

USER MANUAL

US

PS Junior

Seat system for electric wheelchair



PS Junior

Seat system for electric wheelchair

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Important Information about this Owner's Manual

We congratulate you on your choice of a product from Permobil. Our goal is for you to continue to feel satisfied with your choice of both vendor and product.

Before you begin using your seat and wheelchair, it is important that you read and understand the content of these operating instructions and in particular the Safety Instructions.

These operating instructions are primarily intended to acquaint you with the functions and characteristics of the seat and how you can use them in the best manner possible. They also contain important safety and maintenance information, as well as describing possible problems that can arise during use.

Always keep these operating instructions handy in connection with your wheelchair, since the need for important information can arise concerning its use, safety and maintenance.

It is also possible to obtain information concerning our products from our home page on the Internet. You can find us at www.permobil.com.

All information, pictures, illustrations and specifications are based upon the product information that was available at the time that these operating instructions were printed. Pictures and illustrations that are found in these operating instructions are representative examples and are not intended to be exact depictions of the various parts of the seat.

We reserve the right to make changes to the product without prior notice.

Ordering of Documentation

If you are in need of another copy of the Owner's Manual, it can be ordered from Permobil, ask for order no. 205228-US-0.

TECHNICAL SUPPORT

In the event of technical problems, you should contact your equipment provider or Permobil Inc USA at 1-800-736-0925.

Always state the wheelchair chassis serial number when contacting Permobil to ensure that the correct information is provided.

SPARE PART & ACCESSORIES

Spare parts and accessories must be ordered through your dealer.

SCRAPPING THE SEAT

Contact Permobil Inc. for information about scrapping agreements in force.

WARRANTY

A warranty registration card is attached to each new wheelchair. The Permobil Inc. Product Warranty Information sets forth the conditions of the warranty.

Contact your dealer or Permobil Inc USA for information about the warranty period for this wheelchair and seat.

Safety Instructions - General

The seat is heavy and contains many moving parts. Special care must therefore be taken when it is used. Please read and follow all instructions and warnings in this manual before operating your seat together with your Permobil powered wheelchair. Incorrect use may both injure the user and damage the seat and wheelchair. In order to reduce these risks, you should read the Owner's Manual carefully, in particular the safety instructions and their warning texts.

Throughout this manual the following symbol will be used to note items that have significant importance to safety concerns:



NOTE

Please use caution where this symbol appears.



WARNING

Please use extreme caution where this warning symbol appears. Failure to observe warnings can lead to personal injury and property damage, including damage to the wheelchair.

Permobil is not responsible for personal injuries or property damage resulting from any person's failure to follow the warnings and instructions in this manual. Permobil is not responsible for injuries or damage resulting from failure to exercise good judgment.

The final selection and purchasing decision about the type of electric wheelchair and seating system to be used is the responsibility of the wheelchair user and his or her healthcare professional. Permobil Inc. is not responsible for inappropriate selections of wheelchair models and seating system or features or improper fitting of the wheelchair and seat.

Safety Instructions - General

Your wheelchair and seat was configured specifically for your needs as prescribed by your healthcare provider. Consult your healthcare provider before changing the seat position or making any other adjustment. Some adjustments may reduce your wheelchair's performance or safety or may not be appropriate for your needs.

It is also of the utmost importance that you devote sufficient time to become acquainted with the different buttons, the function and steering controls, the different adjustment possibilities of the seat, etc. of your wheelchair and its accessories before you begin using it.

Do not undertake your own first test drive without making sure that you have assistance in the immediate vicinity if you should need help.

In order to make sure that nothing happened to the wheelchair while it was being shipped to you, you should check the following items before beginning to use it:

- that all products ordered are included in the delivery, including operating instructions and possible other documentation. If you suspect that something is missing, then contact your supplier or Permobil for more information as soon as possible.
- that no transport-related or other damages have occurred to the wheelchair, seat and its accessories. If you discover that something has been damaged or in some other manner appears to be incorrect, then contact your supplier or Permobil for more information as soon as possible before you continue the checks.

Safety Instructions



WARNING

Damage to the seat

It is most important that Permobil should be notified as soon as possible if the seat or its accessories have been damaged during transport, or damaged in any other way while running. There is a risk that the seat and its accessories can no longer be used safely.

Driving with Seat Lift/Seat Tilt

Make sure that no people are in the way of the seat when its functions are activated.

Be careful in making sure that nothing gets stuck between the chassis and the seat when the seat lift/seat tilt is operated. Operating the seat lift, seat tilt/ backrest recline changes the center of gravity and increases the risk of tipping over. Always drive in low speed and only use those seat functions on level ground, and not on hills, ramps, slopes or other inclines. Using those seat functions while driving on inclines can lead to personal injury and property damage, including damage to the wheelchair.

Center of Balance

The possibility of this wheelchair tipping and the point where this wheelchair will tip forward, back or to the side depends on its center of balance. Please note that the following factors can affect the wheelchair's center of balance:

- Elevation of the seat
- Height and angle of the seat
- Body position or weight distribution
- Driving on an incline such as a ramp or a hill
- Use of a backpack or other accessories, depending on the amount of weight added.

If your wheelchair begins to move in an unexpected manner, immediately release the joystick to stop the wheelchair. Except in an emergency, do NOT use the on/off button to stop your wheelchair. This will cause the wheelchair to stop abruptly and may cause personal injury.

Safety Instructions



WARNING

Positioning Belts

Always wear your positioning belt while in your wheelchair. If signs of damage or wear appear, replace the positioning belt immediately through your Permobil dealer.

Transfer into and out of the chair

Be sure that the power is turned OFF before entering or leaving the wheelchair and before lifting the control side armrest.

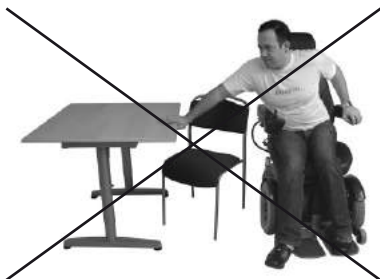
When transferring into or out of the wheelchair, every precaution should be taken to reduce the distance between the wheelchair and the place to which the user is transferring. Overextending this distance can cause user to overexert, lose balance, or fall.

Permobil recommends that users transfer in the presence of or with the assistance of an attendant.

Use caution when bending or reaching.

Never use the joystick as a handhold or point of support.

Do not use foot plates or armrests as supports when transferring into or out of the wheelchair. The footplates and armrests are not designed to be weight-bearing structures. Excessive force may cause them to give way, resulting in personal injury or property damage, including damage to the wheelchair.



Safety Instructions



WARNING

Passengers

The wheelchair is not intended to transport passengers, regardless of the age of the passenger. The Maximum User Weight stated in this manual includes the user and any personal effects. The Maximum limit should not be exceeded. The wheelchair's maneuverability and stability can be degraded as a result.

Environmental Conditions

Protect your seat and wheelchair from exposure to any type of moisture, including rain, snow, or wash. Exposure to moisture may cause the chair to short-circuit and/or catch fire resulting in personal injury or property damage. Do not operate your wheelchair if it has been exposed to moisture until it has dried completely.

If any of the shrouds or the joystick boot has cracks or tears, they must be replaced immediately. Failure to do so can allow moisture to enter the electronics and cause personal injury or property damage, including fire.

NOTE: *Extreme care should be exercised when using oxygen in close proximity to electric circuits and other combustible materials. Contact your oxygen supplier for instruction in use of oxygen.*

Safety Instructions



WARNING

Transport

The wheelchair/seat must be transported in or with transport solutions that have been approved for this purpose.

Do not lift or move the wheelchair/seat by any of its removable parts. Doing so could lead to personal injury and property damage, including damage to the seat and wheelchair.

Check that the wheelchair is properly secured and that the wheel locks are not disengaged. The wheelchair can be locked into position by running fastening straps through the brackets at the front and back. Also check that the fastening points on the transport vehicle are well-anchored.

A defectively fastened chair can cause serious injury to persons in the vehicle and serious damage to the vehicle.

Use Prohibited in Motor Vehicles

Permobil recommends that users NOT be transported in any kind of vehicle while in their wheelchair, unless the user is in an approved Permobil wheelchair configuration, has secured the wheelchair using a Permobil approved WC-19 transit kit, and is using a seat belt attached to the vehicle. The only other safe alternative is that users be transferred into factory vehicle seating for transportation and use safety restraints made available by the auto industry.

Unless using a Permobil approved WC-19 transit kit with an approved Permobil wheelchair, never sit in your wheelchair while in a moving vehicle. In an accident or sudden stop, you may be thrown from the chair and seriously injured or killed.

Permobil positioning belts are designed to position the user only and not to protect you in the event of a motor vehicle accident. The positioning belts do not replace use of a vehicle mounted restraint.

Safety Instructions



WARNING

Maintenance and Service

Carry out only the service and maintenance which are stated in the this Owner's Manual. All other service and maintenance must be performed by a qualified service technician authorized by Permobil to perform such service on Permobil products

During all work on the electrical system of the wheelchair, the connection to the negative pole of the battery must always be removed. To avoid the risk of electric shock, use extreme caution when using metal objects while working on the batteries. Short-circuiting can easily cause an explosion. Never perform service on the wheelchair without using protective gloves and goggles. Failure to do so can lead to personal injury.

Do not use parts or accessories not authorized by Permobil. Use of unapproved "aftermarket" accessories and parts may cause changes in the wheelchair, which may make the wheelchair unstable or uncontrollable. Such use may also void the warranty on the wheelchair.

Connecting any unapproved electrical or electronic devices to the wheelchair's electrical system can cause damage to the chair and caused the chair to become uncontrollable or drive erratically. Such use may also void the warranty.

The wheelchair and seat is heavy and contains many moving parts, which means that the risk of being caught between them is always present.

Safety Instructions



WARNING

Storage

The wheelchair and its accessories must always be shut off when they are not being used. Always store the wheelchair so that access for unauthorized individuals is avoided.

Never store the wheelchair in a room in which condensation can arise (mist or dampness on the surfaces) e.g. in pool areas, laundry rooms, or similar rooms.

If you are unsure as to how your wheelchair and its accessories should be properly stored, contact your supplier or Permobil for more information.

Damages/malfunctions on the wheelchair and its accessories

If you experience that the seat or wheelchair in any manner is not behaving as expected or if you suspect that something is wrong: Stop driving as soon as possible, shut off the wheelchair and contact your service contact or Permobil for more information.

It's also of greatest importance that Permobil be informed if the wheelchair and its accessories have been subjected to transport damages, damages during driving or damages due to another cause as soon as possible after the event. There exists a risk that the wheelchair and its accessories can no longer be used in a safe and secure manner.

Design and function

General

PS-Junior is an ergonomically-designed seat that is simple to adjust according to the user's needs. The seat is made up of modules, and the seat frame constitutes the core element, which can then be supplemented with a range of cushions, arm rests, leg rests and accessories such as calf rests, thigh supports, head rests, etc.

The seat can be equipped with a manual or electric seat lift/seat angle and other manual seat functions.

Overview



- 1. Back rest
- 3. Leg rest
- 5. Seat

- 2. Arm rest
- 4. Foot plates

Design and function

Electrical seat functions (may vary depending on the equipment fitted on your wheelchair)

The electrical seat functions are powered by an electrical actuator, which is steplessly controlled from the wheelchair/seat control panel.

Functions

- seat lift
- seat angle

Other settings and adjustments

The control panel, arm rest, foot plates and other accessories such as manual seat angle, calf support, thigh support, trunk support, head rest, etc. have manual adjustment and setting options.

Design and function

The electrical functions of the seat can be controlled from the wheelchair's control panel. For more details, see the chassis instruction manual. On seats equipped with the ICS control system, the electrical functions can also be controlled with the help of the ICS control panel.

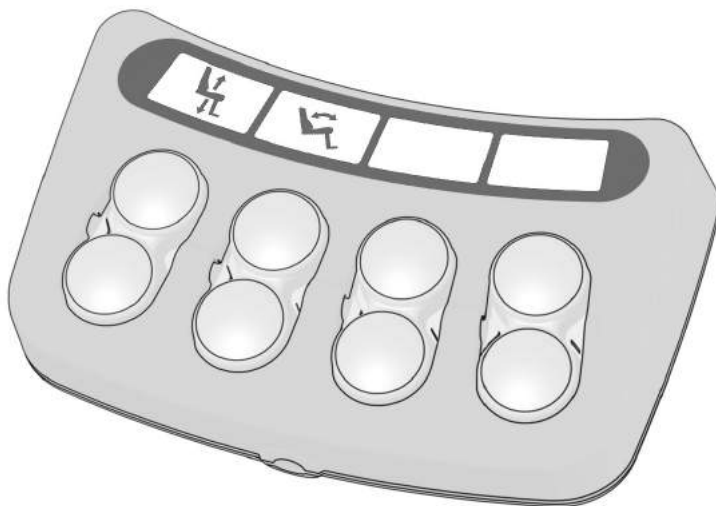
ICS Control Panel

The seat's electrical functions are controlled from the control panel. The control system may be in the form of conventional push buttons or may have levers for those users who find these easier to operate. The lever is moved forward to activate the front button and back to operate the rear button. The functions of the control panel are described here for conventional push buttons, but the functions are the same whatever the design of the control system.

Each control device can have two functions, and the symbol for the active function lights up. Functions are changed using the **shift** function, see adjoining page.



The number of available functions will vary depending on how your wheelchair and seat are equipped.



Seat control panel

Design and function

The symbols on the control panel show which seat functions are available, which are limited, and which will cause a reduction in speed or stop the wheelchair altogether.

The symbols may be unlit, permanently lit up or flashing.

Unlit symbol

The symbol for a function is unlit. This means that the function is not currently available. Use the “shift” button to switch between the left and right seat function on the control system.

Lit symbol

A steadily lit symbol provides speed-related information.

A steady *green* light means the wheelchair can travel at maximum speed.

A steady *yellow* light means that the wheelchair’s maximum speed is limited because of the current position of the seat function.

A steady *red* light means that the wheelchair cannot be driven because of the current position of the seat function.

Flashing symbol

A flashing symbol provides information relating to the actuator.

A flashing green symbol represents a special function, the memory function, for example.

A flashing yellow symbol indicates that the function is blocked in one direction due to a safety switch. The control system for the function in question only works in the “safe” direction.

A flashing red symbol indicates that a fault has been detected in the actuator concerned, and in consequence that seat function may not work. Contact service.

Design and function



Seat lift

The seat can be raised by pressing the top half of the button and lowered by pressing the bottom half.



Seat angle

The seat can be angled backwards by pressing the bottom half of the button and forwards by pressing the top half.



Memory function

The control panel can be equipped with a built-in memory with three memory locations. Each location can store all the electric settings for the seat.

Design and function

Storing memory

Before storing a seating position in memory, position the seating system in the position that is desired to be stored.

- Enter the memory mode by pressing and holding the memory button (8) for two seconds, see illustration below. While in the memory mode, the LED flashes green.
- Activate the memory storage function by holding down button 4 for two seconds. The symbol above will light up green, which means that the function has been activated.
- Press and hold the desired “store” button (5, 6 or 7) for three seconds to memorize the current seat position in a memory location, see illustration below. The LED above the memory position will light red and the control panel will emit a tone when the memory has been successfully stored.
- Return to standard seat function operating mode by pressing the memory button (8), see illustration below.

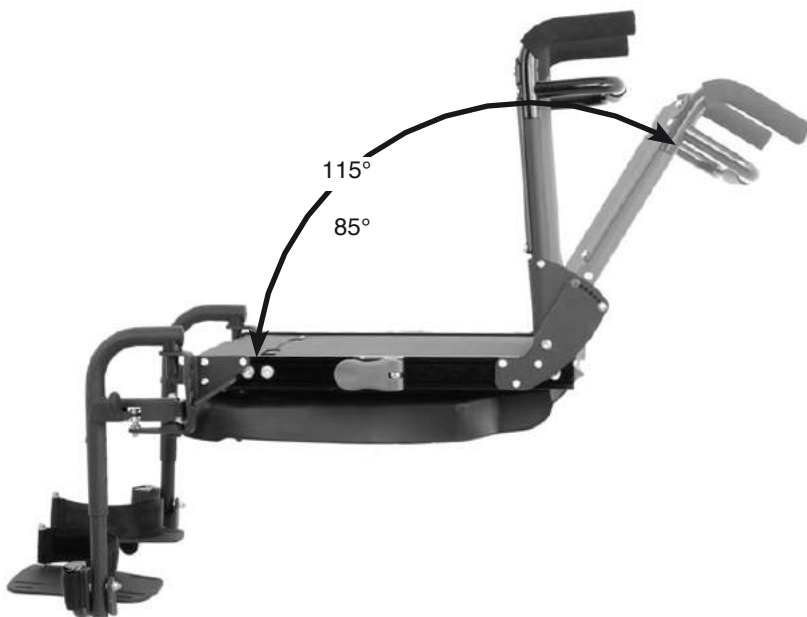
Recalling memory

- Enter the memory mode by pressing and holding the memory button (8) for two seconds, see illustration. While in the memory mode, the LED flashes green.
- Press and hold the desired “recall” button (1, 2 or 3) to move the seating system to the desired memory position, see illustration. Releasing the “Recall” button stops actuator movement, as a safety feature.
- Actuator movement stops, the LED above the memory position lights green and the control panel emits a tone, when the “stored” position is reached.
- Return to standard seat function operating mode by pressing the memory button (8), see illustration.



Memory functions.

Setting the back rest angle



Manually setting the back rest angle

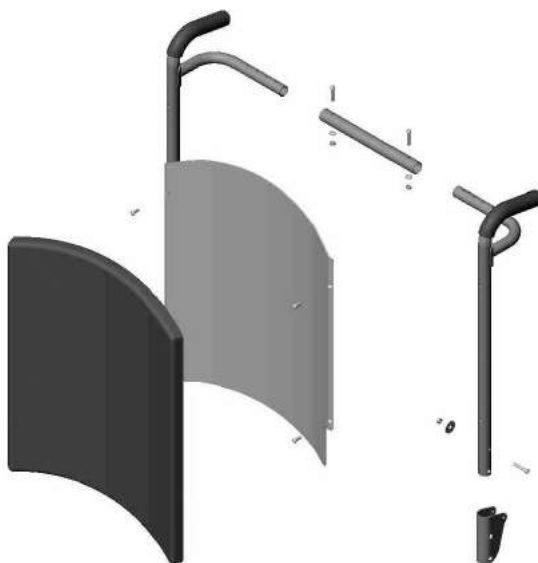
1. Remove the nuts and washers from the bolts holding the back rest in position.
2. Hold the back rest with one hand, remove the screws, angle the back rest to the required position.
3. Replace the screws to lock the back rest at the required angle.
4. Replace the washers and the nuts.

Adjusting the seat width



Width adjustment requires the back rest plate and back rest cushion to be replaced.
See the table below for the correct cushion and plate.

Seat width	Item no. body	Item no. cushion
11"	1822709	1822798
12"	1822710	1822799
13"	1822711	1822800
14"	1822712	1822801
15"	1822713	1822802
16"	1822714	1822803



Adjustment of back rest width

Adjusting the seat width

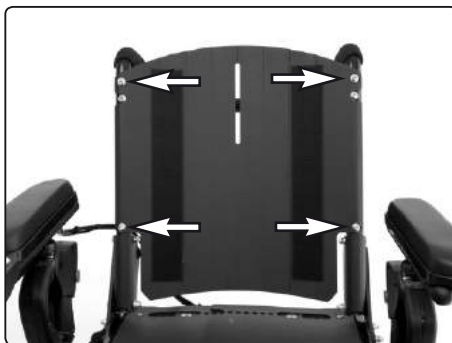
Adjusting the back rest width

1. Remove the back rest cushion, which is attached to the rear of the back rest using Velcro (see picture).



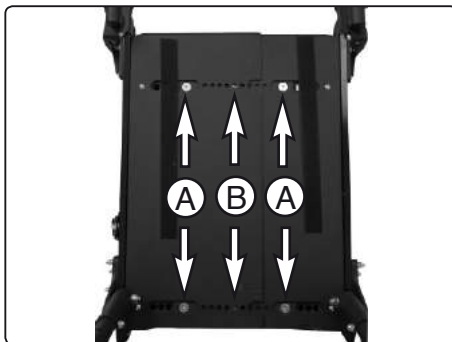
The cushion is held in place by Velcro at the rear of the back rest.

2. Remove the back rest plate, which is held in place by four screws (see picture).



The back rest plate is held in place by four screws.

3. Remove the seat cushion, which is held in place by Velcro on the underside of the cushion.
4. Remove the four screws (A) on the seat (see picture).
5. Loosen the two screws (B) on the seat (see picture).



When adjusting, remove these screws (A) and loosen these screws (B).

Adjusting the seat width

6. Remove the two screws that lock the width setting of the back rest frame (see picture).

On seats with manual seat angle adjustment, the screws on the seat angle mechanism's handle must also be removed (see picture).

7. Adjust the seat to the required width, ensuring that the setting is identical on the left and right side.
8. Replace these four screws (A) and tighten these two screws (B).
9. Fit the two screws that lock the width setting of the back rest frame (see picture). Fit the screws in the hole configuration corresponding to the width setting for the seat. Make sure that the setting is identical on both the left and right side of the handle.

On seats with manual seat angle adjustment, fit the two screws that secure the width of the seat angle mechanism's handle. Fit the screws in the hole configuration corresponding to the width setting for the seat. Make sure that the setting is identical on both the left and right side of the handle.



The width adjustment for the back rest frame is secured by two screws.



The width adjustment of the seat angle mechanism's handle is secured by two screws.

Setting the seat depth

Loosen the three nuts on the left and right side (see picture). Then push the back rest to the required seat depth. Lock in the required position by tightening the nuts again.

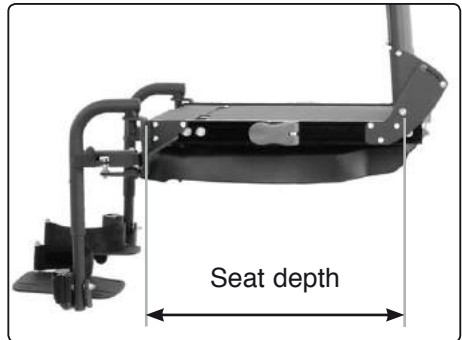


The seat depth setting is secured by three nuts on the right and left side of the seat.

⚠ NB

The seat depth setting affects the maximum permitted user weight (see table below).

Seat depth	Max. user weight
10"	66 lbs
11"	77 lbs
12"	88 lbs
13"	99 lbs
14"	121 lbs
15"	143 lbs
16"	154 lbs
17"	165 lbs
18"	165 lbs



Seat depth setting.

Adjusting the arm rest

The arm rest can easily be removed/fitted, as required.

Removal

Release the arm rest lock on the side of the seat by pulling the lock control straight out from the seat (see picture). Remove the arm rest by lifting it straight up.

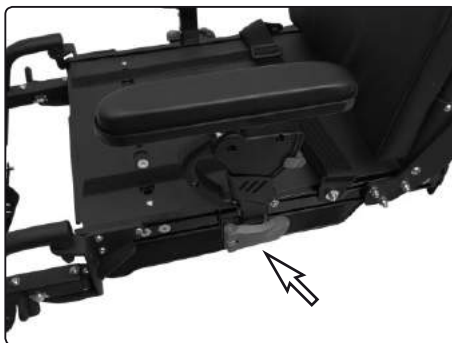
If the arm rest to be removed has the control panel attached, be careful not to damage the cabling.

Installation

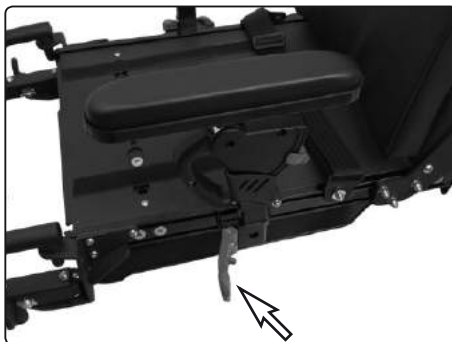
Place the arm rest in the arm rest bracket and press the lock control in (see picture).



Removing/fitting the arm rest



Arm rest lock in locked position



Arm rest lock in released position

Adjusting the arm rest

Adjustment of height

1. Take hold of the arm rest and release the lock mechanism by pushing it backwards (see picture).
2. Adjust the arm rest to the required height and release the lock mechanism to secure it in the required position.



Adjustment of arm rest height

⚠ WARNING

Risk of crushing. Do not push place your hands between the arm rest and the arm rest's height adjustment mechanism when adjusting the height of the arm rest.

Extended height setting

If necessary, the height of the arm rest can be further raised in two fixed stages of 25 mm each (total 50 mm).

1. Remove the arm rest - see page 27.
2. Remove the arm rest bracket, which is attached by two screws (see picture).
3. Refit the arm rest bracket in the required position using the two screws.

⚠ WARNING

Make sure that the arm rest bracket is properly secured with both screws.



The arm rest bracket is attached by two screws, here in the standard position.



Arm rest bracket removed.

4. Refit the arm rest - see page 27.

Adjusting the arm rest

Adjustment of angle

1. Squeeze together the lock loop and then pull it straight back from the arm rest (see image below).
2. Adjust the arm rest to the required angle.
3. Push the lock loop in again to secure the arm rest at the required angle.



Adjusting the arm rest angle.

Setting the leg support

Length

1. Remove the screw securing the length setting for the leg support (see picture).
2. Adjust the leg support to the required position and secure the setting by refitting the screw.



The screw securing the length setting for the leg support

Increased length setting

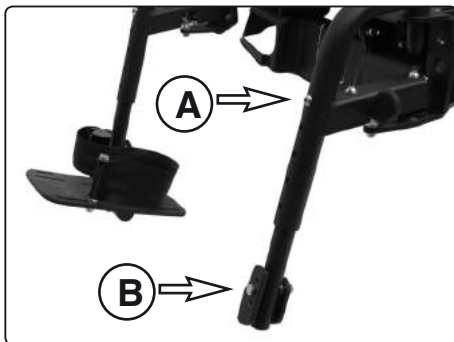
If required, the length of the leg support can be further shortened in four final stages of 25 mm each (total 100 mm).

1. Remove the foot plate, which is attached by two screws (see picture).



The foot plate is attached by two screws

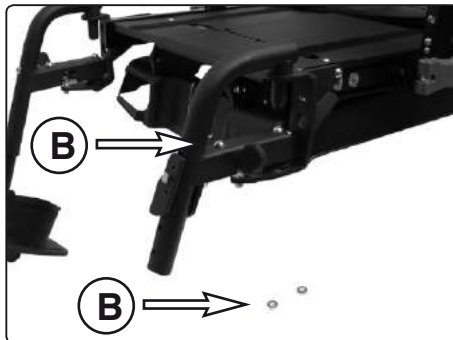
2. Remove the foot plate bracket (B), which is attached by a screw, washer and nut (see picture).
3. Remove the lower tube of the leg support, which is attached by a screw (A) (see picture).



The foot plate bracket is attached by a screw

Setting the leg support

4. Fit the foot plate bracket (A) at the required height on the upper tube of the leg support, fit the bracket without the spacers (B) that were previously attached between the bracket and the lower tube.



The foot plate bracket is attached to the upper tube of the leg support without the spacers.

5. Remove the foot plate from its bracket (see picture).

For adjusting the foot plate, see page 33.



The foot plate attached to its bracket

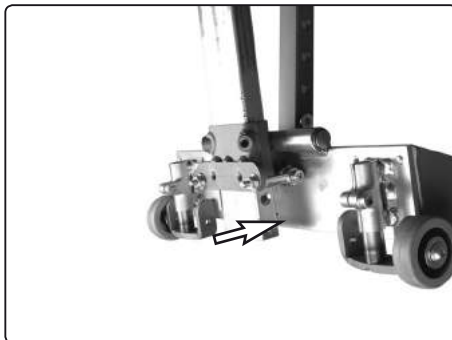
Setting the leg support

Outward rotation/removal

1. Loosen the catch by pulling it backwards, then angle the leg support outwards (see picture).
2. Lift the leg support straight up to remove it.

Attachment

1. With the leg support in the outward-rotated position, insert the guide pins into the leg support holder and swing the leg support inward until the catch locks the leg support in the front position.
2. Check that the leg support is securely attached to the seat.



Loosen the catch by push it backwards.



Leg support in the outward-rotated position

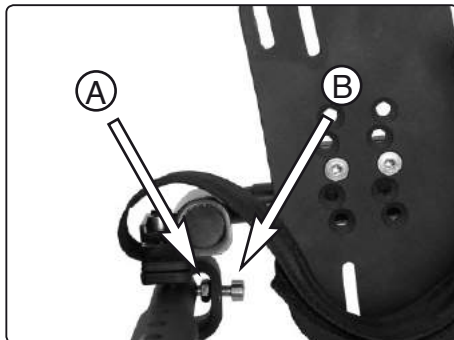


Removing/attaching the leg support

Setting the foot plate

Setting the pronation, in/out:

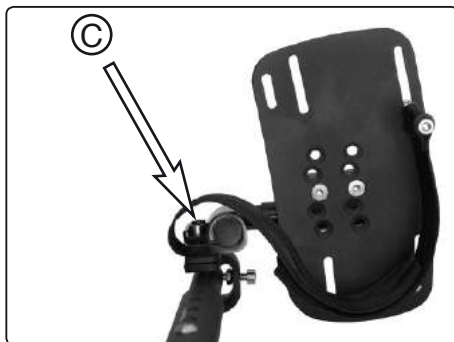
1. Loosen the jam nut (A) and turn the screw (B) in or out to set the foot plate to the required angle (see picture).
2. Tighten the jam nut (A) to secure the setting in the new position (see picture).



The foot plate is attached by two screws

Setting the horizontal angle

1. Loosen the two screws (C). Turn the foot plate to the required angle (see picture).
2. Tighten the two screws (C) to secure the setting in the new position (see picture).



Leg support in the outward-rotated position

The vertical angle of the foot plates

1. Loosen the foot plates' two fixing screws (D) (see picture).
2. Adjust the foot plate to the required vertical angle, tighten the two fixing screws (D) to secure the setting in the new position (see picture).



The position of the foot plate

The position of the foot plates

1. Remove the foot plates' two fixing screws (D) (see picture).
2. Set the foot plate to the required position and replace the two fixing screws (D).

Adjusting the seat angle (optional)

1. Firmly grip the handle at the back of the seat (see picture).
2. Press in the release handles on the left and right side and angle the seat to the required tilt.
3. Secure the setting by letting go of the release handles.



WARNING

Risk of crushing. Do not place your hands between the seat and chassis when adjusting the seat angle.



Manual seat tilt

Positioning belt (accessory)

Fitting a positioning belt

There is an accessory rail on each side of the seat frame intended for attaching a positioning belt, etc. The positioning belt should be fitted in the rail's top slot.

1. Screw the belt in place, with the snap lock on the side that best suits the user and the other half with the clasp on the opposite side.
2. After fitting, check that the belt buckle locks properly in the snap lock.



Fitted belt



Fitted belt



Snap lock, belt.



WARNING

Permobil positioning belts are designed to position the user only and not to protect you in the event of a motor vehicle accident. The positioning belts do not replace use of a vehicle mounted restraint.

Care and maintenance

Regular care and maintenance will prevent unnecessary wear and damage to your seat. The following is general advice recommended by Permobil. For severe soiling of the upholstery or damage to the surface finish, contact Permobil for information.

Upholstery, fabric/vinyl

For normal cleaning, wash the upholstery with lukewarm water and a mild non-abrasive soap. Use a soft cloth or brush. Before the surface dries, wipe off any water/soap residues with a clean, dry cloth. This procedure may be repeated to remove stubborn dirt or stains.

If necessary, the cover may be removed before cleaning. See also the washing instructions on the actual upholstery.

Metal surfaces

For normal cleaning, it is best to use a soft cloth/sponge, hot water and a mild detergent. Wipe down carefully with a cloth and water, and dry off.

Remove scuff marks from semi-matt surfaces with soft wax (follow manufacturer's instructions).

Remove scuff marks and scratches from shiny surfaces using car polish, either liquid or paste. After polishing, apply soft car wax to restore the original surface gloss.

Plastics

For normal cleaning, wash plastic surfaces with a soft cloth, mild detergent and hot water. Rinse thoroughly and dry with a soft cloth. Do not use solvents or abrasive kitchen cleaners.

Accessories

Accessories for Permobil seats are being continuously developed. Contact your nearest Permobil sales person for more information on what accessories are available for your seat.

Data

The following dimension and weight information relates to a PS junior of standard design (incl. control panel) and with the following settings, 70° Leg rest, Seat depth 17", Seat width 16" and Back rest angle 90°.

General

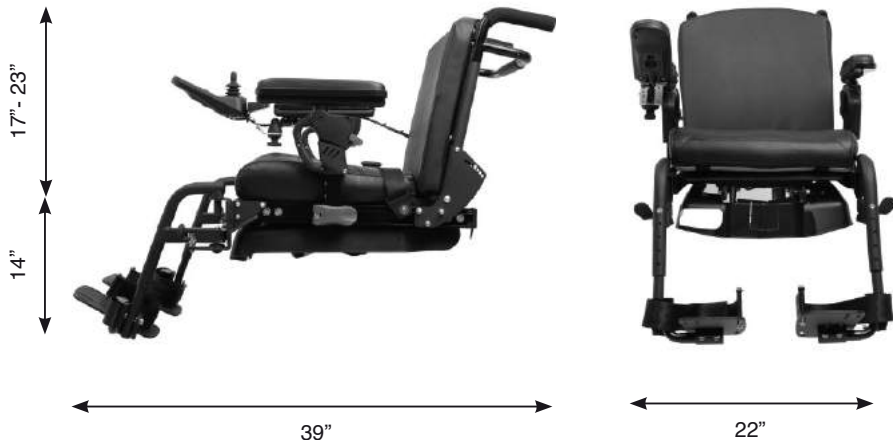
Name PS Junior

Dimension and weight information

Max. Leg Rest Length * 14"
 Overall length ** 39"
 Overall width *** 22"
 Height **** 17" - 23"
 Seat weight..... approximately 58 lbs.

Max. weight of user

Pemobil K300 165 lbs



- * Vertical measurement from rear edge of foot plate to seat pan.
- ** Horizontal measurement from front of Footplates to back of Push Handles.
- *** Horizontal measurement from outside of Armrest to outside of Control Panel.
- **** Vertical measurement from Seat Pan to upper edge on push handles.

US



PS Junior



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