

VERMEIREN

Inovys

INSTALLATION MANUAL





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Preface

To support you on the installation and repairs of this wheelchair, this installation 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 following wheelchair(s):

- Inovys II
- Inovys II-E
- Inovys II-F

Important note

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

Information available

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



User manual
For user and specialist dealer



User manual of applied handset and battery charger (if applicable).
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



EC declaration of conformity



1 Scope of delivery

The following items are part of the delivery.

- Frame including wheels, backrest frame, seat and positioning mechanisms (mechanical or electric *)
- Battery *
- Backrest and 2 leg rests
- 2 Armrests
- Headrest *
- Battery charger in pocket *
- Tools
- User manual of:
 - wheelchair
 - handset *
 - battery charger *
 - battery *
- This installation manual
- Accessories (if applicable), such as red reflector stickers to be used in France.

Before use, check that everything is included and that no products are damaged. Please note that the basic configuration may differ in different European countries. Contact your specialist dealer.

(*) Depends on wheelchair model.

1.1 Tools

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

- Wrench set no. 10 to no. 22
- Allen keyset no. 3 to no. 8
- Screwdriver Phillips head
- Screwdriver
- Nipper
- Pliers

2 Assembly and disassembly

The assembly and disassembly of the wheelchair is described in the user manual. For Inovys II-E, the battery has to be connected before first usage.



3 Adjustments

**CAUTION**

Risk of injuries or damage

- Read the user manual of the specific wheelchair.
- Be aware of the technical details and limits of intended use; see the user manual.
- The wheelchair needs to be 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 working area.
- Collect all small parts in a box or bag.
- While adjusting 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.
- If a battery is applied, unplug the battery charger and switch the operating console off before you perform any mechanical adjustments.
- Any modification to the product will lapse the warranty and will cease the responsibility of Vermeiren.
- **Make sure all screws are firmly secured before riding your wheelchair. Adhere to the tightening torques for screws according to the Torque table on our website.**

**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

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

**Important remarks**

- For more information, contact Vermeiren.

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

- rear-wheel position, see §3.1.
- seat height and angle, see §3.2.

3.1 Rear-wheel position

**CAUTION**

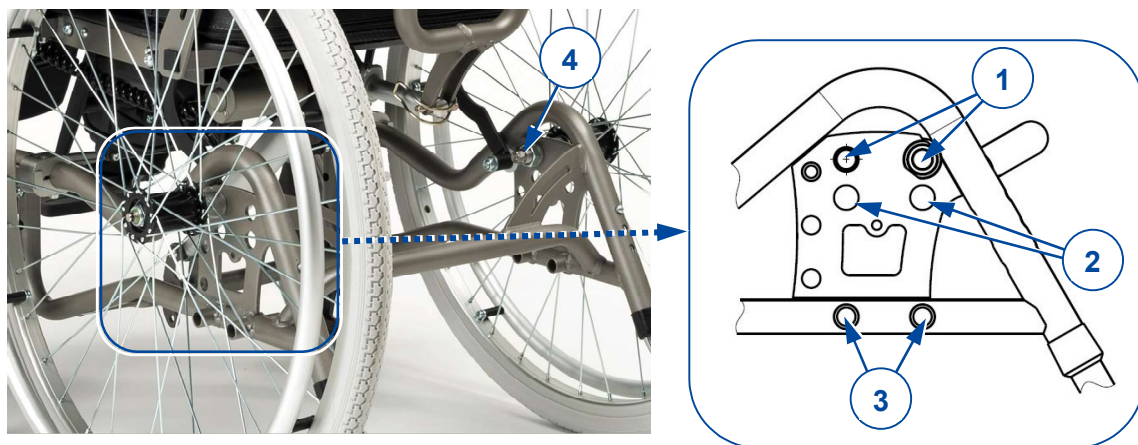
Risk of injuries or damage

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

For each type of driving wheel (16", 22" and 24"), two adjustment positions are available:

- Holes no. 1 for 24" driving wheels, with 45 mm in between;
- Holes no. 2 for 22" driving wheels, with 45 mm in between;
- Holes no. 3 in the frame tubes, for 16" driving wheel, with 50 mm in between;

i The delivered wheel sockets fits in each of the four bores of the mounting plate. The wheel sockets for the 16" wheels (transit version) only fit in the bores (3) of the frame tubes.



To change the position of the wheel socket:

1. Remove the rear wheels, see user manual.
2. Remove the hex nut (4) on the inside of the mounting plate. Collect the wheel socket, washer, distance ring (2x) and bushing.
3. Mount the wheel socket in the other bore, according to the part drawing of the specific type of wheelchair assembly.
4. Tighten the hex nut (4) firmly.
5. Repeat this for the second wheel socket. Make sure that the wheel sockets, left and right side, are mounted in the corresponding bore of the mounting plate.
6. Install both rear wheels.

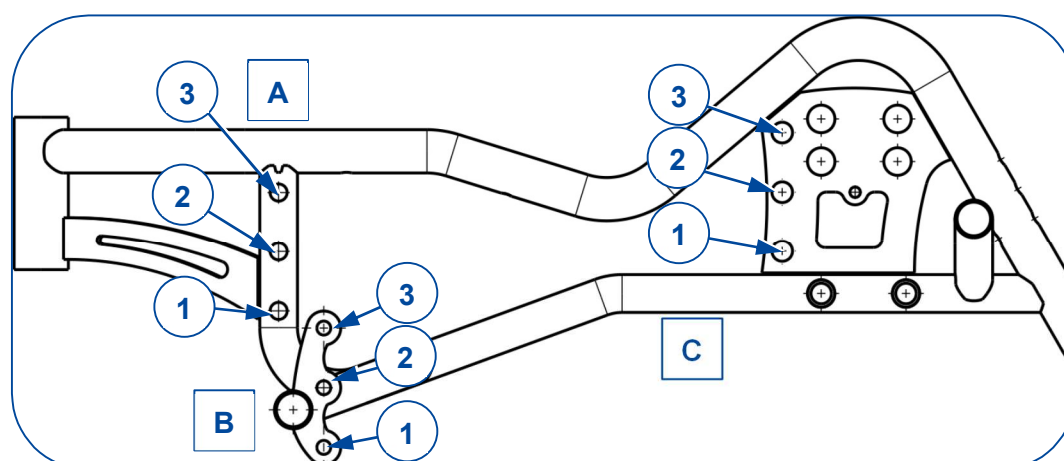
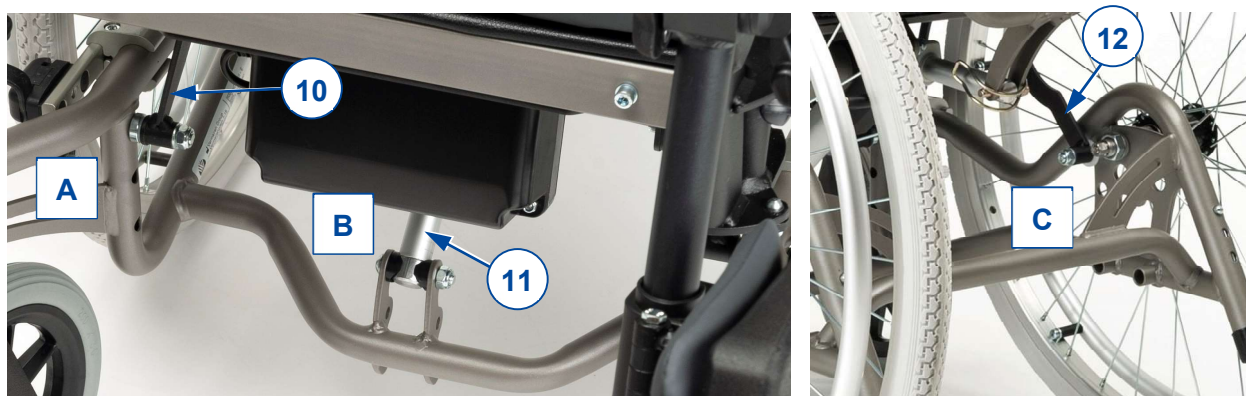
3.2 Seat height and seat angle

The seat height of the Inovys wheelchair is adjustable in 3 positions in steps of 35 mm. To adjust the seat height, the following connection points (located below the seat frame) need to be repositioned:

- at front tube (A), connection of base frame and seat-frame support (10);
- at base-frame support (B), connection of base frame and seat-inclination motor (11);
- at rear-wheel mounting plate (C), connection of base frame and seat-frame support (12).

To adjust the height:

1. Remove the socket screw and nut for item (10), (11) and (12) and collect the spacers.
2. Mount item (10+12) with the spacers in one of the adjustment holes:
 - In lowest position (460 mm), in hole no. 1;
 - In medium position (495 mm), in hole no. 2;
 - In highest position (530 mm), in hole no. 3.
3. Tighten socket screws and nuts firmly.
4. Repeat adjustments (A) and (C) at the other side of the wheelchair.
5. Mount item (11) with spacers in one of the holes at location (B), according to the same hole selection made for item (10+12).
6. Tighten socket screws and nuts firmly.



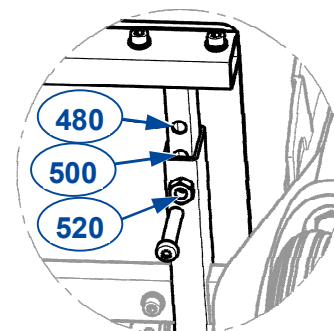
3.3 Seat depth

The seat depth can be changed

- by adjusting the seat frame position
(3 positions available: 480 – 500 – 520 mm)

or

- by adjusting the backrest depth, see §3.4. With the backrest-depth adjustment, a minimum seat depth of 460 mm is possible.



To adjust the seat frame:

1. Loosen both socket screws (16) on each side, beneath the seat-frame front.
2. Move the seat-frame front (17) forward or backward to the desired position.
3. Retighten socket screws (16) firmly.

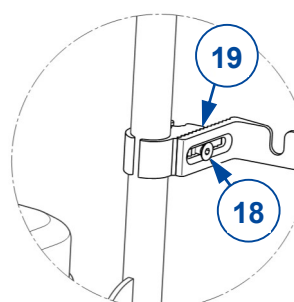
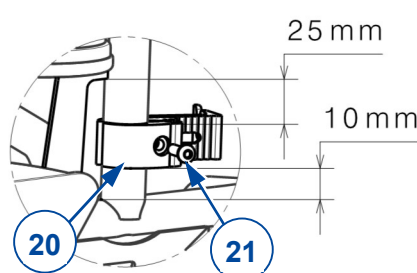


3.4 Backrest height and depth

- i** Use the backrest as reference to position the brackets.
To remove the backrest, see user manual.

Adjust the height of the backrest at the brackets (20) (over max. 50 mm; stepless):

1. Loosen socket screws (21) of the four brackets to make them free to slide.
2. Adjust the backrest to the desired height.
3. Retighten the socket screw of each bracket.



Adjust the backrest depth at the toothed clamps (19) of the brackets:

1. Remove the backrest.
2. Loosen the socket screw (18) of the toothed clamp (19).
3. Move the bracket forward/backward, but make sure that all teeth of the clamp stay covered.
4. Retighten the socket screw.
5. Repeat this adjustment for the other brackets/clamps. Make sure all 4 brackets/clamps are adjusted identically.
6. Mount the backrest in place.

3.5 Parking brakes

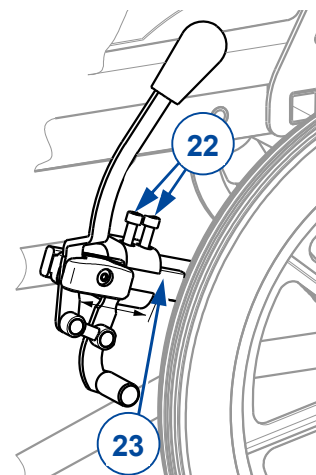

CAUTION

Risk of injuries

Adjust the parking brakes after adjustment on the rear-wheel position, and when tyres are worn to compensate the wear.

Adjust the correct braking force of the parking brakes:

1. Release the brake, see user manual.
2. Loosen the 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 until the brakes are adjusted well.
6. Repeat for the second parking brake. Make sure that both brakes are adjusted identically.



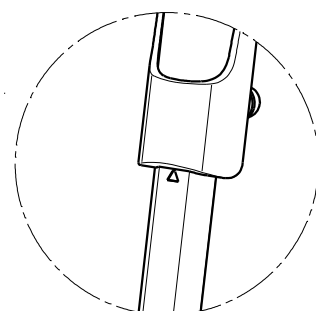
3.6 Leg rest length


CAUTION

Risk of injuries or damage

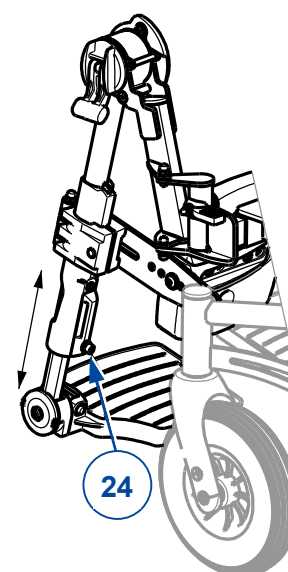
The maximum length of the footrest is limited to the length indicated by a triangle on the front of the footrest tube, see picture. This maximum length adjustment is not possible in sitting position; the footplates will touch the ground.

Make sure that the distance to the ground in sitting position is minimal 60 mm to avoid touching small obstacles and to prevent damage to the footrest.



To adjust the length of the footrests:

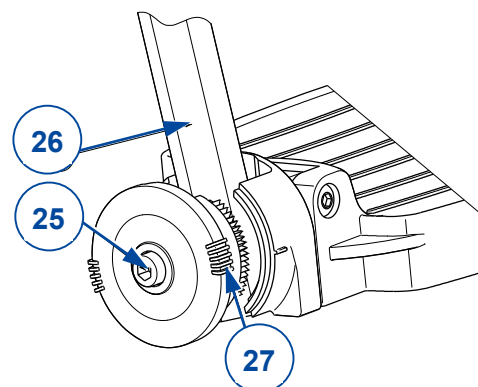
1. Remove the socket screw (24) on the back of the footrest.
2. Adjust the footrest to a comfortable length.
3. Retighten the socket screw firmly.
4. Repeat for the second footrest. Make sure that the footrests are positioned identically.



3.7 Footplate angle

To adjust the angle of the foot plate at its toothed clamp:

1. Loosen the socket screw (25) on the footrest (26).
2. Turn the footplate in the desired angle (80° - 100°). The dashes (27) on the toothed clamp indicate the angular positions.
3. Retighten the socket screw (25).
4. Repeat for the second footrest.



3.8 Footrest width



CAUTION

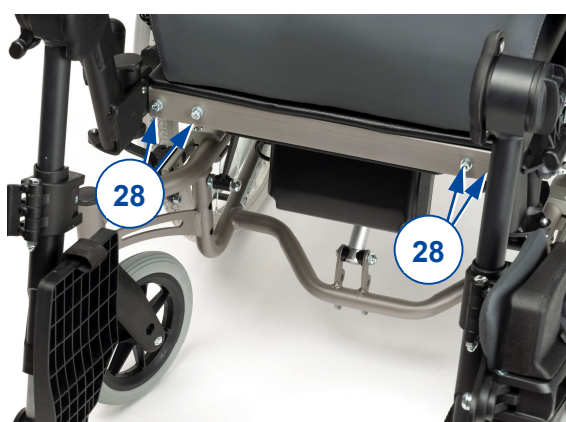
Risk of injuries

The maximum width of one footrest is limited by the position of the two socket screws. Both need to be secured.

To adjust the width between the footrests:

1. Loosen the two socket screws (28) next to the footrest, below the seat front.
2. Adjust the footrest to a comfortable width.
3. Tighten the screws (28) firmly.
4. Repeat this for the second footrest.

Make sure the footrests are positioned identically on both sides of the seat.



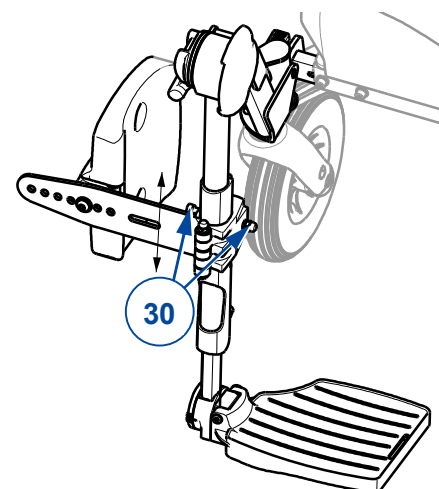
3.9 Calfrest height



The calfrests are available in different sizes:

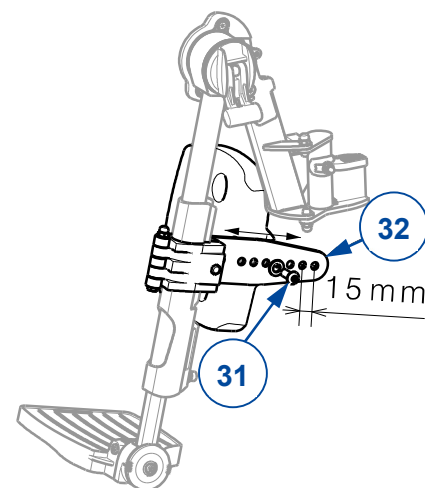
- small size for wheelchair with seat width 400 mm;
- medium size for wheelchair with seat width 450 mm or 500 mm.

1. Turn the calfrest outwards.
2. Loosen the socket screw (30) that clamps the calfrest support on the footrest.
3. Slide the calfrest up/down to a comfortable position (step less).
4. Retighten the socket screw (30) with nut.
5. Repeat this for the second calf rest. Make sure that the calf rests are positioned identically.



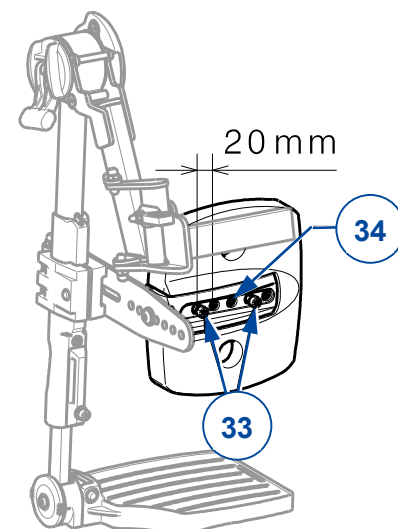
3.10 Calfrest depth

1. Loosen the socket screw (31) on the calfrest support (32).
2. Adjust the depth of the calfrest to a comfortable position (7 positions available).
3. Retighten the socket screw (31).
4. Repeat for the second calfrest. Make sure that the calfrests are positioned identically.



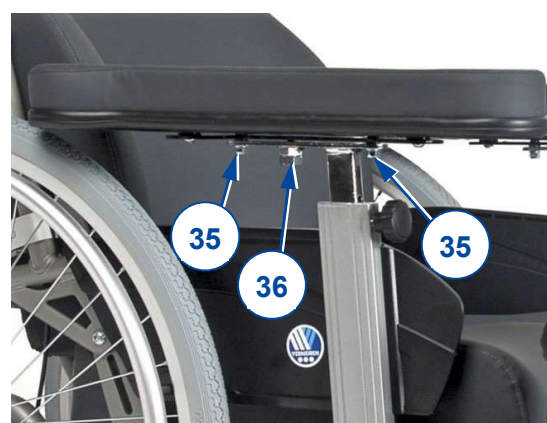
3.11 Width between calfrests

1. Loosen the two socket screws (33) on the back of the calf rest.
2. Adjust the width to a comfortable position (2 positions available). Do not use the hole (34) in the middle!
3. Retighten the two socket screws (33).
4. Repeat for the second calfrest. Make sure that the calf rests are positioned symmetrically.



3.12 Armrest depth

1. Loosen both nuts (35) of the fixing bolts beneath the arm cushion.
2. Remove nut and spring plunger (36).
3. Push the arm cushion into the desired position.
4. Retighten the fixing bolts (35).
5. Mount spring plunger (36) and nut (x2).
6. Verify the working of the spring plunger by moving the arm cushion forward and backward.
7. Repeat for the second armrest. Make sure both armrests are positioned identically.



3.13 Width between armrests

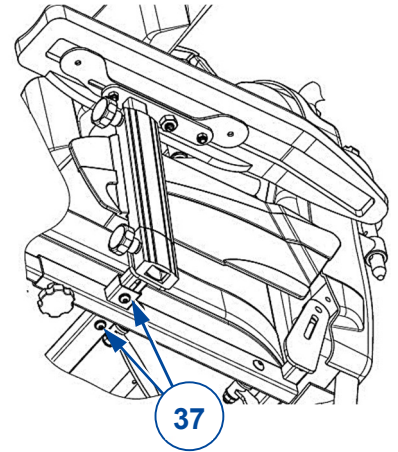

CAUTION

Risk of injuries

The maximum width of one armrest is limited by the position of two sockets screws. Both need to be secured.

Adjust the width of the armrests:

1. Loosen the two socket screws (37) next to the armrest, below the seat frame.
2. Adjust the armrest to a comfortable width (max. 25 mm outwards).
3. Tighten the screws (37) firmly by hand.
4. Repeat for the second armrest. Make sure that the armrests are positioned identically.



3.14 Changing battery (only for Inovys II-E)



CAUTION

Risk of injuries and damage

- If replacement of the batteries is necessary, the complete battery pack needs to be exchanged (IP66). Contact Vermeiren for more information.
- Never try to open the battery pack.

Read and apply the instructions of the battery pack and charger to remove, install and charge the battery. These instructions are part of the delivery.

The identification of the battery and its serial number can be found on the bottom of the battery.



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website: www.vermeiren.com

Instructions for specialist dealer

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

Version: C, 2020-11

Basic UDI: 5415174 122103Inovys II- U2

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