

Quick Reference Guide (S2354)

1. Tiller
2. Key Switch
3. Control Panel
4. Throttle Lever
5. Seat Pivot Lever
6. Removable Seat
7. Adjustable Armrest (Optional)
8. Free Wheel lever
9. Anti-Tip Wheels
10. Rug
11. Front Bumper
12. Tiller Angle Adjuster
13. Front Basket
14. Seat Position Adjuster



Model No.	S2354
Length	44"
Width	23"
Seat height (from ground)	19.5" ~ 23.5"
Front wheel	8" (200 x 50)foam filled tire
Rear wheel	9" (2.80 / 2.50-4)foam filled tire
Weight Capacity	300 lbs
Speed	max 4 mph
Range	max 15 miles
Turning Radius	27"
Battery	12V / 22AH x 2pcs
Brakes	Intelligent, regenerative and electromagnetic brakes
Anti-tip	2 rear anti-tip wheels
Bumper	Front
Unit Weight	129 lbs

Quick Reference Guide (S2454)



Model No.	S2454
Length	45.5"
Width	23"
Seat height (from ground)	19.5" ~ 23.5"
Front wheel	9" (2.80 / 2.50-4)foam filled tire
Rear wheel	9" (2.80 / 2.50-4)foam filled tire
Weight Capacity	300 lbs
Speed	max 4 mph
Range	max 15 miles
Turning Radius	35"
Battery	12V / 22AH x 2pcs
Brakes	Intelligent, regenerative and electromagnetic brakes
Anti-tip	2 rear anti-tip wheels
Bumper	Front
Unit Weight	147.5 lbs

Welcome aboard your new 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.

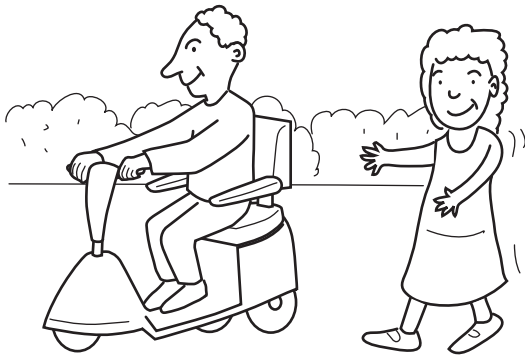
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Failure to follow these instructions may result in damage to the scooter or serious injury.

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.

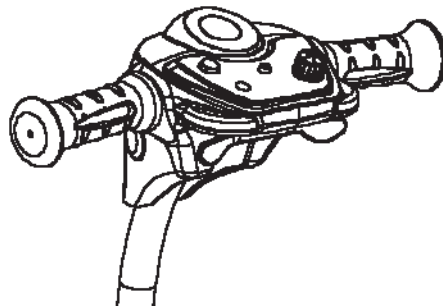


Make sure that the unit is off before getting in or out of it. Set the speed control knob according to your driving ability.

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.

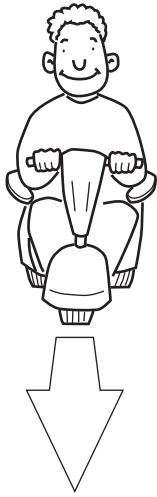
Stop, forward, and reverse operation practice

Push the lever forward on the **right** side to move **forward**

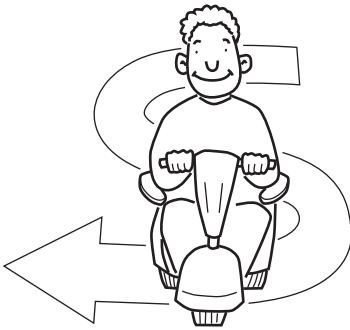


Push the lever forward on the **left** side to move **backward**

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.

Safety considerations

DO NOT do any of the following:

Do not carry any passengers

NO!



Do not drive across a slope

NO!



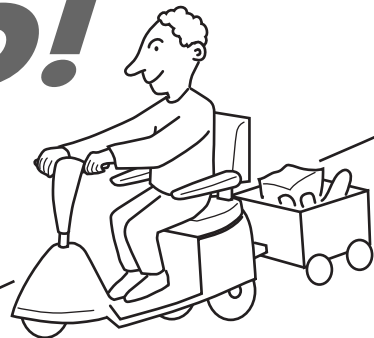
Do not drink and drive

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 Statement be incorporated to the user's manual for all electric scooter.

Powered wheelchairs and electric scooters(in this text, both will be referred to as powered wheelchairs) may be susceptible to electomagnetic 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 highedr 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 communucation 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 or uncontrollable direction.
3. Unexpected brake release.

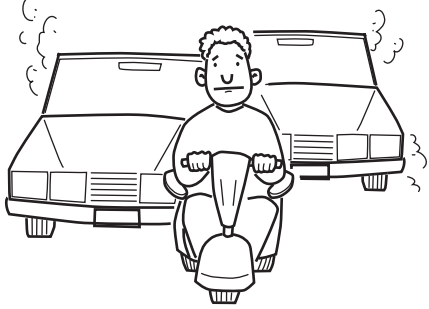
The FDA has written to the manufacturers of power wheelchairs, asking them to test their new products to be sure they provide a reasonable degree of immunity against EMI. The letter says that powered wheelchairs should have an immunity level of at least 20 V/m, which provide a reasonable degree of protection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

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!



Be sure to use the headlights when driving at night


NO!



NO!



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

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

NO!



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

NO!



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

NO!



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

NO!



Do not attempt to cross over a gap greater than 3.5" (9cm).

Gap greater 3.5" (9cm)

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 than 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 than 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.

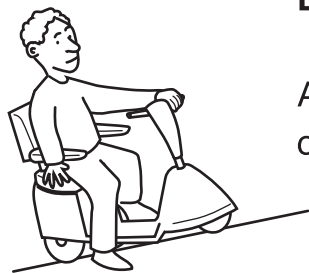
NO!



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.

NO!



Do not get in and out on a hill.

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

NO!



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

YES!



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

■ Parts of the scooter

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.



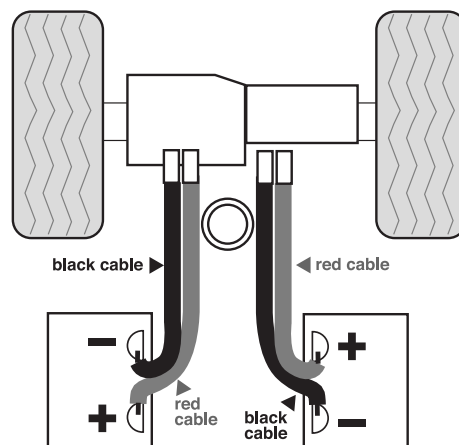
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Batteries

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.



Charging the Batteries

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 batter charger. Charging your batteries as specified below will ensure maximum life, power, and range.

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

Using On Board Charger

1. Turn off the power on the scooter.
2. Plug the charger cable into an outlet.
3. Plug the cable into the power socket at the rear of the scooter. (You will need to flip up the rubber safety covering on the power socket)
4. Leave the scooter to charge. As it charges, you will see progress lights in the clear circular window next to the charger socket. A RED light means the charger is ready to use, a WHITE light means charging is in progress, and a GREEN light means the charger is finished, and the scooter is fully charged.

Using Off Board Charger

Follow steps 1 and 2 as above.

3. Plug the charger cable into the power socket on the tiller. (You will need to flip up the rubber safety covering on the power socket)
4. Leave the scooter to charge. As it charges, you will see progress lights on the charger unit. A RED light means the charger is ready to use, a WHITE light means charging is in progress, and a GREEN light means the charger is finished, and the scooter is fully charged.

Disassembling the Scooter



move the tiller to the forward position, pull up on seat release and remove seat



remove cover



disconnect both batteries



disconnect the white connector



remove both batteries



remove the connecting pin



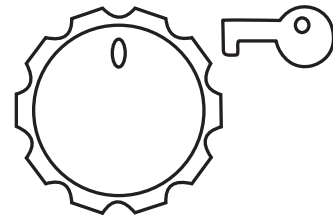
pull the motor section away from the footrest section

■ 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:

- Fully insert the key into the key switch to power up (turn on) your scooter.
- Remove the key from the key switch to power down (turn off) your scooter.



Key switch

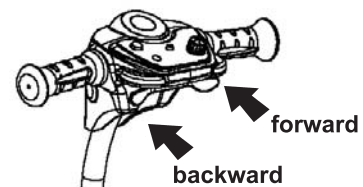
Speed Control:

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.



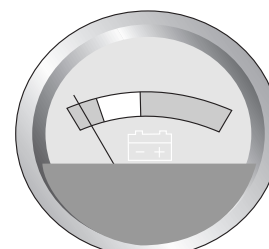
Forward / Reverse:

To move forward push the lever on the right side. To move backwards push the lever on the left side.



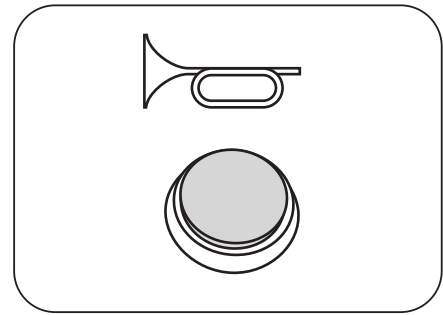
Battery Gauge:

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 charge. As the needle moves to the red area it indicates the depletion level.

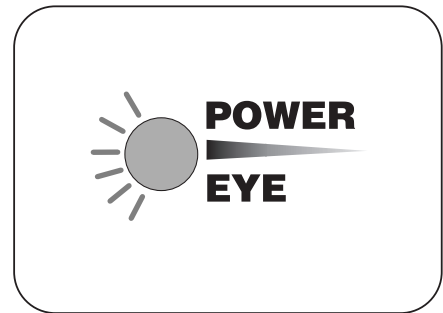


Horn:

The horn is activated by pressing the horn button. 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 reversing.

**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 limit time out	9	Other internal error
5	Brake fault	10	Controller over heat(C40 only)

Brakes and Throttle control lever: Whenever the speed engager lever is moved out of 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 back "ON".

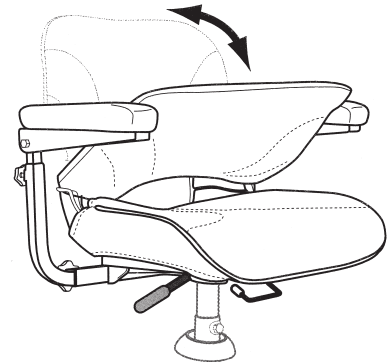


If your scooter ever moves in an unexpected manner, release the speed engager lever and turn off the power.

■ Seat

Back rest angle :

- Backrest folds forward for ease of removal / storage.



Seat swivel positions:

The seat swivel lever (located on the side of the seat) allows the seat rotation in 360 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 for the slightly allowing the lever to lock into position.



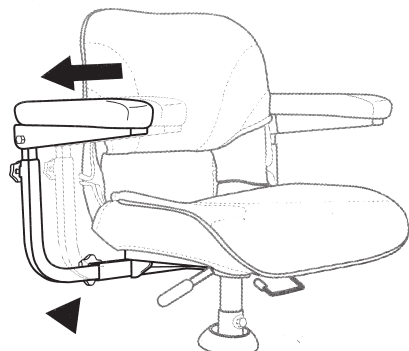
Armrest angle: (Optional)

- Loosen the clamping nut at the rear of the handle.
- 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.



■ Tiller Angle Adjustment:

The tiller angle adjustment knob allows you to position the tiller closer or further away for better access to the controls.

- Locate the angle adjusting knob located on the right side of the tiller.
- Hold the tiller with one hand and loosen the hand knob by turning anticlockwise with the other hand.
- Adjust the angle of the tiller to a comfortable position.
- Turn the handknob clockwise to tighten, test the tiller is set in position by attempting to push back and for to push backward and forward.



■ 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 at the back, right side of the scooter, near the wheel. Pull lever to the "UP" position to disengage the brake and allow the scooter to be pushed freely. Push the lever to the "DOWN" position to reengage the brake. Remember, 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.

IEC SYMBOLS	
	Caution, attention or consult accompanying documents.
	Alternating Current
	Type BF Equipment
	Double Insulation
	No Smoking or Naked Flames

Degree of protection against ingress of water is rated as IPx0.

Serialization format for products	
	
1	The first digit is the last one digit of the year for manufacture.
2	The second and third digits are the month for manufacture.
3	The fourth to seventh digits are counting of how many units were manufactured during the month.

■ **Warranty Registration**

**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



We wish you a safe and comfortable riding experience!

