The finest range of mobility products available in the UK

Zest, Zest Plus & Zest S
Operating Instructions and Owners Handbook

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INTRODUCTION TO YOUR ZEST

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

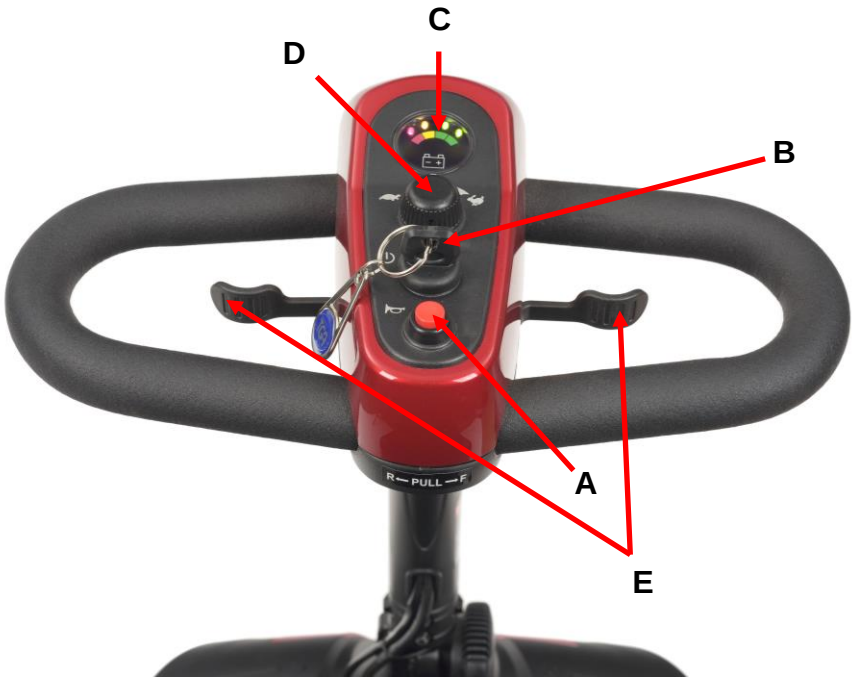
This handbook provides important information on the most common operational and maintenance concerns that you should be familiar with. It is very important that you are familiar with the driving technique and are able to operate the controls competently before venturing far from where there is assistance.

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 Zest 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 11% (6°) and negotiate obstacles up to 7 to 10cm 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 blocks on the indicator will illuminate 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 blocks will slowly go out, moving towards the red sector indicating the state of charge at that precise time. As the lights go out towards the red sector your batteries are losing charge and when there is only one or two left your batteries need to be recharged. For more information see the Charging Your Scooter section.

D. 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.

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

DRIVING YOUR SCOOTER

Before driving your scooter make sure that the battery is fully charged. 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:

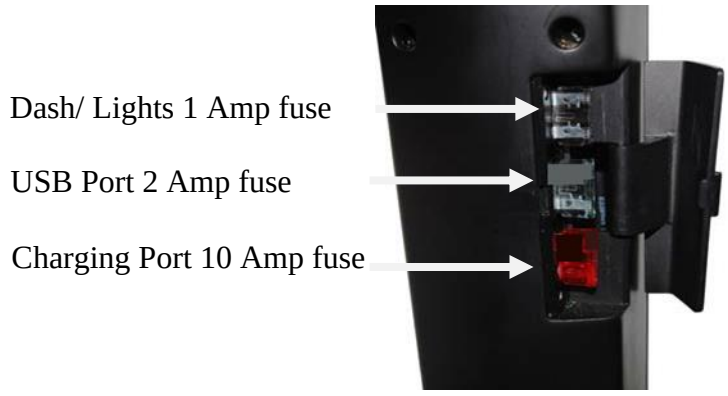
* Children – They may well run in front of you without warning. You may only be moving very slowly, but you could still injure a child.
* Elderly People – They may be unable to quickly move aside to let you pass. Give way to them.
* Disabled people on foot – they too may be unable to move aside for you.
* 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.

Zest S Tiller additional features

1 Amp USB Charging Port



Fuse Panel

ADJUSTING YOUR TILLER

If you'd like to adjust your tiller, simply place one hand on the tiller handle and with the other rotate the hand wheel located at the bottom of the tiller anti clockwise. Once the tiller moves freely you can move it to the position you would like and turn the hand wheel clockwise until it is tight and holds the tiller in place.

REMOVING YOUR BATTERY PACK

To remove the battery pack simply lift the pack up and away from the base of the scooter and the seat using the handle provided.

The Zest Plus and S models come with a split battery pack to make handling the heavier batteries easier. To remove these simply follow the same instructions one side at a time.

ADJUSTING YOUR SEAT

A. Seat Swivel Lever – Lift upwards to rotate your seat. The seat will swivel to the left or right with locking positions each side at 45° intervals.

B. Armrests – Lift up or push down. To remove turn the hand wheel anti clockwise until it is removed and slide out the armrest.

Care! Warning

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

Removing your seat
To remove your seat simply pull up on the seat swivel lever and lift the base up and away from your scooter.

Care! Warning
* The seat is heavy and difficult to handle

DISMANTLING AND ASSEMBLING YOUR SCOOTER

Dismantling
1. Remove your seat by pulling up on the seat swivel lever and lifting the base up and away from your scooter.

2. Remove the battery pack(s) by lifting it/them up and away from the base of the scooter using the handle provided.

3. Disconnect the rear subframe by lifting up on the sub frame release lever. Slide the main chassis of the scooter forwards to move it away from the sub frame.

4. Fold down your tiller by placing one hand on the tiller handle and with the other rotate the hand wheel located at the bottom of the tiller anti clockwise. Once the tiller moves freely you can move it all the way down and turn the hand wheel clockwise until it is tight and holds the tiller in place.

5. Lock the tiller in its central position by turning the tiller lock (located at the bottom of the tiller, under the headlight) 90 degrees clockwise.

Assembling

1. Unlock the tiller by turning the tiller lock (located at the bottom of the tiller, under the headlight) 90 degrees clockwise.

2. Lift up your tiller by placing one hand on the tiller handle and with the other rotate the hand wheel located at the bottom of the tiller anti clockwise. Once the tiller moves freely you can move it all the way up and turn the hand wheel clockwise until it is tight and holds the tiller in place.

3. Reconnect rear sub frame by lining up the main chassis and the rear sub frame and tilting the subframe upwards. Lift the main chassis using the rear subframe release lever and place the connectors on the main chassis onto the bar of the rear subframe. Push the main chassis down and or tilt the rear subframe downwards until the two parts click into place.

4. Reconnect the battery pack(s) by placing it/them onto the base of the scooter. Ensure they click into place.

5. Reconnect your seat by lifting up the seat swivel lever and lowering your seat down so that the lug in the seat post fits into the hole in the base plate of the seat. Release the seat swivel lever and ensure the seat clicks into position.

Care! Warning

* Ensure all components are secured in place and that the tiller is not locked before attempting to ride your scooter.

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 tiller or 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”. A Second Red light will then come on indicating the battery is charging. The Red light will then turn Green 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.

PARKING BRAKE RELEASE

Your scooter is fitted with a manual parking brake release. This is located at the rear of your scooter to the left of 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 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.
Zest S: Check the 10A fuse.

Care! Warning if you find for any reason your scooter does not reduce speed when you let go of the speed control lever, 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. Contact your dealer if this issue recurs.

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

Scooters 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.

NOTES

TECHNICAL SPECIFICATIONS

Specification	Zest	Zest Plus	Zest S
Length	105cm	112cm	112cm
Width	55cm	56cm	56cm
Seat Width	46cm	46cm	46cm**
Total Weight standard	110lbs	154lbs	174lbs
heavy duty	121lbs	N/A	N/A
Wheel & Tyre Size front & rear	20cm	22cm	22cm
Tyre pressure		25-30 psi	25-30 psi
Battery standard	12v 12amp	12v 33amp	12V 33Amp
heavy duty	12v 22amp	N/A	N/A
Motor	24v 270Watt	24v 420Watt	24V 350Watt
Controller	24v 50amp	24v 90amp	24v 90amp
Charger standard	24v 1.5amp	24v 3.5amp	24v 3.5amp
heavy duty	24v 3.5amp	N/A	N/A
Max Speed	4mph	4mph	4mph
Approximate Range* standard	8miles	18miles	18 miles
heavy duty	14miles	N/A	N/A
Max Carry Capacity (Stone)	21	25	26.5
(kg)	135	160	170
Max Gradient	11% (6°)	11% (6°)	11% (6°)
Ground Clearance	7cm	10cm	10cm
Vehicle Class	2	2	2

* with 14 stone / 90 kg user and will vary due to rider weight, drive surface, terrain.
** Contoured Captains Seat

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