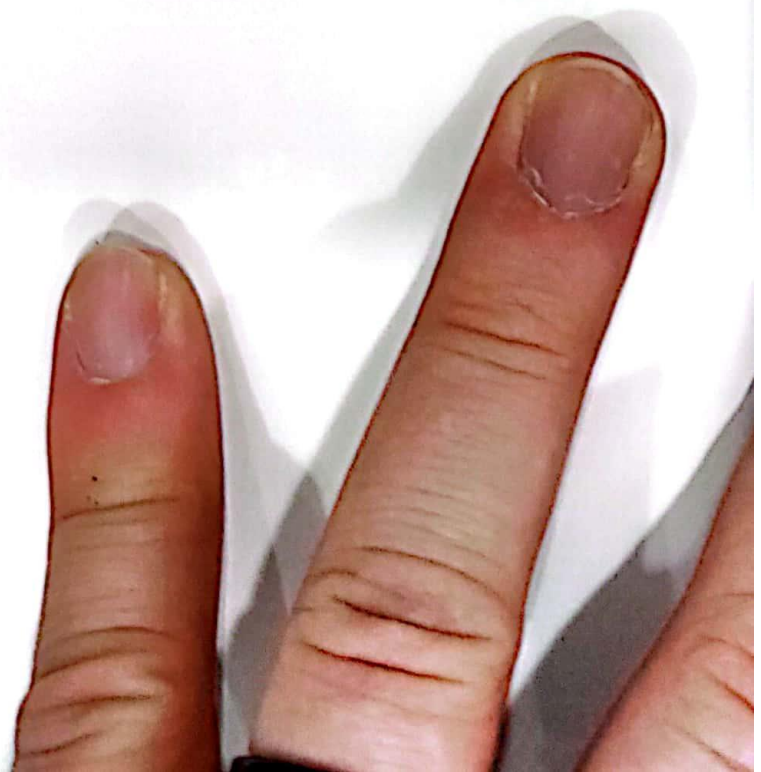
Warning: As with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear or stress fatigue in different ways. If the design life of a component has been exceeded, it may suddenly fail possibly causing injury to the rider. Any 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.

GENERAL TIPS

- It is recommended to take your bicycle for a full tune-up and maintenance check by a bicycle mechanic on a regular basis.
- While our MATE bikes are rain and splash-proof, their electrical components should not be submerged in water.
- To prevent corrosion, dry the bicycle and its components after every wet ride. Store bike and battery in a dry location.

IMPORTANT! Do not attempt to open the casings of the battery, motor, or controller. This will void any warranties associated with those products, and could damage the products, reducing your ability to control your MATE and potentially causing you serious injury. If you experience a problem with the battery, motor, or controller, please contact our service department or your local bike shop.



TROUBLESHOOTING

A. Top speed too slow	1. Fully recharge battery
B. Power on but motor not working	1. Reinstall battery / replace fuse
C. Riding shorter distance per recharge	1. Check tire pressures 2. Recharge completely or have charger re-inspected 3. Replace battery
D. Power and indicator lights are all on, with throttle or pedal assist, but e-bike doesn't work	1. Controller needs to be replaced, or 2. Motor needs to be replaced 3. Please contact us.
E. Power and indicator lights are all on; bike works with throttle, but not with pedal assist	1. Controller needs to be replaced, or 2. Pedal assist module needs to be replaced, or 3. Motor needs to be replaced 4. Please contact us.
F. Power and indicator lights are all on, bike works with pedal assist, but not with throttle	1. Controller needs to be replaced, or 2. Throttle needs to be replaced, or 3. Motor needs to be replaced 4. Please contact us.

G. Power is on, and throttle is down, but bike doesn't work	1. Check battery to see if it needs to be charged, or 2. Fuse needs to be replaced, or 3. Controller needs to be replaced, or 4. Motor needs to be replaced 5. Please contact us.
H. Switch is turned on, and bike takes off without using the throttle	1. Check if throttle is stuck in the ON position 2. Lubricate or replace throttle if it is faulty
I. After stopping, bike doesn't start when throttle is twisted	1. Check whether the brake lever are fully released 2. Check D., E., and F. above
J. You connect the power to the charger, but indicator light does not come on	1. Check whether there is electricity to the charger 2. If you have a voltage meter, you can check to see if the charger produces the correct current
K. You plug in the charger to both bike and outlet, and the green light comes on instead of the red light - which means it isn't charging	1. Check to see if the batteries aren't already fully charged 2. Check whether the charger is plugged in properly to both battery and outlet 3. Check the voltage of the charger and battery 4. If "zero" voltage on the charger, then it needs to be replaced 5. If "zero" voltage from the battery, then check the fuse.