

Invacare® SB® 755



en Bed
User Manual



This manual MUST be given to the user of the product.
BEFORE using this product, this manual MUST be read and saved
for future reference.



Yes, you can.

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1 General

1.1 Introduction

This user manual contains important information about the handling of the product. To ensure safety when using the product, read the user manual carefully and follow the safety instructions.

Note that there may be sections in this document, which are not relevant to your product, since this document applies to all available models (on the date of printing). If not otherwise stated, each section in this document refers to all models of the product.

The models and configurations available in your country can be found in the country-specific price lists.

Invacare reserves the right to alter product specifications without further notice.

Before reading this document, make sure you have the latest version. You find the latest version as a PDF on the Invacare website.

If you find that the font size in the printed document is difficult to read, you can download the PDF version from the website. The PDF can then be scaled on screen to a font size that is more comfortable for you.

For more information about the product, for example product safety notices and product recalls, contact your Invacare representative. See addresses at the end of this document.

1.1.1 Symbols in this document

Symbols and signal words are used in this document and apply to hazards or unsafe practices which could result in personal injury or property damage. See the information below for definitions of the signal words.



WARNING

Indicates a hazardous situation that could result in serious injury or death if it is not avoided.



CAUTION

Indicates a hazardous situation that could result in minor or slight injury if it is not avoided.



IMPORTANT

Indicates a hazardous situation that could result in damage to property if it is not avoided.



Tips and Recommendations

Gives useful tips, recommendations and information for efficient, trouble-free use.

1.2 Intended Use

The bed has been developed for domestic care and long term care:

- *Application environment 3*; Long-term care in a medical area where medical supervision is required and monitoring is provided if necessary and medical electrical equipment used in medical procedures may be provided to help maintain or improve the condition of the patient.
- *Application environment 4*; Care provided in a domestic area where medical electrical equipment is used to alleviate or compensate for an injury, disability or disease.

- The bed is intended for indoor use only.
- The bed is intended for adult users, having a physical size equal to or more than 146 cm, a weight equal to or more than 40 kg and a body mass index (BMI) equal to or more than 17.
- The bed is not intended for transportation of users. It is mobile within a room with a user in it. Castors are lockable.
- The bed is not intended for psychiatric patients.
- Maximum user weight and safe working load are listed on the product label and in the technical data section in this manual.



WARNING!

Any other or incorrect use could lead to hazardous situations.

Invacare accepts no liability for any use, change or assembly of the product, other than stated in this user manual.

1.2.1 Intended Operator

A healthcare professional or private person who has received proper training is the intended operator of this product.

The hand control can also be operated by the occupant of the bed.

1.3 Service life

The expected service life of this product is eight years when used daily and in accordance with the safety instructions, maintenance intervals and correct use, stated in this manual. The effective service life can vary according to frequency and intensity of use.

1.4 Compliance

Quality is fundamental to the company's operation, working within the disciplines of ISO 13485.

This product features the CE mark, in compliance with the Medical Device Directive 93/42/EEC Class 1.

We are continuously working towards ensuring that the company's impact on the environment, locally and globally, is reduced to a minimum.

We only use REACH compliant materials and components.

We comply with the current environmental legislations WEEE and RoHS.

1.4.1 Product-specific standards

The product has been tested and conforms to IEC 60601-2-52 (Particular requirements for the basic safety and essential performance of medical beds) and all related standards.

For further information about local standards and regulations, contact your local Invacare representative. See addresses at the end of this document.

1.5 Warranty information

We provide a manufacturer's warranty for the product in accordance with our General Terms and Conditions of Business in the respective countries.

Warranty claims can only be made through the provider from whom the product was obtained.

1.6 Limitation of liability

Invacare accepts no liability for damage arising from:

- Non-compliance with the user manual
- Incorrect use
- Natural wear and tear
- Incorrect assembly or set-up by the purchaser or a third party
- Technical modifications
- Unauthorised modifications and/or use of unsuitable spare parts

2 Safety

2.1 General safety information


WARNING!
Risk of entrapment / suffocation

There's a risk of entrapment / suffocation between mattress support, side rail and bed end or between moving parts and objects placed nearby the bed.

- The bed must not be used by persons under 12 years of age, or by persons with a body size equivalent to an average 12 years old or smaller.
- The bed, in combination with side rails must not be used by persons having a physical size less than 146 cm, a weight less than 40 kg or a body mass index (BMI) less than 17.
- Due to mattress compression, an increased risk may occur over time. Periodically monitor gaps between the bed, mattress and/or side rail. Replace mattress if the gaps may lead to entrapment.


WARNING!
Risk of slipping through the openings

The bed fulfils all requirements regarding maximum distances. However, it is possible that persons with small body dimensions slip through the openings between the side rails or through the opening between the side rail and the mattress support.

- Pay special attention, if the bed is used for the care of persons with small body dimensions.


WARNING!
Risk of injury or damage to property

Inappropriate handling of cables can cause electrical shock and product failure.

- Do not kink, shear or otherwise damage the main power cord.
- Do not roll the castors over the main power cord.
- Do not bring main power cord into moving parts.
- Disconnect the plug from the mains before moving the bed.
- Make sure that no cables (mains or from other equipment) are jammed or damaged, when the bed is used.
- Keep bed components and accessories at least 30 cm away from a heated surface and not in direct sunlight.


WARNING!
Risk of tripping, entanglement or strangulation

Improper routing of cables may cause tripping, entanglement or strangulation hazard.

- Ensure all cables are routed and secured properly.
- Ensure there are no loops of excess cable extending away from the product.


CAUTION!

There is a risk of entrapment of fingers in the bed moving parts.

- Pay attention to your fingers.


CAUTION!

– For a person entering or exiting the bed, always lower the bed to an appropriate height. The backrest can be used as a support. Make sure, the thigh- and leg section is horizontal to avoid overloading the mattress support.

- Always lower the bed to the lowest position before leaving a person in the bed unattended.
- Make sure that there is nothing under, over, or near the bed that can obstruct the height adjustment, like for example furniture, lifts or window frames.


CAUTION!

Non-original or wrong accessories may affect the function and safety of the product.

- Only use original accessories for the product in use.
- Due to regional differences, refer to your local Invacare catalog or website for available accessories or contact your local Invacare representative. See addresses at the end of this document.

2.2 Mattresses


WARNING!
Safety aspects regarding combination of side rails and mattresses:

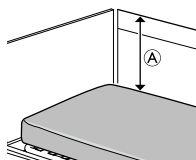
To get the highest possible safety level, when using side rails on the bed, the minimum and maximum measures for mattresses, must be respected.

- For correct mattress measures see mattress table in chapter 7 *Technical Data*, page 17.


WARNING!
Risk of entrapment and/or suffocation

– The user could get trapped and/or suffocate, if the horizontal space, between the mattress side and the inside of the side rail, is too big. Follow the minimum width (and length) of mattresses in combination with a side rail, as stated in the mattress table in chapter 7 *Technical Data*, page 17.

- Be aware that using very thick or soft mattresses (low density), or a combination of these, increases the risk.



WARNING!
Risk of falling

The user can fall over the edge and get seriously injured, if the vertical distance \textcircled{A} between the top of the mattress and the edge of the side rail/bed end, is too short. See image above.

- Always keep a minimum distance \textcircled{A} of 22 cm.
- Follow the maximum mattress height in combination with the side rail as stated in the mattress table in chapter 7 *Technical Data*, page 17.

2.3 Safety information on electromagnetic interference



WARNING!
Risk of malfunction due to electromagnetic interference

Electromagnetic interference between this product and other electrical equipment can occur and disturb the electrical adjustment functions of this product. To prevent, reduce or eliminate such electromagnetic interference:

- Only use original cables, accessories and spare parts, to not increase electromagnetic emission or reduce electromagnetic immunity of this product.
- Do not use portable radio frequency (RF) communications equipment closer than 30 cm to any part of this product (including cables).
- Do not use this product near active high-frequency surgical equipment and the RF shielded room of a system for magnetic resonance imaging, where the intensity of electromagnetic disturbances is high.
- If disturbances occur, increase the distance between this product and the other equipment or switch it off.
- Refer to the detailed information and follow the guidance in chapter 8 *Electromagnetic compatibility (EMC)*, page 20.



WARNING!

Risk of malfunction due to electromagnetic interference

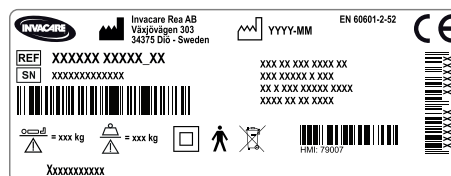
Do not use this bed adjacent to or stacked with other electrical equipment, than specified in the following, as it could result in improper operation. If such use is necessary, the bed and the other equipment must be closely observed to verify that they are operating normally.

This bed can be used together with Invacare approved accessories and medical electrical equipment connected to the heart (intracardially) or blood vessels (intravascularly) provided that following points are respected:

- Medical electrical equipment should not be fixed on the bed's metallic accessories such as side rails, lifting pole, drip rod, bed ends, etc.
- The medical electrical equipment power supply cord should be kept clear of the accessories or any other moving parts of the bed.

2.4 Labels and symbols on the product

2.4.1 Product label



The product label is placed on the frame of the bed and contains the main product information, including technical data.

Symbols









	Serial Number
	Reference Number
	Manufacturer Address
	Manufacturing Date
	Max. User Weight
	Max. Safe Working Load
	CLASS II equipment
	Type B Applied Part
	WEEE conform
	This product complies with Directive 93/42/EEC concerning medical devices. The launch date of this product is stated in the CE declaration of conformity.



Abbreviations for technical data:

- I_{in} = Incoming Current • AC = Alternating Current
- U_{in} = Incoming Voltage • Max = maximum
- Int. = Intermittence • min = minutes

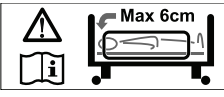
For more information about technical data, refer to 7 *Technical Data*, page 17.

2.4.2 Other Symbols

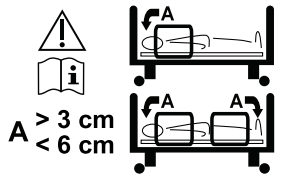

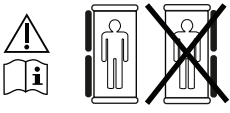
	Refer to User Manual
	Definition of min. weight, min. height and min. body mass index of an adult user Refer to user documentation for the correct mattress measures.
	Indicates, that the bed can be used with automatic washing systems. (Present on washable version only)
	Marks out the location of connection for means of potential equalization. (Not present on all versions of this product)
	Total weight of the product with the maximum safe working load applied
	Temperature limit
	Humidity limitation
	Atmospheric pressure limitation

	Transport and storage conditions
	Operation conditions

Label on 3/4 length side rails

	Indicates the maximum space between side rail and the head end of the bed.
--	--

Labels on Torill side rails

	Indicates the allowed mounting positions and spaces between the side rails and the bed ends. Top: if only one side rail is mounted on the side of the bed. Bottom: if two side rails are mounted on the same side of the bed.
	Indicates the left version of the Torill long side rail, only to be mounted on the left side of the bed. <i>Torill long version only</i>
	Indicates the right version of the Torill long side rail, only to be mounted on the right side of the bed. <i>Torill long version only</i>

3 Operating the bed

3.1 General Safety Information


WARNING!
Risk of personal injury and damage to property.

- The bed must be placed so that the height adjustment is not obstructed by, for example, lifts or furniture.
- Take care that no body parts are being squeezed between fixed parts (such as side rails, bed ends etc) and moving parts.
- The hand control must not be used by children.


WARNING!
Risk of injury

If the bed is used by confused or restless users or users with spasms:

- either, when the bed is equipped with a lockable hand control, lock the hand control functions,
- or make sure that the hand control is out of reach for the user.

3.2 Setup


IMPORTANT!

- Unpacking and setup of the bed must be performed by a specialized dealer or technician as described in the service manual.
- Accessories, delivered with the bed, must be assembled by a specialized dealer or technician as described in the service manual or in the documentation, delivered with the accessory.

Scope of delivery

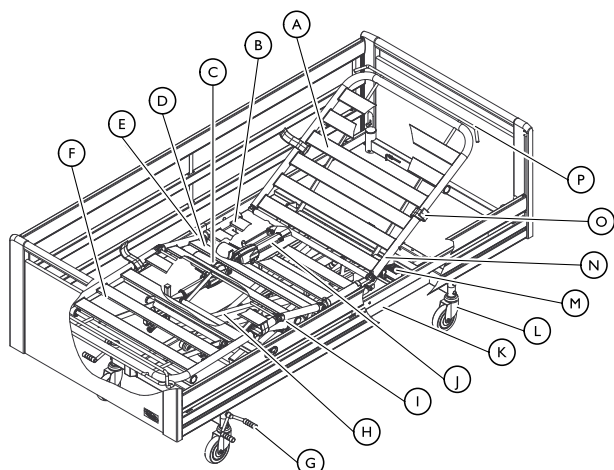
- Complete bed with castors, control box and mattress support

Accessories, like bed ends, side rails, lifting pole etc. are delivered apart.

Before taking the bed into use

1. Move the bed to its correct position.
2. Connect the bed to the mains.

3.3 Main parts of bed



Parts of standard bed:

- | | |
|-------------------------------|--------------------------------|
| Ⓐ Backrest | ⓐ Mattress support, lower half |
| Ⓑ Seat section | ⓑ Backrest motor |
| Ⓒ Leg section motor | ⓓ Base Frame |
| Ⓓ Thigh section | ⓔ Brake - castor with brake |
| Ⓔ Thigh section motor | ⓖ Control Unit |
| Ⓕ Leg section | ⓗ Mattress support, upper half |
| Ⓖ Brake pedal - central brake | ⓓ Mattress retainer |
| Ⓗ Shear arms | ⓔ Mattress support extension |

3.4 Operating side rails


WARNING!
Risk of entrapment or suffocation

There's a risk of entrapment or suffocation between mattress support, side rail and bed end.

- Always ensure correct fitting and tightening of the side rails.


WARNING!
Risk of falling

- Never leave the user unattended in the bed with the side rail down.
- Make sure the side rail is in its highest position and properly locked while leaving the user unattended.


CAUTION!

If the side rail is not locked properly it can fall down.

- Pull/push the top bar of the side rail to ensure that the locking system is properly engaged.

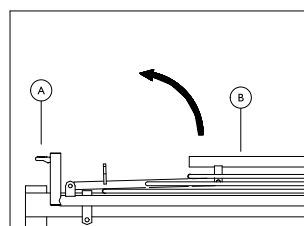

CAUTION!
Risk of Injury

There is a risk of entrapment or squeezing while operating the side rail.

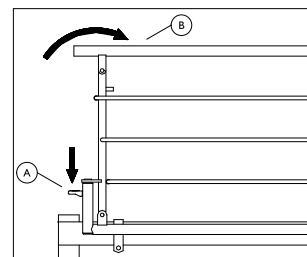
- Pay attention to your fingers and body parts of the patient.
- Never force or drop the side rail while handling it.

3.4.1 Operating Scala 2 side rail

1.

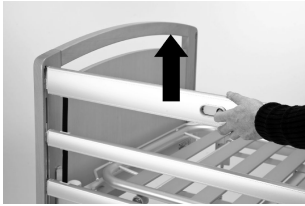


2.



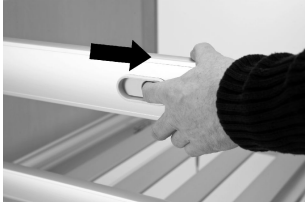
1. **Up:** Lift and pull the top bar **B** of the side rail towards the end with the locking mechanism (release button) **A**. Ensure, it is locked in place.
2. **Down:** Press the release button **A** and push the top bar **B** of the side rail away from the locking mechanism.

3.4.2 Britt V and Line side rails



Lock / Upper position

Pull up the top wooden side rail bar, until the locking pin locks with an audible click



Release

Lift the top wooden side rail bar and press the two locking rings together.



Down / Lower position

Lower the side rail.

Using a side rail height extender

Line and Britt V side rails can be supplemented by a height extender. A side rail height extender increases the allowed mattress thickness by 15 cm.



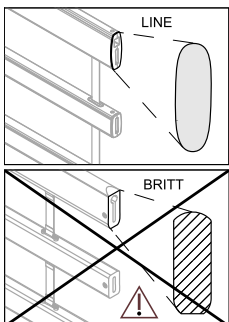
WARNING!

Risk of injury or death

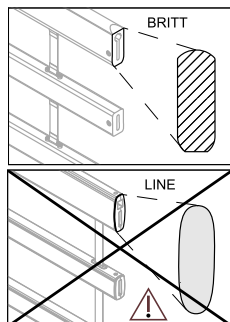
A misapplied side rail height extender could fall off. There's an increased risk for the user to fall out of the bed.

- Make sure that the side rail height extender is properly attached to the side rail. Refer to the user manual of the side rail height extender.
- Make sure to use the correct height extender for your side rail (the shape must match to the shape of the side rail. A label on the height extender determines to which side rail it belongs. See image below.

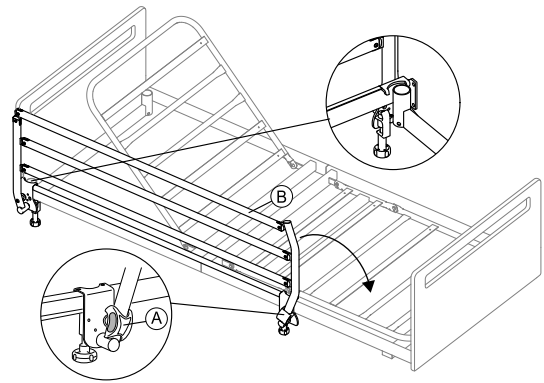
Height extender for LINE side rail:



Height extender for BRITT V side rail:



3.4.3 Verso II side rails



Folding down to open the side rail

1. Hold the top bar ⑥ with one hand and pull the locking button ① with the other hand.
2. Pull the top bar sideways and release the locking button.
3. Fold the side rail down to its lowest position.

Folding up to close the side rail

1. Pull the top bar ⑥ and raise the side rail until it is properly engaged in the locking system.

3.4.4 Operating the Torill side rail



WARNING!

Risk of falling

The middle position of the side rail does not provide protection against falling out of the bed.

- Only the highest position is intended to reduce the risk for the end-user of unintentionally falling out of the bed.
- The middle position must only be used to provide support when the end-user is moving in or out of the bed.

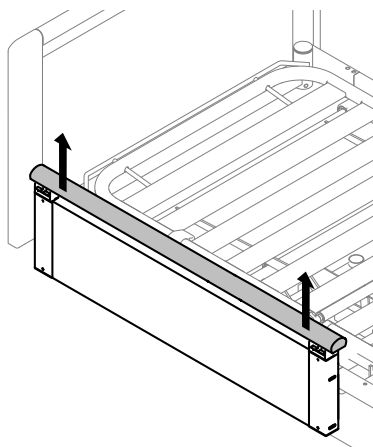
Raising the side rail



IMPORTANT!

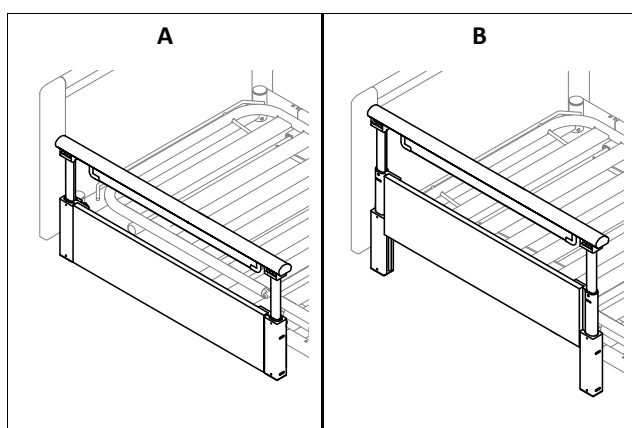
Do not push the release buttons when moving the side rail up.

1.



Pull the top bar upwards with both hands near the left and right end.

2.



To raise the side rail to the middle position (A), stop pulling upwards after a first audible click.

To raise the side rail to the high position (B), pull upwards to the upper stop.

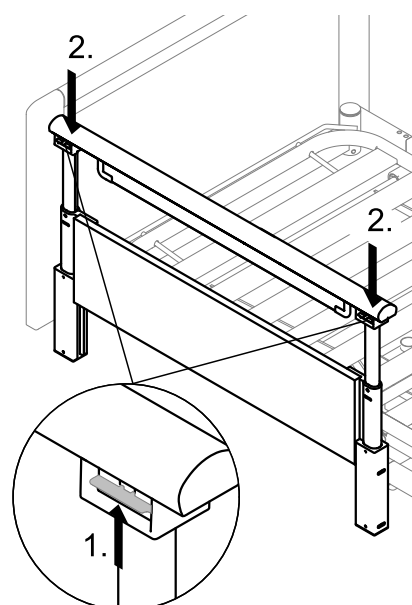
3. Push the top bar downwards to ensure it is properly locked.



If the side rail does not lock properly, perform the following steps to restore proper function.

- Pull up the top bar upwards to its stop, without pushing the release buttons.
- Lower the side rail to its lowest position as described below.

Lowering the side rail



1. Push up and hold the two release buttons.
2. To lower the side rail to the middle position, push the top bar downwards and let go the two release buttons after passing the upper locking position.
To lower the side rail to the lowest position, push the top bar downwards to the lower stop, without releasing the two release buttons.

3.5 Hand control HB85 / HL85

Hand control HB85 / HL85 is equipped with five buttons to operate the electrical functions of the bed. The buttons on hand control HL85 can be locked.

Sitting position



1. Up: press left side of the button (▲).
2. Down: press right side of the button (▼).

Backrest section



1. Up: press left side of the button (▲).
2. Down: press right side of the button (▼).

Leg section



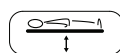
1. Up: press left side of the button (▲).
2. Down: press right side of the button (▼).

Thigh section



1. Up: press left side of the button (▲).
2. Down: press right side of the button (▼).

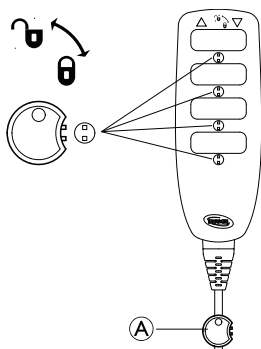
Height adjustment



1. Up: press left side of the button (▲).
2. Down: press right side of the button (▼).

3.5.1 Locking function

The locking function prevents usage of certain function buttons. Regardless of how many buttons your hand control has, they can all be locked individually.



1. Insert key (A) in the key hole, below the wanted function.
2. To lock, turn the key clockwise.
3. To unlock, turn the key anti clockwise.

3.6 Soft Control

Function buttons



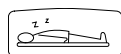
Press up to raise the bed.



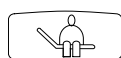
Press down to lower the bed.



Sitting position



Horizontal mattress support



"Out of bed" button (Raises the backrest and brings the thigh section to horizontal)



Thigh section



Leg section

3.7 Castors and brakes



CAUTION!

Risk of trapping/squeezing

All brakes are foot-operated.
– Do not release the brake with the fingers.



CAUTION!

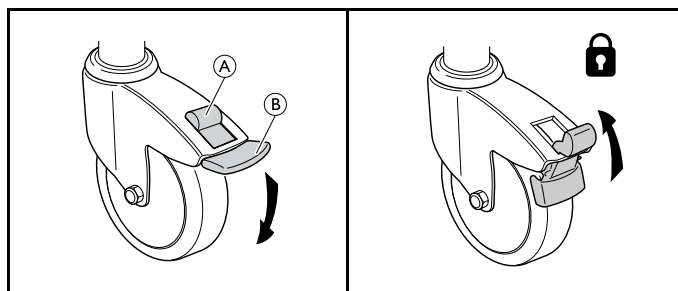
Risk of injury

User can fall, while entering or exiting the bed, if brakes are not locked.
– Always lock the brakes before the user is moving in or out of bed or when attending to the user.
– At least one castor at the head end and one castor in the foot end must be locked.



Castors might make marks on different types of absorbing floor surfaces - such as untreated or badly treated floors. To prevent marks, *Invacare®* recommends to place a suitable kind of protection between the castors and the floor.

3.7.1 Castor brake

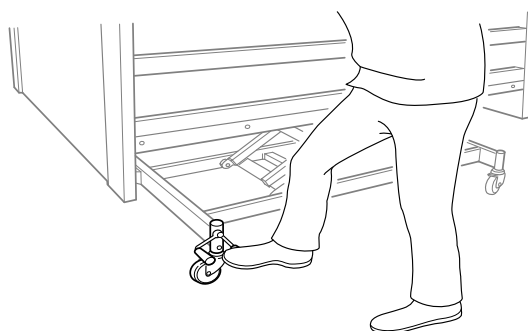


Locking the brake - Step on the outer pedal (B)

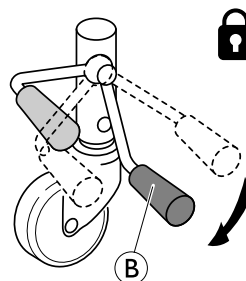
Unlocking the brake - Push up the release button (A)

3.7.2 Central brake system

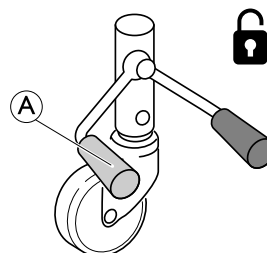
All the wheels are locked by locking one of the pedals.



Always stand in the middle of the bed's long side when locking the brakes.



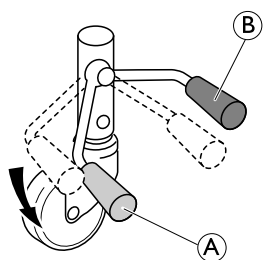
1. Lock the brakes:
Step on the red pedal (B).



1. Unlock the brakes:
Step on the green pedal (A) until the brake is in **neutral position** = Both pedals on the same level.

Steerable castor (optional)

The bed with central braking system may be equipped with a steerable castor operated with the central braking pedal.



1. Activating the steering:
When the brake is in neutral position, step on the green pedal (A).
2. Deactivating the steering:
When steering is activated; step on the red pedal (B), until the brake is in neutral position.

3.8 Lifting pole



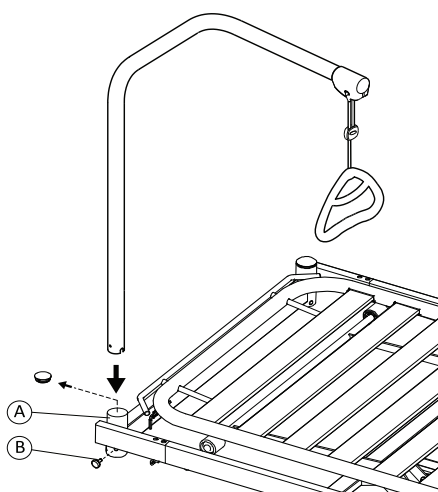
WARNING! **Risk of injury**

The bed can tip if the handle is used, while the lifting pole is turned away from the bed.

- The lifting pole always has to be positioned with the handle hanging over the bed area.
- Do not exceed the maximum load of the lifting pole; 80 kg.

3.8.1 Place the lifting pole

The lifting pole can be placed either on the left or the right side of the head end of the bed.



1. Remove the plastic plug from the lifting pole tube (A) at the head end of the bed.
2. Insert the lifting pole into the lifting pole tube and fix it with the finger screw (B).

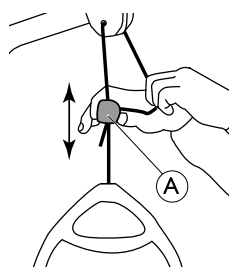


The swivel lifting pole must not be fixed with a finger screw, so that it can swing away to the side of the bed.

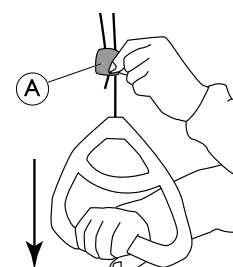
3.8.2 Adjusting the handle height

The handle height should always be adjusted to the user's need.

1.



2.



1. Hold the cord out while sliding the plastic cord lock (A) upwards or downwards until the handle reaches the preferred height.
2. Lock the handle by pressing back the cord in the lock (A) and pull the handle downwards.



IMPORTANT!

After adjusting the handle height:

- Check that the two cords above the cord lock are parallel and inside the cord lock.
- Make sure the cord is properly locked by pulling the handle hard.

3.9 Emergency release of a mattress support section

In case of a power- or motor failure, an emergency release of the back, thigh or leg section could be necessary. An emergency release of the height adjustment is NOT possible.



CAUTION! **Risk of injury**

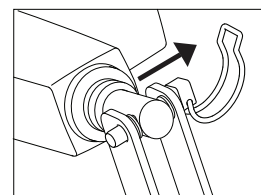
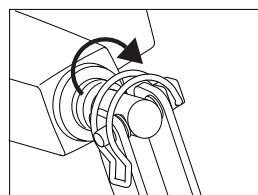
- A minimum of two persons is required for an emergency release of a mattress support section.
- When releasing a mattress support section, it might lower fast. Do not reach under the mattress support while lowering it.



IMPORTANT!

- Before an emergency release of the mattress support, remove the plug from the mains socket.

1. Both persons hold the mattress section.
2. One of them locates the motor in question and pulls out the safety pin.



3. Both persons slowly lower the mattress section until it is completely down.

4 Maintenance

4.1 General maintenance information


CAUTION!
Risk of injury or damage

- Do not perform any maintenance or service procedures while the product is in use.

Follow the maintenance procedures described in this manual to keep your product in continuous service.

4.2 Cleaning and Disinfection

4.2.1 General Safety Information


CAUTION!
Risk of contamination

- Take precautions for yourself and use appropriate protective equipment.


CAUTION!
Risk of electric shock and product damage

- Switch off the device and disconnect from mains, if applicable.
- When cleaning electronic components consider their protection class regarding water ingress.
- Make sure that no water splashes to the plug or the wall outlet.
- Do not touch the power socket with wet hands.


IMPORTANT!

Wrong fluids or methods can harm or damage the product.

- All cleaning agents and disinfectants used must be effective, compatible with one another and must protect the materials they are used to clean.
- Never use corrosive fluids (alkalines, acid etc.) or abrasive cleaning agents. We recommend an ordinary household cleaning agent such as dishwashing liquid, if not specified otherwise in the cleaning instructions.
- Never use a solvent (cellulose thinner, acetone etc.) that changes the structure of the plastic or dissolves the attached labels.
- Always make sure that the product is completely dried before taking into use again.



For cleaning and disinfection in clinical or long-term care environments, institutional hygiene guidelines apply.

4.2.2 Cleaning Intervals


IMPORTANT!

To reveal loose or worn parts, enhance smooth operation and prevent contamination:

- Clean and disinfect the product thoroughly and on a regular basis.
- Clean and disinfect the product before and after any service procedure, according to the instructions in this chapter.
- Clean and disinfect the product when it has been in contact with any body fluids.

4.2.3 Cleaning by hand

Electrical components

- Method: Wipe off with a wet cloth or soft brush.
- Max. temperature: 40 °C
- Solvent/chemicals: Water
- Drying: Wipe dry with a soft cloth

Metal components

- Method: Wipe off with a wet cloth or soft brush. Water may be pressurized, but not high pressure or steam.
- Max. temperature: 40 °C
- Solvent/chemicals: Ordinary household cleaning agents and water.
- Drying: Wipe dry with a soft cloth

Wood (including textile straps on side rails, if existing)

- Method: Wipe off with a wet cloth or soft brush.
- Max. temperature: 40 °C
- Solvent/chemicals: Ordinary household cleaning agents and water.
- Drying: Wipe dry with a soft cloth

Textiles (including upholstery and mattresses)

- See attached label on each product.

4.2.4 Cleaning in automatic washing system


IMPORTANT!

Only certain components of the product tolerate cleaning in automatic washing systems or with high pressure cleaning equipment.

- For detailed information on cleaning in automatic washing systems or with high pressure cleaning equipment see the Service Manual of the product
- All other components must be cleaned by hand.

4.2.5 Disinfection


IMPORTANT!

- Only use disinfectants and methods approved by your local infection control institution and follow your local infection control policy.
- Additional information on recommended disinfectants can be found on <https://vah-online.de/en/for-users>.

- Method: Wipe off with a moistened, firmly wrung cloth.
- Solvent / chemical: Ordinary household disinfectant.
- Drying: Allow the product to air-dry.

5 After Use

5.1 Disposal

Be environmentally responsible and recycle the different materials and components of this product separately through your recycling facility at its end of life.

The disposal and recycling of used products and packaging must comply with the laws and regulations for waste handling in each country. Contact your local waste management company for information.

5.2 Reconditioning

This product is suitable for reuse. To recondition the product for a new user, carry out the following actions:

- Inspection according to service plan
- Cleaning and disinfection

For detailed information about inspection, cleaning and disinfection, consult the service manual for this product.

6 Troubleshooting

6.1 Troubleshooting

Symptom	Possible cause	Remedy
Bed section does not move	End of stroke reached	Operate opposite button
Full bed: No electric function does work	Bed not plugged in	Plug in mains cable
	Hand control not connected	Ensure hand control correctly connected to control unit.
	Hand control defective	Call dealer / technician to replace hand control
	Control unit defective	Call dealer / technician to replace control unit
	Cables entangled or pinched	Call dealer / technician to replace cables
Side rail does not open or close	Locking mechanism defective	Call dealer / technician to repair side rail

7 Technical Data

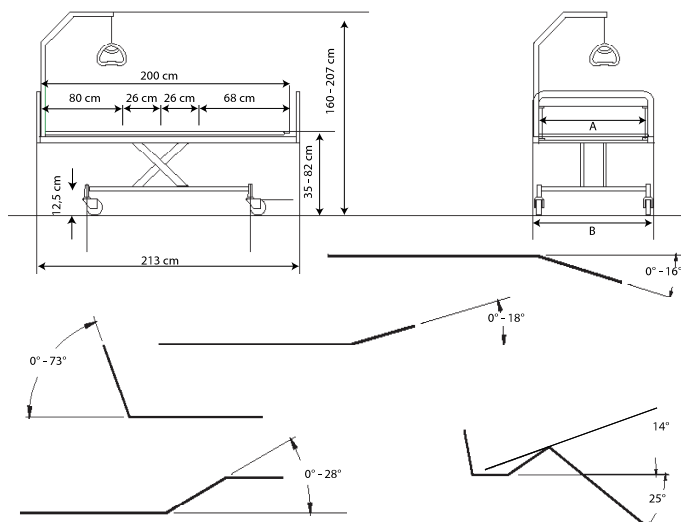
7.1 Dimensions bed

- All measurements are stated in cm.
- All angles are stated in degrees.
- All measurements and angles are stated without tolerances.

Length measures are stated for an non-extended bed. The bed can be extended respectively 5 and 10 cm's in both ends.

Height measures are stated for a bed with castors of 10 cm diameter. With smaller or bigger castors, the heights differ accordingly.

Invacare® reserves the right to change the stated measurements and angles without warning.





	SB 755
Mattress support width A	85 / 90 / 105 / 120 cm
Total width B	95 / 100 / 115 / 130 cm
Mattress support length	200 (80+26+26+68) cm
Total length	213 cm
Bed to floor height	35 – 82 cm
Base to floor height	15 cm
Total height (with lifting pole)	160 – 207 cm

7.2 Dimensions side rails

Side rail	Type	Measures	Information
Line standard	Full length aluminium side rail	206 cm x 40 cm	Mounted on the bed end guideways. Release buttons in the middle.

Line Extendable	Full length aluminium side rail with telescopic extension	206-226 cm x 40 cm	Mounted on the bed end guideways. Release buttons in the middle.
Britt V	Full length wood side rail	205 cm x 40 cm	Mounted on the bed end guideways. Release buttons in the middle.
Scala Basic 2 / Scala Basic Plus 2	3/4 length collapsible steel side rail	168 cm x 40 cm	Mounted on the side tube. Release button in the head section.
Scala Medium 2	3/4 length collapsible steel side rail	165 cm x 46 cm	Mounted on the side tube. Release button in the head section.
Scala Decubi 2	3/4 length collapsible steel side rail	168 cm x 54 cm	Mounted on the side tube. Release button in the head section.
Verso II	3/4 length collapsible steel side rail	156 cm x 40 cm	Mounted on the side tube. Release button in the foot section.
Torill short	Split side rail	76 cm x 56 cm	Mounted on the bed frame. Release buttons in both ends.
Torill long	Split side rail	98 cm x 56 cm	Mounted on the bed frame. Release buttons in both ends.

7.3 Maximum weights

	Max. user weight (provided that the weight of the mattress and the accessories do not exceed 35 kg)	200 kg
	Max. safe working load (including accessories)	235 kg

7.4 Weights

Weights bed with non-washable electronics

	Mattress support width 85 / 90 cm	Mattress support width 105 cm	Mattress support width 120 cm
Complete bed (excl accessories)	88 kg	107 kg	117 kg
Mattress support, upper half	25 kg	34 kg	37 kg
Mattress support, lower half	23 kg	33 kg	36 kg
Shear arms, standard	40 kg	40 kg	44 kg
Shear arms, dismountable	18 kg	—	—

Weights bed with washable electronics

	Mattress support width 85 / 90 cm	Mattress support width 105 cm	Mattress support width 120 cm
Complete bed (excl accessories)	91 kg	110 kg	120 kg
Mattress support, upper half	26 kg	35 kg	38 kg
Mattress support, lower half	24 kg	34 kg	37 kg
Shear arms, standard	41 kg	41 kg	45 kg
Shear arms, dismountable	21 kg	—	—

Weights bed parts and accessories

	Mattress support width 85 / 90 cm	Mattress support width 105 cm	Mattress support width 120 cm
Side rail Line	4,5 kg/pc	4,5 kg/pc	4,5 kg/pc
Side rail Line, extendable	6,5 kg/pc	6,5 kg/pc	6,5 kg/pc
Side rail Britt V	7,7 kg/pc	7,7 kg/pc	7,7 kg/pc
Side rail Britt V extended +10	9,1 kg	9,1 kg	9,1 kg
Side rail Britt V extended +20	9,5 kg	9,5 kg	9,5 kg

Side rail Scala 2	7,4 kg/pc	7,4 kg/pc	7,4 kg/pc
Side rail Verso II	9,3 kg	9,3 kg	9,3 kg
Side rail Torill short	6,2 kg	6,2 kg	6,2 kg
Side rail Torill long	7.7 kg	7.7 kg	7.7 kg
Bed end Emma	7 kg/pc	—	—
Bed end Victoria	10 kg/pc	—	—
Bed end Susanne	8,5 kg/pc	9,5 kg/pc	10,5 kg/pc
Bed end Sophie	8,5 kg/pc	9,5 kg/pc	10,5 kg/pc
Bed end Anita	9 kg/pc	—	—
Bed end Piggy	6 kg/pc	—	—
Bed end Olivia	9,5 / 10 kg (head end) 6,5 kg (foot end)	—	—
Lifting pole	4,2 kg	4,2 kg	4,2 kg

Weights wooden side panel

	Panel length 200 cm	Panel length 210 cm	Panel length 220 cm
For standard bed end	5,7 kg	5,9 kg	6,2 kg
For lowered bed end	6,6 kg	6,8 kg	7,1 kg
For use with side rail Scala	7,1 kg	7,4 kg	7,7 kg

7.5 Allowed mattress sizes

Allowed mattress height and length depending on the side rail in use

Bed side rails	Allowed mattress sizes		
	Max height (cm)	Min height (cm)	Min length (cm)
Line/Line Extendable	18	12	200
Britt V	18	12	200
Scala Basic 2	15	8	200
Scala Basic Plus 2	15	8	200
Scala Medium 2	20	8	200
Scala Decubi 2	29	21	200

Verso II	18	10	200
Torill	16	12	200

Allowed mattress width (for all side rails)

Bed width	Allowed mattress width
85 cm	83–85 cm
90 cm	88–90 cm
105 cm	103–105 cm
120 cm	118–120 cm

7.6 Environmental conditions

	Storage and Transportation	Operation
Temperature	-10°C to +50°C	+5°C to +40°C
Relative humidity	20% to 90% at 30°C - not condensing	
Atmospheric pressure	800 hPa to 1060 hPa	



Allow the product to reach operation temperature before usage:

- Warming up from minimum storage temperature might take up to 24 hours.
- Cooling down from maximum storage temperature might take up to 24 hours.

7.7 Electrical system

	Non-washable version	Washable version
Voltage supply	Uin 230 Voltage, AC, 50–60 Hz (AC = Alternating current)	Uin 100–240 Voltage, AC, 50–60 Hz (AC = Alternating current)
Maximum current input	Iin max. 1,5 Ampere	Iin max. 2.5 Ampere

	Non-washable version	Washable version
Intermittent (periodic motor operation)	10 % 2 min ON / 18 min OFF	
Insulation class	CLASS II equipment	
Type B Applied Part	Applied Part complying with the specified requirements for protection against electrical shock according to IEC60601-1.	
Sound level	55 dB (A)	
Degree of protection	<p>The control unit, external power supply, motors and hand controls are protected according to IPx4, IPx6 or IPx6w (depending on configuration). See bed product label and label on each electric device for correct IP class. The lowest IP-classification decides the overall classification of the bed.</p> <p>IPx4 - The system is protected against water splashed from any direction.</p> <p>IPx6 - The system is protected against water projected from any direction (not high pressure).</p> <p>IPx6w - The system is protected against high pressurized water and steam projected from any direction.</p>	



The bed has no isolator (main switch). If the bed needs to be electrically disconnected, it has to be unplugged from the mains socket.

8 Electromagnetic compatibility (EMC)

8.1 General EMC information

Medical Electrical Equipment needs to be installed and used according to the EMC information in this manual.

This product has been tested and found to comply with EMC limits specified by IEC/EN 60601-1-2 for Class B equipment.

Portable and mobile RF communications equipment can affect the operation of this product.

Other devices may experience interference from even the low levels of electromagnetic emissions permitted by the above standard. To determine if the emission from this product is causing the interference, run and stop running this product. If the interference with the other device operation stops, then this product is causing the interference. In such rare cases, interference may be reduced or corrected by the following:

- Reposition, relocate, or increase the separation between the devices.

8.2 Electromagnetic emission

Guidance and manufacturer's declaration

This product is intended for use in the electromagnetic environment specified below. The customer or the user of this product should assure that it is used in such an environment.


Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group I	This product uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	This product is suitable for use in all establishments including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations /flicker emissions IEC 61000-3-3	Complies	


8.3 Electromagnetic Immunity

Guidance and manufacturer's declaration

This product is intended for use in the electromagnetic environment specified below. The customer or the user of this product should assure that it is used in such an environment.

Immunity test	Test / Compliance level	Electromagnetic environment – guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 8kV contact ± 2 kV, ± 4 kV, ± 8 kV, 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrostatic transient / burst IEC 61000-4-4	± 2 kV for power supply lines; 100 kHz repetition frequency ± 1 kV for input / output lines; 100 kHz repetition frequency	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line to line ± 2 kV line to earth	Mains power quality should be that of a typical commercial or hospital environment.

Immunity test	Test / Compliance level	Electromagnetic environment – guidance
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	$< 0\% U_T$ for 0,5 cycle at 45° steps $0\% U_T$ for 1 cycles $70\% U_T$ for 25 / 30 cycles $< 5\% U_T$ for 250 / 300 cycles	<p>Mains power quality should be that of a typical commercial or hospital environment. If the user of this product requires continued operation during power mains interruptions, it is recommended that the product is powered from an un-interruptible power supply or a battery.</p> <p>U_T is the a. c. mains voltage prior to application of the test level.</p>
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3 V 150 kHz to 80 Mhz 6 V in ISM & amateur radio bands	<p>Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which this product is used exceeds the applicable RF compliance level above, this product should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating this product.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol: </p>
Radiated RF IEC 61000-4-3	10 V/m 80 Mhz to 2,7 GHz 385 MHz - 5785 MHz test specifications for immunity to RF wireless communication equipment refer to table 9 of IEC 60601-1-2:2014	<p>Portable and mobile RF communications equipment should be used no closer than 30 cm to any part of this product including cables.</p>

 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Invacare Sales Companies

Ireland:

Invacare Ireland Ltd,
Unit 5 Seatown Business
Campus
Seatown Road, Swords, County
Dublin
Tel : (353) 1 810 7084
Fax: (353) 1 810 7085
ireland@invacare.com
www.invacare.ie

United Kingdom:

Invacare Limited
Pencoed Technology Park,
Pencoed
Bridgend CF35 5AQ
Tel: (44) (0) 1656 776 222
Fax: (44) (0) 1656 776 220
uk@invacare.com
www.invacare.co.uk



Manufacturer:

Invacare Rea AB
Växjövägen 303
SE-343 71 Diö
Sweden

