

**Mo Rad 1500** 

**Owner's Manual** 

#### The Handbook

The instructions in this handbook are designed to provide a clear and simple guide to use your new vehicle. The handbook contains information regarding maintenance work and periodic checks that should be performed.

You will also find instructions for several simple repair jobs you can do yourself. All operations not explicitly described in the handbook require the use of special tools and or specific technical skills and should be preformed exclusively by an authorized Rad2Go dealer.

Areas of text highlight with the symbols shown on the next page contain important information regarding use of the vehicle and road safety.

#### **Symbols For The Correct Use Of Your New Vehicle**

The symbols on the page are important.

They highlight area of the handbook that deserve special attention.

The three symbols are distinctive so that information can be quickly located.



## **Personal Safety**

WARNING

Failure to observe these instructions will result in serious risk of personal injury or even death.



## **Environmental Respect**

Sections marked with this symbol indicated the correct use of the vehicle in full respect of your natural surroundings.



## Vehicle Safety

**CAUTION** 

Failure to observe these instructions will result in the risk of serious damage to the vehicle and, in certain cases, may invalidate the warranty.

#### **General Safety Rules**

#### Foreword

This manual is an important and integral part of your vehicle. Keep it with your vehicle at all times and when vehicle is resold.

If you have any questions any questions about your vehicle, contact Rad2Go or an authorized Rad2Go dealer.



### REAR WHEEL WARNING

Be vary careful to keep your fingers, all your other body, and any object well clear of the rear wheel while the engine is running and the vehicle is resting on its stand. Failure to observe this warning can lead to serious personal injury, as well as damage your engine.



#### SHOCK-ABSORBERS WARNING

Do not disassemble the front and rear shock absorbers. The shock absorbers have preloaded springs. Disassembly can cause serious injury and even death.



## BATTERY HYDROGEN GAS AND ELECTROLYTE WARNING

Vehicle batteries give off noxious and explosive gases; keep cigarettes, flames and sparks away from the battery.

Provide adequate ventilation when operating or recharging the battery. During recharging or use, make sure that the room is properly ventilated and avoid inhaling the gases released during the recharging.

The battery contains sulphuric acid (electrolyte). Contact with the skin or eyes may cause serious burns. Always wear protective clothing, rubber gloves, and tight fitted goggles or a face shield when working around the battery, especially when filling the battery with either water or electrolytes.

In case of contact with the skin, flush immediately with plenty of water. In case of contact with the eyes, flush with plenty of water for at least 15 minutes. Immediately consult a health professional.

The electrolytes are poisonous.

If the electrolyte is accidentally swallowed, drink large quantities of water or milk and then follow with magnesia, beaten egg or vegetable oil. Immediately consult a health professional.

KEEP AWAY FROM CHILDREN.

Used batteries are harmful for the environment. Take used batteries to your nearest collection point for disposal as prescribed by law.



#### PRECAUTIONS GENERAL ADVICE WARNING

Your safety and that of those around you depends not only on your skills as a rider, but also your knowledge about your motorscooter and about riding safety. Therefore, it is essential that you so not operate your vehicle on public streets until you have received instruction from a qualified safety organization such as the Motorcycle Safety Foundation, and are properly trained and licensed.

#### REPORTING OF DEFECTS THAT AFFECT SAFETY

If you believe that your motorscooter has a defect, which could cause an accident or could cause injury or death, you should inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Rad2Go by calling tool free 1-800-498-8455. If NHTSA receives similar complaints, it may open an investigation and if it finds that a safety defect exists in a group of motorscooters, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your Dealer or Rad2Go. To contact NHTSA, you may either call the Auto Safety Hotline toll free at 1-800-424-9393 (or 366-0123 in the Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590.

You can also obtain other information about motorcycle safety from the Hotline.

#### ROAD REGULATIONS AND USE OF THE MOTORSCOOTER

Rules of the road may vary from country to country or state to state. It is essential that you understand in advance the rules of the road of the country or of the state in which your vehicle will be used.



## WARNING

This motorscooter has been designed and produced for use on even and paved roads or surfaces only.

Do not use the motorscooter on unpaved surfaces, in order to avoid overturning or other accidents.



#### WARNING

Rad2Go recommends you not ride your motorscooter on state or national highways, freeways, or expressways.



#### TAMPERING WARNING

Tampering with the noise control system is prohibited. Federal law prohibits the following acts:

- a) Removal or rendering inoperative by any person other then for the purpose of maintenance, repair, or replacement, and devise or element of design incorporated into any new motorscooter for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or
- b) Use of the motorscooter after such a devise or element of design has been removed or rendered inoperative by any person. Among those acts presumed to constitute tampering are the acts listed below:
- a) Removal or puncturing of any part of the intake system.
- b) Lack of proper maintenance.
- c) Replacement of any moving parts of the motorscooter, or parts of the exhaust or intake system, with parts other than those specified by Rad2Go.



#### CAUTION

The vehicle should be checked for repair or replacement if the motorscooter noise has increased significantly through use. Otherwise, the owner may become subject to penalties under state and local ordinances.

#### PROTECTIVE CLOTHING

For your safety, we strongly recommend that your always wear an approved motorcycle helmet, eye protection, boots, gloves, long pants, and long-sleeved shirt or jacket whenever you ride. Although complete protection is not possible, wearing proper gear can reduce the change of injury.

#### HELMETS AND EYE PROTECTION

Your helmet is your most important piece of riding gear because it offers the best protection against head injuries. A helmet should fit your head comfortably and securely. A bright-colored helmet can make you more noticeable in traffic, as can reflective strips. An open-faced helmet offers some protection, but a full-faced helmet offers more. Always remember to properly fasten your crash helmet. Regardless of the style, look for a DOT (Department Of Transportation) sticker in any helmet you buy (USA only), and always wear a face shield or goggles to protect your eyes and help your vision.

#### ADDITIONAL RIDING GEAR

In addition to a helmet and eye protection, we also recommend:

- Properly fitted boots with non-slip soles to help protect your feet and ankles.
- ❖ Leather gloves to keep your hands warm and help prevent blisters, cuts, burns and bruises.
- ❖ A motorcycle riding suite or jacket for comfort as well as for protection.
- Brightly colored and reflective clothing can help make you more noticeable in traffic. Be sure to avoid loose clothes that could get caught on any part of your motorscooter.

## **KEYS**

The motorscooter is supplied with two keys (one spare) that serve to start the engine and unlock the saddle compartment.

## NOTE

Keep the duplicate key separate from the motorscooter.

The serial numbers are made up of a code stamped into the frame and the engine. Check that the frame number on the vehicle is identical to the number shown in the owner's handbook.

Defacing factory serial numbers is a serious criminal offense and can lead to confiscation of the vehicle or other penalties.



#### CAUTION

In all states and countries, it is against the law to alter the Vehicle Identification Number (VIN) and can result in severe penalties. This will immediately invalidate your warranty.

#### STARTING THE ENGINE

- 1. Place the vehicle on center stand and check that the rear tire is not touching the ground.
- 2. Keep the throttle closed.
- 3. Insert the ignition key and turn it to "ON".

#### STOPPING THE ENGINE

When the vehicle is stopped with the engine idling turn the ignition key to "OFF" (key can now be extracted). Use the center stand to support the motorscooter while parked. Park the motorscooter on firm, level ground to prevent it from falling. Lock the steering to help prevent theft.



#### WARNING

Use the engine stop switch only if the engine runs away. It is for emergency use only. Once the switch is activated, your motorscooter will slow very abruptly. Only in case of emergency the engine stop switch should be used while the motorscooter is running.



#### WARNING

Never attempt to place the ignition switch in the locked position while the motorscooter is moving. This will cause loss of control of the motorscooter with possible subsequent accident, serious injury or even death.



#### WARNING

Do not place anything inside the front part of the fairing between the handlebar and dashboard. Any object placed in this area could jam the forks, and also could restrict visibility of the dashboard.



#### WARNING

Never take your hands off the handgrips or your feet off the footrest while you are riding. Failure to do this could upset the stability of the vehicle.

Before riding away, make sure that the stand is completely up.

Failure to follow these warnings may cause an accident with consequent risk of serious injury or even death.

To ride away:

- ❖ Allow the throttle to return to idle, apply the rear brake, and then remove the vehicle from the stand.
- Get on the vehicle, keeping at least one foot on the ground in order not to lose balance
- ❖ Before driving, be sure that the review mirrors are correctly adjusted.



#### CAUTION

When the vehicle is new to you, practice looking in the rear view mirrors. Only experience will allow you to correctly determine the exact location of other vehicles and objects behind you.

❖ To begin, release the brake lever and accelerate by gently rotating the throttle grip; the vehicle will start moving.



#### WARNING

When braking, close the throttle and apply both brakes simultaneously in order to obtain the best brake performance.

By applying only the front brake or only the rear brake, you reduce the braking efficiency considerably, and run the risk of locking up one wheel. This can cause an upset and subsequent injury or even death.

Before entering a turn, slow the motorscooter using the brakes, to a constant speed and then accelerate slightly through the turn. Avoid braking at the last moment. This can cause you to lose control of your vehicle.

If the brakes are operating continuously on downhill grades, the disc and pads will overheat, reducing the brake efficiency. Use the brakes as little as possible to maintain a safe speed. Never coast downhill with the engine off.



#### WARNING

On roads that are wet or covered with snow, ice or mud, ride very slowly, avoiding braking, or accelerating or maneuvering quickly. Hold the handlebar firmly.

Failure to heed these warnings can cause an upset with subsequent serious injury or death.

Pay very close attention to any obstacles or variations of the road surface. Uneven roads, rail, manholes covers, painted traffic stripes, traffic dots all become slippery when wet. Avoid particularly steel plates, which are sometimes used during road maintenance. They become more slippery than ice once they are wet by rain. If you must ride on such surfaces, decrease your speed and operate the throttle, brakes, and steering very gently.

Always use the turn signals any time you intend to change lanes or change direction, and avoid sudden or abrupt turning.

Switch off the direction indicators as soon as you have changed directions.

Overtake and pass with care, especially in rainy weather. A water cloud created by larger vehicles will reduce visibility and the slipstream could cause you to lose control of your vehicle.



Failure to follow these simple recommendations can damage your motorscooter, and lead to an accident, with subsequent serious injury, or even death. The life of your motorscooter, and your enjoyment of it, will be greatly enhanced if you avoid situations in which the motorscooter will be abused by attempting to carry too heavy a load, or starting on too steep a hill.

Your riding skill and a through knowledge of your vehicle are basic ingredients of road safety. Practice riding in a traffic free area until you are fully in control under various different conditions.



#### WARNING

Never ride under the influence of alcohol or drugs as this dangerous for yourself or others.

# BE SURE TO RIDE SAFELY, DEFENSIVELY AND WITHIN THE LIMITS OF THE LAW AND YOUR ABILITIES.

- ❖ Before starting, put on an approved helmet and secure the straps correctly.
- Reduce speed on unsurfaced roads or uneven ground and exercise the maximum caution.
- Riding in the rain or on wet roads can cause the brakes of your motorscooter to become wet. When this happens, their effectiveness will be greatly reduced. In these conditions, gently activate the brakes regularly, to dry the brakes, and so that you may check the braking action.
- ❖ Use extreme caution when braking on wet roads, unsurfaced roads or any other slippery surfaced.
- ❖ Always use both brakes simultaneously to distribute braking force over both wheels.
- ❖ Do not start off by mounting the motorscooter when it is on the stand. Before taking the vehicle off the stand make sure the rear is not spinning.
- ❖ When your motorscooter is used on sandy, muddy, salty, or snow covered roads, periodically clean the brake disc with a gentle cleaning agent. This will avoid the build-up of abrasive material in the slots in the disc, which will cause early and uneven brake pad wear.
- ❖ Do not modify your motorscooter in any way. This motorscooter is carefully engineered to provide optimum performance and safety. You will only reduce its utility and your enjoyment of the motorscooter by modifying it.



#### WARNING

Over-braking on a slippery surface will lead to upset, an accident, and subsequent injury or possibly even death.

#### **BASIC SAFETY RULES**

The instructions below cover normal operation of your motorscooter and must be carefully observed. By following these rules you will enhance your own safety and the safety of others. You will also maximize the life and utility of your motorscooter. Motorscooters obviously do not provide some of the protection provided by automobiles, therefore it is essential that you wear appropriate, therefore it is essential that you wear the appropriate protective clothing. Never operate your motorscooter without wearing a helmet, gloves, eye protection, a heavy jacket, sturdy footwear, and sturdy full length pants.

However, do not assume that even the best clothing and helmet will protect you in the event of an upset or a crash with another vehicle. At best, this gear provides some protection from scrapes and scratches, but very little, if any, impact protection. Be sure that you meet all the requirements prescribed by local law, including the driver's license, minimum age, training, insurance, taxes, motorcycle registration, license pates, etc.

When you first receive your motorscooter, practice by riding in areas where there is no traffic. Do not attempt to ride in heavy traffic until you are thoroughly experienced and riding your motorscooter has become second nature to you.

Most states prohibit the operation of this size of motorscooter on freeways or expressways. Be sure that it is legal to use your motorscooter before you take any particular road.

A new motorscooter must be carefully broken in.

Before starting the engine, make sure that the brakes; transmission and throttle controls function properly.

The brakes and some other parts of the motorscooter become very hot during operation. Do not touch any of these parts.

Some medicines or drugs, illegal or prescription, and alcohol significantly increase the risk of accidents.

Do not ride while you are under the influence of alcohol or drugs, whether they are illegal or prescription. Make sure you are in good physical condition and not ill before riding your motorscooter. Do not ride your motorscooter when you are particularly tired.

Alcohol, drugs, and fatigue are the leading causes of motorscooter accidents.

Many accidents are caused by the rider's inexperience and lack of training. Do not ride your motorscooter until you have received training form a recognized training organization such as the Motorcycle Safety Foundation.

Remember that riding a motorscooter, though easy and fun, is quite different from driving a car. Do not assume that you can operate your motorscooter safely just because you are a competent automobile driver.

Never lend your motorscooter to others unless you are sure that they are competent and properly licensed motorcycle operators.

If the throttle sticks open, it may cause a collision with another vehicle or an upset. If the throttle sticks, turn off the engine with the engine stop switch located on the right hand side of the handlebar. Do not attempt to restart the engine until the throttle has been repaired and works perfectly. Failure to obey this warning can lead to a run away with serious injuries or even death.



Do not ride the motorscooter if the throttle does not automatically return to idle. Contact Rad2Go service technician who will provide for the necessary repairs.

It is very important to your safety that you give full attention to the riding task, watch what you are doing, do not allow yourself to be distracted by other cars, people or things on the roadside, etc. Never smoke, eat, drink, read, etc. while riding your motorscooter. If you must consult a map, pull over when it can be done safely.

If you and your motorscooter are involved in an accident, ensure that there has been no damage to the control levers. Tubes, wires, braking system and other vital parts. If your motorscooter is involved in an accident, contact a Rad2Go service technician who has the equipment and knowledge to check for damage, which may compromise your safety. Do not use your motorscooter if it is damaged.

A damaged motorscooter may become unstable or present other problems, which can increase the risk of accident, and therefore serious injury or even death.

Do not attempt to modify the position, angle or color of your license plate. Do not cover it with even a clear plastic covering.

Do not modify any of the safety equipment of your motorscooter, especially such safety related items as directional indicators, rear view mirrors, lights or horn.

Any modification to your motorscooter will invalidate the warranty.

Do not modify you r engine in an attempt to increase the horsepower. This can result in irreparable damage to the engine, as well as degradation of the performance and handling of your motorscooter, which could leas to an upset, and serious injury or even death. Have your motorscooter repaired only with original parts, and use only original Rad2Go accessories.

The use of aftermarket accessories and parts can seriously compromise the safety of your motorscooter as well as affect its performance, stability and serviceability. Any modification, which affects performance or safety, voids your warranty completely. For reasons stated above, tampering with the exhaust emission or noise control system of your motorscooter can lead to large fines. Also, in some jurisdictions, helmets are required by law, and in all jurisdictions, you must maintain your motorcycle in current registration (license plate up-to-date). Also, many jurisdictions require a special motorcycle license, and you must not ride your motorscooter without having first obtained this license.

This motorscooter was not designed to be equipped with a sidecar or to be used to tow trailers, motorcycles, motorscooters or bicycles.

Rad2Go does not manufacture sidecars or trailers and therefore cannot predict the effects of such accessories on the maneuverability or stability of your motorscooter: it can only warn that such effects may be negative and that any damage to the motorscooter components caused by the use of such accessories will not be covered by the warranty.

Never race other motorscooters or motorcycles with your motorscooter. Brake with both the front and rear brakes.

The use of one brake only for sudden braking may cause the motorscooter to skid or make the rider lose control of the motorscooter itself.

Always ride at a safe speed and avoid unnecessary hard acceleration.

This also reduces fuel consumption and increases the life of the motorscooter. If you must ride your motorscooter in rainy weather, or on loose surfaces, remember that traction is greatly reduced. Under these conditions, all handling of the motorscooter must be done gradually and smoothly. Sudden acceleration, braking or turning may cause you to lose control of your motorscooter. When traction is reduced, accelerate gradually and when slowing down release throttle and use your motorscooter engine braking in so far as possible, instead of braking in so far as possible, instead of braking abruptly.

Avoid rapid, harsh application of the brakes.

Gradually open and close the throttle, to avoid spinning or skidding the rear wheel. On rough road surfaces, slow down and ride with particular care. Avoid wide-open throttle acceleration, unless they are necessary for passing.

Remember that excessively aggressive corning can cause your motorscooter's tire to lose traction, which can result in an upset and serious injury or even death.

Always observe posted and statutory speed limits, but do not assume that you can ride as fast as the speed limit allows under all road conditions. Slowing does a little can greatly increase your safety under all road conditions.

Do not ride you motorscooter off road.

#### **CLOTHING**

Before riding your motorscooter, ensure that your riding gear is in good condition. Your helmet must fit properly, and the visor or other eye protection must be clean. Both research and experience have shown that drivers of other motorcycles often do not see motorcycles riders. In order to make yourself more conspicuous to these drivers, wear bright reflective clothing, such as a reflective vest, or clothing with reflective sections sewn into the jacket, pants and gloves. Be particularly aware of approaching automobiles and trucks that might be trying to turn left in front of you. Many motorcycle accidents are caused by an opposing automobile driver making a left turn without warning in front of the motorscooter.

Inevitably, the driver will look right at you, and yet swear that they did not see you before they turned directly into your path. Stay alert!

Wear protective clothing, preferably in light and/or reflective colors. In this way you will make yourself more visible to the other drivers, thus notably reducing the risk of being hit, and you will be more protected in case of such an incident.

Always wear your helmet. Many accidents are fatal because of injuries to the head.

An open-face helmet offers some protection, but a full-face helmet offers more. Regardless of the style, look for a DOT (Department of Transportation) sticker in any helmet you buy (USA Only,) and always wear a face shield or goggles to protect your eyes and help your vision.

#### ADDITIONAL RIDING GEAR

In addition to a helmet and eye protection, we also recommend:

- Sturdy boots with non-slip soles to help protect your feet and ankles.
- ❖ Leather gloves to keep your hands warm, and help prevent blisters, cuts, burns, and bruises.
- ❖ A motorscooter riding suit or jacket for comfort as well as protection. Bright colored and protective clothing can help make you more noticeable in traffic. Be sure to avoid loose clothes that could get caught on any part of your motorscooter.

Clothing should be very tight-fitting and fastened at the wrists and ankles. String, belts and ties should not be hanging loose; prevent these and other objects from interfering with driving by getting entangled with moving parts or driving mechanisms. Do not carry sharp objects in your pockets that could be dangerous in case of an upset. For example, pens or mechanical pencils, etc. Also, make sure that your passengers follow this recommendation.

#### **ACCESSORIES**

The owner of the motorscooter is responsible for the choice, installation and use of any accessory.

The installation of inappropriate accessories or the overloading of the motorscooter may result in the instability of the motorscooter itself and cause accidents with consequent risk of serious injuries or even death. Windshields, in particular, can be dangerous, as they can break and injure the rider or passenger in case of an accident. If you have any doubt with regard to any accessory you would like to install, or any load you would like to carry, consult your local Rad2go dealer beforehand. Avoid installing accessories that cover horns or lights, or that could impair their functions. Don't install accessories that limit the suspension stroke or the steering angle, that interfere with the operations of the controls, or that reduce the scooter's lean angle in turns. Also, don't install accessories that could hamper your access to the various controls, since this could prolong reaction time during an emergency. Fairings and windshields, or any other accessory that presents a considerable cross section, may produce aerodynamic forces that will affect the stability of the motorscooter, particularly at high speeds or in cross winds.

Make sure that anything carried on your motorscooter is securely attached and cannot come lose and jam the wheels, forks, etc.

Do not install any electrical accessories, and do not modify the electrical system of your motorscooter. Anything that could cause an electrical overload or other fault could cause the motorscooter to suddenly stop, the lights to dim or fail, or the horn and other safety accessories not to work.

#### **LOAD**

Do not overload your motorscooter. Attach luggage or packages as closely as possible to the center of your motorscooter and distribute the load from side to side as evenly as possible, to keep imbalance to a minimum. Remember that loads tend to loosen with riding, so frequently check the security of your load.

Do not hang anything from your motorscooter handlebar, fenders, or forks, because this will upset the handling of your motorscooter, and could prevent you from avoiding an accident.

Failure to heed this warning can lead to an upset with subsequent serious injury or even death. Do not ride with your crash helmet hung from the strap because it could easily become entangled with the wheels, fenders, or forks, causing an upset and subsequent serious injury or even death. When carrying a passenger, remember that your motorscooter's handling is degraded, that the brakes are less efficient, and the center of gravity is higher and further to the rear.

This makes it more likely that the front wheel will come up off the ground, especially on acceleration. Therefore, you should avoid hard acceleration and hard braking. Many accidents are caused by inexperienced riders carrying passengers.

Remember that allowance must be made for the extra weight of the passenger for all driving maneuvers. Avoid abrupt and excessive acceleration. Always slow down in time and calculate longer stopping and maneuvering distances. Non-compliance with these instructions may lead to the overturning of the motorscooter or to other accidents with consequent serious injuries or even death. Never carry loosely packaged items and make sure that everything that you carry on your motorscooter is carefully secured.

Do not carry packages which protrude from the luggage rack or which cover any of the signal lights, the headlight, or the horn.

Children or animals must not be carried anywhere on your motorscooter. Overloading you motorscooter seriously reduces its stability and maneuverability and can lead to an upset with subsequent serious injury or death.

#### **Tire Pressure**

#### 36 psi

Periodically check the inflation pressure of the front and rear tires.

Check for cuts on the tire walls and uneven tread wear. Tires must be changed by your local Rad2go Dealer or by an Authorized Rad2go Service Center.

#### TIRE REPAIR

If a tire is punctured or damaged, you should replace it not repair it. As discussed below, a tire that is repaired, either temporarily or permanently, will have lower speed and performance limits than a new tire. A temporary repair, such as an external tubeless tire plug, may not be safe for normal speeds and riding conditions. If a temporary or emergency repair is made to a tire, you should ride slowly and cautiously to a Service Center and have the tire replaced. If possible, you should not carry a passenger or cargo until a new tire is installed.

Even when a tire is professionally repaired with a permanent internal patchy plug, it will not be as good as a new tire. In addition, you may not be able to safely carry as much weight as with a new tire. Therefore, we strongly recommend that you replace a damaged tire. If you choose to have a tire repaired, be sure the wheel is balanced before you ride.



#### WARNING

Using tires that are excessively worn or improperly inflated can cause an accident in which you can be seriously hurt or killed. Follow all instructions in this owner's manual regarding tire inflation and maintenance. Rad2Go recommends you to always use original tires as replaced.



#### WARNING

Incorrect tire inflation pressure causes uneven tread wear and will make your scooter unstable and potentially dangerous. You must never ride a scooter on a tire with a tread depth of less then 0.1 in (2 mm). Do not use the scooter if the tires wear indicators show that the tire is worn out.

There are several kinds of tread wear indicators. If the tires appear to you to be worn out, they certainly are, and should be changed.

#### FRONT AND REAR BRAKE ADJUSTMENT



#### WARNING

Check your brakes often to ensure proper braking capabilities.

The free movement of the front and rear brake lever should be one half inch to 1in. to adjust this turn the nut clockwise and continue checking the lever until satisfactory.



When working on the electrical system, pay special attention to the correct connection of wires leading to the electronic ignition unit and observe the polarity and connector color-coding.

Modifications or unsuitable repairs of the electrical system can cause malfunctions and represent a serious fire.

#### **STORAGE**

If the motorscooter is not to be used for prolonged periods, the battery must be charged periodically (when not in use, the battery will discharge over a period of 3 months). If the battery is removed, when you reinstall the battery make sure you connect the positive (+) and negative (-) leads to the correct terminal. Inverting battery polarity can damage electrical components.



#### **CAUTION**

Never open the caps of maintenance free batteries (containing gel). This will destroy the battery.

Batteries contain environmentally toxic substances. When you need to change the battery, contact a Rad2Go service technician to ensure your used battery is disposed of without harming the environment and in compliance with the law.



#### **CAUTION**

Risk of damage to electrical system.

Never disconnect the battery when the engine is running.



#### WARNING

Electrolytes contain sulphuric acid. Avoid contact with the skin, the eyes, and clothing. In case of contact with the skin or the eyes rinse the affected area with plenty of water and consult a doctor. So not lean the scooter over too far or electrolytes may spill from the battery. Keep open flames and sparks away from the battery: explosion and fire hazard.

#### **FUSES**

Before changing a burnt-out fuse, find and remedy the problem that caused it to blow. Do not substitute the fuse with any alternative form of conductor.

## **Technical Specification**

Motor Power	1500W
Brake-Horsepower	2.012052 bhp
Battery	DC 48V, 40AH
Charger	110V/60 Hz
Charging Time	6~8 Hours
Life of Battery	400 Cycles
Wheelbase	47.3 Inches
Torque	18.45 Foot Pounds
Top Speed	45 MPH
Single Charge	50 Miles Depending on Terrain and Load
Climbing Capacity	30 Degree Incline
Maximum Weight Capacity	250 lbs
Tire	3.00-10.00 Inch 4PR
Gross Weight	275 lbs
Net Weight	143 lbs (not including the battery)
Battery Weight	132 lbs
Product Size	L 64.2" x W 26.4" x H 43.3"
Brake System	Front: Drum/Back: Disk



#### **Parts List**

- A. Horn
- B. Front Brake
- C. Rear View Mirror
- D. Head Lamp
- E. Dash Board
- F. Turning SignalG. Rear Brake Handle
- H. Seat
- I. Battery Box Key Hole

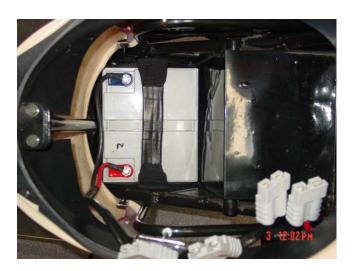
- J. Tail Lamp
  K. Rear Turning Signal
  L. Rear Power Disk Brake
- M. Rear Shock Absorber
- N. Charging PlugO. Center Stand
- P. Kick Stand
- Q. Front Mud Fender
- R. Front Drum Brake
- S. Front Wheel
- T. Body
- U. Fuse

## **Assembly Instructions**

- 1. Remove the unit from its packaging.
- 2. Install the four 12V batteries into the battery compartment, located under the seat. Use your key to open the battery compartment.



3. Place the battery with the longest cable into the battery compartment. The cable measures  $18\frac{1}{2}$  "in length (The measurements are taken from the base of the black cable to the top of the connector). Make sure the cable set aside so that you will be able to connect it.



4. The next battery that you want to install goes on the second tier. This is the shortest cable 11" in length (The measurements are taken from the base of the black cable to the top of the connector). Make sure the cable set aside so that you will be able to connect it.



5. The next battery that you want to install goes on top of the battery on the bottom, this cable 14" in length (The measurements are taken from the base of the black cable to the top of the connector). Make sure the cable set aside so that you will be able to connect it.



6. The next step is to place the remaining battery on top of the previously installed one, this cable 14" in length (The measurements are taken from the base of the black cable to the top of the connector). Make sure the cable set aside so that you will be able to connect it.



7. Once you have placed all of the batteries into the compartment you must connect the batteries to the female plugs.



8. Once installation is complete this is what it should resemble.



## **Installing the Mirrors**

- 1. On the Handle Bar, in between the grips and the brake handle, screw in the mirrors.
- 2. Screw in the mirrors clockwise. The mirror that goes on the left controller is curved to the left and the mirror that goes on the right controller curves to the right.
- 3. Secure mirrors by tightening the bolt.



4. Clean and adjust both mirrors before you ride. Adjust each mirror so you can see the lane behind you and as much as possible of the lane next to you. When the mirror is properly adjusted you can see the edge of your arm and shoulder.



#### **BRAKE FLUID CAUTION**

Brake fluid is extremely poisonous. Never allow brake fluid to b ingested or swallowed. Should brake fluid accidentally be swallowed, drink large quantities of milk or pure water and immediately seek professional medical assistance. Brake fluid is highly destructive to skin and eye tissue. Should you accidentally spill brake fluid on yourself, remove the contaminated clothing, wash your body with soap and warm water immediately and seek professional medical assistance. Should you accidentally splash brake fluid into your eyes, flush with a large quantity of cool, clear water and immediate seek processional medical assistance.

### KEEP BRAKE FLUID AWAY FROM CHILDREN.

1. To Brake Fluid gauge is located on the left controller; brake fluid level should be above the line. If the brake fluid is below you must add brake fluid.



2. Remove the screws on outer cover.



## 3. Remove the clear cap.



## 4. Remove the black filter.



5. Add brake fluid, DOT 3 or DOT 4, fill above the line on the outside of Brake Fluid window.

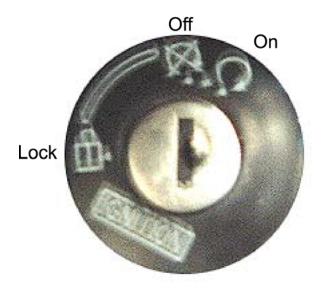




## **Dash Board**

- A. Head Lamp Indicator
- B. Power Indicator
- C. Signal Indicator
- D. Speedometer
  E. Mileage (Odometer)
- F. Pressure Indicator
- G. Low Voltage IndicatorH. Voltage (Middle)I. Full Voltage

Part	Item	Function					
A	Head Lamp Indicator	Light is illuminated when switch key and head lamp are					
		'ON'					
В	Power Indicator	Motorcycle is 'ON' when is illuminated					
C	Signal Indicator	Light is on when turning signal is on					
D	Speedometer	Indicates speed					
E	Odometer	Indicates mileage					
F	Pressure Indicator	Red light is illuminated when the battery is discharged					
G	Low Voltage Indicator	Yellow light is on when battery is low					
Н	Voltage (Middle)	Green light is illuminated when power is on (Similar to					
		<sup>3</sup> / <sub>4</sub> of a tank)					
I	Full Voltage	When battery charge is full					



## **Ignition Key Position**

<b>Key Position</b>	Description
On	Key cannot be taken out when power is on. To prevent theft please
	turn the front handle bar to the lock position and remove key from
	ignition.
Off	Key cannot be taken out when power is off
Lock	Turn the Handle Bar to the far left and turn the key into the lock
	position. The key can be taken out when handle bar is in the lock
	position.
Release Lock	Turn the key to the off position and the locking mechanism will be
	released.



Do not turn the key to "LOCK". This will inevitably lead to an upset, with subsequent serious accident, and serious injury or even death. Leave the key in the on position while riding. Do not attempt to turn it until the scooter has stopped.

## Controller (Left)

Headlight Switch	High Beam – Push Switch Up
	Low Beam – Push Switch Down
Horizontal Switch	Left Turn Signal – Push Switch to the Left
	Right Turn Signal – Push Switch to the Right
Horn Button	Sounds Horn – Push Yellow Button
Rear Brake Lever	When Brake Handle is compressed the rear wheel will slow to a
	stop and power will be cut off. Power will flow once lever has been
	released. To Start turn the Throttle counter clockwise.



**Controller (Right)** 

Controller (1115111)	
Front Brake Lever	When Brake Handle is compressed the rear wheel will slow to a
	stop and power will be cut off. Power will flow once lever has been
	released. To Start turn the Throttle counter clockwise.
Throttle	Turn Throttle counter clockwise to increase speed.
Parking Lights	The dashboard lights, headlight, and taillight will turn on when the
	switch is in the P position.
Head Light	The dashboard lights, headlight, and taillight will turn on when the
	switch is in the # position.



#### **Throttle Tips**

- 5. Turn the key to the 'ON' position, and then turn the Throttle gradually to accelerate.
- 6. To prevent loosing control of the vehicle, please turn the Throttle slowly until the vehicle increases speed.
- 7. Do not turn the Throttle until you are in position to drive.
- 8. To stop, release the Throttle and apply the front and rear brake simultaneously.
- 9. To move, release the brakes and turn the Throttle gradually.
- 10. The Mo Rad 1500 does not make any noise when the key in the 'ON' position; it can accelerate anytime. Please, for your safety, take the key out when you are not riding.

#### **Breaking Tips**

1. For your safety, this vehicle has a circuit brake system. When the front and rear brake is applied the controller will break the circuit; release the Throttle back to zero then accelerate again.

#### **Battery Gage**

Color	Description
Green	While riding, when the batteries have a full charge the gauge light will be
	green.
Green (2 <sup>nd</sup> )	This light indicates that the battery has <sup>3</sup> / <sub>4</sub> percent of a charge
Yellow	When power is low the battery gauge will turn to yellow.
Red	When the battery is discharged the battery gauge will be red, and the
	motor will automatically cut off.
	*Drivers must fully charge the battery before riding the vehicle
	again.

#### Performance

- ❖ The distance and speed will depend upon various elements of the rider and of the road conditions. Other factors include weather, vehicle condition, and battery charge. Drivers must use caution when driving on rough roads, in poor weather, or when the battery charge is low. Please remember that the Mo Rad 1500 is a 'Top Heavy' vehicle and takes strength operate safely.
- ❖ This vehicle has circuit brake system to protect the vehicle when the brake is applied; the driver still needs to release the Throttle to prevent the vehicle from burning out.
- ❖ After each ride the driver must turn off the vehicle and take the key and charge the battery. This battery does not have a memory it can be charged at any time in the cycle of the battery.

Always check the battery gauge while you are riding. An emergency can occur at anytime, please stop and turn the ignition to the 'Off' position and do not ride until the situation has been taken care of.

#### Charging

- ❖ The battery for this vehicle is sealed, a maintenance free D/C battery. The owner must use the factory-supplied charger with an 110V outlet.
- ❖ Turn off all switches while charging the battery.
- ❖ Plug one side to an 110V outlet and the other to charging plug on the vehicle.
- ❖ The average charging time is 4-5 hours. To fully charge battery, charging time will be 5-16 hours.
- ❖ After charging is complete, turn the ignition to the 'On' position and unplug the charger from both sides.
- To keep the battery in good condition, charge after each use. Please charge the battery fully once a month, even when the vehicle has not been ridden.
- ❖ If your battery or charge are in humid or poor climate condition please turn off the vehicle then bring it to an authorized dealer for maintenance.

#### Maintenance

The electric motorcycle represents a new generation of environmentally safe transportation tools. Therefore, good maintenance will play a major role in keeping your vehicle in good working condition and prolong the life of the batteries. Please follow these suggestions:

- ❖ To prevent rust always keep your vehicle dry and clean.
- ❖ Always check the front and rear tires, suspensions and body frame and all fasteners.
- ❖ When riding in the rain do not go through deep puddles or muddy areas; water will easily cause motor damage and other electrical components.
- To prevent rust from forming on the vehicle avoid parking your vehicle in high humidity and corrosion areas.
- To avoid damage to the electrical parts of this vehicle, especially the controller, do not park the vehicle in direct sunlight or in the rain.
- ❖ Due to the complexity of the electronic combination of this vehicle customers should never take any of the parts, remodeling or maintenance upon themselves without consulting a Rad2Go technician.
- Never overload and ride the vehicle for an extended period of time, prolonged use will cause serious damage to the electronic and mechanic parts.
- Always keep the battery in good condition, never use the battery without fully charging it; this will limit the life of the battery.
- ❖ Always routinely check your vehicle and perform necessary maintenance.
- ❖ For customer safety, performing a routine check and maintenance of your vehicle will lower the potential for damage and pollution.

## 9 Point Inspection Before Every Use

Item	Action
Front Brake	Squeeze Brake Handle on Right Controller and push the
	scooters to see if it rolls easily. If so you will need to tighten
	the brake. Tighten bolt until the scooter will not move with the
	brakes applied.
Rear Power/Disc	Listen for any grinding or squealing from the tire while the
Brake	brake is applied. If so, contact a Rad2Go service technician for
	assistance.
Brake Fluid	Check fluid gage of the front of the left controller to ensure that
	the brake fluid is above the indicated level.
Electric Switch Handle	Turn Throttle counter clockwise and release; the Throttle should
	spring back to stop position. If not contact a Rad2Go service
	technician.
Tire	Check tire pressure to 36 PSI
Controller/ Motor	Check usage and condition
Battery	Check power level by looking at the gauge on the handle bar or
	a voltage meter (26V-12V).
Signal	Check to make sure your lights are working.
Nuts and Bolts	Check to make sure that all nuts and bolts are tightened and
	secure.

### **Important Notes:**

- 1. Always perform a routine check and maintenance. Doing so will enable you to better protect yourself and your vehicle.
- 2. Any damage to parts, whether normal or abnormal, please check with the dealer and Rad2Go technician before riding.

## Front Break: Drum

	— - <del></del>
Check	Squeeze Brake Handle on Right Controller and push the scooters
	to see if it rolls easily. If so you will need to tighten the brake.
	Tighten bolt until the scooter will not move with the brakes
	applied.



## Rear Break: Disk

 2 1/11
Listen for any grinding or squealing from the tire while the brake is applied. If so, contact a Rad2Go service technician for assistance.



Left Side of Rear Tire



Right Side of Rear Tire



Full View of Rear Tire

#### **Maintenance Schedule**

Proper servicing of your motorscooter is necessary for it to achieve its normal lifetime, and to maintain its performance. Any problems that you encounter should be immediately discussed with a Rad2Go service technician.

						N	<b>Tileag</b>	ge						
Item	400	1000	2000	3000	4000	5000	6000	7000	8000	9000	10,000	11,000	12,000	Maintenance
Battery			C				С		C				C	
Charger			C				С		C				C	
Tire Pressure	С	С	С	С	С	С	С	С	С	С	С	С	С	A
Tire Wear							С		С				С	
Brake	С		С		С		С		С		С		С	A
System														
Brake Pad							Α		Α				Α	
Nuts and	T		T				T		T				T	
Bolts														

A: Adjust C: Check T: Tighten

#### **Important Notes**

- 1. Performing a routine check and maintenance of your vehicle will keep your vehicle in good condition. Keep a maintenance record, by doing so this will allow you to track the parts usage condition and consider different weather and area conditions that effect your maintenance schedule.
- 2. Use the troubleshooting chart to assist you when you experience difficulty with your vehicle. Please contact your dealer, do not attempt any repair without direction from a Rad2Go technician. Do not ride your vehicle when the vehicle is not operating normally. Always shut off or unplug and check before performing maintenance or operating the vehicle.

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Problem	Condition		Check		Solution
When I turn my vehicle	<ol> <li>Power indicator</li> </ol>	1.	Check power	1.	Fasten connections.
on nothing happens?	light is off while		connection and	2.	Recharge battery.
	riding.		battery level.	3.	Loosen connection and
	2. Indicating light	2.	Check battery		wipe down with a damp
	on motor is or		and motor		rag and dry and fasten
	illuminated.		connection.		again. Contact a Rad2Go
		3.	Assess the		service technician for
			weather for		assistants.
			humidity.	4.	If there is any corrosion
		4.	Check		replace. Contact a
			regulator.		Rad2Go service
		5.	Battery level is		technician for assistants.
			low.	5.	Change or replace
					damaged part. Contact a
					Rad2Go service
					technician for assistants.
The Throttle does not	The Throttle does not	1.	Check the grip	1.	Use a flat head
work or switch on, the	return to stop position.		for damage		screwdriver to adjust the
vehicle moves without		2.	Check the		gap between the rubber
acceleration.			Throttle spring.		handle and the cover.
		3.	The Throttle	2.	Readjust the Throttle
			handle is loose.		spring position. Contact
					a Rad2Go service
					technician for assistants.
				3.	Lubricate the Throttle
					spring. Contact a
					Rad2Go service
			at t t		technician for assistants.
The batteries will not	Charger light is off	1.	Check the	1.	Check by unplugging
take a charge.			charger plug		charger and plugging in
		_	position.	_	again.
		2.	Check the fuse	2.	Unplug the charger and
			in the charger		replace the fuse. Contact
		2	box.		a Rad2Go customer
		3.	Charger has		service to order a new
		,	blown a fuse.	2	charger fuse.
		4.	A bad	3.	Replace the charger fuse.
			connection		The fuse box is located
			exists between		on the floorboard,
			the charger and		unscrew the two screws
			the battery.		and open the fuse case,
					and replace scooter.
					Contact a Rad2Go customer service to order
					a new fuse.
				1	
				4.	Unplug and plug in again. Otherwise contact
					your dealer or service
				<u> </u>	technician.

**Warranty.** Rad2Go warrants each new Rad2Go product for ninety (90) days according to the following terms.

This warranty extends to the original retail purchaser only and commences on the date of the original retail purchase.

Any part of the Rad2Go Product manufacture or supplied by Rad2Go and found in the reasonable judgment of Rad2Go to be defective in material or workmanship will be repaired or replaced by an authorized Rad2Go service dealer without charge for parts and labor. The Rad2Go Product including any defective parts must be returned to an authorized service dealer within the warranty period. The expense of delivering the Rad2Go Product to the factory or authorized service dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid for by the owner. Rad2Go's responsibility in respects to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Rad2Go Product. Proof of date of purchase will be required by the dealer to substantiate any warranty claim. An authorized Rad2Go service dealer must perform all warranty work.

This warranty does not cover any Rad2Go Product that has been subject to misuse, neglect, negligence or accident, or that has been operated in any way contrary to the operating instructions as specified in the Rad2Go Owner's Manual. This warranty does not apply to any damage to the Rad2Go Product that is the result of improper maintenance or to any Rad2Go Product that has been altered or modified so as to adversely affect the product's operation, performance or durability or that has been altered or modified so as to change its intended use. This warranty does not extend to repairs made necessary by normal wear or by the use of parts or accessories which are either incompatible with the Rad2Go Product or adversely affect its operation, performance or durability.

Rad2Go reserves the right to change or improve the design of any Ra2Go product without assuming any obligation to modify any product previously manufactured.

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EXPENSE OF RETURNING THE RAD2GO PRODUCT TO AN AUTHORIZED
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MECHANIC'S TRAVEL, TIME, TELEPHONE, OR TELEGRAPH CHARGES,
RENTAL OF A LIKE PRODUCT DURING THE TIME WARRANTY SERVICE IS
BEING PREFORMED, TRAVEL, LOSS OR DAMAGE TO PERSONAL PROPERTY,
LOSS OF REVENUE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, OR
INCONVENIENCE. SOME STATES DO NOT ALLOW THE EXCLUSION OR
LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE
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