merits

Pioneer II

Pioneer 2

Pioneer II \ Pioneer 2
Owner's Manual

Quick Reference Guide

1. Tiller
2. Tiller Adjustment Lever
3. Removable Seat
4. Adjustable Armrest
5. Seat Pivot Lever
6. Anti-Tipper Wheels
7. Free-Wheel Lever
8. Front bumper
9. Key switch
10. Rug
11. Battery Level Indicator
12. Speed Control
13. Front Basket

Model No.	Pioneer II	Pioneer 2
Length	42"	46"
Width	22"	22"
Seat height (from ground)	18"~21"	18"~21"
Front wheel	8" PU	9"PU
Rear wheel	9" PU	9"PU
Weight Capacity	250 lbs	250 lbs
Speed	max 3.8mph	max 3.8mph
Range	max 15miles	max 15miles
Turning Radius	27"	35"
Battery	12V/17AH-2pcs	12V/17AH-2pcs
Brakes	Intelligent, regenerative and electromagnetic brakes	
Anti-tip	2 rear anti-tip wheels	
Bumper	Front (chrome)	
Unit Weight	110 lbs	118 lbs

Welcome aboard your new PIONEER Scooter. We wish to thank you for letting us improve your freedom and independence. This model has been designed with your practical needs in mind. It is equipped with modern high-tech electronics and special features for a more comfortable ride. Its safety and performance will provide you with years of excellent service and pleasure.

Table of Contents

Failure to follow these instructions may result in damage to the scooter or serious injury.

1.Practice before operating

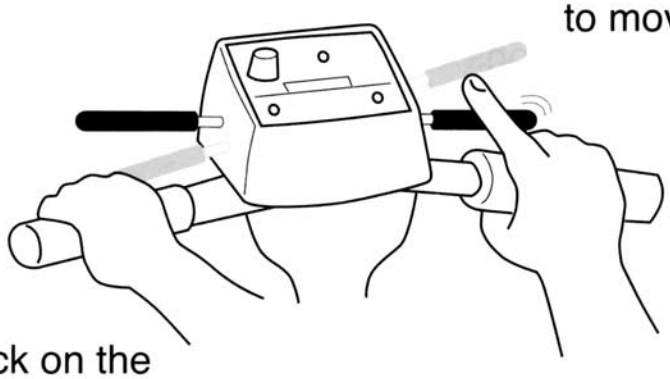
Find an open area such as a park and have an assistant to help you practice until you have confidence operating this vehicle.

Make sure that the unit is off before getting in or out of it. Set the speed control knob according to your driving ability.

We recommend that you keep the speed at the slowest position (fully counter-clockwise) until you are familiar with the driving characteristics of this vehicle.

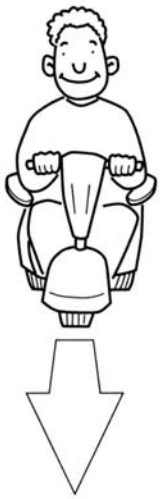
Stop, forward, and reverse operation practice

Pull the lever back on the **right** side to move **forward**

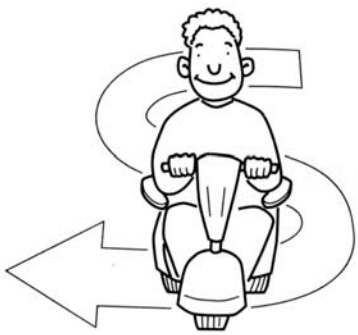


Pull the lever back on the **left** side to move **backwards**

Getting familiar with this vehicle



First, practice moving forward.
Be sure to set the speed to the lowest setting.



After becoming familiar with moving forward, practice making "S" turns.

Once you are familiar with "S" turns, practice moving in reverse.

2.Safety considerations

DO NOT do any of the following:

Do not carry any passengers

NO!

Do not drive across a slope

NO!

Do not drink and drive

NO!

Do not tow a trailer

NO!

Do not turn on or use hand-held personal communication devices such as citizens band (CB) radios and cellular phones

NO!

This vehicle has an immunity level of 20 v/m which should protect it from Electromagnetic Interference (EMI) from Radio Wave Sources The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (radio) waves that are emitted by television, radio and communication signals. These EM waves are invisible and their strength increases as one approaches the source. All electrical conductors act as antennas to the EM signals and, to varying degrees, all power wheelchairs and scooters are susceptible to electromagnetic interference (EMI). This interference could result in abnormal, unintentional movement and/or erratic control of the vehicle. The United States Food and Drug Administration (FDA) suggests that the following statement be incorporated to the user's manual for all electric scooters:

Powered wheelchairs and electric scooters (in this text, both will be referred to as powered wheelchairs) may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy 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 powered wheelchair 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 EM energy can be measured in volts per meter (V/m). Each powered wheelchair can resist EMI up to a certain intensity. This is called the "immunity level." The higher the immunity level, the greater the protection. At this time, current technology is capable of providing at least 20 V/m of immunity level which would provide useful protection against common sources of radiated EMI.
Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement that could result in serious injury:

1) Do not turn on hand-held personal communication devices such as citizens band (CB) radios and cellular phones while the powered wheelchair 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 wheelchair off as soon as it is safe.

4) Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to interference from radio wave sources. (Note: there is no easy way to evaluate their effect on the overall immunity of the powered wheelchair).

5) Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a radio wave source nearby.

TURN OFF YOUR SCOOTER AS SOON AS POSSIBLE WHEN EXPERIENCING ANY OF THE FOLLOWING:

1. Unintentional motions.
2. Unintended of uncontrollable direction.
3. Unexpected brake release.

The FDA has written to the manufacturers of power wheelchairs, asking them to test their new products to be sure they provide a reasonable degree of immunity against EMI. The letter says that powered wheelchair should have an immunity level of at least 20 V/m, which provide a reasonable degree of protection against the more common sources of EMI. The higher the level, the greater the protection.

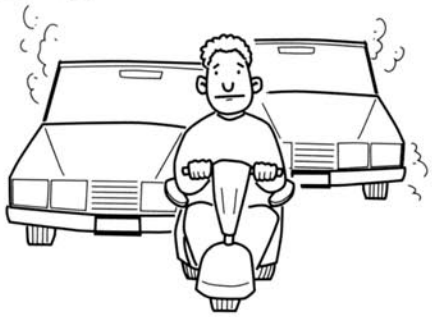
This product Pioneer Ⅱ (3 wheeled scooter) has a tested immunity level of 20 V/M in accordance with the FDA requirements set in May 1994. The Pioneer 2 (4 wheeled scooter) has a generally achievable and useful immunity level against interference from radio waves sources. The immunity level of this model is unknown.

3.Driving outside

When you are on the road, please pay attention to the following:

Do not drive in heavy traffic

NO!



Do not drive beside a river, port, or lake without a fence or railing

NO!

Do not drive during the rain

NO!

Do not drive during or on snow

NO!

Do not drive off-road or on any uneven surfaced roads

NO!

Do not drive at night

NO!

Make sure that there are no obstacles behind you when in reverse.

We recommend to set up the speed knob at the lowest speed (🐢) for reversing

Do not make sudden stops, weave erratically, or make sharp turns.

Keep your arms on or inside the armrests and feet on the footrest at all time.

Do not attempt to climb curbs greater that 2"(5cm).

Do not attempt to cross over a gap greater that 3"(10cm).

4. Use caution when driving on hills

Driving on hills is more dangerous than on level surfaces. If you fail to heed these warnings, a fall, tip-over or loss of control may occur and cause severe injury to the vehicle user or others.

NO!

Do not attempt to climb a hill greater that 10°

NO!

Do not reverse while driving up a hill.

Forward only. If you reverse while moving up a hill, it may cause the vehicle to tip over.

NO!

Do not attempt to drive across a sloping surface greater that 3°

Driving across a slope greater than 3° is very dangerous and may cause the vehicle to tip over.

NO!

Use caution when driving over soft, uneven or unprotected surfaces such as grass, gravel and decks.

Use low speed while driving down hill.

When going down hill, the tiller will become harder to reach and handle. When braking while moving down hill, the scooter will take longer to come to a complete stop.

Do not get in and out on a hill.

Always stop on the level surface to get in and get out of the vehicle.

Always climb or descend gradients perpendicular to the slope or ramp.

Do not load or carry heavy items in the basket while driving down hill.

In this section, we will acquaint you with the many features of your scooter and how they work. Upon receipt of your scooter, inspect it for any damage. Your scooter consists of a frame assembly, drivetrain assembly, seat assembly, tiller assembly, battery charger, and owner's manual. Contact your sales agent if any question arise.

1. Tiller
2. Tiller Adjustment Lever
3. Removable Seat
4. Adjustable Armrest
5. Seat Pivot Lever
6. Anti-Tipper Wheels
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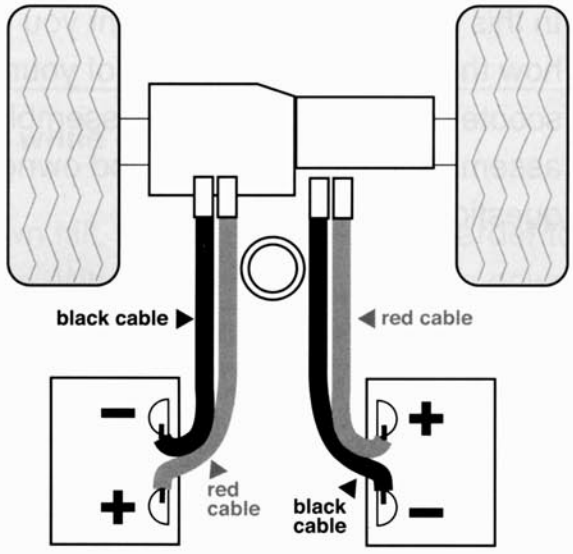
Charging the Batteries



Your scooter is equipped with maintenance free, sealed lead acid batteries. These batteries require no maintenance other than ensuring that they are properly charged. If other batteries are used, check with your battery supplier for proper battery care and maintenance instructions.

Your scooter comes supplied with two battery cables. Attach the red wire of the first cable to the (+) terminal of the first battery. Attach the black wire of the first cable to the(-) terminal of the first battery. Repeat this procedure for the second battery.

Note: Because your batteries may only have a partial charge when you first receive your scooter, you may not experience full riding time until you have fully charged them. Your scooter is equipped with an on-board battery charger. Charging you batteries as specified below will ensure maximum life, power, and range.

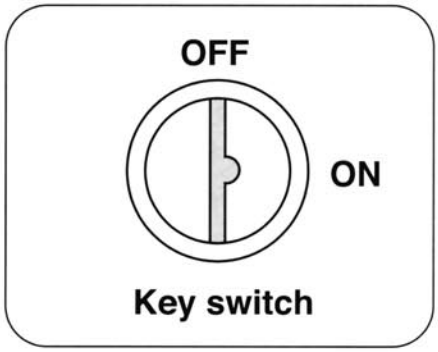
WARNING!
Use of a non-grounded receptacle could result in an electric shock

1. Park the scooter near a 3-prong grounded electrical outlet.
2. Turn the scooter power (key) off while charging the batteries.
3. Check the charger indicator lights (located on the right side of the shroud). You will find two lights; one will be red (indicating the charger is working properly) and one is white (indicating that the batteries need to be charged). When the white light turns green (indicating that the batteries are fully charged) you can unplug the charger from the wall outlet. It is recommended that you charge the batteries after daily use, regardless of the battery depletion level. We do not recommend that you leave your scooter continuously charging because there is no added benefit after the batteries have reached their full charge.

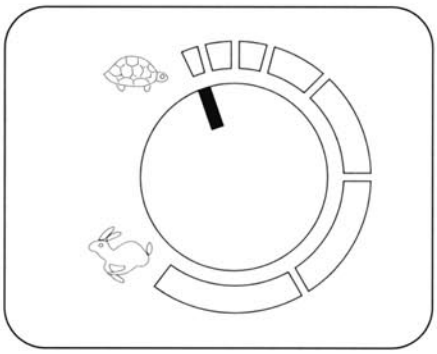
Controls

Only drive within your control limitations. Loss of control of your scooter could result in serious injury to yourself or others. If your speed becomes difficult to control, release the speed engager lever and your scooter will come to a complete stop. Only use the on/off switch to stop your scooter in an emergency.

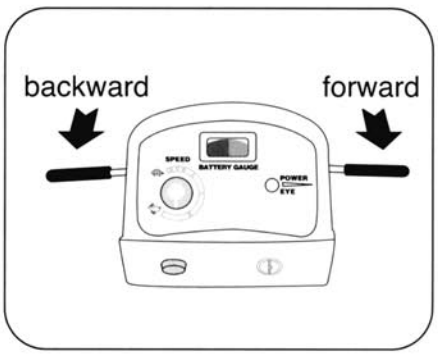
Key Switch: The key switch operates two functions: ON and OFF. "OFF" position (turn the key straight up) "ON" position (turn the key to the forward position, the Scooter is to operate)



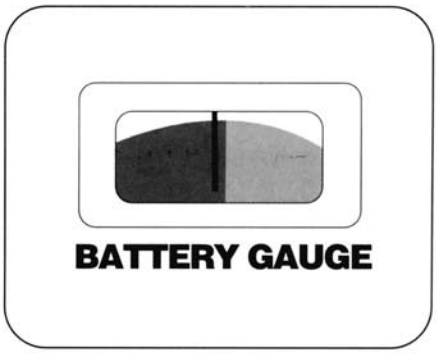
Speed Control: Speed Dial regulates the speed of the scooter. Start at the slowest speed until you feel confident controlling your scooter safely. Turn the speed dial counter-clockwise to decrease the speed. Turn the speed dial clockwise to increase the speed.



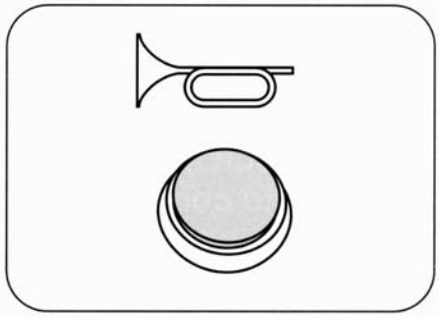
Forward/ Reverse: To move forward, pull the lever back on the right side. To move backwards, pull the lever back on the left side.



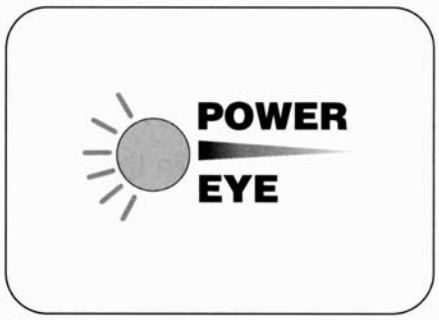
Battery Gauge: Indicates the charge level of the batteries. If the needle goes into the red area, the batteries need to be charged as soon as possible. If the needle is all the way to the right side of the green area, the batteries are fully charged. As the needle moves to the red area it indicates the depletion level.



Horn: The horn is activated by pressing the horn button. Releasing the horn button deactivates the horn. The horn is useful to warn people or animals that you are coming towards them. You may also find it helpful to use when rounding blind corners or backing up.



Power eye: When the scooter is on, and all conditions are normal, the Power Eye will be on. When there is some special situation that needs attention, the light will flash. See the reference chart below for the meanings of the different flashing patterns.



Number of Flashes	Meaning	Number of Flashes	Meaning
1	Battery needs recharging	6	Not in neutral at power up
2	Battery voltage too low	7	Speed pot error
3	Battery voltage too high	8	Motor volts error
4	Current time limit out	9	Other internal error
5	Brake fault		

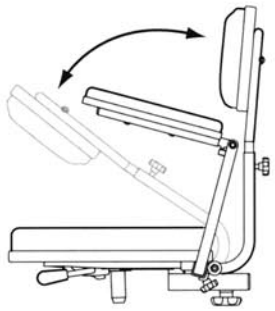
Brakes and Throttle control lever: Whenever the speed engager lever is move out the neutral position, the electromagnetic brake will automatically release and your scooter will move. When the speed engager lever is released, it will return to the neutral position and the scooter will decelerate and come to complete stop. The parking brake will then engage preventing further movement of your scooter. Your unit is equipped with a programmable controller that has a high peddle disable safety feature. This will prevent unexpected acceleration of the scooter, if the speed engage lever is activated the same time you turn the key "ON". To reset the controller, release the speed engage lever and turn the key "OFF" for a couple of seconds and then turn it bake "ON".

If your scooter ever moves in an unexpected manner, release the speed engager lever and turn off the power.

Seat adjustment

Seat Height:

- Turn the power key off while making any adjustments.
- Pull the swivel lever up and lift the seat straight up and off of the seat post.
- Remove rear plastic cover by holding the rear cover.
- Unfasten the velcro material by slightly pulling the cover out away from the frame and lift cover straight up and off the scooter.
- Remove the nut and bolt from the seat post assembly.

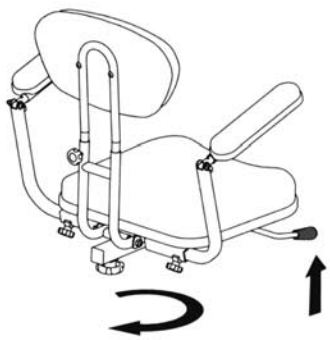


Back rest angle:

- Fold the backrest for easy access.

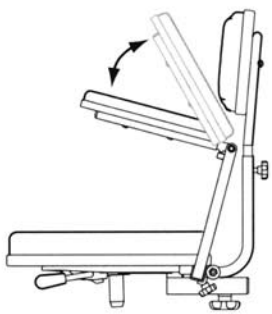
Seat swivel positions:

The seat swivel lever (located on the side of the seat) allows the seat rotation in 45 degree increments. You may use this feature to make it easier to transfer in and out of the seat.



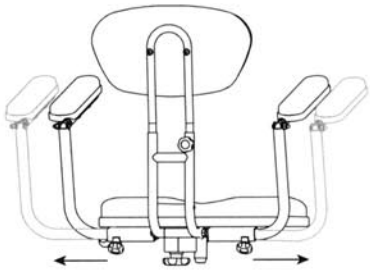
- Pull the swivel lever up to unlock and rotate the seat.
- Pivot the seat to the position you desire.
- Release the lever and try to turn the seat back and forth slightly allowing the lever to lock into position.

Armrest angle:



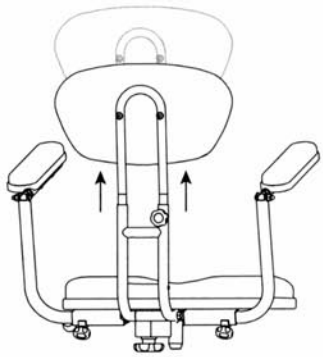
- Flip the armrest up to expose the adjustable bolt and loosen the lock nut.
- Turn the bolt in to lower the angle of the armrest to your desire angle.

Armrest width:



- Locate the width clamping nut (follow the armrest support down to the base of the seat).
- Loosen the clamping nut by turning counter-clockwise.
- Pull the armrest in or out to reach your desired position.
- Tighten the width clamping nut.

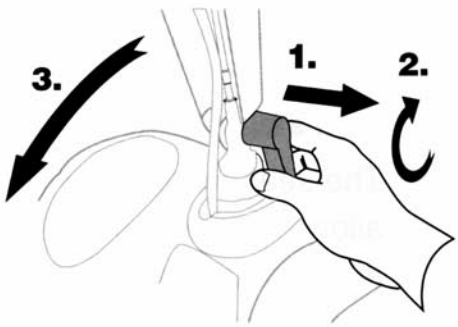
Backrest height:



- Locate the height clamping nut (behind the backrest).
- Loosen the clamping nut by turning counter-clockwise.
- Pull up or push down the backrest to reach your desired position.
- Tighten the clamping nut.

Tiller angle:

The tiller angle adjustment allows you to position the dash closer or further away from you better access of the controls.



- Locate the angle adjusting lever where is located on the right side of the tiller boot.
- Hold the weight of the tiller with on hand and loosen the lever by pulling up the lever with the other hand. Adjust the angle of the tiller to one of three positions
- that you feel is right.
  Release the lever and try to move the tiller back and forth slightly allowing the lever to lock into position.

Operating

Make sure the free-wheel lever is in the drive (up) position to prevent the scooter from rolling. Never sit in your scooter if it is in "Free wheel" mode.

Manual free-wheel mode: Your scooter features a "free wheel" mode for manual operation. To activate manually, turn the key switch OFF and locate the free-wheel lever under the rear cover on the right side of the drivetrain. Push lever to the "down" position to disengage the brake. Pull the lever to the "UP" position to reengage the brake. When the scooter is in manual free-wheel mode, you will have no brakes. You will be unable to operate the scooter. When you wish to push your scooter for a short distance, you may put it into Manual Free-Wheel mode.

Getting in and out: Your scooter is designed to make getting in and out of the scooter as easy as possible. Make sure the scooter is on a level surface and the key switch is turned OFF. If necessary, raise the armrest to give you maximum space to transfer in or out of the seat. Once transfer is complete, return the armrest before operating the scooter.

Never operate your scooter without your feet being placed on the scooter platform. Driving your scooter without your feet on the platform could cause serious bodily injury.

Model No.	Pioneer II	Pioneer 2
Length	42"	46"
Width	22"	22"
Seat height (from ground)	18"~21"	18"~21"
Front wheel	8" PU	9"PU
Rear wheel	9" PU	9"PU
Weight Capacity	250 lbs	250 lbs
Speed	max 3.8mph	max 3.8mph
Range	max 15miles	max 15miles
Turning Radius	27"	35"
Battery	12V/17AH-2pcs	12V/17AH-2pcs
Brakes	Intelligent, regenerative and electromagnetic brakes	
Anti-tip	2 rear anti-tip wheels	
Bumper	Front (chrome)	
Unit Weight	110 lbs	118 lbs

MERITS LIMITED WARRANTY

THIS WARRANTY IS EXTENDED ONLY TO ORIGINAL PURCHASERS OF OUR PRODUCTS, AND IS BASED ON THE RETURN TO MERITS OF THE COMPLETED WARRANTY REGISTRATION WITHIN THIRTY (30) DAYS OF ORIGINAL DATE OF PURCHASE.

MERITS CORPORATION WARRANTS THE PRODUCTS DISTRIBUTED BY IT, OTHER THAN ITS COMPONENT BATTERY OR BATTERIES, TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF PURCHASE. BATTERIES ARE WARRANTED BY THE BATTERY MANUFACTURER. IF, WITHIN SUCH WARRANTY PERIOD, ANY SUCH PRODUCT SHALL BE PROVEN TO MERITS OPTION, BE REPAIRED OR REPLACED. THIS WARRANTY DOES NOT INCLUDE ANY LABOR OR SHIPPING CHARGES INCURRED IN REPLACEMENT PART INSTALLATION OR REPAIR OF ANY SUCH PRODUCT. MERITS SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY UNDER THIS WARRANTY SHALL BE LIMITED TO SUCH REPAIR AND/OR REPLACEMENT.

FOR WARRANTY SERVICE PLEASE CONTACT YOUR AUTHORIZED MERITS SERVICE CENTER. IN THE EVENT THAT YOU DO NOT RECEIVE SATISFACTORY WARRANTY SERVICE, PLEASE WRITE OR CALL DIRECTLY TO MERITS, PROVIDE THE SERVICE CENTER'S NAME AND ADDRESS, AND INDICATE THE NATURE OF THE PROBLEM.

LIMITATIONS AND EXCLUSIONS;

THE FOREGOING WARRANTY SHALL NOT APPLY TO PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENTS, IMPROPER OPERATION, MAINTENANCE OR STORAGE, COMMERCIAL, INSTITUTIONAL, OR SERVICE USE OTHER THAN NORMAL APPLICATION, OR TO PRODUCTS DAMAGED BY REASON OF REPAIRS OR MODIFICATIONS MADE TO ANY PRODUCT WITHOUT THE SPECIFIC WRITTEN CONSENT OF MERITS. OR TO PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND MERITS' CONTROL.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES, IMPLIED WARRANTIES, IF ANY, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANT ABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. MERITS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.

MERITS HEALTH PRODUCTS INC.
WARRANTY REGISTRATION

MODEL NO. _____ SERIAL NO. _____

DATE PURCHASED _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

DEALER NAME _____

STAMP

RETURN ADDRESS

_____

_____

_____

MERITS HEALTH PRODUCTS INC.
P.O BOX 150356
CAPE CORAL, FL. 33915

WARNING: Radio wave sources may affect powered wheelchair or scooter control

Radio wave sources, such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones, can affect powered wheelchairs. Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement which could result in serious injury.

1) Do not turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones, while the powered wheelchair 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 wheelchair OFF as soon as it is safe;
4) Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to interference from radio wave sources (Note: There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair; and
5) Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a radio wave source nearby.

Important Information

1) 20 volts per meter (V/m) is a generally achievable and useful immunity level against interference from radio wave sources (as of May 1994) (the higher the level, the greater the protection);
2) The immunity level of this product is not known.

CAUTION: IT IS VERY IMPORTANT THAT YOU READ THIS INFORMATION REGARDING THE POSSIBLE EFFECTS OF ELECTROMAGNETIC INTERFERENCE ON YOUR POWERED WHEELCHAIR OR SCOOTER.

Electromagnetic Interference (EMI) From Radio Wave Sources

Powered wheelchairs 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 powered wheelchair to release the 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 powered wheelchair can resist EMI up to a 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 powered wheelchair model as shipped, with no further modification. The immunity level of this product is not known.

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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 warnings 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** (transmitters-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. **NOTE: some cellular telephones and similar devices transmit signals when 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. These usually have the antenna mounted on the outside of the vehicle. And
3) **Long-range transmitters and transceivers**, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios. NOTE: Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players and cassette players, and small appliances, such as electric shavers, and hair dryers, so far as we know, are not likely to cause EMI problems to your powered product.

Powered Product 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 close to the powered product's control system while using these devices. This can affect powered product movement and braking. Therefor, the warnings listed below are recommended to prevent possible interference with the control system of the powered product.

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 products. Following the warnings listed below should reduce the chance of unintended brake release or powered product movement, which could result in serious injury.

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

Important Information

1) 20 volts per meter (V/m) is a generally achievable and useful immunity level against EMI (as of May 1994) (The higher the level, the greater the protection)
2) The immunity level of this product is unknown.

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Please be sure to visit our website for more information on this and other great MERITS products.

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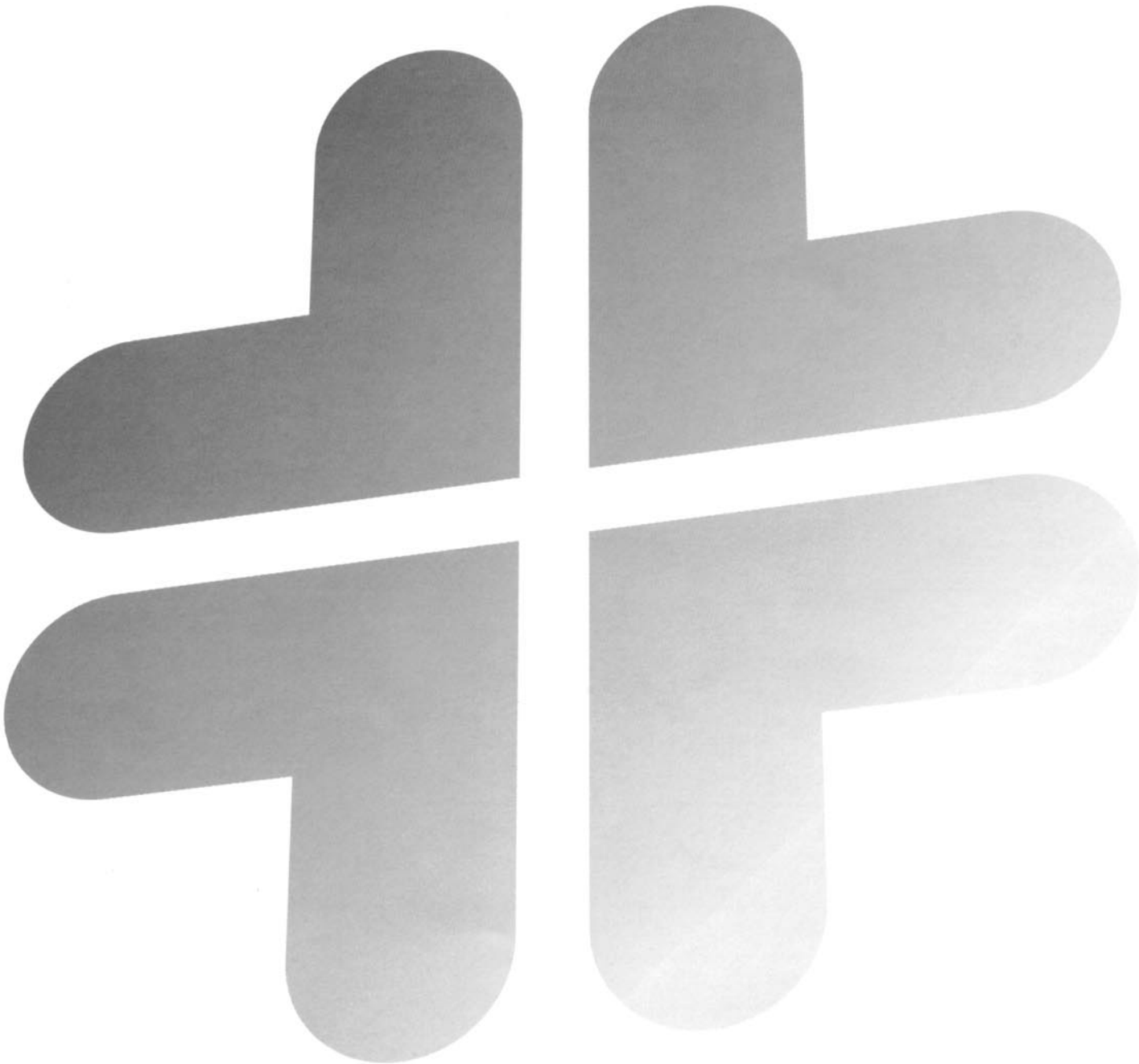
Pioneer II \ Pioneer 2 Owner's Manual



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