POWER CHAIR



Geo

(Item #’s S35001696, S35001697, S35002696, S35002697)

OWNER’S MANUAL

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1. PREFACE AND INTRODUCTION

Please carefully read this owner's manual before using the power chair. Improper use of the power chair could result in, injury.

This owner's manual includes operating instructions for every aspect of the power chair, including assembly instructions and how to deal with possible accidents.

◆ The symbols used in this manual are explained below:

Read carefully the notes marked with these symbols:

☠ Warning	Improper usage could result in serious injury or death
☞ Attention	Improper usage could lead to injury and/or damage to your power chair.
🕮 Suggestion	Follow these instructions to keep your power chair in a good operating order.

◆ This manual includes a copy of repair and maintenance record chart and warranty information. Please keep it in a safe place.

◆ If someone else uses the power chair, please make sure that you provide them with the instruction manual for his or her consideration.

◆ We reserve the right to make design modifications. As designs change some illustrations and pictures in the manual may not correspond to the power chair that you have purchased.

"Caution: Federal law restricts this device to sale by or on the order of a practitioner licensed by the law of the State in which he/she practices."

2. SAFETY NOTICE

2.1 BEFORE DRIVING

The user should become familiar with the usage and operation of this power chair before driving. Therefore, please always keep the following safety notices in mind.

- **For your safety, please follow these guidelines.**

  - ◆ Drive on the pavement, or pedestrian areas only.
  - ◆ Do not drive your power chair after consuming alcohol or when tired.
  - ◆ Please be careful when driving your power chair in low light. It has not been designed for use at night.
  - ◆ The power chair has been designed to operate on pavement for speeds up to 3.5mph.

- **Practice operating your power chair**

  Before using the power chair, familiarize yourself with the operation of your power chair.
  - ◆ Turn the speed dial to value 1 for your initial practice.
  - ◆ Be sure someone accompanies you for safety when operating you power chair for the first time.
  - ◆ Only use higher speed setting when you are confident that you can easily operate and control your power chair.

- **The Geo power Chair is only to be used by one person at a time**

  Do not carry passengers on your power chair. (including children)

- **Do not use this power chair to carry or haul goods**
  - ◆ The maximum weight with occupant is 250 lbs.

2.2 WHILE DRIVING

- **Carry out daily inspections.** Refer to the section “titled” “DAILY CHECKING”

- **Do not move your body out of the power chair while moving**
  - ◆ Such action may cause you to lose balance and risk injury from falling.
  - ◆ Pay attention that your clothes do not tangle in the wheels.

- **Do not use your power chair under any of the conditions.**
  - ◆ On roads with heavy traffic or roads that are operate, snow-covered, or icy.
  - ◆ Do not drive at night. Do not drive in rain or snow.
  - ◆ Do not drive your power chair in an "S" pattern or make erratic turns.
  - ◆ Do not take the power chair onto escalators.
  - ◆ UNDER NO CIRCUMSTANCES SHOULD THE POWER CHAIR BE USED AS A SEAT IN ANOTHER VEHICLE (CARS, BUSES, TRAINS, ETC).

- **About Mobile Phones and other electrical equipment**
  - ◆ Do not use a mobile phone or other wireless communication device while driving.
  - ◆ Always switch off the power chair and remove the ignition key before using a mobile phone.
  - ◆ Do not charge the mobile phone or any other electrical device from the power chair battery.

- **Automatic Power Shut Down**

  In order to avoid accidental battery run down, your power chair is equipped with an automatic power shut down. If the power chair is turned on, it will automatically turn off after remaining undisturbed for a period of thirty minutes. When this situation occurs, simply switch your power chair off and back on and it will be ready to use once again.

- **Ramps, inclines and drops**
  - ◆ Do not drive onto ramps that are steeper than the specified gradient. Refer to the section entitled "CLIMBING ANGLE" in "8. SPECIFICATION"
  - ◆ Always use a low speed setting when ascending or descending a gradient.
  - ◆ Do not drive on roads with large drops or potholes. Refer to the section entitled "MAX. GROUND CLEARANCE" in "8. SPECIFICATION".
  - ◆ Operate when driving on roads with inclines.
  - ◆ Do not make sudden turns when driving on gravel roads or ramps.
  - ◆ Always lean forward when climbing a steep gradient.

■ **Starting and Driving**

1. Make sure the seat is installed properly.
2. Fold down the armrests so that you can rest your arms.
3. Turn the power switch to "ON".
4. Check battery indicator to ensure proper power as necessary, Recharge the batteries.
5. Set the speed dial to a safe and comfortable speed.

6. Check the joystick lever to ensure it operates correctly.
7. Make sure the electromagnetic brake works correctly.

☠ Warning!

- ◆ Do not set in the freewheel mode when driving on a gradient.
- ◆ Always re-engage the anti-freewheel device before use. Fail to do so may result in injury.
- ◆ To protect your safety, the power will automatically cut off and electromagnetic brake system will activate while driving down a steep gradient. This will limit the speed to a safe level. Turn the power on again to re-start your power chair.
- ◆ **Maximum User Weight Limit**

  Refer to section titled "MAX. LOAD WEIGHT in "8. SPECIFICATION ". Overloading past The weight limit may lead to damage of your power chair or cause it to malfunction and will endanger your own safety. The warranty does not cover this type of damage.

☞ **Attention**

1. Avoid putting all of your weight on the footrest. This may cause the power chair to tip. Possibly resulting in injury.
2. Do not turn the power switch to OFF while driving as this will lead to an emergency stop and possible risk of accident and injury.
3. Do not set to the higher speeds while driving indoors.
4. Do not adjust the speed dial while driving; a sudden change in speed may cause danger to you and others, and may damage your power chair.
5. Do not place magnetic devices near the area of the controller as this could affect the safe operation of your power chair.
6. Demons while driving in heavy traffic or in crowded areas.
7. While backing up the power wheelchair, be aware of people or objects behind you.

■ **Stopping**

◆ Release the joystick control lever completely. The power chair will come to a stop.

◆ Turn the power switch to (OFF). Remove the key.

■ **Driving on the pavement**

- ◆ Ensure the speed limit switch is set to the slowest setting when using the power chair. This will limit the power wheelchair to a maximum speed of 3.5mph.

2. SAFETY NOTICE

◆ The speed switch can be set to the fastest setting for use on the road or on private ground.

Attention: When going up an incline, do not zigzag or drive at an angle. Drive straight up the inclined surface.

Always drive your power chair straight up the incline. This greatly reduces the possibility of a tip or a fall. Always exercise extreme caution when negotiating an incline.

Do not drive your power chair on an inclined surface if it is covered in ice or snow.

■Inclines and uneven terrain

When climbing an incline, try to keep your power chair moving. If you must stop, start up again slowly and then accelerate cautiously. When driving down an incline, do so slowly and in the forward direction only. If your power chair starts to move faster than you anticipated or desired it would, allow the chair to come to a complete stop by releasing the joystick. Push the joystick slightly forward and continue traveling slowly down the incline.

■Maximum recommended incline

The Geo Power chair has undergone extensive incline testing. Our results show that the maximum incline your Geo can safely climb is six degrees at maximum weight capacity. Six degrees is the angle of most handicap access ramps. Any attempt to climb a steeper slope may put your scooter into an unstable position.

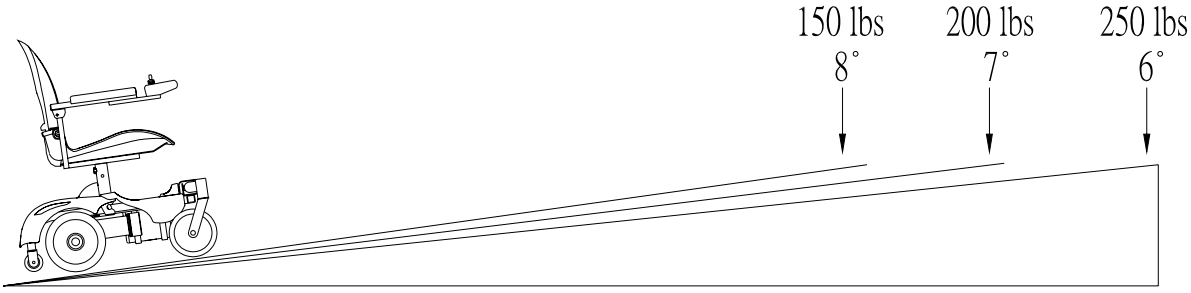


Figure 1. Maximum Recommended Incline Angles

2. SAFETY NOTICE

■ Labeling

Carefully read all the labeling on the power chair before driving it. Do not remove any labels from the power chair.



2. SAFETY NOTICE

This section provides the user with basic information that describes the problems with electromagnetic interference (EMI), known sources of EMI, protective measure to either lessen the possibility or exposure or to minimize the degree of exposure, and suggested action should unexpected or erratic movement occur.

Attention: It is very important that you read this information regarding the possible effects of electromagnetic interference on your Geo power chair.

■ ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES

Powered chairs may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones. The interference (from radio wave sources) can cause the power chair to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered wheelchair's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each power chair can resist EMI up to certain intensity; this is called its "immunity level". The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. This power chair model has as shipped as with no further modification an immunity level of 20 V/m without any accessories.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warning listed below, your risk to EMI will be minimized.
The sources of radiated EMI can be broadly classified into three types:

1. Hand-held portable transceivers (transmitter-receivers with the antenna mounted directly on the Transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie", security, fire, and police transceivers, cellular telephones and other personal communication devices.

Attention: Some cellular telephones and similar transmit signal while they are ON, even when not being used.

2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis.
3. Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

3. EMI

Attention: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, cassette and small appliances such as electric shavers and hair dryers are not , likely to cause EMI problems to your powered power chair .

■ POWERED POWER CHAIR ELECTROMAGNETIC INTERFERENCE (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very closer to the powered s control system of power chair while using these devices. This can affect powered power chair movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered power wheelchair.

■ WARNINGS

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect powered power chair and motorized power chair. Following the warnings listed below should reduce the chance of unintended brake release or powered power chair movement which could result in serious injury.

1. Do not operate hand-held transceivers-receivers, such as citizens band (CB) radios, or turn ON personal communication devices such as cellular phones, while the powered power chair is turned ON.
2. Be aware of nearby transmitters such as radio or TV stations, and try to avoid coming close to them.
3. If unintended movement or brake release occurs, turn the powered power chair OFF as soon as it is safe;
4. Be aware that adding accessories or components, or modifying the powered power chair, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered power chair).
5. Report all incidents of unintended movement or brake release to the powered power wheelchair manufacturer, and note whether there is a source of EMI nearby.

■ IMPORTANT INFORMATION

1. 20 Volts per meter (V/m) is a generally achievable and useful immunity level against EMI (the higher the level, the greater the protection);
2. This product has an immunity level of 20 V/m without any accessories and connected to it.

4. PARTS INTRODUCTION

PARTS DESCRIPTION

1. Controller
2. Armrest
3. Seatback
4. Seat
5. Drive Wheel
6. Caster Wheel
7. Footrest
8. Battery Pack



5. OPERATION

JOYSTICK AND CONTROLLER

Your power wheelchair is operated by a joystick and controller. The Geo is currently available with P&G VR 2 controller.



VSI Series CONTROL FUNCTIONS

1. ON/OFF Button
2. Battery Gauge
3. Joystick
4. Maximum Speed / Profile Indicator
5. Speed / Profile Decrease Button
6. Horn
7. Speed / Profile Increase Button

■ HOW TO OPERATE YOUR Geo

◆ ON/OFF Button

The ON/OFF button applies power to the control system electronics, which in turn supply power to the power chairs motor. Do not use the ON/OFF button to stop the power chair unless there is an emergency.

Attention:
If you use the ON/OFF button to stop the power chair, it may shorten the life of the drive components

◆ Bold

The battery gauge shows you that the power chair is switched on. It also indicates the operating status of the power chair.

◆ Joystick

The primary function of the joystick is to control the speed and direction of the power chair. The further you push the joystick from the center position the faster the power chair will move. When you release the joystick the brakes are automatically applied.

◆ Maximum Speed / Profile Indicator

This gauge shows the maximum speed setting of the power chair.
There are five speed settings step 1 is the lowest speed and step 5 is the highest speed.

5. OPERATION

◆ **Speed / Profile Decrease Button**

This button decreases the maximum speed setting or, if the control system is programmed for drive profile operation, selects a lower drive profile.

◆ **Horn Button**

Press the button to sound the horn.

◆ **Speed / Profile Increase Button**

This button increases the maximum speed setting or, if the control system is programmed for drive profile operation, selects a faster drive profile.

◆ **Lock/Unlock Power Chair**

· To lock the power chair.

1. While the control system is switched on, depress and hold the on/off button.
2. After 1 second the control system will beep. Now release the on/off button.
3. Deflect the joystick forwards until the control system beeps.
4. Deflect the joystick in reverse until the control system beeps.
5. Release the joystick, there will be a long beep.
6. The power chair is now locked.

· To unlock the power chair.

1. Use the on / off button to switch the control system on. The maximum speed / profile indicator will be rippling up and down.
2. Deflect the joystick forward until the control system beeps.
3. Deflect the joystick in reverse until the control system beeps.
4. Release the joystick, there will be a long beep.
5. The power chair is now unlocked.

Attention:

This feature is disabled by default; if required, it must be enabled by programming.

5. OPERATION

🕮 Suggestion

1. You should recharge the batteries after each time the power chair is used to ensure maximum range. The batteries should be charged at least once a week, even if the power chair is not used.
2. After charging or replacing a new battery, drive the power chair for 2-3 minutes to make sure the battery capacity is sufficient.
3. In cold weather, the battery may respond more slowly and the battery range may be reduced.
4. When driving on a gradient, the battery indicator light may move up and down. This is a normal phenomenon and should not cause concern.
5. Even with proper care and use of the battery it is natural for the battery's capacity to reduce with time. Therefore, the battery's range is about 50% of the range when the batteries were new; it is time for it to be replaced. Please contact your dealer about replacement batteries. If an old battery is used, it can lead to a rapid decline in performance.
6. The battery range will be reduced when driving frequently, on a slope or on rough terrain, as this requires a greater consumption of power.
7. The batteries have a six-month warranty covering manufacturing defect. This warranty does not cover faults due to incorrect battery recharging.

■ BRAKING

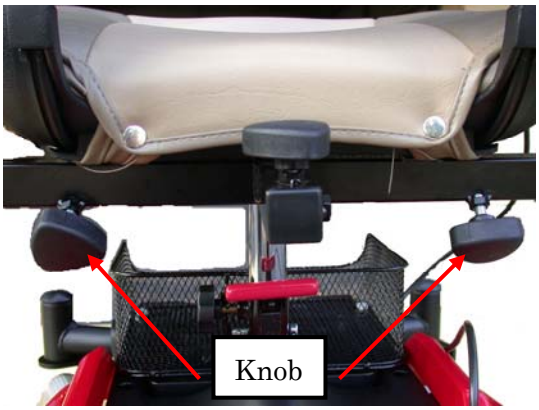
Electro-magnetic brake: Release the speed control lever completely, the electromagnetic brake will be activated automatically and the power chair will stop.

Warning

When on a gradient, NEVER switch the power chair to the freewheel mode. The electromagnetic brakes will not be applied and this may result in injury.

▌To adjust the armrest width

- ◆ Loosen the knobs
- ◆ Slide the armrests in or out to the desired width .
- ◆ Tighten the knobs.



To remove the seat

1. Turn the power OFF.
2. Make sure the Geo is not in freewheel mode.
3. Pull the seat rotate lever while pulling up on the seat to remove.

To change the seat height

1. Remove seat (See "**To remove the Seat")**
2. Remove the shroud.
3. Disengage and remove the seat height adjustment pin from the seat post.
4. Remove the height adjustment pin.
5. Raise or lower the post to the desired position.
6. Reinstall the seat height adjustment pin through the seat post and armrest post. (Bend the end of the pin lock and position it over the end the pin.)
7. Reinstall the shroud.
8. Reinstall the seat.

HOW TO ADJUST THE FOOTREST

To adjust the footrest angle

You can adjust the angle of the footrest with a hex wrench (M6).

- Turn the setscrew clockwise to raise the front of the footrest.
- Turn the setscrew clockwise to lower the front of the footrest.

To adjust the footrest height

- Remove the quick release pin.
- Adjust footboard to one(1) of three (3) mounting positions.
- Install the quick release pin. Make sure the detent ball is engaged with the outer edge of the tube.





5. OPERATION

HOW TO SET TO FREEWHEEL MODE

For your convenience, the Geo is equipped with a freewheel level. This level allows you to disengage the drive motors and maneuver the chair manually.

To engage the drive and take power chair out of freewheel

- Pull the freewheel lever to “DRIVE” position (left and right).
- Activation of the joystick automatically releases the brake so the powered Geo can be driven.

To disengage the drive and place power chair in freewheel

- Push the freewheel lever to “NEUTRAL” position (left and right).

> **☠ Warning**
> Do not use your Geo Power Chair while the drive motors are disengaged unless you are in the presence of an attendant! Do not disengage the drive motors when on an incline as the power chair may roll down, causing injury!

> **🕮 Suggestion**
> If a lever is difficult to move in either direction, gently rock the power chair back and front; the lever should then move to the desired position.

CIRCUIT BREAKERS

The Geo Power Chair has a circuit breaker protruding through the shroud cover at the right of the power chair.

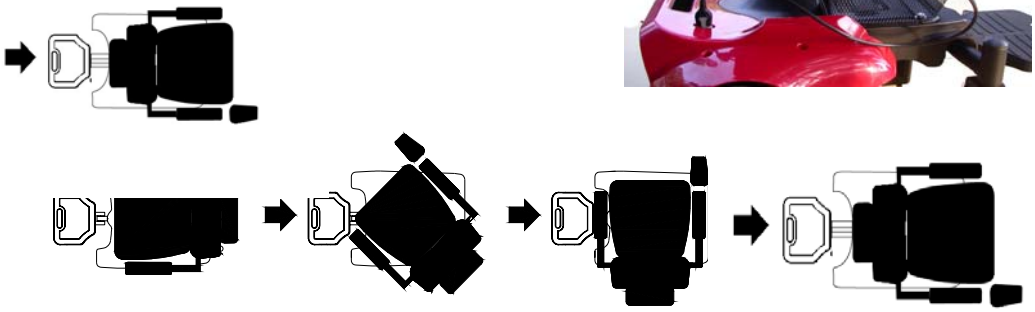
- In the unlikely event of a short circuit or heavy overload, all power to the power chair will be shut off.
- To reset, depress the circuit breaker button. Wait A few minutes for the circuit breaker.



5. OPERATION

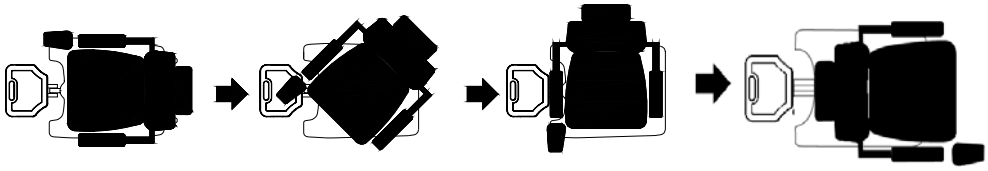
HOW TO ADJUST THE SEAT





Above: Seat shown in the four possible “ENGAGED” positions

Below: Seat shown in the four possible “REMOVABLE” positions



6. BATTERY CHARGING AND CARE

BATTERIES

◆ The Geo Power Chair uses two long- lasting, 12 volt, deep-cycle batteries. These batteries are sealed and maintenance free. Since they are sealed, there is no need to check the electrolyte (fluid) level.

Deep-cycle batteries are designed to handle a longer and deeper discharge. Though they are similar in appearance to automotive batteries, they are not interchangeable. Automotive batteries are not designed to handle a long, deep discharge and are unsafe for use in powered chairs.

- These batteries are maintenance free and there is no need to refill with water.
- Do not expose the battery to temperatures below 50° F or above 122° F when charging or storing the power chair. If a battery is used in a lower temperature than stated above, then there is a risk of causing damage or shortening the life of the battery.

☠ Warning

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling!

Use proper batteries

- Your power chair operates on two 12 volt batteries.
- They should be 12 ampere hour rating . Only deep cycle sealed case construction batteries should be used in the power chair.
- When you buy a replacement, insist on a deep cycle sealed case. Do not use any other type.

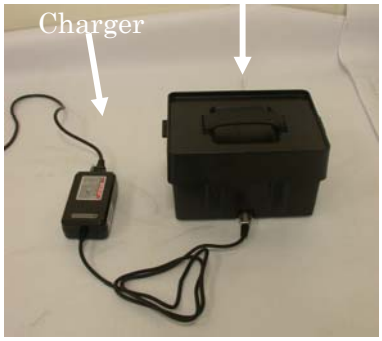
To charge the batteries using the off-board charger

- Position the power chair next to a standard wall outlet.
- Be certain the controller power is turned off .
- Open the charging socket cap on the rear shroud .Then connect the charging cable into the charging
- Plug the charging cable into the wall outlet.
- We also recommended that the batteries are not charged for more then 24 hours.
- When your Geo batteries are fully charged, unplug the charging cable from the wall outlet.
- Disconnect the charging cable from the Geo.

Charging
Option #1



Charging
Option #2



6. BATTERY CHARGING AND CARE

☠ Warning

1. Keep away from flammable objects while charging as it may lead to fire or explosion of battery.

2. Do not smoke while charging as the battery may release hydrogen gas. Always charge the battery in a well-ventilated space.
3. Avoid electric shock! Never connect or disconnect the plug or cord with wet hands while charging. Do not connect or disconnect the plug or cord when they are wet.

☞ **Attention - Follow these safety rules below to avoid accidents while charging.**

1. Use the manufacturer's supplied charger only, and recharge the battery to its full capacity Every time. You may damage the battery and power chair if you use a charger which is not correctly specified.
2. Charge in a well-ventilated space not directly exposed to sunlight. Do not charge in areas that are humid or exposed to rain, mist or dew.
3. Do not charge in temperatures -50°F or higher than 122°F as the charger may cause battery damage.

🕮 **Suggestion – How to maximize your battery's efficiency and service life**

1. Fully charge any new battery before its initial use.
2. Be sure to charge the battery after each use. Battery power will be reduced if the battery is used without being fully charged.
3. If the power chair is not used for an extended period, batteries should be charged at least weekly.
4. The ambient temperature affects charging time, it will be longer in the cold temperatures.
5. After charging, do not leave the charger socket plugged in.

■ Cleaning the battery

If the batteries are contaminated by water, battery acid, dust or other substances, they will discharge quickly. The batteries supplied with the power chair are sealed and as such are maintenance free with no risk of battery leakage. Please follow the steps below to clean the battery.

1. Turn the Geo power switch to OFF.
2. Remove the seat.
3. Open the battery pack then disconnect the cables from the four battery terminals.
4. Use a clean cloth to wipe off the soiled area.
5. Wipe with a clean cloth. If the terminal is covered with white powder, wipe it clean using warm water.

6. BATTERY CHARGING AND CARE

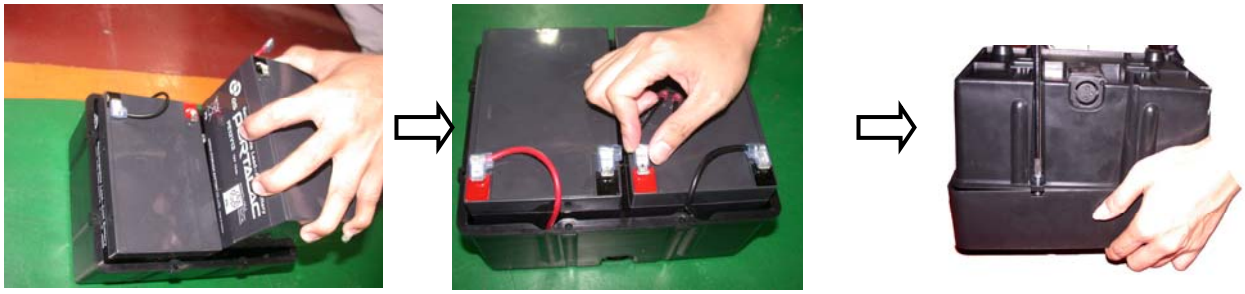
■ Batteries replacement

Follow the procedure below step by step to replace the batteries:

1. Remove the battery pack from the Geo.
2. Open the battery pack then disconnect the cables from the four battery terminals.
3. Remove the batteries from the battery pack.
4. Place new batteries inside the pack.

5. Connect the red cable to the positive (+) battery terminal and black cable to the negative (-) on the other battery.
6. Connect up the fused cable between the two batteries and close the battery pack...





☠ Warning

1. The wiring system and charger are well situated in the battery pack while being assembled in plant. Do not attempt to re-locate the wiring system by yourself. The improper layout of wiring system may result in the wires pinched by battery box, which might result in the electronic system failure.
2. Be sure the battery wires are connected to their right battery terminal.

🕮 Suggestions

1. Make sure the terminals are installed properly and replace the cover.
2. Battery efficiency will vary with outside conditions- driving range will be reduced in cold Weather If the power chair is not used for a long time; charge the battery at least once a week.
3. Replace both batteries together.

7. INSPECTION AND MAINTENANCE

INSPECTION

Initial adjustments should be made to suit personal body structure and preference. Be sure to; follow these checks and maintenance procedures.

NO.	Item	initially	weekly	monthly	periodically

1	**General(Mechanical Troubleshooting)** ♦power chair rolls straight (no excessive drag or pull to one side).	○			○
2	**Arms** ♦Secure but easy to release; adjustment levers engage properly. ♦Adjustable height arms operate and lock securely. ♦Pivot point free of wear and looseness.	○ ○ ○		○	○ ○
3	**Seat and back upholstery** ♦Inspect for rips or sagging.	○			○
4	**Seat** ♦Seat secured to the power chair frame. ♦Inspect seat release latches	○ ○	○		○
5	**Drive wheel** ♦Mounting bolts are secure ♦No excessive side movement or binding when lifted and spun when disengaged (free-wheeling)	○ ○			
6	**Caster assemblies** ♦Bolts are tight. ♦Inspect caster assembly for proper tension by spinning caster assembly; caster assembly should come to a gradual stop. **Attention: As with any power chair, the wheels and tires should be checked periodically for cracks and wear, and replaced if necessary.**	○ ○		○ ○	
7	**Caster assemblies/ wheel** ♦Ensure all fasteners are secure.	○	○		
8	**Wheels/tires** ♦Inspect for flat fasteners are secure. **Attention: As with any power chair, the wheels and tires should be checked periodically for cracks and wear, and replaced if necessary.**	○	○		
9	**Cleaning** ♦Clean upholstery and armrests.	○			○

7. INSPECTION AND MAINTENANCE

REGULAR CHECKING RECORD

To make sure your power chair is correctly serviced, take it to your dealer for regular maintenance checks. The initial inspection should be made after the first month's use, thereafter every six months. Your dealer may charge a fee for this.

YEAR	1	2	3	4	YEAR	1	2	3	4
Service Dates					Service Dates				
Controller					Upholstery				
On/off switch					Seat				
Joystick					Back				
Braking					Armrests				
Recharge point					Electrics				
Batteries					Connections condition				
Levels					Utility tray				
Connections					Test run				
Discharge test					Forwards				
Wheels and Tires					Reverse				
Wear					Stop				
Pressure					Left turn				
Bearings					Right turn				
Wheel nuts					Slope test				
Motors					Other obstacles				
Wiring					List Items repaired				
Noise									
Connections									
Brake									
Brushes									
Chassis/Footrest									
Condition									
Footrest									

BATTERY, FUSE AND TIRE

■ **Battery**

Refer to the section titled “BATTERY CHARGING AND CARE”

🕮 **Suggestion**

Ask for help from your Geo dealer to inspect or replace the fuse as the steering shroud must be removed for access

■ **Tires**

The condition of the tires depends on how you drive and use your power chair.

◆ Inspecting Tire Tread

◆ Please check the tread depth regularly. Replace the tires when the tread depth is less than 0.5 mm.

7. INSPECTION AND MAINTENANCE

☞ **Attention**

1. When tread depth is below 0.5mm it can easily lead to power chair slippage, making braking distances longer. Therefore replace the tires as early as possible when they are found to have insufficient tread depth.

☞ **Attention**
Before doing any maintenance, turn the power switch to OFF and remove the charger cords.
🕮 **Suggestions** 1. Do not splash water onto the power chair as this could cause the electronic system to malfunction. 2. Do not use caustic materials, solvents or aerosols as these may deform or damage the shrouds. 3. Do not use wax.

STORAGE

Make sure the power chair is stored as follows:

- With the charger unplugged
- With the power switch OFF

🕮 **Suggestion**
Always store the power chair in a location where it is out of direct sunlight, rain or dew. If storing for an extended period, charge the battery to full power and then disconnect the battery terminal. For details inquire to your dealer.

DISASSEMBLING THE GEO

The Geo can be disassembled in to four pieces, the seat (weight 18 lbs), the front section (weight 26.5 lbs),the rear section (35.5 lbs) and battery pack (weight 21 lbs), without any tools. Please follow the steps.

1. Switch off power of the power wheelchair.
2. Discount the connector of controller from the rear shroud.
3. Pull the Seat Rotate Lever while pulling up on the seat to remove.
4. Remove the battery pack...
5. Pull up the power wheelchair holding the seat post, while pulling the red handle behind the seat post...
6. Lift the front section up until the lower pegs are longer in contact with the curved locking brackets on the rear section.

7. INSPECTION AND MAINTENANCE





☠ Warning

Always unplug the rear section electrical connector before separating the two sections.

ASSEMBLING THE GEO

🕮 Suggestion

The assembly process is essentially the disassembly process in reverse. First study the text and photographs in the disassembly procedure before re-assembling the scooter.

☠ Warning

After assembling the Geo make absolutely certain the tiller adjustment knob is fully tightened.

8. TROUBLE SHOOTING AND SPECIFICATION

■ TROUBLE SHOOTING

Symptom	Probable cause	Solution

Limited driving distance	♦Batteries not fully charged. ♦Batteries weak won't hold charge.	♦Charge batteries overnight or ensure 10 hours of charge between uses. Make sure setting on charger is correct. ♦Replace batteries
Batteries not charging.	♦Charger not working ♦Battery connections loose. ♦No current at wall outlet. ♦Bad connection on charger, charger cable, plug or internal wiring problem.	♦Replace charger. ♦Check all connections. Secure connections. ♦Switch to another wall outlet. ♦Replace charger or internal repairs required. Contact dealer.
Batteries draw excessive current when charging.	♦Battery failure.	♦Replace batteries
Charge indicator shows low charge Level immediately after charging.	♦Batteries weak won't hold charge. ♦Electrical malfunction. ♦Charger not operating.	♦Replace battery ♦Contact dealer ♦Replace charger
Battery indicator flashes the charge level is low-too soon after being recharged.	♦Have charger checked. ♦Weak batteries.	♦Service or replace charger. Contact dealer ♦Replace batteries
Wheel chair will not drive	♦Motor release levers disengaged. ♦Battery require charging. ♦Charger plugged in. ♦Circuit breaker tripped.	♦Engage motor release levers. ♦Charge batteries. Make sure setting on charger is correct. ♦Unplug charger from wall outlet. ♦Reset breaker. If breaker trips again, it may indicate need for internal repairs. ♦Contact dealer.
Motor "chatter" or runs irregularly.	♦Electrical malfunction.	♦Contact dealer
Joystick erratic or does not respond as resired.	♦Electrical malfunction. ♦Controller programmed improperly.	♦Contact dealer ♦Contact dealer
Only one (1) rear wheel turns.	♦Electrical malfunction. ♦One (1) motor release lever is engaged.	♦Contact dealer ♦Disengage motor release lever.
Wheelchair does not respond to commands. Power indicator off even after recharging.	♦Poor battery terminal connection. ♦Electrical malfunction.	♦Clean terminals. ♦Contact dealer

8. TROUBLE SHOOTING AND SPECIFICATION

SPECIFICTIONS

MODEL / ITEM	Geo
Dimension (L×W×H)	35.8×21×32.2 inches
Weight, with batteries Without batteries	43.6 / 95.9 Kg/lbs 34.6/76.1 Kg/lbs
Battery	12V 12Ah×2
Motor	180W×2
Charger	DC24V 2A Off-board
Caster wheels	6“×2 Solid
Drive wheels	8“×2 Solid
Driving system	Direct drive the rear wheel
Brake system	Electromagnetic brakes
Top speed	5.6 km/hr /3.5mph
Climbing angle	6°
Cruising range	12-16km/8-10miles
Turning radius	500 /19.7mm/inches
Armrests	Adjustable Width, Angle, Height
Footrest	Adjustable Height, Angle
Maxus weight	115 kg/250lbs
Controller	VR-2 60A

Please note that the maximum range is based on an ambient temperature of 48 ℉ , a 165 lb driver, a brand new and fully charged battery, and a constant driving speed of 3.5 mph with 70% battery power discharged.

NOTE: Specifications are subject to change without notice.

8. TROUBLE SHOOTING AND SPECIFICATION

■ Self-Help Guide

If a system trip occurs, you can find out what has happened by counting the number of blink on the battery gauge that are flashing.

Overleaf is a list of self-help actions. Try to use this list before you contact your service agent. Go to the number in the list that matches the number Of flashing bars and follow the instructions.

If the problem persists after you made the checks described above contact Your service agent.

1 blink	The battery needs charging or there is a bad Connection to the battery. Check the connections to the battery. If the connections are good, try charging the battery.
2 blink	The left hand motor has a bad connection. Check the connections to the left hand motor.
3 blink	The left hand motor has a short circuit to a battery Connection. Contact your service agent.
4 blink	The right hand motor has a bad connection. Check the connections to the right hand module.
5 blink	The right hand motor has a short circuit to a battery connection. Contact your service agent.
6 blink	The wheelchair is being prevented from driving by an external signal. The exact cause will depend on the Type of wheelchair you have, one possibility being that the battery charger is connected.
7 blink	A joystick fault is indicated. Make sure that the joystick is in the center position before switching on The control system.
8 blink	A control system fault is indicated. Make sure that all connections are secure.
9 blink	The parking brakes have a bad connection. Check the Parking brake and motor connections. Make sure the Control system connections are secure
10 blink	An excessive voltage has been applied to the control system. This is usually caused by a poor battery connection. Check the battery connections.

9. WARRANTY

Life Time Warranty: Power Chair Frame

We will repair the frame with new or refurbished parts, free of charge, in the USA in the event of defective materials or workmanship.

One Year Limited Warranty:

- Electronic controller
- Drive train components

Drive will repair these products with new or refurbished parts, free of charge, in the USA for one (1) year from the original date of purchase in the event of defective materials or workmanship.

Drive will repair these products with new or refurbished parts, free of charge, in the USA for six (6) months from the original date of purchase in the event of defective materials or workmanship.

Warranty Exclusions:

- ABS plastic shrouds
- Batteries (batteries are warranted by the battery manufacturer)
- Tires and tubes

This warranty is extended only to the original purchaser. Your original receipt will be necessary as proof of purchase before any warranty performance is rendered. This warranty only covers failures due to defects in materials or workmanship which occur during normal use and does not cover damage that occurs in shipment or failures which are caused by products not supplied by Drive or failures resulting from accident, misuse, neglect, mishandling, misapplication, alteration, modification, commercial use or by anyone other than authorized dealer, or damage that is attributable to acts of God.

The manufacturer reserves the right to alter without notices any weights, measurements or other technical data shown in this manual. All figures, measurements and capacities shown in this manual are approximate and do not constitute specifications.

DRIVE AUTHORIZED SERVICE AGENT

NAME
ADDRESS

TELEPHONE
FAX
EMAIL

Warranty Registration

Please type or print.

Serial # _____ Date Purchased ____/____/____

Owner Name _____

Address _____

City _____ State _____ Zip _____

Additional Required Owner Information

Please indicate your understanding of your scooter by completing the following information.

_____ I have read and fully understand

_____ Owner's Manual, especially sections on operating instructions, safety guidelines,
maintenance and battery instructions.

_____ Scooter Warranty

Battery Instructions – only sealed lead acid or gel cell type batteries should be used. Batteries must also be sealed, deep cycle, and maintenance free or battery will hinder vehicle performance and void the warranty.

_____ My dealer has instructed me on how to operate my scooter.

Signature _____ Dealer Name _____

Telephone (___) _____ Dealer Phone (___) _____

Email Address _____

Comments:

_____

_____

_____

_____

_____

_____

9. WARRANTY

VIN (POWERCHAIR INDIFICATION NUMBER)

To ensure the correct after sales, service and warranty service Support, please write down the power chair identification number Found on the rear right-hand side of the frame.



Identification Number

Model	Geo		
VIN			
Motor serial #		Controller #*30*	

……

……

Warranty Application Form

Name				
Date of Birth	Year Month Day			
Address				
Model				
VIN	Power chair VIN:			
	Motor Serial No:		Controller #	
Date of Purchase	Year Month Day			
Purchaser Signature				



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