



Reno II

Model – P319
USER MANUAL

Please ensure that this manual is read and understood before using the powerchair.

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Introduction

Congratulations on your purchase of the ROMA *Reno* powerchair. This powerchair incorporates the latest innovative designs. The ROMA *Reno* can be used in confined spaces both indoors and out. The powerchair can be easily dismantled without tools and will fit into the boot of vehicles for easy transport or stored neatly indoors. The detachable battery pack allows convenient charging wherever necessary.

Intended Use

The ROMA *Reno* was carefully designed for indoor or outdoor use in paved pedestrian areas by a single individual with limited mobility up to a maximum weight of 136kg (21st).

Your assessor/healthcare professional will determine the suitability of the powerchair for each individuals intended use.

Note: Persons with lower body amputations should not use this device unless evaluated with artificial limbs fitted, as stability may be compromised due to an irregular centre of gravity.

Technical Specification

Class 1 Medical Device (93/42/EEC as amended by 2007/47/EC)

Class 2 Indoor/Outdoor Vehicle (Use of Invalid Carriages on Highways Act)

<i>Overall Size</i>		<i>Seat Dimensions</i>	
<i>Length</i>	870mm	<i>Width</i>	460mm
<i>Width</i>	570mm	<i>Depth</i>	380mm
<i>Height</i>	860mm	<i>Seat to footrest</i>	430 - 520mm
<i>Battery</i>	22Ah	<i>Backrest height</i>	410mm / 16"
<i>Height (Seat Removed)</i>	420mm	<i>Range (Up To)</i>	20km (12.5m)*
<i>Maximum user weight</i>	136kg / 21 st	<i>Seat to floor</i>	530mm
<i>Safe working slope</i>	6°	<i>Battery charger (off board)</i>	4 amp
<i>Weight with battery</i>	59.5kg	<i>Turning radius</i>	700mm
<i>Max. Speed</i>	6km/h (4mph)	<i>Battery pack weight</i>	14kg

* Passenger weight, rough ground conditions, low temperatures and battery condition can affect maximum range.

Component Weights:-

Battery Pack – 14kg
Rear Chassis – 20kg

Seat – 11.5kg
Front Chassis – 14kg

'Reno'



1. Programmable joystick controller
2. Flip up, width adjustable armrests
3. Padded seat and fold down backrest
4. Removable battery pack
5. Rear anti-tippers
6. Puncture proof non-marking wheels
7. Flip up and depth adjustable footplate
8. Handy storage basket

Safety Advice



DO:

- Read this manual carefully before using your powerchair
- Turn the power off when transferring to and from the powerchair
- Select a slow speed when going down gradients (max 6°) or over uneven ground
- Keep your feet on the powerchair whilst driving
- Ensure the seat is locked in the 'forward' position
- Avoid rough or soft terrain and long grass wherever possible
- Be aware of other road users when crossing roads
- Turn the power off when not in use
- Follow the maintenance guide to ensure safe operation of the powerchair



DO NOT:

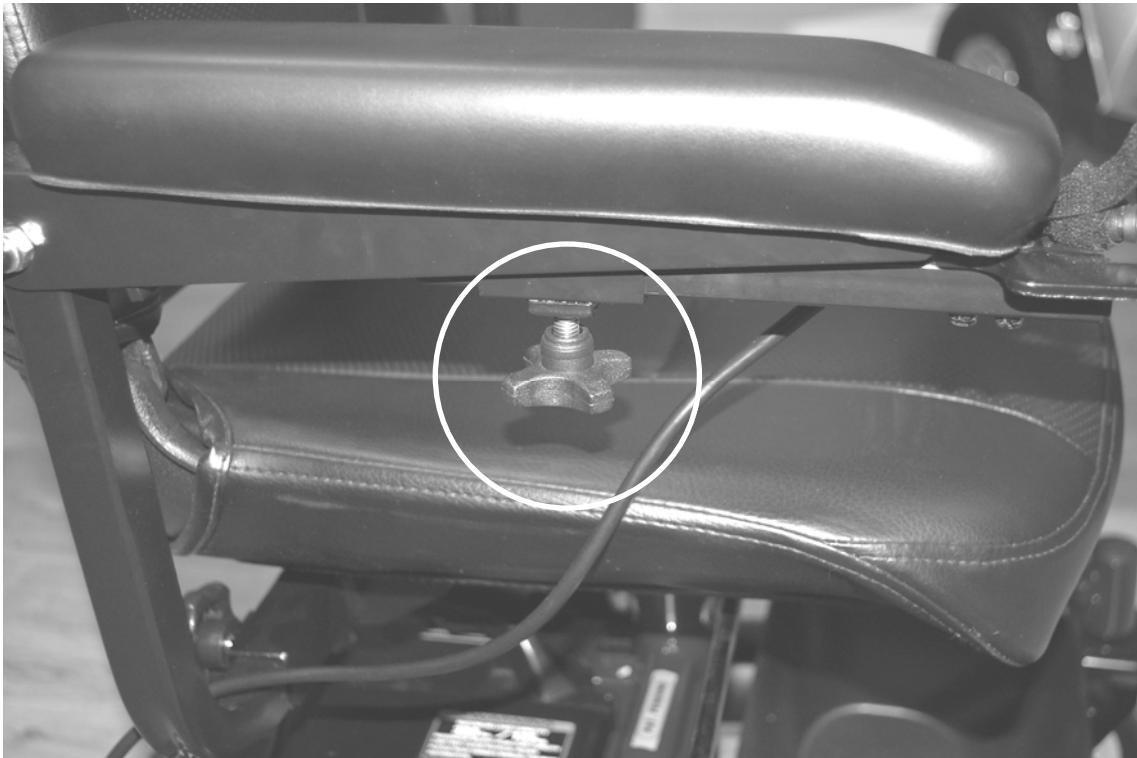
- Carry passengers
- Exceed inclines over 6°
- Traverse inclines
- Attempt inclines if the surface is slippery
- Turn sharply at full speed
- Exit or enter the powerchair unless the power is switched off
- Switch off the power whilst driving – this will cause the powerchair to stop abruptly
- Use the powerchair where you cannot safely or legally walk
- Attempt to climb kerbs except drop down kerbs
- Use the powerchair if under the influence of alcohol or any medication
- Use a mobile phone whilst driving
- Attempt to negotiate steps or escalators
- Attempt to tow any other devices
- Exceed the stated weight limit
- Connect any unauthorised devices to the battery as this could cause permanent damage and void your warranty
- Use any other battery/charger other than those supplied by ROMA
- Travel through water or over soft terrain (mud, sand etc.) Avoid cobbles if possible
- Travel on the road except when crossing between pavements
- Lift the powerchair by the seat assembly or any plastic part
- Sharply shift your centre of gravity as this could make the powerchair unstable

Every care has been taken to ensure that your powerchair will give you safe, reliable service provided you adhere to the advice given above.

Adjustments and Battery Removal

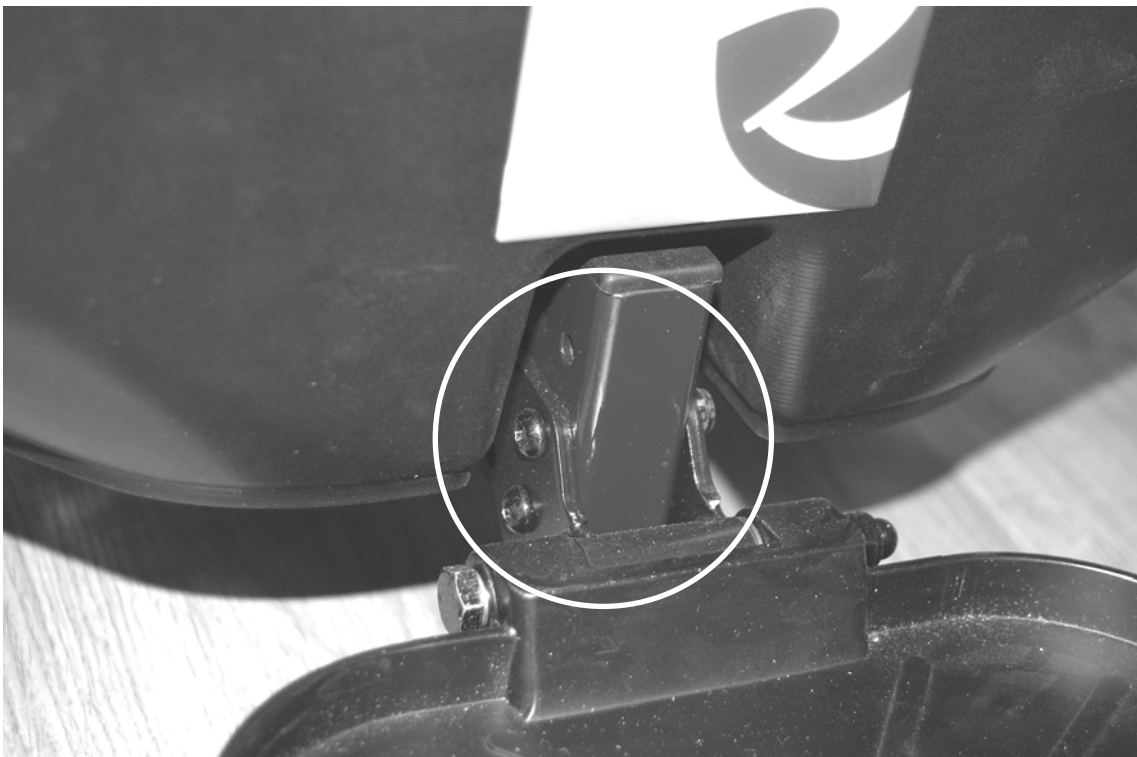
Joystick Depth Adjustment

It is possible to adjust the depth of the joystick controller for added comfort. Simply loosen the handknob and slide the joystick to the required distance and fully re-tighten the handknob.



Footplate Height Adjustment

The height of the footplate can be adjusted by fully undoing the two fixing bolts. When removed, place the footplate at the desired height and re-insert the bolts and tighten fully. Both screws must be used when re-fitting.



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Seat swivel & Removal

The seat can be swivelled around the base unit. Lift up on the lever on the right side of the seat and rotate as necessary.

To remove the seat fold down the backrest, lift up the lever and gently pull the seat upwards away from the chair at the same time.

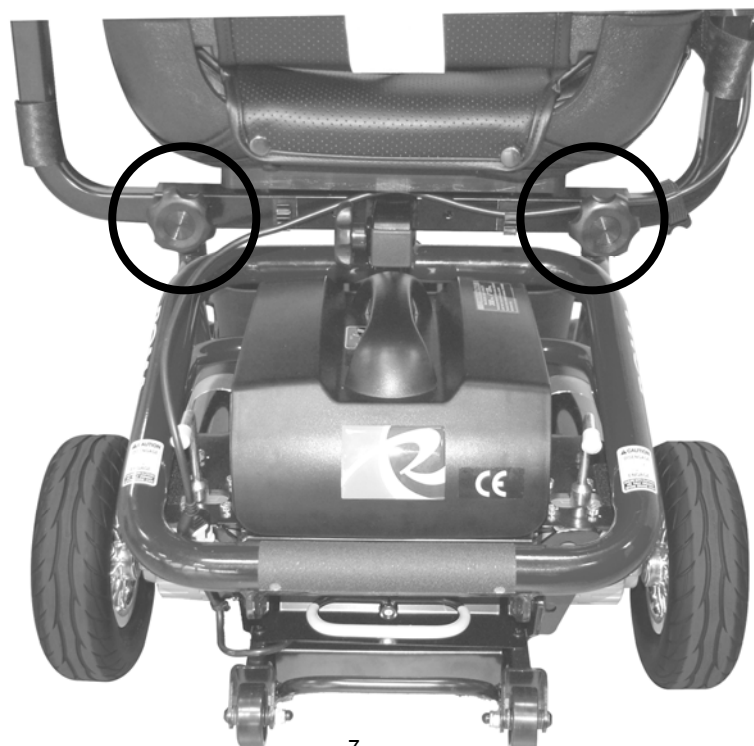
The seat is required to be swivelled to remove the battery pack.

The joystick MUST be unplugged before removing the seat to prevent damage to the cable.



Armwidth adjustment

The armrest width can be quickly adjusted without tools. Under the rear of the seat there are two handknobs. Loosen the handknob and adjust the armrests as desired and re-tighten the handknobs.



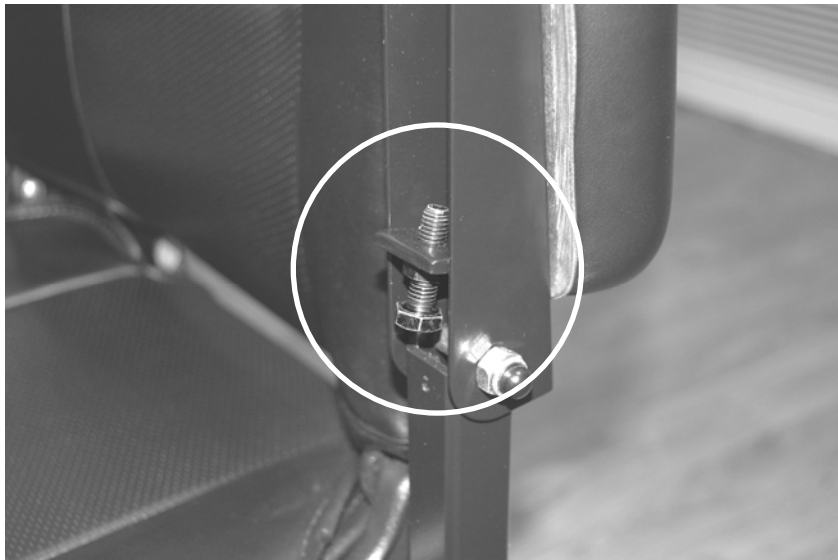
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Flip up armrests & angle adjustment

The armrests flip up to allow for easier transfers.

Simply lift the armrest when transferring.

The angle of the armrest can be adjusted by undoing the locking nut and setting at the desired height. The nut should then be tightened to lock the adjustment in place.



Battery removal

The battery can be easily removed for charging away from the powerchair or for storage.

The seat must be swivelled to the left or right by 90 degrees (or removed) the battery can then be removed by holding the handle, depressing the release trigger and lifting the pack out towards the rear of the chair.

Always ensure the power is switched off at the joystick before removing the battery pack.



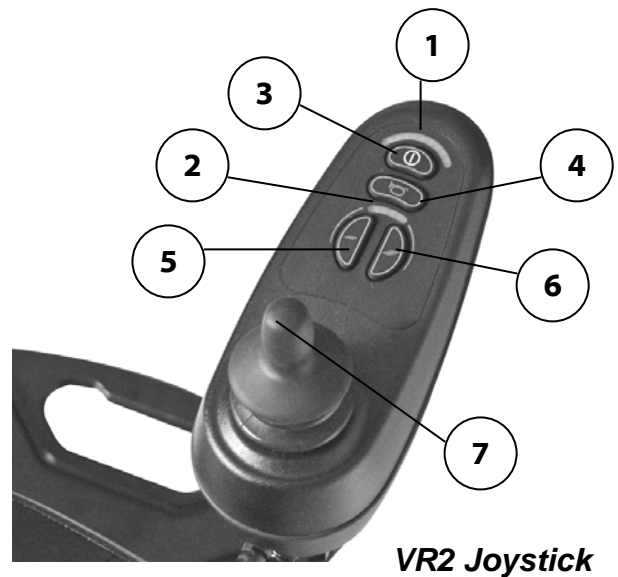
VR2 Joystick Controller

Battery Gauge (1)

This is a 10-segment display, which indicates if the VR2 is switched on and gives the state of charge of the battery. Also, any faults in your power chair's electrical system are also indicated by this display. Refer to page 16 for details.

Maximum Speed Indicator (2)

This is a 5-segment display, which indicates the speed setting selected. 1 bar indicates the slowest setting and 5 bars the fastest.



On/Off Button (3)

This button turns your joystick controller on and off. Do not use this button to stop the power chair, except in an emergency.



Horn Button (4)

This button operates your powerchair's horn. *This should only be used to warn others of your presence and not as a rebuke of any form.*



Speed Decrease Button (5)

This button decreases your maximum speed.



Speed Increase Button (6)

This button increases your maximum speed.

Joystick (7)

This controls the speed and direction of your powerchair. Push the joystick in the direction you want to go. The further you push it, the faster the speed will be. Releasing the joystick will automatically engage the brakes and bring the powerchair to a controlled stop.

'Sleep' Mode

If the joystick is left on and the powerchair is not used for 10 minutes, it will go into 'sleep' mode. Simply turn the power on to resume operation.

Joystick 'Lock' Function

Your VR2 controller is equipped with a lock function to prevent any unauthorised use. To lock the controller:

- When the power is on, press and hold the power button for about 1 second until the system beeps.
- Move the joystick forward until it beeps, then move it to the back position until you hear a beep.
- Release the joystick – you should now hear a long beep, this indicates the system is now locked.

To unlock the controller:

- Press the power button until the speed indicator lights go from left to right.
- Move the joystick forward until it beeps, then move it to the back position until you hear a beep.
- Release the joystick – you should hear another beep, this indicates that the system is unlocked and ready for use.



Should the rubber boot/gaitor or keypad on the joystick become damaged, replace immediately to prevent damage to the internal components.

Brake Release / Freewheel Operation

To release the electromagnetic brakes go to the back of the powerchair and rotate the two levers away from the chair as indicated by the labelling. The powerchair may now be pushed. This function is not intended to be used for moving the powerchair when occupied unless in an emergency. Rotate both levers as indicated by the labelling to re-engage the brakes.



Caution! Never leave the powerchair unattended whilst in freewheel mode as it will roll away down an incline. 'Freewheel' mode should only be used in an emergency to move the powerchair due to power failure. NEVER move the powerchair in this mode whilst it is occupied. DO NOT use your feet to operate the electromagnetic brakes as this will apply excessive force and damage the mechanisms. This could lead to the powerchair being inoperable.

Starting to drive your powerchair

Getting Started

Select an area with plenty of space.

Ensure that when seated in the in the powerchair you are in a comfortable position and can easily and freely operate the controls.

Moving off and steering

Turn the power on and check that your battery is fully charged.

Set your speed to a low setting.

Gently push the joystick in the direction you wish to travel. The harder you push the joystick the faster you will travel.

Release the joystick, this will automatically return to the centre position and the electromagnetic brakes will be activated.

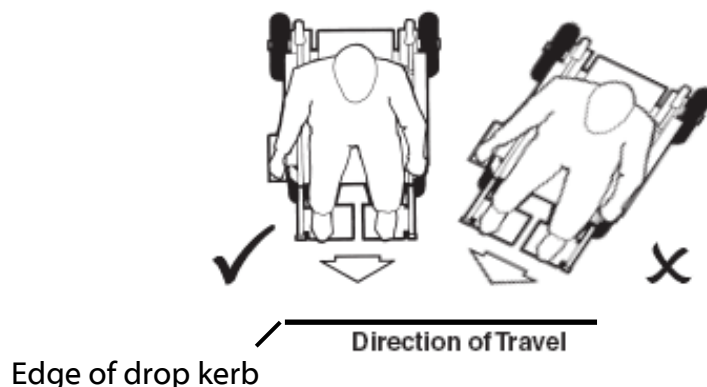
Reversing

Before reversing please ensure that the area behind is free from any hazard or obstruction. DO NOT reverse down an incline without supervision.

Drop Kerb Climbing

We recommend that a suitable access point such as a drop kerb or ramp be used at all times.

When driving up the drop kerb, always address the edge as shown in the illustration below. This will ensure maximum stability.



Warning: Do not hit the drop kerb at speed and do not attempt to climb a drop kerb if the anti tipping castors have been removed. Please take time to get accustomed to your new powerchair before driving in heavily pedestrianised areas.

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Drop Kerb Descent

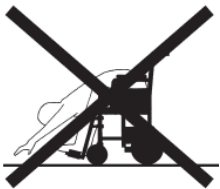
Do not reverse down drop kerbs, please use a ramp/drop-kerb in forward motion to descend.

Warning: NEVER reverse down a drop kerb or ramp onto a main thoroughfare.

Reaching and Stretching

Care must be taken when reaching and stretching for objects as this may affect the stability of the powerchair.

When attempting to reach for objects it is very important that the power is OFF.



Do not attempt to reach for objects on the floor by leaning forward or reaching between your knees.



Do not attempt to reach for high objects by moving to the front of the seat. NEVER stand on the footplate to reach for objects.



Do not attempt to reach for objects behind you by leaning over the back of the seat.

Disassembly & Assembly



Warning: We advise caution when disassembling and lifting items. You must ensure that the person undertaking the action is able to safely and correctly handle the weight to avoid any personal injury.

Ensure that the power is switched off and the joystick cable is disconnected before dismantling.

The motors MUST be in the Drive / Engaged position to disassemble and assemble the powerchair.

Remove the seat as described earlier.

Remove the battery pack as described earlier.

Locate the yellow release lever as shown below and pull backwards – this will cause the frame to separate.

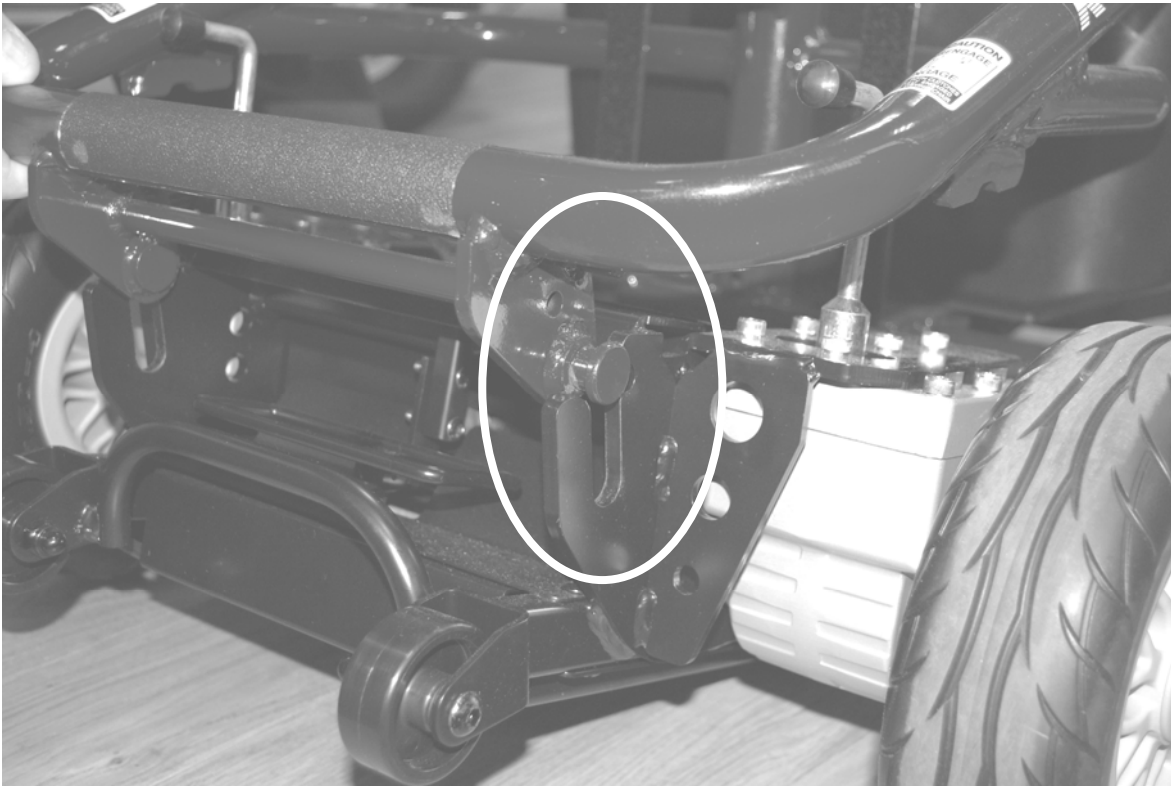


The front chassis can then be lifted away from the rear as shown below for transportation.

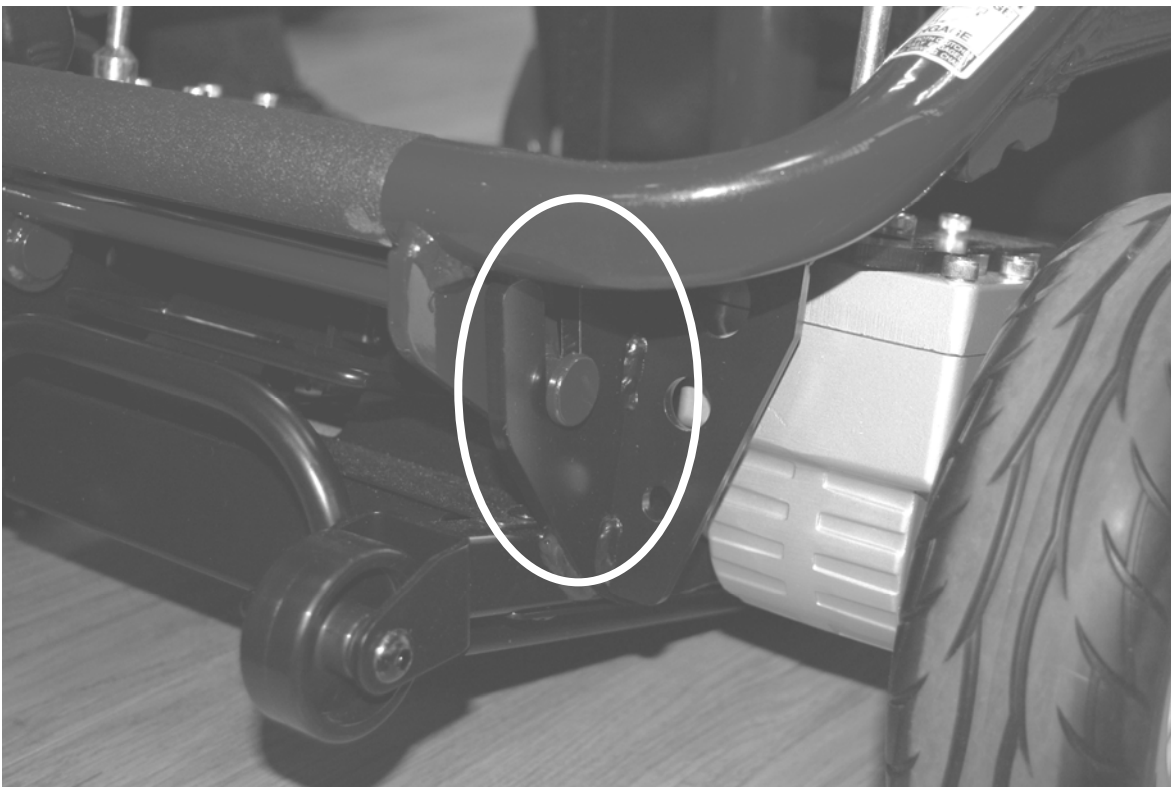


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To reassemble locate the pivot pin of the front chassis into the receiving slots of the rear chassis (each side) and lowered to the bottom location.



Fully located in the bottom position



Continued.....

Push down on the rear part of the frame as shown below. This will reconnect the two parts of the frame together. You will hear the latch 'click' into place.

ALWAYS check that both parts are fully connected before refitting the seat and battery box.



Refit the battery box and seat and reconnect the joystick. The scooter is now ready for use.

Battery and Battery Charger

IMPORTANT: The VR2 controller MUST be switched off when charging.

Battery Charger

The battery charger is a 4 amp switch mode type off board. The battery charging port is located on the underside of the joystick controller. There is also a charging port on the battery pack. This special feature allows the battery to be charged independently of the main powerchair.

Before using your powerchair for the first time be sure to fully charge the battery pack, this may take up to 8 hours.

To charge the battery connect the 3-pin male charger plug into the charging socket on the joystick / battery pack (to use the charge socket on the battery pack it must be removed). Plug the 3-pin mains plug into a wall socket and switch on.

There will be a constant red light on the charger which indicates power is on. When charging the light changes to yellow, a green LED light indicates charging is complete.



Caution! Do not charge the battery for longer than 12 hours. Always charge the battery in a well-ventilated indoor area. You must still maintain charging the battery even if the powerchair is not to be used for a prolonged period of time (2 to 3 weeks). Failure to do so could result in permanent damage and render the battery unusable. Wherever possible do not interrupt the charge cycle until the battery is fully charged. Continual interruption can permanently damage the battery. If the charging lead should get damaged discontinue use immediately and seek a replacement from your dealer. ONLY USE THE CHARGER SUPPLIED WITH YOUR POWERCHAIR. Do not leave the charger plugged into to the charger port after the charge is complete.



Disposing and recycling of used battery

Batteries must always be recycled correctly. Do not dispose of them with your domestic refuse.



For further information regarding your nearest recycling facility please contact your local authority.

Battery Pack

The Reno has a 22Ah AGM (2 x 12v) battery pack which has the advantage of being removable for charging off board.

Do not open the battery pack. Always seek the advice of your mobility retailer should fuses or batteries need replacing. Failure to do so could result in damage to the battery pack.

If the powerchair is to be unused for extended periods fully charge the battery pack and remove it completely from the powerchair. The battery pack should not be stored for prolonged periods in cold environments (do not leave it outside in a garage / shed over the winter period if not used) as this can cause permanent damage to the batteries.

Maintenance

Product Life Expectancy

Your powerchair has been designed to provide the user with a long, reliable life provided it is correctly maintained and regularly serviced by an authorised dealer. However, due to inevitable wear and tear and technological improvements it is recommended that the average useable life of this powerchair is five years.

Cleaning

The frame and seat of the powerchair should be cleaned using a damp cloth and gentle detergent. Do not use abrasive cleaners or solvents, as this will damage the plastic components. Do not spray water (*hose or pressure washer*) onto the powerchair as this may cause damage to the electronics.

Routine Maintenance

We suggest that your powerchair should undergo a full service at least once a year by an authorised ROMA dealer.

Please check the following on a weekly basis:

- Tyres are in good condition
- Wheels spin freely (castors)
- Moving parts, pivots and frame fixings are not damaged or worn
- All hand knobs and levers are secure

✓ **Note:** *Should any part of your powerchair need replacing or repairing please contact your local ROMA dealer to undertake any maintenance. Failure to do this may void your Warranty.*

Troubleshooting

Circuit Breaker

Your powerchair is fitted with the latest in electronic controls that are programmed to protect the electrical system from abnormal overloads. Fitted for extra protection is a circuit breaker, which is located under the carry handle of the battery pack. Should there be a situation where your powerchair stops for no apparent reason please check that the circuit breaker has not tripped. Simply press the button to reset the circuit breaker.

✓ **Note:** *Should the circuit breaker continue to trip, turn off the powerchair immediately and consult your dealer.*



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Check List

If your powerchair fails to operate, please check the following:

- The unit is switched on.
- All plugs and connections are firmly fixed.
- Battery level shows full charge.
- Freewheeling device is in the drive position.
- Circuit breaker has not tripped.
- Battery and controller lead are properly connected.

If the freewheel device has been operated with the powerchair switched on, the powerchair will not operate until the unit has been turned off and on again.

VR2 Error Codes

Your VR2 controller has the ability to diagnose possible errors in the electrical system, which may prevent your powerchair from operating. These are displayed on the battery gauge. The fault is shown against the number of lights flashing on the display.

Battery Gauge	Possible Fault
10 bars flash	Battery voltage too high. Check battery connections.
9 bars flash	Electromagnetic brake fault – check freewheel.
8 bars flash	Possible controller fault – check connection / cable.
7 bars flash	Possible joystick fault – check connection / cable.
6 bars flash	Battery charger connected.
5 bars flash	Right hand motor wiring fault – check connection.
4 bars flash	Right hand motor disconnected – check connection.
3 bars flash	Left hand motor wiring fault – check connection.
2 bars flash	Left hand motor disconnected – check connection.
1 bar flashing	Low battery voltage – charge batteries.

✓ **Note: If your powerchair fails to operate after checking the above possible faults consult your local Dealer immediately. Also ensure that the VR2 has not been accidentally locked – refer to page 10.**

Further Information



Safety Information Regarding Electromagnetic Interference (EMI)

Powerchairs and powerchairs are designed to operate under certain conditions. However, radio waves or electromagnetic fields may affect the operation of the powerchair. The source of EMI could be radio or television transmitters or portable devices such as mobile phones, portable CB radios etc.

Should any unintentional movement occur turn the powerchair off as soon as safely possible.

Solar Energy

During periods of sunny weather, it is possible that surfaces of your powerchair may reach high temperatures (as with motor vehicles). Please take precautions if leaving the powerchair in direct sunlight for any period of time. Seek shade or cover the seat and joystick to keep any temperature increases to a minimum.

Health Factors

Suitability for this product has been assessed on the user's current state of health. It is essential that the user regularly monitor their ability to use the powerchair safely.

General Use

Take heed of the information given in this manual regarding safety and the maintenance of your powerchair. If adhered to, your powerchair should give you years of reliable mobility.

Storage and General Care

We recommend that the powerchair is always stored in a dry environment such as in the home or garage to protect the chassis and other components from corrosion. Do not leave the powerchair outside during rainstorms. If the powerchair is wet, wipe with a dry cloth to ensure there is no ingress of water into the internal components of the powerchair.

During everyday use, do not use in rain showers or travel through puddles. Avoid use in areas where the powerchair could become contaminated with sand or abrasive materials.

Product Stability

Powerchairs are designed to allow the user flexibility of movement in restricted areas. Driving at maximum speed and attempting sharp turns can create a situation where the product becomes unstable. Therefore it is essential that the user pay attention the guidance set out in this manual.

The main factors affecting stability are:

- Maximum speed setting
- Seat height
- User movement
- User's manoeuvres
- Gradients or slopes

Please keep your speed to a level where you can safely stop without having to make any erratic turns.

Do not load bags etc. on the back of the seat as this will affect the centre of gravity and could increase instability.

Do not lean outside of the 'footprint' of the product, especially whilst moving.

Avoid making turns on gradients or slopes.

Adjustment of your lap belt

Ensure that you are sitting back fully into the seat with the pelvis as upright as possible and not leaning to one side.

Close the buckle and position the belt so that the hip bones can be felt above the lap belt.

Adjust the strap length by pulling on the open end of the belt. As a guide, the belt should be adjusted so that there is sufficient room for two fingers to slide between your body and the belt.



Warning: Should any damage occur to the lap belt, please replace immediately. The user should transfer to a bespoke vehicle seat whilst being transported. DO NOT sit in the powerchair whilst in any moving vehicle.

Driving in Pedestrian Areas

As mentioned previously, when using the powerchair in pedestrian areas always lower your maximum speed to that of the pedestrians around you. Remember the stopping distance of your powerchair and always allow enough space to stop safely to avoid collisions with pedestrians or other objects.

Transportation

The P319 Reno Powerchair was tested to ISO 7176/19 on .09.10.2014.by Millbrook Services Test No...S13301

The test chair was fitted with a high back seat and Unwin Safety Systems items

1pair x Quattro with tongue and buckle fro the front (FR 01)

1pair x Quattro with Karabiner for the rear (FR 02)

3point Occupant restraint (OCR01)

Other systems are available for these wheelchairs, for further details please contact the Unwin Sales Office.

Warranty Terms and Conditions

This is to certify that your Roma Medical product is warranted for a period of 12 months from the date of original purchase. This warranty is not transferable.

Should a defect or operating fault arise within this period the Dealer from where the product was originally purchased should be notified immediately. Failure to register the fault may invalidate the warranty.

The Dealer from where the product was purchased is responsible for any warranty repairs.

Roma Medical warrants that if a fault occurs within this period due to faulty workmanship or materials that the product will be repaired (or replaced at the Company's discretion) free of charge.

Any unauthorised modifications will invalidate the warranty.

Parts which are subjected to normal wear and tear, accidental damage, neglect or misuse are excluded from this warranty. Normal wear and tear includes tyres, chassis covers, bulbs, seat coverings etc.

Component parts replaced outside this period carry a six-month warranty. (Standard terms and conditions apply for this period).

Model: _____

Serial No: _____

Purchase Date: _____

Dealer Stamp

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Roma Medical reserve the right to change specifications without prior notice

