

USER MANUAL  
US

# Corpus/x850

Seat system for electric wheelchair





# How to contact Permobil

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# ***Corpus/x850***

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](http://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 item No. 205244-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.

## **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 numerous moving parts and must therefore be handled with great care. Carefully read through and follow all instructions and warnings in this manual before using your seat/wheelchair. Incorrect use could both injure the user and damage the seat.

The user manual contains the following “warning labels” which are intended to draw attention to situations which could lead to personal injury or damage to the seat etc.

### CAUTION

Take care here.

### WARNING

Take extra care here.  
Risk of personal injury or damage to the wheelchair and its surroundings.

### CAUTION

**Permobil accepts no liability for personal injury or damage to property which may arise from the failure of the user or other persons to follow the recommendations, warnings and instructions given in this user manual.**



## Safety instructions - General

This seat may have been adjusted precisely to your needs on delivery, so you should always ask the advice of the person who ordered the seat on your behalf before making any changes or adjustments to the seat. Certain adjustments may impair the seat's safety/functions or its suitability for your needs.

To minimize incorrect use of your seat, it is also extremely important to take the necessary time to familiarize yourself with the seat and its accessories, the various buttons and function or steering controls, and with the various adjustment options, etc. before starting to use it.

*Do not set out alone on your first test ride. Make sure you have assistance close by if you should need help.*

To ensure that the seat has not been damaged during transport to you, please check the following before initial use:

- Check that all products ordered are included in the delivery. If you suspect that something is missing, contact your mobility aids center or Permobil as soon as possible for further information.
- Check that no transport damage or other damage has occurred to the seat and its accessories. If you discover any damage or see any other problem, contact your mobility aids center or Permobil as soon as possible for further information before you continue the check.

## Safety instructions

### WARNING

#### **Risk of pinching**

Please note that the seat is heavy and contains many moving parts, which means there will always be some risk of pinching.

Use the seat's electric seat functions with the greatest care. Above all: when you have moved up to or under a table or other fixed or moveable objects, always make sure there are no items in the immediate vicinity which could interfere with the seat's moving parts.

#### **Operation of seat elevator/seat angle/backrest angle**

Make sure that there is nothing which could get caught between the chassis and the seat when the seat elevator/seat angle or backrest angle functions are being used. Using these functions alters the center of gravity, which always means an increased risk of tipping. Always drive at low speed and only use these seat functions on a level surface and not on slopes, ramps, hills or other gradients.

#### **Center of gravity**

Note that the following factors may affect the center of gravity of the seat/wheelchair and thus the risk of tipping:

- Raising the seat elevator
- Height and angle of seat
- Position or weight distribution of the body
- Driving on sloping surfaces, for example a ramp or hill
- When wearing a backpack or using other accessories, due to the extra weight.

If your wheelchair starts to move in an unexpected way, immediately let go of the joystick to stop the wheelchair. Except in an emergency, NEVER use the on/off key to stop the wheelchair. This could lead to the wheelchair stopping suddenly and violently, resulting in personal injury.

## Safety instructions

### WARNING

#### Positioning Belt

Permobil's positioning belt is only designed to aid in the positioning of the user in the seating system and not as protection in the event of a collision/accident. Check the condition of the belts regularly in case any damage or worn areas have developed.

#### Getting in and out of the chair

Make sure the power is turned OFF before getting into or out of the wheelchair and before raising the armrest with the control panel.

When getting into or out of the wheelchair you should take all precautions to reduce the distance between the wheelchair and the point to which the user is moving. If this distance is increased, it could result in the user losing balance or falling over.

Permobil recommends that users get in and out with another person present to keep an eye on the operation or to help.

Be careful when bending down or reaching out to get something.

Never use the joystick as a handle or support.

Do not use the footplates or armrests as supports when getting into and out of the wheelchair. The footplates and armrests are not intended to support heavy loads. Unnecessarily high load could cause them to give way, which could result in personal injury or damage to property, including damage to the wheelchair.



## Safety instructions

### WARNING

#### **Passengers**

The seat is not designed for transporting passengers, whatever their age. Nor is it designed for taking heavy items other than the user's personal belongings. The maximum user weight given in this manual must not be exceeded. Ignoring this could impair the wheelchair's maneuverability and stability.

#### **Use in different climates**

Permobil's seats are designed to tolerate most weather conditions, but you should avoid exposing the seat to severe cold, persistent dampness, heavy rain/snowfall and similar situations. If the seat is exposed to any of these, do not use it again until it has completely dried out.

Remember also that certain surfaces on the seat may heat up or cool down during lengthy exposure to strong sunshine or cold etc.

If any of the seat covers or the control panel case show signs of cracking etc., they should be replaced so no moisture can penetrate and damage the electronics.

## Safety instructions

### WARNING

#### **Transport**

The seat/wheelchair must only be transported in vehicles approved for this purpose.

Carefully check that the wheelchair is properly secured and that the brake release has not been activated (the wheelchair's drive wheels must be locked). The wheelchair can be locked in position using loading straps from the transport eyes at the front and rear, marked with yellow stickers.

Anchor the wheelchair using the vehicle's anchoring system and according to the manufacturer's instructions. Always check that the fixing points on the transport vehicle are well anchored.

An inadequately secured seat/wheelchair could cause great damage and injury if it broke loose, affecting persons in the transport vehicle, the vehicle and the seat/wheelchair itself.

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 Permolock, and is using a seatbelt 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. The only wheelchair transportation system Permobil recommends is a Permolock used in combination with an approved Permobil wheelchair.

Unless using a Permolock 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 will not protect you in your vehicle if you are in an accident.

## 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

Corpus is an ergonomically shaped seat that can be easily adjusted according to the user's needs. The seat is built up of modules, with the seat frame constituting the core element, which can then be supplemented with a selection of seats, backrests, armrests and accessories such as a thigh rest, lateral support, chest rest, headrest, etc.

The seat can be fitted with a fixed or electric seat elevator and both manual and electric seat functions.

### Overview



- |                                |             |
|--------------------------------|-------------|
| 1. Headrest (optional)         | 2. Backrest |
| 3. Control panel               | 4. Armrest  |
| 5. Electric actuator, backrest |             |



## Design and function

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

The electrical seat functions are driven by an electric actuator which is steplessly controlled from the wheelchair control panel or a seat control switchbox, normally located next to the control panel.

### *Functions*

- Seat Elevator
- Seat Tilt
- Backrest Recline

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

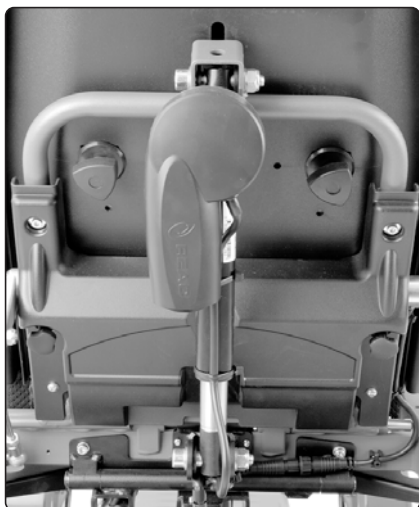
The seat can be adjusted manually by adjusting manual locking tubes with quick-acting locks in a number of fixed positions.

### *Functions*

- Backrest Recline

## Other adjustments

The control panel, armrest and other accessories such as thigh rest, trunk support, headrest, etc. have manual adjustment and setting options.



*Electric actuator for backrest recline.*



*Manual locking tube for backrest recline.*

## Design and function

### Electric Seat Elevator

An electrically controlled seat elevator permits steplessly variable raising or lowering of the seat in order to adjust the height to tables, benches etc.

Whenever the seat elevator is raised from its lowest position, the maximum speed of the wheelchair will be reduced.



*Electric seat elevator*

### Electric Seat Tilt

The electrically controlled seat angle function permits steplessly variable adjustment of the seat angle.



*Electric seat angle adjustment*



#### **WARNING**

Raising the seat elevator will increase the center of gravity and thus entails a higher tipping risk. For this reason use the seat elevator only on level ground.

Always drive at low speed and never move the seat/backrest angle so far back that the wheelchair cannot be controlled safely when moving over sloping, uneven ground or when negotiating obstructions.

## Design and function

### Electric Backrest Recline

The electrically controlled backrest permits steplessly variable adjustment of the backrest angle.



*Electric backrest*



#### WARNING

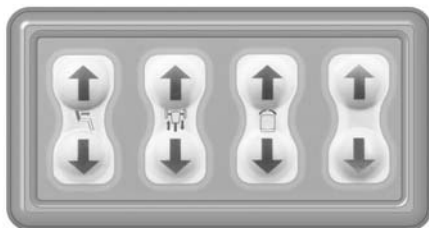
There will always be a pinching risk when the electrical functions are in action.

## Design and function

The electrical functions of the seat can be controlled from the seat's seat control switchbox or via the wheelchair's joystick. For more details, see the chassis user manual.

### Seat Control Switchbox

The wheelchair's seat control switchbox is fixed to the right or left armrest behind the control panel. The seat control switchbox is used to control the various options such as the wheelchair's extension, seat rotation and backrest and seat angle.



*Seat Control Switchbox*



#### **CAUTION**

The number of available functions will vary depending on the equipment fitted on your wheelchair and seat.

## Design and function



### ***Seat Elevator***

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



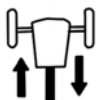
### ***Backrest Recline Angle***

The backrest can be moved backwards by pressing the lower part of the button and brought back by pressing the upper part.



### ***Seat Tilt***

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



### ***Extension***

The distance between the footplate and the seat on the wheelchair is adjustable. Press the upper surface of the icon to move the footplate out and on the lower surface to retract it. This makes it easy to set the leg length for the user and you are able to stretch your legs while driving.



### ***Seat rotation***

The seat rotation function allows you to rotate the seat. This makes it easier to get into and out of the seat. Press on the upper surface of the icon to rotate the seat clockwise. Press on the lower surface of the icon to rotate the seat anticlockwise. The seat rotates until the position is straight forward or the right or left end position.



#### **WARNING**

Make sure that there is nothing stuck between the chassis and the footplate when the length of the wheelchair is reduced. There is a risk of personal injury.

Seat rotation must not be used when the wheelchair is on a sloping surface. There is a risk of personal injury.

## Design and function

### Manual seat functions - Backrest angle

The angle of the backrest is adjusted via an adjustable locking tube with a quick-acting lock in a number of fixed positions. From an upright position, the backrest can be inclined max. 45° backwards.

1. Pull out the quick release lock's spring-action handle so that the locking tube moves freely and the backrest can be angled.
2. Adjust the backrest angle to the required angle and then lock the locking tube securely by releasing the handle so that it engages in the intended hole in the locking tube.
3. After adjustment, check that the backrest is locked in position.



#### WARNING

Do not subject the backrest to load when adjusting the backrest angle. Doing so creates a risk of crushing, which may cause personal injury or damage to the wheelchair.

## Settings

### Armrest

The height and angle of both armrests can be adjusted for optimum comfort.

1. Undo the two lock nuts on the inside of the armrest bracket.
2. Adjust to the required height/angle and tighten the nuts.
3. Following adjustment check that the position of the armrest is locked.



*Height adjustment.*



*Adjustment angle.*



#### WARNING

Do not subject the armrests to load when adjusting them. Doing so creates a risk of crushing, which may cause personal injury or damage to the wheelchair

## Settings

### Lumbar Support

The lumbar support consists of three back cushions with Velcro fastening which can be separated, depending on how much back support is required.

1. Remove the backrest cushion.
2. Adjust the back curve support as required.
3. Replace the backrest cushion.



*Lumbar Support.*



*Adjusting the height.*

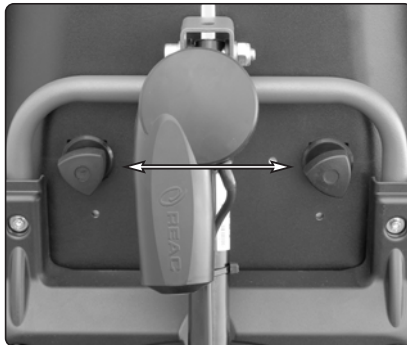


## Settings

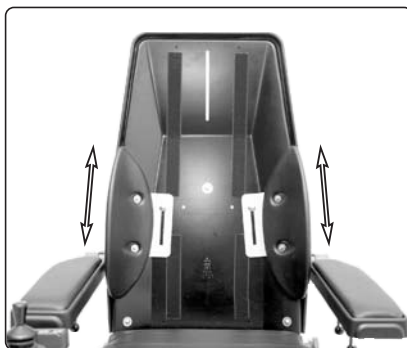
### Lateral Support

#### Adjustment of height

1. Remove the backrest cushion.
2. Undo the knobs holding the lateral support to the rear of the backrest.
3. Adjust the height of the lateral support to the required position.
4. Tighten the knobs.
5. Replace the backrest cushion.



*Locking knob for lateral support.*



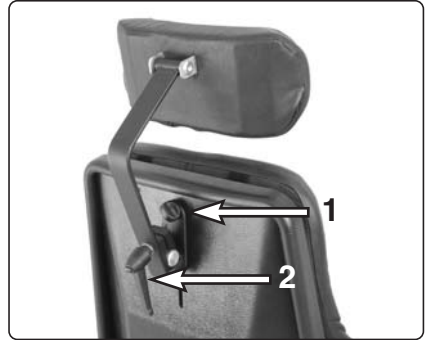
*Adjusting the height.*

## Settings

### Headrest (accessory)

#### Adjustment of height

1. Undo the knob (1) on the rear of the backrest, see illustration.
2. Adjust the height of the headrest as required.
3. Tighten the knob (1).



*Headrest adjustment.*

#### Adjustment forwards/backwards

1. Undo the knob (2) on the rear of the backrest, see illustration.
2. Adjust the headrest backwards/forwards as required.
3. Tighten the knob (2).



#### **WARNING**

Do not subject the headrest to load when adjusting it.

## Settings

### Headrest (accessory)

This headrest has expanded adjustment options to give the user the best comfort. The headrest can also be removed/remounted while preserving the same setting.

### Removal

1. Undo the knob (3) on the rear of the backrest, see illustration.
2. Remove the headrest by lifting it straight up.

### Fitting

Fit in the reverse order.

### Adjustment of height/depth

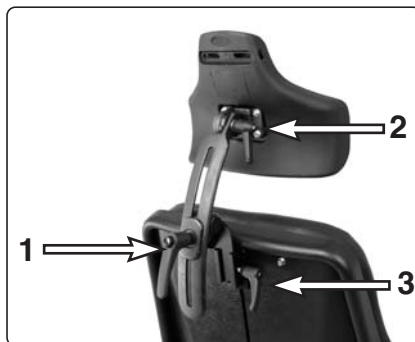
1. Undo the knob (1) on the rear of the backrest, see illustration.
2. Adjust the height/depth of the headrest as required.
3. Tighten the knob (1).

### Adjustment of angle

1. Undo the knob (2) on the rear of the headrest, see illustration.
2. Adjust the angle of the headrest as required.
3. Tighten the knob (2).



*Headrest with extensive adjustment options.*



*Headrest adjustment.*



### WARNING

Do not subject the headrest to load when adjusting it. Doing so creates a risk of crushing, which may cause personal injury or damage to the wheelchair

## Settings

### Control panel - rotating panel holder

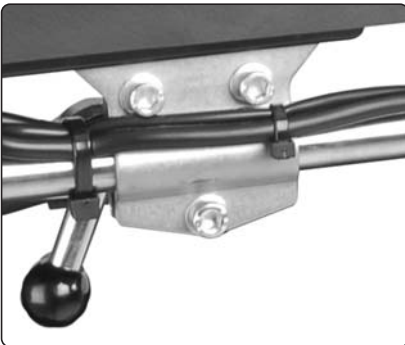
The location of the control panel can be adjusted lengthwise to find the optimum driving position. It is also possible to adjust the angle of the panel sideways, which facilitates getting in and out.

#### *Length adjustment*

1. Undo the screw on the panel holder and adjust the panel to the required position.
2. Tighten the screw.

#### *Angle adjustment with friction joint*

Using the knob on the friction joint, it is possible to adjust how easily or stiffly the panel can be angled laterally.



*Length adjustment screw*



*Friction joint knob*



## 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 buckle on the opposite side.
2. After fitting, check that the belt buckle locks properly in the snap lock.

#### WARNING

Permobil positioning belts are designed to position the user only and will not protect you in an accident. You may even receive further injury from the belts. Also check regularly that the belt is in good condition, and that it is not worn or damaged.



*Fitted belt*



*Fitted belt*



*Snap lock, belt.*

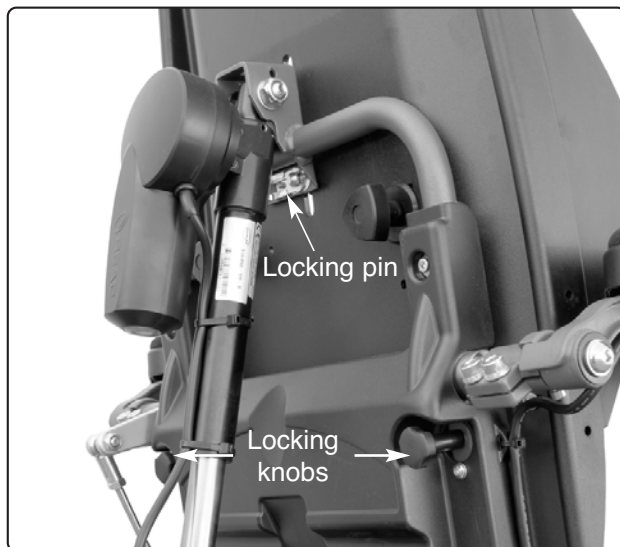
## Transport

To make transportation of the wheelchair/seat easier, the backrest can be removed in a few simple moves.

### Corpus seat, standard

1. Remove the backrest cushion.
2. Undo the locking pin and locking knobs on the rear of the backrest.
3. Press the top part of the backrest slightly forward so that it disengages from the locking pin and remove the backrest by pulling it upwards.

If necessary, the headrest can also be removed - see pages 26-27.

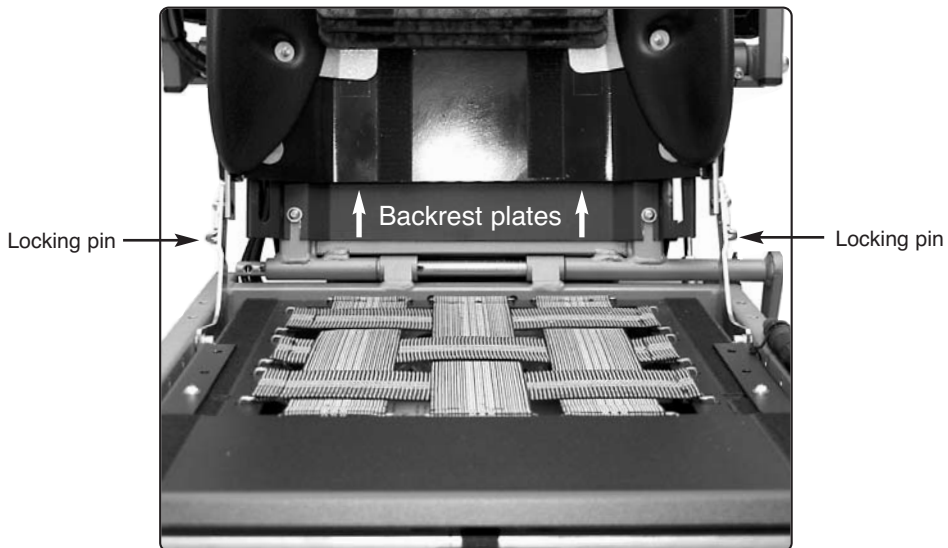


*Loosen locking pin and knobs.*

## Transport

### Corpus seat with sliding backrest

1. Remove the backrest cushion.
2. Undo the upper locking pin and locking knobs on the rear of the backrest.
3. Push the upper part of the backrest slightly forward so that it disengages from the upper locking pin.
4. Undo the backrest from the two lower locking pins.
5. Push the backrest plates straight up and then lift off the backrest.



*Lower locking pins and backrest plates.*

## 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.

### Checking the positioning belts

Check the condition of the positioning belts regularly in case any damage or worn places have developed.



#### WARNING

Never hose the wheelchair down as the electronics may be damaged. The wheelchair must always be turned off when being cleaned.



## **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.

### Technical specifications

The following dimension and weight information relates to a Corpus seat of standard design fitted on a Permobil X850.

#### General

Name ..... Corpus X850

#### Dimension and weight information

Length..... 50" - 57"

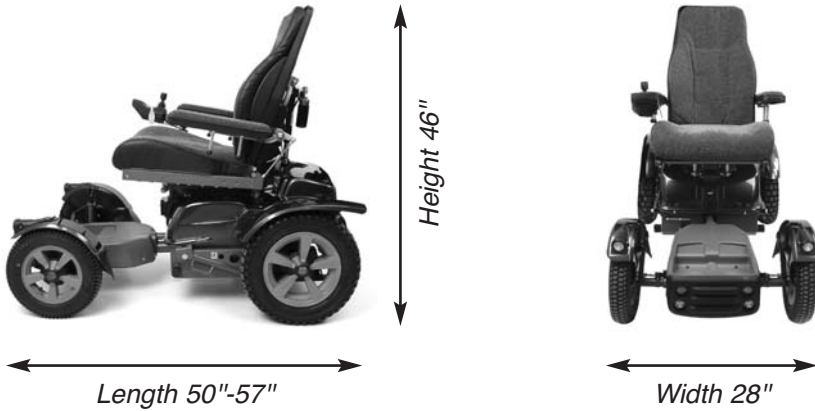
Width ..... 28"

Height ..... 46"

Weight incl. batteries ..... approximately 400 lbs

#### Max. weight of user

Permobil X850 ..... 300 lbs



Minimum transport dimensions =  
Length 50", Width 28", Height 33"



US



Product code: 205244-US-0