



**MM-01 / MM-02
Mobility Scooter
Owner's Manual**

TABLE OF CONTENT

1. PREFACE.....	4
2. SAFETY NOTICES.....	5
BEFORE THE FIRST USE OF YOUR SCOOTER.....	5
REGULAR USE OF YOUR SCOOTER.....	6
LABELING OF YOUR SCOOTER.....	7
STAIRWAYS AND ESCALATORS WARNING.....	8
WARNING	9
3. EMI	10
ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES.....	10
POWERED SCOOTER ELECTROMAGNETIC INTERFERENCE (EMI)...	11
4. STANDARD PARTS.....	12
MM-01	12
MM-02	12
TILLER AND OPERATION PANEL.....	13
OPTIONAL PARTS	14
5. OPERATION.....	14
TILLER ADJUSTMENT	14
POWER SWITCH.....	15
POWER INDICATOR	15
SPEED DIAL	16
SPEED INDICATOR.....	16
HEADLIGHT/TAILLIGHT BUTTON	16
FORWARD, REVERSE AND BRAKING	17
BLINKER SWITCHES	17
HAZARD BUTTON	17




HORN BUTTON	17
USB SOCKET	18
WARNING TRIANGLE DOOR.....	18
DRAWER.....	19
FREEWHEEL MODE	20
FIXATION BAND	21
DRIVING YOUR SCOOTER	21
STOPPING.....	22
EMERGENCY STOP.....	22
SCOOTER TRANSPORT.....	23
6. ADJUSTING THE SCOOTER	24
ACCESS TO THE BATTERY COMPARTMENT	24
BATTERY CONNECTIONS.....	25
REMOVING THE TRIANGLE DOOR.....	25
SEAT, BACKREST & ARMREST.....	26
7. BATTERY & CHARGER.....	28
CHARGING THE BATTERY	28
CHARGER.....	30
BATTERY	30
CLEANING THE BATTERY	30
DISPOSAL OF BATTERY	31
8. INSPECTION & MAINTENANCE	32
DAILY INSPECTION	32
REGULAR MAINTENANCE RECORD	33
BATTERY, FUSES, CIRCUIT BREAKER AND TIRES	35
MAINTENANCE	36
LUBRICATION.....	37

STORAGE	37
9. TROUBLESHOOTING	38
10. SPECIFICATIONS	41
11. WARRANTY	43
TWO-YEAR LIMITED WARRANTY.....	43
WARRANTY EXCLUSIONS.....	43
SERVICE CHECKS AND WARRANTY SERVICE	44
LIMITATIONS	44
WHAT WE WILL DO.....	45
WHAT YOU MUST DO	45
NOTICES TO CONSUMER.....	45
12. STICKERS	46
WARRANTY REGISTRATION	48

1. PREFACE

Please read this owner's manual before using the scooter. Improper use of the scooter could result in harm, injury or traffic accidents.

This owner's manual includes operation instructions for every aspect of the scooter, assembly instructions, as well as instructions for how to deal with possible accidents. The symbols used in this manual are explained below. Read carefully, especially the parts marked with these symbols:


	Warning	Improper usage could lead to death or serious injury
	Caution	Improper usage could lead to injury and/or damage to you scooter.
	Suggestion	Follow these instructions to keep the status of the scooter working well and ease your operation.

This manual includes the repair and maintenance record chart and Warranty. Please keep it in a proper place or in the scooter.

If someone else uses the scooter, please be sure to give him or her the instruction manual. All other users must have been read the manual before driving.

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

The manufacturer disclaims all responsibilities for any personal injury or property damage which may occur as a result of improper or unsafe use of its products.

	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.
---	----------------	--

- ◆ This manual is available as PDF file. Please download the PDF format from <http://www.minniemobil.com> Use the verbal assistance of PDF for reading. Adobe Reader supports verbal reading or other verbal reading programs can also help. If the user has serious visual difficulty, we suggest not using this scooter.

Intended use

The intended use of the scooter is to provide mobility to persons limited to a seated position that have the capability of operating a scooter and visual ability. The max. user's weight is 150kg. The user must have cognizance ability of following the traffic rules, manoeuvre the scooter, and properly control the functions on control panel.

The MM-01/02 scooter provides stability under normal driving conditions, which is dry, level surfaces composed of concrete, blacktop, asphalt, packed soil, grass, and gravel.



Warning

1. Avoid driving on uneven terrain and/or soft surfaces.
2. Avoid tall grass that can become tangled in the running gear.
3. Avoid loosely packed gravel and sand.
4. Do not use your scooter in fresh or salt water.
5. Do not use your scooter at the edge of a stream, lake, or ocean.
6. If you feel unsure about a driving surface, avoid that surface.

2. SAFETY NOTICES

BEFORE THE FIRST USE OF YOUR SCOOTER

The user should be familiar with the operation of this scooter before driving. Therefore, keep these safety notices in mind.

The same traffic rules for pedestrians apply to the use of this scooter.

For your safety, please follow the rules that apply to pedestrians.

1. Permission for streets or bicycle lanes depends on local/ national law. Please inform yourself about the rules where the scooter is being used.
2. At the end of a sidewalk, be aware of the cars on the road. Always be aware of the traffic.
3. Be extremely cautious when driving your scooter around heavy traffic streets or shopping malls.
4. Do not drive your scooter after consuming alcohol or when feeling tired.
5. Always obey traffic signals and traffic signs.

Safety/Handling of Powered Scooters

Until you are familiar with the operation of your scooter, please practice in a wide and open area, like a park. To prevent the possibility of falling off your scooter while driving, bear in mind the scooters driving motion, such as whether it is accelerating, stopping, turning, reversing, or going up or down inclines.

1. Please set the speed dial to the lowest speed initially.
2. Be sure someone is accompanying you and watches for traffic while you are driving on the road for the first time.
3. Be sure you are able to control and operate your scooter safely and confidently before changing to a higher speed.

The MM-01/02 scooter is limited to one passenger

Do not carry any passengers on your scooter (including children).

Use this scooter to carry or transport goods

The maximum total weight of scooter to carry is 225kg (496 lb) on flat ground. The weight capacity for the front basket(optional item) is 20kg (44 lb), and is 15kg (33 lb) for the Rollator Holder(optional item). On a incline ground as 10 degree, the maximum total weight of scooter to carry is 150kg (330 lb) on the seat only.

REGULAR USE OF YOUR SCOOTER

Please carry out daily inspections. Refer to Section 7 “Inspection & Maintenance” for inspection procedures.

Do not stretch your body out on the scooter

Such action may cause you to lose your balance or be injured. Also, pay attention to loose clothing that could get tangled in the wheels.

When crossing the railroad

Before entering the crossing, please stop completely. While crossing with the scooter, watch to make sure the wheels do not get stuck in the track.

Do not use your scooter under any of these circumstances:

- The road has heavy traffic
- The road is muddy or has loose gravel
- The road is bumpy, narrow, or snow covered
- The road is beside a canal or waterway without fencing or hedges

Additionally, avoid holes where your wheels may get stuck. Do not drive at high winds. Do not make sudden turns. Do not ride on an escalator.

Do not use a mobile phone or other wireless communication device while driving**Be careful driving on or near ramps, incline and drops**

1. Do not drive up a steep incline. Refer to “CLIMBING ANGLE” in Section 10“SPECIFICATIONS” for details.
2. When climbing up an incline, please drive slowly. You can set the speed dial to the highest speed to aid in climbing. When going down an incline, never reverse your scooter. Set the speed dial to the lowest speed setting.
3. Do not drive through any holes in the road. Do not drive over the edge of a sidewalk. Refer to “MAXIMUM GROUND CLEARANCE” in Section 10 “SPECIFICATIONS” for details.
4. Do not pass through water crossing the road unless the water is less than 2.5 cm (1 Inch) deep.
5. Please drive slowly on roads with drops or dips.
6. Do not make sudden turns while driving on gravel roads or ramps.

 **Warning!**

Do not set the scooter in freewheel mode when driving on an incline or decline. Do not drive your scooter climb or descend an obstacle that is inordinately high. Do not drive your scooter proceed backward down any step, curb, or other obstacle. This may cause the scooter to tip. Be sure your scooter is going perpendicular to any curb to ascend or descend.

Maximum User Weight Limit

Refer to “MAXIMUM LOAD WEIGHT” in Section 10 “SPECIFICATIONS” for details. Overloading your scooter will lead to damage to, or malfunction of, your scooter. This could cause the scooter to become a safety hazard. The warranty does not cover damage from overloading.

 **Warning!**

When climbing 10 degree incline, maximum weight capacity as 150kg is on the seat only. Do not load other stuff, or it could be dangerous or risk of flipping over.

Controller parameter

Never change the parameter on your own. Always check with your dealer when you want to change the parameter.

Pneumatic tire pressure

The recommended tire pressure is 2.3 Bar, which is 230kPa.

 **Warning!**

This mobility scooter is not intended to be used as a seat in a motor vehicle.

LABELING OF YOUR SCOOTER

Please read all the labeling on the scooter before driving it. For your future reference, do not remove them.

Warning!

STAIRWAYS AND ESCALATORS

Do not attempt to move an occupied scooter between floors using a stairway. Use an elevator to move an occupied powered scooter between floors. Do not attempt to lift the scooter by any removable parts. Lifting by means of any removable parts of a scooter may result in injury to the user or damage to the scooter. Do not use an escalator to move a scooter between floors. Serious bodily injury may occur. Do not attempt to lift the powered scooter by its tiller, seat or shrouds. Do not twist on scooter handles. Otherwise, damage or injury may occur.

Warning!

Do not make sharp turns in the forward or reverse direction at excessive speed. Failure to observe the warning can cause the scooter to tip over and may result in injury to user and/or damage to the product. Always wear the security belt. The security belt is an optional item; we strongly recommend ordering the security belt as an additional safeguard for the scooter user. If any wear appears, security belt must be replaced immediately. Do not attempt to reach objects if you have to move forward in the seat or pick them up from the floor.

Warning!

Do not stand on the foot plate while driving. Do not stand on the shroud(s) of the scooter. Do not lean over the top of the backrest to reach objects behind you, as this may cause the powered scooter to tip over. Do not shift your weight or sitting position toward the direction you are reaching as the scooter may tip over. Do not operate the scooter until you have checked that the surroundings are clear and that the area is safe for travel. Do not operate the scooter if it is behaving abnormally. Do not use the scooter on highways. Do not attempt to move up or down an incline with water, ice or oil film. Avoid operating the scooter in dark or poorly lit areas. Do not climb and/or go up or down ramps or traverse slopes greater than 10°.

Warning!

On a slope, if the throttle control lever is released while in the forward motion, the scooter will roll back approximately 30cm before the brake engages. If the throttle control lever is released while in the reverse motion, the scooter will roll back approximately 90cm before the brake engages. Before attempting to sit in or exit the scooter, remove the key to ensure that the power is off and the scooter will not drive. Do not remove the key or shut off while the powered scooter is in motion. Ensure that the seat is properly locked before use. Otherwise the user may fall from the scooter resulting in bodily harm. Attempting unsafe transfers may cause the user to fall, resulting in serious injury. Ensure that the tiller is properly adjusted before driving the scooter. After making any tiller angle adjustment and before use, the tiller must be securely locked into position. Gently push/pull the tiller to ensure that the tiller is securely engaged. Always keep hands and fingers clear of moving parts to avoid injury. Always check hand grips for looseness before using the scooter. If loose and/or worn, replace immediately. Never leave an unoccupied scooter on an incline. When outdoors on wet, soft ground or on gravel surfaces, extra caution must be observed when traversing such surfaces.

Warning!

Do not leave the scooter in a rain storm of any kind. Do not use the scooter in a shower. Do not leave the scooter in a damp area for any length of time. Check to ensure that all electrical connections are secured at all times. Remove the key while the scooter is not in use so as to avoid injury and/or damage to the scooter and surrounding areas. Avoid storing or using the scooter near open flame or combustible products. Serious injury or damage to property may result.

Warning!

Prolonged exposure to hot or cold conditions may affect the temperature of the scooter, possibly resulting in skin irritation. Extra caution when using your scooter in extremely hot or cold conditions or when exposing your scooter to direct sunlight for prolonged periods of time.

3. EMI

This chapter of the manual will provide the user with basic information about the problems with EMI (electromagnetic interference), protective measures can be used to either lessen the possibility of exposure or to minimize the degree of exposure; this section also shows some conditions that unexpected or erratic movements may cause.

Caution

It is very important that you read this information regarding the possible effects of electromagnetic interference on your electric MM-01/02 Scooter

ELECTROMAGNETIC INTERFERENCE (EMI) FROM RADIO WAVE SOURCES

Powered scooters 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 scooter to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered scooter can resist EMI up to a certain intensity 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 scooter model as shipped, with no further modification, has 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) or hand held radios, (security, fire, and police transceivers), cellular telephones and other personal communication devices.

NOTE: Some mobile phones transmit a signal while they are ON but not being used.

2. Medium-range mobile transceivers, such as those used in police care, fire trucks, ambulances and taxis usually have the antenna mounted on the outside of the device.

3. Long-range 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 player, and cassette players, and small appliances, such as electric shavers and hair dryers, are not likely to cause EMI problems to your powered scooter.

POWERED SCOOTER ELECTROMAGNETIC INTERFERENCE(EMI)

EM energy rapidly becomes more intense as one moves closer to a 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 scooter's control system while using these devices; this can affect your scooters movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of a powered scooter.

Despite compliance with all applicable EMC directives and standards, it is possible that the scooter may affect or be affected by other electrical devices that emit electromagnetic fields (e.g. mobile phones, alarm systems at shops, or automatic doors). Meanwhile, the driving performance could be influenced by electromagnetic fields. If you are aware of any such interference, either turn off the other device or turn off your scooter and move it outside the range of the interference.

Warning!

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

1. Do not operate hand-held transceivers-receivers, such as citizens band (CB) radios, or turn ON personal communication devices, such as mobile phones, while the powered scooter is turned ON.
2. Be aware of nearby transmitters, such as radio or TV stations, and try to avoid getting close to them.
3. If unintended movement or brake release occurs, turn the powered scooter OFF as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the powered scooter, may make it more susceptible to EMI.
5. Report all incidents of unintended movement or brake release to the scooter manufacturer, and note whether there were sources of EMI nearby.

4. STANDARD PARTS

MM-01

1. Tiller
2. Rear Mirror
3. Steering Wheel
4. Armrest
5. Back Seat
6. Seat
7. Reflector
8. Side Drawer
9. Floor Plate
10. 16"Pneumatic Wheel
11. Front Blinker
12. Front Light
13. Front Bumper/ Fixation Point
14. Fixation Points for Basket
15. Back Bar
16. Fixation Band
17. Warning Triangle Door
18. Mud Ward
19. Taillight
20. Rear Blinker
21. Rear Reflector
22. Drive Lever
23. Rear Fixation Bar
24. Bodywork
25. Seat Wing
26. Canopy Fixation Point
27. Control Panel

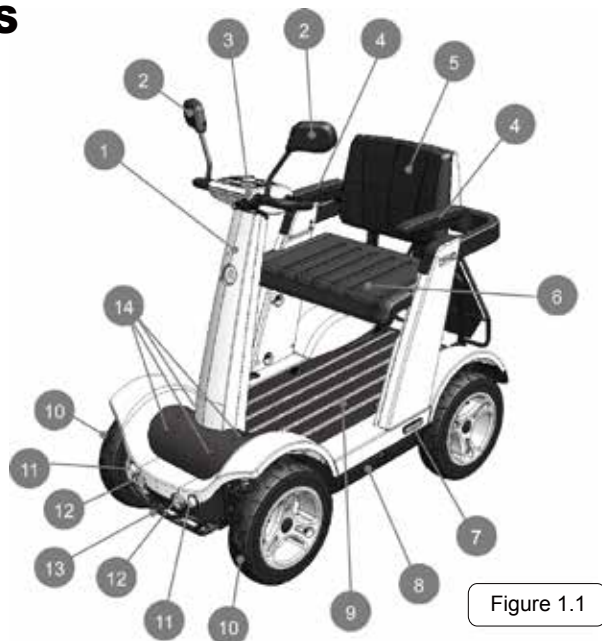


Figure 1.1

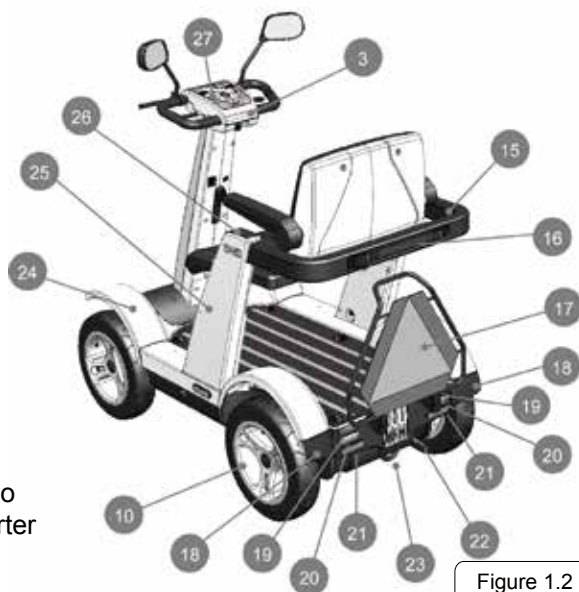


Figure 1.2

MM-02

It is the same scooter but with no Back Seat & Armrest and a shorter Back Bar.

TILLER AND OPERATION PANEL

28. Charging Socket
29. USB Socket
30. Tile Adjustment Handle
31. Tile Adjustment Pedal
32. Hand Break
33. Speed Indicator
34. Hazard Light Button
35. Speed Control Knob
36. Battery Gauge Indicator
37. Diagnostic Light
38. Speed Control Lever
39. Steering Handle
40. Blinker Button
41. Front&Tail Lights Button
42. Horn Button
43. Power Key Switch

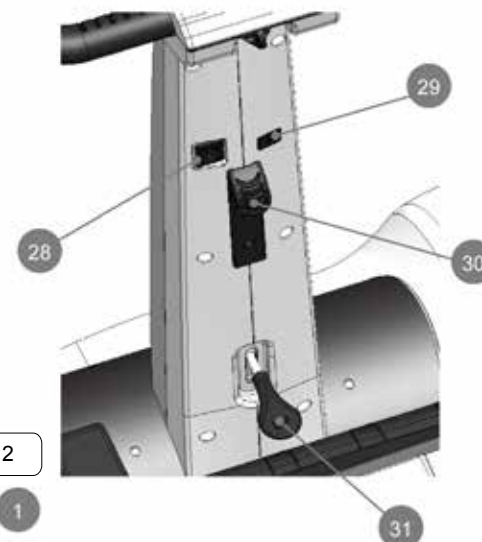


Figure 2

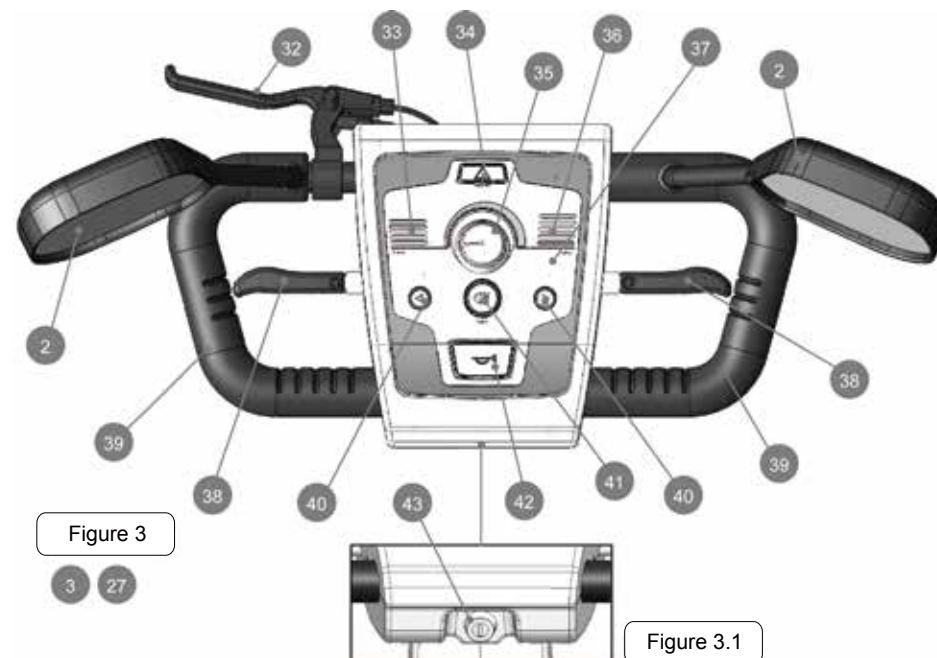


Figure 3

Figure 3.1

OPTIONAL PARTS:

- | | |
|-----------------------|-----------------------------|
| 1. Rollator Holder | 6. Trunk |
| 2. Cargo Net | 7. Rain Cover |
| 3. Security Belt | 8. Seat/Back Pad Soft |
| 4. Bag Hook | 9. Seat/Back Pad Extra Soft |
| 5. Charger Wall Mount | |

◆ Please visit <http://www.minniemobil.com> for more information of optional parts.

5. OPERATION

All the functions on the Operational Panel must be operated by the occupant. The rest operations can be managed by either occupant or assistant.

TILLER ADJUSTMENT

The Tiller **1** can be adjusted by the following steps.

1. Push down the Tiller Angle Adjustment Handle **30**, or Foot Paddle **31** and either one works. (Fig. 4.1).
2. Adjust the Tiller to the proper, safe and comfortable angle. (Fig. 4.2).
3. Release the Tiller Angle Adjustment

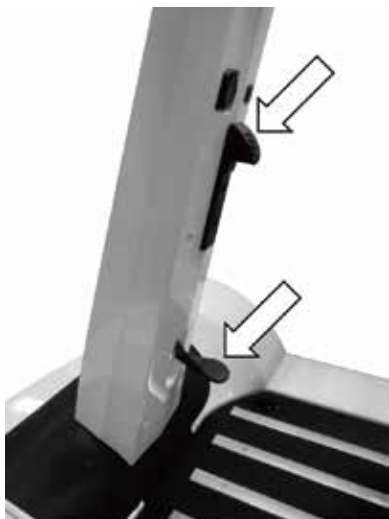


Figure 4.1



Figure 4.2

⚠ Caution

Potential pinch point by adjusting tiller and gas spring handle.

⚠ Warning!

After the adjustment the complete turning circle of the steering wheel must always be given.

POWER SWITCH

Turn the key switch **43** to power ON or OFF

[ON] Insert key into the key socket and turn clockwise.

[OFF] Turn key counterclockwise to turn off the power. If you plan to leave your scooter for a long time, please turn off and take the key out of the socket.

If the light of Battery Gauge Indicator **36** doesn't glow the first time the key is turned to the ON position, it could be that the battery connections are not in place. Please go to the section BATTERY CONNECTIONS to see how to proceed.

The scooter has a sleep function to save power. This will turn off the controller power automatically when the speed control lever has not moved after 10 minutes.

The sleep function will turn off the controller power, so the battery gauge will still glow until you turn off the power switch. When the scooter is in sleep status, you must turn the power switch off and then on again to wake it up.

POWER INDICATOR

When the power switch is turned on, the Battery Gauge Indicator **36** will light up to indicate the power remaining in the battery. Charge the battery when power is low.

The green light area indicates a full charge from the battery. The red light indicates it is time to recharge.


The remaining power indicated by the Battery Gauge will vary based on the actual driving time and how you drive. Repeated starting, stopping or climbing will consume the power more quickly.

i Suggestion


1. It is recommended that you charge the battery immediately when the battery gauge is in the red area.
2. After charging or replacing a new battery, drive the scooter for 2-3 minutes to make sure the battery capacity is enough.

3. In the wintertime, the battery may respond more slowly and the distance you can travel may also be shortened.
4. When driving on an incline, the battery gauge light might move from green to red, this is a normal phenomenon, please do not worry.
5. Even if the battery is used properly, it is natural that the battery capability will decay as time passes. This results in a shortening of travel distance compared to a brand new battery. Therefore, when you find the travel distance is about only 50% of a brand new battery's traveling distance, it is time for a replacement of the battery. Please go to your dealer and ask a new battery. If you continue to use the old battery when its capacity has decreased, it could lead to a dramatic decrease in travel distance.
6. Travel distances will be shortened when driving frequently on an incline or slope, rough ground or to climb kerbs as this leads to a larger consumption of the power.
7. Do not operate the scooter when battery is low.


SPEED DIAL

The driving speed of the scooter can be set via the speed control knob  located on the control panel. When the knob is turned to the left, it will drive with a speed of 3 km/h (1.86 mph), the scooter will drive only at the speed indicated by the knob. The scooter will travel faster the farther the knob is turned clockwise. To reduce the scooter's travel speed, turn the knob back counterclockwise. By turning it clockwise, you can raise the speed up to 15 km/h (9 mph). Based on your country and state, the maximum speed is defined by national laws. The speed limit will be applied by your local dealer.

SPEED INDICATOR




The speed LED  is actually a power use indicator. The more LEDs are light up the more power the motor is using.

HEADLIGHT/TAILLIGHT BUTTON


The headlight button  is an independent switch. So, if you drive your scooter with the headlight on, remember to turn off the headlight at the same time you turn off the power switch to avoid draining the battery.

Remember to turn on the lights in darkness, in the twilight, bad weather conditions or smog. We recommend to drive always with the lights turned on to be more visible for the traffic.

FORWARD, REVERSE AND BRAKING

- § Pull the speed control lever  on the right hand side toward you and the scooter will move forward.
- § Pull the speed control lever  on the left hand side toward you and the scooter will move backward.
- § The horn will beep and the taillights will blink when the scooter is in reverse.
- § Release the speed control lever freely while in either forward or reverse direction, the electromagnetic brake in the motor will activate, the scooter stops.
- § The scooter also has a hand brake. Pull the hand brake lever  toward you and the scooter will stop immediately.
- § The forces necessary to operate the throttle is very limited.

BLINKER SWITCHES

The light will flash and the horn will make a beeping sound when you press the left or right signal lamp button .




Left blinker button



Right blinker button

You must press the button again to turn the blinker off.

HAZARD BUTTON

In case of emergency press the hazard button . Both blinkers are blinking together with a beeping sound.

HORN BUTTON

The warning horn will be activated when you push the button, release the button and the horn will stop.

USB SOCKET

When the power switch is turned to ON position, USB ²⁹ socket provides 5V 1A power for charging the battery of mobile device (Fig. 5)



Figure 5

WARNING TRIANGLE DOOR

You are obliged to drive with the warning triangle ¹⁷ in upright position. For a comfortable loading you can flip the triangle by lifting the handle and turn it to a horizontal position (Fig 6.1, 6.2). After loading turn it back to the vertical position (Fig. 6.3). Make sure that the triangle is locked in place (Fig 6.4).



Figure 6.1

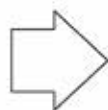


Figure 6.2



Figure 6.3

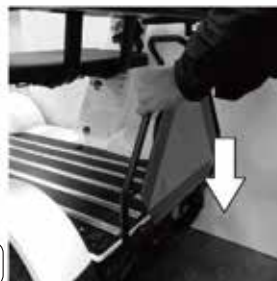


Figure 6.4

Warning!

Never step on the rollator holder or the warning triangle flipped in horizontal position. Never drive with the triangle in horizontal position. The maximum loading capacity of triangle is 15kg but it's only for purpose of loading stuff to the space under the seat.

DRAWER

Use the key to open and lock the Side Drawer ⁸ (Fig. 7). [Unlock]-Insert key into the key socket and turn clockwise to unlock the drawer. The drawer will open by gently pulling down. (Fig. 7.1) To close the drawer pull it up again to the original position. [Lock]-Turn key counterclockwise to lock the drawer and take the key out of the socket. (Fig. 7.2)



Figure 7

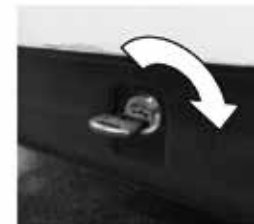


Figure 7.1



Figure 7.2

Warning!

Never drive with an open drawer.

FREEWHEEL MODE

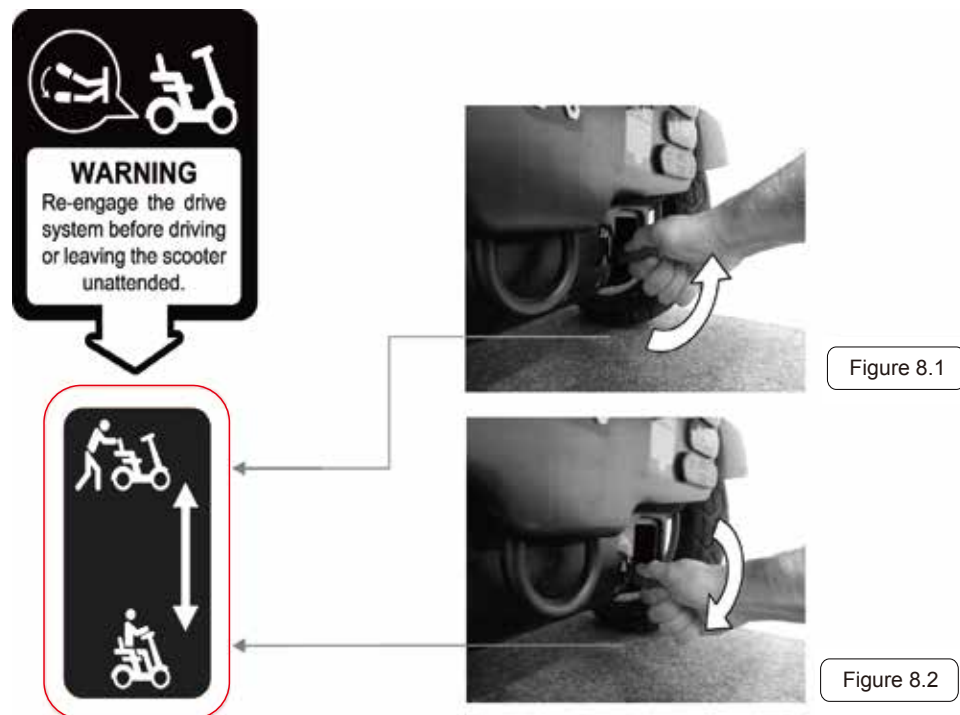
Situations may occur where you have to move your scooter by hand. Therefore you can put your scooter in freewheel mode. Only put your scooter in freewheel mode when the scooter is on a horizontal plane.

Drive Mode (Fig. 8.2)

Push drive lever ²² down completely so the scooter can be driven by motor power.

Freewheel Mode (Fig. 8.1)

Pull drive lever ²² up completely so the scooter can be moved manually.



Warning!

When going down on an incline, NEVER set to the freewheel mode. The electromagnetic brake will not function in freewheel mode.

FIXATION BAND

When you put something at the rear side of the scooter, use the fixation band ¹⁶ to tighten the stuff. The fixation band is at the back side of the back bar. (Fig. 8a-1). Release the bank hook before you start using it. (Fig. 8a-2). Loosen the band and fix your stuff in a safe position. (Fig. 8a-3). Pull the band to tighten it. (Fig. 8a-4)



Figure 8a-1



Figure 8a-2



Figure 8a-3



Figure 8a-4

DRIVING YOUR SCOOTER

1. Make sure the seat is installed properly.
2. Make sure the tiller has been secured in the correct position.
3. Turn the key switch to "ON".
4. Check battery gauge to see whether there is enough power for your trips. If you have doubts about the remaining power, please charge the battery before departure.
5. Set the speed dial to the proper speed.
6. Be sure the forward/reverse lever is functioning properly.
7. Make sure the electromagnetic brake is working properly.
8. Make sure that your head light, taillight, blinkers and horn is working.
9. Make sure it is safe before driving on the street.

⬠ Caution

1. Do not push both Right & Left side speed control levers. This may lead to the loss of control to your scooter or the break of the levers.
2. Do not turn the power switch to OFF while driving, as this will lead to an emergency stop and possible injury.
3. Only use the lowest speed while driving indoors.
4. Do not adjust the speed dial while driving, the sudden change to a higher speed may endanger you and cause your scooter to malfunction.
5. Do not place magnetic devices near the area of the operation handle as this could affect the safe operation of your scooter.
6. Be careful while driving in heavy traffic or crowded areas.
7. While reversing the scooter, be aware of people or objects behind you.
8. Always drive according to national laws

STOPPING

1. Release the throttle lever completely, and the scooter will brake and stop.
2. Turn the key switch to [OFF]. Then pull out the key (only after stopping).

⬠ Caution

The stopping distance will vary with your forward/reverse speed. Please begin braking as early as possible.

While parking your scooter, be sure to park on a flat ground and then turn the power to "OFF".

EMERGENCY STOP

Hold the hand brake lever tightly to operate the front drum brake, and the scooter will stop immediately.

SCOOTER TRANSPORT

If you want to transport your Scooter on a vehicle, first it must be firmly fixed at the defined spots both on the scooter (Fig. 9.1, 9.2) and on the transport vehicle.

Please check your car manual for the same.

Wheel rims can be used as supportive fixation spots.

Only accredited lashing straps are to be used for fixation.



Figure 9.1



Figure 9.2

The scooter can't be folded or dismantled to assist in storage or transport.

The motor gear must be disengaged, the power must be turned off, and the scooter must be fixed tightly.

If you want to send your Scooter by train or plane, make sure it is also tightly fixed inside the transport box.

⬠ Caution

During transportation the seat of the scooter may not be used to sit or keep objects.

6. ADJUSTING THE SCOOTER

ACCESS TO THE BATTERY COMPARTMENT

This could be operated by either occupant or assistant.

The batteries are located in the central middle part of the scooter, under the floor. Be sure the floor of the Scooter is free from objects before trying to open it.

To get access to the batteries:

1. First unlock the Floor Plate **9** by removing the six hand screws that fasten it to the scooter (Fig. 10.1, 10.2).
2. Then remove the Floor Plate with the help of the two handgrips on the rear of the Plate (Fig. 10.3).
3. The battery hollow is now accessible (Fig. 10.4).

To close it again, please follow the steps in reverse way.



Figure 10.1



Figure 10.2



Figure 10.3

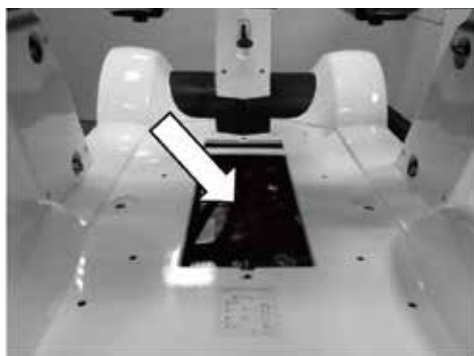


Figure 10.4

BATTERY CONNECTIONS

This could be operated by either occupant or assistant.

Switch the key to turn on the scooter. If the light of Battery Gauge doesn't glow, it means the battery connections are not in place. Access the battery compartment and connect the harness. Be sure to connect black to black, red to red (Fig. 10). If you are insecure about the right connections contact your local dealer.

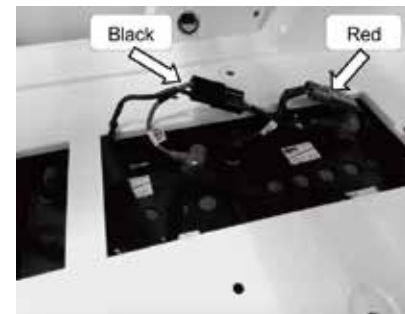


Figure 11



Battery handgrip

REMOVING THE TRIANGLE DOOR

This could be operated by either occupant or assistant.

The Triangle door can be removed following those steps:

1. First unlock the Floor Plate **9** by removing the six hand screws that fasten it to the scooter (Fig. 10.1, 10.2).
2. Then remove the Floor Plate with the help of the two handgrips on the rear of the Plate (Fig. 10.3).
3. Unscrew the two screws that fasten the triangle rods to the Scooter (Fig.12.1).
4. Pull the Triangle Door backwards to remove it (Fig. 12.2).

To place the Triangle Door again, perform the same steps in reverse.

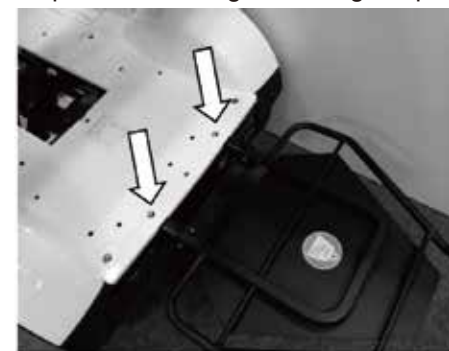


Figure 12.1

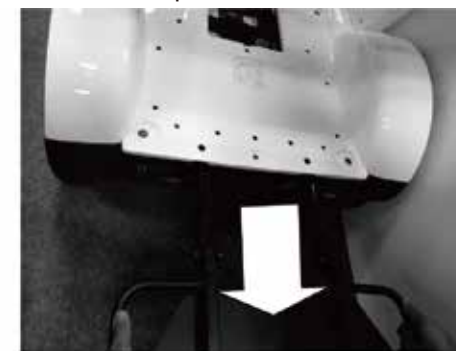


Figure 12.2

SEAT, BACKREST & ARMREST

The Armrests turn up and down 90° for comfort access (Fig. 13).



Figure 13



Figure 13.1

The resistance of the armrest movement can be adjusted by a screw (Fig. 13.1).

The resting angle of the armrest (Fig. 13.2) can also be changed by adjusting a screw (Fig. 13.3).

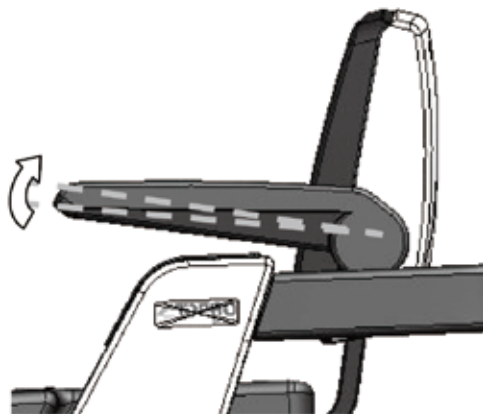


Figure 13.2



Figure 13.3



Caution

Be sure the seat is well locked before driving the Scooter.

PU seat, armrest, and backrest comply with EN1021-1/2 of resistance to ignition.

The Seat ⑥ has three height adjustments (Fig. 14). Ask your dealer to make personal adjustments (Fig. 14.1).



Figure 14



Figure 14.1

The Backrest ⑤ has 4 height adjustments (Fig. 15). Ask the dealer to make adjustments (Fig. 15.1, 15.2).



Figure 15

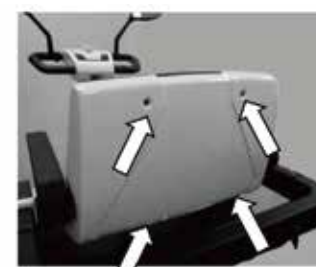


Figure 15.1



Figure 15.2

The Armrest ④ can also be adjusted inwards and outwards (Fig. 16). Ask the dealer to make adjustments (Fig. 16.1).



Figure 16



Figure 16.1

7. BATTERY & CHARGER

CHARGING THE BATTERY



Figure 17

Be sure to follow the procedures below accordingly.

1. Turn the scooter key switch to "OFF".
2. Open the charging socket cap on the scooter's cover then connect the charger's plug to the charging socket. There are 2 charging sockets on the scooter.
A) On the Tiller (Fig.18.1).
B) Inside the Side Drawer (Fig. 18.2). If you choose this socket, you can use the drawer to place the charger and take it always with you.
Refer to the arrow on the pictures.



Figure 18.2

Figure 18

3. Plug the power cable into your power outlet.

4. The charger will now be on. As long as the charger is on and connected to the Scooter, the Diagnostic Light (37) at the Control Panel (27) will be on.
5. The charger's LED light will be orange at the beginning of a charge. The charging duration is at least 6-8 hours but can take as long as over 10 hours, based on the status of the battery and environmental temperature.
6. The orange LED will turn to green when the charging is complete.
7. Disconnect the cord and remove the round plug from the charge socket.

Power indicator:

Red LED on: means power is on

Status indicator:

Green LED flash: means the charger is not connected to the battery

Orange LED flash: means pre-charging

Orange LED on: means in process of charging

Green and orange LED flash: means 85% charged

Green LED on: means charging finished

Red LED flash: faulty

Suggestion

1. Do not disconnect the charger cord if the charging is not complete. The battery life will be shortened if the battery is repeatedly used without being fully charged. Therefore, we suggest that you finish the full charging every time.
2. Continue to charge until the green LED light is on.
3. While finishing charging, the electric power will still slowly discharge if the cord is not disconnected.
4. Your scooter should be charged at least every month to keep the battery at full status, even when not being used.
5. Charging time will be affected by the ambient temperature so it takes longer in the wintertime.
6. We recommend to charge the scooter after every use. Especially new batteries reach the maximum capacity after 20 times loading and unloading.

Warning!

1. Keep away from flammable objects while charging, as it may lead to fire or explosion of the batteries.
2. As the battery may produce hydrogen, do not smoke while charging. Always charge your battery in a well-ventilated space.
3. 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, this may lead to an electric shock.

⚠ Caution

1. Please use the MM-01 /02 charger only and charge the battery completely every time. The battery might be damaged if you use a charger which is not compatible.
2. Never disassemble or modify the charger.
3. Do not charge in a space that is directly exposed to the sunlight. Do not charge in a space that is humid or subject to rainfall and morning dew.
4. Do not cover the scooter with any waterproof cloth or other objects while charging.
5. Do not charge in temperatures lower than -10°C (14°F) or higher than 50°C (122°F), the charger may not work properly and the battery may be damaged.

CHARGER

The charger's orange LED will be ON during charging. The green light will come on when the charging is complete.

BATTERY

Do not expose the battery to temperatures lower than 14°F or higher than 122°F when charging or storing the scooter. Exceeding the specified temperature ranges can lead to freezing or overheating of the battery. This will possibly damage the batteries and shorten their lifetime.

⚠ Warning!

Do not open the battery seal cap at any time.

CLEANING THE BATTERY

If the battery is contaminated by dirty water, battery acid or dust, the battery will discharge more quickly. Therefore, please follow these steps to clean the battery.

1. Turn the scooter power switch to OFF.
2. Open the Floor Plate (Chapter 6.).
3. Unplug the terminal to the taillight and signal lights.

4. Use a clean cloth to wipe off the soiled area.
5. Take out the battery.
6. Clean the battery with a clean cloth. If the terminal is covered by white powder, please clean it by using warm water.

i Suggestion

If necessary, ask for help from your MM-01 / 02 dealer for cleaning and replacing of the battery.

i Suggestion

1. Make sure the terminal is installed properly and put the cover back on.
2. Do not use the battery to charge other equipment.
3. Battery capability will vary with outside conditions; the driving distances will be shorter in the winter. If the scooter is not used for a long time, please charge the battery every month.
4. Please replace both batteries at the same time. Do not replace only one battery or use a different brand battery for your scooter.

DISPOSAL OF BATTERY

Used batteries are hazardous waste!!

Do not dispose them in the normal waste container. Contact your dealer or give the battery to buyback recycling centers.

For batteries and any other parts disposals please follow the local government policy for recycle.

8. INSPECTION & MAINTENANCE

DAILY INSPECTION

Check the following items before driving. If you find anything abnormal, go to or call your scooter dealer for further inspection before using it.

Item	What to Look For
Handle Bar	Is it tight? Can it be turned left or right smoothly?
Speed Dial	Can it be adjusted freely and function well?
Throttle Lever	Does the scooter move when the lever is engaged? Does the scooter stop when the lever released completely?
Motor	Is there any abnormal noise from the motor? Does the electromagnetic brake work properly?
Freewheel Mode Lever	Does the free wheel mode lever work properly?
Battery Gauge	Does the light come on when switched "ON"? Is the remaining power enough for your trip?
Horn Button	Does the horn work?
Turn signal	Does the turn signal work?
Headlight, taillight & blinker	Do they work properly?
Seat	Is the seat on properly?
Rearview Mirror	Is it tight?
Tires	Are there any cracks or other damage to the tires? Check the tread on the tires.
Other	Is there any abnormal noise?

Caution

Go to your dealer for inspection and maintenance if you find anything wrong.

REGULAR MAINTENANCE RECORD

To make sure your scooter is in good condition, we recommend to go to your dealer once a year for maintenance.

Suggestion

Even if you don't use the scooter for a long time, the scooter should still be maintained regularly.

I-Inspection **A - Adjustment** Δ - Repair **x - Replacement**
T-Tightening **C - Cleanse**

Item/Period		1 year	2 year	3 year	4 year	5 year	6 year
Control Panel	Forward /Reverse of speed lever						
	The function of switches						
	Connection of socket /plug is good						
Motor	Operation and noise						
	Function of electromagnetic brakes						
	Connection of socket /plug is good						
Transaxle	Any oil leakage from Transaxle						
Battery	Looseness or rrosion on terminals						
	Connection of socket /plug is good						
	Any broken on electrical cord						
Charger	Charging function and LED light						
	Any broken on socket/plug/cord						
Seat	High adjustment bolt damaged						
	Seat looseness						
Tiller	Right/left turn of tiller						
	Adjustment of tiller angle						
Tire	Crack or damage of tire surface						
	Tread depth enough or not						
	Abnormal wearing						
Rim	Tightness of bolts and nuts						
	Wear or deformation around tires						
Shock Absorber	Tightness of bolts and nuts						
	Damage to shock absorbers						
Inspector	Check by						
	Checking date						

BATTERY, FUSES, CIRCUIT BREAKER AND TIRES

Battery

Refer to Section 6 "CHARGING AND BATTERY".

Fuse

There are two fuses on your scooter. One is located inside the control panel. The other is near the main wire of the controller. If the power is switch ON and the battery indicator does not light up, check the fuse (Fig. 19.1, 19.2).



Figure 19.1



Figure 19.2

i Suggestion

Ask for help from your dealer for inspecting or replacing the fuses, (since battery pack has to be disassembled first for replacement of fuses).

Circuit Breaker

There is one button for the circuit breaker located on the rear shroud (Fig. 20, 20.1), if the power switch does not come ON and the battery indicator does not light up, please try to push this button, it is possible an electric current overload of the scooter.



Figure 20



Figure 20.1

Tires

The condition of the tires depends on how you drive and use your scooter. Please check the tread depth regularly. Replace the tires when the tread depth is less than 0.5 mm.

Regularly inspect your scooter's tires for signs of wear.

Caution

When tread depth is below 0.5mm, it can easily lead to slippage, making braking distances longer. Therefore, replace the tires as early as possible.

MAINTENANCE

1. You must maintain the scooter frequently if you drive on grass, sand, or gravel roads.
2. Do not use water, gasoline or other chemical solutions to clean your scooter. Be sure NOT to spray the scooter with water to prevent damaging the electronic components and printed circuit board. Please clean the scooter by wiping it with either a dry or moist cloth. Do not use wax.
3. Please take the scooter to authorized dealers for repairs and adjustments. Improper adjustments could lead to accidents and scooter malfunction.
4. Please use soft and dry clothes to keep your scooter tidy. Please use moderate or mild detergent to clean the scooter.

Caution

When conducting maintenance of your scooter, please turn the key switch "OFF" and remove the charger cord.

The warranty is expiring immediately when maintenance is done by not authorized personnel by minniemobil GmbH.

LUBRICATION

At six-month intervals, you should lubricate the following parts with a light oil or similar lubricant:

- Wheel bearings
- Axle of scooter
- Rollator holder frame
- Triangle frame
- Suspension axle
- Gas spring axle

Caution

Do not use WD40 to lubricate parts. Do not lubricate transaxle/gear box. In the event of any difficulties, please consult your provider.

Caution

When conducting maintenance on your scooter, please turn the power switch OFF and remove the charger cord.

STORAGE

When storing your scooter:

Make sure the key switch is turned to "OFF"

Suggestion

Please store the scooter in a location where it is out of direct sunlight, rain, or dew. When storing for long periods of time, please charge the battery fully and then disconnect the battery terminal. For further details, inquire with your dealer.

9. TROUBLESHOOTING

This table is only a guide to aid you in getting your scooter operating, should you have any problems. If you are unable to get your scooter operating, please contact your Authorized Service Center.

Table1: Basic Troubleshooting

Symptom	Possible Cause	Solution
Scooter does not move	Key switch is not "ON"	Turn key switch to "ON"
	Main circuit breaker tripped	Reset circuit breaker in trunk area
	Brake release lever in 'Freewheel Mode'	Place lever to 'Drive Mode'
	Charger connected to outlet	Disconnect charger
	Battery power low	Recharge battery
	Battery harness loose or unplugged	Plug harness into connector
	Scooter shuts down to conserve battery	Cycle key switch "OFF", then "ON"
	Controller error	Check diagnostic light for Flash Code (See Table 2 to get solution)
Scooter feels wobbly when driven	Tire pressure low	Inflate tires
	Seat is loose	Check seat for loose hardware or damage. Ensure seat in locked position
	Bearing in tiller worn	Replace bearings

Range less than expected	Charging too infrequently	Charge scooter more often
	Defective or worn out battery	Load test batteries. If necessary replace.
	Cold weather reduces battery life	Allow batteries to reach room temperature and then fully recharge
	Defective charger	Contact your Authorized Service Center
Brake squeals	Dirt in brake pad	Blow dirt out with air pressure hose
Brake release lever sticks	Rust and corrosion	Spray ball detent area with lubrication oil.
Stiffness in steering	Possible grime build-up	Lubrication rod end joints
Low Tire pressure	Possible time-related loss of air pressure	Inflate the tire again (2.3bar)
	Possible puncture of tire	Contact your service agent

The diagnostic flash codes for your scooter are designed to help you perform basic troubleshooting quickly and easily. A diagnostic flash code flashes from the diagnostic light in the event one of the conditions listed below develops.

Table 2: Scooter Controller Internal Diagnostics

Flash code	Possible Cause	Solution
1	The battery needs charging	The battery voltage has dropped below 23.3 volts in neutral. Recharge batteries.
2	Battery voltage is too low	The battery has dropped past 16.5 volts and is not sufficient to allow safe driving. Check the battery condition and the connections.
3	Battery voltage too high	The battery has exceeded 32 volts. Check the battery condition and the connections.
4	Current limit time out	The motor current has reached a too high value. Check the condition of the motor and loom. Contact your Service Agent.
5	Park brake fault	Check park brake conditions.
6	Speed control out of neutral	Return speed pod to neutral and rest system. Readjust the speed lever to neutral if necessary. Contact your Service Agent.
7	Speed control fault	Check speed pod wiring for open or short circuits. Check speed pot set-up. Contact your Service Agent.
8	Motor fault	Contact your Service Agent.
9	Internal (controller) fault	Contact your Service Agent.

10. SPECIFICATIONS

MM-01/ 02	
Overall Length(w/o rollator holder)	57.5"/1460mm
Overall Length(w/ rollatorholder)	66.3"/1685mm
Overall Width	31.8"/810mm
Overall Height	58.46"/1485mm
Total Weight (with battery)	411.4 lb/187 kg
Total Weight (without battery)	314.6 lb/143 kg
Min. Turning Radius	77"/1975 mm
Propulsion Motor	24Vx1300Wx5300rpm
Battery	Lead Acid battery DC12V/75AH x2", 22kg per battery
Charger	5 Amp, off board
Tires	16"x3.5" (406.4mmx89mm) pneumatic
Driving System	Direct drive rear wheels (with differential gear)
Brake System	Automatic electromagnetic brake & Hand brake
Control Method	By speed control lever
Speed (Maximum)	Forward: 9.4 mph/15 kph Reverse: 1.25 mph/2 kph
Climbing angle (dynamic)	0° - 495 lb/225 kg 1 -10° - 330 lb/150 kg
Parking angle (static)	15° - 495 lb/225 kg
Range	28 miles/ 45km for 150kg loading
Ground clearance	2.75"/70mm
Weight Capacity	0° - 495 lb/225 kg(dynamic)
Max. kerb height	100 mm

Energy consumption	43.2km
Minimum breaking distance from max speed	4.1 meters
Seat plane angle	100°
Effective seat depth	420 mm
Effective seat width	620 mm
Seat surface height at front edge	750-800mm
Backrest angle	100°
Backrest height	370mm-460mm
Footrest to seat distance	410-480mm
Leg to seat surface angle	120°
Armrest to seat distance	195 mm
Front location of armrest structure	318mm
Horizontal location of axle	43 mm
Minimum turning radius	1750mm
Type Class	Class C
Compliance	ISO 7176-14

Minniemoobil GmbH reserves the right to modify the specifications if necessary. The final specifications are subject to the individual scooter your purchase from your dealer.

11. WARRANTY

TWO-YEAR LIMITED WARRANTY

Two years on all structural frame components including:

1. Main frame
2. Seat
3. Rollator holder
4. Triangle

TWO-YEAR LIMITED WARRANTY

For two (2) year from the date of purchase, we will repair or replace, at our option, to the original purchaser, free of charge, any part or electronic component found, upon examination, to be defective in material and/or workmanship by an authorized representative of Minniemoobil GmbH. Components included under the two-year limited warranty include:

1. Electronic controllers
2. Transaxle
3. Motor & brake (electronic function ONLY).
5. Charger
6. Any other electrical subassembly

NOTE: If there is an increase in the noise level from the transaxle, the warranty does not apply. An increase in operational noise level usually occurs due to abuse and excessive strain on the scooter.

WARRANTY EXCLUSIONS

1. ABS plastic shrouds and footrest covers (wear items are not warranted)
2. Batteries (The battery warranty is provided by the battery manufacturer. The batteries are not warranted by Minniemoobil GmbH)
3. Tire (wear items are not warranted)
4. Upholstery and seating (wear items are not warranted)
5. Motor brushes
6. Brake pads (wear items are not warranted)
7. Fuses
8. Repairs and/or modifications made to any part of the scooter without specific and prior consent from Minniemoobil GmbH or the dealer.
9. Circumstances beyond the control of Minniemoobil GmbH.

Exclusions also include components with damage caused by:

1. Contamination (rain, etc).
2. Abuse, misuse, accident, or negligence.
3. Commercial use, or use other than normal.
4. Improper operation, maintenance, or storage.

NOTE: Gradual deterioration in performance because the battery has been left in a discharged state, left in cold conditions for an extended period of time, or worn out through heavy use is not covered.

SERVICE CHECKS AND WARRANTY SERVICE

This warranty is extended only to the original purchaser. Your original receipt will be necessary as proof of purchase before any warranty performances 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 Minniemobil GmbH or failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, commercial use or by anyone other than an authorized dealer, or damage that is attributable to the 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.

LIMITATIONS

We do not warrant damage due to:

1. Neglect
2. Misuse
3. Improper installation or repair of parts or changes not authorized by Minniemobil GmbH.
4. Exceeding the weight limit as shown in the specification

This warranty is invalid if the original scooter serial number tag is removed or altered.

Serial number is stamped on the frame of the scooter and also on the scooter.

WHAT WE WILL DO

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

WHAT YOU MUST DO

1. Return the warranty card.
2. Obtain from us, while this warranty is in effect, prior approval for return or repair of covered parts.
3. Return the scooter or parts, freight pre-paid, to an authorized Minniemobil GmbH provider.
4. Pay the cost of labor to install or repair parts.

NOTICES TO CONSUMER

The warranty covers all defects of the product which are demonstrably attributable to material or manufacturing defects. The warranty period is 24 months after receipt of the readiness for dispatch, at the latest after delivery. Excluded from the warranty are damages which are caused by normal wear and tear, by intent, negligent or improper operation or use. No warranty is given if you use inappropriate care products, lubricating oils and greases.

J. Basket capability

H. Main sticker

I. I / O Key switch

F. SN Barcode

G. Under seat capability

K. Rollator holder capability

A. CE Mark

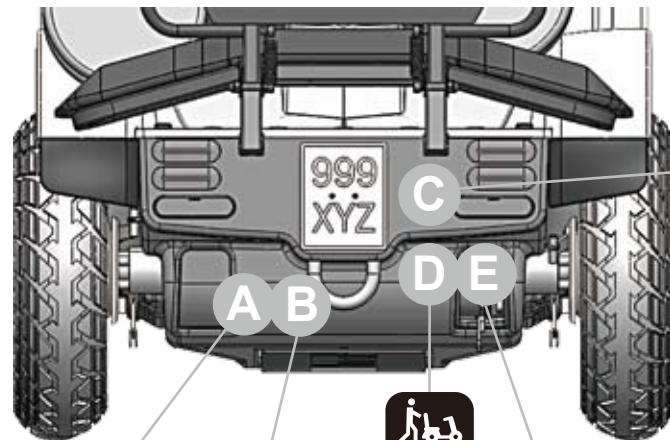
B. Bus tie down warning

C. Electric brake position

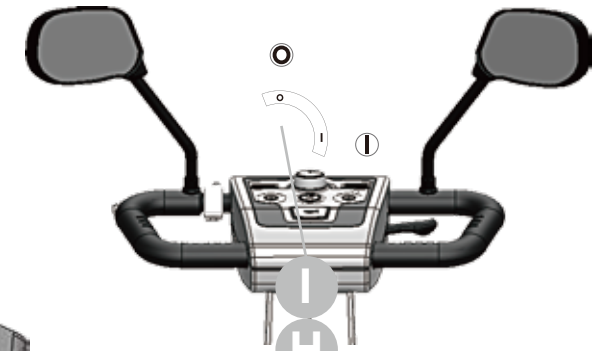
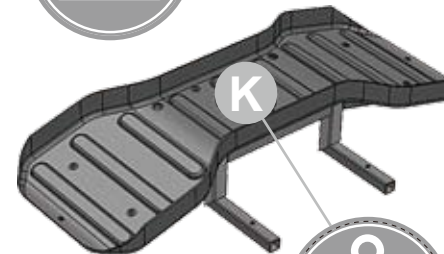
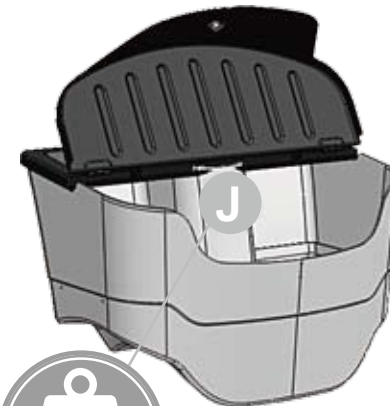
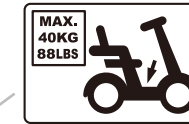
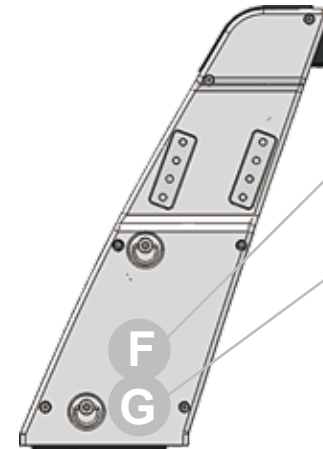
D. Electric brake

E. Motor warning

L. Circuit diagram

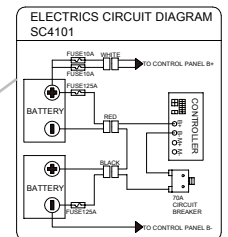
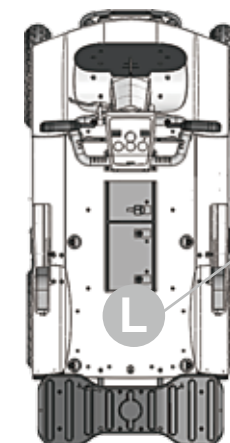
**CE**

The scooter is not intended to be used as a seat on a motor vehicle.



minniemobil
Minniemoobil GmbH
Grünwalderweg 28c
82041 Oberaching
Info@minniemobil.com
www.minniemobil.com
Germany

Model: MM-01/02
Type: Class C
Speed: 3-15km/h
Max user weight: 150kg 330lbs
Manufacturing Date: 2015-06
SN: MM-01-1506001



WARRANTY REGISTRATION*Please type or print*

vehicle identification number _____ 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 Manual, especially sections on operation instructions, safety guidelines, maintenance and battery instructions.
- ☐ Scooter Warranty
- ☐ My dealer has instructed me on how to operate my Scooter.

Signature _____ Telephone _____

Dealer Name _____ Dealer Phone _____

E-mail Address _____

Comments _____



Minniemobil GmbH

Grünwalderweg 28c

82041 Oberhaching

Phone: +49 89 651089 22

Info@minniemobil.com

www.minniemobil.com

Germany