# MINI PHANTOM BY DRIVE SCOOTER



35001692, 35002692

# **OWNER'S MANUAL**

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# **1. PREFACE AND INTRODUCTION**

Please carefully read this owner's manual before using the vehicle. Improper use of the vehicle could result in harm, injury or traffic accidents. To ensure that you get the most your scooter, please read this owner's manual before using.

- This owner's manual includes operation instructions for every aspect of the vehicle, assembly instructions, as well as instructions for how to deal with possible accidents.
- The symbols used in this manual are explained below:

Section 2 Warning	Improper usage could result in serious injury or death
The Attention	Improper usage could lead to injury and/or damage to your scooter.
Suggestion	Follow these instructions to keep your vehicle in a good operating order.

- This manual includes a copy of repair and maintenance record chart and warranty information. Please keep it in a safe place or in the scooter.
- If someone else uses the scooter, please make sure that you provide him or her with this owner's handbook for his or her consideration.
- As designs change some illustrations and pictures in the manual may not correspond to the vehicle that you purchased. We reserve the right to make design modifications.

Our Scooters have been designed and manufactured to provide a comfortable and secure yet affordable solution for some mobility requirements.

# 2. SAFETY NOTICE

#### **2.1 BEFORE DRIVING**

The user needs to be familiar with the usage and operation of this vehicle before driving. Therefore, please follow the recommendation in this safety notice.

- The same traffic rules apply to the use of this vehicle as apply to pedestrians
  - For your safety, please follow and adhere to the same traffic laws as pedestrians.
  - Please do not drive your scooter after consuming alcohol or when you are tired.
  - Please be careful when driving your scooter in low light. It has not been designed for use at night.
  - Be extremely cautions when driving your scooter in busy areas or in shopping malls.
  - Ride on the pavement, single carriage roads, or pedestrian areas only. Never ride on motorways or dual carriageways.
  - Be aware of traffic when crossing or using roads.

#### Practice operating your vehicle

Before using the scooter in busy or potentially dangerous areas, familiarize yourself with the operation of your scooter. Please practice in a wide and open area like a park. In order to avoid accidents with your scooter while driving, please bear in mind driving motions, such as accelerating, stopping, turning, reversing, up-and down ramps.

- Please turn the speed dial to minimum value for your initial practice.
- Be sure someone accompanies you for safety when driving on the roads for the first time.
- Only use higher speed setting when you are confident that you can easily operate and control your scooter.

#### • The Scooter is only to be used by one person at a time

Do not carry passengers on your scooter (including children)

#### Do not use this vehicle to carry or haul goods

- The maximum weight that can be carried is 115kg/250lbs (including occupant and any goods).Refer to "MAX LOAD WEIGHT" in "9. SPECIFICATION"
- Please carry out daily inspections. Refer to the section entitled "DAILY CHECKING"

# 2. SAFETY NOTICE

#### 2.2 WHILE DRIVING

- **Do not use your vehicle under the circumstances below.** 
  - On surfaces that are muddy, gravelly, bumpy, narrow, snowed over, icy, or canal towpaths not guarded by any fence or hedge. Keep away from places where you might get the wheels stuck.
  - Do not drive at night or when it is raining, snowing, misty, or windy.
  - Do not drive your vehicle in an "S" pattern or make erratic turnings.
  - Do not take the scooter onto escalators.
  - UNDER NO CIRCUMSTANCES SHOULD THE SCOOTER BE USED AS A SEAT IN A MOTOR VEHICLE (E.G. CARS, BUSES, TRAINS, ETC).

#### About Mobile Phones and other electrical equipment

- Do not use a mobile phone or other wireless communication devices while driving.
- Always switch off the scooter and remove the ignition key before using a mobile phone.
- Do not charge the mobile phone or any other electrical devices from your scooter's battery.

#### Automatic Power Shut Down

In order to avoid accidental battery run down, your scooter is equipped with an automatic power shut down facility. If the scooter is switched on, after remaining undisturbed for a period of thirty minutes it will automatically turn off. When this situation occurs, simply switch your scooter off and back on and it will be ready to use once again.

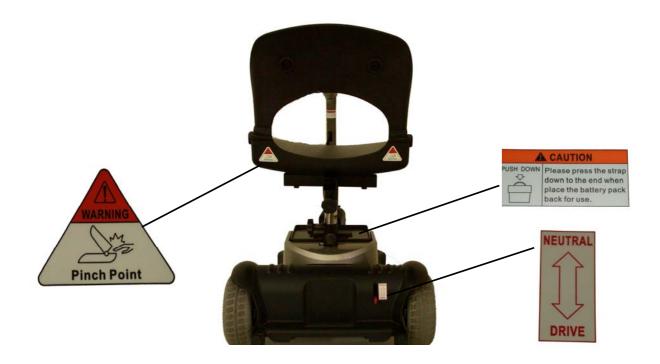
#### Ramps, inclines and drops

- Do not drive onto steep ramps greater than the specified gradient. Refer to the section entitled "CLIMBING ANGLE" in "9. SPECIFICATION"
- Always use a low speed setting when ascending or descending a gradient.
- Do not drive on roads with large drops or potholes. Refer to the section entitled "MAX. GROUND CLEARANCE" in "9. SPECIFICATION".
- Please slow down when driving on roads with inclines.
- Do not make sudden turns when driving on gravel roads or ramps.
- Always lean forward when climbing a steep gradient.
- Do not travel on gradients exceeding those stated on the diagram on page 7.

### 2.3 Labeling

Please carefully read all the labeling on the scooter before drive it. For your future reminding, do not remove them.





# 2. SAFETY NOTICE

#### **2.4 EMI**

This portion of the content will provide the user with basic information that describes the problems with EMI, known sources of EMI, protective measures either to lessen the possibility or exposure or to minimize the degree of exposure, and suggested action should unexpected or erratic movement occur.

**Caution**: It is very important that you read this information regarding the possible effects of electromagnetic interference on your electric SCOOTER.

#### <u>ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE</u> <u>SOURCES</u>

Powered vehicle may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones. The interference (from radio wave sources) can cause the powered scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to certain intensity. This is called its "immunity level". The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This powered scooter model as shipped, with no further modification,

has an immunity level of 20 V/m without any accessories.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warning listed below, your risk to EMI will be minimized.

The sources of radiated EMI can be broadly classified into three types:

1. Hand-held portable transceivers ( transmitter -receivers with the antenna mounted Directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie", security, fire, and police transceivers, cellular telephones and other personal communication devices.

**Note:** Some mobile telephones and similar transmit signal while they are ON, even when not being used;

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the vehicles.

# 2. SAFETY NOTICE

3. Long-range transmitters and transceivers, such as commercial broadcast transmitter (radio and TV broadcast antenna towers) and amateur (HAM) radios.

**Note:** Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD player, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered scooter.

#### POWERED VEHICLE ELECTROMAGNETIC INTERFERENCE (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the control system of power chair while using these devices. This can affect powered vehicle movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered scooter.

#### WARNINGS

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and mobile phones can affect powered scooter and motorized scooter. Following the warnings listed below should reduce the chance of unintended brake release or powered scooter movement which could result in serious injury.

1. Do not operate hand-held transceivers-receivers), such as citizens band (CB) radios,

or turn ON personal communication devices, such as cellular phones, while the powered vehicle is turned ON;

- 2.Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- 3.If unintended movement or brake release occurs, turn the powered vehicle OFF as soon as it is safe;
- 4. Be aware that adding accessories or components, or modifying the powered vehicle, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered scooter).
- 5. Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a source of EMI nearby,

### ■ <u>IMPORTANT INFORMATION</u>

- 1. 20 Volts per meter (V/m) is a generally achievable and useful immunity level against EMI (the higher the level, the greater the protection);
- 2. This product has an immunity level of 20 V/m without any accessories and connected to it.

# 3. PARTS INTRODUCTION

#### PARTS DESCRIPTION

3. Tiller Adjustment Knob

1. Control panel

5. Battery Pack

- 2. Charger Socket
- 4. Seat
- 6. Seat Post Knob





# 4. OPERATION

#### **4.1 CONTROL PANEL**

- 1. Speed Dial
- 2. Horn Button
- 3. Battery Indicator
- 4. Power Eye

### **4.2 HOW TO OPERATE YOUR SCOOTER**

#### Power switch

- To switch the power on, turn the key clockwise in the ٠ ignition. The power eye should illuminate.
- To switch the power off, turn the key counter ٠ clockwise. The power eye should switch off and the key can be removed if required.

### Speed Dial

Turn the speed dial to determine the maximum speed of the scooter. Turn the dial clockwise to increase the speed setting and turn the dial counter clockwise to decrease the speed setting.





Slowest setting

Fastest setting

- Moving and Braking Pull the right-hand side lever control towards you and the scooter will move forward.
  - Pull the left-hand side lever control towards you and the scooter will move ٠ backward.
  - To brake, release the lever control which will return to neutral and activate the electromagnetic brake automatically .This will bring the scooter to a prompt stop.
  - The lever control allows you to control the speed of the scooter up to a maximum speed determined by the Speed Dial. The further the lever control is deflected, the faster the scooter will go.

#### Horn Button

Press the horn button to sound the horn. Release the button to stop the horn.

#### Braking

Electro-magnetic brake: Release the speed control lever completely, and the electromagnetic brake will be activated automatically, and the scooter will stop.

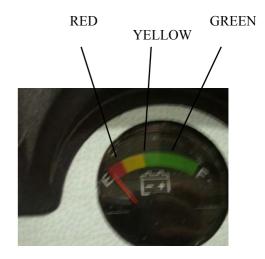
#### & Warning

When on a gradient NEVER set the vehicle to the freewheel mode. The electromagnetic brakes will not be applied. This may result in injury or damage.

### Battery indicator

The battery indicator on the tiller console uses a color code to indicate the approximate power remaining in your batteries. Green indicates (40 ~ 100%) capacity, yellow a draining charge (10 ~ 30%), and red indicates that an immediate recharge is necessary.

• The remaining power suggested by the battery indicator will vary by the actual driving time incurred and how you drive. Repeated starting, stopping, climbing will consume the power more quickly.



#### Main Circuit Breaker (Reset Button)

When the voltage in your scooter's batteries becomes low or the scooter is heavily strained because of excessive loads or steep inclines, the main circuit breaker may tip to protect the motor and electronics from damage.

- The main circuit breaker rest button pops out when the breaker trips.
- When the breaker trips, the entire electrical system of your scooter shuts down.
- Allow a minute or two for your scooter's electronics to "rest".
- Push in the reset button to reset the main circuit breaker.



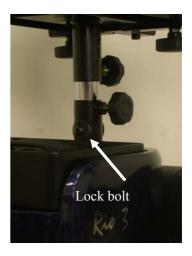
# 4. OPERATION

#### Suggestion

- 1. You should recharge the batteries after each time the vehicle is used to ensure maximum range. The batteries should be charged up at least once a week even if the scooter is not used.
- 2. After charging or replacing a new battery, drive the vehicle for 2-3 minutes to make sure the battery capacity is sufficient.
- 3. In wintertime, the battery may respond more slowly and the battery range may be reduced.
- 4. When driving on a gradient, the battery indicator light might move up and down. This is a normal phenomenon so please do not worry.
- 5. Even if the battery is used properly, it is natural for the battery's capacity to reduce with time, which results in reduced battery range compared to a brand new battery. Therefore, when you find the battery's range is about only 50% of the range when the batteries were new, it is time to replace the batteries. Please see your dealer about replacement batteries. If you continue to use the old battery when it should be replaced, it could lead to a rapid decline in performance.
- 6. The battery range will be reduced when driving frequently on a slope or rough terrain, as this leads to greater consumption of power.
- 7. The batteries have a six-month warranty covering manufacturing defects. This warranty does not cover faults due to incorrect battery recharging.

#### How to adjust the seat height

- 1. Remove the seat from your scooter.
- 2. Remove the lock bolt from the lower seat post.
- 3. Adjust the seat post to the desired seat height.
- 4. Move the upper seat post so that there is a hole to insert the lock bolt.
- 5. Tighten the nut of lock bolt.



# 4. OPERATION

#### 4.3 How to set to freewheel mode

#### **&** Warning

Never operate the freewheel lever while seated on the scooter or on an incline! OPERATION OF THE FREEWHEEL LEVER



Fig 4.1

Fig 4.2

- Engaged mode (Fig. 4.1): Push the lever down completely and the scooter can be driven by motor power.
- Freewheel Mode (Fig 4.2) : Pull the lever up and the scooter can be moved manually.

#### Tiller Adjustment

The tiller can be adjusted in to many different positions to suit each driver.

- 1. Loosen the knob to adjust the tiller to positions you want. (Fig. 4.3)
- 2. Once decide the position, tighten the knob to secure the tiller.(Fig.4.4)

Adjustment Knob







Fig. 4.4

#### & Warning

- Please hold the tiller before loosening the tiller adjustment knob.
- Before lifting or driving the scooter make certain the tiller adjustment knob is fully tightened.
- Never attempt to adjust the tiller while the scooter is motion.

# 5. DRIVING ON THE ROAD

### Starting and Driving

- 1. Make sure the seat is installed properly.
- 2. Make sure the tiller has been secured properly.
- 3. Turn the power switch to "ON".
- 4. Check battery indicator to see whether there is enough power for your journey. If you have any doubt about the remaining power, please recharge the batteries before departure.
- 5. Set the speed dial to a position you feel safe and comfortable with.
- 6. Check the forward/reverse lever works correctly.
- 7. Make sure the electromagnetic brake works correctly.
- 8. Before driving, ensure it is safe to do in the environment around you.

#### The Attention

- 1. Do not push both RH & LH sides of the speed control lever simultaneously. This might leave you unable to control your scooter.
- 2. Do not turn the power switch to OFF while driving as this will lead to an emergency stop and possible risk of accident and injury.
- 3. Do not set to the highest speeds while driving indoors.
- 4. Do not adjust the speed dial while driving, a sudden change in speed may cause danger to you and others, and may cause damage to your scooter.
- 5. Do not place magnetic devices near the area of the operation handle as this could affect the safe operation of your scooter. The scooter controller is located under the foot way.
- 6. Do be careful while driving in heavy traffic or crowded areas.
- 7. While reversing the vehicle, beware of people or objects behind you.

#### Stopping

- 1. Release the speed control lever completely. The vehicle will naturally brake and stop.
- 2. Turn the power off. Then pull out the key.

#### The Attention

- 1. The stopping distance will vary with your forward / reverse speed. Therefore please begin braking as early as you can.
- 2. When parking your scooter, be sure to park on flat ground and then turn the power to "OFF" before you dismount.

# 6. BATTERY CHARGING AND CARE

# **CHARGING THE BATTERY**

Follow the procedure below step by step:

- 1. Turn the power switch to (OFF).
- 2. Connect the charger's power cord into the power outlet.
- 3. Open the charging rubber cover on the rear shroud. Then connect the charger's round plug to the charging socket.
- 4. Switch the charger on.
- 5. Both the charger's red and orange LEDs will be lit when charging. The charging duration is about 10 hours. To ensure optimum performance a 12-14 hour charge is recommended.
- 6. Both the charger's LEDs will be lit during the charging process. The orange LED will turn green when charging is complete.
- 7. Turn off the charger, disconnect the power cord and the round plug from charger socket on the scooter.

# SUGGESTION

- 1. Do not disconnect the charger cord if charging is not completed. The battery life will be seriously shortened or decayed if the battery is repeatedly used without being fully charged. Therefore be sure to charge the battery fully every time.
- 2. Always complete the charging until the orange LED light turns green. NEVER stop charging before it is complete.
- 3. When fully charged, the battery charger will still trickle charge the battery to ensure optimum range.
- 4. If you do not use your scooter for a long time, it should be charged at least every week to keep the battery in a fully usable condition.
- 5. The ambient temperature will affect charging time. Charging time will be longer in the winter.
- 6. After charging, do not leave the charger socket plugged in to the scooter, as this will cause a power drain on the scooter and temporarily reduce its range.
- 7. The batteries carry a six-month manufacturer's warranty. This warranty only covers issues relating to manufacturing faults, and not faults relating to failure to recharge

the batteries as instructed above.

8. Should range or power problems arise, please charge your scooter for 24 hours continually and then retry the scooter.

### Attention:

Please follow the rules below to avoid accidents while charging.

- 1. Please use the 24V charger that comes with your scooter only, and recharge the battery to its full capacity every time. You may damage the battery and scooter if you use a charger which is not to the correct specification.
- 2. Never disassemble or modify the charger.
- 3. Please charge in a well-ventilated space where it is not directly exposed to the sunlight.

Do not charge in surroundings where it is humid or under rainfall and morning dews.

4. Do not charge in temperatures less than 14°F or higher than 122°F as the charger may not work well and the batteries may become damaged.

### Warning:

- 1. Keep away from flammable objects while charging as it may lead to fire or explosion of battery.
- 2. Do not smoke while charging as the battery may release hydrogen gas. Always charge your battery in a well-ventilated space.
- 3. Never connect or disconnect the plug or cord with wet hands while charging. Do not connect or disconnect the plug or cord when they are wet, it may lead to electric shock.

### Charger:

Both the chargers red and orange LEDs will be switched ON during charging. The orange LED will turn green when charging completed. It is recommended to leave the charger plugged in for at least 1-2 hours after the green light has become illuminated. This process may increase or maintain the performance of the batteries.

### Warning:

The fan inside the charger will be activated accordingly when you turn on the charger. If the fan does not work when connected to the charger or the green light is not showing, DO NOT use this charger. It may lead to overheating of the charger and cause a fire.
There is a red LED present on the charger to illustrate operation. If this LED does not illuminate the charger is faulty, please contact your dealer.

### **Battery:**

• Do not expose the battery to temperatures below 50°F or above 122°F when charging or storing the vehicle. Being out of the above temperature range can cause the battery either to freeze or over heat. This will damage the batteries and shorten their life.

• These batteries are maintenance free and there is no need to inspect the battery liquid or refill with water.

• You are required to recharge the batteries on a regular basis. Even if the scooter is stood idle, you should charge the batteries at least once a week.

**WARNING** Do not open the battery sealed cap at any time.

### **Batteries:**

- Your scooter is powered by two deep cycle sealed lead-acid batteries.
- The batteries supplied with the scooter are 12V12AH batteries.

### **Charging the Battery**

Using the charger supplied with the scooter, the charging duration is about 8 hours. However to ensure optimum performance we recommended a 12-hour charge. We also recommend that the batteries are not charged for more than 24 hours.

### **Cleaning the Battery**

If water, battery acid, dust or other substances contaminate the batteries, they will discharge quickly. The batteries supplied with the scooter are sealed and as such are maintenance free. Please follow the steps below to clean the battery.

- 1. Turn the scooter power switch to OFF.
- 2. Remove the seat and dust cover.
- 3. Remove the shroud.
- 4. Use a clean cloth to wipe off the soiled area.
- 5. Take out the battery.

6. Clean the battery with a clean cloth. If the terminal is covered by white powder, please wipe it clean using warm water.

### Suggestions:

If necessary, ask for help from your dealer for advice about maintaining and replacing the battery.

- 1. Make sure the terminals are installed properly and put the cover back on.
- 2. Do not use the battery to charge telecom equipment or other items.

3. Battery efficiency will vary with outside conditions, the driving distances will be shorter in the winter. If the vehicle is not used for a long time, please charge the battery at least every week.

4. Replace both batteries together.

# 6. BATTERY CHARGING AND CARE

# Charging Hours

The charging duration is about 6 hours. To ensure optimum performance a 10-hour charge is recommended. But we do not recommend a charging more than 24 consecutive hours.

### **Batteries** (Inside the Pack)

- 1. The MINI PHANTOM is powered by two sealed lead-acid deep-cycle batteries.
- 2. The batteries supplied with the scooter are 12 V 12ah batteries.
- 3. Size: 5.94 "× 3.89 " x 3.74 "(Width x Height x Thickness)

(151mm×99mm×95mm)

#### & Warning

- 1. Keep away from flammable objects while charging as it may lead to fire or explosion of battery.
- **2.** Do not smoke while charging as the battery may release hydrogen gas. Always charge your battery in a well-ventilated space.
- **3.** Never connect or disconnect the plug or cord with wet hands while charging. Do not connect or disconnect the plug or cord when they are wet, it may lead to electric shock.

### **The Attention - Please follow the rules below to avoid accidents while charging.**

- 1. Please use the charger only, and recharge the battery to its full capacity every time. You may damage the battery and scooter if you use a charger, which is not to the correct specification.
- 2. Please charge in a well-ventilated space where it is not directly exposed to the sunlight. Do not charge in surroundings where it is humid or under rainfall and morning dews.
- 3. Do not charge in temperatures less than  $14^{\circ}$  F or higher than  $122^{\circ}$ F as the charger may not work well and the batteries may become damaged.

# 6.1 BATTERY

- Do not expose the battery to temperatures below 14° F or above 122° F when charging or storing the vehicle. Under or over the above temperature range can cause the battery either to freeze or over heat. This will damage the batteries and shorten their life.
- These batteries are maintenance free and there is no need to refill with water.
- You are required to recharge the batteries on a regular basis. Even if the scooter is stood

# 6. BATTERY CHARGING AND CARE

idle, you should charge the batteries at least once a week.

• The batteries carry a six-month manufacturer's warranty. This warranty only covers issues relating to manufacturing faults, and not faults relating to failure to recharge the batteries as instructed above.

#### □ Suggestion – How to maximize your batteries efficiency and service life

- 1. Fully recharge your new battery before its first time use.
- 2. Be sure to charge the battery fully every time. The battery life will be seriously shortened or decayed if the battery is repeatedly used without being fully charged.
- 3. Always complete the charging until the orange LED light turns green. NEVER stop charging before it is complete.
- 4. Keep your batteries fully charged whenever possible.
- 5. If you do not use your scooter for a long time, it should be charged at least every week to keep the battery in a fully usable condition.
- 6. The ambient temperature will affect charging time. Charging time will be longer in the winter.
- 7. After charging, do not leave the charger socket plugged in to the scooter, as this will cause a power drain on the scooter and temporarily reduce its range.

# 6.2 REPLACING BATTERIES

### Batteries replacement

Follow the procedure below step by step to replace the batteries:

- 1. Remove the battery pack from the scooter.
- 2. Remove all screws that hold the battery pack.
- 3. Open the battery pack then disconnect the cables from the four battery terminals.
- 4. Remove the batteries from the battery pack.

# 6. BATTERY CHARGING AND CARE

- 5. Place new batteries inside the pack.
- 6. Connect the red cable to the positive (+) battery terminal and black cable to the negative (-) on the other battery.
- 7. Connect up the fused cable between the two batteries and close the battery pack.
- 8. Replace and tighten all the screw that holds the battery pack together.



#### & Warning

- 1. The wiring system and charger are well situated in the battery pack while being assembled in plant. Do not attempt to re-locate the wiring system by yourself. The improper layout of wiring system may result in the wires pinched by battery box, which might result in the electronic system failure.
- 2. Be sure the battery wires are connected to their right battery terminal.

#### **Suggestions**

If necessary, ask for help from your dealer for advice about maintaining and replacing the battery.

#### **Suggestions**

- 1. Make sure the terminals are installed properly and put the cover back on.
- 2. Do not use the battery to charge telecom equipment or other items.
- 3. Battery efficiency will vary with outside conditions; the driving distances will be shorter in the winter. If the vehicle is not used for a long time, please charge the battery at least every week.
- 4. Replace both batteries together.

# 7. INSPECTION AND MAINTENANCE

#### 7.1 INSPECTION

- Clean the scooter with a damp cloth and dust down approximately once a week to preserve the appearance of the scooter.
- Adjust the tiller height and return to the original position and swivel the seat once a week to ensure the parts adjust and remove smoothly and easily when required.
- Check for signs of wear and tear on the tires and the upholstery on a regular basis.
- For optimum performance and to increase the lifespan of your scooter, it is recommended that you have your scooter serviced once a year.

#### **REGULAR CHECKING RECORD**

To make sure your scooter is correctly serviced, take it to your dealer for regular maintenance checks. This should be at six months intervals after an initial inspection after one month. Your dealer may charge a fee for this. The checking record is shown below.

YEAR	1	2	3	4	YEAR	1	2	3	4
Service Dates					Service Dates				
Controller					Upholstery				
On/off switch					Seat				
Control Lever					Back				
Braking					Armrests				
Recharge point					Electrics				
Batteries					Connections				
					condition				
Levels					Harness				
Connections					Test run				
Discharge test					Forwards				
Wheels and Tires	_				Reverse				
Wear					Emergency stop				
Pressure					Left turn				
Bearings					Right turn				
Wheel nuts					Slope test				
Motors			_		Other obstacles				
Wiring					List Items repaired				
Noise									
Connections									
Brake									
Brushes									
Chassis									
Condition									
Steering									

# 7. INSPECTION AND MAINTENANCE

#### 7.3 BATTERY, FUSE AND TIRE

#### **Battery**

Refer to the section entitled "6. BATTERY CHARGING AND CARE".

#### **Fuse**

If the battery charger is turned on and no LED is lit, check the fuse.

#### Suggestion

Ask for help from your dealer to inspect or replace the fuse, since the tiller shroud has to be removed first before you can replace the fuse.

#### **Tires**

The condition of the tires depends on how you drive and use your scooter.

- Please check the tread depth regularly.
- Replace the tires when the tread depth is less than 0.5 mm.

#### The Attention

- 1. When tread depth is below 0.5mm it can easily lead to vehicle slippage, making braking distances longer. Therefore replace the tires as early as possible when they are found to have insufficient tread depth.
- 2. The scooter comes with solid tires so there is no need to check tire pressure.

### 7.4 STORAGE

Make sure the scooter is stored under the following circumstances:

- Ensure the scooter is switched off
- Ensure the charger is disconnected when not in use

#### Suggestion

Please store the scooter in a location where it is out of direct sunlight, rain, or dew. When storing for a long time, please charge the battery to full power and then disconnect the battery terminal. For details inquire to your dealer.

# 7. INSPECTION AND MAINTENANCE

#### 7.5 MOVING ABOUT

- Switch off the power with power key before moving. Always dismount from the scooter before moving.
- Lift the scooter by the chassis, and not by the shroud. Lifting the scooter by the bumper could cause damage or injury.

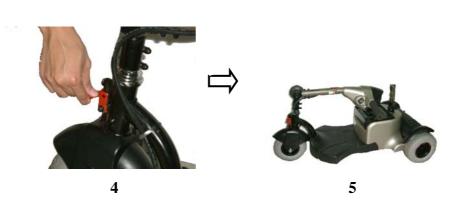
 For your safety, always ask for help if required. You will need two people when moving or lifting the scooter whole. If you are on your own, please disassembly the scooter before lifting. Refer to the section below.

## 7.6 DISASSEMBLING THE SCOOTER

The scooter can be disassembled in to three pieces, the seat (weight 15 lbs.), the frame (weight 44.75 lbs.), and battery pack (weight 21 lbs.), without any tools. Please follow the steps.

- 1. Switch off power of the scooter.
- 2. Loosen the seat post knob.
- 3. Remove the seat
- 4. Remove the battery pack..
- 5. Loosen the tiller adjustment knob and fold down the tiller and retighten knob.
- 6. Lock the front wheel and tiller by pulling the wheel lock catch down.





# 7. INSPECTION AND MAINTENANCE

# 7.7 ASSEMBLING THE SCOOTER

#### Suggestion

The assembly process is essentially the disassembly process in reverse. First study the text and photographs in the disassembly procedure before re-assembling the scooter.

- 1. Loosen tiller adjustment knob, raise the tiller to the desired position, and then tighten the tiller adjustment knob.
- 2. Reinstall the upper seat post at the desired height. Secure with the locking pin and tighten the seat post knob.
- 3. Reinstall the batteries by lowering it in to place.
- 4. Replace the seat and rotate it until it locks into its correct position.

### & Warning

After assembling the MINI PHANTOM BY DRIVE, make absolutely certain the tiller adjustment knob is fully tightened.

# 8. TROUBLESHOOTING

### **TROUBLE SHOOTING**

If you have trouble with your scooter, you can inspect the following before taking you scooter to the dealer.

If you cannot solve the problem, contact your dealer for assistance.

	Problem	Symptom	Remedy
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The scooter will not switch on	<ul><li>Batteries not connected.</li><li>Circuit breaker has tripped</li></ul>	<ul> <li>Check batteries are connected</li> <li>Push circuit breaker button to rest</li> </ul>
The scooter switch on but will not run	<ul><li>Dead Batteries</li><li>Charger plugged in</li><li>Motor in freewheel mode</li></ul>	<ul> <li>Check battery power</li> <li>Unplug charger</li> <li>Re-engage the freewheel lever</li> </ul>
Scooter appears slow	<ul><li>Dead batteries</li><li>Speed setting slow</li></ul>	<ul> <li>Check battery power and /or recharge</li> <li>Check the speed dial is not set at low</li> </ul>
The seat moves while in use	• Seat not locked in position	• Slowly rotate the seat until it drops into place and is secure
The tiller appears loose	• Tiller adjustment knob loose	• Tighten the tiller adjustment knob
Involuntary horn sounds	• There is fault on the scooter	• Ensure the control lever is released and switch the scooter on and off recharge batteries

# 9. SPECIFICATION

### SPECIFICATIONS

Model	MINI PHANTOM BY DRIVE
Dimension (L x W x H mm)	960x535x890 mm
(L x W x H inch)	37.8 "x 21.1" x 35"

Weight(Kg),W/I battery	36.9 kg / 81.2lb
W/O battery	27.2kg / 59.8 lb
Battery	12V 12 Ah x 2
Charger	24V 2A
Front Tire	200 x 50 solid tire
Rear Tire	200 x 70 solid tire
Driving System	Direct rear wheels (with differential gear)
Brake System	Electromagnetic brake
Control Method	By speed control lever
Top Speed	4 mph
Climbing angle	6°-8°
Cruising range (see note)	10 miles
Max. User weight	250 lbs

Remark: The manufacturer reserves the right to modify the specification if necessary. The final specification is subject to the individual scooter you purchase from your dealer. **Note:** 

Maximum driving distance is based on an ambient temperature of 68°F, a 165 lbs. driver and a brand new fully charged battery by a constant driving speed at 3.7 mph with 70% battery power discharged.

# **10. WARRANTY**

Your Drive brand product is warranted to be free of defects in materials and workmanship as follows:

Chair/Scooter frame: Lifetime

Electronic Controller and drive train components: 1 year

Batteries: 6 months from time of installation

This device was built to exacting standards and carefully inspected prior to shipment. This Lifetime

Limited Warranty is an expression of our confidence in the materials and workmanship of our products and our assurance to the consumer of years of dependable service.

In the event of a defect covered by this warranty, we will, at our option, repair or replace the device.

This warranty does not cover device failure due to owner misuse or negligence, or normal wear and tear. The warranty does not extend to wearable components.

If you have a question about your Drive device or this warranty, please contact an authorized Drive dealer.

#### WARRANTY CONDITIONS:

- 1. Any work or replacement part installation must be carried out by an authorized Drive dealer/ service agent.
- 2. Should your power chair require attention under this warranty, please contact an authorized Drive dealer.
- 3. Any repaired or replaced parts will be covered by this warranty for the balance of the warranty period on the power chair.
- 4. The above warranty conditions apply to an new power chair purchased at the full retail price. If you are unsure whether your power chair is covered, check with an authorized Drive dealer.
- 5. Under normal circumstances, no responsibility will be accepted where the power chair has failed as a direct result of:
  - a. The power chair part not having been maintained in accordance with the manufacturer's recommendations.
  - b. Failure to use the manufacturer's specified parts.
  - c. The power chair or part having been damaged due to neglect, accident or improper use.
  - d. The power chair or part having been altered from the manufacturer's specifications or repairs having been attempted before the service agent is notified.

The manufacturer reserves the right to alter without notices any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

#### DRIVE AUTHORIZED SERVICE AGENT

#### NAME

#### ADDRESS

TELEPHONE	
FAX	
EMAIL	

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# Warranty Registration

Please type or print.

Serial #	 Date Purchased	//
Owner Name		
Address	 	

City				State		Zip	_
Additional	Required (	Owner Informati	ion				
Please indi	cate your u	nderstanding of	your scooter	by completing the	e follo	wing information	n.
	I have read	d and fully unde	erstand				
		Owner's Manu maintenance a		sections on oper tructions.	ating	instructions, safe	ty guidelines,
		Scooter Warra	anty				
		used. Batteries	s must also be	sealed lead acid o sealed, deep cyc nnce and void the	le, and	d maintenance fr	
	My dealer	has instructed r	me on how to	operate my scoot	er.		
Signature				Dealer Name			
				Dealer Phone	(	_)	
Email Add Comments							

## WARRANTY APPLICATION FORM

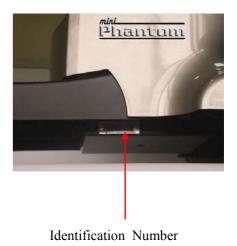
Name		
Sex	□ Male	□ Female

Date of Birth	Year Month Da	ıy			
Address					
Model	□ MINI PHANTOM	BY DRIVE			
VIN	Scooter VIN:				
	Motor Serial No:		Key #		
Date of Purchase	Year Month Da	y			
Purchaser Signature					

#### **10.1 VIN (VEHICLE INDIFICATION NUMBER)**

To ensure the correct after sales service and warranty service support, please write down the vehicle identification number that is stuck on the back left-hand side of the frame.

Model	MINI PHANTOM BY DRIVE		
VIN			
Motor serial #		Key #	



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# **Drive Medical**

99 Seaview Blvd Port Washington, NY 11050 516.998.4600 (Phone) 516.998.4601 (Fax) 877.224.0946 (Toll Free) 877.390.6628 (Toll Free)

www.drivemedical.com

