Instructions for use for

P-Access

standing wheelchairs

POWERSTAND

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INTRODUCTION

You have just acquired a “P-Access” standing wheelchair.
Congratulations, and thank you for choosing PowerStand!

Before initial use, it is essential to read these Instructions carefully. It contains several advices about using and maintenance instructions.

Reminder of safety and maintenance instructions you must comply with:

1) Safety

The stand-up function operates exclusively on a flat surface, away from any stairs, access ramp or slope.

2) Adjustments

Your dealer will IMPERATIVELY adjust this chair for your use by making the adequate adjustments. In no case must you try to adjust the chair yourself.

3) Annual maintenance

For a long satisfaction, we advise you an annual service by an approved dealer in order to check the safety devices.

4) Physiological benefits of multiple daily standing.

Use of this chair is by medical prescription.
Progressive re-education for the standing position with your physiotherapist is strongly recommended before daily use of the “Stand Mobility”.
Benefit from the standing position will ensue in the main from frequent alternation of seated-standing-seated positions. It reduces the risk of sores. Frequent repeated elevation in the course of the day so as to carry out daily activities will progressively regulate intestinal and urinary function as well as contributing to better joint, bone and blood functions.

5) Guarantee

Please return the warranty card (located at the end of the logbook) as soon as possible so we can provide support service if needs be.
We are always pleased to have your remarks or suggestions.

We are at your disposal for any enquiries or help you may require.

Label:

CE

Compliance of this device with annex I of the EU directive 93/42/EEC is attested by the CE label.

CHAPTER I - SAFETY INSTRUCTIONS AND PRACTICAL

1 – WARNING AND SAFETY INSTRUCTIONS

1.1 Move in and out of the wheelchair:

Your doctor or therapist will advise you how to transfer according to your health and everyday life.

1.2 Overcoming steps or stairways:

Whatever the obstacle, always approach slowly preferably assisted by a third person. Never try to overcome an obstacle superior to 25 cm.

1.3 Going up or down a slope:

Going up, always lean the trunk forward and avoid changing direction abruptly.
Going down, always lean backwards. It is also important to keep speed and direction under control.
In order to limit the risk of fall, do not use steep (maximum 8 degrees), long (control loss) or uneven slopes (tip over).

2 - TRANSPORT

CAUTION: Your wheelchair has neither been designed nor tested to be used as a seat in a vehicle. Do not seat in the chair during transportation, only in a seat correctly fitted and adapted to this purpose.

When transporting the chair in a vehicle, bulk can be reduced:
- Fold back backrest (see “Common instructions” paragraph III.2-Folding and unfolding the backrest).
- And only on the semi-electric by removing the rear wheels.

CAUTION: After each reassembly of the wheelchair, before use, it is imperative to check if every part is locked in position properly.

3 – CLEANING AND MAINTENANCE

3.1 Cleaning:

Not only for hygienic reasons but also for a good mechanical functioning, we advise a cleaning of your wheelchair on a regular basis.
Especially after use under the rain, dry it carefully.
- For painted parts: clean with water slightly soapy.
- For upholstery: use a mild and moisturized cloth.

After use under rain, carefully rub your wheelchair to dry.
CAUTION: Sand and seawater can damage the bearings and some joints on the wheelchair.

3.2 Maintenance:

For the service, we advise you to have the main components of your wheelchair serviced by your dealer, in order to maintain a good level of performance.

Chapiter II – First contact instructions : put in service

2.1 – UNPACKING

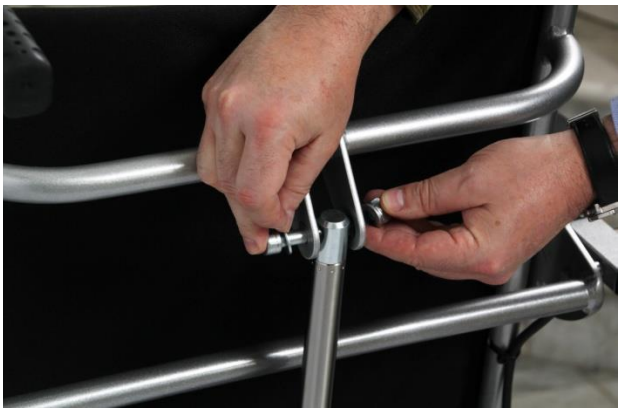
Open the box by the top and remove the chair and its components.

It is recommended to open the box from lateral side rather than from the top to avoid to lift a heavy load to carry.

2.2 – BACKREST ASSEMBLY

In order to ease and reduce volume of transportation, the wheelchair is delivered with its backrest and kneepad unassembled.

Backrest assembly: straighten up the backrest until the fitting holes of the backrest tube match with the actuator.

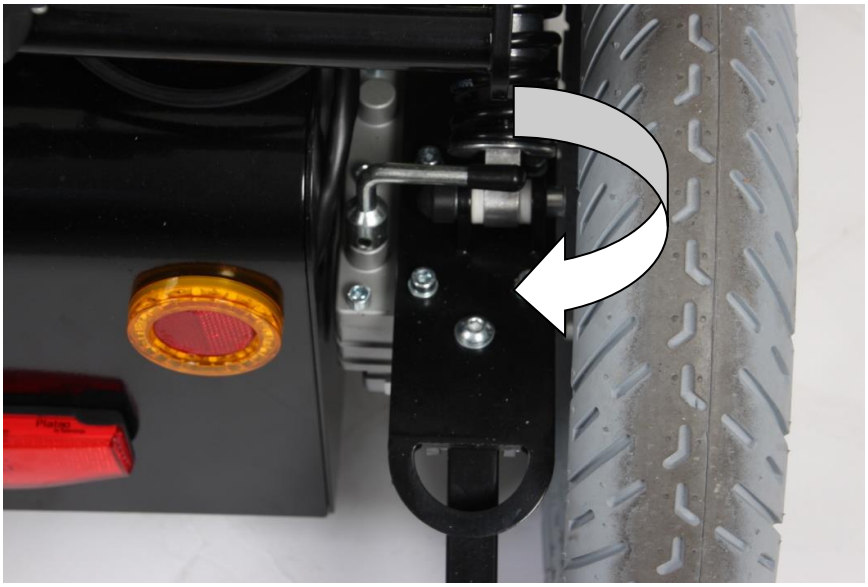


2.3 – DISENGAGE AND ENGAGE THE MOTORS

The wheels of your wheelchair can be used in electrically powered mode or they can be switched into manual mode in order to enable a third person to move the wheelchair without using the motor.
Both levers are located on each side of the wheelchair, at rear of the motor.

2.3.1 - Disengage and engage the drive wheels

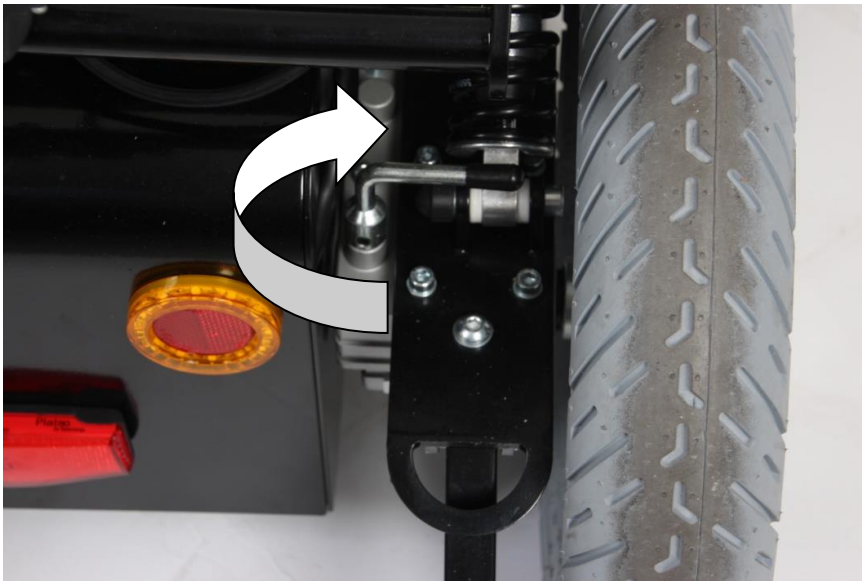
Disengage: hand free mode



Swing both levers outwards.

The wheels are disengaged, the wheelchair can be pushed manually.

2.3.2 - Engage: powered mode



Swing both levers inwards.

The wheels are connected to the propulsion engines controlled by the Joystick

Chapiter III – ADJUSTMENTS

Adjustments to be fulfilled by the dealer according to the end-user's morphology in order to obtain the best standing position as possible.

3.1 IN SEATED POSITION.

3.1.1 – Seat depth

Possibilities of adjustment from 36 to 54 cm.

In order to obtain a good stretched standing position, it is compulsory to get first a good and comfortable seated position. Therefore the seat depth must be adjusted to end-user's thigh length.

A sticker on the left side of the chair indicates the seat depth.

To proceed with the adjustment, remove the two bolts fitting the upper seat depth tube and the bolt fitting the lower seat depth tube to the backrest. Adjust and replace the bolts in the holes corresponding to the desired seat depth, then connect the plates together.

As a reminder, a well-adjusted seat depth means 4 to 5cm distance between the popliteal and the seat strap.

Caution! Once the seat depth is adjusted, double check that the hole adjustment in the upper seat depth tube corresponds to the one in the lower seat depth tube.

WARNING! Always double-check that the setting of the pivot points on the upper and lower seat tube correspond.

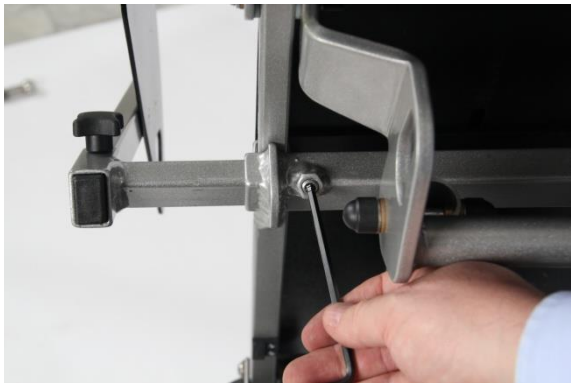
TIPS! By exception, doing the opposite by making a different connection between upper and lower seat tubes, you will get a different range of backrest adjustment going to a complete flat position if wished.

3.1.2 – Armrest

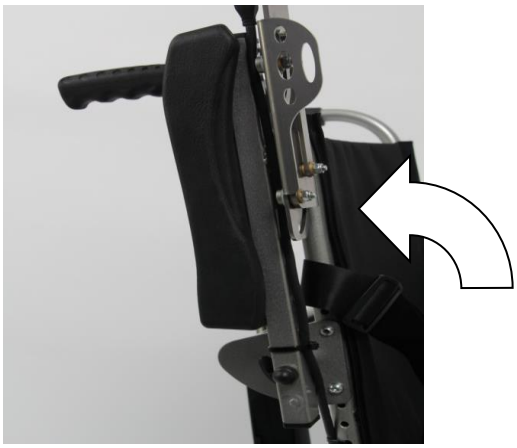
a – Height adjustments (5 different height possibilities)

Remove the screws from the armrest fitting tube, adjust to the desired height and put back the screws in place.

b – Width adjustments (3 different possibilities +/- 60 mm).



c – Swing backwards



To make side transfers easy, the chair is equipped with swing away armrests.

Lift and swing backwards to escape.

3.1.3 – Footrest

a – Height adjustment: 3 different positions for a range of 60 mm / 2”.

The aluminum footrest are height adjustable.
Adjust the height of the footrest according to the length of the end-user’s leg.
Remove the screws holding the footrest bracket, put at the desired height and put back the screws. Tighten securely.
Remember that adjusting the footrest at the right height means a better pressure relief along the thigh in a seated position.

b – Angle adjustment of the footplate
The 2 screws inside the footplate tube are designed to adjust the footplate angle.

c – Flip up

To make transfer easier, the footrests can be lift up backwards by pulling the cable handle.

d – Safety lock and unlock

To lift up the footplate, just pull the cable to the up and lift the footplate.

3.1.4 – Knee support

The knee support is made of a central square-profiled tube held by a sleeve.
Before standing, it is important to adjust the knee support in height and depth and to adjust the U-formed knee-supports in the width.

a – Adjustment in the depth

Choose the appropriate hole to reach the desired depth.

Keep 3 to 4cm between the knee of the end-user and the knee-support.

b – Adjustment in height (3 different heights possible)

To adjust, remove bolt, slide knee support to desired height and put the bolt back. Tighten securely.

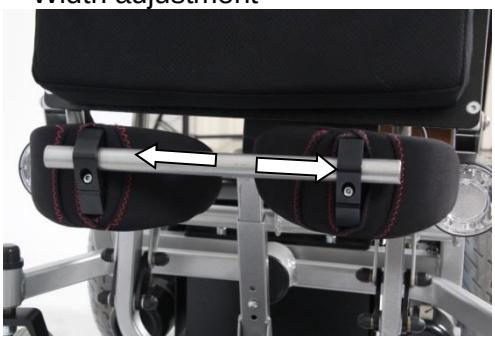
The upper edge of the knee support has to be below the patella.

c – Angle adjustment

Loosen the fitting screws from the knee-supports and proceed with angle adjustment according to the morphology of the user.

Once adjusted, tighten up the screws securely.

d – Width adjustment



Loosen up the fitting screws from the knee-supports and proceed with width adjustment right and left within the tube limits.

Once adjusted, tighten up the screws securely.

Those adjustments will have to be optimized after a progressive standing session. This will enable to avoid exaggerated pressure on the knees and to guarantee a good alignment of the limbs.

3.1.5 – Side Guards:

To protect on each side the clothes and avoid any damage.

Insert the side-guard on the axle located on the side of the seat.

Once in position, tighten up holding screw.

3.1.6 – Suspension adjustment.

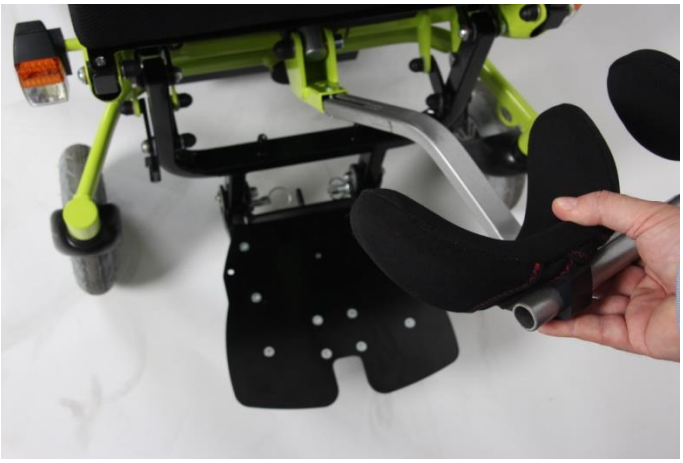
The firmness of the shock-absorber is adjustable by turning the knurled knob of the spring.

3.2 – IN STANDING POSITION

Be sure to be on a flat surface.

Ensure that the chair is on a leveled ground. For safety reasons, we advise not to verticalize on a slope, or too close to greater level differences such as steps or ramps for example.

a – Put the knee support



Place the knee-support into the square profiled shaft designed for this purpose situated at leg level.

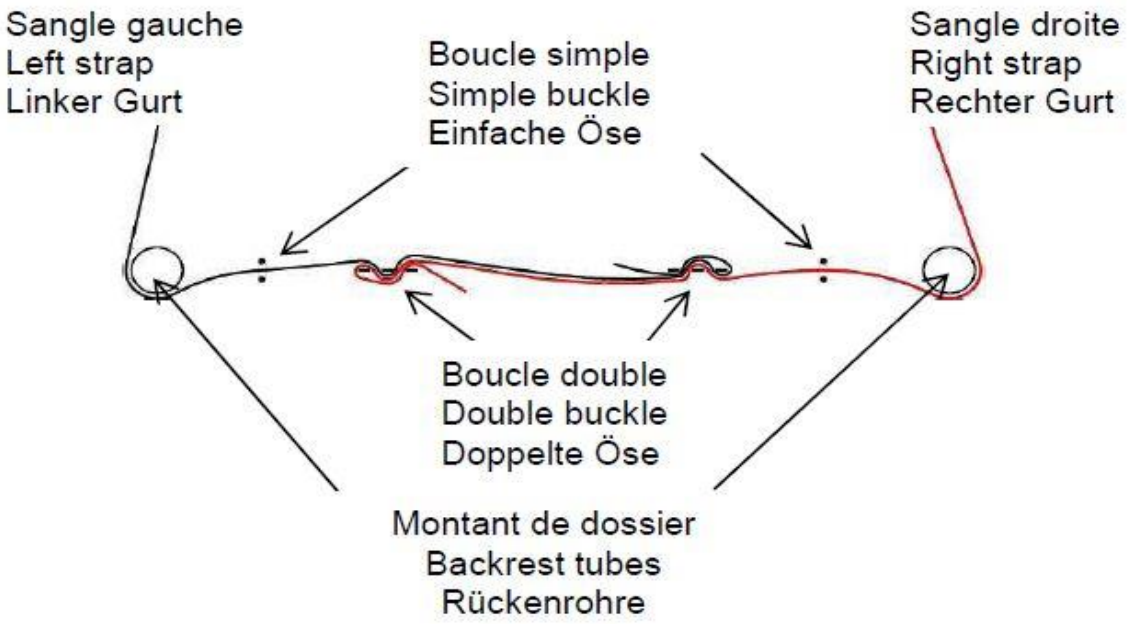
b – Put the armrest in horizontal position

Swing down the armrest in flat position in order to get a strong support when stand-up.

c – Put the safety belt

Secure the trunk with chest strap and safety buckle.
The chest strap is adjustable according to the morphology of the end user.
WARNING: Make sure that the chest strap does not get caught in the spokes when loose.
This chest strap is not to be used as a safety belt in a vehicle.
WARNING: Never use safety belt of the wheelchair as safety belt of a car.

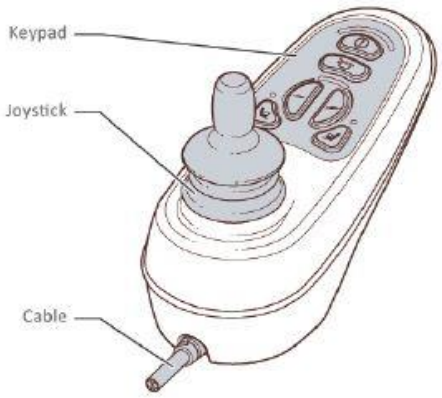
Fasten the belt on the backrest tube ABOVE the armrest and following the below mounting instructions.

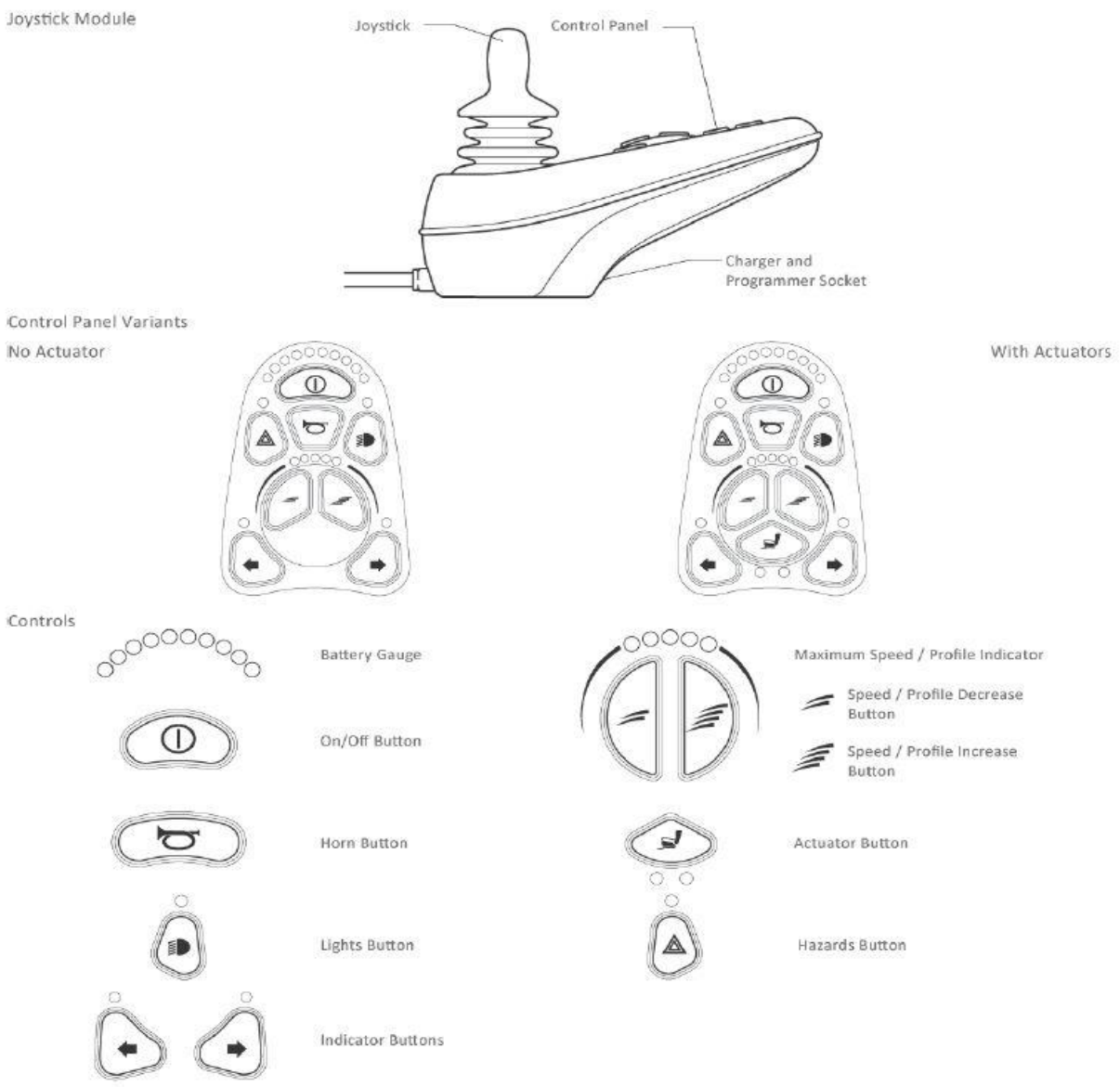


Chapiter IV – DRIVING

4.1 –REMOTE CONTROL

a – Description





b – On/off switch

Use the button to switch the joystick on and / or off. The joystick display lights will be on.
Adjust speed with the adjustment wheel. (see picture here above).

4.2 – DRIVING

The direction of the chair depends on the direction given to the joystick.

Push forward: The wheelchair drives straight forward.
Push to the right: the wheelchair drives to the right.
Push left: the wheelchair drives to the left.
Push backwards: the wheelchair will drive straight backwards.

4.3 – BRAKING OF THE WHEELCHAIR.

To brake, all you need to do is release the joystick.
The joystick returns to neutral.
For emergency braking, move the joystick to “reverse” position.

4.4 – STANDING POSITION AND ADJUSTING THE SEAT BACK

Warning! On the both modes, free-wheel or electrically powered mode, there is the possibility to come into the standing position. However, if you are on the free-wheel mode, we advise you to put on both brakes before standing up.

Warning! Always think about putting the backrest in its vertical position before coming into standing.
In order to stop the process, release the joystick. There is the possibility to stop in any position in between.

To access to these functions, press on the mode button « positioning functions ».
1 - Push to the right or to the left on the joystick to access to the adjusting seat back.

2 - Push forward on the joystick to access to the standing position and push backwards on the joystick to access to the seat position.

NOTE: In case of contractures in moving to the standing up position, move slowly and carefully.

Chapiter V – MAINTENANCE

5.1 – BATTERIES

5.1.1 - Batteries

Your wheelchair is equipped with sealed, maintenance-free deep cycle batteries that are in conformity with air transport standards DOT and IATA.
These batteries have been developed especially for propulsion of power wheelchairs:

- « cycle » means that they are able to provide saved energy over a long period of time, compared to starter batteries which provide a high quantity of energy for only a few minutes.
- « sealed » means there is no risk of acid leaking or evaporating from the batteries during charging or if the wheelchair over turns.
- « maintenance-free » means that it is not necessary to monitor the level of the batteries:

Care is required to ensure proper charging and discharging.
These two operations determine the durability of your batteries and the autonomy of your wheelchair.

Reminder: the use of acid batteries is prohibited with this wheelchair.

5.1.2 - Use and Charge of the Batteries

The propulsion of your chair is provided by 2 batteries.
Their durability depends on several factors:

1) The product quality:

Use only original batteries that are in conformity with the manufacturer's technical specifications.
Using batteries of inferior quality may damage the electronics or interfere with the wheelchair's operation.

2) The quality of discharge.

The discharge indicator on your display provides you with valuable information.
Warning: driving for a long time with the discharge indicator on red results in deep discharge that irreversibly damages the batteries' durability.

3) The number of charging cycles: charge sensibly.

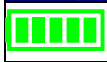
The durability of the cycle batteries depends partly on the number of « charge/discharge» operations but also on the extent of every discharge.

Thus a battery which is 100% discharged will have a life expectancy of only 200 cycles,
while the same battery which is only 75% discharged is good for 275 cycles.
A 50% discharged battery will give about 450 cycles.

Ideally the batteries should be charged when the discharge level is between 50 and 70%.
In practice this means you should charge your batteries as soon as there are only red lights on the display's discharging indicator but not before that.

The battery gauge

The battery gauge indicates how much battery charge remains.

Battery Gauge	Indicates
	Battery full
	Battery almost full
	Battery half full, drive to a charger

	Battery low, recharge soon
	Battery almost empty, recharge now
	Battery empty, recharge immediately

The remaining battery capacity does not translate directly to remaining physical range of the power chair. The remaining physical range depends on the ambient temperature, the capacity, age and state of the battery, the driving style of the operator and the terrain that the power chair is being used in.

Battery Warnings
Battery warnings are shown at the centre of the screen, in the "Active Mode" area.

Warning Icon	Meaning
	Battery overcharged. • Slow down and turn on the lights (if fitted).
	Battery completely empty. System turns off. • Recharge.

5.1.3: Complete charge:

A complete charge is long (from 10 to 12 hours), but efficient.
An incomplete charge will also reduce the durability of your batteries by one charging cycle.
The battery will not have enough time to store the energy correctly.
It will not be able to reconstitute the missing energy. The autonomy will be reduced.
A series of incomplete charges will have an even more disastrous effect: with the different batteries charged incompletely and to different levels.
They will be out of balance and the entire set will have its life time reduced.

Conclusion:
To maintain maximum autonomy and optimise the durability of your batteries, every charging cycle started should be completed.
Repeated short or incomplete charging cycles gradually reduce your batteries' capacity.

5.1.4: Range of the wheelchair:

The autonomy of your wheelchair on flat ground is about 20 to 30 km at nominal operation.
This autonomy is subject to the influence of various factors.

In practice the road condition, inclinations, driving mode, use of lights, tire pressure, total transported weight, outside temperature, etc. … are some of the elements to be considered.
The way the batteries are charged has a considerable influence on the energy consummation and thus affects the rapidity of discharge.
Attention: at 10 km/h, a distance of 25 km is overcome in about two hours.
When driving outdoors it is recommended to assure that a sufficient amount of energy is available to return to the point of departure.

5.2 – CHARGER

Use only the charger provided with the wheelchair. It's adapted to the batteries of your vehicle.
This charger adapts to all voltages in between 110 and 240 Volts.
It initiates a programmed charge phase and disconnects automatically in the end of the cycle to prevent damage of the batteries.

The charger has to be placed on a plane surface and protected from humidity.

For your own security it is imperatively necessary to read and respect the following orders before using the charger
1) Before charging the batteries, switch off the wheelchair.
2) Connect the charging cable to the wheelchair, than connect the charger to the power socket.
3) Once the charge is terminated, unplug the power socket first, than disconnect the charging cable.

5.3 – TYRE PRESSURE

For good mobility, comfort and lower puncture risks, check the pressure on a regular basis.
The pressure is indicated on the side of the tyre.
Castors are maintenance free. Inflate wheel need a monthly control of the pressure.

5.4 – CLEANING AND MAINTENANCE

5.4.1 Cleaning :

Regular cleaning of your electric wheelchair is highly recommended both for hygienic reasons and for its proper operation.
Painted parts : clean with soapy water.

Saddlery : use a soft and slightly damp cloth.

WARNING ! After use in rain, dry the chair carefully with a soft cloth.

WARNING ! Do not use rough or corrosive products, or high-pressure hoses which damaged the electronics and degrease the ball bearings. Use steam cleaner with added disinfectant.

WARNING ! Sand and seawater can damage ball bearings and certain joints.

WARNING ! The electric parts must not come into contact with water.

5.4.2 Maintenance :

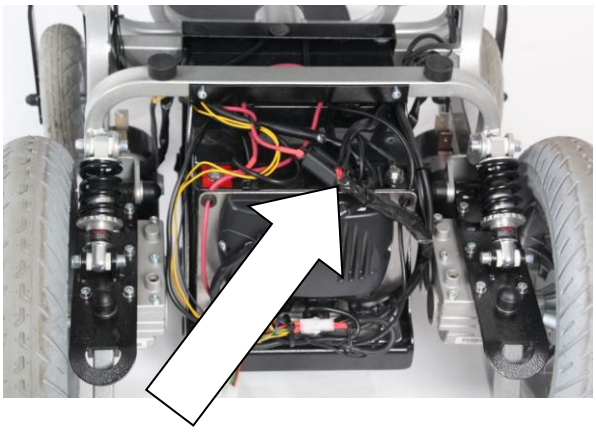
Yearly maintenance of your chair by your dealer will allow you to preserve optimum performance levels. This maintenance guarantees high safety levels.

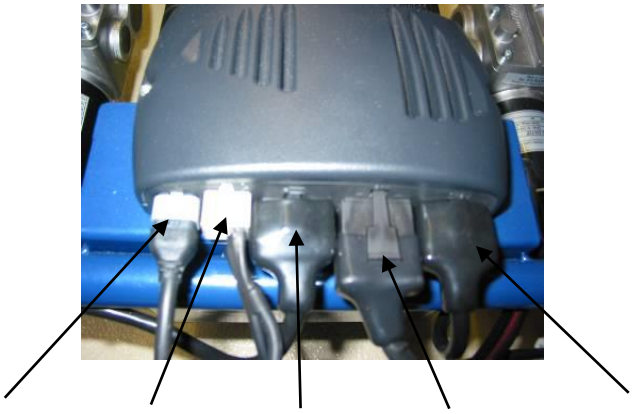
Chapiter VI – Technical specifications

Total length (footplate up)	: 77.50 cm / 30.51”	with anti-tips: 81 cm / 31.90”
Total length (footplate down)	: 101.50 cm / 40”	with anti-tips: 106 cm / 41.75”
Frame width	: 62 cm / 24.40”	
Width with narrow armrests	: 63 cm / 24.80”	
Standard configuration width	: 65 cm / 25.60”	
Seat height	: < 50 cm / 20” at front, with 3.35° decreasing angle to the rear.	
Backrest upholstery height	: 50 cm / 20”	
Backrest height	: 103 cm / 40.55”	
Backrest angle	: 55° from 35 to 90°	
Turning radius	: 65.50 cm / 25.80”	
Chassis	: steel with epoxy coating.	
Seat width	: 45 cm / 17.72” between guard-clothes	
Seat depth	: adjustable from 35 cm /13.80” to 50 cm / 19.70”	
Backrest actuator	: type LA 31-3000-100.	
Standing actuator	: type LA 31-6000-150.	
Foot plate	: flip-up and adjustable in height by 30 mm.	
Wheel	: anti-puncture castor Ø 200 x 50 mm. : inflate rear Ø 360 x 80 mm.	
Motor	: rear wheel drive powered by 2 motors of 300 watts.	
Speed	: 6 or 10 km/h according version.	
Range	: > 20 km / 13 miles with 55 Ah batteries.	
Range	: > 30 km / 18 miles with 70 Ah batteries.	
Batteries	: 2 batteries AGM of 55 Ah or 70 Ah 12 volts according version.	
Charger	: 1 charger 8 Ah / 24 volts.	
Weight of the chair without batteries	: 78 kg	
Weight of the chair without batteries	: 108 kg	
Maximum user weight	: 120 kg	

6.1 – ELECTRIC WIRING

Ensure this assembly diagram is followed as otherwise use of the wheelchair is dangerous.
They must be correctly connected to obtain the appropriate voltage

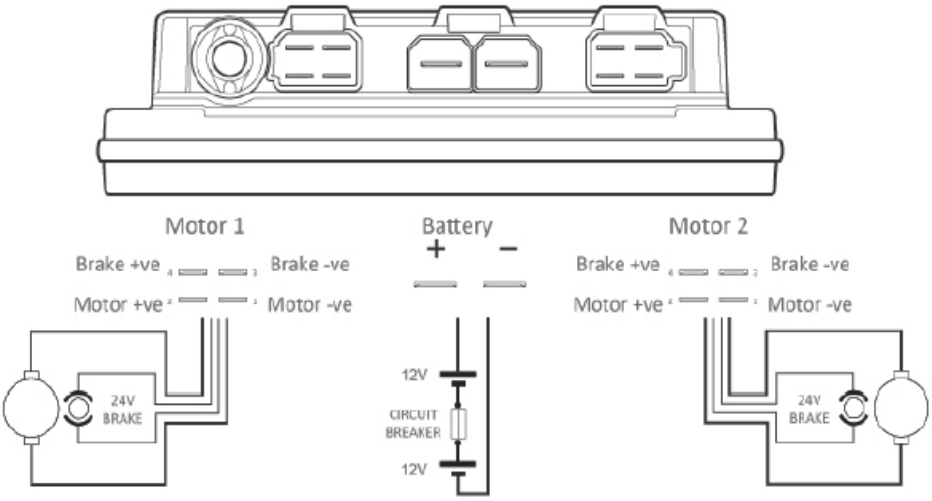


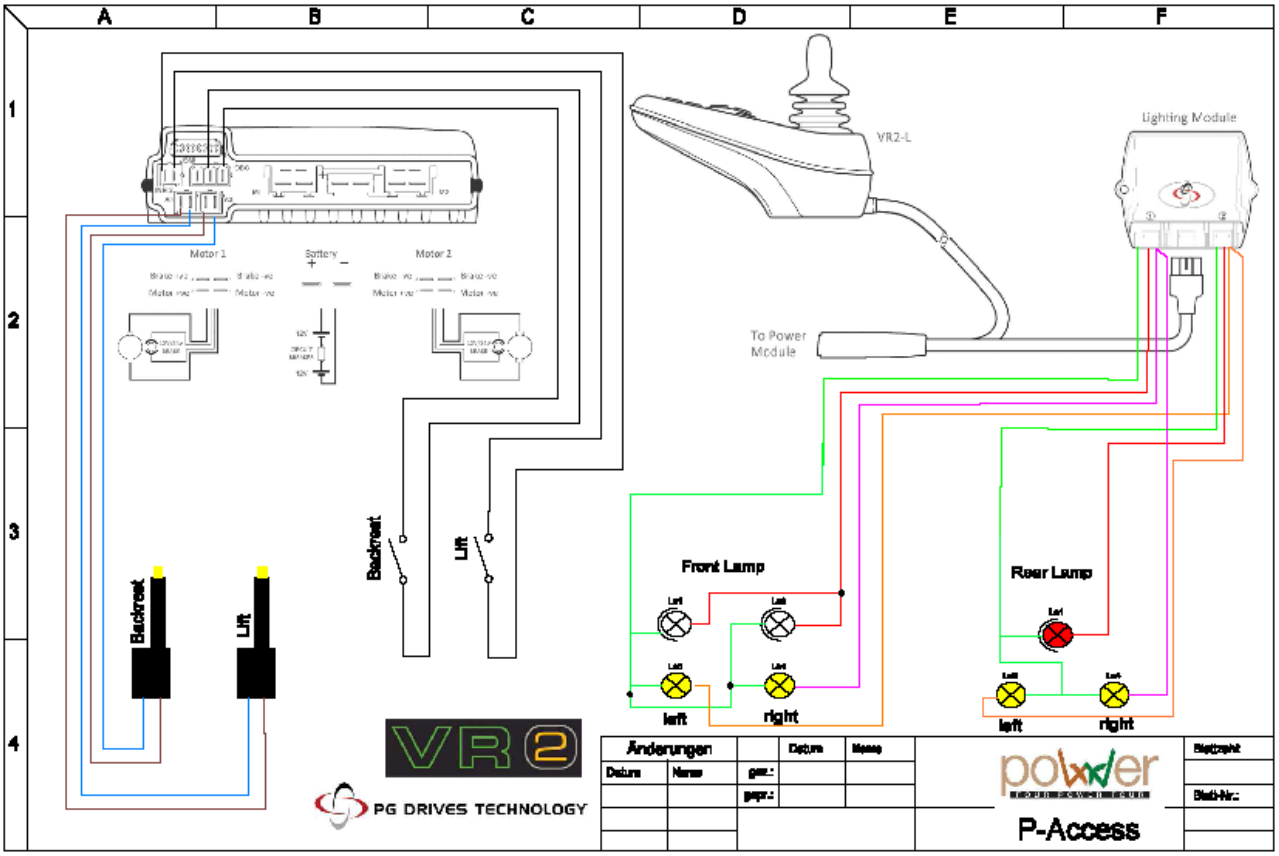


Fuse 60 Ah …….. …….. Joystick Actuator Right motor Battery Left motor

VR2 PM 50 & VR2 PM 60
D51425 & D51426

Connection





6.2 – ERRORS

Check that the electronics have been correctly switched off.

When the battery level display lights are off:
- Check that the batteries are full charged.
- Check that all the cables have been connected properly.
- Check that the electronics have been switched on.
- Check the fuses.

After checking those points, turn the remote control « on ».

More information on www.dynamiccontrols.com for LINX or SHARK version or on www.pgdt.com and details http://www.pgdt.com/products/vr2/index.html for VR2 version.

Chapiter VII : Standards and Certification

7.1 - « CE » STANDARD TESTED

Compliance of the device with Annex 1 of EEC 93/42 directive is certified by the EC label.

7.2 – ELECTROMAGNETIC COMPATIBILITY

This wheelchair has been tested in accordance with European and international standards.
However in certain cases there may be a risk of malfunctioning due to electromagnetic fields.

WARNING! Electric and electronic devices (TV, radio, industrial machine, electronic medical appliances, mobile phone …) may cause electromagnetic interference likely to affect the correct operation of the electric wheelchair. They should be avoided.

WARNING! Allow for the risk of interference due to electromagnetic radiation if electrical parts or accessories are added to the electric wheelchair.

7.3 – WASTE MANAGEMENT

Warning ! This product has been supplied by an environment-friendly manufacturer in compliance with the EC directive (WEEE 2002/96/CE) concerning processing of electrical and electronic equipment. This product may contain substances which are harmful to the environment if you dump them in places inappropriate to their disposal according to law. The wastebin interdict logo is posted on this product to encourage you to recycle whenever possible. Safeguard the environment by recycling this product in a recycling centre at the end of its lifespan.

Chapiter VIII – GUARANTEE CERTIFICAT

A - Guarantee

To be retained by the user.

Your new chair with standing aid is guaranteed as follows from the date of delivery:
• TWO years against all manufacturing faults except for the pneumatic units and upholstery, which are not covered by the guarantee.
• ONE year against all manufacturing faults for electrical parts: added standing aid kit, motorisation kit.
• SIX months for batteries (charger and control wire are not guaranteed).

§I: Scope of the Guarantee:
The guarantee covers all labour and replacements for those parts to be defective after inspection by our experts.

§II: Terms of Guarantee:
The guarantee is granted on condition that the equipment has been supplied by a Stand Mobility approved supplier and is used under ordinary operating conditions.
The guarantee does not cover faults arising from:
- Normal wear or fatigue;
- Abnormal use;
- Failure to maintain the chair;
- Any modifications out of the manufacturers control.

Similarly, it does not cover metal parts that have been modified by any person whatever since they were supplied, either by adapting the original parts or by fitting new parts from other manufacturers.

Where parts are replaced or reconditioned under the guarantee, this does not extend the guarantee period.

Since the responsibility of Stand Mobility is expressly limited to the above terms and conditions, the company cannot be held responsible for any loss, damage or claim by third parties arising from any defect whatsoever that is covered by this guarantee. In the event of a return to the factory, the client shall be responsible for onward and return transport costs.

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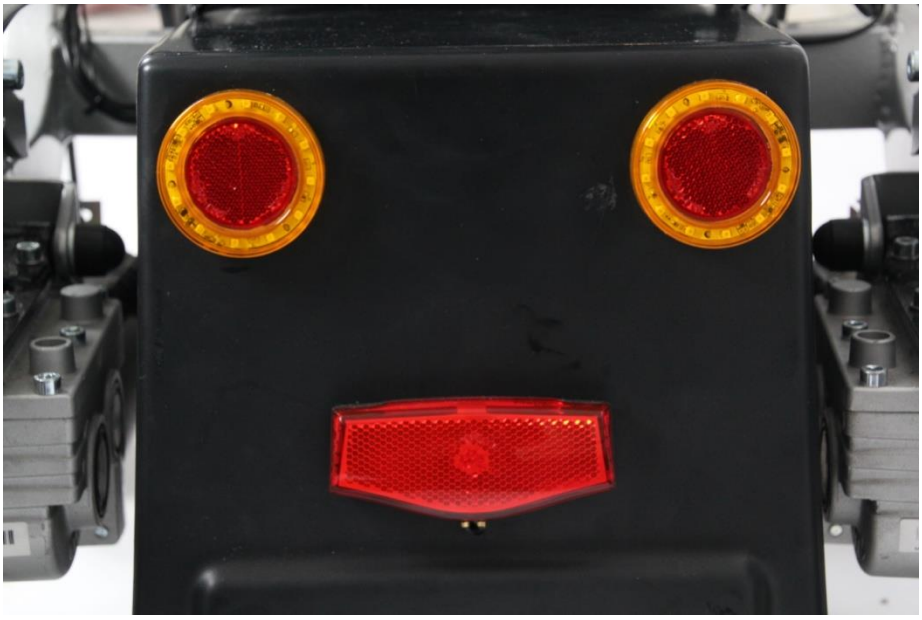
B – Guarantee certificate

To fill in and to be returned to the manufacturer address:

Suriname : …… First name:…….....…….
Address: ……...
GSM: …….
Age:……..…. Height :……. Weight :…… Pathology :……
Chair's number :……. Model :……..
Standing aid kit number :……Purchase date :…..……
Dealer name :……..

Rue Baron de Castro 16
BE-1040 Brussels
Belgium



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