

ELECTRIC BIKES



MAVERICK

USER MANUAL



# RIDE #REVOLUTION

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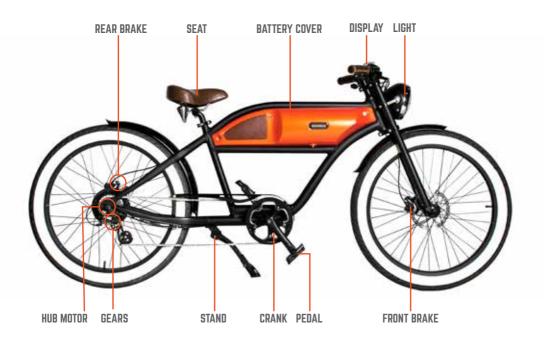
CONGRATULATIONS ON YOUR MICHAEL BLAST "MAYERICK" ELECTRIC BIKE PURCHASE. WE BELIEVE OUR "MAYERICK" BIKE IS ONE OF THE COOLEST VINTAGE STYLED ELECTRIC BIKES ON THE STREETS OF NEW ZEALAND.

We know that you will have lots of fun riding your bike but remember to read this manual fully and always wear the right protective gear to help you stay safe when riding this electric bike.

If you have any concerns, questions or suggestions then please contact Rev Bikes on the link below.

#### www.revbikes.co.nz

We highly recommend you have your "Maverick" assembled and checked over by a qualified bicycle technician if you are unsure as to how to assemble your electric bike, this way you know it will operate perfectly as intended.



# **CARTON CONTENTS**

1 x Maverick Electric Bike

1 x Owner's Manual

2 x Keys for Battery

1 x Battery Charger

1 x Multitool

Please Note: This manual is not intended as a detailed service, repair or maintenance manual. Please seek assistance from your dealer or a qualified bicycle technician for service and repairs. To clarify, the name of this electric bike in other countries is "Greaser". Rev Bikes has the approval of Michael Blast to change the name to "Maverick" for the New Zealand market.

#### Your bike has been pre-assembled and requires only just a few steps to get it ready for you to ride:

Open the box. Carefully lift the bike out of the box as the bike weighs 28kg. We recommend that you seek help so that two people lift the Maverick from the inner cardboard box so as not to damage the bike, nor cause a lifting strain to yourself. Alternatively, you can carefully cut the cardboard to 'expose' the bike.

- 1. Remove the loose items and protective packaging around the bike.
- 2. Fit the handlebar using a 6mm hex key, remove the top half of the handlebar clamp, locate the handlebar into the bottom half of the handlebar clamp and ensure the cables are not in any way tangled with the LCD display unit on the left-hand side of the bike. When sitting on the bike looking forward, insert the top half of the handlebar clamp and install the 4x6mm Hex head bolts, and initially tighten slightly while making sure the top clamp is sitting evenly on the bottom handlebar clamp. Adjust the handlebars to the desired angle and tighten the 4x6mm hex bolts firmly so the bars do not move up or down when pressure is applied. Do not adjust the handlebar settings when the hex bolts are firm as this will result in damage to the handlebar.



**HEX BOLTS** 

3. Adjust the seat up or down by pulling the clamp handle away from the seat post and loosen the clamp around the seat stem. Slide the seat up or down to suit the rider. Once you have the preferred seat height, gently tighten the clamp against the seat stem and move the clamp handle inwards towards the seat post so it is held tight by the clamp. Make sure the seat is not set above the maximum height marks on the seat post.



The pedals have been labelled "L" for the left and "R" for the right-hand side. Attach and tighten them with a 15mm spanner turning anti clockwise.

**SEAT CLAMP** 









#### Understand how your bike works before going for a ride:

Electric bikes are a relatively new means by which to achieve individual transportation. There are three ways in which you can gain forward motion when riding your bike.

1.You do all the work. To achieve this, you select a pedal assist level of 0, and change gears up and down according to the speed at which you wish to travel and the terrain that you are riding over. A moderately fit person can achieve a sustainable speed of 20 – 25 KPH over flat ground when riding on a hard surface.

- **2. Shared work load.** By using pedal assist levels of 1 5, the bike is gaining forward motion through a combination of your pedalling activity and the hub motor. Once the bike achieves a pre-set speed limit for the specific pedal assist level, the motor will no longer contribute to the forward motion of the bike as you are pedalling fast enough to maintain the speed setting. To gain support from the motor, you must either increase the level of pedal assist, or reduce your level of pedalling.
- **3. Thumb throttle.** Should your bike be fitted with a thumb throttle, then provided the LCD unit has been turned on, you do not need to pedal to gain forward motion, but rather gently depress the throttle. Removing your thumb from the throttle will result in power to the hub motor being disconnected.

Before taking your "Maverick" for your first ride, think of a manual car. When you start, you have the car in first gear (the bike has 7 gears) and exert low pressure on the accelerator (the bike accelerator, is the 5 levels of pedal assist, or the thumb throttle). Similarly, you should start from a stationary position with the bike in 1st or 2nd gear and a pedal assist level of 1, and increase the gear and pedal assist settings, as you gain momentum.

Please note that the bike has a built-in safety feature, that cuts power to the motor when the load on the bike battery is too high. This often occurs when accelerating from a stationary position when the bike is in a high gear and has a high pedal assist setting. Likewise, when biking up a hill, if the effort required by the motor is too high, then the safety cut out will kick in. The best way to over-come the power loss, is to use lower gears and a low pedal assist setting when starting or biking up hills. Do not expect the bike to do all the work for you. Should you experience power loss, restart the bike using the on off button attached to the LCD unit. The best way to find out how your bike operates using a combination of pedal assist (or the thumb throttle) and gears, is to find a nice big flat open area and ride around on pedal assist setting 1. As you pedal you will quickly learn when the bike starts to lose power to the hub motor. This means you have reached the speed limit for the pedal assist setting. By changing your pedal assist level to 2, (by depressing the + button) you will feel the power of the hub motor kick in. When pedalling, the crank has three points of contact for every rotation. If you stop pedalling, and in some cases if you are pedalling too slow, then the power to the hub motor will stop. It is very important when testing your bike, that you try using the thumb throttle to see how this affects the bike while riding. If you need to stop in a hurry, then release the thumb throttle first and apply the rear brakes.

# **HELMET SAFETY**

Always wear an approved helmet while riding your "Maverick" electric bike and follow the helmet manufacturer's instructions for the fitting and use of your helmet. It is your responsibility to familiarise yourself with the relevant New Zealand laws of where you can ride your bike and that you comply with all road safety rules. Rev Bikes recommends the Livall BH51 M helmet when riding the "Maverick".

## **MECHANICAL SAFETY CHECKS**

- Check the condition of your "Maverick" bike before every ride.
- Make sure all nuts, bolts or any fixings are not loose and pay attention to the axle nuts and handlebar stem bolts
- Make sure the tyres are correctly inflated to 25-30 psi (175-205 kPa)
- It is recommended you take your "Maverick" bike to be serviced and checked by
  a bicycle technician once you have done 150 kilometres of riding. This is a good
  standard practice for any new bike as cables will stretch and components will 'bed in'.
  The service should include spoke tensioning for both front and rear wheels along with
  a general check to ensure all nuts and bolts are tight.

# **PASSENGERS**

The Maverick is designed for the rider only.

Do not carry any additional passengers on the front or rear of the bike.

This bike is designed to have a maximum rider weight of 130kg.

# **TECH SPEC**

| MOTOR            | 350Watt Bafang Geared brushless rear hub                          |
|------------------|---|
| WEIGHT           | 28kg  |
| BATTERY          | 36volt 13Ah Lithium-ion   |
| RANGE            | Approx 40km + Depending on Pedal Assist<br>Usage and riding style |
| SPEED            | 0 – 25+km/h   |
| CONTROLLER       | 18Ah  |
| LCD              | Good Times 5 Pedal Assist speed display                           |
| FRONT WHEEL HUB  | Joytech (Sealed bearings)   |
| HANDLEBAR + STEM | Promax aluminium  |
| FRAME            | 6061 Aluminium Tig welded   |
| GEARS            | 7 speed Shimano Acera   |
| BRAKES           | Tektro Auriga hydraulic disc                                      |
| WHEEL            | 26"x 3" Rim   |
| FORK             | Double Down Chromoly / CNC Crown set                              |
| WARRANTY         | Frame 5 years, Hub Motor 2 years, Electric<br>Components 1 year   |
| FRONT LIGHT      | LED   |
| TYRES            | 26" x 3" Kendra Duro Beach Bum                                    |

# **MAVERICK LCD SCREEN SYMBOLS**

- 1. Battery Level
- 2. Current Speed
- 3. Pedal Assistance Level
- 4. Light On/Off
- 5. Not in Use
- 6. Current Trip Distance or total distance travelled



# TURN YOUR MAVERICK ON

Press and Hold the Power/Mode Button for 3 seconds to turn your "Maverick" on. Located on the front of the display unit.

POWER/MODE BUTTON

The "Maverick" LCD display will look like the one in the picture when turned On.



# ADJUST THE AMOUNT OF PEDAL ASSIST

Press the + button to increase the amount of pedal assistance. The higher the number the more assistance is applied. Level 5 is the highest level of assistance this bike has been set to.

Press the – button to decrease the amount of pedal assistance. The lower the number, the lower the level of assistance. Level 1 (as indicated in the photo on the previous page) is the lowest pedal assist setting.

You can lower the pedal assist down to 0, however this will result in no pedal assistance when you ride the bike.



Please Note: Each pedal assist level has a pre-set maximum speed. When the set speed has been reached for the level of pedal assistance, the power to the hub motor will cease. Should you want assistance from the motor then you either need to reduce the pedalling activity and slow the bike, or press the + button to increase to a higher level of pedal assist.

# LCD UNIT BACKLIGHT AND LED HEADLIGHT

Press and Hold the + button for 3 seconds to activate the LED headlight. This action will also cause the LCD Unit backlight to come on, to help light the LCD screen. To turn the headlight and backlight off, press and hold the + button again for 3 seconds.

How to change between current trip km travelled, and total distance travelled: While the LCD Unit is on, Press the Power/Mode button once only, to switch between the current trip km travelled and the total km travelled.

To reset the current trip meter back to zero, Press and Hold the Power/Mode button and the – button for 3 seconds

**LCD/Controller Settings Menu:** By Holding the + and the - button at the same time for 3 seconds this will allow you to enter the Settings Menu overleaf.

#### The Settings Menu will look like the picture below



**Unit –** Displays KPH or MPH. You can select your preference.

Speed Limit – Maximum speed at which assistance to the motor will cease has been set at 25Km/h as some countries have set speed limits for electric bikes. New Zealand speed limits for electric bicycles are the same as for the road rules for vehicles dependent upon the speed zone that you are in riding in. Please note that you must ride your electric bike on the road and not the footpath unless a cycle lane is available.

**Backlight** - The brightness of the LCD backlight.

Wheel Size – Factory set at 26" (Do not Adjust)

**Power Off Delay -** Time (in minutes) at which the power will automatically turn off if the bike is not being used. We recommend that you leave this at the factory setting.

NDW - Do not Adjust this.

Adjusting the Settings Menu: Once you have entered the Settings Menu then Press the + or – button to select the setting you would like to adjust. The setting that is slowly flashing is the setting that can be adjusted.

To adjust the setting, Press the Power/Mode button once only.

Press the + or – button to adjust to the desired setting. Once you have the desired setting Press the Power/Mode button once. When you have finished with the Settings Menu, Press the Power/Mode button again to bring you back to the main LCD screen display.

## **TYRES**

To minimise tyre wear, and for maximum rider safety, comfort, and handling, you need to maintain front and rear tyre air pressure between 25 - 30 psi. Use a reliable tyre air pressure gauge to check for proper inflation before every ride. At the same time, inspect tyres for excessive wear and cracks in the sidewalls.

## **KICKSTAND**

The "kickstand" (on the left-hand side of the bike) has a single leg that flips out to the left side and allows the bike to lean against it. Please do not sit on your "Mayerick" with the kickstand in the down position.

## **GEARS**

Your "Maverick" is equipped with 7 gears. The first gear is for easier uphill pedalling, and for commencing your ride when stationary. The seventh gear is for maximum speed on level or downhill terrain. Change gears (up and down) only while pedalling your bike. Avoid changing gears rapidly from the first gear to the seventh gear and vice versa. If you change multiple gears too quickly, the chain may come off the front sprocket. Adjustments to the gears should be

done by a qualified bike technician.

To overcome loss of power when pedalling too slow, you can change up a gear by pushing the lower gear lever on the right side of the handlebar with your thumb

If you wish to change down gears, use your index finger to pull inward on the finger trigger towards the handlebar grip, then release it for the gear change.



FINGER TRIGGER

THUMB TRIGGER

### **BRAKES**

Your "Maverick" is equipped with hydraulic disc brakes for maximum reliability. The more hand pressure applied to the brake levers, the greater the pressure applied to the disc brake, and the quicker the "Maverick" will come to a stop. The left-hand lever activates the rear brake and should always be applied before the front brake is applied. Applying only the right-hand lever for the front brake too slow or stopping at high speeds may result in the rider being ejected from the seat and continuing forward over the handlebars.

Bicycles equipped with disc brakes will occasionally make a slight scraping noise when the wheels are turning without the brakes being applied. This is normal for your bike.

Ensure that the brake levers do not contact the handlebar when full hand pressure is applied. If so, then the brakes must be adjusted, bled or brake pads need to be changed.

## **BATTERY**

#### **Charging:**

- Always use the charger that comes with the battery on the bike
- Never charge your battery straight after a ride as it has built up heat due to the discharge of energy to the hub motor
- Let the bike sit for an hour (or two) to allow the battery to "cool" before recharging
- Once fully charged let the battery "cool down" before riding the bike
- Never lay your bike down on its side as this is not good for the battery, or the bike
- Plug the charger into your bike first and then the wall socket before turning the charger on
- The charger unit may get warm during the charging process
- Keep your charger fittings free from dirt as dirt will stop the bike battery from being recharged
- Keep the charger and the battery away from damp areas
- Do not open or alter the battery or battery charger

#### Storage:

- Keep your battery in a cool and dry place
- Avoid elevated temperatures and do not leave the battery near a heat source

#### **How to Care for your Battery:**

Included with your bike is a lithium-ion battery (installed), along with a charger unit which plugs into a standard household electric socket. Lithium-ion batteries require specially designed chargers. You should never charge your battery with a charger that is not designed for this use. Use of an unsuitable charger to charge a lithium-ion battery could result in overheating and may cause it to catch fire or even explode.

#### Recharging the battery:

To charge the battery you need to plug the charger lead into the charge port located on the bottom of the tank cover on the left hand side (when standing behind) your bike. You will need to carefully remove the rubber grommet before inserting the charger fitting.

The indicator light on the charger will be red when the battery is charging and will turn green when the battery is fully charged. Please note that the Lithium-ion battery is referred to as a "smart battery" and will not accept any further input from the charger once it is fully charged. When the charger has finished charging your battery, you must switch the charger off at the wall, wait for the light on the charger to go out, and then remove the lead from the charging port under the tank cover and replace the rubber grommet.

As a guide, you should only recharge your battery after a ride of 20 or more kilometres, or when the battery is showing a quarter charge as displayed on the LCD screen. Frequent recharging after short rides is not ideal for ensuring the longevity of the battery. Ideally there should be some variation in battery charge levels whenever you decide to recharge the battery, to remove any potential for the battery building any form of memory.

#### Can your battery wear out even if it isn't being used?

The stored energy in the battery escapes gradually. This is called self-discharging. If it remains completely discharged for a long period of time, irreparable damage can occur due to chemical reactions inside the battery. If the bike is going to be stored for an extended period, then the battery needs to be kept charged. We suggest a recharge every two months to maintain a healthy battery.

## **CLEANING**

#### What if I want to clean my bike?

- Remember that water and electricity do not match!
- Do not clean your bike with the garden hose
- Do not use a high-pressure water washer for cleaning your bike
- Never completely immerse your bike or battery in water

If cleaning your bike use a damp cloth only

#### How to clean your bike without damaging electrical components:

- First, remove the dirt from your bike using a soft bristled brush
- Fill a bucket with warm soapy water and use a soft cloth
- Start from one end of the bike wiping down the bike with the damp cloth
- By doing this you will limit the amount of water around your electrical components
- To clean the chain, hold the cloth loosely on your chain and slowly turn the pedal crank backwards.
- If your chain looks dry, then place a few drops of oil on the chain while turning the pedals backwards
- Be careful when using spray lubricants such as CRC near your disc brakes, as the spray will adversely affect how your brakes work

## **SERVICING**

We highly recommend the first service from a qualified bicycle technician after riding 150 - 200 kilometres.

#### **6 Week Inspection:**

It is recommended that 6 weeks after assuming ownership, you should inspect your bike as some fittings may loosen and need retightening. If you do not know how to adjust any of the cables, please take your "Maverick" to a qualified bicycle technician.

#### **Annual Inspection:**

It is recommended that once a year you complete a full service on your bike to keep it in excellent working order. This can be completed by your local bike shop technician as they will have a check list for yearly service requirements.

When storing your bike for a prolonged period, remove the battery and store it in a cool, dry place, charging periodically, as the battery will discharge over time without use. Failure to so will result in the battery falling into a dormant state rendering the battery unrepairable or ineffective.

### **ACCESSORIES**

#### **Rear Rack:**

You can also purchase optional items for your bike if you wish to dress up your bike, like a rear rack for those times you need to carry any items.

#### **Thumb Throttle:**

A thumb throttle provides you with a third option to gain forward motion, without having to pedal, or use the pedal assist function. You need to be mindful, when using the thumb throttle that it will override the pedal assist settings on your bike.

#### Warranty:

Subject to the following provisions, Rev Bikes and Michael Blast warrants that the goods will correspond with their specification at the time of purchase and will be free from defects in material and workmanship. Rev Bikes and Michael Blast offers a 5 - year warranty on the frame for any problems relating to manufacturer workmanship or arising from material defects including breakages or cracking caused while riding (other than rider misuse). Rev Bikes and Michael Blast offers a 2 - year warranty on the hub motor for any problems relating to manufacturers workmanship or arising from material defects. The warranty does not cover misuse or failure to follow the manufacturers operational instructions correctly. Rev Bikes and Michael Blast offers a 1- year warranty on the battery for any problems relating to manufacturers workmanship or arising from material defects. The warranty does not cover misuse or failure to follow the manufacturers operational instructions correctly. All other components carry a 1 – year warranty for problems related to manufacturer workmanship or arising from material defects apart from consumable components for example brake pads, tyres and when battery discharge if resting voltage is below the standard or batteries damaged due to overcharging. You must provide this to vour authorised dealer for all warranty claims.



Rev Bikes and Michael Blast will have no obligation under this limited warranty in the event the battery is damaged or destroyed as a result of any of the following events; use of a non-Maverick bike charger, damage or destruction by abusive overcharging, collision, theft, improper maintenance or mishandling of the battery and natural forces such as wind, lightning, hail etc, any wilful or negligent acts such as penetration or opening of the battery case in any manner. This warranty becomes effective on the date of the original retail purchase date. For the warranty to remain valid, servicing on a regular 12 monthly basis must be carried out by a bicycle technician. Should a warranty claim be made, Rev Bikes may require evidence of the servicing.

#### Warning:

Electric bikes can be dangerous to use, and the user or consumer assumes all risk of personal injuries, damage, or failure of the bicycle or system and all other losses or damages to yourself and others and to any property arising because of using the bicycle.

## MODEL / COLOUR

# **SERIAL NUMBER BATTERY NUMBER HUB NUMBER** DATE OF PURCHASE

PLACE OF PURCHASE

