

# VERMEIREN

V500, V500 30°

USER MANUAL





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## Preface

Congratulations! You are now owner of a Vermeiren wheelchair!

This wheelchair is made by qualified and committed personnel. It is designed and produced according to high quality standards, guarded by Vermeiren.

Please read this manual carefully; it will help you to get familiar with the operation, capabilities and limitations of your wheelchair.

If you still have questions after reading this manual, do not hesitate to contact your specialist dealer. He/she will be glad to help you.

### Important note

To ensure your safety, and to prolong the lifetime of your product, please take good care of it and have it checked and serviced on a regular basis.

This manual reflects the latest product developments. Vermeiren has the right to implement changes to this type of product without any obligation to adapt or replace similar products previously delivered.

Pictures are used to clarify the instructions in this manual. Details of the depicted product may deviate from your product.

### Information available

On our website <http://www.vermeiren.com/> you will always find the most recent version of the information in this manual. Please consult this website regularly for possible updates.

Visually impaired people can download the electronic version of this manual and have it read out by means of a text-to-speech software application.



User manual

For user and specialist dealer



Installation instructions

For specialist dealer



Service manual for wheelchairs

For specialist dealer



EC declaration of conformity

# 1 Your product

**V500**

1. Handgrips
2. Backrest
3. Arm pads
4. Armrests
5. Seat
6. Footrests
7. Footplates
8. Steering wheels (front wheels)
9. Brakes
10. Driving wheels (rear wheels)
11. Hand rims
12. Anti-tipping
13. Tip cap
14. Cross
15. Identification plate


**V500 30°**


- Only for V500 30°:
16. Lever backrest inclination
  17. Push bar

## 1.1 Accessories

The following accessories are available for the V500:

- Anterior pelvic belt (B20)

The following accessories are available for the V500 30°:

- Anterior pelvic belt (B20)
- Drum brakes (B74)

## 2 Before use

### 2.1 Intended use

- Indications and contraindications: The user can propel the wheelchair by himself or have the wheelchair pushed by an attendant. The wheelchair is intended for elderly people or people with walking difficulties or no walking abilities, such as paralysis, loss of limbs, limb defects or deformations, stiff or damaged joints, heart insufficiencies and poor blood circulation, balance disturbances, cachexia (decrease in muscle), ... You should NOT use this wheelchair if you suffer from physical or mental impairments that may put you, or other people, in danger when driving the wheelchair. For this reason, consult your doctor first and make sure that your specialist dealer is informed about his advice.
- This wheelchair is suitable for indoor and outdoor use.
- This wheelchair is designed and produced solely to transport/transfer one (1) person with a maximum weight of 130kg. It is not designed for transportation of goods or objects, nor for any use other than previously described.
- Only use accessories and spare parts approved by Vermeiren.
- Please read all technical details and limits of your wheelchair in chapter 5.
- The warranty on this product is based on normal use and maintenance as described in this manual. Damage to your product caused by improper use or lack of maintenance will cause the warranty to lapse.

### 2.2 General safety instructions

 CAUTION Risk of injuries and/or damage





Carefully read and follow the instructions in this manual. Otherwise you may get injured or your wheelchair may get damaged.

Keep the following general warnings in mind during use:

- Do not use your wheelchair if you are under influence of alcohol, medicines or other substances that may influence your riding abilities.
- Be aware that some parts of your wheelchair may get very hot or cold due to ambient temperature, solar radiation or heating devices. Be careful when touching. Wear protective clothing if the weather is cold. When going outdoors, riding gloves can be used to improve the grip on the hand rims.
- Do not modify your wheelchair in any way.

Be aware that your wheelchair may interfere with some types of anti-theft systems, depending on the settings used. This may cause the shop's alarm to go off.

### 2.3 Symbols on the wheelchair

	Maximum weight of the user in kg
	Indoor/outdoor use
	Maximum safe slope in ° (degrees).
	Type designation

## 2.4 Transport

### 2.4.1 Transport by vehicle, as luggage (V500, V500 30°)



WARNING

Risk of injuries

- Make sure that the wheelchair is attached properly to avoid injury from the passengers during collision or sudden braking.
  - NEVER use the same seatbelt to secure the wheelchair and passenger.
1. Remove footrests, armrests and accessories.
  2. Store footrests, armrests and accessories safely.
  3. If possible, fold the wheelchair and remove the rear wheels.
  4. Place the wheelchair in the luggage compartment.
  5. If the luggage and passenger compartments are NOT separated, attach the frame of the wheelchair securely to the vehicle. You can use the available safety belts in the vehicle.

### 2.4.2 Use of the wheelchair as seat in a motor vehicle (only V500)



WARNING

Risk of injuries

- For V500 30°: Do NOT use your V500 30° wheelchair as a seat in a vehicle, see the following symbol.
- The wheelchair has passed the crash test of ISO 7176-19: 2008 and, as such, has been designed and tested for use only as forward-facing seat in a motor vehicle.
- The wheelchair's pelvic belt alone is not suited as an occupant restraint belt.



The wheelchair is tested using the four-point strap-tie system and a 3-point occupant-restraint system.

Whenever feasible, use the seat of the vehicle and store the wheelchair in the cargo area.

Steps to secure the wheelchair in a motor vehicle:

1. Check that the vehicle is equipped with a suitable wheelchair tie down and occupant-restraint system, conform ISO 10542.
2. Check that the components of the wheelchair tie down and occupant restraint system are not frayed, contaminated, damaged or broken.
3. If equipped with an adjustable seat and/or back tilt, make sure that the wheelchair user is sitting as upright as possible. If the user's condition prevents this, a risk assessment should be done to evaluate the user's safety during transit.
4. Remove all mounted accessories such as trays and respiratory equipment, and secure them in a safe place.
5. Position the wheelchair facing forward in the travelling direction, centrally between the tie-down rails mounted in the floor of the vehicle.
6. Make sure that the indicated zones around the wheelchair user are clear from rigid vehicle parts.

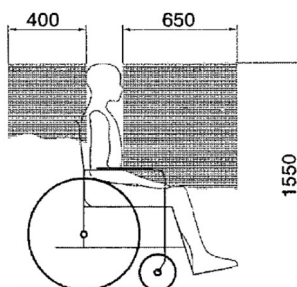


Figure 1

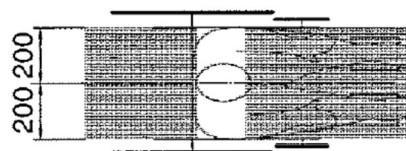


Figure 2

7. Mount the front securement straps according to the instructions of the strap-system manufacturer at the indicated place (figure 3). This place is marked on the wheelchair with a symbol (figure 4).
8. Roll back the wheelchair until the front straps are tight.
9. Apply the wheelchair brake.
10. Mount the back securement straps according to the instructions of the strap-system manufacturer at the indicated place (figure 3). This place is marked on the wheelchair with a symbol (figure 4).

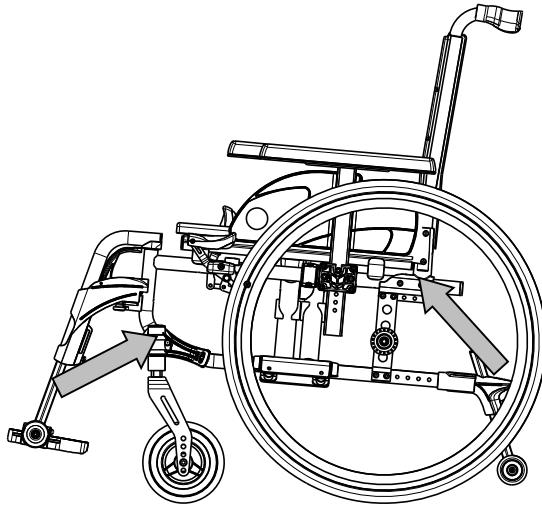


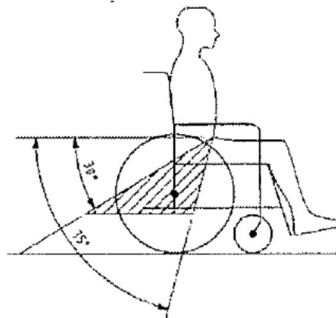
Figure 3



Figure 4

#### Steps to secure the wheelchair user:

1. Remove both armrests.
2. If present, attach the wheelchair's pelvic belt.
3. Attach the occupant restraint belts according to the instructions of the strap-system manufacturer.
4. Wear the pelvic belt low across the front of the pelvis, so that the angle of the pelvic belt is within the preferred zone of 30° to 75° to the horizontal, similar to that shown below.



5. A steeper (greater) angle within the preferred zone is desirable.
6. Adjust the belt tightly according to the instructions of the strap-system manufacturer, consistent with the user's comfort.
7. Ensure that the restraint belt connects in a straight line to the anchor point in the vehicle and that no bends in the belt are visible, for instance at the axle of the rear wheel.
8. Install the armrests, if desired. make sure that belts are not twisted or held away from the body by wheelchair components such as armrests or wheels.



RESTRAINTS SHOULD NOT BE HELD AWAY FROM BODY BY WHEELCHAIR COMPONENTS SUCH AS ARMRESTS OR WHEELS



PELVIC RESTRAINTS SHOULD MAKE FULL CONTACT ACROSS THE FRONT OF THE BODY NEAR THE JUNCTION OF THE THIGH AND PELVIS



## 2.5 Folding/Unfolding



CAUTION

Risk of injuries

Keep fingers away from moving parts of the wheelchair.

### 2.5.1 Unfolding the wheelchair

1. Position yourself behind the wheelchair.
2. Use the handgrips to open the wheelchair as much as possible.
3. Position yourself at the front of the wheelchair.
4. Push both seating tubes down till they are fixed in their position.

### 2.5.2 Folding the wheelchair

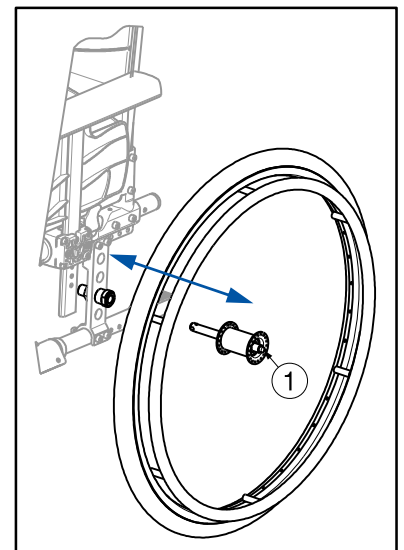
1. Fold the footplates or remove the footrests (see § 3.1).
2. Take the seat on the front side and backside and pull it up.

### 2.5.3 Mounting the rear wheels

1. Take the rear wheel and push button ①.
2. Keep the button pushed in and mount the rear wheel axle until it stops.
3. Release the button.
4. Check that the wheel is secured.

### 2.5.4 Taking off the wheels

1. Make sure the brakes standing in the off position.
2. Take the wheelchair to the side frame where you want to remove the wheel.
3. Press the button ① in the center of the wheel hub.
4. Pull the wheel away from the frame.



## 2.6 Storage



Make sure that your wheelchair is stored in a dry environment to prevent mould from growing and the upholstery from being damaged, see also chapter 5.

### 3 Using your wheelchair



WARNING

Risk of injuries

- First read previous chapters and inform yourself about the intended use. Do NOT use your wheelchair unless you have read and fully understood all instructions.
- In case of doubts or questions, do not hesitate to contact your local specialist dealer, your care provider or technical adviser to help you with this.

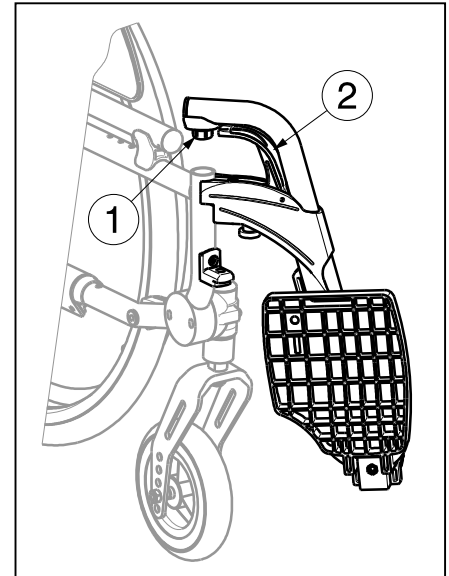
#### 3.1 Mounting or removing the footrests

Mounting the footrests is done as follows:

1. Hold the footrest sideways at the outside of the wheelchair's frame and mount the tube hood ① into the frame.
2. Swing the footrest inwards until it clicks in position.
3. Swing the footplate downwards.

To take off the footrests:

1. Pull lever ②.
2. Swing the footrest to the outside of the wheelchair until it comes loose from the guidance.
3. Pull the footrest from the tube hood ①.



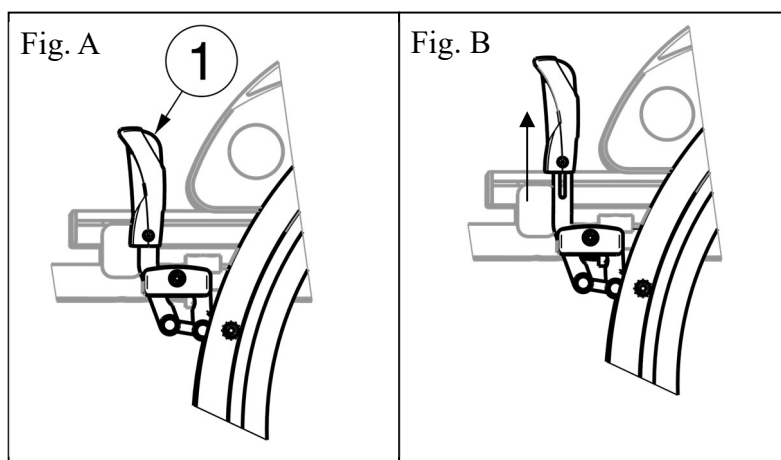
#### 3.2 Operating the brakes



CAUTION

Risk of injuries

- The brakes are not used to slow down the wheelchair during movements. Use the brake only to prevent the wheelchair from unintended movements.
- Good operation of the brakes is influenced by wear and contamination of the tires (water, oil, mud, ...). Check the condition of the tires before each use.
- The brakes are adjustable and can wear. Check the operation of the brakes before each use.
- Make sure the wheelchair is on a flat horizontal surface before releasing the brakes. Never release both brakes simultaneously.



To reduce the braking force it is possible to extend the brake lever (Fig B).

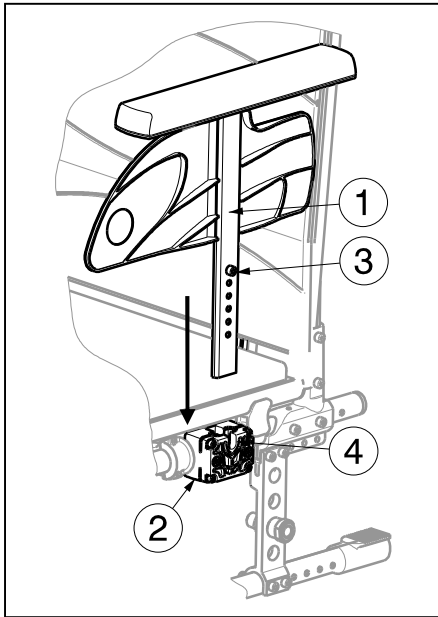
To apply the brakes (Fig A):

1. Push the brake levers ① forward until you feel a distinctive click.

To release the brakes:

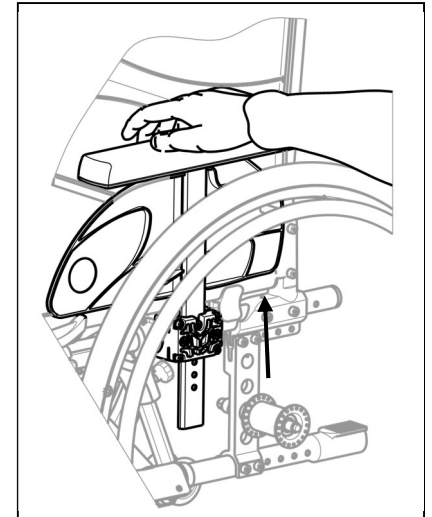
1. Release one brake by pulling the lever ① backwards.
2. Hold the hand rim of the released wheel with your hand.
3. Release the second brake by pulling the lever ① backwards.

### 3.3 Mounting or removing the armrests



The armrests of the wheelchair can be mounted by following instructions.

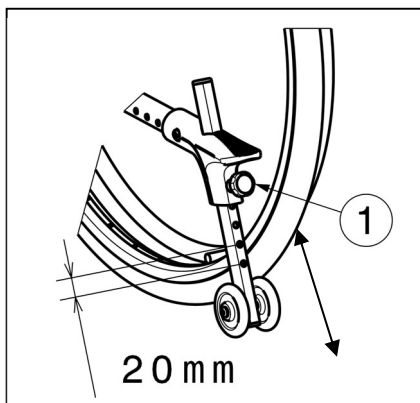
1. Mount the armrest ① in the armrest support ② until the screw ③ fits in the sleeve ④.
2. Make sure the armrest ① is firmly fixated.



To remove the armrest:

1. Grasp the arm pad and pull the armrest gently out of the armrest support.

### 3.4 Adjusting anti-tipping (only mounted to the right side)



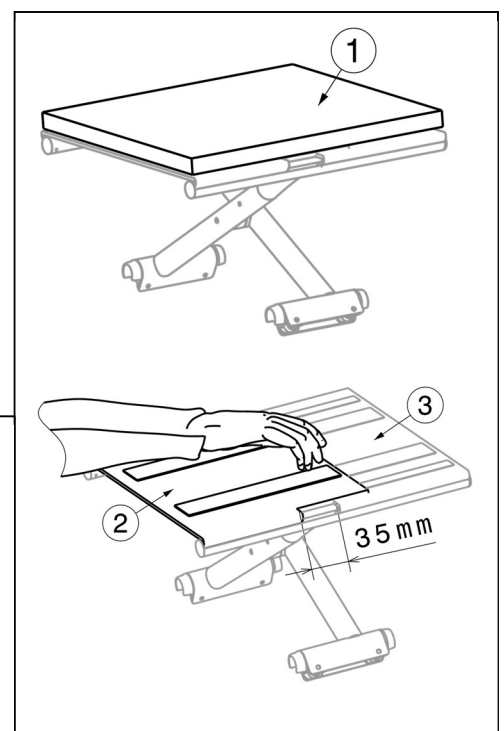
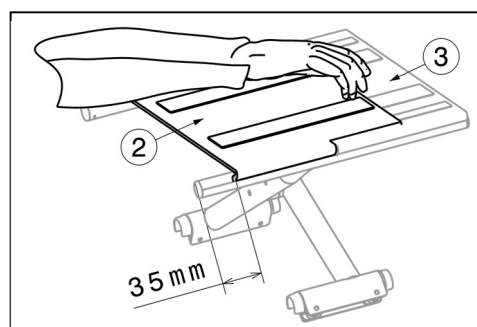
Adjust the height of the anti-tipping in 7 positions (range 120 mm: steps 20 mm):

1. Loosen the star knob ① a little bit.
2. Move the tube of the anti-tipping in the desired height.
3. Secure the star knob ①.
4. Make sure that the anti-tipping is firmly secured.

### 3.5 Adjusting the seat depth

The V500, V500 30° wheelchair is adjustable in seat depth by adjusting the seat canvas (range 35 mm: step less).

1. Fold up the wheelchair a little bit (see § 2.5).
2. Remove the seat cushion ① with the velcro straps.
3. Loosen the front canvas ② with the velcro.
4. Move the front canvas ② backwards or frontwards in the desired seat depth.
5. Refasten the front canvas ② with the velcro to the rear canvas ③.
6. Unfold the wheelchair.
7. Remount the seat cushion ① with the velcro straps to the seat canvas ③.



### 3.6 Backrest inclination (V500 30°)

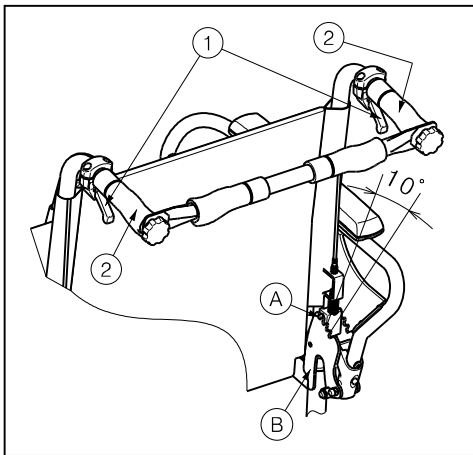
**⚠ WARNING** Risk of injuries

- Be aware that the stability decreases when backrest is adjusted backwards.
- Apply the parking brakes before adjusting the backrest.

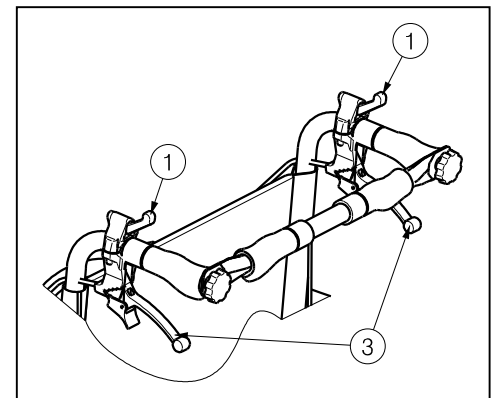
**⚠ CAUTION** Risk of injuries

- Do not place your fingers, clothes between the adjustment mechanism.

For model V500 30°, it is possible to set the backrest backwards with a maximum inclination of 30° (4 different positions: steps of 10°). Make sure that the patient sits in the chair when the attendant adjusts the backrest inclination and that the wheelchair does not tip over.



1. Pull the lever ① on both sides towards the push handle ② to adjust the backrest.
2. The pen ① comes out of the groove of the toothed plate ②.
3. Pull both back tubes backwards to the desired position (4 different positions: 5° - 15° - 25° - 35°).
4. Check that the pen ① is well fixed in the groove of the toothed plate ②.

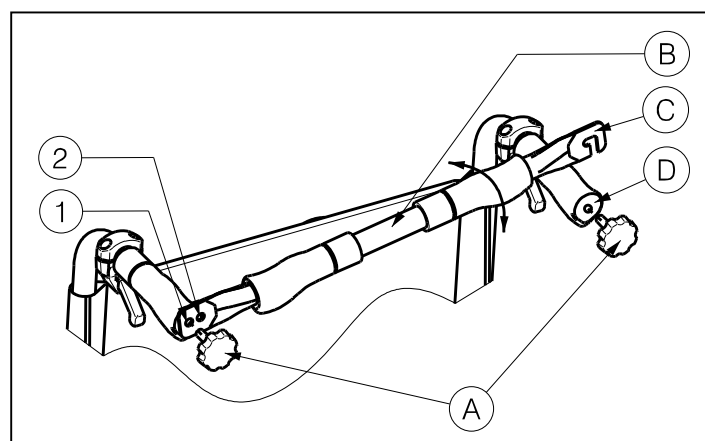


If your wheelchair features drum brakes, the handles ③ are used as brakes.

### 3.7 Mounting or removing the push bar (V500 30°)

**⚠ WARNING** Risk of injuries

- Make sure that buttons ① are tightened.
- When equipped with the push bar, the push bar should always be mounted to increase the stability of the back.



To mount the push bar:

1. Mount the push bar **B** with the star knob **A** in the left handgrip.
2. Swing the push bar **B** to the right.
3. Mount hook **C** over the right handgrip **D** as shown on the drawing. Use holes ① or ② to adjust the tension of the backrest.

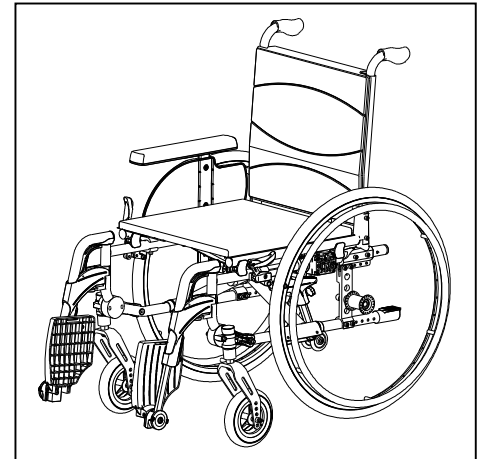
To take off the push bar:

1. Loosen the star knob **A** on the right handgrip.
2. Remove hook **C** from the right handgrip **D**.

### 3.8 Transfer in and out of the wheelchair

 CAUTION Risk of injuries

- In case you cannot perform the transfer in a safe manner, ask someone to assist you.
  - Do not stand on the footplates.
1. Position the wheelchair as close as possible to the chair, couch or bed to/from you wish to transfer.
  2. Make sure that both brakes of the wheelchair are activated.
  3. Fold the foot plates upwards to prevent standing on them.
  4. If the transfer is on the side of the wheelchair, remove the armrest on that side (see § 3.3) and fold the brake lever down.
  5. Transfer to/from the wheelchair.



#### 3.8.1 Correct position in the wheelchair

Some recommendations for a comfortable use of the wheelchair:

- Position your backside as close as possible to the backrest.
- Make sure your upper legs are horizontal. If needed adjust the length of the footrests (see installation manual).

### 3.9 Riding the wheelchair

 CAUTION Risk of injuries and damage

- Before every usage, make sure that:
  - parking brakes are working properly.
  - tires are in good condition, see §4.
- Prevent your fingers from being caught by the wheel spokes.
- Do not operate the hand rims with wet hands.
- Prevent entrapment of your hands on the hand rims when you pass small passages.
- Do NOT drive on slopes, obstacles, steps or kerbs larger than specified in §5.
- When you stop on a (small) slope, use your brakes.
- Make sure all four wheels touch the ground while riding up or down a slope.
- Take slopes as slow as possible.
- Always stay on the pavement when riding on public roads.
- Pay attention if the road has holes or gaps that may cause entrapment of the wheels.
- Avoid stones and other objects that may block the wheels.
- Make sure that the footplates do not touch ground while taking an obstacle.
- Do not use your wheelchair on an escalator.
- If available, wear your safety belt.
- Always keep the swing range of the footplate in mind to prevent bystanders from being injured or objects from being damaged.

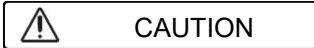
- If you don't have enough experience riding your wheelchair, ask assistance of an attendant. Keep your arms away from the wheels and keep your feet on the footplate.
- Stairs should always be negotiated with the help of two attendants.
- Never try to use stairs that are not appropriate for wheelchairs.

### **3.9.1 Riding your wheelchair:**

1. Release the brakes.
2. Take both hand rims at their highest position.
3. Lean forward and push the hand rims forward until your arms are straight.
4. Move your hands back to the top of the hand rims and repeat the movement.

## 4 Maintenance

### 4.1 Points of maintenance



Risk of injuries and damage

Repairs and replacements may only be undertaken by trained persons and only genuine replacement parts of Vermeiren should be used.

**i** The service frequency depends on the frequency and intensity of use. Contact your dealer to agree to a common timetable for inspection/maintenance/repair.

For the maintenance manual, refer to the Vermeiren website: [www.vermeiren.com](http://www.vermeiren.com).

#### *Before each use*

Inspect the following points:

- All parts: Present and undamaged or unworn.
- All parts: Clean, see § 4.2.2.
- Wheels, backrest, seat, calf rests, arm rests, footplates: Well secured.
- Condition of wheels/tyres, see § 4.2.1;
- Condition of frame parts: No deformation, instability, weakness or loose connections
- Seat, backrest, arm pads, calf pads and head rest (if applied): No excessive wear (like dented spots, damage or tears).
- Brakes: Undamaged and functioning.
- For V500 30°: Backrest inclination: Undamaged and functioning well (locking, load, no deformation or wear).

Contact your specialist dealer for possible repairs or part replacements.

#### *Yearly or more often*

Have your wheelchair inspected and serviced by your specialist dealer, at least once a year, or more often. The minimum maintenance frequency depends on use and should therefore be commonly agreed upon with your specialist dealer.

### 4.2 Maintenance instructions

#### 4.2.1 Wheels and tyres

**i** Proper working of the brakes depends on the state of the tyres, and can change due to wear and contamination (water, oil, mud, ...).

Keep your wheels free of wires, hair, sand and fibres.

Check the profile of the tyres. If the tread depth is less than 1 mm, the tyres need to be replaced.

Contact your specialist dealer for this matter.

Inflate each pneumatic tyre to the correct pressure (see pressure indication on the tyres).

#### 4.2.2 Cleaning



Risk of damage by moisture

Never use a hose or high-pressure cleaner to clean the wheelchair.

Wipe all rigid parts of the wheelchair with a damp cloth (not drenched). If necessary, use a mild soap, suitable for varnishes and synthetics.

The upholstery can be cleaned with lukewarm water and a mild soap. Do not use abrasive cleaning agents to clean.

### 4.2.3 Disinfection

CAUTION

Risk of damage

Disinfections may only be undertaken by trained persons. Consult your specialist dealer.

## 4.3 Troubleshooting

Even if you use your wheelchair properly, a technical problem may occur. In this case, contact your local specialist dealer.



WARNING

Risk of injuries and damage to the wheelchair

NEVER repair your wheelchair yourself attempting to solve the problem.

The following symptoms may indicate a serious problem. Therefore always contact your specialist dealer if you spot any of the following deviations:

- Strange sound;
- Uneven tread wear on one of the tyres;
- Jerky movements;
- Wheelchair deflects to one side;
- Damaged or broken wheel assemblies.

## 4.4 Expected lifespan

The average lifespan of your wheelchair is 5 years. Depending on the frequency of use, driving circumstances and maintenance, the lifespan of your wheelchair will increase or decrease.

## 4.5 Reuse

Before each reuse, have the wheelchair disinfected, inspected and serviced according to the instructions in §4.1 and §4.2.

## 4.6 End of use

At end of life, you need to dispose your wheelchair according to the local environmental legislation. The best way to do so, is to disassemble the wheelchair to facilitate the transport of recyclable parts.



## 5 Technical specifications

Technical terms below are valid for the wheelchair in standard settings. If other footrests / armrests or other accessories are used, the tabulated values will change.

<b>Make</b>	<b>Vermeiren</b>
<b>Type</b>	<b>Manual wheelchair</b>
<b>Model</b>	<b>V500, V500 30°</b>
<b>Maximum occupant mass</b>	<b>130 kg</b>

Description	Min. dimensions			Max. dimensions		
Overall length with footrest	975 mm			1035 mm		
Effective seat width	390 mm	420 mm	440 mm	460 mm	480 mm	500 mm
Overall width (depends on the seat width)	590 mm	620 mm	640 mm	660 mm	680 mm	700 mm
Folded length (without footrest)	790 mm					
Folded width	310 mm					
Folded height (depends on seat height)	860 mm			920 mm		
Total mass	V500 V500 30°			16,6 kg 19 kg		
Mass of heaviest part	9,5 kg					
Masses of parts that can be dismantled or removed	<b>Footrests: 1,70 kg; Armrests: 1,20 kg; Rear wheels: 4,40 kg</b>					
Static stability downhill	10° (in standard configuration)					
Static stability uphill	V500 V500 30°			7° (in standard configuration) 2°		
Static stability sideways	18° (in standard configuration)					
Obstacle climbing	60 mm					
Seat plane angle	0°			10°		
Effective seat depth	380 mm			500 mm		
Seat surface height at front edge	440 mm			530 mm (with 200 mm front wheels)		
Backrest angle	V500 V500 30°			5° 5° - 35°		
Backrest height	440 mm (without seat cushion)					
Distance between footrest and seat	330 mm			500 mm		
Angle between seat and footplate	5°			25°		
Angle between seat and leg footrest	105°					
Angle between leg footrest and footplate	80°					
Distance between arm pad and seat	150 mm			210 mm		
Front location of arm pad structure	322,5 mm			370 mm		
Handrim diameter	535 mm					
Horizontal location of axle (deflection)	1,27 mm			61,04 mm		
Minimum turning radius	1500 mm					
Diameter PU Rear wheels	22"			24"		
Tyre pressure, rear (driving) wheels	Not applicable					
Diameter PU steering wheels	150 mm			200 mm		
Tyre pressure, steering wheels	Not applicable					
Storage and use temperature	+ 5 °C			+ 41 °C		
Storage and use humidity	30%			70%		

We reserve the right to introduce technical changes. Measurement tolerance ± 15 mm / 1,5 kg / 1,5°





## Service registration form

This product (name): .....

was inspected (I), serviced (S), repaired (R) or disinfected (D):

By (stamp):           Kind of work: I / S / R / D Date:	By (stamp):           Kind of work: I / S / R / D Date:	By (stamp):           Kind of work: I / S / R / D Date:
By (stamp):           Kind of work: I / S / R / D Date:	By (stamp):           Kind of work: I / S / R / D Date:	By (stamp):           Kind of work: I / S / R / D Date:
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### **Instructions for specialist dealer**

This instruction manual is part and parcel of the product and must accompany every product sold.

Version: C, 2020-09

Basic UDI: 5415174 122106V500 9Q  
5415174 122106V500 30° FP

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