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# Invacare<sup>®</sup> **1600 Bed**



User's Manual Version 0310



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# User Part

# I. General Information

Congratulations on your choice of the Invacare® **1600** bed.

- This bed has been developed for users requiring care in an Aged Care Facility or home care.
- The bed combines excellent ergonomic design.
- A specially designed 2 or 4-sectioned mattress support provides the user with excellent . comfort and provides working conditions for the carer.



Invacare<sup>®</sup> Australia accepts no liability for any use, change or assembly of the product other than as stated in this User's Manual.

# 2. Pre Operation Check



Read This Before Operation. Ignoring This Warning May Result In Damage Or Injury.

Disconnect the mains cord from the supply before moving the bed.

Ensure the mains cord is kept clear of the wheels when moving the bed, and is never caught in the bed operating mechanism or in a safety side. It can be dangerous to run over the mains cord.

Ensure the mains cord has enough slack when connected that it is not strained when the bed is raised and lowered.



## **Positioning Of Bed:**

#### **Bed fitted without Bumper bar:**

With the bed at it's lowest height, position the bed so that the head end buffers are at least 30mm from the wall and some slack is present in the electrical supply cable. Lock the castors. If this positioning is incorrect or not performed the bed may cause damage to the wall as it moves through an arc upon raising.

# Safety Sides:

Due to the low height nature of this bed, safety sides are not recommended to be used as the risk of injury due to falling out of bed is very small. However, if they are fitted then the following considerations should be made:

- Before lowering the bed it is imperative that safety sides when fitted be folded into their "down" position. If this is not performed then a "crushing risk" may be present between the floor and the safety side catch or clamp. Figure 1 below demonstrates clearance with safety side raised.
- When safety sides are lowered, the latch, being the lowest point swings up and the risk is removed.

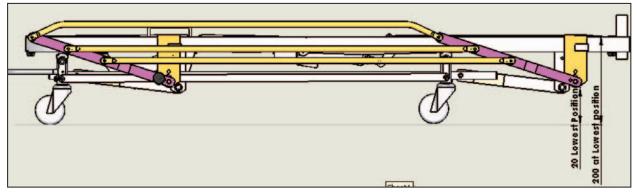


Figure 1: Low Height Clearance



KEEP

LIMBS

CLEAR

# 3a. Operation of Invacare 1600 Series bed

WARNING: There is a potential risk of personal injury when operating the bed. Before operating the bed (eg moving the bed into a sitting position, lowering or increasing height of mattress platform or lifting the back rest) – the carer/user must ensure that all limbs/ appendages must be clear of all bed moving parts. Furthermore the carer/user must ensure that the underside of the bed is clear of obstructions prior to operation.

Linak Handset		<b>I. Back rest</b> Button with the symbol shown to the left. Push the left-hand side of the button to raise, right to lower.			
		<b>2. Hi Low</b> Button with the symbol shown to the left. Push the left-hand side of the button to raise, right to lower.			
		<b>3. Thigh &amp; knee section</b> Button with the symbol shown to the left. Push the left-hand side of the button to raise, right to lower.			
Dewart Handset					
Dewart Handset		<b>I. Back rest</b> Buttons with the symbol shown to the left. Push the top button to raise, bottom to lower.			
		<b>2. Thigh &amp; knee section</b> Buttons with the symbol shown to the left. Push the top button to raise, bottom to lower.			
		<b>3. Hi Low</b> Buttons with the symbol shown to the left. Push the top button to raise, bottom to lower.			



#### **b. Operating the Castors:**

A single treadle bar at the foot end of the bed locks all Central locking Castors. Toe Break Castors can be locked individually by lowering the brake on the castors.



The bed's castors must be locked whilst nursing the patient in bed or when using any positioning function. The bed must be locked when the patient is moving in and out of the bed.







Treadle bar

# c. Operating the Safety Sides:



There is a risk of personal injury on operation of safety sides. Before lowering the bed, the safety side must be down to avoid potential personal injury due to clearances with the floor. See Figure 1.

DO NOT place hands between moving parts. DO NOT sit on rails.

#### To Raise:

Grasp the top rail of the safety side and lift in an arc. There will be an audible click when it locks.

#### **To Lower:**

Standing beside the bed near the middle of the safety side, hold the black release knob with the hand nearest to it and the top rail with the other hand.

Pull the release knob outwards and gently lower the safety side towards the release knob.



To lower



To raise



# **Technical Information**

# 4. General Layout

Invacare Australia accepts no liability for use, change or assembly of the product other than as stated in this User's Manual.

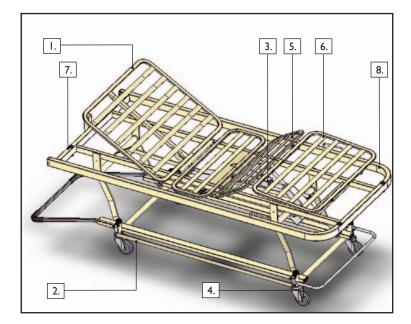
Invacare Australia is certified to ISO 9001:2000.

The 1600 bed has been independently tested and complies with all requirements of AS/NZS 200.2.38-1997 for 200kg SWL.

The bed serial number is located.....

#### Parts of a standard bed:

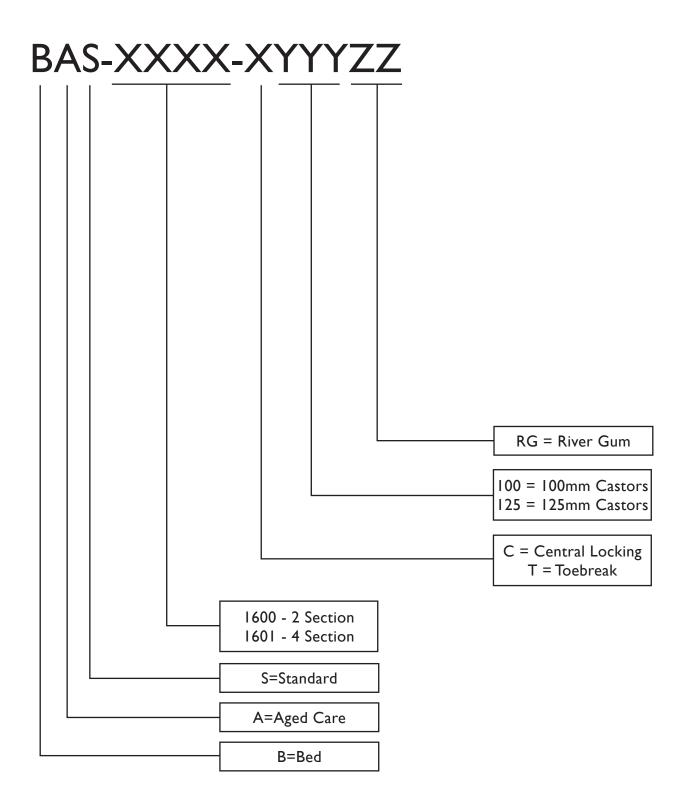
- I. Upper posture
- 2. Base frame
- 3. Control box, actuators, handset
- 4. Castors
- 5. Thigh section (4 section only)
- 6. Leg section (4 section only)
- 7. Bed ends
- 8. Bumper bar





#### 5. Model Identification:

#### **Ordering numbers**





# 6. Accessories Mounting:

For an ergonomic working position, raise the bed mattress support to approx. 60cm above the floor level.

#### a. Assembling the Headboard:

Press fit the standard style head board frame into the socket holes. This allows rapid removal in an emergency.

# **b.** Assembling the Footboard:

Press fit the standard style footboard frame into the socket holes. This allows rapid removal in an emergency.

A bed stripper style footboard is an option which quickly and easily folds down to allow access to the foot end of the bed for the purpose of stripping the bed and replacing covers.

Mount bedstripper on the clips at the bed end.

# c. Self Help Pole:

The self help pole is an option to provide extra patient support. The handle length can be adjusted according to the need.

Press fit the pole into the RHS section located in the centre at the head end of the bed.



A foot extension panel can be purchased which extends the length of the bed by 250mm. A mattress bolster is then available to sit on top of the foot extension effectively lengthening the mattress accordingly.

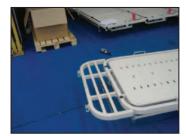
Clips on to the foot end of the bed and clamped by knobs.



Pole connector



Self Help Pole



Foot Extension



#### e. Safety Rail:



There is a risk of entrapment on assembly and operation of safety sides.

- I. Raise the bed about one third.
- 2. With the release knob at the head end, position safety side brackets against the bed frame such that in the lowered position the safety side does not go past the head of the bed.
- 3. Press fit onto bed frame, attach flat bar and tighten the star knob for secure holding.

### f. Bumper Bar:

The bumper bar fits both Standard and Knee Break Beds.

#### Installation

- I. Apply wheel brakes on bed.
- 2. Plug bed into power.
- 3. Using handset controls, lift mattress base to its highest position.
- 4. Holding the bumper inverted, line up both labels with holes in the end of base frame.
- 5. Slide the bumper into the frame, at Head End of the Bed Base, until the locating pins click into the holes, approximately 100mm.

#### **Removal:**

- I. To remove the bumper, apply wheel brakes on bed.
- 2. Squeeze both sides of locating pins to disengage bar from holes.
- 3. Squarely pull the bumper out of the bed's base frame.



Safety side brackets



Raise bed about one third



Bumper bar



Bumper bar

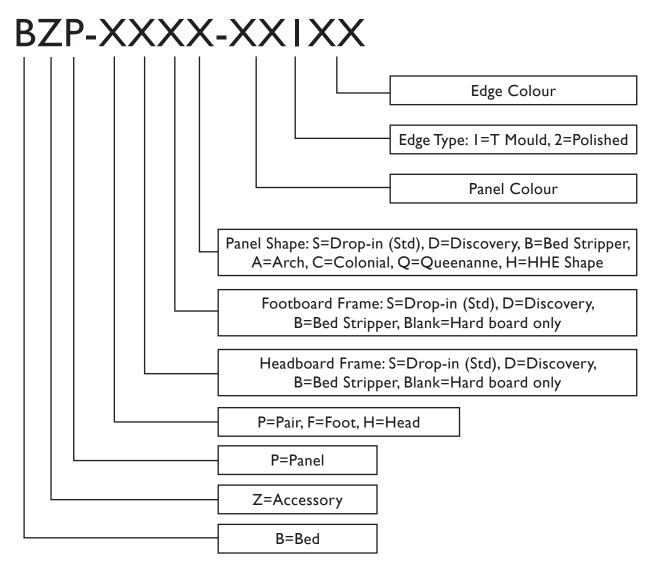
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# 7. Accessory Part Numbers

DESCRIPTION	FUNCTION	PART NUMBER	
HEAD BOARD STANDARD	SUPPORTS HEAD	BZP-XXXX-XXIXX	
FOOT BOARD STANDARD	SUPPORTS FOOT	BZP-XXXX-XXIXX	
FOOT BOARD BASE STRIPPER	SUPPORTS FOOT AND FOLDS DOWN FOR MAKING UP THE BED	BZP-XXXX-XXIXX	
SELF HELP POLE	FOR PATIENT TO HOLD	BZA-H2116	
FOOT EXTENSION CLIP ON	EXTRA LENGTH TO BED	B151226	
FOOT END BUFFERS	ACTS AS CUSHION AGAINST WALL	SHVV0018 & B160583	
SAFETY SIDES- HORIZONTAL	TO AVOID FALLING FROM BEDS	BSH-3093	
SAFETY SIDES - VERTICAL	TO AVOID FALLING FROM BEDS	BSV-VSS425	
BUMPER BAR	-	BZA-B161205RG	

# Head board and Foot board ordering numbers





#### 8. Service and Maintenance:

Service and maintenance of the Invacare 1600 Series bed must be performed by personnel who have received the necessary instruction or training.

With normal daily use, service must be carried out according to the service schedule.



Ensure that the mains cord is disconnected from the mains supply. The top frame must be supported during service inspections to prevent accidental lowering.

# **Cleaning:**

Cleaning can be done using household detergents, brush, cloth and sponge. Dry the bed after cleaning.

DO NOT use acids, alkaline, or any other chemical solvents.

For cleaning Actuators use a dry cloth to remove lint, grease and dirt. DO NOT wash as this removes the fine layer of oil.



There is a risk of finger entrapment, as there is chance of physical injury.



# 9. Maintenance Chart:

Service and Maintenance of the Invacare <sup>®</sup> 1600 bed must be performed by personnel who have received the necessary instruction or training: Bed Serial no Date:											
								6 Monthly		Check	Initial
									Correct operation of bed		
	Castor fittings tightened										
	Castor brakes checked										
	Actuators checked for visible damage										
	Actuators shafts clean										
	Wiring correct and undamaged. Plugs undamaged and no interference with bed movement										
	Damaged paintwork repaired										
12 Monthly											
	Check all pivot points										

#### **Electrical System:**

a. The electrical system in this bed is a sealed unit and must be replaced.

b. A battery change can be performed by certified maintenance staff and requires the removal of four screws securing the box to the bed frame and the withdrawal of a plug from the control box.

#### **Toe-Operated Castors.**

Toe operated castors are the non-adjustable type, however they can quickly and easily be replaced by certified maintenance staff.

#### **Central Lock Castors.**

Central Lock Castors are adjustable. Certified maintenance staff can tighten brakes simply by tightening the grub screw protruding from the brake pad at the rear of the castor just above the wheel.

# **Upper Posture (Fowler) Removal and Replacement.**

Removal

- I. Disconnect bed from mains supply.
- 2. Remove bolt-fastening fowler Rocker Arm (25mm solid square MS, mild bend one end, 4 lugs attached) to Fowler Frame. (Leave rocker arm attached to actuator)



3. Insert 5.0 mm punch into Fowler retaining lug (Effectively hinge for whole fowler frame located at foot end of fowler frame either end of 25 mm Dia. tube.) Push back retaining pin until pin is free of nylon bush and raise that side of fowler slightly to clear the mount.

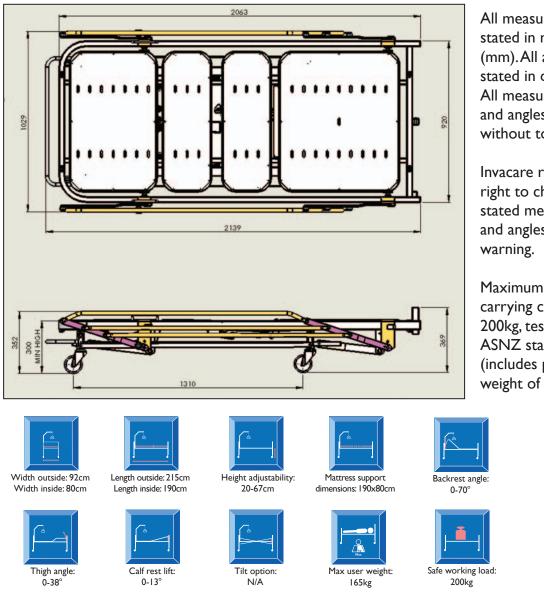
Fowler frame and sheet should then move sideways and remove from top frame.

Replacement of fowler frame is the reverse of the above procedure. Use new pivot bushes and other components if they are worn.

#### **Pivot Points:**

Replace pivot pins, bolts or removable bushes (where fitted) if there is significant play or the there is wear greater than 1mm in diameter.

### II. Technical specifications:



All measurements are stated in millimetres (mm). All angles are stated in degrees. All measurements and angles are stated without tolerances.

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

Maximum weight carrying capacity is 200kg, tested as per ASNZ standards (includes patient weight of 165kg).

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# 12. Electrical data

Voltage supply: 230V AC/ 50Hz +/- 20V Sound level < 45db Protection class: IP54 Insulation class: II type B

# 13. Warranty:

10 years on welded frame3 years electrical system2 years hydraulic2 years mechanical2 years castors1 year battery

# INVACARE

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#### NOTES