

# VERMEIREN

## Forest 3+

INSTALLATION MANUAL





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## Preface

To support you on the installation and repairs of this electric wheelchair, we provide you with this installation manual. 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 the following wheelchair(s):

- Forest 3+

### **Important note**

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

### **Available information**

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



User manual of applied operating console and battery charger.  
For user and specialist dealer



Installation instructions (Instructions for detail adjustments and (dis)assembly)  
For specialist dealer



Service manual for wheelchairs  
For specialist dealer



Drawings of (spare) parts  
For specialist dealer



EC declaration of conformity

## 1 This product





## 2 Scope of delivery

The following items are part of the delivery:

- Framework with armrests, operator control, rear and front wheels, seat and backrest (optional: electrically adjustable seat, backrest, electrical lift)
- Footrests
- Batteries
- Battery charger in pocket
- Tools
- User manual of:
  - wheelchair
  - operating console
  - battery charger
- Accessories (if applicable)

Before use, check if everything is included and that no products are damaged.

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

## 3 Assembly and adjustments

**CAUTION**

Risk of injuries or damage

- The wheelchair needs to be (dis)assembled and adjusted by a specialist dealer according to the instructions in this chapter.
- Only use parts and tools described in this manual.
- Prevent bystanders from accessing the (dis)assembling area.
- Keep the (dis)assembling area clean and tidy, to prevent falling.
- Collect all small parts in a box or bag.
- While (dis)assembling and operating the wheelchair, make sure no objects or body parts get caught between moving parts. In particular, pay attention to the position of the cables.
- Turn the wheelchair off before you perform any mechanical adjustments and make sure that the free-wheel lever is in braking position.
- Make sure all screws are firmly secured before driving.
- Software changes are only allowed if executed by skilled personnel, taking into account the user and environment (stability, acceleration, indoor/outdoor, etc.).

**Important remarks**

- Read the user manual of this wheelchair.
- Be aware of the technical details and limits of intended use; see the user manual.
- For more information, contact Vermeiren.

### 3.1 Tools

To (dis)assemble and adjust the wheelchair, the following tools are needed:

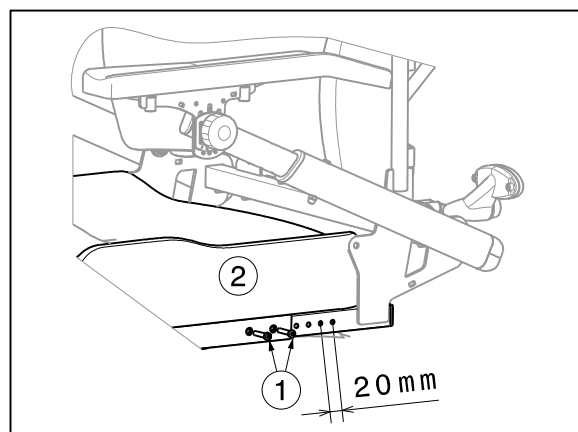
- Wrench set no. 10 to no. 17
- Allen keyset n° 4
- Screwdriver

## 3.2 Adjusting the wheelchair to the user

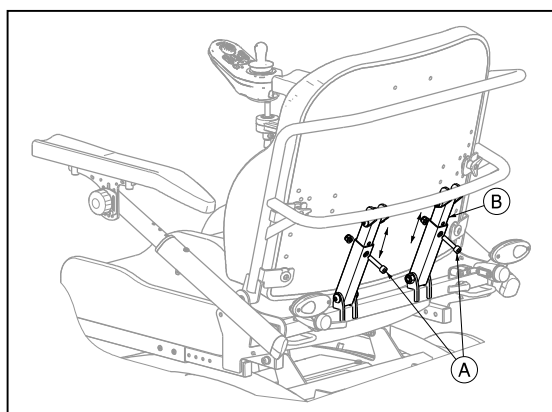
### 3.2.1 Seat depth

The Vermeiren Forest 3+ is adjustable in 6 different seat depths over a range of 100 mm (steps of 20 mm).

1. Loosen the two screws (1) on either side of the frame.
2. Pull the seat (2) more backwards or forwards to the desired position and until the relevant holes lie above one another so that the fixing screws (1) can be inserted through the frame.
3. Retighten the screws (1) firmly by hand.



### 3.2.2 Backrest inclination



1. Remove the screw (A).
2. Move the inner square tube (B) until the desired backrest angle is reached (5 positions: 2° - 9° - 16° - 24° - 32°).
3. Retighten the screw (A).
4. Check that the backrest frame is firmly fixed.

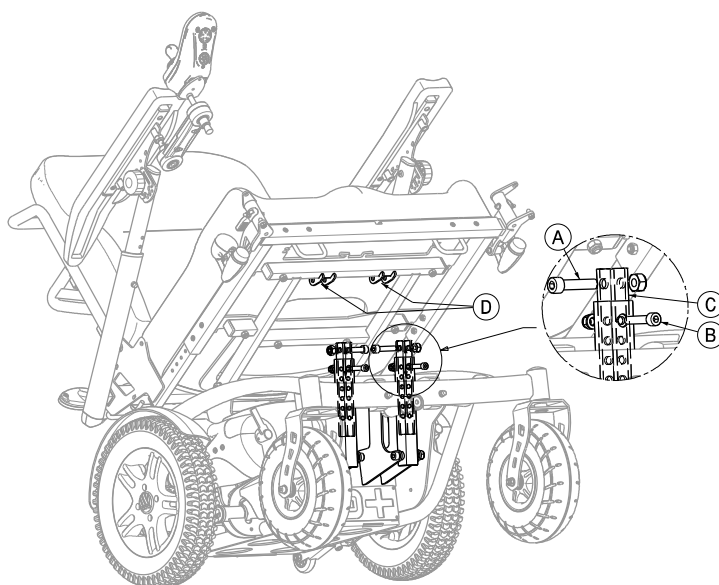
### 3.2.3 Seat inclination

CAUTION

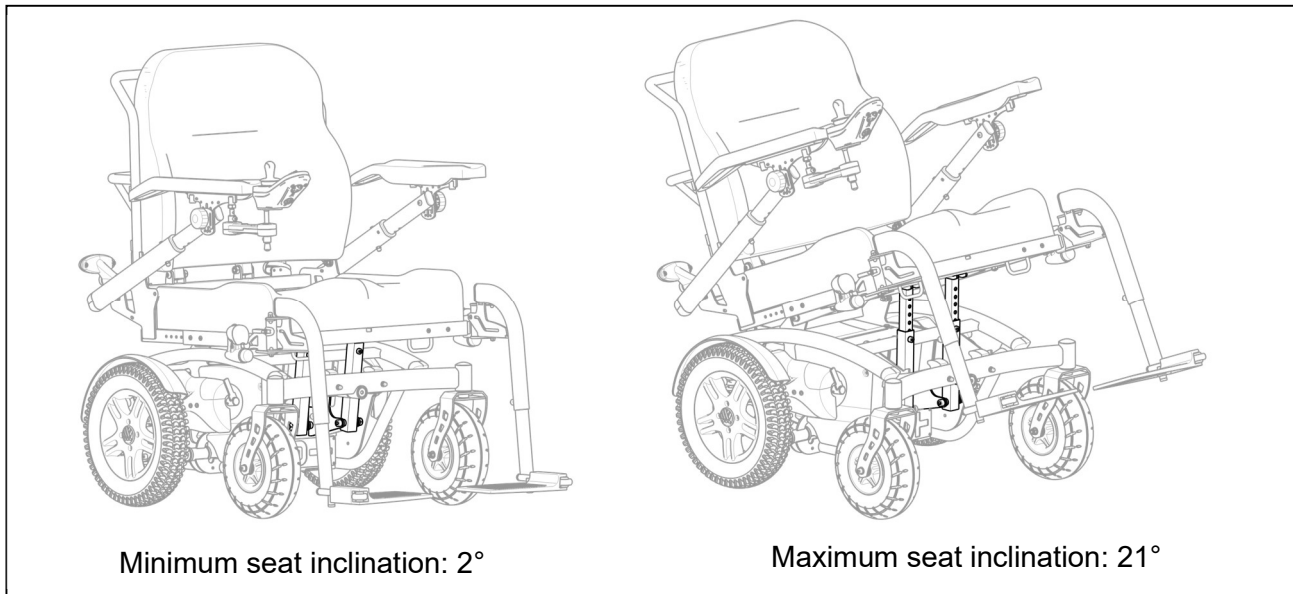
Risk of damage

Ask assistance to prevent the mounting frame with seat from falling during adjustment.

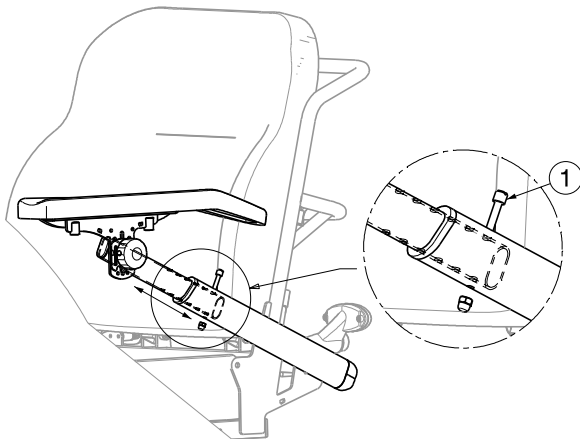
1. Remove the footrests.
2. Remove the screw (A) that connects the seat frame with the lower frame. Fold the seat frame backwards.
3. Check that the seat frame stays backwards or ask someone to hold the seat frame to the back.
4. Remove the screw (B).
5. Move the inner square tube (C) until the desired seat angle is reached (6 positions: 2° - 6° - 9,5° - 13° - 17° - 21°).
6. Retighten the screw (B).
7. Fold the seat frame back to the front.
8. Retighten the screw (A) to attachment (D).
9. Replace the footrests.
10. Check that the seat frame is firmly fixed.







### 3.2.4 Armrest length



Adjust the length of the armrests as follows (6 positions: steps 20 mm):

1. Loosen the screw (1).
2. Adjust the armrest to a comfortable length.
3. Tighten the screw (1) properly.

Check that the armrests are positioned identically on both sides.

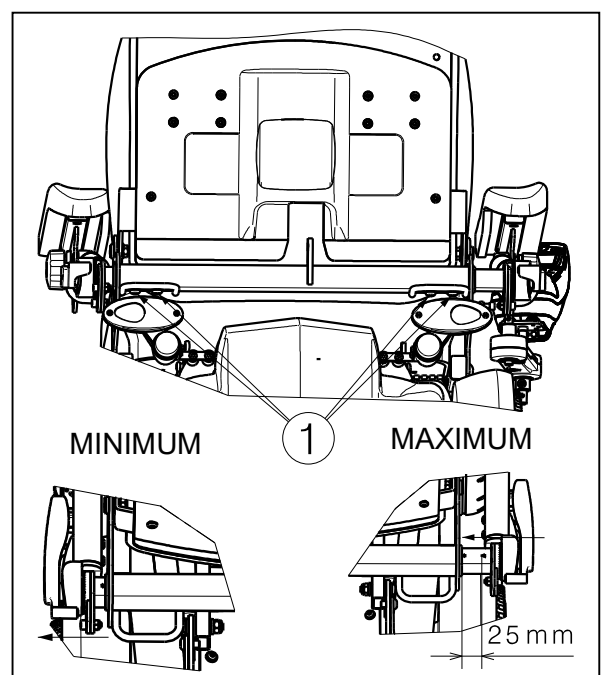
### 3.2.5 Armrest width

Adjust the width of the armrests as follow (range 25 mm: stepless / on each side):

1. Loosen the screws (1) on the back of the wheelchair just below the seat frame.
2. Adjust the armrest to a comfortable width.
3. Tighten the screws (1) properly.

**Check that the armrests are positioned identically on both sides.**

The minimum and maximum adjustment will be indicated by the triangle. The triangle must be completely visible.



### 3.2.6 Footrest length

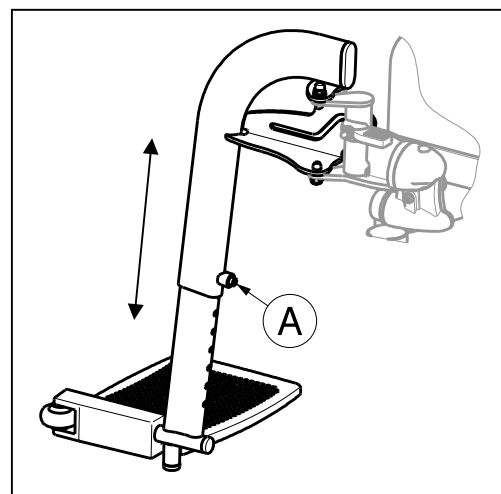
CAUTION

Risk of damage

Avoid that the footrests make any contact with the ground. Keep a minimum distance of 50 mm above the ground.

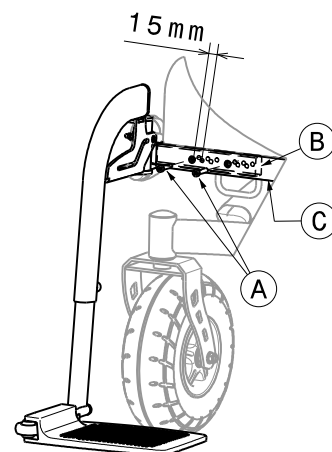
1. Remove the screw (A).
2. Adjust the length of the footrest to a comfortable length (range: 120 mm, steps 20 mm).
3. Tighten the screw (A) properly.

Check that the footrests are positioned identically on both sides.



### 3.2.7 Footrest width

1. Loosen the two screws (A) on the front of the seat frame.
2. Move the footrest in an horizontal direction until the correct seat with, by moving the square tubes (B) and (C) over each other (3 different positions: steps 15 mm on each side).
3. Retighten the screws (A) properly.
4. Repeat instructions above for the other footrest.



### 3.2.8 Operating console

#### Mounting position left or right

1. Hold the control with its support (3) while removing M6 socket screw (41).
2. Loosen hex nut (42) and demount shaft (43) from the armrest.
3. Mount shaft (43) in the other armrest and lock it with hex nut (42).
4. Mount the control support (3) with socket screw (41) on the shaft (43).
5. Make sure all connections are well secured.
6. Guide the cable and plug the cable in the operating console.



#### Operating console - height

The height of the operating console can be adjusted in 2+4 positions, or 6+4 positions depending on the type of shaft:

1. Hold the control while removing M6 socket screw (41).
2. Move the control support (3) up/down on shaft (43) and mount the socket screw (41).

3. If necessary adjust the height of the console on shaft (45) in the same way and lock it with socket screw (44).
4. Make sure all connections are well secured.
5. Guide the cable and plug the cable in the operating console.

### 3.3 Changing battery



CAUTION

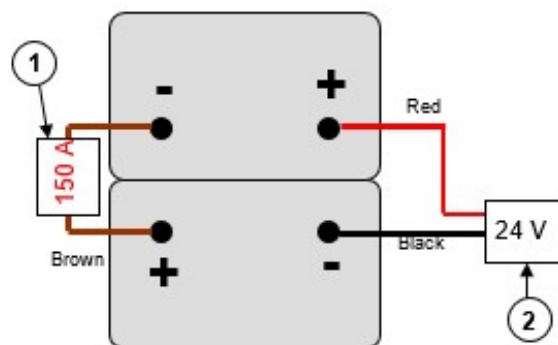
Risk of injuries and damage

- The batteries must only be replaced by trained personnel
  - Do not come into contact with the acid from the batteries.
  - Replace the batteries in a well-ventilated room.
  - Make sure that the ventilation holes of the battery housing are free from any contaminations.
  - First read the charging instructions in the user manual before charging the batteries.
1. Take off the front battery cover by removing the two knobs on the top and the knob on the bottom.
  2. Move aside the plate with power module by loosening and removing the screws in the top corners. You can now reach the batteries.

Replace both batteries at the same time and with the same type as the ones used in the wheelchair. If this is not possible, contact the nearest Vermeiren facility.

Battery connections:

- 1) Blow fuse
- 2) Plug (electronic system)



### 3.4 Changing wheels or tyres



CAUTION

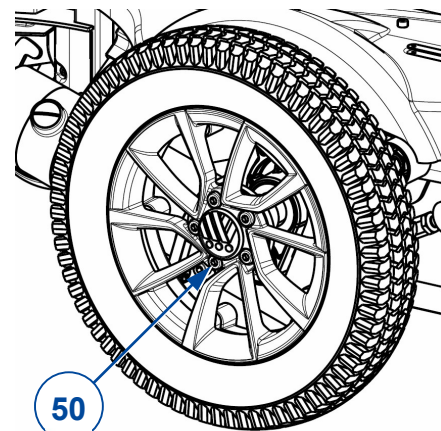
Risk of injuries and damage

- Make sure that all air is released from the tyre, before removing it.
  - Use a wooden block and jack to lift the wheelchair. Always place the jack under the lower frame, never under any other parts.
  - Make sure that no body parts, the inner tube nor any other objects are pinched between tyre and rim.
  - Handle carefully to prevent damage to the rim.
  - Make sure all screws are firmly secured by hand before driving with the wheelchair.
1. Replace the innertube, and if necessary also the tyre.
  2. Inflate the tyre using inflating equipment which complies to regulations and with a pressure indication in "bar".
  3. Make sure that the pressure is correct, see the pressure indication on the tyres.

### 3.4.1 Driving wheels

**i** If a tyre needs to be replaced, first check the type of tyre that has been fitted. In case of a tyre with line profile, do not switch left and right tyre.

1. Lift the driving wheel from the ground using a jack.
2. Remove the socket screws (50) and take the wheel from the flange.
3. Open tyre valve and push it gently to release the air.
4. Loosen the 5 screws that connect both rim halves (on the inner rim half).
5. Separate the rim halves and remove the inner tube from the tyre.
6. Inflate the new or repaired inner tube partly.
7. Insert the inner tube into the tyre.
8. Place the two rim halves back on the tyre. Make sure that the tube valve pops out of the opening in the rim.
9. Connect the rim halves with the 5 socket screws. Tighten by hand.
10. Inflate the tyre at the correct pressure, see the indication on the tyre.
11. Remove grease and other contamination from the thread of the 5 flange socket screws (48). Apply screw adhesive (ex. Loctite) to these screws.
12. Mount the wheel on the flange.
13. Lower the jack.
14. Make sure the socket bolts are firmly secured.



### 3.4.2 Steering wheels (front wheels)

#### DISMANTLING

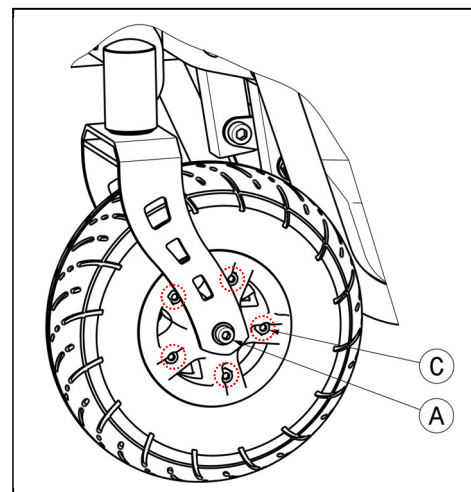
- A.** Loosen the screw on the steering wheel axle and remove it from the steering wheel fork.
- B.** Let the air out of the steering wheel by lightly pressing the pressure pin on the valve.
- C.** Loosen the 5 screws that hold the split rim together.

Now separate the rim sides.

#### ASSEMBLY

Insert the partly-filled inner tube into the tyre.

- C.** Connect the two sides of the rim through the tyres and use the 5 connecting screws to screw the rim together.
- B.** Make sure that the valve juts out of the valve opening in the rim.
- A.** Put the wheel back into the front wheel fork and inflate the wheel.











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### **Instructions for specialist dealer**

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

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Basic UDI: 5415174 122127Forest 3+ G5

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