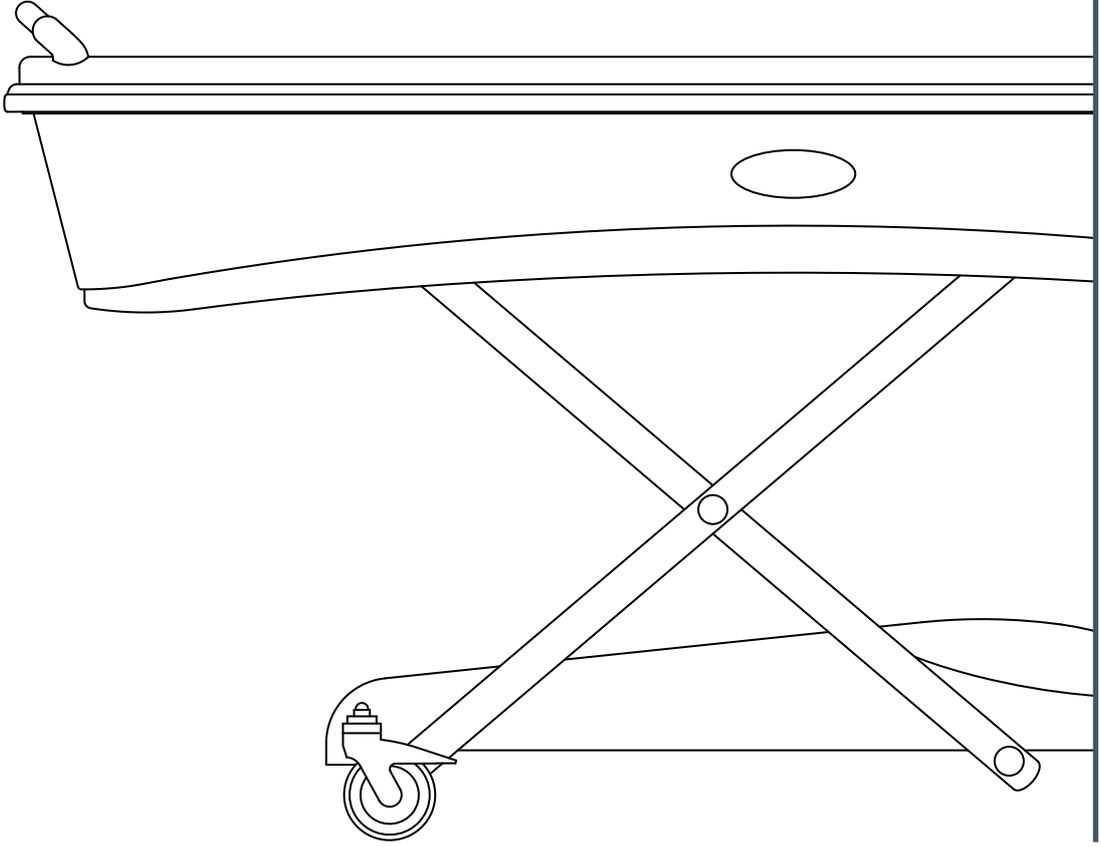




PACIFIC SHOWER- BATHING TROLLEY

OPERATORS MANUAL



Standard Warranty

Thank you for purchasing your product from Howard Wright Limited.

Please refer to our website www.howardwrightcares.com for our warranty terms.

Manual's Purpose

This manual contains helpful information and important safety instructions for safe and proper operation and servicing of the Pacific Shower-Bathing Trolley. We urge that you read it carefully and become familiar with the Shower-Bathing Trolley's operation.

NOTE:

- In this manual, the term patient refers to one who receives medical attention, care, or treatment.

WARNING:

- Read and understand this operator's manual before using the Pacific Shower-Bathing Trolley.
- Failure to adhere to the safety instructions could result in equipment damage and/or injury to the patient, operator or other personnel.

Howard Wright Limited's Policy

Howard Wright Limited has a policy of continuous improvement and reserves the right to change product specifications and information referred to in this document without notice.

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1. PRECAUTIONS

1.1 CONVENTIONS

The following conventions are used in this publication:

- WARNING:** Gives instructions or information intended to ensure the safety of the patient, caregiver and other personnel.
- CAUTION:** Gives instructions or information intended to avoid damage to the Pacific Shower-Bathing Trolley (PSBT) or its accessories.
- NOTE:** Gives additional instructions or information intended to make the Pacific Shower-Bathing Trolley (PSBT) easier to use.

1.2 GENERAL WARNINGS & CAUTIONS

WARNING: Read and understand these Operator Instructions before using the PSBT.

WARNING: Use the PSBT to support one patient only.

WARNING: Never leave a patient unattended.

WARNING: Do not use the PSBT for cyclic or repetitive manipulations of the patient.

WARNING: Do not sit on the trolley ends. Failure to heed caution may result in injury to the patient or personnel as well as damage to the shower trolley.

WARNING: All the trolley's castors must be locked before and throughout the entire patient transfer and bathing operations.

WARNING: To avoid damage to the drain hose or injury to the patient or personnel, the hose should be placed in the cutaway storage location when not in use.

WARNING: Patient, caregiver and other personnel must keep body parts clear of the elevator system.

WARNING: When raising or lowering the platform or tub sides keep handset cord clear of the elevator mechanisms.

WARNING – CLEANING:

- Never operate electric functions when cleaning the PSBT or its accessories.

WARNING - DROWNING HAZARD:

- Never leave patient unattended.
- Never place a patient face down.
- Never overfill the tub.

CAUTION: The safe working load of the PSBT is 200kg (440lbs). (This includes the mass of the patient, the water in the tub and any accessories.)

CAUTION: When not in use the PSBT should be stored with the tub sides down.

CAUTION: Keep the handset out of the tub. Store the handset on the head end bracket at the head end of the tub or on either side on the storage rails.

CAUTION: Use only approved cleaning products. If bleach is necessary strictly adhere to the BLEACH CLEANING instructions (section 5.3).

CAUTION: Do not use abrasive sponges, cloths or substances on any trolley surfaces.

CAUTION: Do not use water hotter than 50°C (122°F) on the tub surface.

2. PART IDENTIFICATION

2.1 PART IDENTIFICATION - PACIFIC SHOWER-BATHING TROLLEY

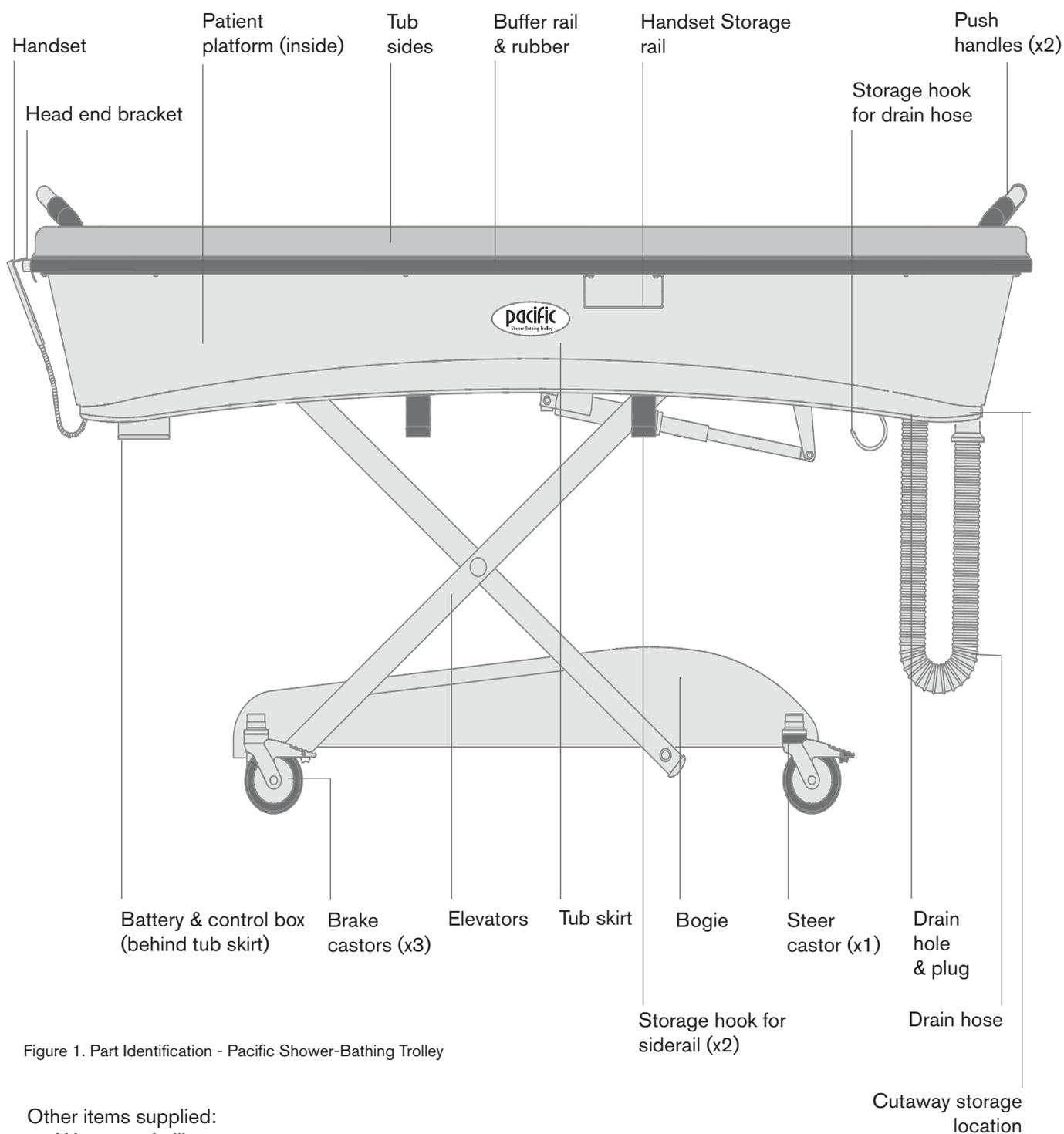


Figure 1. Part Identification - Pacific Shower-Bathing Trolley

Other items supplied:

- Waterproof pillow
- Wall mounted battery charger
- Electric power cord for battery charger

3. INTRODUCTION

3.1 HOWARD WRIGHT LIMITED

Congratulations on choosing a Howard Wright Limited product. Established in the 1950's, Howard Wright Limited has built a reputation based on product quality and design innovation. Today our equipment is found in healthcare institutions worldwide.

3.2 INTENDED PURPOSE

The Pacific Shower-Bathing Trolley is a high quality product intended to bring a new standard of efficiency and operating ease to trolley bathing and showering in hospital and home care environments. It combines ergonomic design with modern styling and durability.

3.3 TECHNICAL SUMMARY

3.3.1 VERSIONS

One version of the Pacific Shower-Bathing Trolley is available. The Pacific Shower-Bathing Trolley is an upgrade of the old Pacific shower trolley. This trolley is supplied with electric operation only.

3.3.2 CONSTRUCTION

The Pacific Shower-Bathing Trolley has a LINAK control box. An onboard removable lead-acid battery provides power to operate LINAK actuators at 24V DC. Control buttons are located on a handset for adjustment of the tub sides and patient platform heights.

The Pacific Shower-Bathing Trolley push handles, buffer rails, castors and bogie are all manufactured from stainless steel, aluminium or hard wearing plastic to resist rust and chemical attack from the most acidic water supplies. Other structural parts of the Shower-Bathing Trolley where water runs off easily are made of powdercoated fabricated steel.

The upholstered tub is a seamless design made from fabric reinforced stretch polyurethane with a foam padding for extra patient comfort. The fabrics provide thermal insulation to give warmth at first touch.

Plastics used are PE (PolyEthylene), PP (PolyPropylene), PU (PolyUrethane) Nylon, PVC (Poly Vinyl Chloride) and ABS (Acrylonitrile Butadiene Styrene). Latex rubber is not used.

The waterproof pillow is PFC Vinyl Nitrile Foam (closed cell) with a Poly Vinyl coating.

4.1 CASTORS

see figures 2- 4

1. Brake position - brake tab down (3 of 4 castors)

In this position, the Pacific Shower-Bathing Trolley's brake castors are locked and cannot swivel or roll.

This prevents the trolley from moving during patient transfer, bathing or clinical intervention.

1. To lock the castors, press each castor brake tab down towards the floor so that it flips up, vertical to the floor.
2. To release the brakes (neutral position), push the castor brake tab forward so that it flips back into the tab slot on the castor hood.

WARNING: All the trolley's castors must be locked before and throughout the entire patient transfer and bathing operations.

CAUTION: Do not try to lock the trolley's castors on a grade of more than five degrees. The Pacific Shower-Bathing Trolley is designed to operate and lock in level situations only.

2. Neutral position - brake tab horizontal

In this position, the castors can swivel and roll freely and the trolley can be pushed in any direction.

3. Steer position - steer tab down (steer castor only)

In this position, the steer castor cannot swivel and is locked to roll in line with the length of the trolley.

The brake castors should be free to swivel. This allows the trolley to be more easily steered. If pushed from either end, the trolley will track in line with its length.

NOTE: To ensure that the steer castor locks in a position that trails the direction of trolley's movement:

1. Push the trolley a short distance in the intended direction of travel, to align the castors.
2. Push the steer castor tab down towards the floor to lock.
3. Continue to push the trolley. An audible 'click' will be heard when the steer castor locks in position.

NOTE: The steer castor is located on the right hand side at the drain end and has a dark grey castor brake tab. The other castor's brake tabs are light grey.

CAUTION: Do not attempt to push the trolley sideways when the steer castor is in the steer position.

CAUTION: Ensure that the steer castor trails the direction of the trolley movement.

CAUTION: When moving the trolley from room to room, take care that handrails on hallway walls or other sharp extrusions do not damage the upholstery top (tub surface).

CAUTION: When moving the trolley from room to room, the patient platform should be at, or near, its fully raised height to prevent the drain hose from dragging on the floor.

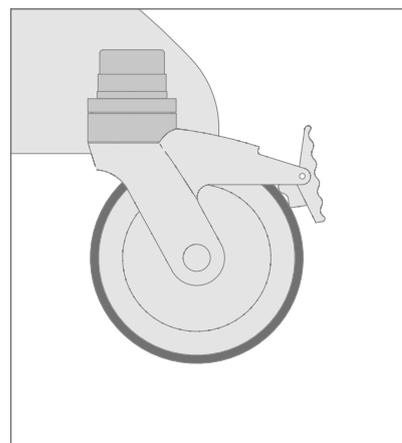


Figure 2. Castor pedal in brake position

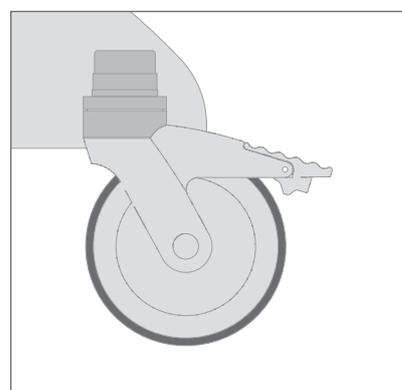


Figure 3. Castor pedal in neutral position

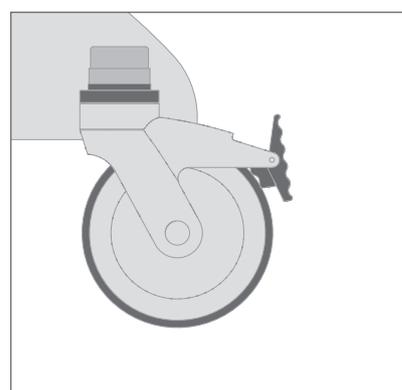


Figure 4. Castor pedal in steer position

4. OPERATION

4.2 ELECTRIC CONTROLS

WARNING: Do not operate the Pacific Shower-Bathing Trolley controls so that moving parts of the trolley contact people or surrounding objects.

CAUTION: Do not operate the Pacific Shower-Bathing Trolley controls for more than 6-minutes during a 60-minute period (i.e. do not exceed the mode/duty cycle).

Adjustments on the Pacific Shower-Bathing Trolley are powered by electric actuators.

Two actuators are used; one for each of the following functions:

1. Patient platform height.
2. Tub sides height.

The actuators are controlled by buttons on a handset.

4.2.1 HANDSET LOCATION

see figures 5-6

The handset can be stored on the head end bracket or on either side on the storage rails.

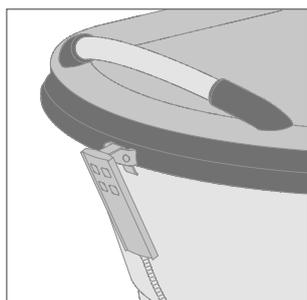


Figure 5. Head end bracket

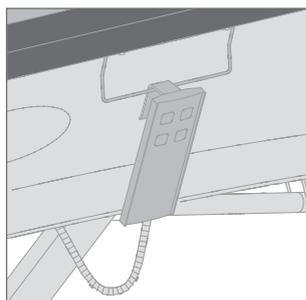


Figure 6. Storage rail

4.2.2 BUTTON OPERATION

see figure 7

Adjustment occurs only while a button is pressed. Adjustment will stop when the button is released or the moving actuator reaches the end of its range of adjustment.

To raise and lower the patient platform:

1. Before raising or lowering the patient platform, ensure all the Pacific Shower-Bathing Trolley castors are locked.
2. To raise the platform height, press the "Patient platform up" button on the handset
3. To lower the platform height, press the "Patient platform down" button on the handset.

To raise and lower the tub sides:

1. Before raising or lowering tub sides, ensure all Pacific Shower-Bathing Trolley castors are locked.
2. To raise the tub sides, press the "Tub sides up" button on the handset.
3. To lower tub sides, press "Tub sides down" button on the handset.

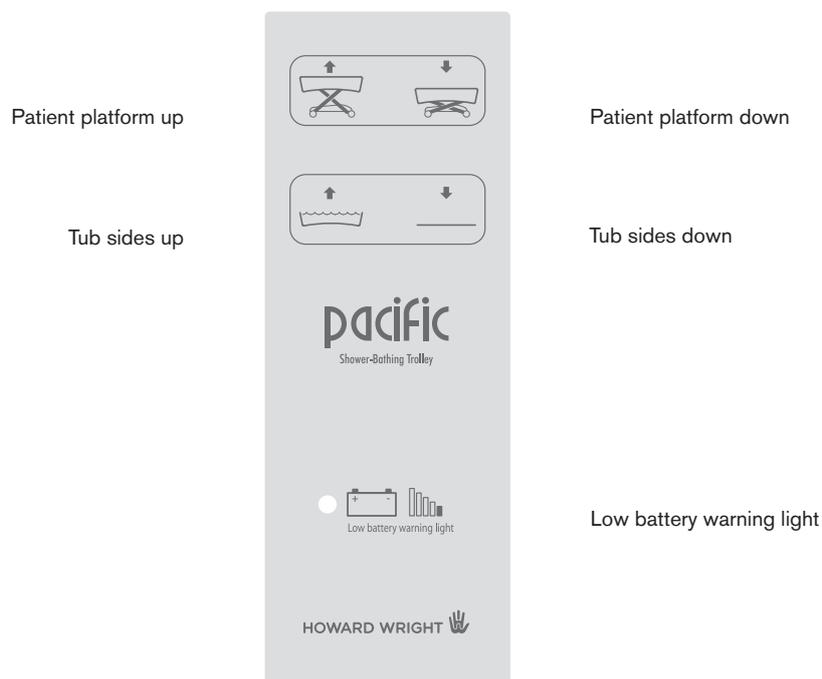


Figure 7. Handset

- NOTE:** It takes approximately 30 seconds to raise the patient platform or tub sides from the lowest to the highest position. This also applies when lowering from the highest to the lowest position.
- NOTE:** Height adjustment will stop automatically when it reaches its maximum or minimum height.
- WARNING:** Never leave a patient unattended. If a patient is left in the trolley unattended, the patient platform should be at its lowest height and the tub sides in their highest position to reduce risk of patient injury in a fall.
- WARNING:** When lowering the tub sides ensure that:
- the patient's feet are clear of the drain end push handle.
 - the patients arms or legs are not caught in the gutter between the sides and the patient platform.

4. OPERATION

4.3 BATTERY AND BATTERY CHARGER

see figures 8-10

The battery is at the head end of the Pacific Shower-Bathing Trolley, on a pull down battery compartment, located up behind the tub skirt.

It is a lead-acid battery, should be charged regularly and not be allowed to discharge fully. Fully discharging the battery will reduce its life.

The battery charger supplied with the Pacific Shower-Bathing Trolley should be fitted to a wall using the brackets supplied and be connected to a power supply.

To remove the battery from the Pacific Shower-Bathing Trolley for charging:

1. Pull down on the battery compartment handle to gain access to the battery (see figure 8).
2. Squeeze the battery release lever to disengage the battery from the mount bracket and lift. The battery will disconnect from the control box (see figure 9).
3. Lift the battery out with both hands.
4. Return the battery compartment to its raised position to protect it from being knocked.

WARNING: The battery is heavy and should be supported with both hands when releasing from the mount bracket.

To charge the battery:

1. Hold the battery with one hand squeezing the release lever. Use your other hand to hold or support the front side of the battery.
2. Place the lower end of the battery onto the wall mounted battery charger with the upper (lever) side of the battery slightly out from the bracket (see figure 10).
3. Push the upper (lever) side of the battery towards the wall bracket and release the lever. Ensure that the battery clicks into place and that the yellow "Charge" LED (Light Emitting Diode) on the charger illuminates.
4. Ensure that the battery charger is connected to the power supply (as indicated by the green "On" LED on the charger).

NOTE: The yellow "Charge" LED will extinguish once the battery has reached full charge.

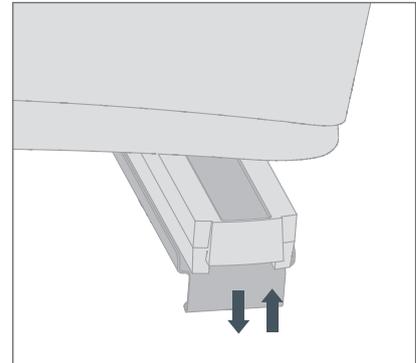


Figure 8. Pulling down battery compartment

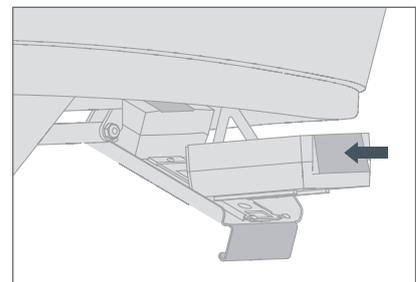


Figure 9. Attaching/removing battery to/from battery compartment

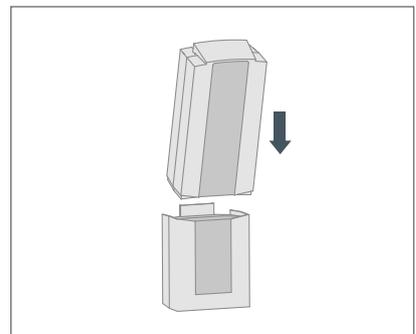


Figure 10. Attaching/removing battery to/from charger

To attach the battery to the Pacific Shower-Bathing Trolley:

1. Ensure that the battery compartment in its lowered position (see figure 8).
2. Using two hands to support the battery, slide the battery on the mount bracket up towards the control box. Ensure that the battery latches securely (it should “click” into place).
3. Return the battery compartment to its raised position.

NOTE: After reinstalling a charged battery check that all electric functions operate. If no functions are operational it is possible that the battery has not been installed properly. Reattach the battery as described above.

NOTE: A green LED on the handset will illuminate and the control box will ‘beep’ audibly during adjustment of either of the actuators when the battery charge is low.

NOTE: The charger will display the following LED lights:

- A yellow “Charge” LED on the charger indicates whether the battery is charging.
- A green “On” LED on the charger indicates whether the charger is connected to the power supply.

NOTE: The number of full load (200kg) cycles (raising and lowering the shower trolley) achievable using a new initially fully charged battery is approximately 30.

CAUTION: Fully discharging the battery will reduce its life.

CAUTION: Charge the battery as often as possible for a minimum of six hours each time or until the “charge” LED extinguishes.

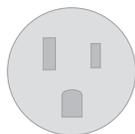
CAUTION: Do not expose the battery to an open flame or immerse it in liquid.

4.3.1 PLUG OPTION

To charge battery please ensure you use correct plug for your country/ region.



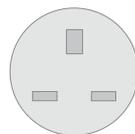
Australia, New Zealand



Japan



Europe



United Kingdom



North America

4. OPERATION

4.4 DRAIN HOSE

see figures 11-12

The drain hose is located at the drain end of the Pacific Shower-Bathing Trolley and can be stored in the cutaway in skirt (see figure 11). If needed the hose can be lifted off the floor and placed into the storage hook for better clearance (see figure 12).

The drain hose is designed so that water can be drained away from the bathing tub into a suitable waste water collecting receptacle such as a floor mounted drain, toilet or basin.

To Drain Water from the Pacific Shower-Bathing Trolley:

1. Ensure that the loose end of the drain hose is placed into the drainage area. Make sure the drainage area is located lower in height than the patient platform drain hole (raise patient platform if necessary).
2. Remove the plug from the trolley's drain hole to drain the water.

CAUTION: Ensure the drain hose end is placed into the drainage area before bathing the patient.

WARNING: When not in use the drain hose should be stored to avoid damage to the hose or injury to the patient or personnel.

NOTE: Curl the drain hose by gently twisting/turning the hose at the hose end before attaching the end to the storage hook. This will prevent the hose from dragging on the floor during transportation/storage.

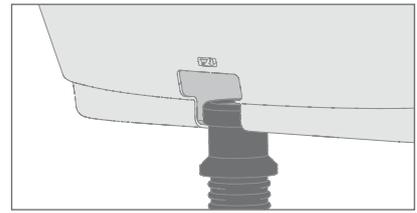


Figure 11. Cutaway storage location for drain hose

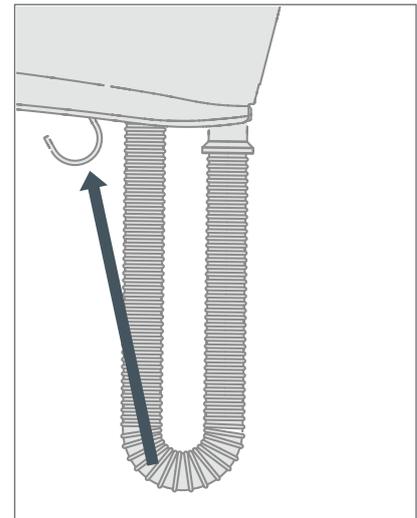


Figure 12. Storage hook for drain hose

4.5 WATERPROOF PILLOW

A waterproof pillow is supplied with all Pacific Shower-Bathing Trolleys. It is designed to provide comfort to the patient while being bathed and gives support while washing the patient's hair. (See section 4.7 Showering and bathing).

4.6 TRANSFERRING THE PATIENT TO THE PACIFIC SHOWER-BATHING TROLLEY

1. Place the Pacific Shower-Bathing Trolley beside the patient's bed.
2. Orientate the trolley so that the drain end is at the foot end of the patient's bed.
3. Lock all of the castors to stabilise the trolley during patient transfer.
4. Fully lower the tub sides to the patient platform height (remove siderails if you have this option).
5. Raise or lower the patient platform height to the corresponding height of the patient's bed.
6. Transfer the patient.
7. Place the waterproof pillow under the patient's head (if required).

WARNING: It is recommended that two attendants transfer the patient to the Pacific Shower-Bathing Trolley.

WARNING: Ensure the patient's head is opposite the drain end of the trolley when transferring.

WARNING: Do not sit on the trolley ends. Failure to heed caution may result in injury to the patient or personnel as well as damage to the trolley.

WARNING: All the trolley's castors must be locked before and throughout the entire patient transfer and bathing operations.

WARNING: Remove both siderails before transferring the patient.

CAUTION: Do not exceed the Safe Working Load (SWL) rating. The safe working load of the Pacific Shower-Bathing Trolley is 200kg/440lbs. This includes the mass of the patient, the water in the tub and any accessories.

4.7 SHOWERING AND BATHING THE PATIENT

1. Raise the tub sides so that the patient is contained within the trolley.
2. Raise the patient platform to a convenient working height.
3. Ensure the free end of the drain hose is placed into the drainage area.
4. Place the waterproof pillow under the patients head (if required).
5. Shower the patient with a hand held spray head.

NOTE: The drain plug can be used and the tub semi filled for immersion bathing or burns treatment.

NOTE: Patients can be showered or bathed wherever there is a suitable supply of water and drainage.

NOTE: The tub must be higher than the water drainage area so that water drains away naturally through the drain hose.

CAUTION: The Safe Working Load is 200kg/440lbs.

CAUTION: Ensure the loose end of the drain hose is placed into the drainage area before bathing the patient.

WARNING: Do not use water hotter than 40°C (104°F) for bathing a patient.

WARNING: The shower mixer/device used in conjunction with the Pacific Shower-Bathing Trolley must have a built in safeguard against the possible discharge of excessively hot water.

WARNING: The Pacific Shower-Bathing Trolley is designed for bathing one patient at a time only.

WARNING: All the trolley's castors must be locked before and throughout the entire patient transfer and bathing operations.

WARNING: The trolley should be left in its lowest position with tub sides up, when unattended, in order to reduce the risk of injury due to falls.

WARNING: Use extreme caution if razors are being used while patient is in PSBT.

To wash the Patient's Hair:

1. Place the waterproof pillow under the patient's head area, with the highest part of pillow placed under the patient's neck.
This allows the patient's head to tilt back slightly providing better access to the patient's hair.
2. Proceed to wash the patient's hair.

To dry the Patient:

1. Remove the drain plug (if in use) and drain the water from the tub.
2. Raise the patient platform to its highest height.
3. Dry and dress the patient on the raised Pacific Shower-Bathing Trolley, or lower the patient platform and tub sides to allow mobile patients to vacate the trolley with assistance for drying and dressing.

4. OPERATION

4.8 SIDERAILS (OPTION)

see figures 13-16

The siderails are located on either side of the PSBT.

The siderails are designed to aid the patient during the bathing process i.e. the patient can hold on to the siderail for support when lying on their side or rolling over.

To release:

1. Press the release buttons on the siderail legs and lift the siderail out of its sockets (see Figure 14 and 15).

The siderails should be placed on the storage hooks on either side of the PSBT when not in use.

NOTE: Siderails should always be stored in the storage hooks when not in use.

CAUTION: Do not sit or stand on siderails.

CAUTION: Siderails should be removed during patient transfer.

WARNING: Siderails are not intended to be used as patient restraints or to prevent the patient rolling off the platform.

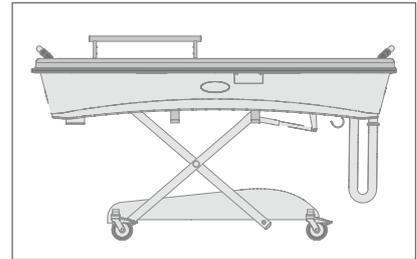


Figure 13. Siderail in use

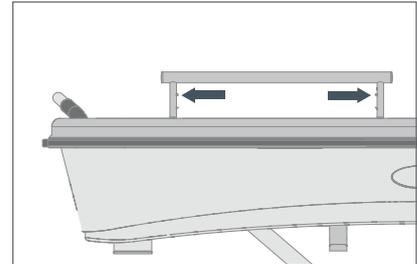


Figure 14. Siderail release button

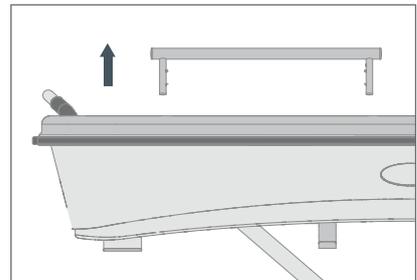


Figure 15. Siderail released

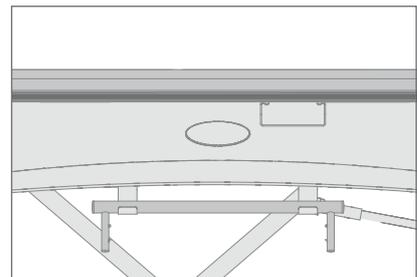


Figure 16. Siderail in storage

- NOTE:** For a list of approved cleaning products go to the Howard Wright Limited website on <http://www.howardwrightcares.com>
- CAUTION:** Before cleaning:
- Depress the castor pedal into the Brake position.
 - Unplug the power cord from the mains supply.
- CAUTION:** Do not use abrasive cleaning products.
- CAUTION:** Do not use a water temperature of more than 50°C (122°F).
- CAUTION:** Do not use excess water.
- CAUTION:** Do not use a steam cleaner, washing tunnel, high-pressure spray, or hose.
- CAUTION:** Do not immerse the product in water.
- CAUTION:** Do not clean or degrease the steel shafts of the actuators.
- CAUTION:** Use only approved cleaning products. If bleach is necessary strictly adhere to the BLEACH CLEANING instructions (section 5.3).
- CAUTION:** Keep sharp objects such as razors etc away from the tub top.
- CAUTION:** Do not use oil based products.
- CAUTION:** Do not unplug the handset or actuators from the control box for cleaning.

5.1 PACIFIC SHOWER BATHING TROLLEY ALL SURFACES

see figure 17

To wash:

- Raise the tub sides to full height (fabric is taut).
Ensure the free end of the drain hose is placed in drainage area.
- Flush the whole surface with fresh warm water (less than 50°C, 122°F).
- Wipe bogie and frame with a sponge or soft cloth wetted with warm water containing soap or mild detergent.

To dry:

- Leave the tub sides raised to drain and dry.
- Wipe dry with a clean, soft cloth or sponge.
- Lower the tub sides after drying is complete.

To disinfect:

- Wash the surface.
- Wipe the surface with a sponge or soft cloth wetted with an approved cleaning product.
- Wipe off residue with water using a soft cloth or sponge.
- Dry.

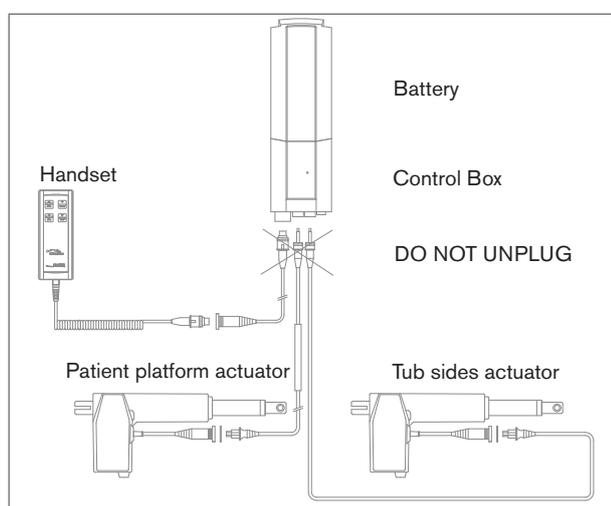


Figure 17. Electrical system, do not unplug

5. CLEANING

REMEMBER

The upholstered tub has a bielastic backing fabric with a polyurethane top coating. Soap residue left on the tub surface can degrade the surface.

Therefore, care should be taken to flush away all residual soap after use.

CAUTION: Failure to follow these recommendations may lead to fabric failure.

5.2 WATERPROOF PILLOW

Follow the same directions as for the surface (see section 5.1)

The same CAUTIONS apply.

5.3 BLEACH CLEANING INSTRUCTIONS

If none of the approved cleaning products provide the disinfectant level required then use a solution of 5.25% Sodium Hypochlorite diluted to less than 1 part bleach to 100 parts water (volume to volume).

Bleach products are corrosive and degrading in nature and may cause damage to your product. If bleach is used, measures must be taken to ensure the product is rinsed thoroughly with clean water and thoroughly dried.

Failure to rinse and dry the product will leave a corrosive residue on the surface possibly causing corrosion.

Failure to follow the above directions may void the product's warranty.

6. UNPACKING & COMMISSIONING

NOTE: To manoeuvre the Pacific Shower-Bathing Trolley, release the brakes by setting the castors into the neutral position. (see section 4.1).

To unpack and commission the trolley:

1. Remove any external packaging.
2. Cut and remove the transport ties.
(The locations of these ties will vary depending on how the Pacific Shower-Bathing Trolley has been transported.)
3. It will be necessary to secure the Pacific Shower-Bathing Trolley's castors if the trolley has been packaged in a carton. Secure the steer castor at the right hand side, drain end, of the trolley. Special care must be taken that it tracks in line with the trolley.
4. Install the battery (see section 4.3).
5. Check that the Pacific Shower-Bathing Trolley is operating correctly (see section 9.5).

WARNING: Ensure that the handset cord is positioned so that it cannot become damaged during trolley adjustment.

CAUTION: Ensure that all transport ties have been cut and removed before using the Pacific Shower-Bathing Trolley.

CAUTION: Charge the battery as often as possible (minimum recommendation: six hours once every three months).
Fully discharging the battery will reduce its life.

7. PACKING FOR TRANSPORT OR STORAGE

To pack the Pacific Shower-Bathing Trolley for transport or storage:

1. Ensure the castors are locked.
2. Fully lower the tub sides and patient platform.
3. For transport only, use packing string to tie:
 - The battery compartment to the tub frame (in its up position).
 - The handset to the tub frame or battery compartment.
 - The drain hose to the tub frame or disconnect it.
4. Cover the shower trolley to protect from dust.

CAUTION: Do not leave the Pacific Shower-Bathing Trolley in direct sunlight.

CAUTION: To maximize the life of the tub stretch fabric the Pacific Shower-Bathing Trolley should be stored with the tub sides down.

NOTE: For least space occupation the tub sides and the patient platform are both in their lowest positions.

CAUTION: The transport and storage environment should be as follows:

- Ambient temperature range: +5°C to +40°C.
- Relative humidity range: 30% to 75%.
- Atmospheric pressure range: 70 kPa to 106 kPa.

8. TROUBLE SHOOTING GUIDE

Use Table 1 below for assistance if the Pacific Shower-Bathing Trolley cannot be adjusted correctly using the electric controls.

If further assistance is required, contact Howard Wright Limited or an authorized service agent.

Table 1. Trouble shooting guide

Problem	Possible Causes	To Resolve
Handset buttons do not work.	<p>The battery charge is low.</p> <p>The battery is not connected properly to the control box.</p> <p>The duty cycle (mode) has been exceeded, overheating the control system.</p>	<p>Recharge the battery.</p> <p>Remove the battery from the battery compartment, then reattach the battery ensuring that it latches securely (ensure that it “clicks” into place).</p> <p>Wait until system has cooled to normal operating temperature.</p>
Patient platform lowers but will not raise the load.	The trolley is overloaded. (SWL = 200kg (440lbs) including patient, water and accessories).	Reduce load.
Patient platform and/or tub sides high/low movement is slow.	The battery charge is low.	Recharge the battery.
Patient platform and/or tub sides high/low movement stops unintentionally.	<p>The trolley is overloaded. (SWL = 200kg (440lbs) including patient, water and accessories).</p> <p>The battery charge is low.</p> <p>The selected movement has reached its limit of adjustment.</p>	<p>Reduce load.</p> <p>Recharge the battery.</p>
The control box beeps and the LED on the handset illuminates when pushing a button on the handset	The battery charge is low.	Recharge the battery.

9. MAINTENANCE & SERVICING

9.1 ANNUAL INSPECTION

Inspection of the trolley should be performed annually using the user maintenance checklist (section 9.5).

No maintenance, servicing, or repairs should be carried out by the user.

9.2 AUTHORISED SERVICING

All maintenance, servicing, and repairs must be carried out by Howard Wright Limited or an authorized service agent.

WARNING: Do not modify the Pacific Shower-Bathing Trolley or its accessories without the agreement of Howard Wright Limited.

CAUTION: Do not tamper with any of the electric components.

9.3 OBTAINING SPARE PARTS & SERVICE

Howard Wright Limited's products are supported by an extensive network of authorized service agents. These service agents are trained by Howard Wright Limited. For contact details of your nearest service agent please contact Howard Wright Limited.

9.3.1 HOWARD WRIGHT LIMITED CONTACT DETAILS

Name:	Howard Wright Limited	Howard Wright Limited
Address:	PO Box 3003, Fitzroy Paraite Road, Bell Block New Plymouth 4341 New Zealand	PO Box 2786 U1/2 Production Road Taren Point, NSW 2229 Australia
T.	+64 (6) 755 0976	+61 (2) 9540 5118
F.	+64 (6) 755 0908	+61 (2) 9540 4840
E.	service@howardwrightcares.com	service@howardwrightcares.com

9.3.2 TROLLEY INFORMATION

When making service or repair enquires, please provide the following information:

- Pacific Shower-Bathing Trolley model (MODEL:).
- Pacific Shower-Bathing Trolley manufacture date (DATE:).
- Pacific Shower-Bathing Trolley serial number (SN:).

This information is recorded on the serial number label located on the drain end right elevator leg. Please see section 12 for more information.

9.4 BATTERY REPLACEMENT

The life of the battery will depend on the kind of use that it has had. As a guide, it should be replaced every four years. This should only be undertaken either by Howard Wright Limited, an authorized service dealer or a Howard Wright Limited trained user technician.

CAUTION: The battery is of lead-acid type and should be disposed of safely so as not to cause damage to the environment.

9.5 USER MAINTENANCE CHECKLIST

Carry out the following maintenance checks annually:

a) Visual check

- Visually check all Pacific Shower-Bathing Trolley components for dents, bends, scratches, or other obvious signs of mechanical damage.

b) Electric controls

- Check that all of the buttons on the handset work correctly.
- Check the patient platform rises and lowers fully.
- Check the tub sides rise and lower fully.

c) Electrical system

- Check all electrical cables for cracks, cuts, or damage from crushing.
- Connect the battery to the battery charger to check the yellow “Charge” LED on the charger illuminates, indicating the battery is charging.
- Check that the green “On” LED on the charger is illuminated which indicates that the charger is connected to the power supply.

d) Castors

- Lock the brake castors. Check that the castors cannot swivel or roll.
- Lock the steer castor. Check that the castor locks in line with the length of the trolley and cannot swivel.
- Place all of the trolley's castors in the neutral position. Check that the castors are free to swivel and roll.
- Check that the trolley's castors do not 'click' when rolling.

e) Mechanical items

- Check that all bolts, screws, nuts and pivot pins are securely fastened.
- Adjust the patient platform and tub sides. Check that there are no abnormal noises. Check that the full range of movement is available (see section 10.1).
- Check the function of the battery compartment. Does it move properly between up and down positions, and stay in those positions.
- Fill the tub with water. Check that the tub fabric is undamaged.
- Check that the drain parts seal properly towards the tub surface.
- Check that the drain plug seals properly in the drain hole.
- Check that the drain hose is undamaged and that the hose end can be easily attached to the storage bracket located behind the tub skirt.

9. MAINTENANCE & SERVICING

9.6 TO REMOVE DRAIN PARTS AND DRAIN HOSE

see figure 18

1. Raise the tub sides to their highest position and raise the patient platform to its highest position.
2. Remove the hose clamp, and then the drain hose.
3. Unscrew the large nut from the plastic waste.
4. Tap the plastic waste out of its hole in the tub platform.

NOTE: To replace the drain hose reverse the procedure for removing. Screw the large nut tightly to the plastic waste to compress the upholstery padding.

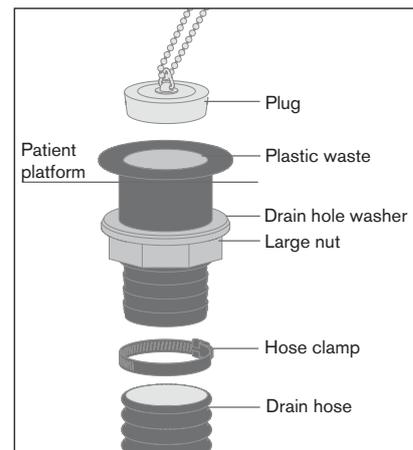


Figure 18. Drain Parts

9.7 TO REMOVE UPHOLSTERED TUB TOP

1. Remove the drain hose (see section 9.6).
2. Unclip the domes that secure the skirts of the upholstered top to the steel tub frame.
3. Lower the tub sides to their lowest position. The patient platform should be in its highest position.
4. Remove the tub skirt by unscrewing 10x M6 button head socket screws that secure it to the steel tub frame.
5. Remove the push handles by unscrewing 4x M8 socket head capscrews.
6. Remove 12x M6 socket head capscrews that secure the outer timber frame of the upholstered top to the steel tub frame.
7. Remove 12x M6 socket head capscrews that secure the platform of the upholstered top to the inner steel platform frame.
8. Lift the upholstery tub top off.

9.8 TO REPLACE UPHOLSTERED TUB TOP

1. Carefully place the new upholstered tub top in position. Ensure that the holes in the outer timber frame are located over the four bosses sticking out of the steel tub frame.
2. Ensure that the tub sides are in their lowest position and that the patient platform is in its highest position.
3. Screw 12x M6 socket head capscrews to secure the outer timber frame to the steel tube frame.
4. Attach the push handles by screwing 4x M8 socket head capscrews in place.
5. Secure the upholstered tub top platform to the steel tub platform using 12x M6 socket head capscrews.
6. Clip the dome caps on the upholstered top to the dome studs attached to the steel tub frame.
7. Reattach the drain hose (see 9.6 above).
8. Reattach the buffer rail and buffer rubber if they were removed.
9. Reattach the tub skirt using 10x M6 button head socket screws.

10. SPECIFICATIONS

10.1 PSBT SPECIFICATIONS

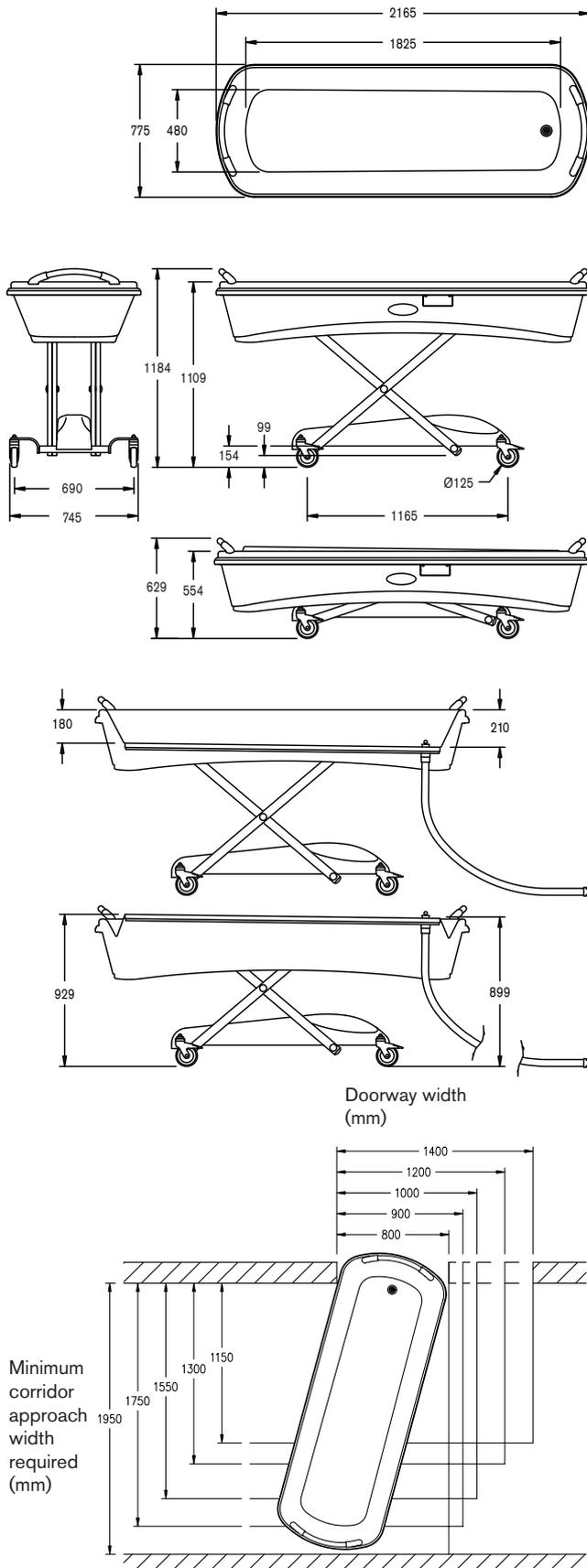


Figure 19. Pacific Shower-Bathing Trolley specifications

MODEL:	ST 2.23+2
IP RATING:	IP65
EEC CLASSIFICATION:	Class 1, Non-invasive
MAXIMUM SWL:	200kg/440lbs (incl. patient, water & accessories)
TROLLEY MASS:	100kg

EXTRA FEATURES:

- Switch mode battery charger power cord and brackets for wall mounting
- Buffer rail & buffer rubber around the perimeter of the tub
- LINAK electric system with 2 actuators, control box, handset & battery. Approved to EN 60601-1
- Battery charger input: 110-240 VAC, 50-60 Hz, 650mA maximum
- Power source: Rechargeable battery, 24 VDC, 2.9Ah
- Battery charge time: 6 hours, number of full load cycles: app. 30
- Time to raise or lower patient platform: 30sec
- Time to raise or lower tub sides: 22sec
- Tub top is seamless stretch polyurethane with foam padding for extra patient comfort
- Drain hose (50mm inside diameter)
- Plastic drain hole and plug
- Push handles at both ends
- Waterproof pillow
- Handset storage on head end bracket and storage rails
- Siderails available

DIMENSIONS:

- Overall dimensions: L: 2165mm, W: 775mm
- Tub platform: L: 1825mm, W: 480mm
- Wheel base: 1165mm
- Wheel track: 690mm
- Maximum overall height: ST2.23+2: 1184mm
- Maximum trolley height: ST2.23+2: 1109mm
- Minimum overall height: ST2.23+2: 629mm
- Minimum trolley height: ST2.23+2: 554mm
- Maximum patient platform height (drain end): ST2.23+2: 899mm
- Maximum patient platform height (head end): ST2.23+2: 929mm
- Maximum tub depth (drain end): 210mm
- Maximum tub depth (head end): 180mm
- Castor diameter: Ø125mm
- 3 castors individual locking, 1 directional locking

UNDER TROLLEY CLEARANCES (FOR PATIENT LIFTERS)

- Minimum floor clearance*: ST2.23+2: 99mm
- Maximum floor clearance*: ST2.23+2: 154mm

TESTING:

- Developed in accordance with the requirements of AS/NZS 3200.2.38:2007 & IEC 60601-2-38:1996-10.

*Dimensions (DIM) vary with castor diameter.

11. ABBREVIATIONS, SYMBOLS & TERMINOLOGY

11.1 ABBREVIATIONS

ABS	Acrylonitrile Butadiene Styrene
AS/NZS	Australian/New Zealand Standard
CE	Communautés Européens
DC	Direct Current
EEC	European Economic Community
IEC	International Electrotechnical Commission
IP	Ingression Protection
LED	Light Emitting Diode
PE	PolyEthylene
PFC	Vinyl Nitrile Foam
PP	PolyPropylene
PU	PolyUrethane
PVC	PolyVinyl Chloride
SWL	Safe Working Load

11.2 TROLLEY ORIENTATION TERMINOLOGY

see figure 20

NOTE: The terms head end, drain end, left and right used in these instructions are referenced with respect to a patient lying face up on their back as follows.

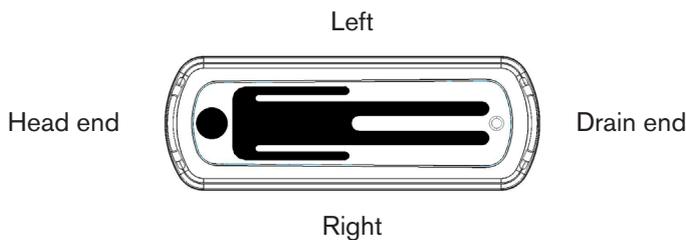


Figure 20. Trolley orientation terminology

11.3 Labels

Labels are placed on the Pacific Shower-Bathing Trolley to provide information, cautions and warnings. Read all labels before using the Pacific Shower-Bathing Trolley.

11.4 Serial Number Label

see figure 21

The serial number label is located on the drain end right elevator leg of the Pacific Shower-Bathing Trolley.

When making service or repair enquires, please provide the following information:

- PSBT model (MODEL:)
- PSBT manufacture date (DATE:)
- PSBT serial number (SN:)



Figure 21. PSBT serial number label

11. ABBREVIATIONS, SYMBOLS & TERMINOLOGY

	Attention: consult accompanying documents.
IP65	Ingression Protection (IP) rating, as per BS EN 60601-1 <u>First Number:</u> Dust ingression protection. 6 indicates total protection against dust. <u>Second Number:</u> Water ingression protection. 5 indicates protection against low pressure water jets.
	Indicated compliance with the applicable CE requirements of directive 93/42/EEC for medical devices, product Class 1.
24V DC	V Volts DC Direct Current
	Direct Current
Mode:	The Pacific shower-bathing trolley is intended for intermittent operation. Duty Cycle: ratio of operating time to the sum of the operating time and ensuing interval: no more than 10% of time, that is maximum 1 minute in total per every 10 minute period.
MODEL:	Trolley reference code.
DATE:	Date of PSBT manufacture.
SN:	PSBT serial number.
	Safe Working Load (SWL), kg.
	Do not use trolley end as a seat.
	Warning: potential squeezing/shearing point.
	Drain hose storage location.
	Battery compartment location.
	WEEE: Waste, Electrical and Electronic Equipment.
	Consult operating instructions

12. CONFORMITY

The Pacific Shower-Bathing Trolley satisfies the essential requirements of directive 93/42/EEC for medical devices, product Class 1.

12.1 TESTING & COMPLIANCE

Safe working load (SWL) tests

The Pacific Shower-Bathing Trolley has been developed to comply with the safe working load (SWL) requirements of:

- **IEC 60601-2-38:1996-10.**
Medical electrical equipment. Part 2-38: Particular requirements for the safety of electrically operated hospital beds.
- **AS/NZS 3200.2.38:1997.**
(Identical to IEC 601-2-38:1996-10.)

12.2 IP STANDARDS

- **BS EN 60529:1992.**

Specification of degrees of protection provided by enclosures.

IP65 6 - Totally protected against dust.

5 - Protected against low pressure jets of water from all directions, limited ingress permitted.

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