## SAFETY

When operating the Manchester 48V please make sure you adhere to the following:

- Always wear a helmet when riding the Manchester 48 V .
- Always check your mirrors and blind spots when operating the vehicle.
- Turn on headlights when in need of additional visibility.
- Make sure that your battery power is sufficient before you go out to ride.
- Obey all laws of the road.
- Periodically charge the unit when not in use for long periods of time
- If you bring your charger avoid shaking / rattling charger while riding.
- Do not over charge the battery by leaving the charger in the charging port. Once the battery is fully charged remove the charger immediately.
- Do not try to operate the unit while charging.
- Do not let anyone uner the age of 16 years old operate this vehicle.
- Do not make sharp / abrupt turns at high speeds to avoid tipping.
- Do not operate under the influence of any use of drugs or alcohol
- Do not completely submerge the unit in water
- Do not operate in harsh weather conditions.

> For any questions or concerns please call 1-800-649-9320 or visit www.daymak.com

## ABOUT DAYMAK

Daymak is one of Canada's largest Alternative Vehicle providers. We design, engineer, manufacture, import and repair everything from recreational dirt bikes, go-karts and electric golf cars to alternative transportation solutions such as e-bikes electric scooters.

Our electric bicycles represent an energy-efficient and eco-friendly alternative for people who need to get around the city. They greatly increase the practicality of bicycle transportation in urban centres. Costing only a few cents to charge, an e-bike can make city life more convenient and much less expensive.

While there are many new Green technologies that are still in their infancy, electric bicycles have been developing over the last 40 years or more. E-bike technology has been dramatically refined since the introduction of the first custom-conversion bicycles. Today, electric bicycles are a supremely reliable and affordable means of transportation.

Daymak is constantly developing new eco-friendly alternative transportation strategies, led by its own Research and Development department in Toronto, Canada. We are always improving our products. Our innovative in-house engineering and quality testing provide customers with many new kinds of reliable, eco-friendly vehicles, designed to help change the lives of our customers and the world.

Daymak warranties, services, and stocks parts for everything it sells. We support our products. Please feel free to visit our website. You'll find the latest in cool transportation solutions, support for the products you've purchased and contact information.

## INTRODUCTION

## E-BIIKS

Using an electric bicycle is a great way to ride around town conveniently and economically. E- Bikes represent a natural progression in the development of urban transportation. Using only small amounts of electricity, e-bikes have the potential to radically reduce the amount of pollution in our cities. They are also very quiet, so they do not add to the high levels of noise pollution which we often take for granted. They are easy, and usually free to park. They are unobtrusive and highly practical additions to the urban landscape.

E-bikes are also inexpensive. They (currently) require no registration, no insurance, no licence and do not incur parking charges. Compared to internal combustion engines, the engines in electric vehicles have fewer moving parts and require far less maintenance. Your Daymak e-bike is the result of Daymak's years of experience, the highly trained technical skills of our staff, and careful ongoing design work by our engineers. We hope you enjoy using this product and welcome any feedback that you may have.

## NEW LAWS

Most provinces in Canada, most states in the U.S.A, the United Kingdom and many European countries have new laws that permit cyclists to use electric motors to assist the regular operation of bicycles. Please check with your provincial or state government to learn about your local laws.

## LIABILITY

Daymak does not assume any liability for damages, loss of profits, or claims from third parties due to improper use of this product. Daymak does not assume any liability for damages due to problems with the product resulting from service by a third party that is not certified by Daymak.

The information in this guide may be subject to change without notice. For the latest information available, please contact your local Daymak dealer or visit our website. We have taken all possible measures to ensure the accuracy and completeness of the information in this guide. However, if you do find anything missing, incomplete or wrong, do not hesitate to contact us.

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## PART DIAGRAMS

## DIAGRAM 1: MANCHESTER 48V

This diagram illustrates the various parts of your bicycle. Please note that many of these parts are not user-serviceable and should be repaired only by trained professionals. This is especially true of the electrical systems and the mechanical components.


1. Turn Signals
2. Display
3. Brakes
4. Shocks
5. Headlight
6. Fender
7. Pedal
8. Chain
9. Tire
10. Tire Pump Valve
11. Rear Light
12. Seat Post Latch
13. Seat

## RIDING INSTRUCTIONS

This guide assumes that you already know how to ride a standard bicycle. Before you try to ride an electric bicycle, you should be very familiar with controlling and balancing a normal bicycle.

## Caution

If you do not have cycling experience, an e-bike is too dangerous to ride. Do not begin learning to ride a bicycle using an e-bike.

## IMPORTANT NOTES

- Ebikes are Fast! E-bikes are capable of traveling at higher speeds than many bicycle riders are accustomed to. Use caution at all times, especially when travelling in mixed traffic. Always take into account driving and traveling conditions.
- Obey the Law. Be sure to follow all provincial and city traffic laws. This includes obeying stop signs, checking carefully when turning, and riding defensively. An e-bike is a motorized vehicle, even though it is classed as a bicycle. You must follow the law.
- Stay Sober. Never ride your bicycle while intoxicated. An e-bike is capable of traveling faster than a normal bicycle, and you should always be in control of it.
- Share the Road. Be careful in mixed traffic. Let vehicles that are faster than you
- Overtake you and give ample room for vehicles travelling slower.


## ITEMS TO CARRY WITH THE ELECTRIC BIKE

It is a good idea to carry the following items with you at all times when you ride your e-bike.

- The charger, to charge the bike in case the battery power runs out.
- 30 Amp Fuse, spares for the batteries, in case the fuses blow (if applicable).
- A lock, to secure your e-bike when you park it.
- A helmet, as required by safety laws.


## INSPECTING YOUR ELECTRIC BIKE

Always inspect your e-bike before you ride it, to make sure its safety features are operating properly. Many accidents can be avoided with routine inspections. Once you are comfortable with your e-bike, you will be able to detect small changes in the way it feels. If anything changes between uses, make sure to have it properly examined. Also, be sure to listen for changes in the sounds your e-bike makes over time. Any mechanical or power issues may have effects on the sounds the bicycle makes.

## HOLDING THE HANDLEBARS

As with a normal bicycle, place your fingers over the brake levers, using the palms of your hand and your thumbs to wrap around and under the handlegrips. Doing this allows you to activate the brakes easily, by squeezing your hand, in case you have to stop quickly. This is the safe way to control your electric bicycle.

## TURNING YOUR E-BIKE ON AND OFF

To turn on your e-bike, press and hold the round button in the middle of the keypad on the left handlebar (see Operation section for more details). Repeat this process to turn off the ebike.

## Warning

When you activate the e-bike, the electrical system becomes live. Do not try to affect changes to the E-Bike (such as removing the battery or repairing electrical components) while the E-Bike is activated. Turn the E-Bike off and remove the key before you attempt to access any of the electrical components. Also, the battery carries a significant electric charge and can injure people if not treated properly and with respect.

## ACCELERATING AND DECELERATING

The throttle is found on the right-side hand grip on the handlebars. Turn rotate the grip counterclockwise (towards from you) to accelerate. To decelerate, release the grip (turn it away from you). Don't over-rotate the accelerator, as this could damage the battery and electrical components.

## Warning

Do not activate the accelerator until you are seated on the bicycle and are ready to accelerate. The e-bike can easily escape from your control, possibly injuring you or others, and the e-bike may be damaged by being dropped.

## STOPPING

Your e-bike has two sets of brakes, at the front and at the rear. The levers attached to the handlebars, on the left and right, activate the brakes. Pull the levers toward you to activate the brakes.

You can use both brakes to come to a stop more quickly, or you can use one of the brakes to come to a gentle stop, depending on your riding needs at the moment. When the brakes are activated, the power to the engine is automatically turned off, until you release the brakes. This allows you to stop safely.

## SAFETY TIPS

- When you are traveling in wet weather, water may cause your brakes to function less efficiently because it reduces friction between the brake pads and the wheels.
- Take care to slow down and give yourself more room to stop or slow if necessary.
- It is a good idea to have your brakes and brake pads checked regularly. The brake pads will eventually wear down through friction, and after significant use will have to be replaced.
- Engage the rear brakes first before the front brakes to avoid flipping the unit.



## SIGNALLING

## TURNING SIGNAL LIGHTS

Your e-bike has turn signal lights. The turn signal activator is on the left handlebar. Push it left or right to activate it to indicate that you are turning in the appropriate direction.

## LIGHTS

The headlight and tail light are useful features when you are riding at night or in dark areas. They radically improve your safety in mixed traffic. The lights on your e-bike consume some electricity. Keeping them on may reduce the maximum distance you can travel on one charge by about 5 \%.

## PEDALING

This e-bike is designed to be a motor-assisted bicycle. You can use the motor by itself, but ideally, you can work with the motor by pedaling. This increases the distance you can travel on your e-bike, because it assists the motor and reduces the amount of electricity you draw from the battery.

## RIDING IN WET WEATHER

Your e-bike is designed to function in wet conditions, such as when it is raining. However, because the motor is on the rear wheel, it is easy to slip when moving at high speeds. If it is very wet, be sure to avoid high speeds. When you are traveling in wet weather, water may cause your brakes to function less effectively because it reduces friction between the brake pads and the wheels. Take care to slow down and give yourself more room to stop or slow if necessary.

## THE MOTOR AND WATER

Your e-bike is not designed to be immersed in water. Always ensure that the water level does not go above the middle of the tire, to prevent water from getting inside the motor. Water in the motor can cause short-circuits and may damage the electrical systems in your e-bike.

## RIDING IN COLD WEATHER

Your e-bike is designed to operate year-round. However, in very cold conditions or when there is a lot of snow or slush on the ground, it is possible for the motor in the e-bike to get wet or for the brakes to function less effectively, just as it can happen in wet weather. Below 10 degrees Celsius, the battery will not work as well as it would in warmer temperatures. While Lithium-Ion batteries perform better than Lead-Acid batteries in temperature extremes, both will experience reduced performance in cold temperatures.

Also, riding the e-bike in cold temperatures may require you to replace the battery sooner rather than later.

## MAXIMUM LOAD

Do not exceed the maximum load capabilities of your e-bike. You can find the exact loading capacity listed in the technical specifications in this guide.

If you exceed the maximum load, the performance of the bike will suffer.
Exceeding the maximum load of your e-bike could cause damage to the shocks, to the mechanism and, ultimately, even to the frame. It could also cause your motor to work too aggressively, and may cause it to burn out.

## DISCONNECTING THE CIRCUIT BREAKER

When the circuit breaker is disconnected, all power from the battery to the e-bike is blocked. This is useful if you are going to store your e-bike or if it is damaged and you wish to bring it to be serviced.

Note: The circuit breaker must be on for the alarm system to work. Do not leave the circuit breaker off in an unsafe location if you are worried about theft.

## LONG-TERM STORAGE OF YOUR E-BIKE

If you are storing your bike for a long period, disconnect the circuit breaker. This is a safer way to store the electric bicycle, as it prevents accidental activation of the e-bike and makes it impossible to activate it even with the key.

Please see the section titled "The Battery" for instructions on battery maintenance while your e-bike is being stored.

## THE BATTERY

This section details what you need to know about the battery that powers your e-bike. Always remember to treat your e-bike's electrical systems with respect.

## BATTERY POWER

The dashboard has a battery charge indicator. When the e-bike is activated, the guage will jump and indicate the currently available battery power. If the power has dropped significantly, you should charge your e-bike.

## DISTANCE AND POWER

Your battery has the capacity to carry you anywhere from $35+\mathrm{km}$ before it must be recharged. The ability of your battery to power your bicycle depends on many variables. These variables include the weight of the rider, the prevailing wind resistance, the rider's driving habits, the presence of steep hills and inclines, and other issues such as proper air pressure in the tires.

## SAVING POWER

If you are traveling long distances, you can save a lot of electricity by using better driving habits:

- Coasting: When going downhill or over long, flat road surfaces, try using your ebike's momentum and allow it to coast, without drawing power from the motor.
- Stopping and Starting: Try to avoid stop and go movements. The motor draws more power when starting from a full stop.
- Weight: Remove unnecessary weight from the bike. This reduces the amount of power the motor must draw.
- Air Pressure: Make sure your tires have the proper air pressure. Proper pressure reduces drag on the tires and radically increases the efficiency of any vehicle.
- Head and Tail Lights: Turn off the lights to conserve power, if it is safe to do so.

The lights will reduce the distance you can travel by about 5\%.

- Pedalling: When accelerating from a full stop, you might want to try pedaling to help acceleration.


## CHARGING YOUR E-BIKE

Charging your e-bike is a simple process. You require the following:

- The charger that came with your e-bike.
- A 110V household electrical outlet.


## Charger Warning

Only use the chargers that were supplied with your e-bike. Using chargers that do not have specifications identical to those which came with the e-bike could irreparably damage your e-bike's battery and electrical systems, and may cause injury.

To charge your e-bike, follow these steps:

1. Turn off the e-bike.
2. Plug the female end of the charger cable into the charging slot on the e-bike.
3. Plug the male end of the charger power cable into your wall socket. This should be a110v household electricity supply. You can also use a portable generator, if necessary, but make sure it provides 110 V current.
4. Allow the e-bike's battery to charge for the appropriate amount of time
5. Disconnect the charger when the LED light on the charger is green. The batteries have been fully charged.

If your charger's LED status light does not change from red to green over an extended period of time, for perhaps more than 6 hours, and the battery is very hot, the battery or charger may need replacing. Stop charging and bring both to your Daymak dealer immediately. Do not charge the battery.

## UNDERSTANDING YOUR VOLTAGE

Electric scooters primary power is displayed on your unit as a voltage. This number in short shows how powerful your unit is, and as it dips down when the unit will no longer be able to perform. Depending on your unit's voltage and battery type (Lithium vs Lead Acid) will effect the range of voltage between what is fully charged and when it exceeds the low voltage threshold.

## LOW VOLTAGE THRESHOLD

Your unit will try to protect the battery by preventing the motor from drawing power below the Low Voltage Threshold. By doing this it will significantly increase the life expectancy of your unit. If you find that your motor starts cutting off at a certain speed or not engaging at all it may be because your voltage is dropping past the threshold point and needs to be charged. To see what your voltage threshold you can check on it via the bluetooth APP (if applicable) and you can check it out using this chart.

VOLTAGE CHART

| VOLTAGE | LEAD ACID |  | LITHIUM ION |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Ful charee | Low voirace | Full blirge | low voriage |
| 24 V | 27V | 21V | ${ }_{78}^{29.4 V}$ | $\frac{20 \mathrm{~V}}{20 \mathrm{~V}}$ |
| 36 V | 40V | 32V | $\begin{array}{\|l\|l\|} \hline \text { 42V } \\ \text { 10S } \end{array}$ | $\begin{aligned} & 28 \mathrm{~V} \\ & 10 \mathrm{~S} \end{aligned}$ |
| 48V | 53V | 42V | ${ }_{205}^{54.6 V} / 518.8 V$ | $\underset{20 \mathrm{~S}}{37 \mathrm{~V} / 40 \mathrm{~V}}$ |
| 60 V | 67V | 53V | $\underset{16.2}{67.2} /{ }_{175}^{71.4 V}$ | $\underset{16 \mathrm{~S}}{45 \mathrm{~V}} / \underset{215}{48 \mathrm{~S}}$ |

## LITHUMM FULL/LOW VOLTAGE READING

Depending on the way your lithium battery's composition will impact what the low voltage and full charge reading should be. Underneath each reading on the above chart shows a number and a " S " this represents how many series are in your battery pack. To know the exact series of your battery contact your local Daymak dealer.

## ASSEMBLING THE MANCHESTER 48V

To assemble the ebike in a box remove all the zip ties and styrofoam and unfold it as seen in the folding section. Insert the handlebars into the handlebar colum and the seat post into the seat column.

For a video to show how to assemble the Manchester 48 V visit:
www.daymak.com/assembly/manchester

## CHARGING THE MANCHESTER 48V

First take the charger that came with your Manchester 48 V and plug it into the the wall. Once you have done that locate the charging port of the Manchester 48V located on the left side of the frame near the pedals.


Once the bike is charging the charger will glow red. When the unit is fully charged the charger will glow green and then your bike is ready to go.

## Warning

Do not leave the Manchester 48V charging for long periods of time after it is fully charged.
Once the bike is charged unplug it ASAP.


## BATTERY CARE

Follow these suggestions to maintain your battery's optimal performance. If you do not follow these suggestions, your battery may lose its ability to maintain a charge and might have to be replaced sooner than would otherwise be necessary.

- Charge it: Charge your battery immediately after riding it.
- Full Charge: Do not allow the battery to run down completely and lie in storage without a charge. This significantly reduces the battery's lifespan and may cause damage.
- Keep it Charged: When being stored, charge the battery occasionally to make sure its power supply does not run down. Charging it once every 21 days should be sufficient.
- Storage Conditions: Store the battery on a flat, cool, dry surface. Do not allow the battery temperature to drop below 10 degrees Celsius for extended periods of time.


## COLD WEATHER AND YOUR BATTERY

Below 10 degrees Celsius, the battery will not work as well as it would in warmer temperatures. While Lithium-Ion batteries perform better than Lead-Acid batteries in temperature extremes, both will experience reduced performance in cold temperatures.

Also, repeatedly riding the e-bike in cold temperatures may cause your battery to have to be replaced sooner.

## REPLACEMENT AND DISPOSAL

After approximately 300 charges, a lead-acid battery will need to be replaced. A lithiumion battery will last approximately 1000 charges. When the battery has to be replaced, you will notice that your battery cannot carry as much of a charge as it could initially.

Contact your local Daymak dealer to purchase a new battery.
When replacing your battery, dispose of it at a proper municipal battery recycling facility. If none is available, please contact your local Daymak dealer.

## OPERATION

## RIGHT HANDLE BAR

1. Shift Gears Up - Press this button to shift the manual gears up. Only do this while pedalling to keep the gear alignment.
2. Throttle - Turn this towards you to engage the motor automatically. Pedal assist must be set to 0 for this to work.
3. Rear Brakes - Pull this to engage the rear brakes. Always use the rear brakes before the front brakes when stopping.
4. Shift Gears Down - Press this button to shift the manual gears down. Only do this while pedalling to keep the gear alignment.
5. Right Turn Signal - These flash when you press the turn signal button! Turn the handlebars that direction to turn them off.



## LEFT HANDLE BAR

1. Front Brakes - Pull this to engage the front brakes. Always use the rear brakes before the front brakes when stopping.
2. Left Turn Signal - These flash when you press the turn signal button! Turn the handlebars that direction to turn them off.
3. Power Button - Press and hold this to turn on and off the bike. Short press while it's on to switch the display metrics.
4. Down Button - Press this to decrease the level of pedal assist.
5. Right Button - Press this to indicate turning right.
6. Up Button - Press this to increase the level of pedal assist. Press and hold this to turn on the lights.
7. Left Button - Press this to indicate turning lieft.

## DISPLAY

The Manchester 48 V comes with a back lit LED display that shows the performance of your bike.

1) Speed - This shows the speed that you are travelling in.
2) Battery Power - This shows how much battery power you have left. 5 Bars is fully charged and 1 bar means you are almost empty (3 bars are shown on the right)
3) Headlights - This indicates whether the backlight and headlights are on.
4) Pedal Assist Level - This shows how much automatic assistance will be provided as you pedal. To have no assistance this should be set to 0 . To have the most assistance this should be set to 5 . To get the most range out of the bike the pedal assist level should be set to 1 . Throttle only works on 0 PAS.
5) Setting - This changes through three settings as cycled by pressing the power button. The three settings are average speed, maxium speed and current speed. The metrics for each setting will appear in section 1)
6) Brake Notification - This indicates that the brakes are being pulled. The motor will not engage if this notification is on.
7) Odometer / Trip Meter / Time - Shows the total distance travelled / distance travelled for this trip / and time for this trip. To switch through these modes press the power button.



## DISPLAY ADVANCED

To access the advanced settings of your display quickly double press the power button the Press power again to switch to the next settings.

CR - This resets the Trip Meter / Running Time. Switch this from N to Y to reset all your metrics.

bL - This changes the brightness of the back light from 1 to 5 . One being the dimmest and 5 being the brightest. Press up and down to change settings respectively.


57 - This changes the speed and distance settings from KMH/KMs to MPH/Miles. Press up


OF - This changes the how quickly the bike automatically turns off in minutes. Setting 1 will make it turn off in 1 minute and 9 in 9 minutes. Press up and down to change settings repsectively


PD - The last setting is a password to get into the dealer settings. Please bring to a local Daymak dealer in case these settings need to be accessed.


## SEAT

The Manchester 48V comes with a quick release seat post that you can adjust the height quickly as you need. You can also remove this entirely and put it aside for when you are storing it when folding.

To do so, take the latch as seen in the picture below and pry it open, and then once the seat is in the desired position, clamp it closed again.


## Warning

When clamping the seat post, make sure to clamp it with a lot of pressure to prevent it from sliding down while riding.

## TIRES

On each tire you will find a valve with a cap as seen here. Unscrew the cap and fill the tires with a pump between 45 and 60 PSI


## TECHNICAL DATA

This section provides you with the technical specifications for your e-bike.

## THE MOTOR AND WHEEL ASSEMBLY

The Manchester 48 V has a 350 Watt magnetic DC brushless motor on the rear wheel hub. This type of motor has excellent low-end torque and high efficiency when working within its range. Note that while the motor is very quiet, it does produce some noise. Also attached to the rear hub are speed reduction gear and the speed free clutch.

## THE FREEWHEEL

The wheels have freewheels, so the e-bike's drive train is not fixedly geared. This means that when coasting or traveling downhill, you can turn off the engine and your e-bike will continue to move without slowing. This feature will allow you to achieve faster speeds when coasting, moving downhill or moving with the wind. It will also allow you to conserve electrical power, because you will be able to let to the motor rest while moving.

## THE CONTROLLER

Daymak pioneered the development of intelligent component control in e-bikes. The Daymak Drive technology developed by Daymak is the brain of your e-bike. It allows your e-bike to achieve faster acceleration, to climb steeper hills, and to save energy.

## THE BRAKES

The brakes on your e-bike are disc brakes. They generally provide for very fine stopping and control. This is a very tested and well-designed technology, but even so, the brakes will require servicing from time to time, and may have to be adjusted for tension.

When the brakes are activated, tension increases and the clamps engage. This is a very effective and reliable way to stop a vehicle.

## THE CHAIN AND PEDALS

The pedals are connected to the rear wheel. Along with the chain, they provide a humanpowered "drive train". This is an important part of your e-bike. The pedals are not removable and should not be removed.

## VEHICLE IDENTIFICATION NUMBER [VIN]

Your unit comes with a Vehicle Identifiation Number. You should write this down and keep it somewhere safe in case of theft of your unit. This is also required for registering your warranty on the warranty section of Daymak.com. To find the VIN on your Manchester 48 V look on the left hand side of the steering column right above the front forks.

## MAINTENANCE AND TROUBLESHOOTING

This section outlines problems you may have and solutions you may be able to use.

Many of the parts in this product are not user-serviceable and should be repaired by trained professionals. This is especially true of the electrical systems and the mechanical components. Alteration of these components voids the warranty.
TIRE PRESSURE
Maintain the air pressure in your tires at the appropriate level. If the air pressure is too low, your e-bike's performance will suffer and it will become damaged more easily.

Cold weather and lower temperatures will cause the air pressure in your tires to drop, and warmer weather will cause it to increase, even if there are no leaks in the tire tube. To replace the air in your tires, follow this procedure:

1. Identify the required pressure by examining the text along the side of the tire rim. This text should indicate the recommended pressure for your tire.
2. Locate the air valve on the inner surface of the tire rim.
3. Remove the valve cap and place in a secure location.
4. Place the nozzle end of an air pump (hand-power or mechanical) over the valve.
5. Pump up the air in the tire, being careful not to let the pressure go above the level prescribed on the side of the tire wall.
6. Remove the pump nozzle from the air valve without allowing much air to escape from the tire.
7. Replace the valve cap on the air valve.

Maintaining the proper air pressure will allow you to travel much further on a single charge, because the motor will not have to work as hard to move the e-bike.

## REPLACING FLAT TIRES

Replacing flat tire tubes is a more complicated and labour-intensive process with e-bikes than it is with regular bicycles. It requires proper tools, more skill and more patience.The front wheel is easier to service when changing a flat tire than the rear wheel, as the rear wheel is connected to the hub motor and other mechanical parts.

Unless you are very familiar with the mechanical components of the rear motor, attempting to change a flat rear tire may cause serious problems. Please contact your Daymak dealer for specific instructions on how to remove your wheel and tires safely, and how to replace the tubes. It may be easier - and safer - to have the tubes replaced by your Daymak dealer.

## THE MOTOR

Do not service the motor yourself. Bring the e-bike to your Daymak dealer for service. The motor in your e-bike is a highly complex and fine-tuned mechanism. Repairing it requires significant expertise. We suggest maintenance every 100 running hours or so.

## THE CHAIN

Ensure that the chain on your e-bike is well-oiled and lubricated. It is an important part of your e-bike. As with any bicycle, it needs to be maintained if it is to function.

## BRINGING IN YOUR E-BIKE FOR SERVICE

Do not attempt to service the electronic or mechanical parts of your e-bike unless you are absolutely sure of what you are doing and have a solid understanding of electrical and mechanical equipment. If your e-bike is not performing properly, disconnect the circuit breaker and bring the e-bike to your local Daymak dealer. Do not store the e-bike without disconnecting the circuit breaker.

## Liability

Daymak will not be held responsible for damage or injuries resulting from errors resulting from improperly serviced parts.

## EBIIE MAINTENANCE

## CLEANING

Cleaning is extremely important this will ensure your e-bike will serve you for a long time. In the long run, it will save you money and a lot of time waiting for the bike to be repaired. You should clean your ebike weekly.

Do not use aggressive power jets or water sprays when washing the ebike and keep water off the battery as much as you can. Clean gently but thoroughly and make sure that all the outer casing of the electric parts are dry and clean.

Remove any dirt, debris, sand, mud, grit, grime that got caught on the bike and dry it off.

While cleaning, it is a good opportunity to look closely for a worn, loose, cracked, rust, teared or damaged parts. Buckled paint can also be a hint for some parts that need closer inspection.

## LUBRICATING

It is also recommended to lubricate the chain, levers, derailleur, cables, etc. A clean, lubricated e-bike tends to be faster, smoother and quieter. It's like having a little extra push for free.

Apply the lubricant to the different parts and let it sit a few minutes and then wipe off the excess lubricant with a rag. After a while, clean the different parts with a degreaser to remove any excess dirt that has been collected.

## WEATHER

Don't leave the bike out in the rain or snow.

Store it somewhere dry and out of direct sunlight. Overheating the batteries, for example, can cause problems.

Do not open up casings, chargers, etc as you are unlikely to be able to reseal them effectively afterward, making them more susceptible to water damage and other extreme weather conditions.

Batteries should be removed from the ebike if not used and charged once a month regardless of usage.

## SCHEDULE

The frequency of maintenance depends on how much you ride and under which conditions. Recreational riders needs far less maintenance then off-road riders. The harder you ride, the more you have to take care of your bike if you want it to last. There are various time intervals for proper maintenance. Quick maintenance should be done before \& after every ride.

| Time after Purchase | Action Suggested |
| :--- | :--- |
| Everytime before you ride (The 60 Second <br> Check) | Check tire pressure, check brakes that they <br> work, check lights, check bolts (make sure <br> everything is tight), check battery gauge. <br> Do not ride the unit unless everything is <br> functional and proper |
| $\mathbf{3 0}$ Days (every month) | Completely clean the unit, including the dust <br> on the motor and under the seat. Check for <br> any abnormal wear and tear or alignment <br> problems. |
| 90 Days (every 3 months) | Inspect frame and fork for paint crack or <br> bulgest that may indicate frame or part <br> damage; pay particular attention to all frame <br> joints. Check wear and tear on tires. Check |
| range of battery. |  |$|$| Inspect all components on the unit. Check |
| :--- |
| that connections are nice and tight. Look |
| inside where your controller is and clean in |
| detail. Check that all plugs are clean. Go over |
| every bolt and nut in your unit. |

## SPECIFICATIONS

| Name | Manchester 48V |
| :---: | :---: |
| Motor | 350W |
| Voltage | 48 V |
| Amp Hour | 10.4 AH |
| Watt Hours | 360Wh |
| Battery Life | 1000 cycles |
| Battery | Lithium Ion |
| Removable Battery | Only During Replacement |
| Charger | 54.6V 2.0A 110V |
| Charge Time | 4-6 Hours |
| Lights | LED |
| Max Load | 275 lbs. |
| Assembled Weight |  |
| Assembled Length | 72" |
| Assembled Width | 28" |
| Assembled Height | 43" |
| Seat Height | 32" |
| Seat Width | 7" |
| Seat Length | 10" |
| Boxed Weight | 60 lbs . |
| Boxed Length | 57 |
| Boxed Width | 10 |
| Box Height | 30 |
| Range | Up to 40 km |
| Speed | $32 \mathrm{~km} / \mathrm{h}$ |
| Climbing Incline | 20 degrees |
| Front Wheel | $27.5 \times 2.0$ |
| Rear Wheel | $27.5 \times 2.0$ |
| Gauges | Battery Level / Speedometer /Odometer /Trip Meter |
| Ground Clearance | 10" |
| Wheel Base | 45" |
| Battery Weight | 6 lbs. |


| Name | Manchester 48V |
| :--- | :--- |
| Rear Brakes | Hydraulic Disc |
| Front Brakes | Hydraulic Disc |
| Ignition | No |
| Front Shocks | 6 " of Travel |
| Rear Shocks | N/A |
| Controller | Standard |
| Pedal Assist | 4 Levels |
| Speed Levels | 9 Speed Shimano Altus |
| Throttle | Half Twist |
| Cruise Control | No |
| Display | Back Lit LED |
| Frame Size | $20 "$ Seat Tube 23" Top Tube 6" Head |
| Tube |  |
| Rear / Basket Storage | No |
| Under Seat Storage | No |
| Rear / Basket Storage Volume | N/A |
| Under Seat / Glove Storage | No |
| MP3 | No |
| Occupancy | 1 |
| Alarm | No |
| Steering Lock | No |
| Center Kickstand | No |
| Foldable | No |
| Folded Dimenison | N/A |
|  |  |

## THANK YOU FOR CHOOSING DAYMAK

