



The finest range of mobility products available in the UK



**Minimo & Minimo Plus Operating Instructions and Owners Handbook**

<b>CONTENTS</b>	<b>PAGE</b>
<b>INTRODUCTION</b>	<b>3</b>
<b>PRODUCT OVERVIEW</b>	<b>3</b>
<b>YOUR SCOOTER CONTROLS</b>	<b>3</b>
<b>DRIVING YOUR SCOOTER</b>	<b>4</b>
<b>ADJUSTING YOUR TILLER</b>	<b>6</b>
<b>REMOVING YOUR BATTERY PACK</b>	<b>6</b>
<b>ADJUSTING YOUR SEAT</b>	<b>7</b>
<b>FOLDING &amp; UNFOLDING YOUR SCOOTER</b>	<b>9</b>
<b>CHARGING YOUR SCOOTER</b>	<b>12</b>
<b>PARKING BRAKE RELEASE</b>	<b>13</b>
<b>MAINTENANCE</b>	<b>13</b>
<b>TROUBLE SHOOTING</b>	<b>14</b>
<b>TIPS FOR SCOOTER USERS</b>	<b>15</b>
<b>TECHNICAL SPECIFICATIONS</b>	<b>16</b>

## INTRODUCTION TO YOUR MINIMO

Thank you for purchasing a TGA Minimo mobility scooter. We hope your new scooter will bring freedom, independence and pleasure to your life.

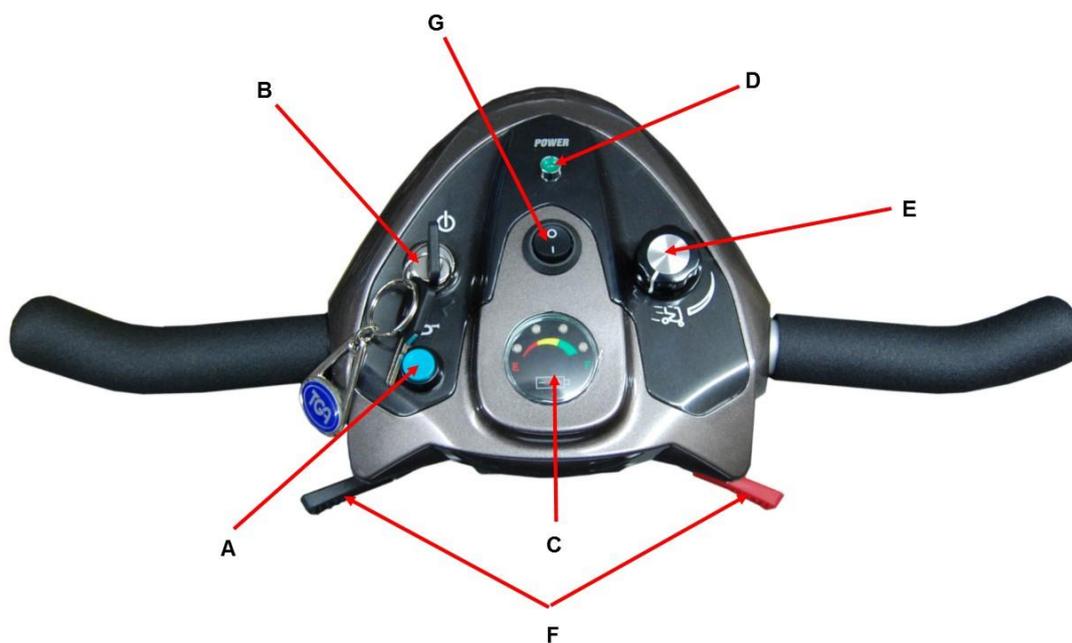
This handbook provides important information on the most common operational and maintenance concerns that you should be familiar with. It is very important that you are familiar with the driving technique and are able to operate the controls competently before venturing far from where there is assistance.

Please make sure you read this handbook in full and fully understand how to operate your scooter before venturing too far from assistance. This handbook will draw your attention to important safety related issues by **Care! Warning** labelling throughout. Please keep this handbook for future referral.

## PRODUCT OVERVIEW

Your Minimo is a class 2 mobility scooter and intended for indoor or outdoor use but is not road legal. It is designed to be easily folded in order to fit in your car boot making it ideal for trips to your local town and shops. It is capable of 4mph, can climb slopes up to 10% and negotiate obstacles up to 6 or 7cm high, depending on the model (see Technical Specifications). Care must be taken when using your scooter in these conditions.

## YOUR SCOOTER CONTROLS



A. Horn – press the horn button to sound your horn.

B. Key – insert the key and rotate it clockwise to power on your scooter. To turn off your scooter rotate the key anti clockwise.

C. Battery Condition Indicator – When your scooter is switched on the needle on the indicator will move across from the left 'Red' sector to the 'Green' sector indicating the state of charge in your batteries. As the charge is used up in your batteries the needle will slowly move towards the red sector indicating the state of charge at that precise time. When the needle is pointing fully to the right the batteries are fully charged. As the needle falls towards the red sector your batteries are losing charge and when the needle is in the red sector your batteries need to be recharged. For more information see the Charging Your Scooter section.

D. Power On Light – The light will be illuminated green when your scooter is on.

E. Speed Adjustment – This allows you to pre-select your desired maximum speed. The adjuster is proportional to speed and can be set anywhere between minimum and maximum. Turn the adjuster knob fully anti clockwise for the lowest speed and gradually rotate clockwise to increase your maximum speed.

F. Throttle Control Lever – The Throttle Controls also adjust the speed of your scooter. The further you push the control the faster you will go.

G. Lights – This switch will turn your lights on and off (Minimo Plus only).

## **DRIVING YOUR SCOOTER**

Before driving your scooter make sure that the battery is fully charged, check that the tyres do not appear to be soft (see Maintenance section for details of monthly checks and tyre pressures). Check that the key is in the off position before entering. When comfortably sat, ensure that the seat is secure. Ensure that the armrests are in the correct position.

Set your speed to low, hold the Tiller with both hands and gently apply pressure to the throttle control lever to move forwards. The more pressure you apply to the lever, the faster you will go. Remember to always come to a stop before changing from forward to reverse.

Releasing the throttle control lever automatically operates the motor brake to slow down your scooter to a stop. Once stopped, the parking brake will automatically engage.

Use the Tiller to steer your scooter left and right. Simply move your left hand towards you to steer left and your right hand towards you to turn right.

To reverse, apply pressure on the opposite throttle control lever. The speed in reverse is reduced automatically for safety and your scooter will beep.

To negotiate kerbs you should always approach at right angles. If you are going up, select the highest speed setting then drive until both front and back wheels are on the pavement, then immediately lower the speed. If going down, proceed slowly until on the road, then switch to a suitable higher speed to cross the road safely.

Watch your Battery Condition Indicator. The distance you can travel depends on many factors. Range is influenced by many environmental conditions, hills will substantially decrease the range. Establish what you can obtain around your locality by gradually increasing the distance and checking the battery indicators at the end of each journey.

Should the battery “run out” before you get home there are two things you can do to avoid being stranded. Stopping and switching off your scooter for 5 – 10 minutes will allow the battery to “recover” a little power so that you can proceed further. You can attempt this a number of times. If you are unfortunate and cannot return to home under the battery power there is a “Free Wheel” device that will allow someone to push your scooter home (see Parking Brake Release).

### **Driving inside shops and buildings**

When inside it is your responsibility to drive slowly and safely and not damage your surroundings or hurt other people.

When using the footpath – Just because you are on the footpath or pedestrian precinct does not make you a pedestrian. If you are on a scooter you are no longer a pedestrian.

In a crowded precinct, market area, or footpath - It is your responsibility to ensure you do not run into anyone or do any harm with your scooter. While many people will make way for you, you cannot expect everyone to do so. Some will appear to not even realize you are there. They will climb round and even over your vehicle rather than allow you room to move. Also be very aware of people’s feet.

Watch out for:

- \* Children – They may well run in front of you without warning. You may only be moving very slowly, but you could still injure a child.
- \* Elderly People – They may be unable to quickly move aside to let you pass. Give way to them.
- \* Disabled people on foot – they too may be unable to move aside for you.
- \* People with visual problems or impaired hearing – Give them space and time.
- \* Other scooter users – You may be doing all the right things. This does not guarantee they will do likewise

### **Driving on the road**

Your scooter is a class 2 mobility scooter and therefore it is not road legal.

## ADJUSTING YOUR TILLER



If you'd like to adjust the height of your tiller simply turn the adjustment wheel anti clockwise until the top part of the tiller moves freely up and down. Then just move the top half of the tiller to the height you would like and tighten the adjustment wheel by turning it clockwise until tight.

## REMOVING YOUR BATTERY PACK



To remove the battery pack first ensure the pack is unlocked by inserting the key into the pack and turning it 90° anti clockwise to the unlock position. Then simply lift the pack up away from the base of the scooter and the seat using the handle provided.

## ADJUSTING YOUR SEAT

### Removing your seat

To remove your seat follow these 2 simple steps:

1. Pull and rotate the red circular knob located under the seat so that it is locked open.



2. Slide the seat forwards slightly and lift away from the base.



To replace the seat simply reverse these steps.

### Care! Warning

\* Always ensure the seat is locked in place before attempting to get on. Failure to check this could result in injury.

## Adjusting your arm rests

Your scooter has both height adjustable and rotating armrests. To adjust the height of your armrests follow these 2 simple steps:

1. Press the silver button located halfway up either armrest.



2. Slide the armrest up or down into either of the 3 positions available.



To rotate the armrests, follow these 2 simple steps:

1. Press the silver button located at the bottom of the armrest



2. Rotate the armrest backwards 90 degrees until it locks in place.



To rotate the armrest forwards simply reverse these steps.

## FOLDING & UNFOLDING YOUR SCOOTER

### Folding

To fold your scooter in order to put it into a car boot or stand it up and store it follow these 4 simple steps:

1. Place one hand on your scooters seat base and use the other to pull up on the red handle located at the back of the floor pan just in front of the battery pack until you hear a click.



2. Fold the back of the seat down and the arms back (see Adjusting Your Seat).



3. Use one hand to push the seat down towards the floor pan and the other to move the tiller towards the seat which will lift the front wheels off the floor and fold your scooter.



4. Finally push the tiller against the seat and the front of the floor pan towards the rear wheels to ensure your scooter is locked into the folded position.



Once folded you can then lift your scooter using the handle at the rear and stand it on its front wheels to move around in the folded position.



## Unfolding

To unfold your Minimo Plus follow these 3 simple steps:

1. Pull the red handle on the left hand side of your scooter towards you until you feel it click.



2. Pull the tiller away from the floor pan until the front wheels of your scooter touch the floor.



3. Ensure your scooter is locked in the unfolded position by pulling the seat away from the floor pan with one hand and pushing the tiller away from the seat with the other until you hear a click and feel your scooter lock into this position. Once your scooter is locked in position you will no longer be able to move the tiller towards and away from the seat so use this as a simple test to find out if your scooter is locked in the unfolded position.



## Care! Warning

\*Always take care when folding and unfolding your scooter that your hands and fingers are clear of moving parts.

\* Always ensure the scooter is locked in the unfolded position before attempting to get on. Failure to check this could result in injury.

## CHARGING YOUR SCOOTER

Only use the charger supplied with your scooter as other makes of chargers have not been tested and may permanently damage your batteries. Your battery charger is designed and tested for use with your scooter so it may not be suitable for any other scooters.

To charge your batteries follow these simple steps.

1. Switch OFF your scooter and remove the key.
2. Plug the charger lead into the socket located on the battery pack. Plugging the charger in automatically cuts all power to the electronics so your scooter cannot be driven.
3. Push the plug from the charger into a suitable wall outlet and switch on.
4. The red light on your charger will come on for “mains on” indicating the battery is charging. The Green light will come on when your batteries are fully charged.
5. When your batteries reach their charged state, the charger will automatically stop charging so the batteries cannot over charge. The lights will, however, still be on.
6. Although to get out of trouble the batteries can be put on charge for a short period of time, it is always best to go through a complete charge cycle each time. Excessive short period charging will be detrimental to battery life.
7. For the best results and to prolong your battery life, try to run the battery down by at least 50% before recharging and in addition it is always best to go through a complete charge cycle every time.
8. Depending on the depth of the discharge, the minimum time taken to recharge serviceable batteries fully will vary up to 12 hours. Please note that this time may increase as batteries get older. During periods without use it is wise to charge the batteries every 4 to 6 weeks.
9. For the best results your batteries must be cycled for their first 10-15 charges. This means run them down as much as you safely can in use and then give them a full charge. They will not work at their best until this process has been carried out.

You will find that the distance that your scooter can travel will gradually increase over the first few weeks of use as the batteries reach their optimum efficiency after approximately 12 cycles of discharge and recharge.

### Care! Warning

- \* Do not smoke or use a naked flame while your batteries are being charged.
- \* Do not use the charger if it has received a sharp blow, been dropped or otherwise misused in any way.
- \* Do not dismantle your charger.
- \* Do not leave your charger plugged into your scooter with your charger switched off as this may discharge your batteries.
- \* For a complete charge – Do not switch off, unplug or interrupt the recharge cycle until it has completed.

## Care! Warning

All TGA lithium battery packs contain a temperature sensor. When this sensor records a temperature of 10°C, the internal circuit board will stop the battery charger from working in order to protect the battery cells. Once the battery pack reaches a temperature of approximately 20°C it will then allow the charger to start working again. This is only relevant if the pack drops below 10°C, so long as the battery pack is stored and remains above 10°C then the charger should work as normal, standard room temperature is sufficient.

## PARKING BRAKE RELEASE

Your scooter is fitted with a manual parking brake release. This is located at the rear of your scooter just above the right hand rear wheel. The back position is normal use, pushed forwards releases the brake and allows your scooter to be pushed. There will be no power to drive when the brake is in this position, however when switched on the battery condition indicator lights will flash indicating a fault mode. Never release this lever when your scooter is on a slope.

## MAINTENANCE

We recommend that your scooter has an annual service and maintenance check by either TGA or an approved mobility specialist. There are however a few tips you can follow yourself to keep your scooter in good condition.

- Keep all components clean and dry.
- Keep your tyres inflated according to the technical specification. Low tyre pressure will degrade your scooters performance so it is very important that you check them frequently.
- Check your tyres for wear and replace them as soon as there is any sign of excessive wear.
- Your scooter uses maintenance free batteries which are leak-proof regardless of their position so charging the battery is the only maintenance required. **DO NOT** leave the batteries flat though, charge them every 4-6 weeks if your scooter is being stored or not in use.
- Check any accessible electrical cable connectors are fully home and secure.
- Battery replacement is dependent upon use. When your batteries lose power too quickly, it is likely they need replacing. If you want to change the batteries yourself installation instructions are included with the replacement batteries from TGA.
- Make sure all repairs relating to electrical or mechanical components are carried out by TGA or an approved mobility specialist only.
- Do not apply oil or grease to any components. Sealed bearings and nylon bushes eliminate the need for lubrication.

## Seat Upholstery

You can use a damp cloth and a little soap to keep your seat looking good. Do not use abrasive cleaning materials as this will damage the coating of your seat. Upholstery can also be damaged by chemicals so do not over apply. Ultraviolet light can also reduce the life of the material coating your seat.

## Bodywork

You can clean the plastic bodywork of your scooter by lightly washing it with clean soapy water. Car polish can be used to keep the paint and bodywork in pristine condition. Do not use abrasive cleaners or strong detergents as this will fade the colour.

## Motor Brake

You can check if the motor brake is functioning correctly by testing, if you can push your scooter when it is switched off or switched on with the speed control throttle in the neutral position. If your scooter can be pushed when as described above, the motor brake may be faulty.

**Care! Warning** if this is the case do not use your scooter and contact TGA or an approved mobility specialist. You can also test this when driving your scooter, if you let go of the speed control lever it should lose speed very quickly. If you notice a change in the normal stopping time/distance you should also contact TGA or an approved mobility specialist.

**DO NOT** operate your scooter in extreme weather conditions i.e. very heavy rain.

**DO NOT** drive through deep water. This could damage the main electronic controller, or other electronics.

**DO NOT** store your scooter in damp conditions. This may affect the electronics if left for very long periods of time

**DO NOT** do not hose down your scooter. Water could be forced into the electronics and cause permanent damage.

## TROUBLE SHOOTING

### **If your scooter will not start, check the following:**

Make sure that the key is in the 'on' position, if it is then the battery condition indicator will be displayed, if it is showing empty then recharge batteries.

Check parking brake is released

### **If the battery condition indicator fails to operate when the key is in the 'on' position, check the following:**

Make sure your battery charger is not plugged in to the wall outlet, this will prevent your scooter driving.

Check parking brake is released

Check the battery pack connection

### **If your scooter will not charge, check the following:**

Check the lights on your battery charger are on and that the charger is plugged into a working wall socket.

Check your battery charger is connected to your charge socket correctly

**Care! Warning** if you find for any reason your scooter does not reduce speed when you let go of the speed control lever, use the manual brake on the handlebars. If this fails to stop you, switch your scooter off with the key. The parking brake will activate immediately and stop your scooter. Beware the machine will stop very suddenly so brace yourself with the handlebars and sit back on your seat.

This operation should only be carried out as an emergency, continual use of this procedure will damage the drive transmission and motor brake.

## **TIPS FOR SCOOTER USERS**

Scoters fall into two categories, Class 2 which is essentially a 4mph pavement scooter and can only legally be used on the road when either crossing over or because there are no footpaths. A Class 3 scooter is capable of 4 & 8 mph and provided it is fitted with front and rear lights, flashing indicators, horn and rear view mirror it is legal for use on the road. It can also be used on the footpaths but must not exceed 4 mph. Class 2 & 3 vehicles must not be driven on Dual Carriageways, Motorways, Bus Lanes or Cycle Tracks. Class 3 scooters must also be registered with the DVLA.

### **Insurance**

There is no legal requirement for insurance but it is a very good idea to have cover for fire and theft, accidental and malicious damage, and also third party damages. For more information call TGA.

### **Breakdown & Recovery Service**

Again not a requirement but a very good idea to enable you total peace of mind when going out on your scooter.

### **Mobile Phone**

An essential item if you are out there alone. You never know, breakdown, accident, health - communication is a must.

### **Carrying Loads**

Do not overload. It may make your scooter unstable and reduce its range. Place heavy loads inboard – in the middle – not behind the back wheel which can lighten the steering or can cause the front end to lift off the road on a bump, and not at the front which might make steering heavy.

### **Airline Checking**

Sealed Lead Acid Batteries are permitted on aeroplanes. Airline personnel may insist on removing the battery cover to verify its contents. It is best to check with the airline beforehand. An airline compliance certificate is available from TGA. Due to circumstances out of TGA's control, it is not possible to board an aeroplane with our 14.5AH Lithium batteries, this is the battery supplied as standard on our Minimo Plus scooter. This is due to an instruction/information provided by the Civil Aviation Authority. The Minimo Plus folding scooter comes complete with a 14.5AH battery and therefore cannot be transported on aeroplanes.

We at TGA have recognised this as a potential issue for some of our customers and have introduced a loan battery service to help our customers take the Minimo Plus scooter out of the country with them, should the need arise. We will supply a loan battery pack containing an 11.5AH Lithium battery, which falls within the parameters/tolerances of the Civil Aviation Authorities guidelines. This battery WILL work with the Minimo Plus scooter, however it will reduce the overall range of the scooter, whilst the temporary battery is being used. It will not affect the scooter in any other way. For more information including prices please contact the TGA customer service team.

## TECHNICAL SPECIFICATIONS

Specification	Minimo	Minimo Plus	Minimo Plus 4
Length	95cm	96cm	95cm
Width	55cm	55cm	55cm
Folded Dimensions	86x55x45cm	86x55x46cm	86x55x46cm
Seat Width	41cm	41cm	41cm
Total Weight	62.5lbs	63.5lbs	63.5lbs
Wheel & Tyre Size front	18 x 4cm	20 x 5cm	18 x 4cm
Wheel & Tyre Size rear	20 x 5cm	23 x 7cm	23 x 7cm
Battery	24v 11.5amp	24v 11.5amp	24v 11.5amp
Motor	24v 270watt	24v 270watt	24v 270watt
Controller	24v 45amp	24v 45amp	24v 45amp
Charger	24v 2.5amp	24v 2.5amp	24v 2.5amp
Max Speed	4mph	4mph	4mph
Approximate Range	10miles	12.5miles	12.5miles
Max Carry Capacity	18stone	18stone	18stone
Max Gradient	10%	10%	10%
Ground Clearance	6cm	7cm	7cm
Vehicle Class	2	2	2



**TGA Mobility Ltd**  
 Woodhall Business Park  
 Sudbury  
 Suffolk  
 CO10 1WH

**Tel:** 01787 882244 **Fax:** 01787 882248 **Web:** [www.tgamobility.co.uk](http://www.tgamobility.co.uk) **Email:** [info@tgamobility.co.uk](mailto:info@tgamobility.co.uk)



TGA Mobility Ltd reserves the right to change specification and/or prices without prior notification or warning