



Guardian[®] Trek Trek 3, Trek 3 Ultra, Trek 4, Trek 4 Ultra User Instruction Manual & Warranty

SUPPLIER: THIS MANUAL MUST BE GIVEN TO THE RIDER OF THIS SCOOTER.

RIDER: BEFORE USING THIS SCOOTER READ THIS ENTIRE MANUAL AND SAVE FOR FUTURE REFERENCE.

Indications for Use: To provide an optional means of mobility for physically challenged people.



I. INTRODUCTION

SUNRISE LISTENS

Thank you for choosing a Guardian scooter. We want to hear your questions or comments about this manual, the safety and reliability of your scooter, and the service you receive from your Sunrise supplier. Please feel free to write or call us at the address and telephone number below:

SUNRISE MEDICAL Customer Service Department 7477 East Dry Creek Parkway Longmont, Colorado 80503 (800) 333-4000 or (303) 218-4500

Be sure to return your warranty card, and let us know if you change your address. This will allow us to keep you up to date with information about safety, new products and options to increase your use and enjoyment of this scooter. If you lose your warranty card, call or write and we will gladly send you a new one.

FOR ANSWERS TO YOUR QUESTIONS

Your authorized supplier knows your scooter best and can answer most of your questions about scooter safety, use and maintenance. For future reference, fill in the following:

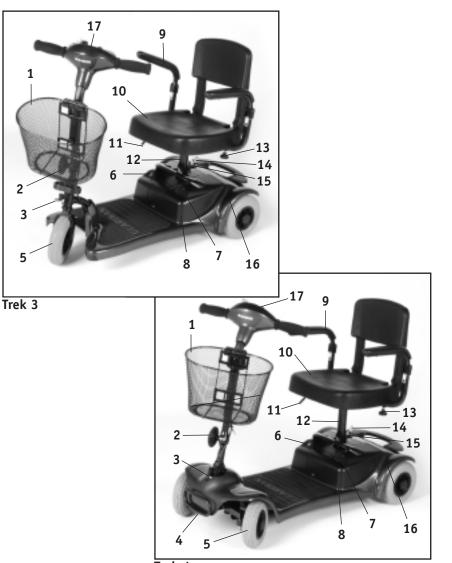
Supplier:			
Address:			
Telephone:			
-			
Serial #:	Date/Purchased:		

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III. YOUR SCOOTER AND ITS PARTS



Trek 4

GUARDIAN TREK

Weight

3

Trek 3- 47.3 lbs (base) 14.2 lbs (seat) 22.6 lbs (battery) Trek 3 Ultra- 47.3 lbs (base), 18.8 lbs (seat) 22.6 lbs (battery) Trek 4- 56.3 lbs (base), 14.2 lbs (seat) 22.6 lbs (battery) Trek 4 Ultra- 56.3 lbs (base), 18.8 lbs (seat) 22.6 lbs (battery)

Drive Wheels 8" Mag: Std, airless insert **Batteries**

2 X 12 AH battery pack **Battery Charger** off board 1.5 AMP Seats, Upholstery and Style Trek 3/4 - standard Trek 3/4 Ultra - Fish-on comfort Material: vinyl Color: black Width: Trek 3/4 - 15, 17" Trek 3/4 Ultra - 13, 15" Depth: Trek 3/4 - 15, 17" Trek 3/4 Ultra - 13, 15"

- 1. Basket
- 2. Tiller Adjustment Knob
- 3. Tiller Lock
- 4. Handle
- 5. Tire
- 6. Circuit Breaker
- 7. Battery Charger Port
- 8. Battery Case
- 9. Width-Adjustable, Flip-Back Armrest
- 10. Seat
- Seat Height and Swivel 11. Adjustment Lever
- Seat Post 12.
- 13. Armrest Width Adjustment Knob
- 14. Motor Lock Lever
- 15. Rear Wheel Assembly Release Lever
- 16. Rear Wheel Assembly
- Tiller/Control Panel 17.

Armrests

Flip back 10" arm pad

All features may not be available with some scooter setups or in conjunction with another scooter feature. Please consult your supplier for more information. Your authorized supplier can also provide you with more information on accessories.

IV. NOTICE- READ BEFORE USE

A. CHOOSE THE RIGHT SCOOTER & SAFETY OPTIONS

Sunrise provides a choice of many power mobility devices to meet the needs of the rider. However, final selection of a scooter rests solely with you and your health care professional. Choosing the best scooter for you depends on such things as:

- 1. Your size, disability, strength, balance and coordination.
- 2. Your intended use, and your level of activity.
- 3. The types of hazards you must overcome in daily use (in areas where you are likely to use your scooter).
- 4. The need for options for your safety and comfort (such as positioning belts or special seat systems).

B. ADJUST SCOOTER TO YOUR ABILITY

You need to work with your doctor, nurse or therapist, and your supplier, to fit this scooter and adjust the controller settings for your level of function and ability.

C. REVIEW THIS MANUAL OFTEN

Before using this scooter you, and each person who may assist you, should read this entire Manual and make sure to follow all instructions. Review the warnings often, until they are second nature to you.

D. WARNINGS

The word "WARNING" refers to a hazard or unsafe practice that may cause severe injury or death to you or to other persons. The "Warnings" are in four main sections, as follows:

1. V — EMI

Here you will learn about electromagnetic interference and how it can affect your scooter.

2. VI — GENERAL WARNINGS

Here you will find a safety checklist and a summary of risks you need to be aware of before you ride this scooter.

3. VII — WARNINGS — COMPONENTS & OPTIONS

Here you will learn about your scooter. Consult your supplier and your health care professional to help you choose the best set-up and options for your safety.

4. XI — BATTERIES

Here you will learn about battery and charger safety, and how to avoid injury. **NOTE-** Where they apply, you will also find "Warnings" in other sections of this Manual.

V. EMI (ELECTROMAGNETIC INTERFERENCE)

AWARNING

Heed all warnings to reduce the risk of unintended brake release or scooter movement:

- 1. Beware of the danger from hand-held transceivers. Never turn on or use a hand-held transceiver while power to your scooter is on. Use extra care if you believe that such a device may be in use near your scooter.
- 2. Be aware of nearby radio or TV stations, and avoid coming close to them.
- 3. If unintended movement occurs, turn your scooter off as soon as it is safe to do so.

A. WHAT IS EMI?

AWARNING

- 1. EMI means: electromagnetic (EM) interference (I). EMI comes from radio wave sources such as radio transmitters and transceivers. (A "transceiver" is a device that both sends and receives radio wave signals).
- There are a number of sources of intense EMI in your daily environment. Some of these are obvious and easy to avoid. Others are not, and you may not be able to avoid them.
- Powered scooters may be susceptible to electromagnetic interference (EMI) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two way radios, and cellular phones.
- 4. EMI can also be produced by conducted sources or electro-static discharge (ESD).

B. WHAT EFFECT CAN EMI HAVE?

WARNING

- 1. EMI can cause your scooter, without warning, to:
- Release its brakes
- Move by itself
- Move in unintended directions
- If any of these occurs, it could result in severe injury to you or others.
- 2. EMI can damage the control system of your scooter. This could create a safety hazard, and lead to costly repairs.

C. SOURCES OF EMI

AWARNING

The sources of EMI fall into three broad types:

1. Hand-Held Transceivers:

The antenna is usually mounted directly on the unit. These include:

- Citizens band (CB) radios
- "Walkie-talkies"
- Security, fire and police radios
- Cellular phones
- Lap-top computers with phone or fax
- Other personal communication devices

NOTE- These devices can transmit signals while they are on, even if not in use.

2. Medium-Range Mobile Transceivers:

These include two-way radios used in police cars, fire trucks, ambulances and taxi cabs. The antenna is usually mounted on the outside of the vehicle.

3. Long-Range Transceivers:

These include commercial radio and TV broadcast antenna towers and amateur (HAM) radios. Note: The following are not likely to cause EMI problems: Lap-top computers (without phone or fax), Cordless phones, TV sets or AM/FM radios, CD or tape players. 7

D. DISTANCE FROM THE SOURCE

EM energy rapidly becomes more intense as you get closer to the source. For this reason, EMI from hand-held devices is of special concern. (See C.1) A person using one of these devices can bring high levels of EM energy very close to your scooter without you knowing it.

E. IMMUNITY LEVEL

AWARNING

- 1. The level of EM energy is measured in volts per meter (V/m). Every power scooter can resist EMI up to a certain level. This is called its "immunity level".
- The higher the immunity level, the less the risk of EMI. It is believed that a 20 V/m immunity level will protect the power scooter user from the more common sources of radio waves.
- 3. The configurations tested and found to be immune to at least 20 V/m are:
 - a. Guardian Ruby power wheelchair with a right-hand mounted Penny & Giles VSI integral controller, fish-on seat, flip-down armrests, solid flip-up footplate and 12AH battery pack.
 - b. Guardian Ruby 11 power wheelchair with a right-hand mounted Penny & Giles VSI integral controller, highback seat, flip-back armrests, solid flip-up footplate and 12AH battery pack.
 - c. Guardian Garnet with a control pod, fish-on seat and 10AH battery pack.

Individuals with physical limitations requiring the use of a specialty control input device known not to be immune to 20V/m, or not known, should exercise extra care around known sources of EMI.

AWARNING

There is no way to know the effect on EMI if you add accessories or modify this scooter. Any change to your scooter may increase the risk of EMI. Parts from other suppliers have unknown EMI properties.

F. REPORT ALL SUSPECTED EMI INCIDENTS

AWARNING

You should promptly report any unintended movement or brake release. Be sure to indicate whether there was a radio wave source near your scooter at the time. Contact: Sunrise Medical Customer Service Department at (800) 333-4000.

VI. GENERAL WARNINGS

AWARNING

Heed all warnings in this section. If you fail to do so a fall, tip-over or loss of control may occur and cause severe injury to you or others.

A. NOTICE TO RIDER

AWARNING

- 1. Before using this scooter, you should be trained in its safe use by your health care professional.
- 2. Every scooter is different. Take the time to learn the feel of this scooter before you begin riding.
- 3. Be aware that you must develop your own methods for the safe use of this scooter that are best suited to your level of function and ability.
- 4. Have someone help you practice bending, reaching and transferring until you learn how to do them safely.
- 5. Never try a new maneuver on your own unless you are sure it is safe.
- 6. Get to know the areas where you plan to use your scooter. Look for hazards and learn how to avoid them.
- 7. Do not allow additional riders on the scooter, armrests or chassis. Doing so may result in injury or damage.

B. NOTICE TO ATTENDANTS

AWARNING

Make sure you heed all warnings and follow all instructions in each section of this manual. (Be aware that warnings that apply to the rider also apply to you).

Notes:

- 1. You need to work with the rider and the rider's doctor, nurse or therapist, to develop safe methods best suited to your abilities and those of the rider.
- 2. To manually push the scooter you must release the motor locks.
- Make sure you have full control over the scooter when you release the motor locks. When you do so the scooter will not have brakes.
- 3. Propel this scooter by the armrest supports only. If using a seat frame, propel the scooter by the push handles on the top of the backrest posts. They provide secure points for you to hold the rear of the scooter to prevent a fall or tip-over.

C. WEIGHT LIMIT

AWARNING

- 1. Never exceed a total weight of 250 lbs/113.6 kg for rider plus items carried.
- 2. Never use this scooter for weight training if the total weight (rider plus additional weights) exceeds 250 lbs/113.6 kg.
- 3. Exceeding the weight limit is likely to damage the seat, frame, or fasteners and may cause severe injury to you or others from scooter failure.
- 4. Exceeding the weight limit will void the warranty.

D. EMI

Read Section V to learn about EMI. To reduce the risk of unintended brake release or scooter movement:

- 1. Never turn on or use a hand-held transceiver while power to your scooter is on. Use extra care if you believe that such a device may be in use near your scooter.
- 2. Be aware of nearby radio or TV stations, and avoid coming close to them.
- 3. If unintended movement or brake release occurs, turn your scooter off as soon as it is safe.

E. SAFETY CHECK-LIST

Before each use of this scooter:

- Make sure the scooter operates smoothly. Check for noise, vibration, or a change in ease of use. (They may indicate low tire pressure, loose fasteners, or damage to your scooter). If you detect a problem, make sure to repair or adjust the scooter. Deferring repair or adjustment could increase the risk for injury. Your supplier can help you find and correct the problem.
- Make sure batteries are charged. Green lights on charge indicator will light up (or charge indicator will indicate a full charge) when charge is full. Yellow lights indicate battery charge level is getting low. Red lights indicate batteries are in immediate need of charging.

F. CHANGES & ADJUSTMENTS

AWARNING

Never use non-Guardian parts or make changes to your scooter unless authorized by Sunrise. (Doing so will void the Warranty and may create a safety hazard).

- 1. If you modify or adjust this scooter it may increase the risk of a fall or tip-over.
- 2. Modifications unauthorized by Sunrise constitutes remanufacturing of the scooter. This voids the warranty. The rider then assumes all future liability for the scooter.

G. WHEN SEATED IN A PARKED SCOOTER

1. Always turn off all power to your scooter when you are parked, even for a moment. This will prevent:

•Accidental movement from contact with the control pod by you or others.

•Unintended brake release or movement from EMI sources. (See Section V)

 Make sure that persons who help you (for example, store clerks) are aware of the control pod and do not touch it. If they do, your scooter may move suddenly when you do not expect it.

H. ENVIRONMENTAL CONDITIONS

Your scooter is not designed for use in a heavy rain storm, or in snowy or icy conditions.

- 1. Contact with water or excessive moisture can cause an electrical malfunction. The frame, motors and other scooter parts are not watertight and may rust or corrode from the inside. To avoid a scooter failure:
 - Minimize exposure of your scooter to a rain storm or very wet conditions.
 - Never take your scooter into a shower, tub, pool or sauna.
 - Do not use your scooter in fresh or salt water (such as at the edge of a stream, lake, or ocean).
 - Make sure shroud cover is secure.
 - Make sure all electrical connections are secure.
 - Dry the scooter as soon as you can if it gets wet, or if you use water to clean it.

- Proceed slowly and use extra care if you must operate your scooter on a wet or slick surface.
 - Do so only if you are sure it is safe.
 - Stop if one or both main wheels lose traction. If this occurs, you may lose control of your scooter or fall.
 - Never operate your scooter on a slope or ramp if there is snow, ice, water or oil film present.
 - When in doubt, have someone help you.
- 3. When not in use, keep your scooter in a clean, dry place.

AWARNING

Extra caution should be used when employing the disc switch or the proximity head array as control devices. These two devices are susceptible to malfunction when wet.

I. TERRAIN

AWARNING

- 1. This scooter is designed for use on firm, even surfaces such as concrete, asphalt and indoor flooring.
- 2. Do not operate your scooter in sand, loose soil or over rough terrain. Doing so may damage wheels, bearings, axles or motors, or loosen fasteners.

J. STREET USE

AWARNING

In most states, power scooters are not legal for use on public roads. Be alert to the danger of motor vehicles on roads or in parking lots.

- 1. At night, or when it is hard to see, use reflective tape on your scooter and clothing.
- It may be hard for drivers to see you. Make eye contact with drivers before you proceed. When in doubt, yield until you are sure it is safe.

K. MOTOR VEHICLE SAFETY

AWARNING

To date, the U.S. Department of Transportation has not approved any tie down system for transporting a scooter in a motor vehicle.

- 1. Never sit in this scooter while in a moving vehicle. In an accident or sudden stop you may be thrown from the scooter.
- 2. Always move to an approved vehicle seat. You must be secured with proper motor vehicle restraints.
- 3. Never transport this scooter in the front seat of a vehicle. It may shift and interfere with the driver.
- 4. Always secure this scooter so that it cannot roll or shift.

L. CENTER OF BALANCE

AWARNING

The point where this scooter will tip forward, back or to the side depends on its center of balance and stability.

The Center Of Balance Is Affected By:

- 1. The seat height and seat angle.
- 2. A change in your body position, posture or weight distribution.
- 3. Using this scooter on a ramp or slope.
- 4. The use of a back pack or other options, and the amount of added weight.

To Reduce The Risk Of A Fall Or Tip-Over:

1. Consult your supplier for information on modifications authorized by Sunrise before you modify or adjust this scooter.

NOTE- You may need to make additional changes to correct the center of balance.

2. Use extreme care until you know the balance points of this scooter and how to avoid a fall or tip-over.

M. TRANSFERS

AWARNING

It is dangerous to transfer on your own. It requires good balance and agility. Be aware that there is a point during every transfer when the scooter seat is not below you. To avoid a fall:

- Always turn off power before you transfer to or from your scooter. If you fail to do so you may touch the joystick/control pod and cause your scooter to move when you do not expect it.
- 2. Make sure motor locks are engaged. This keeps the scooter from moving when you transfer.
- 3. Work with your health care professional to learn safe methods.
 - Learn how to position your body and how to support yourself during a transfer.
 - Have someone help you until you are sure you can do a safe transfer on your own.
- 4. Move your scooter as close as you can to the seat you are transferring to. If possible, use a transfer board.
- 5. Make sure armrests do not interfere.
- 6. Transfer as far back onto the seat surface as you can. This will reduce the risk that you will miss the seat or fall.

N. REACHING OR LEANING

AWARNING

Reaching or leaning affects the center of balance of your scooter. If done improperly, a fall or tip-over is likely. When in doubt, ask for help or use a device to extend your reach.

To Reduce the Risk of Injury and/or Damage to the Scooter:

- 1. Never reach or lean if you must shift your weight sideways or rise up off the seat.
- 2. Never reach or lean if you must move forward in your seat to do so. Always keep your buttocks in contact with the backrest.
- 3. Never reach with both hands (you may not be able to catch yourself to prevent a fall if you lose your balance).
- 4. Never try to pick up an object from the floor by reaching down between your knees.
- 5. Never put pressure on the foot platform while reaching. This may cause the scooter to tip if you lean too far.
- 6. Never reach or lean over the top of the seat back. This may damage the backrest and cause you to fall.

IF YOU MUST REACH OR LEAN, DO SO AT YOUR OWN RISK.

Remember to:

- 1. Move your scooter as close as you can to the object you wish to reach.
- 2. Turn off all power to your scooter. If you fail to do so, you may touch the control pod and cause your scooter to move when you do not expect it.
- 3. Firmly grasp an armrest with one hand. This will help to prevent a fall if the scooter tips.

O. DRESSING OR CHANGING CLOTHES

AWARNING

Be aware that your weight will shift if you dress or change clothes while seated in this scooter.

P. OBSTACLES

AWARNING

Obstacles you may have to overcome in daily use include door thresholds, lifts, ramps and hazards such as potholes and broken pavement. These can damage your scooter and may cause a fall, tip-over or loss of control.

- 1. Be aware that thresholds are very dangerous. (Even a small change in height may stop a caster wheel and cause your scooter to tip). You may need to:
 - Remove or cover threshold strips between rooms.
 - Install a ramp at entry or exit doors.
- 2. Keep your eyes moving when you ride; scan the area well ahead of your scooter.
- 3. Make sure the floor areas where you use this scooter are level and free of obstacles.
- 4. To help correct your center of balance:
 - Lean your upper body forward slightly as you go up over an obstacle.
 - Press your upper body backward as you go down from a higher to a lower level.

Q. DRIVING IN REVERSE

AWARNING

Use extra care when you drive your scooter in reverse. You may lose control or fall if one of the rear wheels hits an object.

- 1. Operate your scooter slowly and at an even speed.
- 2. Stop often and check to make sure your path is clear of obstacles.

R. RAMPS, SLOPES & SIDEHILLS

WARNING

The center of balance of your scooter changes when you are on a slope.

NOTE- "Slope" includes a ramp or sidehill. Your scooter is less stable when it is at an angle. Never use this scooter on a slope unless you are sure it is safe. When in doubt, have someone help you.

Beware Of:

- 1. Steep slopes. Do Not use this scooter on a slope steeper than 10%. (A 10% slope means: One foot in elevation for every ten feet of slope length).
- 2. Wet or slippery surfaces (such as when ice, snow, water or oil film is present). A loss of traction may cause a fall or tip-over.
- 3. A change in grade on a slope (or a lip, bump or depression). These may cause a fall or tip-over.
- 4. A drop-off at the bottom of a slope. (A drop-off of as small as 3/4 inch can stop a front caster and cause the scooter to tip forward).

S. TO REDUCE THE RISK OF A FALL, TIP-OVER OR LOSS OF CONTROL

- 1. Never use your scooter on a slope unless you are sure you can do so without losing traction.
- 2. Always go as straight up and as straight down as you can.
 - Do not "cut the corner" on a slope or ramp.
 - Do not turn or change direction on a slope.
- 3. Always stay in the center of the ramp. Make sure ramp is wide enough that you are not at risk that a wheel may roll off the side.
- 4. Lean or press your body uphill. This will help adjust for a change in the center of balance caused by the slope.
- 5. Keep your scooter moving at a slow, steady speed. Keep control over the scooter at all times.
 - On a descent, do not let your scooter accelerate beyond its normal speed.
 - If the scooter picks up speed, center the joystick to slow down or stop.
- NOTE- The solid state controller of your scooter has a logic system that will help control your speed when driving on a slope or uphill.
 - If you stop, re-start slowly.

T. RAMPS AT HOME & WORK

AWARNING

Make sure ramps meet all Building Codes for your area.

- 1. For your safety, have a licensed contractor build or remodel ramp to meet all standards.
- 2. **NOTE** The proper design will vary, depending on such things as: the length and height of the ramp; the need for an intermediate platform; landing size; doors and the direction of swing; and whether the ramp includes a turn or angle.

At A Minimum:

- 1. Open sides of ramp must have side rails to prevent your scooter from going over the edge.
- 2. Slope must not be steeper than one inch in height for every one foot of slope length.
- 3. Ramp surface must be even, and have a non-skid surface.
- 4. You may need to add a section at the top or bottom to avoid a lip or drop-off.
- 5. Ramp must be sturdy. Add bracing if needed, so ramp does not "bow" when you ride on it.

U. WHEELCHAIR/SCOOTER LIFTS

AWARNING

Wheelchair/Scooter lifts are used in vans, buses, and buildings to help you move from one level to another.

- Always turn off all power to your scooter when you are on a lift. If you fail to do so, you may touch the control pod by accident and cause your scooter to drive off the platform. (Be aware that a "roll-stop" at the end of the platform may not prevent this).
- 2. Make sure there is not a lip or drop-off at the top or bottom of the platform. These may cause a fall or tip-over. When in doubt, have someone help you.
- 3. Always secure the rider with a positioning belt to help prevent falls during transfers.
- 4. Avoid moving forward if a wheel is "hung up" on the lip of the ramp. Backup, reposition the caster for a more direct approach and slowly try again.

V. CURBS & SINGLE STEPS

AWARNING

- 1. Your scooter is not designed to drive up or down a curb or step more than 1/2 inch high. Doing so may:
 - Result in a fall or tip-over.
 - Damage the frame, wheels, axles or other scooter parts, or loosen fasteners.
- 2. To prevent a fall or tip-over, use wheelchair/scooter access ramps or have someone help you.
- 3. If you must climb or descend a curb or step alone do so at your own risk and use extreme care.
 - Go as straight up or straight down as you can. Never turn or climb or descend at an angle as a fall or tip-over is likely.
 - Proceed slowly, at a steady speed.
- Make sure that persons who assist you review the "Tips For Attendants" and heed all warnings.
- 5. Avoid driving along curb edges and drop-offs. A minimum distance from the edge of 18" is recommended.

W. STAIRS

WARNING

Never use this scooter to go up or down stairs, even with an attendant. Doing so is likely to cause a fall or tip-over.

X. ESCALATORS

AWARNING

Never take this scooter on an escalator, even with an attendant. Doing so is likely to cause a fall or tip-over.

VII. WARNINGS: COMPONENTS & OPTIONS

WARNING

Note: If you use parts or make changes not authorized by Sunrise it may create a safety hazard and will void the Warranty.

A. ARMRESTS

WARNING

Armrests flip back/down and cannot be used to lift scooter or the seat.

- 1. Never lift this scooter by its armrests.
- 2. Lift this scooter only by non-detachable parts of the main frame.

B. BATTERIES

AWARNING

- 1. Only an approved battery case should be used in this device.
- 2. To prevent an acid spill, always keep battery case upright. (wet cell batteries only)
- 3. Never smoke or hold an open flame near battery case. They are a known explosion hazard.
- 4. Read all of section XI Batteries before attempting to change or charge batteries.
- 5. Always remove batteries using straps or handle provided. Pinched fingers may occur if the batteries are removed by grasping the battery casings.

C. CUSHIONS

AWARNING

- 1. Guardian seats are designed for comfort, not specifically for the relief of pressure.
- If you suffer from pressure sores, or if you are at risk that they will occur, you may need a special seat system such as can be provided by the Seat Frame, or a device to control your posture.
 - Consult your doctor, nurse or therapist to find out if you need such a device for your well-being.

D. FASTENERS

AWARNING

Many of the screws, bolts and nuts on this scooter are special high-strength fasteners. Use of improper fasteners may cause your scooter to fail.

- 1. Only use fasteners provided by Sunrise.
- 2. If fasteners become loose, tighten them as soon as you can.
- 3. Over- or under-tightened fasteners may fail or cause damage to scooter parts.
 - See Section IX, "Set-Up, Adjustment & Use", for proper torque settings.

F. MOTOR LOCKS

AWARNING

- 1. Do not engage or disengage motor locks unless power to the scooter is off.
- Be aware that the scooter will not have brakes when motor locks are in the freewheel position.
- 3. Make sure that the person pushing the scooter has full control when motor locks are disengaged.

G. ON/OFF SWITCH

AWARNING

- 1. Never use the ON/OFF switch to stop the scooter except in an emergency. This will result in an abrupt stop and may cause you to fall.
- 2. To slow your scooter to a stop, return the control pod to neutral.

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H. SEATING SYSTEMS

WARNING

- 1. Use of a seating system not approved by Sunrise may alter the center of balance of this scooter. This may cause a fall or tip-over.
- Never change the seating system of your scooter unless you consult your supplier first.

I. UPHOLSTERY FABRIC

AWARNING

- 1. Replace worn or torn fabric of the seat as soon as you can. If you fail to do so, the seat may fail and cause you to fall. Worn fabrics may increase the potential for a fire hazard.
- 2. Fabric will deteriorate with age and use. Look for fraying, thin spots, or stretching of fabric at rivet holes. Replace fabric as required.
- 3. Be aware that washing may reduce flame retardation of the fabric.

J. WIRING

AWARNING

Never pull on cables directly. This can result in wires breaking inside the connector or harness. To remove a plug or connector, always grasp the plug or connector itself.

VIII. TIPS FOR ATTENDANTS

WARNING

- 1. Persons who help a rider do one of the following tasks should review and heed the warnings "Notice to Attendants" and all warnings in this Manual for that task.
- 2. The "Tips" that follow are suggestions only. Be aware that you will need to learn safe methods best suited to the rider and to your abilities. Consult your health care professional for instructions.

A. TO CLIMB A CURB OR SINGLE STEP

AWARNING

The following is one way to safely help a rider climb a curb or single step going FORWARD:

- 1. Stay behind the scooter.
- 2. Face the curb and tilt the scooter up on the rear wheels so that the front caster clears the curb or step.
- 3. Move forward, placing the front caster on the upper level as soon as you are sure they are past the edge.
- 4. Continue forward until the rear wheels contact the face of the curb or step. Lift and roll the rear wheels to the upper level.

B. TO DESCEND A CURB OR SINGLE STEP

AWARNING

The following is one way to safely help a rider descend a curb or single step going BACKWARD:

- 1. Stay at the rear of the scooter.
- 2. Several feet before you reach the edge of the curb or step, turn the scooter around and pull it backward.
- 3. Proceed carefully. Look over your shoulder and carefully step back until you are off the curb or stair and standing on the lower level.
- 4. Pull the scooter toward you until the rear wheels reach the edge of the curb or step. Then allow the rear wheels to slowly roll down onto the lower level.
- 5. When the rear wheels are safely on the lower level, tilt the scooter back to its balance point. This will lift the front casters off the curb or step.
- 6. Keep the scooter in balance and take small steps backward. Be sure to look where you are going. Turn the scooter around and gently lower front casters to the ground.

IX. SET-UP, ADJUSTMENT & USE

NOTES:

1. Work Surface For Set-Up:

Use a flat surface, such as a table, to assemble, adjust and check your scooter. This makes the steps easier and helps ensure a correct set-up.

2. Fasteners:

- Many of the screws and bolts on this scooter are special high-strength fasteners and may have special coatings.
- Many nuts are of the Nylock type. They have a plastic insert to help prevent loosening.

- 1. Use of improper fasteners may cause the scooter to fail.
- 2. Over- or under-tightened fasteners may fail or cause damage to parts.
- 3. If bolts or screws become loose, tighten them as soon as you can. Loose bolts or screws can cause damage to other parts causing them to fail.

3. Washers & Spacers:

- Note the position of washers and spacers before disassembly.
- To avoid damage to the frame, replace all washers and spacers when you reassemble parts.

4. Torque Settings:

• A torque setting is the optimal tightening for a particular fastener. Use a torque wrench that measures 120 inch-pounds to secure screws, nuts and bolts on this scooter.

NOTE- Unless otherwise noted, use a torque setting of 120 inch-pounds for all fasteners.

TOOLS YOU WILL NEED

1. Basic Tool Kit:

To set-up, adjust and maintain your scooter you will need the following tools:

- 3mm Allen Wrench
- 5mm Allen Wrench
- 6mm Allen Wrench
- 8mm Allen Wrench
- 13mm Open-end Wrench
- Phillips screwdriver #2
- 17mm Socket Wrench

You can obtain a multi-purpose tool kit from Sunrise, or buy the tools you need from a hardware store.

2. Torque Wrench:

If you plan to adjust and maintain this scooter yourself, Sunrise recommends that you use a torque wrench.

NOTE- The wrench must measure inch-pounds. You can buy a torque wrench and proper sockets from a hardware store.

AWARNING

When properly set up, this scooter will operate smoothly. Check to see that all components work properly. If you detect a problem, be sure to correct it before use.

A. BATTERY CASE REMOVAL (Figure 1)

To remove the batteries for transporting or servicing:

Pull up on battery pack handle (A), disengaging Velcro[®].

NOTE- Removing the scooter seat may provide better access to the battery case.

AWARNING

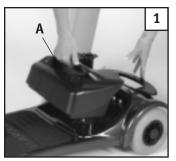
Batteries may weigh up to 55 lbs. Care must be taken to avoid injury when lifting up on battery case.

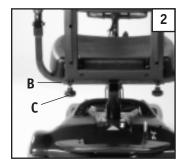
B. ARMREST INSTALLATION AND WIDTH ADJUSTMENT (Figure 2)

- a. Insert armrest support inside of 1" square tube (B) located on the underside of the seat.
- b. Repeat for other side of seat.
- c. Position armrest at appropriate width.
- d. Tighten knob screws (C) on square tube.

AWARNING

Avoid pinching fingers in the flip-back armrest.





C. TILLER

1. Tiller Adjustment (Figure 3)

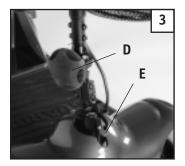
The scooter features an adjustable tiller which allows you to lock the tiller in the most comfortable driving position. This feature also lets you fold the tiller down fully, for transportation and stowage.

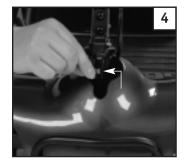
- 1. Support the tiller with one hand.
- 2. Loosen soft-sided tiller knob (D) to release teeth integration.
- 3. Move the tiller to the desired angle.
- 4. Tighten tiller knob until teeth are fully engaged.

2. Tiller Lock Mechanism (Figures 3 & 4)

The tiller lock mechanim locks the tiller and front wheels in a fixed position. Locking the tiller will ease assembly/disassembly and transportation of the scooter.

- a. Locate the red tiller lock (E) on the front of the tiller.
- b. Push the lock up and over to lock the tiller. (Fig. 4)
- c. Reverse to unlock.





D. SEAT REMOVAL (Figure 5)

- 1. Lift red lever on right side of seat (A).
- 2. Lift seat off.



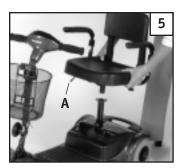
- 1. Lift red lever on right side of seat (A).
- 2. Swivel seat to desired position.
- 3. Release red lever when seat clicks into one of four swivel positions.

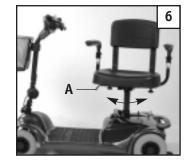
F. SEAT HEIGHT ADJUSTMENT (Figure 7)

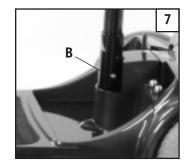
- 1. Remove seat and lift off battery case to access the seat post pin.
- 2. Remove pin (B) from seat post.
- 3. Move the post up or down to select the desired seat height.
- 4. Reinsert the seat post pin.

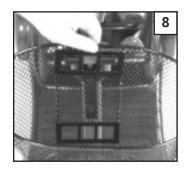
G. BASKET INSTALLATION AND REMOVAL (Figure 8)

- 1. To install the basket, place the openings in the back of the basket over the hooks on the front of the tiller as shown.
- 2. To remove, lift the basket up and off the hooks.





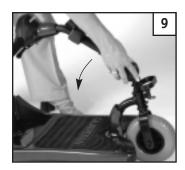


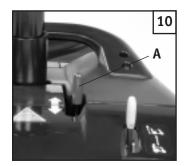


H. DISASSEMBLY (Figures 9 & 10)

Your scooter disassembles quickly and easily for transportation or storage.

- 1. Remove seat.
- 2. Lift off the battery.
- 3. Lower the tiller and then lock in place. (Fig. 9) (Locking the tiller stabilizes the unit making assembly, disassembly and transportation easier. The lowered and locked tiller also provides a grip point to easily lift the main body off the rear wheel assembly.)
- 4. Push the red quick-release lever (A) rearward and lift the main body off the rear wheel assembly.





X. OPERATING GUIDE

A. CIRCUIT BREAKERS (Figure 1)

1. Notes:

Your Guardian Trek has a circuit breaker on the battery case (A).

- In the unlikely event of a short circuit or heavy overload, all power to your scooter will be shut off.
- To reset your scooter, depress the circuit breaker button located on the front of the battery case. A few minutes wait is required before the circuit breaker will reset.

2. Repeated Shutdown:

If the scooter continues to shut down after resetting, have it serviced by a supplier.

B. TILLER CONTROL FUNCTIONS (Figure 2)

NOTE- To preserve battery charge, your scooter will go into sleep mode after being left idle 5 minutes. To remove from sleep, turn key off and then back on.

1. Hand Controls

All of the drive controls for the scooter are to be found on the Tiller Control Box.

2. The Pre-Set Speed Knob

Turning the knob to the left reduces your available maximum speed. Turning it to the right increases the available maximum speed.

3. The Battery Gauge

This gives an approximation of battery charge.

The gauge is marked from "E" empty to "F" full. For extra clarity there is a colored graduated scale ranging from RED (Empty) through YELLOW to GREEN (Full).

As the scooter moves over differing terrain, the battery gauge will dip up and down. This is normal. For a more accurate indication, stop the scooter and note the reading.

GREEN indicates ready for use.

YELLOW indicates batteries to be charged as soon as possible.

RED indicates charge batteries immediately.

NOTE- If you find that your battery gauge has gone into the red while you are out and about, you can increase the remaining range of your scooter by reducing your maximum available speed, but you MUST charge your scooter as soon as you can.

4. Throttle Lever

The throttle lever offers finger-tip control of your scooter. It controls the speed as well as forward and reverse motion. Pushing the right-hand side of the lever away from you moves the scooter forwards. Pushing the left-hand side of the lever away from you moves the scooter in reverse and sounds a reversing beeper. The more you move the lever the more your speed increases up to its pre-set maximum. It is possible to operate your scooter using one side of the throttle lever. To do this you must PUSH and PULL on the chosen side of the throttle lever.

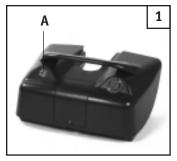
NOTE- One-hand operation requires carefull concentration and is more tiring than normal operation.

5. Horn Button

Pressing the yellow horn button operates an audible beep. Use this function to warn pedestrians of your presence when necessary.

6. Key On-Off Switch

Make sure that this switch is in the OFF position BEFORE getting on or off the scooter. Switching this switch to OFF while driving will cause the scooter to stop very abruptly. This is not recommended.





C. MOTOR LOCKS (Figure 3)

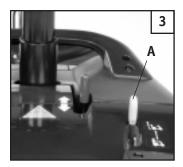
Disconnect the motor locks when you need to manually push the scooter. (For example, in an emergency, or if batteries fail).

AWARNING

- 1. Do not disengage motor locks unless power to the scooter is off.
- 2. With either one or both brakes released, the scooter will not operate.
- 3. Be aware that the scooter will not have brakes in the free-wheel position.
- 4. Make sure that the person pushing the scooter has full control when motor locks are disengaged.

Engage/Release Motor Locks

- 1. The yellow motor lock lever is located on the rear of the scooter (A).
- 2. To release the motor locks, push the motor lock lever forward.
- 3. To engage the motor locks, push the motor lock lever backward.



XI. BATTERIES

A. INTRODUCTION

1. Notes:

- Batteries supply the power for your scooter. They contain a finite amount of energy and have limits on how long they can store and supply energy.
- You can charge batteries only a certain number of times before they will fail and no longer hold a charge.
- For answers to questions about batteries, consult your supplier.

2. Use Proper Battery Case:

- Your scooter operates on two 12/10 A batteries in a battery case.
- Only use a battery case.

3. Breaking In:

- A battery requires "breaking-in" for the first 6 to 12 charges. It will not accept a full charge for this period.
- It is best to limit the length of your trips until you break the batteries in and you know the range of your scooter.

4. Discharged Batteries:

- **Never** allow a battery to completely discharge. If you operate your scooter until it has almost stopped, you will greatly reduce the life of your batteries.
- **Never** let a battery sit in a discharged condition. Give unused or stored batteries a full charge once per month.
- Always fully charge the batteries. Avoid "topping off" with frequent charges.

Never connect a life support or auxiliary device to a scooter battery. The electrical system may fail and result in severe injury to or death of rider.

B. BATTERY CHARGER

A battery charger produces a direct current (DC). When applied to a discharged battery, this reverses the chemical reaction that led to its discharge.

1. Charge Rate. How fast a battery will charge depends on:

- Its electrical capacity, state of charge, electrolyte temperature, and internal condition.
- The DC output of the charger. (The charge rate will vary if the alternating current (AC) supply is higher or lower than 110 volts).

2. CAUTION- To Avoid Damage to the Charger

- Never expose charger to rain or snow.
- Never unplug charger by pulling on the electrical cord. This will damage the cord.
- **Never** open a charger or attempt to repair it yourself. Return charger to Sunrise or have repairs made only by a qualified person.
- Keep cord out of the way, where it will not be stepped on, tripped over, or damaged.

3. CAUTION- To Avoid Damage to the Battery

- Make sure you use the correct setting for sealed (gel) batteries (located on the offboard charger).
- **Never** charge a frozen battery. A fully charged battery will rarely freeze, but the fluid in a discharged battery can freeze at 16 degrees Fahrenheit (minus 9 degrees Centigrade). If you suspect a battery is frozen, thaw it before charging.

AWARNING

Lead acid batteries generate explosive gas while charging. Completely read and follow all warnings about the batteries in this user instruction manual and any labels applied to the product. Failure to do so could result in fire, explosion, injury and/or death.

C. ACID BURNS (UNSEALED WET CELL BATTERIES)

AWARNING

- 1. Use extreme care not to spill acid when you handle wet cell batteries. Keep batteries upright.
- 2. Avoid contact of acid with bare skin or clothing.
- 3. Always wear rubber gloves and safety glasses when you handle batteries.
- 4. If acid contacts your skin or clothing, wash immediately with soap and water.
- 5. If acid contacts your eyes, immediately flood eyes with cold running water for at least 15 minutes. Seek medical attention immediately.

Sunrise Medical does not recommend the use of wet cell batteries on this scooter.

D. CONNECTING BATTERIES IN BATTERY WELL

- 1. Each battery weighs up to 22 lbs. Take care to avoid injury when lifting.
- 2. Keep batteries upright. Take care not to spill acid (wet cell batteries).
- 3. Always wear rubber gloves and safety glasses when you handle batteries.
- 4. Before working around batteries, remove all metal personal effects, such as necklaces, rings, watches, pins, and other metal jewelry that might contact battery terminal and cause a short.

AWARNING

Never make direct contact across both battery terminals, as an explosion may occur. A spark may result in an explosion and/or fire resulting in severe injury or death.

E. CHARGING BATTERIES

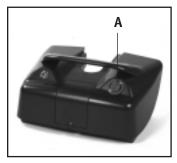
AWARNING

To avoid the risk of severe injury or death from electrical shock, fire or explosion while charging:

- 1. Never connect charger to a 240 volt source. The main input voltage is 110 volts.
- 2. **Never** touch the charger after it is connected to an electrical outlet. This may cause electrical shock.
 - **Never** connect or disconnect charger from battery while there is power to the charger.
- 3. **Never** use an extension cord. Use of an improper cord could damage the charger or cause a fire or electrical shock.
- 4. A battery emits explosive hydrogen gas during charging. To reduce the risk of fire or explosion:
 - Make sure area is well vented. Never charge battery in a closed-in area.
 - Never smoke or allow a spark, flame or high heat near battery during charging.
 - Never allow metal tools or scooter parts to make direct contact across both battery terminals.
- 5. Never look directly into cells when charging battery (wet cell batteries).

ALWAYS:

- 1. Use the charger that comes with your scooter. Read and follow all instructions and warnings.
- 2. Make sure room is well ventilated.
- 3. Turn off all power to your scooter.
- 4. Connect and disconnect battery cables with caution.
- 5. Make sure to allow enough time to fully charge batteries.
- NOTE- Batteries should never be left for long periods in the discharged state. Unused or stored batteries should be given a charge once per month.
 - 6. Or, use the off-board charger by plugging it into the charger port on the battery case (A).



Off-board charger port

F. DISPOSING OF BATTERIES

AWARNING

- 1. All batteries once they have reached the end of their useful life are deemed to be hazardous waste.
- 2. For further information on handling and recycling contact your local recycling authority.
- 3. Always dispose of product through a recognized agent.

XII. MAINTENANCE

A. NOTES

- 1. Proper maintenance will improve performance and extend the useful life of your scooter.
- 2. Clean your scooter regularly. This will help you find loose or worn parts and will make your scooter easier to use.
- To protect your investment, have all major service and repair work done by your supplier.

AWARNING

- 1. Your scooter needs regular maintenance for peak performance and to avoid injury from scooter failure, damage or premature wear.
- 2. Inspect and maintain this scooter strictly per the "Maintenance Chart".
- 3. If you detect a problem, make sure to service or repair the scooter before use.
- 4. At least once a year, have a complete safety check and service of your scooter performed by a supplier.

B. CLEANING

1. Frame:

• Clean the frame with mild soapy water monthly.

2. Motors:

- Clean around motor area weekly with a slightly damp (not wet) cloth.
- Wipe off or blow away any fluff, dust, or dirt on or around the motors.
- Note: You do not need to grease or oil the scooter.

3. Upholstery:

- Hand-wash only as needed. Machine washing may damage fabric.
- Drip-dry only. Heat from a dryer may damage fabric.

NOTE- Washing the fabric may decrease fire retardant properties.

C. STORAGE TIPS

- 1. Store your scooter in a clean, dry area. If you fail to do so, parts may rust or corrode.
- 2. Before using your scooter, make sure it is in proper working order. Inspect and service all items on the "Maintenance Chart".
- 3. If you store this scooter for more than three months, have it inspected by a supplier before use.

D. BATTERY MAINTENANCE

AWARNING

- 1. To prevent an acid spill, always keep batteries upright. (wet cell batteries)
- 2. Never smoke or hold an open flame near batteries.
- 3. Always wear rubber gloves and safety glasses when you handle batteries.

1. Maintenance Schedule:

This varies for different types of batteries. Always follow the instructions supplied with your batteries.

NOTE- Always wear rubber gloves and safety glasses when you handle or service batteries.

2. For Answers To Questions: Contact your supplier.

E. ORDERING PARTS

When you order parts, provide the following:

- 1. Model of scooter
- 2. Serial number of scooter
- 3. Left hand or right hand control
- 4. Part number, description and quantity of parts you need.
- 5. State reason for replacement.

F. MAINTENANCE CHART

You should check the items on this chart at the indicated intervals. If any of the items are loose, worn, bent or distorted, immediately have them checked and/or repaired by your authorized Sunrise supplier. Frequent maintenance and servicing will improve performance and extend scooter life, and help prevent injuries.

CHECK	Daily	Weekly	Monthly	Quarterly	Annually
Charge batteries	1				
Check all moving parts for wear				1	
Inspect all nuts, bolts and fasteners for looseness or wear				1	
Inspect upholstery for wear				1	
Service by authorized supplier					1

XIII. SUNRISE LIMITED WARRANTY

1. FOR FIVE YEARS

We warrant the main frame of this scooter against defects in materials and workmanship for 5 years use of the first consumer purchaser.

2. ADDITIONAL WARRANTY

We warrant Sunrise-made components of this scooter against defects in materials and workmanship as follows:

- Motors, gear boxes and charger— For one (1) year from the date of first consumer purchase.
- b. All other original components (such as wheels, upholstery, plastic, rubber parts and painted surfaces)—For three (3) months from the date of first consumer purchase.

3. LIMITATIONS

- a. We do not warrant damage due to:
 - Neglect, misuse, or improper installation or repair.
 - Use of parts or changes not authorized by Sunrise.
 - Exceeding the weight limit of 250 lbs.
- b. This warranty is void if the original scooter serial number tag is removed or altered.
- c. This warranty applies in the USA only. Check with your supplier to find out if international warranties apply.

4. WHAT WE WILL DO

Our sole liability is to repair or replace covered parts. This is your only remedy for consequential damages.

5. WHAT YOU MUST DO

- a. Return the warranty card.
- b. Obtain from us, while this warranty is in effect, prior approval for return or repair of covered parts.
- c. Return the scooter or part(s), freight pre-paid, to Sunrise Mobility Products Division at: 2842 Business Park Ave., Fresno, CA 93727-1328.
- d. Pay the cost of labor to install or repair parts.

6. NOTICE TO CONSUMER

There are no other express warranties. To the extent permitted by law, any implied warranty (including a warranty of merchantability or fitness for a particular purpose) is limited to:

- a. One (1) year from the first consumer purchase, and
- b. Repair or replacement of the defective part only.

This warranty gives you certain legal rights. You may also have other rights that vary from state to state.



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