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# **BOOMERBEAST 2D** USER MANUAL

# SAFETY

For your safety, please ensure the following:

- Check both right and left brake levers, and that the brake sensors shut off power to the motor
- Check the air pressure of both front and rear tires. The correct P.S.I. is listed on each tire
- Check both left and right turn signals and taillights work properly before riding
- Check and make sure that your mirrors are tightened and allow for maximum visibility
- Observe all traffic rules, and do not operate in areas where motorized vehicles are not allowed.
- Make sure that your battery power is sufficient before you go out to ride
- If you bring your charger avoid shaking / rattling charger while riding.
- Once the battery is fully charged remove the charger.
- Do not try to operate the unit while charging.
- Do not let anyone under 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 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 Mobility Scooters, gokarts and electric golf cars to alternative transportation solutions such as Mobility Scooters 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 Mobility Scooter 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. Mobility Scooter 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

### **MOBILITY SCOOTERS**

Mobility Scooters represent a natural progression in the development of urban transportation. Using only small amounts of electricity, Mobility Scooters 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.

Mobility Scooters 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 Mobility Scooter 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.

### 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: BOOMERBEAST 2D

This diagram illustrates the various parts of your mobility scooter. 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.



- Mirrors
  Brake Handle
  Turn Signals
  Headlight
  Shocks
- 6. Tires
- 7. Foot Rests
- 8. Charging Port
  9. Motor
  10. Seat Adjust
  11. Trunk
  12. Charging Port
  13. Seat
  14. Throttle

15. Ignition



# **RIDING INSTRUCTIONS**

This guide assumes that you already know have operated a mobility scooter. If you have never used a mobility scooter before, we strongly recommend that you read throught this guide entirely before beginning to operate.

### Caution

Always make sure to be properly situated on the unit before turning it on and engaging the throttle. Failing to do so can potentially lead to injuries or damage of the vehicle.

### **IMPORTANT NOTES**

• 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. A mobility scooter is a motorized vehicle, and thus you must follow the law.

• Stay sober. Never ride your mobility scooter while intoxicated. Mobility scooters can cause harm to the rider and others if not operated properly and require full attention during operation.

• Mobility scooters are to be rode on the sidewalk unless there is no sidewalk present. Please be mindful of all pedestrians on the sidewalk and give ample notice when passing by.



### ITEMS TO CARRY WITH THE ELECTRIC MOBILITY SCOOTER

It is a good idea to carry the following items with you at all times when you ride your Mobility Scooter.

- The charger, to charge the mobility scooter 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 Mobility Scooter when you park it.
- #9 Allan Key to access circuit breaker.

### **INSPECTING YOUR MOBILITY SCOOTER**

Always inspect your mobility scooter 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 mobility scooter, 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 mobility scooter makes over time. Any mechanical or power issues may have effects on the sounds the mobility scooter makes.

### HOLDING THE HANDLEBARS

As you would with a bicycle, place your fingers over the brake levers (if your scooter has disc/drum brakes), 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. Otherwise hold onto the handle bar in a manner where you can easily push the brake mechanism. This is the safe way to control your mobility scooter.

### TURNING YOUR MOBILITY SCOOTER ON AND OFF

To turn on your mobility scooter, insert the key into the "ignition", you can find more detailed information in the operation section of this manual.

### Warning

When you activate the Mobility Scooter, the electrical system becomes live. Do not try to affect changes to the Mobility Scooter (such as removing the battery or repairing electrical components) while the Mobility Scooter is activated.



### ACCELERATING AND DECELERATING

The throttle is typically found on the right handlebar (see operation for more information. Use this carefully when situated on the mobility scooter to go forward and release to decelerate.

### Warning

Do not activate the accelerator until you are seated on the mobility scooter and are ready to accelerate. The mobility scooter can easily escape from your control, possibly injuring you or others, and the mobility may be damage.

### STOPPING

Your Mobility Scooter 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

### THE HORN

The mobility scooter has a horn. Use this when coming close to pedestrians to warn of your passing. See the operation section for where to find your horn and how to use it.

### TURNING SIGNAL LIGHTS

Your mobility scooter has turn signal lights. Push it left or right to activate it to indicate that you are turning in the appropriate direction. See the operation section for more info.

### LIGHTS

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

### **RIDING IN WET WEATHER**

Your mobility scooter is designed to function in wet conditions, such as when it is raining. However, 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 mobility scooter is not designed to be immersed in water. Always ensure that the water level does not go above the motor, to prevent water from getting inside of it. Water in the motor can cause short-circuits and may damage the electrical systems in your Mobility Scooter.



### **RIDING IN COLD WEATHER**

Your mobility scooter 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 mobility scooter 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 mobility scooter 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 mobility scooter. 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 scooter will suffer.

Exceeding the maximum load of your Mobility Scooter 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.

### LONG-TERM STORAGE OF YOUR MOBILITY SCOOTER

If you are storing your Mobility Scooter for a long period, disconnect the circuit breaker (if applicable). This is a safer way to store the electric bicycle, as it prevents accidental activation of the mobility scooter 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 mobility scooter is being stored.



# THE BATTERY

This section details what you need to know about the battery that powers your mobility scooter. Always remember to treat your mobility scooters electrical systems with respect.

### **BATTERY POWER**

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

### **DISTANCE AND POWER**

Your battery has the capacity to carry you anywhere from 20+ 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 e-Mobility Scooter'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 scooter. 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%.



# **CHARGING YOUR MOBILITY SCOOTER**

Charging your scooter is a simple process. You require the following:

- The charger that came with your Mobility Scooter.
- A 110V household electrical outlet.

### **Charger Warning**

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

To charge your scooter, follow these steps:

1. Turn off the mobility and remove the key from the ignition (if applicable).

2. Plug the female end of the charger cable into the charging slot on the mobility scooter.

3. Plug the male end of the charger power cable into your wall socket. This should be a 110v household electricity supply. You can also use a portable generator, if necessary, but make sure it provides 110V current.

4. Allow the mobility scooter battery to charge for the appropriate amount of time (6-12 hours).

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 14 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 overcharge the battery.



# **UNDERSTANDING YOUR VOLTAGE**

Electric scooters primary power is understood as voltage. This number in short is 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.

	LEAD ACID		LITHIUM ION	
VOLTAGE	FULL CHARGE	LOW VOLTAGE	FULL CHARGE	LOW VOLTAGE
24V	27V	21V	29.4V	<b>20V</b> 75
36V	40V	32V	42V 10S	28V
48V	53V	42V	54.6V / 58.8V	<b>37V / 40V</b> 20 s 21 s
60V	67V	53V	67.2 / 71.4V	45V / 48V

### VOLTAGE CHART

### LITHIUM 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.



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# **CHARGING THE BOOMERBEAST 2D**

The Boomerbeast 2D comes with a lead acid battery pack that can be charged together or individually. These can be done both in and out of the Mobility Scooter. To charge the Boomerbeast 2D directly in the unit look for the charge port underneath the seat. It will be covered with a flap that you must lift up and then plug the female end into that port.



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

### Warning

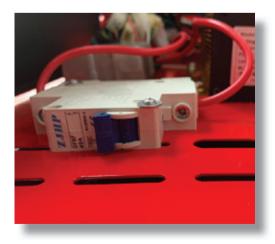
Do not leave the Boomerbeast 2D charging for long periods of time after it is fully charged. Once the Mobility Scooter is charged unplug it ASAP. Failure to do so can reduce the battery life and can cause possibly become a fire hazard

### ACCESSING YOUR CIRCUIT BREAKER

To prevent surges, we have installed a circuit breaker. If you are unable to get power to your Mobility Scooter more than likely your circuit breaker has been triggered and needs to be switched to the on position.

To do this:

Unlock the seat, and lift up the chair. (See next page for more info)





# **ACCESSING YOUR CIRCUIT BREAKER**

To access the circuit breaker and the controller you must unscrew the two bolts that hold the seat down with a #9 allan key. From that point you can lift up the seat to access the circuit breakers.



# **BOOMERBEAST 2D DELUXE**

The Boomerbeast 2D Deluxe comes with a lithium ion battery pack that offers longer range, longer life expectancy and reduces the weight of the unit by over 50 lbs.

### **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 Mobility Scooter 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**

Congratulations on your new Boomerbeast 2D mobility scooter. To begin, you will need to take the keys that came with your scooter and insert them into your ignition. This is located on the main steering colum infront of you when you are sitting on the machine.

To turn on the machine. Put the key in the ignition and turn it clockwise to the right most position (1).

To turn off the machine turn the key counterclockwise to the middle position (2).

### ENGAGING THE WHEEL LOCK

To lock the wheels perpendicular to the machine to prevent someone pushing it away to steal it the Boomerbeast 2D has a wheel lock.

To engage the wheel lock:

1) Turn the handlebars to the left

2) With the key in the off position (2) push into the key hole further and turn counterclokwise to the left most position (3)

Reverse this process to disengage the steering lock

\*Please note there are 3 positions for the ignition and you must push into the key to get it past the wheel lock\*









### **RIGHT HANDLE BAR**

1. Front Brake - Pull this lever to engage the front brake.(Use the rear brake first located on the left handle bar.)

2. Throttle - Slowly rotate this towards you to engage the motor.

3. Motor Switch - Put this switch to the left engage just the rear motor or to the right to engage both front and rear motors.

4. Lights - Push this to the right most position to turn on all lights. Push this to the middle position to have just the rear lights on. Push this to turn off all the lights.

5. 3 Speed Switch - Choose between 1 of 3 speeds. Position 1 will get you the furthest range at the slowest speed. Position 3 will get you there fastest with the shortest range.

### \*PLEASE NOTE\* Always be sitting on the unit before turning the throttle.

### LEFT HANDLE BAR

1. High Beam / Low Beam - Toggle this switch to choose between a low or high angle of the headlights. (The headlight must be on for this to have an effect)

2. Turn Signals - Push this to the left to indicate turning to the left and into the middle once your done. Push this to the right if you are turning to the right.

3. Reverse switch - Press and hold this while engaging the throttle to go in reverse.



4. Horn - Press this to honk the horn

\*PLEASE NOTE\* Always be aware of your surroundings when operating this in reverse and use it at your own discretion



## BRAKES

On either handle bar you will find a brake lever as picutred on the right. Pull this lever towards the unit to engage them.

The left brake lever engages the rear brakes and should always be used first.

The right brake lever engages the front brakes and should be only use in conjunction with the rear brakes when needing to make an abrupt stop.

Note: Pressing the brakes will disengage the motor and must be released before the motor will engage again.

### **ENGAGING THE BRAKE LOCK**



The Boomerbeast has a brake lock that will prevent it from rolling even when parking the unit on a hill. To engage the brake lock do the following:

1) Pull the brake lever on the left hand side towards you as much as you can.

2) Take the latch with your other hand or other finger and pull it into the grooves of the brake lever.

3) Release brake lever and make sure the brakes are stuck in a pressed position.





To disengage the brake lock, just pull the brake lever towards you slightly more and the brake lock latch will pop out. Release the brake lever and you are ready to go!



# SEAT

The Boomerbeast 2D comes with a seat that has movable arm rests that can be moved up and down to get on and off the unit easier



The seat can be slid either forward or backward slightly by holding the lever as shown above and pushing the seat either direction.

# **MIRRORS**

The Boomerbeast comes with a set of mirrors that screw on each handlebar. Screw each mirror into the appropriate side (left mirror on left side etc). Until it is loosely in the position you want. Then take a wrench and tighten the bolt at the bottom of the mirrors to make it stick in that position. Please note mirrors may look slightly different then shown here.





# DISPLAY

You will find above the ignition a display that will show you your metrics and performance for your Boomerbeast 2D.

1. Speed - This display shows you how fast you are going in km/h

2. Voltage - This meter shows how much voltage is left in your battery. Refer to the understanding your voltage section for more info.

3. Battery Meter - This shows how much power you have left before you need to charge. Once you start getting below 50% its advisory to get to a charging station. 5 Bars is a full charge 4 bars is 80%, 3 bars is 60% etc.

4. Odometer / Trip meter - This shows how many kilometers you have travelled on this unit when initially turned on. Then will show how much you've travelled on this trip.

5. Headlights - Shows if the lights are on.

6. Gear - Shows which gear your in. First Gear gives you the longest range and 3rd gear gives you the fastest speed . 2nd Gear is a balance between the two.
 \*PLEASE NOTE\* The battery meter will dip down when it starts and then go back up to a steady power level. This is normal.



### **DISPLAY - BRAKES ENGAGED**

When the brakes are engaged either manually or via the brake lock, the display will glow red and you will see an error in the upper corner.

To use the machine simply disengage the brakes and wait for the display to say **Ready**.



# **REMOTE CONTROL**

The Boomerbeast 2D comes with two sets of keys and two remotes. There are four buttons on the remote:

1) Set Alarm - This button will set the alarm. After pressing it wait for 5 seconds. Afterwards if someone moves the bike the alarm will sound.

2) Remove alarm - This will disengage the alarm. Use this before riding your bike. \*\*Also disengeages remote start\*

3) Panic Button - This will automatically set the alarm off

4) Remote Start - Press this twice to start the bike without using the keys. Press the remove alarm button (2) to disengage the remote start





# **REAR RACK**

On the back of the Boomerbeast is the carrying rack. Use this to mount a case or store goods however you see fit.



The Boomerbeast comes with extendable foot rests so you can choose your riding style. Using your feet push the foot rests towards the Boomerbeast and it will pop out.

Reverse this process stick them to the sides of the Boomerbeast.



# **TECHNICAL DATA**

This section provides you with the technical specifications for your Mobility Scooter.

### THE MOTOR AND WHEEL ASSEMBLY

The Boomerbeast 2D has a magnetic DC brushless motor on the front 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. It also comes with a rear motor on the axel that has differential capabilities to detect which rear tire is spinning the fastest.

### THE CONTROLLER

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

The electronic controllers are located under the seat assembly. These controllers efficiently regulates the speed and electronic functions of the bicycle. It allows for stepless speed adjustment, shuts off the motor when the brakes are activated, has low voltage protection and has fuses to prevent excess current from damaging the Mobility Scooter's systems.

### THE BRAKES

The brakes on your mobility scooter are disc-brakes, like those found on gas scooters and motorcycles. 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.

The brakes are contained within a sealed unit, and are very finely adjusted and fitted.



# 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 Boomerbeast 2D look on the steering column on the right side for numbers engraved on the frame as seen below.





# 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 mobility scooters 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 Mobility Scooter.



### **REPLACING FLAT TIRES**

Replacing flat tire tubes is a more complicated and labour-intensive process with Mobility Scooters 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 mobility scooter to your Daymak dealer for service. The motor in your mobility scooter is a highly complex and fine-tuned mechanism. Repairing it requires significant expertise. **We suggest maintenance every 100 running hours or so.** 

### SHOCK ABSORBERS AND COMFORT

If your riding experience feels bumpier than usual, and you suspect that your shock absorbers are experiencing difficulties, check the air pressure in your tires. If the air pressure is too low, this may be the reason you feel less comfortable. It may have nothing to do with your shock absorbers. If the problem persists, take your Mobility Scooter to your Daymak dealer for servicing.

### **BRINGING IN YOUR MOBILITY SCOOTER FOR SERVICE**

Do not attempt to service the electronic or mechanical parts of your mobility scooter unless you are absolutely sure of what you are doing and have a solid understanding of electrical and mechanical equipment. If your mobility scooter is not performing properly, disconnect the circuit breaker (if applicable) and bring themobility scooter to your local Daymak dealer. **Do not store the mobility scooter without disconnecting the circuit breaker.** 

### Liability

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



### CLEANING

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

Do not use aggressive power jets or water sprays when washing the mobility scooter 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 Mobility Scooter 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, levers, cables, etc. A clean, lubricated mobility scooter 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 mobility scooter 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 mobility scooter if not used and charged once a month regardless of usage if possible.



### 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 Mobility Scooter 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 Check)	Check tire pressure, check brakes that they work, check lights, check bolts (make sure everything is tight), check battery gauge. Do not ride the unit unless everything is functional and proper
30 Days (every month)	Completely clean the unit, including the dust on the motor and under the seat. Check for any abnormal wear and tear or alignment problems.
90 Days (every 3 months)	Inspect frame and fork for paint crack or bulgest that may indicate frame or part damage; pay particular attention to all frame joints. Check wear and tear on tires. Check range of battery.
180 Days	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.
360 Day (every 12 months)	Bring the unit for a complete tune-up. Varying on the unit the shop should complete a battery discharge, tires should be changed depending on wear and tear. All connections should be checked for rust and loosness. All components should be checked including charged, ignition, and gauges.



# **SPECIFICATIONS**

Name	Boomerbeast 2D / Deluxe
Motor	500W x 2
Voltage	60V
Amp Hour	32AH / (56AH Deluxe)
Watt Hours	1920WH / (3360WH Deluxe)
Battery Life	300 cycles / (1000 cycles Deluxe)
Battery	Lead Acid / (Lithium Ion Deluxe)
Removable Battery	Only During Replacement
Charger	60V 3.0A 110V (60V 5.0A 110V Deluxe)
Charge Time	8 - 10 Hours
Lights	LED
Max Load	330 lbs
Assembled Weight	325 lbs. / (275 lbs. Deluxe)
Assembled Length	79"
Assembled Width	39"
Assembled Height	44"
Seat Height	30"
Seat Width	17.5"
Seat Length	16"
Boxed Weight	300 lbs.
Boxed Length	77"
Boxed Width	41"
Box Height	43
Range	Up to 50 km / (Up to 100 km Deluxe)
Speed	50 km/h
Climbing Incline	30 degrees
Front Wheel	20 x 8 - 12
Rear Wheel	23 x 7 - 10
Gauges	Battery Level / Speedometer / Odome- ter
Ground Clearance	9"
Wheel Base	60"
Battery Weight	100 lbs / (48 lbs Deluxe)



Name	Boomerbeast 2D / Deluxe
Rear Brakes	Hydraulic Disc
Front Brakes	Hydraulic Disc
Ignition	Key Ignition / Remote Start
Front Shocks	7" of Travel
Rear Shocks	Dual Coil
Controller	2 x Daymak Drive
Pedal Assist	N/A
Speed Levels	3 Speeds
Throttle	Full Twist
Cruise Control	N/A
Display	Back Lit LED
Frame Size	N/A
Rear / Basket Storage	Rear Rack
Under Seat Storage	No
Rear / Basket Storage Volume	35 x 18 x 4
Under Seat / Glove Storage	N/A
MP3	No
Occupancy	1
Alarm	Yes
Steering Lock	Yes
Center Kickstand	No
Foldable	No
Folded Dimenison	No

# THANK YOU FOR CHOOSING DAYMAK

