

# Installation manual

MANUEL D'INSTALLATION  
INSTALLATIEHANDLEIDING  
INSTALLATIONSANLEITUNG  
MANUALE DI INSTALLAZIONE  
MANUAL DE INSTALACIÓN  
INSTRUKCJA INSTALACJI  
PŘÍRUČKU PRO INSTALACI

**V-series wheelchairs**  
**Fauteuils roulants série V**  
**Rolstoelen V-serie**  
**Rollstühle der V-Serie**  
**Carrozine serie V**  
**Sillas de rueda serie V**  
**Wyzki inwalidzkie serii V**  
**Invalidní vozíky řady V**





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## Preface

To support you on the installation and repairs of this wheelchair, this manual is offered. Please read it carefully. If you still have questions after reading this manual, do not hesitate to contact Vermeiren.

The information in this manual applies to all wheelchairs in the following list:

- V300
- V300 30°
- V300 30° Comfort
- V300 HEM2
- V300 XL
- V300ACT / V300XR
- V300D
- V300DC
- V300DL
- V300F
- V300GO
- V500
- V500 30°
- V500 Active
- V500 Light
- V500 Light 30°
- V500XL

Pictures of the product are used to clarify the instructions. Details of the shown product may deviate from your product.

On our website <http://www.vermeiren.com/> you will always find the most recent version of the following information. 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.



Instruction manual  
For user and specialist dealer



Installation instructions (Instructions for detail adjustments)  
For specialist dealer



Torque table (maximum torques for bolts and nuts)  
For specialist dealer



Service manual for wheelchairs  
For specialist dealer



Drawings of (spare) parts  
For specialist dealer

## 1 Scope of delivery

The following items are part of the delivery.

- Frame including wheels, backrest frame, seat (default seat height 500 mm, default seat angle 5°)
- 2 Armrests (not for V300XR and V500 Active)
- Seat cushion (only for V300 DL)
- Anti-tipping (only for V300 DL)
- 1 pair of footrests/1 complete footrest
- Tools
- Manual
- Accessories

Please note that the basic configuration may differ in different European countries. Contact your specialist dealer.

## 2 Tools

To repair and adjust the wheelchair, the following tools are needed:

- Wrench set no. 7 to no. 22
- Allen keyset no. 3 to no. 8
- Screwdriver Phillips head
- Screwdriver no. 4 to no. 6

## 3 Adjustments



CAUTION

Risk of injuries or damage

- Read the instruction manual of the specific wheelchair.
- Be aware of the technical details and limits of intended use; see the instruction manual.
- The wheelchair needs to be adjusted by a specialist dealer according to the instructions in this manual.
- Any modification to the product will lapse the warranty and will cease the responsibility of Vermeiren.
- Only use parts and tools described in this manual.
- Prevent bystanders from accessing the working area.
- While adjusting and operating the wheelchair, make sure no objects or body parts get caught between moving parts.
- Only use the settings described in this manual.
- Make sure that the adjustment on left and right side of the wheelchair are the same.
- Deviation of the adjustment settings may influence the stability of the wheelchair with risk of tilting and falling.
- **Make sure all screws are firmly secured before riding the wheelchair. Adhere to the tightening torques for screws according to the Torque table on our website.**



Important remark

- For more information, contact Vermeiren. See the website <http://www.vermeiren.com/>.

### 3.1 Stability and manoeuvrability



CAUTION

Risk of tipping over

Be aware that by changing the position of the rear wheels, the stability of the wheelchair is influenced. By adjusting the rear wheels

1. in rear adjustment position, the wheelchair becomes more stable, but less manoeuvrable;
2. in front adjustment position, it becomes less stable but more manoeuvrable.

To increase stability or manoeuvrability, the following adjustments can be made:

- Rear-wheel position, see §3.2.
- Seat height and angle, see §3.3.

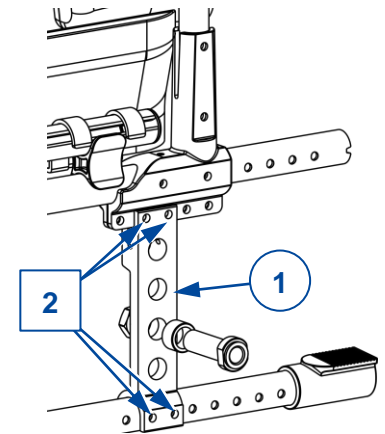
## 3.2 Rear-wheel position

 **CAUTION** Risk of injuries or damage

After adjusting the rear wheels, check the working of the brakes and adjust according to §3.5.

Adjust the position of the rear wheel as follows:

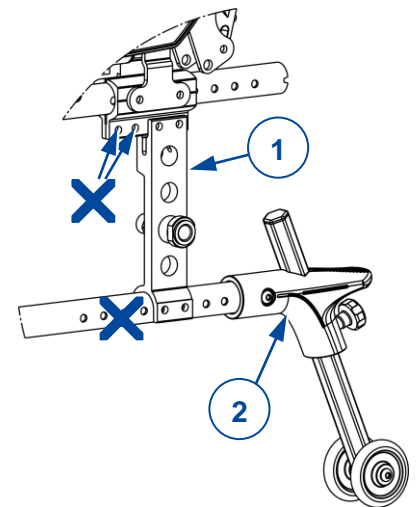
1. Remove the 4 socket screws located in the holes (2) of the mounting plate (1).
2. Move the mounting plate to the front or rear within the range of the adjustment holes.
3. Retighten the 4 socket screws in holes (2).



**i** For V300 30°, V500 30°, V500 Light 30°, and depending on use:

We advise you to mount the mounting plate (1) of rear wheels in the **most rearward** position.

Install two anti-tipping rollers (2) if the wheelchair is to be moved with inclined backrest.



## 3.3 Seat height and angle

### 3.3.1 Adjustment settings

The seat of the V300 & V500 wheelchairs is adjustable in height and angle (0°-2,5°-5°-7,5°-10°). The adjustment settings depend on the wheelchair model as shown in table 1 up to table 3 in this section. Each table is followed by an illustration of the adjustment points. The adjustment procedures are explained in §3.3.2.

The values in the tables are for the default seat angle of 5°. For other seat angle - seat height combinations, the same table can be used. If you don't find the right seat angle - seat height combination, please contact Vermeiren.

The adjustment of seat height and seat angle is based on:

- Relocating bushing (B) to a position above or under the housing (C) of the castor axle;
- Mounting front wheel higher or lower in the front fork (A);
- Mounting the rear wheel higher or lower in the mounting plate (D).

**i** Wheelchairs with Bi5 armrests:

Do not install the rear wheels in the highest position (hole 1) to avoid damage to the wheels and armrests.

Table 1: V300DC, V300XL, V300F, V300 DL

At seat angle 5° (Default setting)				
Seat height	Rear wheels		Front wheels	
	Hole	Hole	Bushing (B)	
440 mm	1	6	Above (C)	
470 mm	2	6	Under (C)	
500 mm (Default)	3	7	Under (C)	
530 mm	4	8	Under (C)	

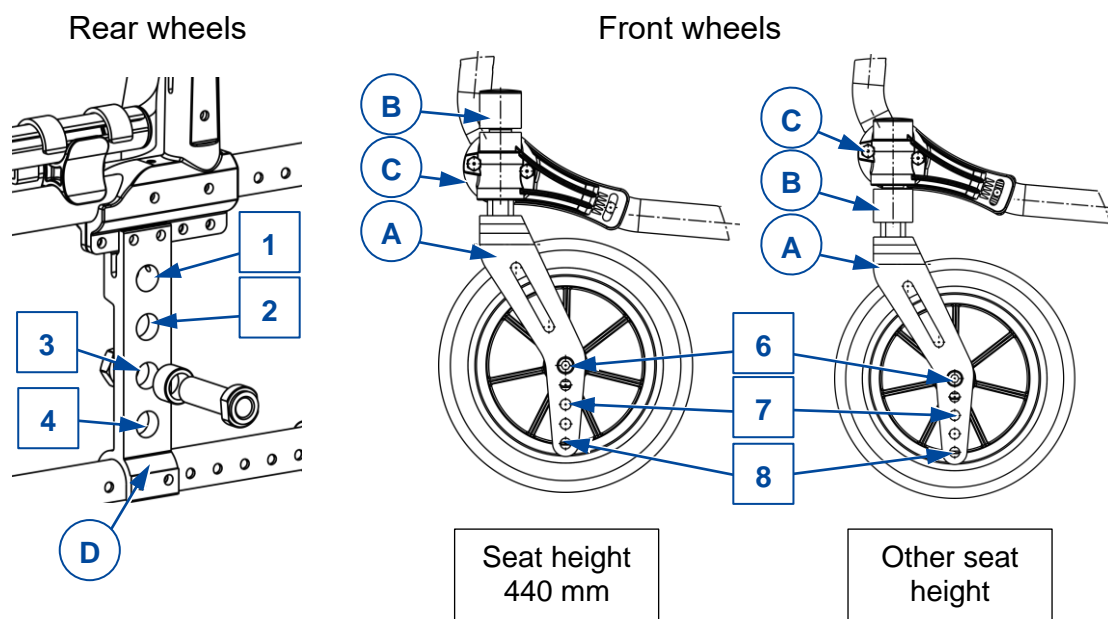


Table 2: V300XR, V300ACT

At seat angle 5° (Default setting)				
Seat height	Rear wheels		Front wheels	
	Hole	Hole	Bushing (B)	
440 mm	1	8	Above (C)	
470 mm	2	8	Under (C)	
500 mm (Default)	3	10	Under (C)	
530 mm (6" wheels)	4	10	Under (C)	



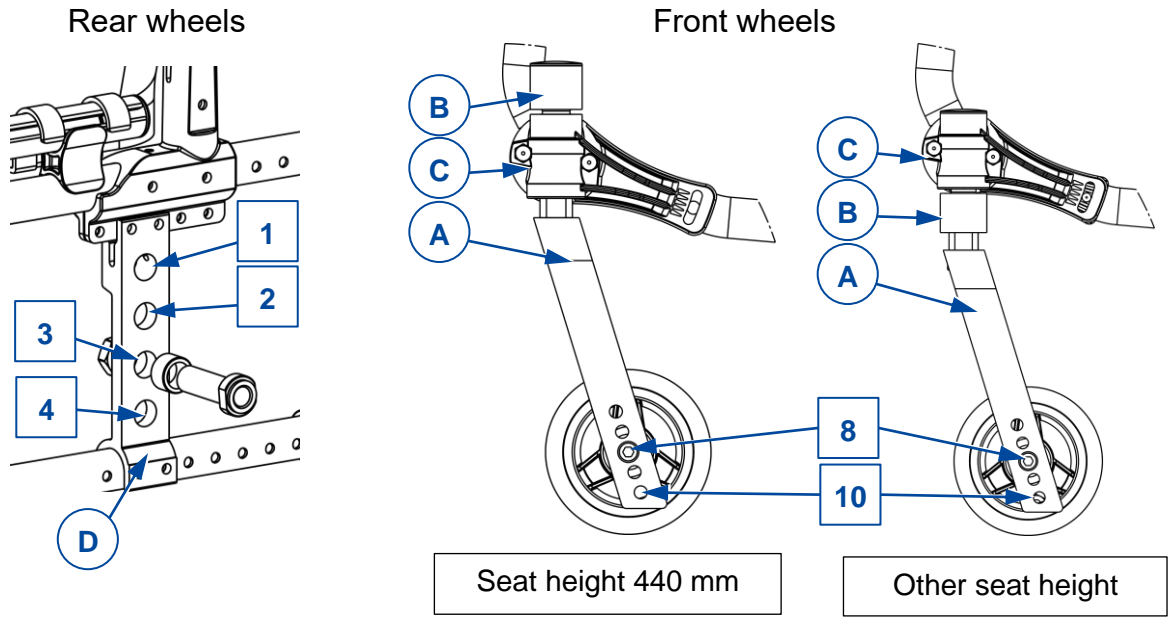
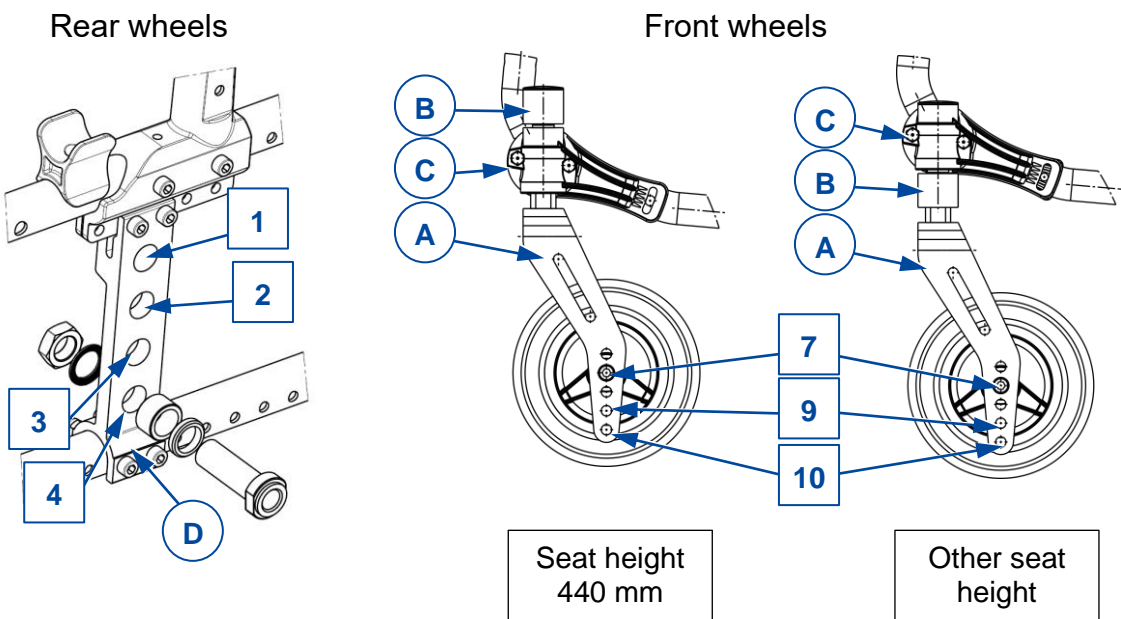


Table 3: V300, V500, V500XL, V500 Light, V500 Active

At seat angle 5° (Default setting)				
Seat height	Rear wheels		Front wheels	
	Hole	Hole no.	Ø	Bushing (B)
440 mm*	1	7	150 mm	Above (C)
470 mm	2	7	150 mm	Under (C)
500 mm (Default)	3	9	150 mm	Under (C)
530 mm	4	10	200 mm	Under (C)

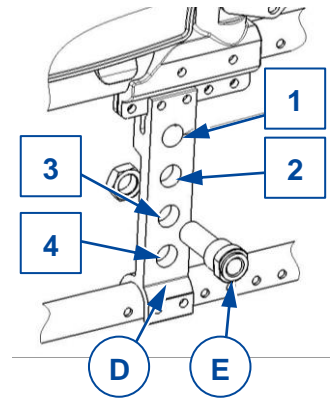
\* V500 Light, V500 Active: 440 mm seat height with 22" rear wheels



### 3.3.2 Adjusting rear and front wheel height

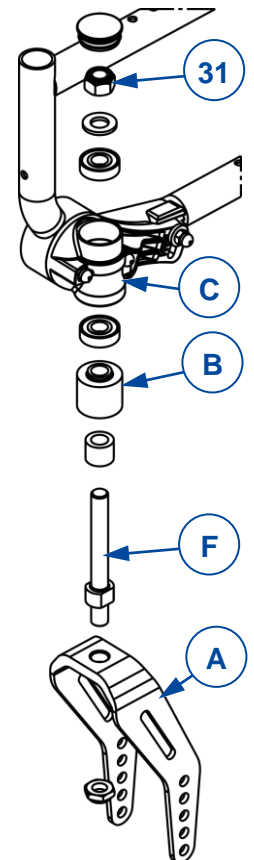
*Adjust the rear wheel height as follows:*

1. Remove the rear wheels (see instruction manual).
2. Demount the axle housings (E) of the rear wheels from the axle plate (D) and remount in the correct hole, see tables in §3.3.1.
3. Repeat this for the second rear wheel. Make sure both housings are positioned identically.
4. Verify that both axle housings (E) are tightened firmly.



*Adjust the front wheel height as follows:*

1. Remove the cover cap from the frame tube.
2. Remove the nut (31) of the swivel axle (F) and collect the loose parts.
3. Demount the front wheel and remount it in the correct hole of front fork (A) according to the tables in §3.3.1.
4. Verify that the location of the bushing (B) is correct in relation to the swivel axle housing (C), see tables in §3.3.1.
5. Mount the swivel axle (F) back in the housing (C) with bushing (B) at the correct position, see the exploded view. Tighten nut (31) firmly.
6. Check the tension of the swivel axle (F); make sure it turns smoothly, without play.
7. Repeat this for the second front wheel. Make sure both front wheels are positioned identically.



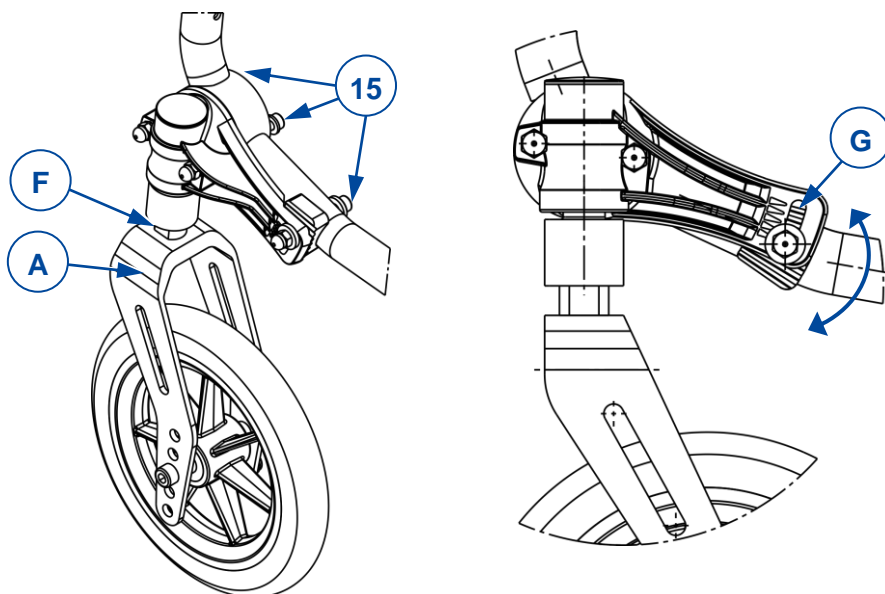
*Final adjustment*

1. Insert the rear wheels.
2. If installed properly, the swivel axles of the front wheels stand perpendicular to the ground. To adjust the angle of the swivel axles, follow the instructions in the next section.
3. Finally, adjust the brakes according to the instructions in § 3.5.

### 3.3.3 Adjusting swivel axles

Verify that the swivel axle (F) stands perpendicular to the ground. If not, adjust the swivel axle at toothed clamp (G) as follows:

1. Loosen the three socket screws (15).
2. Adjust the angle of the swivel axle until it is perpendicular to the ground. There are 5 positions available, each indicated by a small triangle.
3. Tighten the 3 socket screws (15) firmly and repeat this for the second swivel axle.



## 3.4 Seat depth

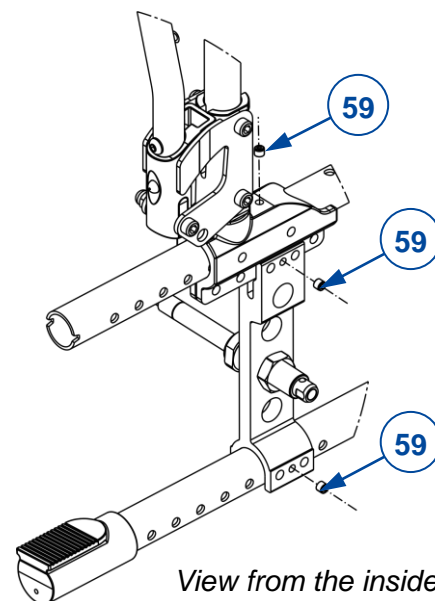
The procedure of this adjustment is explained in §3.4.6.

The adjustment settings depend on the wheelchair model as shown in the tables in sections §3.4.1, §3.4.2, §3.4.3 and §3.4.4. Each table is followed by an illustration of the adjustment points.

### **i** Important remark

When adjusting the backrest connection, make sure that all 3 connection screws (item 59, in example) are tightened firmly.

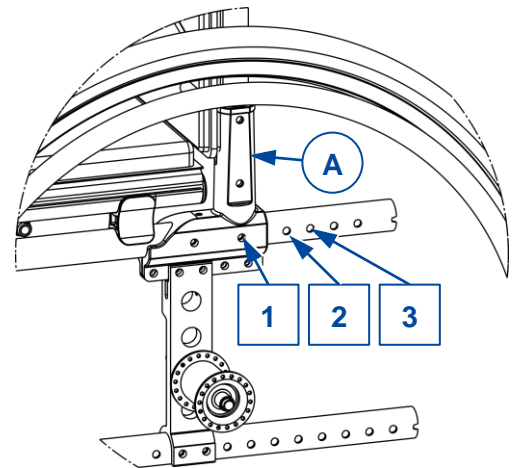
To prevent that theft-protection systems in shops react on the wheelchair frame, the connection screws (59) must be turned **through** the frame coating!



### 3.4.1 Seat depth option 1

This type of wheelchair is only adjustable in 3 seat depths by adjusting the backrest connection (A).

	Seat depth	Backrest position holes
V300XL	490 mm (Default)	1
	510 mm	2
	530 mm	3

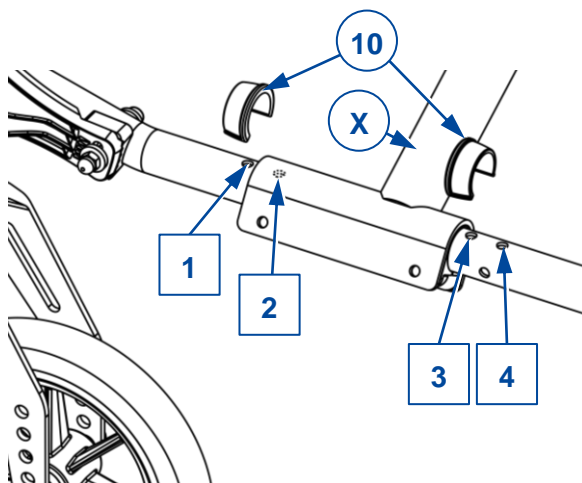


### 3.4.2 Seat depth option 2

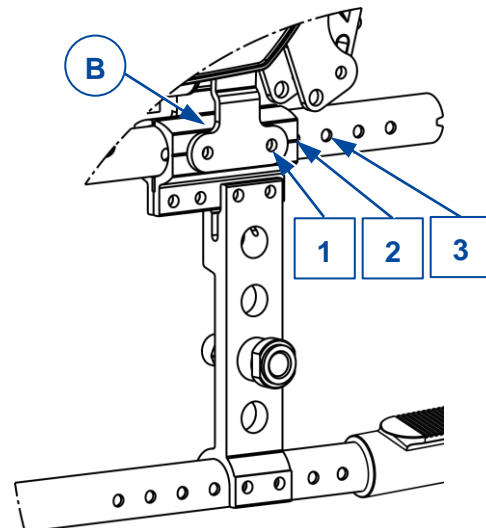
This type of wheelchair is adjustable in 5 seat depths by adjusting the location of the frame cross (X) and backrest connection (B).

	Seat depth	Cross position holes	Backrest position holes
V300 30°	460 mm	Hole 1 and 3	1
	440 mm (Default)	Hole 2 and 4	1
	500 mm	Hole 1 and 3	2
	480 mm	Hole 2 and 4	2
	520 mm	Hole 1 and 3	3

Cross position



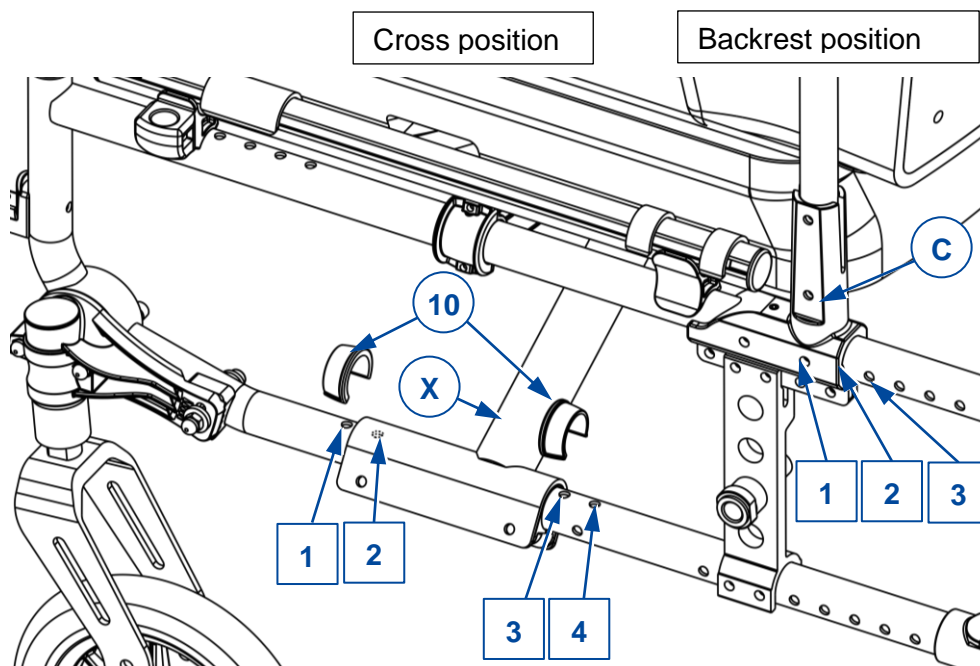
Backrest position



### 3.4.3 Seat depth option 3

This type of wheelchair is adjustable in 5 seat depths by adjusting the location of the frame cross (X) and backrest connection (C).

	Seat depth	Cross position holes	Backrest position holes
V300	460 mm	Hole 1 and 3	1
V300DC	440 mm (Default)	Hole 2 and 4	1
V300F	500 mm	Hole 1 and 3	2
V300ACT	480 mm	Hole 2 and 4	2
V300XR	520 mm	Hole 1 and 3	3
V300DL			

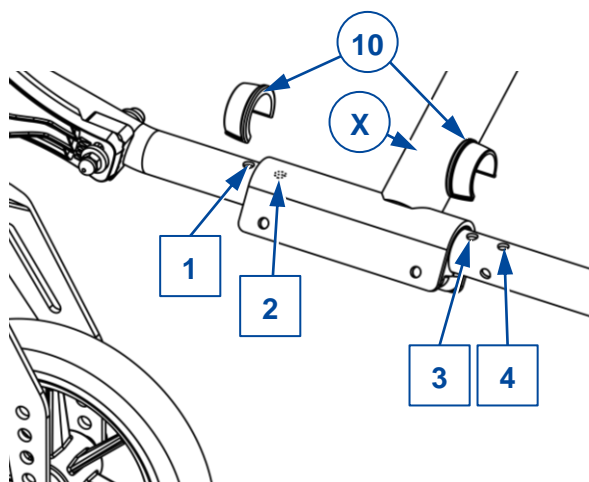


### 3.4.4 Seat depth option 4

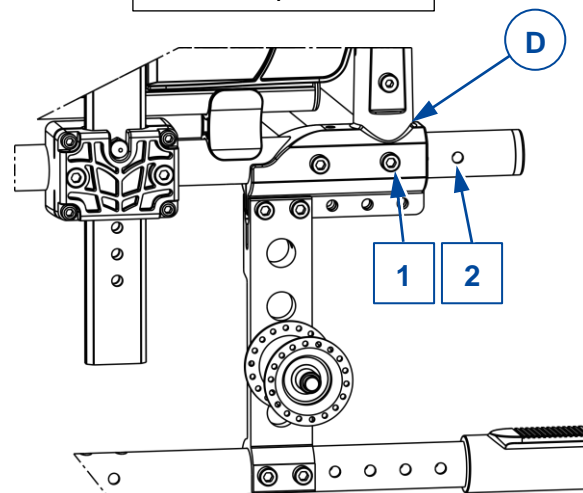
This type of wheelchair is adjustable in 4 seat depths by adjusting the location of the frame cross (X) and backrest connection (D).

	Seat depth	Cross position holes	Backrest position holes
V500	460 mm	Hole 1 and 3	Position 1
	440 mm (Default)	Hole 2 and 4	Position 1
	500 mm	Hole 1 and 3	Position 2
	480 mm	Hole 2 and 4	Position 2

Cross position



Backrest position

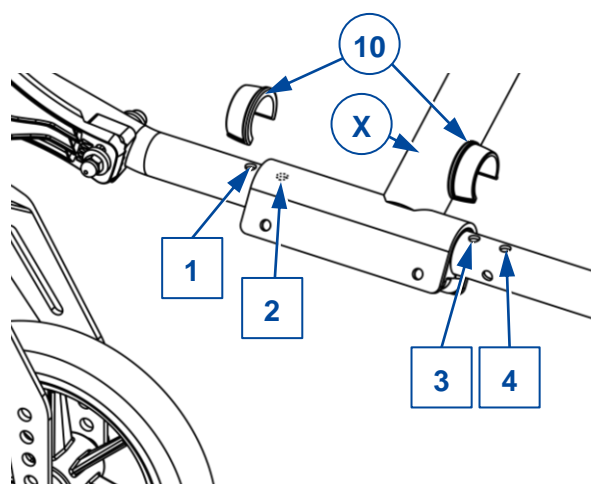


### 3.4.5 Seat depth option 5

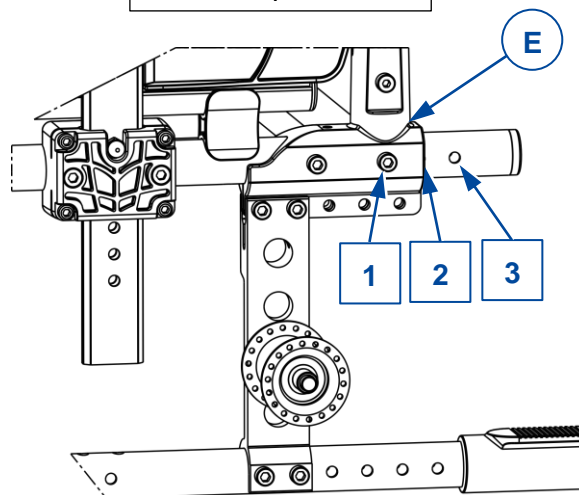
This type of wheelchair is adjustable in 4 seat depths by adjusting the location of the frame cross (X) and backrest connection (E).

	Seat depth	Cross position holes	Backrest position holes
V500 Light	440 mm	Hole 1 and 3	Position 1
V500 Light 30°	420 mm (Default)	Hole 2 and 4	Position 1
V500 Active	480 mm	Hole 1 and 3	Position 3
	460 mm	Hole 1 and 3	Position 2

Cross position



Backrest position





### 3.4.6 Adjustment of cross and backrest connection

**i** The settings and item numbers can be found in following sections


#### *Cross position (if adjustable)*

1. Remove clip (10), at each side of the wheelchair.
2. Move the cross (X) forwards/backwards to the desired position according to the settings in the tables of previous sections.
3. Replace both clips (10) at each side of the wheelchair to lock the cross position.

#### *Backrest connection position*

1. Demount both socket screws of the backrest connection, at both sides of the wheelchair.
2. Move the backrest connection (A/B/C/D/E) forwards/backwards to the desired position according to the settings in the tables of previous sections.
3. Mount the 2 socket screws firmly; at both sides of the wheelchair.
4. Verify if seat height and seat angle are correctly set.

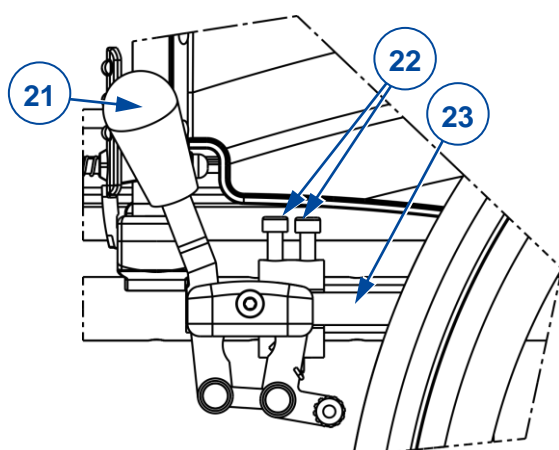
## 3.5 Parking brakes

 CAUTION Risk of injuries

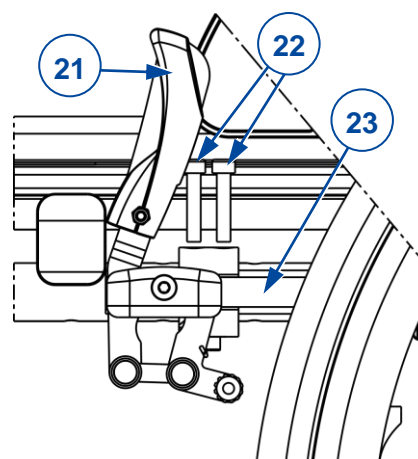
Always adjust the parking brakes after adjusting the rear wheel position. Readjust also when tyres are worn, to compensate the wear.

Adjust the correct braking force.

1. Release the brake with lever (21), see instruction manual.
2. Loosen socket screws (22) to make the brake free to slide.
3. Slide the brake over the guide (23) to the desired position.
4. Retighten the socket screws (22).
5. Verify if the brake is working properly: the wheel is blocked, but the brake can be operated easily. If this is not the case, repeat the steps above.
6. Repeat this adjustment for the second parking brake. Make sure both brakes are adjusted identically.



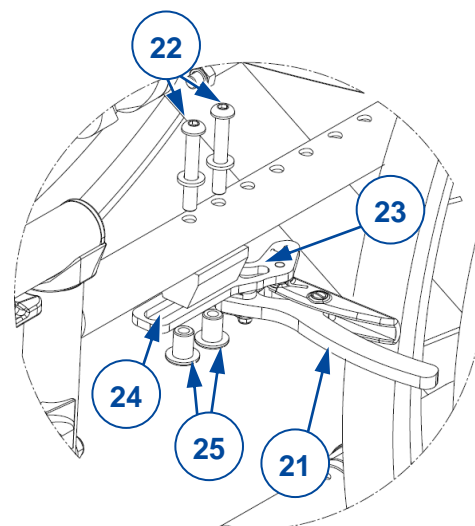
V300	V300DC
V300 30°	V300F
V300XL	V300XR
V300ACT	



V300DL	V500
	V500 Light
	V500 Light 30°

### 3.5.1 Sport brakes

1. Release the brake with lever (21), see instruction manual.
2. If not possible to adjust the brake properly using the slot (24), remove the socket screws (22) and nuts (25).
3. Move the brake (23) to the desired position (6 possible positions).
4. Retighten the socket screws and nuts (22+25) and tighten slightly.
5. Make final adjustments to the brake position by sliding the brake along the slot (24) in the attachment plate.
6. Verify if the brake is working properly: the wheel is blocked, but the brake can be operated easily. If this is not the case, repeat the steps above.
7. Repeat this adjustment for the second parking brake. Make sure both brakes are adjusted identically.



### 3.6 Footrest length

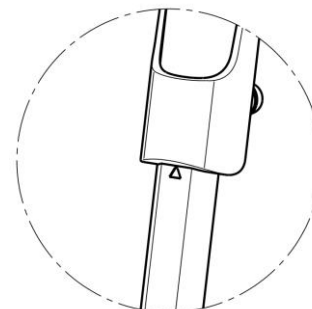
CAUTION

Risk of damage

Make sure that the footrests won't touch the ground.

Keep a minimum safe distance of 60 mm above the ground.

The maximum length of the footrest is limited to the length indicated by a triangle on the front of the footrest tube, see picture.

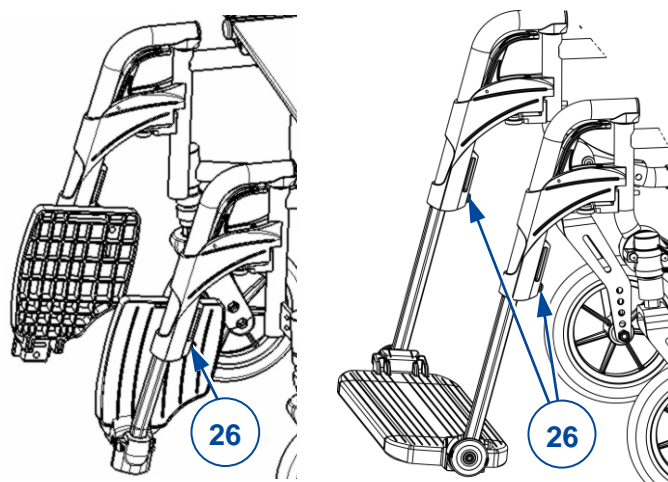


**i** Since they are connected, both footrests of V300XL are adjusted simultaneously.

#### 3.6.1 Stepless adjustment

Adjust the length as follows:

1. Remove the socket screw (26) at the back of the footrest.
2. Adjust the footrest to a comfortable length.
3. Retighten the socket screw firmly.
4. Repeat this for the second footrest. Make sure the footrests are positioned identically.



V300 – V500

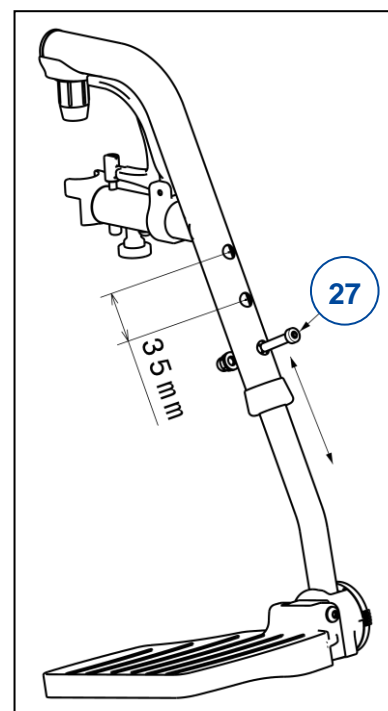
V300 XL



### 3.6.2 Adjustment in steps

Adjust the length as follows (3 holes on inside tube, 3 holes on outside tube ; 120mm range):

1. Remove the screw (27).
2. Adjust the footrest to a comfortable length.
3. Retighten the screw firmly.
4. Repeat this for the second footrest. Make sure the footrests are positioned identically.



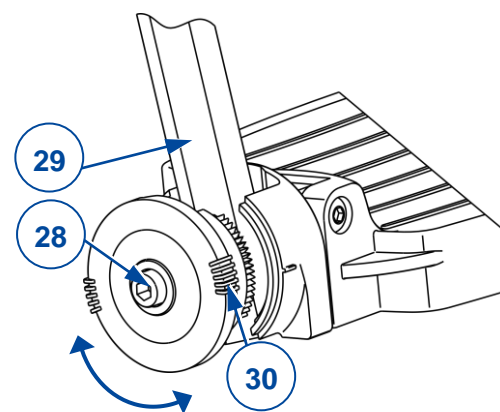
V500 Light - V500 Light 30° - V500 Active

### 3.7 Footplate position

The footplate(s) can be used in 2 positions: front and rear. By default, each footplate is adjusted with its base plate in the rear position.

To place the footplate in front position:

1. Remove the socket screws (28) of both footplates.
2. Exchange left and right footplate.
3. Tighten the socket screws (28) firmly.



### 3.8 Footplate angle

Adjust the angle of the footplate at its toothed clamp:

1. Loosen the socket screw (28) of the footrest (29).
5. Turn the footplate to the desired angle (80°- 100°). The dashes (30) on the toothed clamp indicate the angular positions.
6. Retighten the socket screw.
7. Repeat this for the second footplate.

### 3.9 Arm pad height and depth (option 1)

This arm pad is adjustable in height and depth, each in 3 positions. The height is adjusted by adding or removing distance blocks. The depth is adjusted by using different mounting holes.

To adjust:

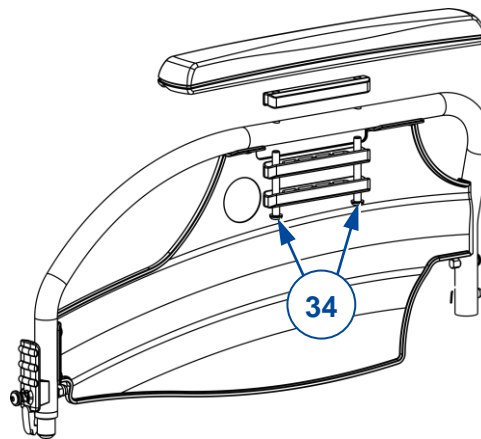
1. Remove both socket screws (34).
2. Place the correct number of blocks below and above the frame tubes, see table 1.
3. For depth adjustment, install the arm pad by using the correct mounting holes, see table 2.

Table 1

Height arm pad to seat	Number of blocks below tube	Number of blocks between tube and arm pad
220 mm (Default)	2	1
230 mm	1	2
240 mm	0	3

Table 2

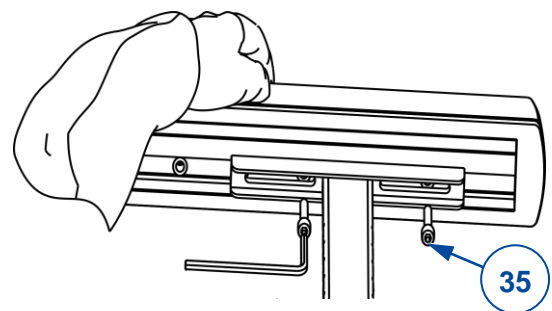
Depth of the arm pad	Used holes
Front position	Back and middle
Middle position (Standard)	Hole 2 and 4
Back position	Front and middle



### 3.10 Arm pad depth (option 2)

Adjust the depth of the arm pad as follow (range 120 mm: step less):

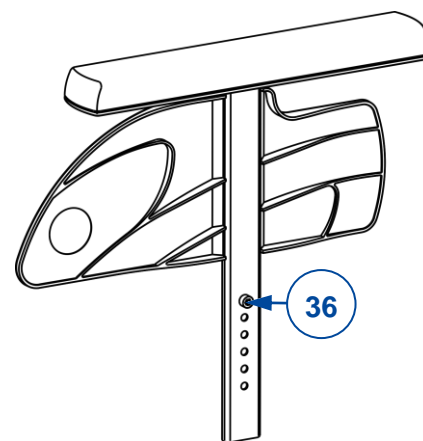
1. Loosen both socket screws (35) at the bottom of the arm pad.
2. Move the arm pad to the front or rear within the range of the slotted holes (42,5 mm).  
If this not enough, remove the socket screws and attach the arm pad using the other holes (3 positions available).
3. Tighten both socket screws firmly.
4. Repeat this for the second arm pad. Make sure both arm pads are positioned identically.



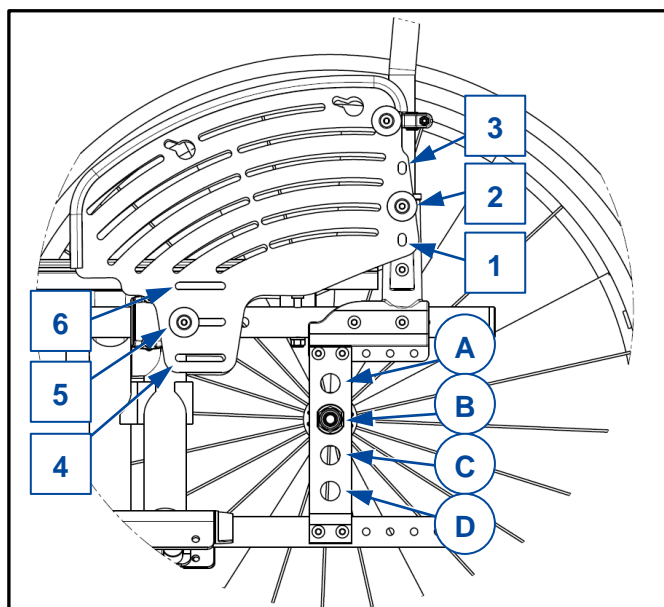
### 3.11 Armrest height (option 3)

The height of the armrest is adjustable in 6 positions as follows:

1. Pull the armrest out of the armrest holder.
2. Remove the socket screw (36) that sets the height.
3. Mount the screw in the desired hole.
4. Insert the armrest in the armrest holder.
5. Check the height; readjust if necessary.
6. Repeat this for the second armrest. Make sure both armrests are positioned identically.



### 3.12 Side plate adjustment (option 4)



The height of the side plate can be adjusted in 3 positions as follows:

1. Remove socket screws (backrest screw & seat screw).
2. Move the side plate up/down to the desired height and retighten it with the socket screws in the corresponding openings according to the table below.

Repeat the adjustments above for the second side plate. Make sure that both side plates are set to the same height and dept, and that they are firmly secured.

Wheel position	Backrest screw	Seat screw
A	1	4
B	2	5
C	3	6
D	3	6



Vermeiren GROUP  
Vermeirenplein 1 / 15  
2920 Kalmthout  
BE

website: [www.vermeiren.com](http://www.vermeiren.com)

### **Instructions for specialist dealer**

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

Version: F, 2023-07

Basic UDI: 5415174 122106V300\*  
5415174 122106V500\*

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