**BANDIT** 





**USER MANUAL** 

#### **AUTHORISED TOP GUN MOBILITY AFTER SALES SERVICE**

We have ensured that your new Top Gun Mobility Scooter is ready to deliver! Every member of our Team is dedicated to Customer Satisfaction. By making contact with the following personnel you will be assured of Prompt and Efficient After Sales Service.

Sales :	DEALER STAMP :
Service :	
Spare Parts :	

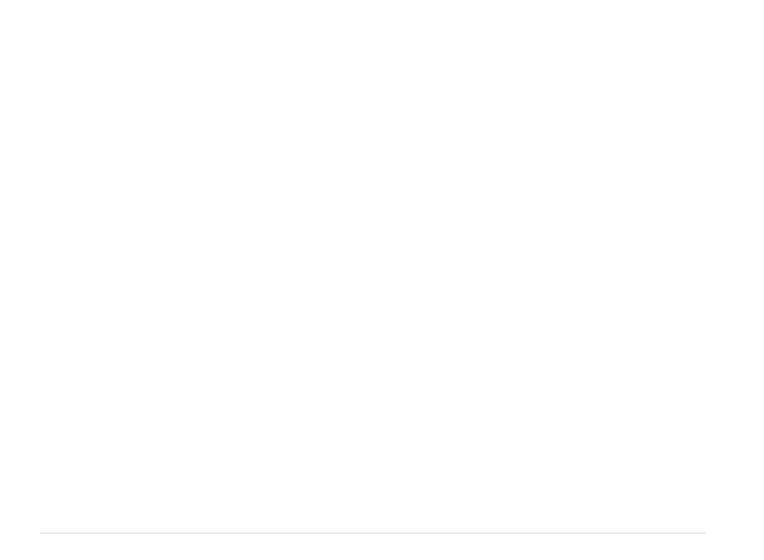
#### **WARNING**

Please read the Owner's Manual carefully before operation. If you do not fully understand any part of the Manual, please contact your dealer so as to avoid any injury or damage from misuse. Electromagnetic Interference ("EMI") can cause powered vehicles to behave erratically, which can be dangerous to the user. For your Safety & Protection, it is IMPERATIVE that you take the time to read the Chapter on EMI prior to operating your Top Gun Mobility Scooter.

### **RETAIL ADVICE & BUYERS WARRANTY REGISTRATION**

Selling Dealer to complete at time of sale in order to Register Warranty with Top Gun Mobility

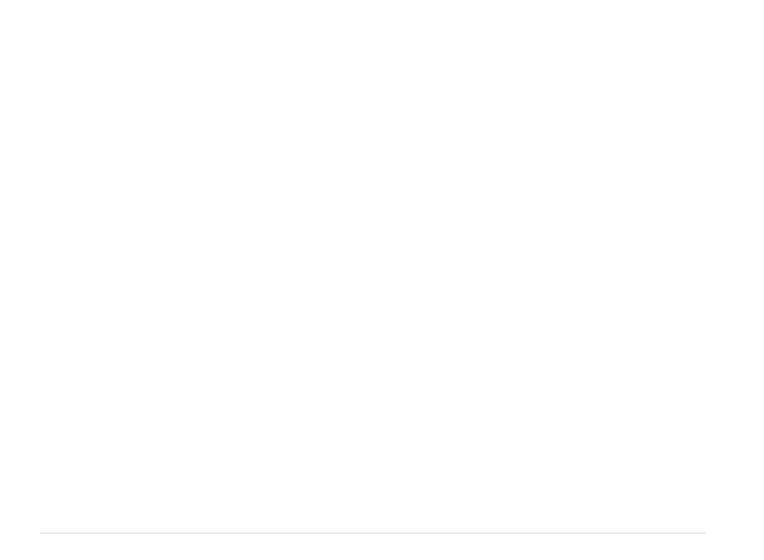
Customers Email Address:	
Customer:	Model:
Address:	
	Colour:
State: Postcode:	
	Date of Sale:
Phone:	Type of Purchase: Consumer / Rental / Other
	SELLING DEALER:
Customer Signature	
Dealership Representative Signature	



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#### INTRODUCTION

**CONGRATULATIONS** on the purchase of your new Top Gun Mobility Scooter. We are excited to provide you one of our Innovative Mobility Scooters. Our Scooters are designed to provide personal freedom, as well as Convenience, Comfort and the Assuredly High Performance level combined with a long life cycle. This Owner's Manual contains important information concerning the proper maintenance and safe operation of your Mobility Scooter. Please read this manual thoroughly and carefully prior to operating your new Mobility Scooter to familiarise yourself with all operation instructions.

The TG100 can be used in confined spaces, both inside and out which makes it a truly versatile little unit. A direct drive rear transaxle and electromagnetic brake give a safe and efficient ride.

#### **INTENDED USE**

The TG100 is intended for indoor or outdoor use in pedestrian areas by a single individual with limited mobility, upto a maximum weight of 136kg. It is intended to be used by those suffering from some disability or impairment which prevents a normal level of personal mobility.

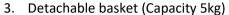
The acute manoeuvrability prohibits the use by persons who are severely physically impaired or those who have balance difficulties. Your assessor/health care professional will determine the suitability of the scooter for each individuals' intended use.

Note: Persons with lower body amputations should not use this device unless evaluated with artificial limbs fitted, as stability may be compromised due to an irregular centre of gravity.

### **MODEL FEATURES & SPECIFICATIONS**

#### **TG100 BANDIT**

- 1. Tiller control head
- 2. Detachable swivel padded seat with fold down back



- 4. Detachable battery box/carrier
- 5. Tiller angle adjustment hand knob
- 6. Anit-Tip wheels
- 7. Puncture proof non-marking tyres/pneumatic tyres
- 8. Tiller Lock



SPECIFICATION TABLE				
TG100 BANDIT				
Battery (Lead-Acid)	12V*2 20Ah			
Motor Power	300W			
Controller	PG45A			
Electric Brake	Yes			
Overall Dimensions	108x50x87cm			
Weight without Batteries	46.9kg			
Weight with Batteries	59.9kg			
Max. Loading Weight	136kg			
Max. Speed (klm/hr)	6.8KM/H			
Turning Radius	110cm			
Max. Climbing Grade	Between 6-8° Depending on weight of user			
Wheel Size - Front	9" pneumatic			
Wheel Size - Rear	9" pneumatic			
Suspension	Front & Rear			
Ground Clearance	7.5cm (+ / - 2.5cm)			
Travel Range	Upto 25km			
Free Wheel Mode	Yes			
Wheel Hub	Aluminium Alloy			
Charger Size	24V 2A			

### **SAFETY SYMBOLS**



**WARNING!** An authorised supplier or qualified technician must perform the initial setup of this scooter, and must perform all of the procedures in this manual.

The symbols below are used throughout this Owner's Manual and on the scooter to identify warnings and important information. It is very important for you to read and understand them.



**WARNING!** This indicates a potentially hazardous condition/situation. Failure to follow designated procedures can cause personal injury, component damage or malfunction.



**MANDATORY!** These actions must be performed as specified. Failure to perform "Mandatory" actions can cause personal injury and/or equipment damage.



**PROHIBITED!** This indicates that the action is prohibited. These actions must NOT be performed at any time or under any circumstance. Performing a prohibited action can cause personal injury and/or equipment damage.



**PLEASE NOTE** and strictly adhere to the following Safety Instructions. Additional Warnings and Notices are printed in this Owner's Manual; it is Imperative that you carefully read all chapters of this manual before operation. It is also advisable to refresh your memory by re-reading this manual periodically.



**GET ACQUAINTED** with your Mobility Scooter and its operational features before driving it. Drive slowly (speed limit dial set to MIN) until you get used to your scooter, its' various functions, safety features as well as it's braking capabilities and limitations.



**PEDESTRIANS!** Watch carefully for pedestrians and drive your Mobility Scooter accordingly. In crowded areas, always drive with the speed limit dial set to MIN. Drive only where permitted according to all applicable local laws. Be mindful of the width of your particular mobility scooter and take care not to hit persons or objects around the vehicle.



**NEVER** remove any of the Mobility Scooter safety parts such as bumpers, plastic covers or emergency braking lever. Never remove any of the Warning Labels.



**NEVER** put your hands, fingers, feet or legs into any moving part or under any protective cover as moving parts and hot surfaces are generally secured under these covers.



When making adjustments (folding the seat back, adjusting armrest, moving seat forward/backward, adjusting tiller etc.) as well as when squeezing the throttle control lever, always take care that your hands and fingers are not trapped between any of the moving parts. When moving the tiller forward or backward, be careful not to trap your fingers in the mechanism.



**LOAD RESTRICTIONS** – The load in the rear basket must not exceed 8kg. This load in the front basket must not exceed 5kg. Your Top Gun Mobility scooter is designed to carry ONE person only (unless a dual seat model has been purchased). Never operate it with an additional person on board, including carrying a child.



**TYRE INFLATION** – Never inflate the tyres on your Mobility Scooter more than the manufacture's recommended pressure shown on the tyres and within this owner's manual.



**STAIRS** – Never use your Mobility Scooter on STAIRS. Do not try to go over obstacles that are more than the maximum recommended slope angle and obstacle heights given in the specification sheets for your Mobility Scooter. When driving over an obstacle, always drive so that the front the scooter is facing the obstacle.



If for any reason your Mobility Scooter does not stop when you release the throttle control lever, or takes longer to stop than it should (3 meters on a level surface), turn the key switch to OFF and immediately contact your selling dealer.



**WEATHER** – Do not use your Mobility Scooter in Heavy Rain or Extreme Humidity, or at temperatures below -30°C (-22°F) or above +45°C (+113°F).



The seat weights 21kgs. Each battery weights a minimum of 14kg. Be careful when lifting the seat and batteries. See instructions for lifting the seat and the batteries in the Maintenance Chapter. Always lift using your knees and legs, not your back.



**BATTERIES** – Only use batteries as recommended by an authorised dealer (lead acid maintenance-free sealed batteries or lithium depending on the model scooter you have purchased).



**ACCIDENTS/DAMAGE** – If your Mobility Scooter is involved in any kind of accident in which parts are damaged, you must arrange for a qualified technician to examine it before continuing use.



**CHILDREN** – Special Care must be taken to prevent children from operating your Mobility Scooter or riding as a passenger. Do not allow unsupervised children to play near your Mobility Scooter, especially when charging batteries.



Always drive carefully. Adjust your speed according to road conditions. When turning at high speed, your Mobility Scooter can become unstable. Before making sharp turns, reduce speed to a minimum to prevent roll-over.

# CAUTION ON SLOPES!!



Your Mobility Scooter is able to go up slopes higher than the recommended safe slope. HOWEVER, do not drive on slopes whose incline you do not know. Always drive very slowly and do not drive on the side of such slopes. Before starting to drive, make sure your emergency brake operates correctly.

Do NOT release the manual release lever of the electromagnetic brake (EMB) when your Mobility Scooter is on a slope. When on any sort of an incline, never place the Mobility Scooter in freewheel mode (whilst seated on or standing next to it)



The lights on your Mobility Scooter (if fitted), should be turned on when visibility is reduced, regardless of day or night.



As your seat upholstery is fire resistant, do not cover it or replace with any upholstery other than upholstery of the same kind. When removing the battery cover, watch out for hot parts. The motor, axel, EMB, electronic cards and electronic controller might be hot! DO NOT TOUCH them until you have ensured temperature is not dangerous.



Do NOT operate a mobile phone, walkie-talkie, laptop or other radio transmitter whilst operating your Mobility Scooter



Removal of the grounding prong can create an electrical hazard. If it is necessary to use a 2-pronged electrical outlet, properly install an approved 3-prong adapter.



Do NOT connect an extension cord to the AC/DC converter or to the battery charger



Keep tools and other metal objects away from the battery terminals. Contact with tools can cause an electrical shock. Do not sit on the Mobility Scooter when it is on any type of lift/elevation product.



This symbol indicates that Explosive conditions exist



Disposal and Recycling. Contact your authorised dealer for information on proper disposal of your Mobility packaging and components



Always wear safety glasses when working on the Mobility Scooter



**Contains Lead** 



Battery Charger is for INDOOR use only





At the rear of your Mobility Scooter is the manual release lever of the EMB. When using this lever, be careful not to touch the internal surface of the motor as it could be very hot and cause injury. See the warning label at the rear of the Mobility Scooter near the lever.

#### SAFETY OPERATIONAL INSTRUCTIONS

#### **General**

MANDATORY! Do not operate your new Mobility Scooter for the first time without reading and understanding this user manual completely.

Your Mobility Scooter is a state-of-the-art life-enhancement device designed to increase mobility. We provide an extensive range of products to best fit the individual needs of the user. Please be aware that the final selection and purchasing decision regarding the type of Mobility Scooter to be used is the responsibility of a user who is capable of making such a decision and of his or her healthcare professional (i.e., medical doctor, physical therapist, etc.)





The contents of this manual are based on the expectation that a mobility device expert has properly fitted the appropriate model scooter to the user.

Healthcare Professionals and/or the authorized dealer to give instructions for the use of the product.

There are certain situations, including some medical conditions, where the user will need to practice operating the scooter in the presence of a trained attendant. A trained attendant can be defined as a family member or care professional specially trained in assisting a user in various daily living activities.

As you begin using your scooter during daily activities, you will probably encounter situations in which you will need some practice. Simply take your time and you will soon be in full and confident control as you manoeuvre through doorways, on and off elevators, up and down ramps, and over moderately rough terrain.

#### **Modifications**



We have designed and engineered your Mobility Scooter to provide maximum mobility and utility. Under no circumstances should you modify, add, remove, or disable any feature, part, or function of your scooter.

**WARNING!** Do not modify your Mobility Scooter in any way not authorized by the manufacturer. Do not use accessories if they have not been tested or approved by the manufacturer

#### **Removable Parts**



**WARNING!** Do not attempt to lift or move your Mobility Scooter by any of its removable parts, including the armrests, seat, or shroud

### **Weight Restrictions**



Your scooter is rated for a maximum weight capacity. Refer to Specification sheet for details. Stay within the specified weight capacity for your scooter. Exceeding the weight capacity voids your warranty. We will not be held responsible for injuries and/or property damage resulting from failure to observe weight limitations.

**WARNING!** Do not carry passengers on your scooter as it may result in instability.

#### **Pre-Drive Safety Check**

Get to know the feel of your Mobility Scooter and its capabilities. We recommend that you perform a safety check before each use to make sure your scooter operates smoothly and safely.



Perform the following inspections prior to using your scooter:

- Check for proper tyre inflation. Maintain but do not exceed the psi/bar/kPa air pressure rating indicated on each tyre.
- Check all electrical connections. Make sure they are secure and not corroded.
- Check all harness connections. Make sure they are secured properly.
- Check the brakes.
- Check the battery charge.
- If you discover a problem, contact your authorised dealer for assistance.

### **Tyre Inflation**

Your scooter is equipped with pneumatic tyres. Check the tyre pressure at least once a week. Proper inflation pressures will prolong the life of your tyres and help ensure smooth operation.



WARNING! It is critically important that the psi/bar/kPa air pressure is maintained at all times. (Generally, between 25-30psi) Do not under-inflate or over-inflate your tyres. Under-inflation may result in loss of control, and over-inflation may burst the tyre.

WARNING! Inflate your scooter tyres from a regulated air source with an attached pressure gauge.

	Condition	Possible Cause	Remedy
(F)	Even Center Wear	Over Inflation	Check & Adjust Pressure When Cold
	Inside & Outside Wear	Under Inflation	Check & Adjust Pressure When Cold
	Smooth, Side Wear - One Side	Loss of Camber or Overloading	Check & Unload As Necessary Have Alignment Checked
	"Feathering" Across The Face	Axle Not Square To Frame or Incorrect Toe In	Square Axles Have Alignment Checked
	Cupping	Loose Bearings or Wheel Balance	Check Bearing Adjustment and Wheel & Tire Balance
	Flat Spots	Wheel Lockup	Adjust Brakes

#### WARNING!

Failure to maintain the suggested pressure rating at all times may result in uneven and rapid tyre wear and possibly tyre/wheel failure.

If you have any doubts as to correct tyre pressure or you see these wearing patterns, please contact your local scooter supplier.

#### **Incline Information**

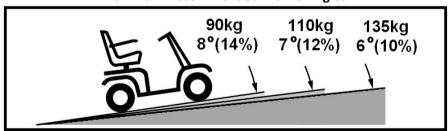
More and more buildings have ramps with specified degrees of inclination, designed for easy and safe access. Some ramps may have turning switchbacks (180-degree turns) that require you to have good cornering skills on your scooter.



- Proceed with extreme caution as you approach the downgrade of a ramp or incline.
- Take wide turns with your scooter around any tight corners. If you do that, the scooter's
  rear wheels will follow a wide arc. Do not cut the corner short, and do not bump into or
  get hung up on any railing corners.
- When driving down a ramp, keep the scooter's speed adjustment set to the slowest speed setting to ensure a safely controlled descent.
- Avoid sudden stops and starts.

Refer to Figure below to determine the maximum slope – do not exceed inclines of between 6-8° Depending on weight of user

#### **Maximum Recommended Incline Angles**



When driving up an incline, try to keep your scooter moving. If you must stop, start up again slowly, and then accelerate cautiously. When driving down an incline, set the speed switch to MIN and drive forward only. If your scooter starts to move down the incline faster than you want, allow it to come to a complete stop by releasing the throttle control lever, then push the throttle control lever forward slightly to ensure a safely controlled descent.

**WARNING!** When on any incline, never place the scooter in freewheel mode while seated on it or standing next to it.

**WARNING!** When climbing an incline, do not zigzag or drive up at an angle. Always drive your scooter straight up the incline. This greatly reduces the possibility of tipping over or a fall. Always exercise extreme caution when negotiating an incline.

**WARNING!** Do not drive your scooter across an incline or diagonally up or down an incline; if possible, do not stop while driving up or down an incline.

**WARNING!** Do not drive up or down a potentially hazardous incline (e.g., areas covered with snow, ice, cut grass, or wet leaves).

#### WARNING!

Even though your scooter is capable of climbing slopes greater than those illustrated, do not, under any circumstances, exceed the incline guidelines or any other specifications presented in this manual. Doing so could cause your scooter to become unstable. Note that public accesses ramps are not subject to government regulation in all countries, and therefore do not necessarily have the same standard degree of slope. Other inclines may be natural or not be designed specifically for scooters.

The figure on page 14 illustrates your scooters' stability and its ability to climb under various weight loads and under controlled testing conditions.

These tests were conducted with the scooter seat in the highest position and in its farthest rearward position. Use this information as a guideline. Your scooters' ability to travel up inclines is affected by your weight, scooter speed, your angle of approach to the incline, and your scooter setup.

**WARNING!** Any attempt to go up or down a slope steeper than shown in Figure C may make your scooter unstable and cause it to tip.

**WARNING!** Never carry an oxygen tank weighing more than 15 lbs (6.8 kg). Never put more than 5 Kg (11 lbs) in the front basket



**Figure B. Normal Driving Position** 



Figure C. Increased Stability Drive Position

#### **Cornering Information**

Excessively high cornering speeds can result in tipping. Factors that affect the possibility of tipping include, but are not limited to, cornering speed, steering angle (how sharply you are turning), uneven road surfaces, inclined road surfaces, riding from an area of low traction to an area of high traction (such as passing from a grassy area to a paved area — especially at high speed while turning), and abrupt changes of direction.

**WARNING!** When cornering sharply, reduce your speed and maintain a stable centre of gravity. When using your scooter at higher speeds, do not corner sharply. This greatly reduces the possibility of a tip or fall. Always exercise your common sense when cornering.

### **Braking Information**

- Your scooter is equipped with two powerful braking systems:
- Regenerative: Uses electricity to rapidly slow the vehicle when the throttle control lever returns to the centre/stop position.
- Park Brake: Activates automatically after regenerative braking slows the vehicle to a near stop, or when power is removed from the system for any reason

### **Outdoor Driving Surfaces**

- Your scooter is designed to provide optimum stability under normal driving conditions, on dry, level surfaces of concrete, tarmac or asphalt. However, we recognize that there will be times when you will encounter other surfaces. For this reason, your scooter is designed to perform well on packed soil, grass, and gravel. Feel free to use your scooter safely on lawns and in parks.
- Reduce your scooter speed when driving on uneven terrain and/or soft surfaces.
- Avoid tall grass that can become tangled in the running gear.
- Avoid loosely packed gravel and sand.

### **Public Streets and Roadways**

**WARNING!** Do not operate your scooter on public streets or roadways. It may be difficult for traffic to see you when you are seated on your scooter. Obey all local pedestrian traffic rules. Wait until your path is clear of traffic, and then proceed with extreme caution.

### **Stationary Obstacles (Steps & Curbs)**



**WARNING!** Do not drive near raised surfaces, unprotected ledges, and/or drop-offs (curbs, porches, stairs, etc.).

**WARNING!** Do not try to go up or down an obstacle that is too high.

**WARNING!** Do not try to go backward down any step, curb, or other obstacle.

**WARNING!** Be sure your scooter is travelling perpendicular to any curb you may be required to go up or down. **WARNING!** Do not attempt to negotiate a curb that is higher than 10 cm (4").

#### **Precautions during Unusual Weather**

Avoid exposing your scooter to extreme weather.

If you are suddenly caught up in rain, snow, severe cold or heat while operating your scooter, proceed to shelter at the earliest opportunity. Thoroughly dry your scooter before storing, charging, or operating it.

**PROHIBITED!** Do not operate your scooter in heavy rain, snow, salt, mist/spray conditions, or on icy slippery surfaces, as this can have an adverse effect on the electrical system.

**WARNING!** Prolonged exposure to extreme hot or cold may affect the temperature of parts of the scooter, possibly resulting in burns. Exercise caution when using your scooter in extremely hot or cold conditions or when exposing your scooter to direct sunlight for prolonged periods of time.

#### **Freewheel Mode**

The brake release lever is situated at the right rear of the scooter. This lever allows you to disengage the drive mechanism and push the scooter in 'freewheel' mode. To disengage the drive, push the lever to the front of the scooter as shown in the image below. The scooter can now be pushed.

Simply push the lever toward the rear of the scooter to re-engage the drive mechanism (the scooter can now be driven). The scooter will not operate when the lever is in the disengaged position. The scooter must be turned off and on by the key switch to reset the circuits before it will resume normal operation. A '9' flash error will show if the brake is disengaged when it is switched on.



#### Caution!

Never leave the scooter unattended whilst in freewheel mode as it will roll away down an

incline. 'Freewheel' mode should only be used in an emergency to move the scooter due to power failure. NEVER move the scooter in this mode whilst it is occupied. NEVER tow the scooter with another vehicle. When in freewheel mode the scooter may be pushed on level ground at a walking pace. The scooter will 'auto-brake' if this speed is exceeded. NEVER sit on the scooter and freewheel down a hill as this can cause permanent damage to the motor, brake and controller due to excessive regenerative braking. As above the scooter can only be moved at walking page when in freewheel mode.

#### **Stairs & Escalators**

Top Gun Mobility scooters are NOT designed to travel up or down stairs or escalators. Always use an elevator where available.

#### **Doors**

- Determine whether the door opens toward or away from you.
- Use your hand to turn the knob or to push the handle or push-bar.
- If the door opens away from you, drive your scooter gently and slowly forward to push the door open.
- If the door opens towards you, drive your scooter gently and slowly backwards to pull the door open.

#### **Elevators**

Modern elevators have a safety mechanism on the edge of the door that, when pushed, reopens the door(s).

- If you are in the doorway of an elevator when the door(s) begin to close, push on the rubber door edge or allow the rubber door edge to contact the scooter and the door will reopen.
- Take care that handbags, packages, or scooter accessories do not become caught in elevator doors.

**NOTE**: Sometimes manoeuvring your scooter may be difficult in elevators and building entrances. Use caution when attempting to manoeuvre your scooter in small spaces, and avoid areas that might pose a problem.

### **Lifts/Elevation Products**

If you travel with your scooter, you may find it necessary to use a lift or elevation product to aid in transportation. We recommend that you closely review the manufacturer's instructions, specifications, and safety information before using the lift/elevation product.

**WARNING!** Never sit on your scooter when it is being used with any type of lift/elevation product. Your scooter was not designed for such use, and any damage or injury resulting from such use is not our responsibility.

### **Batteries (also see Storage Instructions)**



In addition to following the warnings below, be sure to comply with all other battery handling information.

**MANDATORY!** Battery posts, terminals and related accessories contain lead and lead compounds. Wear goggles and gloves when handling batteries, and wash hands after handling.

**WARNING!** Scooter batteries are heavy. If you are unable to lift that much weight, be sure to get help. Use proper lifting techniques and avoid lifting beyond your capacity.

WARNING! Always protect the batteries from freezing and never charge a frozen battery.

**WARNING!** Connect the battery cables correctly. RED (+) cables must be connected to positive (+) battery terminals/posts and BLACK (-) cables must be connected to negative

(-) battery terminals/posts.

REPLACE damaged cables immediately. Protective caps must be installed over all battery terminals.

**NOTE:** If the battery is damaged or cracked, immediately enclose it in a plastic bag and contact your local waste disposal agency or authorized dealer for instructions for disposal or for recycling (which we recommend).

#### **Preventing Unintended Travel**

**WARNING!** If you anticipate being stationary for an extended period of time, turn off the power. This will prevent unexpected travel caused by accidentally touching the throttle control lever.

### **Getting Onto and OFF Your Mobility Scooter**

Getting onto and off your scooter requires a good sense of balance. Please observe the following safety tips when getting on and off your scooter:



- Remove the key from the key switch
- Ensure that your scooter is not in freewheel mode
- Ensure that the seat is secured in place
- Pivot the armrests up

**WARNING!** Position yourself as far back as possible in the seat

**WARNING!** Avoid putting all of your weight on the armrests, and do not make the armrests bear weight, such as during transfers.

WARNING! Avoid putting all of your weight on the floorboard

The abovementioned actions may cause your scooter to become unstable and tip, causing injury or damage

### **Reaching and Bending**

Avoid reaching or bending while driving your scooter. Bending forward creates the risk of accidentally contacting the throttle control lever. Bending to the side while seated creates the risk of tipping. It is important to maintain a stable centre of gravity, we recommend that you determine your personal limitations and practice bending and reaching in the presence of a qualified attendant.

**WARNING!** Do not bend, lean, or reach for objects if you have to pick them up from the scooter deck or from either side of the scooter. Movements such as these may change your centre of gravity and the weight distribution of the scooter, causing it to tip. **PROHIBITED!** Keep your hands away from the tyres and wheels when driving. Be aware that loose-fitting clothing can become caught in tyres and wheels.

### **Prescription Drugs/Physical Limitations**

Users must exercise care and common sense when operating the scooter. This includes awareness of safety issues when taking prescription or over-the-counter drugs or when the user has specific physical limitations.

**WARNING!** Consult your physician if you are taking prescription or over-the-counter medication or if you have certain physical limitations. Some medications and limitations may impair your ability to operate your scooter in a safe manner.

### **Smoking**

**WARNING!** The manufacturer strongly recommends that you do not smoke while seated on your scooter, although the seat has passed the necessary testing requirements for cigarette smoking.

You must adhere to the following safety guidelines if you decide to smoke cigarettes while seated on your scooter;

- Do not leave lit cigarettes unattended.
- Keep ashtrays a safe distance from the seat cushions
- Always make sure cigarettes are completely extinguished before responsible disposal.

#### **Alcohol**

**WARNING!** Do not operate your scooter while you are under the influence of alcohol, as this may impair your ability to operate the scooter in a safe manner.

#### **Adjustments**

### **Tiller Angle Adjustment**

At the bottom of the tiller stem is the angle adjustment knob. Rotate the hand knob anticlockwise to loosen and adjust to the required angle. Re-tighten the hand knob fully before use.

DO NOT fully undo the hand knob as the internal components may become detached from the assembly.



### Seat Swivel & Slide Adjustment

The seat has a lockable swivel base to allow easier transfer. Simply lift the lever and rotate the seat at the same time.

Releasing the lever will allow the seat to lock in position. The seat locks in 45 degree intervals.

Always ensure the seat is in a locked position before mounting or dis-mounting the scooter. The seat should always be locked facing forward whilst driving.



#### **Tiller Lock**

Below the angle adjustment knob is the tiller lock. Pull up the tiller lock and rotate 60 degrees (anti-clockwise or clockwise), the tiller is locked, the front wheel can move and turn.

Pull up the tiller lock and rotate 60 degrees again (anti-clockwise or clockwise), let the lock down and the tiller is locked. The front wheels can't move or turn



#### **Armrest Adjustments**

On each side of the seat towards the back there are two hand knobs, these are to adjust the width of the armrests or to remove them for transport.

Turn the hand knobs anti-clockwise to loosen. Once the knobs are loose you will be able to adjust the armrests in or out to the desired width. Re-tighten when a comfortable width has been achieved or remove the armrests completely for transport.

If removing the armrests for transport, ensure that the hand knobs are re-tightened to avoid them rattling loose and falling out.



#### **Seat Removal & Height Adjustment**

To remove the seat, fold down the back of the seat and simply lift the seat away from the chassis whilst lifting the seat swivel lever.

DO NOT hang baggage or other objects on the back of the seat as this may affect stability.

To adjust the seat height remove the seat as previously described and remove the battery box as shown in image. Undo the stem-fixing bold and adjust the stem to the desired height. Re-fit the bolt and tighten. Re-fit the seat as above.

The height of the seat is adjustable; stability may be affected due to the height centre of gravity. Please ensure you don't adjust too high.



## ELECTROMAGNETIC AND RADIO FREQUENCY INTERFERENCE (EMI/RFI)



WARNING! Laboratory tests have shown that electromagnetic and radio frequency waves can have an adverse effect on the performance of electrically powered mobility vehicles. EMI/RFI can come from sources such as cellular phones, mobile two-way radios (such as walkietalkies), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave signals, paging transmitters and medium- range mobile transceivers used by emergency vehicles. In some cases, they can cause unintended movement or damage to the control system. Every electrically powered mobility vehicle has an immunity (or resistance) to EMI.

**WARNING!** Be aware that cell phones, two-way radios, laptops, and other types of radio transmitters may cause unintended movement of your electrically powered scooter due to EMI. Exercise caution when using any of these items while operating your scooter and avoid coming into close proximity of radio and TV stations.

**WARNING!** The addition of accessories or components to an electrically powered mobility vehicle can increase its susceptibility to EMI. Do not modify your scooter in any way not authorized by the manufacturer.

**WARNING!** The scooter itself can interfere with other electrical devices located nearby, such as alarm systems.

#### **Important Information:**

- 20 volts per meter (v/m) is a generally achievable and useful immunity lever, against interference from radio wave sources (as of May 1994) (the higher the lever, the greater the protection);
- The immunity level of this product is not known.

# Powered Scooter Electromagnetic Interference (EMI)

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered scooter and motorized scooters. 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 (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the powered scooter 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 scooter OFF as soon as it is safe.
- 4) Be aware that adding accessories or components, or modifying the powered scooter, 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.

If unintended motion or brake release occurs, turn the power OFF as soon as it is safe. The following warning label is attached to your scooter in order to make users always aware that a possibility of electromagnetic interference exists.

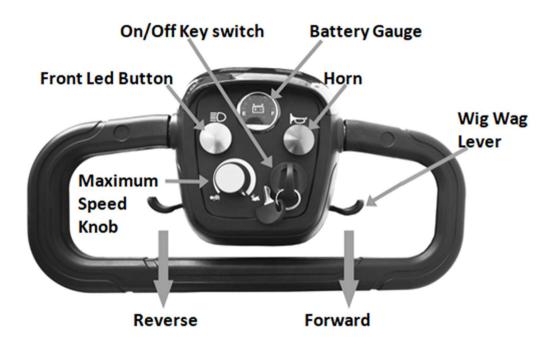
# SAFETY INFORMATION SUMMARY

- DO NOT try to climb sharp curbs
- **DO NOT** drive off or over obstacles exceeding 5 cm in height
- DO NOT make abrupt changes in direction at high speed or while traveling on an incline
- **DO NOT** attempt to make fast turn on flat surfaces
- **DO NOT** climb inclines greater than recommendation
- DO NOT back your scooter on uneven surfaces or inclines
- DO NOT attempt to operate your unit in a stalled condition, such as traveling up very steep incline.
   This may cause the circuit break or thermal cut out, rendering your unit temporarily immobile
- DO NOT travel on highways and freeways; ALWAYS stay in the bike lanes and sidewalks
- **DO NOT** carry passengers in any manner
- DO NOT operate your unit when the red battery indicator light is flashing
- **DO NOT** operate your unit with the clutch lever in the disengaging position
- **DO NOT** mount or dismount your unit with power switch in the "ON" position
- ALWAYS make sure that the steering tiller adjustment lever is locked
- ALWAYS make sure that the seat is locked so that it will not swing during operation
- **DO NOT** turn ON or use hand-held personal communication devices, such as citizens band (CB) radios and cellular phones, while your scooter is turned ON
- **BE AWARE** of nearby transmitters, such as radio or TV stations and hand-held or mobile two-way radios, and try to avoid coming close to them
- **BE AWARE** that adding accessories or components, or modifying your scooter may make it more susceptible to interference from radio wave sources.

# **BASIC OPERATING INSTRUCTIONS**

# **Standard Dashboard Configuration**

(Explanations on following pages)



### **Maximum Speed Knob**

The speed control enables you to set the maximum speed of the scooter. Turn clockwise to increase maximum speed and anti-clockwise to decrease.

ALWAYS start at a slow speed until you are accustomed with the characteristics of your scooter. Do not put excessive pressure on the dial. When driving in pedestrian areas such as shopping centres and busy pavement areas always respect other pedestrians and turn the maximum speed down so that the scooter travels at the walking pace of others around you.

#### **Horn Button**

The red button operates the scooters horn. This should only be used to warn others of your presence and not as a rebuke of any form.

# Finger Lever (Wig-Wag)

The finger levers control the reverse and forward motion of the scooter – see "Starting to Drive" for operation. Remember, more pressure = more speed. Release the lever and the scooter will automatically come to a safe stop as the electromagnetic brake is applied. *Always release the lever if the scooter behaves erratically.* 

### On/Off Key

The key switch is located on the front of the tiller. Simply insert the key and turn clockwise to switch the power on. The display will light up to indicate the power is on. There may be a slight delay before the finger levers operate as the controller checks the scooters circuits.

NEVER leave the key in the switch unattended to prevent unauthorised use. Do NOT switch the power off to stop the scooter unless it is an emergency. The scooter will stop very abruptly if stopped in this way.

### **Battery Lever Indicator Gauge**

This gauge gives you a guide to the amount of charge left in the scooters batteries. This will give the truest reading when the scooter is in motion.

ALWAYS fully charge the batteries before driving your scooter and never let the batteries become completely drained, as this may cause permanent damage to the batteries.

# **Starting to Drive**

### **Getting Started**

Note: You must fully charge the batteries prior to first use (See "Batteries and Charging")

Select an area with plenty of space.

Mount the scooter by lifting the armrest and sliding onto the seat. Ensure the seat is securely locked in the forward facing position before driving. Adjust the tiller and seat if necessary (see "Adjustments") Do NOT use the tiller to fully support you during transfers.

The TG100 has a 'wig-wag' finger lever. The direction of the scooter is determined by which part of the lever is pushed / pulled. Pulling the right side of the lever will cause the scooter to move forward, the left side will select reverse.



### **Moving Off**

Insert the key, switch on the power and initially set the speed control to a low setting. The further you pull the lever the faster the scooter will travel, but only to the maximum speed that has been selected. Release the lever and the scooter will come to a smooth controlled stop.

Caution! DO NOT switch off the power to stop the scooter as this will cause the transmission to lock and the scooter will come to as sharp stop, which could possibly cause injury. This procedure should only be used in an emergency.

# **Steering**

Steering the scooter is light and easy. Ensure you give obstacles a wide clearance to avoid the rear wheels catching. When steering through limited spaces, turn the tiller in the direction that you wish to go and apply power gently. The scooter can turn very tightly with complete stability at slow speeds.

Caution! NEVER turn sharply at high speeds as it can make the scooter unstable. The maximum speed should be set at 50%

# Reversing

Before reversing ensure the area behind the scooter is free from any obstacles or hazards. Adjust the speed to low before you reverse. Steer wide of all corners and obstacles.

Caution! Do NOT reverse onto a main thoroughfare

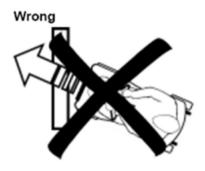
### **Surfaces**

Your scooter will perform well over many surfaces. However, avoid long grass, loose gravel, sand, mud and icy surfaces as these pose a threat to the stability of the scooter and your safety. Extended use on such surfaces may also cause damage to your scooter and void your warranty.

# Ramps/Slopes

The stability of your scooter depends on several factors such as seat height, angle of gradient and the users height and weight. When approaching an incline, do so directly and not at an angle. Avoid making turns where possible.





### **Transferring**

Lift up the armrest from the side you wish to leave or sit on the scooter from. Use an aid for balance if required. Do NOT us the tiller or armrests to support your full weight during transfers

# **STORAGE**

Your scooter should be stored in a dry environment, preferably a garage or shed. Tarpaulins and covers may create condensation during certain weather conditions. If your scooter is to be stored for prolonged periods, fully charge the batteries and remove them from the scooter. Very cold weather can severely deplete battery condition (upto 40%). If left for any period during cold weather it is very important that the scooter is fully charged again before us

### **BATTERIES and BATTERY CHARGERS**

### **Batteries**

# Charge the batteries completely (approx. 8-12hrs) prior to first use

The TG100 uses two 20Amp, 12Volt sealed VRLA AGM batteries. The battery box is located under the front of the seat. It can be easily removed by simply lifting the handle on the top.

Low temperatures, rough terrain and the weight of the user can affect battery performance. Your battery gauge is a guide only to the level of charge remaining in your batteries and will give its best indication whilst the scooter is moving.

Note: Batteries recommended MUST be used if they need to be replaced. An authorised Top Gun Dealer must carry out the battery replacement to avoid voiding your warranty.

# **Battery Charger**

The battery charger is a 2-amp switch mode type. The battery charging ports are located on the left side of the tiller head and on the front of the battery pack. Before using your scooter for the first time be sure to fully charge the batteries, this may take upto 12hours (min. 8hrs)

To charge the batteries connect the 3-pin male charger plug into the charging socket on the left side of the tiller. Plug the 3-pin mains plug into a wall socket and switch on. A constant yellow light will show when the battery charger is connected and charging is underway. The green LED will light when the charging cycle is complete. A red LED will light when there is a break in the connection. Always turn off mains power to the charger before disconnecting the plug from the battery box.

Caution! Do NOT charge the batteries for longer than 12hours. Always charge the batteries in a well-ventilated indoor area. You must still maintain charging the batteries even if the scooter is not to be used for a prolonged period of time (2 to 3 weeks). Failure to do so could result in permanent damage and render the batteries unusable. Wherever possible do not interrupt the charge cycle until the batteries are fully charged. Continual interruption can permanently damage the batteries. If the charging lead should get

damaged discontinue use immediately and seek a replacement from your dealer. ONLY USE THE CHARGER SUPPLIED WITH YOUR SCOOTER. Do not leave the charger plugged into the charger port after the charge is complete. ALWAYS remove the keys from the scooter when charging.

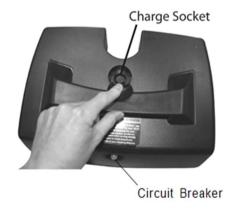
### **Disposing and Recycling of Used Batteries**

Batteries must always be recycled correctly. Do not dispose of them with your domestic refuge.

For further information regarding your nearest recycling facility please contact your local authority.



Tiller charging socket



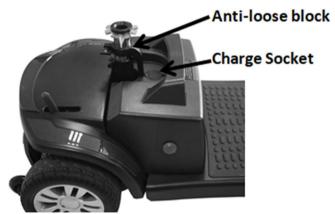
Battery box charging socket and circuit breaker reset

### DISMANTLING

The scooter can be easily and quickly dismantled into five parts for transportation and storage. No tools are required. Firstly remove the basket and seat as described earlier.

Before removing the battery pack, unscrew the handle for the anti-loose block, rotate the block left or right, remove the battery pack. When installing the battery pack, place the battery and rotate the block back over the battery pack, screw and tighten the handle.





Remove the battery pack

When dismantling be careful to perform this function on a flat, stable surface.

Locate the release lever which is spring loaded. Lift it to the vertical position 'A' and while holding the seat post lift the lever upwards 'B' and the two parts of the scooter will separate.

To reassemble tilt the rear part of the scooter backwards and locate the rear frame tube into the frame locating lugs (shown below). The scooter should then click back together. Lift the release lever to ensure that the locking mechanism fully relocates and that there is no debris fouling the mechanism





### **MAINTENANCE SCHEDULE**

Although your scooter requires very little maintenance, do not neglect it. When performing maintenance procedures on your scooter, make sure that it is parked on a level surface and that the key is not inserted.

#### **DAILY**

- Check brake effectiveness before you drive.
- · Recharge batteries fully every night.

### WEEKLY/FORTNIGHTLY

- Check tyre pressure. The pressure should be between 30-35 psi.
- Clean seat upholstery, plastic body and covers. To avoid electrical failure, do not spray water directly into your unit.
- Use a damp clean rag to clean all parts.
- Check and tighten the throttle lever attachment screws.

#### **MONTHLY**

- Check battery condition. Clean terminals if necessary.
- Check all electrical wire connectors to eliminate loose connection.
- Tighten all exposed bolts and nuts.
- Check wheel bearings by spinning tyres and checking for free rotation.

#### **EVERY TWELVE MONTHS**

- Visit your dealer and have a trained technician comprehensively service your scooter
- Under normal use, batteries should last between 2-3 years. These should be replaced by your dealer

# TROUBLESHOOTING and REPAIRS

Your scooter is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads.

#### **Fuses**

There are two fuses on the battery cables to give protection against possible overload on the wiring

#### Checklist

If your scooter fails to operate, please check the following;

- The unit is switched on
- All plugs and connections are firmly fixed
- Battery level shows full charge
- Freewheeling device is in the drive position
- Circuit breaker has not tripped

If the freewheel device has been operated with the scooter switched on, the scooter will not operate until the key switch has been turned off and on again.

Should a fault occur, the fault code indicator on the tiller head will indicate a flash sequence which relates to the fault in the table on the next page.

NOTE: should your scooter fail to operate after checking the below possible causes, consult your local dealer immediately!

If the scooter is switched on and not operated for a period of time (approx.. 10mins) it may enter 'sleep' mode. Simply switch the scooter off and on to reset the controller.

The controller fitted to the scooter will let you know if a system error occurs by displaying a flash code. These codes are as follows;

Flash Code	Description	Scooter Condition	Action Required	
1	Charge Batteries	Scooter may run slowly	Batteries less than 23.3V? Charge as soon as possible	
2	Bad motor connection	Scooter will not run	Check all connections between the motor and the controller	
3	Motor short circuit	Scooter will not run	Check all connections between the motor and the battery	
4	Not Used on this model			
5	Not Used on this model			
6	Inhibit circuit A	Scooter will not run	Check charger is not still connected or a controller fault	
7	Throttle Fault	Scooter will not run	Check wig wag lever is in neutral position. Faulty potentiometer	
8	Controller Fault	Scooter will not run	Check all connections are secure. Switch scooter on and off, this may clear the code.	
9	Magnetic brake error	Scooter will not run	Check scooter is not in freewheel mode. Check brake action	

### WARRANTY

This is to certify that your TOP GUN MOBILITY product offers a 5 Year limited Warranty from the date of original purchase. Should a defect or operating fault arise within this period the Dealer, from where the product was originally purchased, should be notified immediately. Failure to register the fault may invalidate the warranty.

The Dealer from where the product was purchased is responsible for any warranty repairs. Top Gun Mobility warrants that if a fault occurs within this period due to faulty workmanship or materials that the product will be repaired (or replaced at the Company's discretion) free of charge. *Any unauthorised modifications will invalidate the warranty.* 

Component parts replaced outside this period carry a six-month warranty. (Standard terms and conditions apply for this period).

#### **FIVE-YEAR LIMITED WARRANTY**

- Structural frame components, including: platform, fork, seat post, and frame welds (excludes Canopy & Canopy framework
- Drivetrain, including: differential, motor, and brake.



#### TWO-YEAR LIMITED WARRANTY

Your Top Gun Mobility Scooter is fully guaranteed for two (2) years from the date of purchase against faults arising due to defects in manufacture or materials. This warranty does not detract from, but is in addition to your legal rights.

All electronic parts, including controllers, batteries and battery chargers, have a one (1) year warranty. Servicing to the controller or battery charger must be carried out by your authorised Top Gun Mobility Provider. Any attempt to open or dismantle these items renders the guarantee void on that item.

#### NOT COVERED UNDER WARRANTY

The guarantee does not extend to those items which may need replacement due to normal wear and tear (tyres, belts, bulbs, upholstery, plastic shrouds, motor brushes, fuses, and batteries), or damage to the product caused by misuse or accident for which Top Gun Mobility or its agent cannot be held responsible. This warranty does not include service calls or external bolt on components such as a canopy or canopy framework. **Transport/Call Out Costs** - As the owner you must bear the cost of transporting the unit to the dealer or should you decide to have the dealer come to you, you must bear the cost of the dealers call out fee. Your dealer may choose to waive this cost, but this will be at the dealers discretion only and separate to TopGun Mobility's warranty terms and conditions.

#### WARRANTY SERVICE PERIOD

The service intervals are every 500klm or every twelve (12) months from date of purchase, whichever occurs first. We recommend using a Top Gun Mobility Service Provider. Proof of annual service (paid invoice receipts) must be kept and provided upon any warranty claim. **This warranty will be void if annual servicing is not carried out.** 

#### SERVICE CHECKS AND WARRANTY SERVICE

Warranty service can be performed by an authorised Top Gun Mobility Provider. Please contact your authorised Top Gun Mobility Provider for advice on the current cost affecting the service visit.

#### **COMMERCIAL USE**

Any TopGun Mobility products used in a commercial application will only be covered by a 12-month warranty from the purchase date and will be excluded from any coverage mentioned in the warranty relating to 5 (five) or 3 (three) year warranty. All other conditions in this warranty will apply.

#### STORAGE INSTRUCTIONS

Always store in a dry area protected from freezing to avoid damage to the scooter and premature wear of the batteries.

Avoid exposure to rain, snow, ice, salt or stagnant water. Keep your scooter clean and dry.

Never expose the electronic components of the scooter to humidity (rain, snow, mist, or water from washing), as it may damage electronic circuits.

Always store your scooter with batteries fully charged. When storing the scooter for more than two weeks, charge the batteries and disconnect them.

During the storage, check the charge once a month and recharge the batteries as needed. You must complete a full charge cycle every month or damage to batteries can occur.

Avoid extreme temperature of hot and cold during storage. Freezing can damage low charged batteries and they may become unusable.

# **CHANGE OF DETAILS / CHANGE OF OWNER**

If you change your address/contact details, please let us know as soon as possible. This can be done by;

• Email us with the updated details as per below on <a href="mailto:office@topgunmobility.com.au">office@topgunmobility.com.au</a>

Customers Email Address:	
Customer:	Model:
Address:	Serial Number:
	Colour:
State: Postcode:	
	Date of Sale:
Phone:	_
Customer Signature	

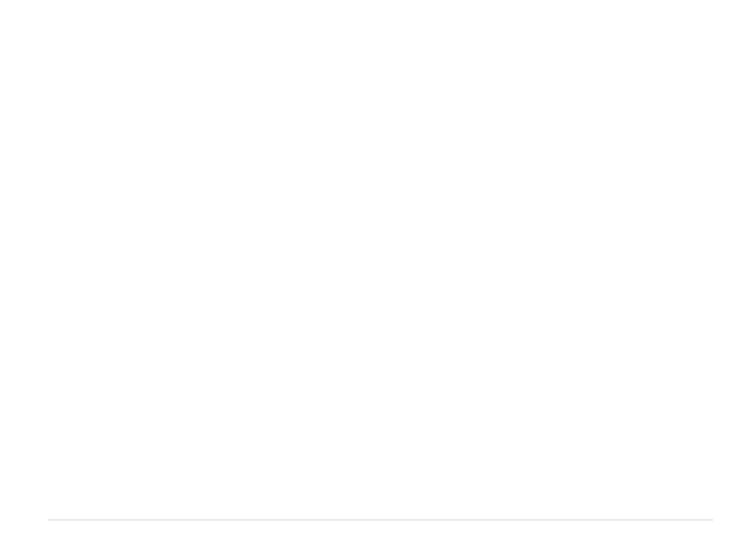
# **SERVICE RECORD**

Certification, by signature and stamp, of an Authorised Top Gun Mobility dealer/repairer is required to verify that the recommended routine maintenance has been performed on this Mobility Scooter. An accurate record is necessary to protect your warranty.

Always present this book to the dealer when routine maintenance is performed or when warranty repairs are requested. Service intervals are required as per Maintenance Schedule section of this Owner's Manual.

DEALER/REPAIRER:	DEALER/REPAIRER:
DATE: KLMS:	DATE: KLMS:
DEALER/REPAIRER:	DEALER/REPAIRER:
DATE: KLMS:	DATE: KLMS:

DEALER/REPAIRER:	DEALER/REPAIRER:
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