INSTRUCTIONS FOR USE

System 2000



04.AR.12_16EN • 06/2020

arjo
with people in mind

WARNING

To avoid injury, always read this Instructions for Use and accompanied documents before using the product.



Mandatory to read the Instructions for Use

Design Policy and Copyright
® and ™ are trademarks belonging to the Arjo group of companies.
© Arjo 2020

As our policy is one of continuous improvement, we reserve the right to modify designs without prior notice.The content of this publication may not be copied either whole or in part without the consent of Arjo.

Contents

Foreword 4
Intended Use 5
Safety Instructions 6
Preparations 7
System 2000 Bathtubs 8
Parts Designation 10
Control Panels 12
Buttons and Displays 14
Product Description/Functions 16
- Drain Control Knob 16
- Autofill 16
- Shower Handle 17
- Shower/Disinfection System (UK market only) 17
- P220 Temperature Display 18
- P300 Display 18
- Scalding Protection 18
- Shampoo/Body Wash (optional) 19
- Bath Oil/ArjoSound™ Water Conditioner (optional) 19
- Raise and Lower Bathtub 20
- Emergency Lowering (optional, not for UK market) 20
- Disinfection Unit (optional) 20
- Pillow 21
- Foot Support 21
- Toiletry Tray (optional) 21
- Hot Water Flush (Kit) 21

Hydromassage System 22
Hydrosound System 24
Sound & Vision System 26
Change Default Setting (P300 only) 27
Bathe Patient using a Lift Hygiene Chair 28
Bathe Patient using a Lift Bath Trolley 34
Cleaning and Disinfection Instructions 40
Care and Preventive Maintenance 52
Troubleshooting 56
Error Codes (P300 only) 57
Technical Specifications 58
List of Standards and Certificates 63
Labels 64
Electromagnetic Compatibility 66
Parts and Accessories 69

Foreword

Thank you for purchasing Arjo Equipment

The Arjo System 2000® bath is part of a worldwide family of quality products designed especially for efficient patient hygiene and good ergonomics for the caregiver.

Please read this *Instructions for Use* thoroughly!

Please read this *Instructions for Use (IFU)* in its entirety before using your *System 2000* bath. Information in this *IFU* is crucial to the proper operation and maintenance of the equipment, will help protect your product, and make sure that the equipment performs to your satisfaction. Some of the information in this *IFU* is important for your safety and must be read and understood to help prevent possible injury.

Unauthorized modifications on any Arjo equipment may affect its safety. Arjo will not be held responsible for any accidents, incidents or lack of performance that occur as a result of any unauthorized modification to its products.

Service and Support

A service routine has to be done on your *System 2000* to make sure the safety and operating procedures of your product. See section *Care and Preventive Maintenance on page 52*.

If you require further information, please contact Arjo for comprehensive support and service programs to maximize the long-term safety, reliability and value of the product.
Contact Arjo for replacement parts. Contact information appears on the last page of this *Instructions for Use (IFU)*.

Serious incident

If a serious incident occurs in relation to this medical device, affecting the user, or the patient then the user or patient should report the serious incident to the medical device manufacturer or the distributor. In the European Union, the user should also report the serious incident to the Competent Authority in the member state where they are located.

Complementary Information

A set of Quick Guides/Posters accompanies this *IFU*. Please note that the Quick Guides/Posters do not replace the information in this *IFU*. The *IFU* contains additional important safety instructions.

A Video accompanies this *IFU*.

Please note that the Video does not replace the information in this *IFU*. The *IFU* contains additional important safety instructions.

Definition in this *IFU:*

WARNING

Means:
Safety warning. Failure to understand and obey this warning may result in injury to you or to others.

CAUTION

Means:
Failure to follow these instructions may cause damage to all or parts of the system.

NOTE

Means:
This is important information for the correct use of this system or equipment.



Means:
The name and address of the manufacturer.

Intended Use

This equipment must be used in accordance with these safety instructions.

Anyone using this equipment must also have read and understood the instructions in this *Instructions for Use (IFU)*.

If there is anything you do not completely understand, ask your Arjo representative.

This equipment is intended for therapeutic bathing and showering hospital or care facility residents under the supervision of trained skilled nursing staff in accordance with the instructions outlined in the *Instructions for Use* (*IFU*).

Equipment fitted with a bathtub disinfection device must be disinfected according to the instructions established in the IFU. All other uses of the disinfection device must be avoided.

The System 2000 should only be used for the purpose specified in this *Instructions for Use*. Any other use is prohibited.

Resident Assessment

We recommend that facilities establish regular assessment routines.

Caregivers should assess each resident according to the following criteria prior to use:

- The resident's weight should not exceed the Safe Working Load (SWL) of the lift hygiene chair, lift bath trolley or sling lifters.
- Active and semi-active residents (i.e. able to sit upright self supported on the side of a bed or toilet) and completely bedridden residents can use the bath. Correct transfer equipment shall be used.

If a resident does not meet these criteria an alternative equipment or system shall be used.

Installation Requirements

The equipment must only be used for the purposes stated above and must be installed according to the *Assembly and Installation Instructions*, which can only be superseded by local code.

Indication for Use

To relieve pain and itching and as an aid in the healing process of inflamed and traumatized tissue, and it serves as a setting for removal of contaminated tissue.

Expected Service Life

The expected lifetime of this equipment, unless otherwise stated, is ten (10) years, subject to required preventative maintenance as specified in the section *Care and Preventive Maintenance on page 52*, the *Assembly and Installation Instructions* and the *Parts List*.

Safety Instructions

WARNING

To avoid injury to both the patient and the caregiver, never modify the equipment or use incompatible parts.

WARNING

To avoid explosion or fire, never use the equipment in oxygen rich environment, in presence of heat source or flammable anaesthetic gases.

WARNING

To avoid electric shock, never use other electrical equipment near this device.

WARNING

To avoid falling, make sure the patient always remains in a seated position.

WARNING

To avoid injury, make sure that the patient is not left unattended at any time.

NOTE

A medical assessment of the patient must be made in order to ensure their suitability to use this product.

Preparations

Site Preparation

Prior to installation of the *System 2000* bath the floor and walls within the required area must be finished.

Material: The floor should be made of a slip-resistant material, free of bumps.

Floor Slope: When using a floor drain, the slope towards the drain should not exceed 1:50.

Floor attachments: The floor construction must be suitable for anchoring the bolts.

Actions Before the First Use

(10 steps)

1 Make sure that the bath has been installed according to the *Assembly and Installation Instructions*.

2 Check that all parts of the product are supplied. Compare with section *Parts Designation on page 10*. If any part is missing or damaged - do NOT use the product.

3 Unpack the plastic from the *Sound & Vision* system hand control, if any.

4 Read the *IFU*.

5 Disinfect the product according to section *Cleaning and Disinfection Instructions on page 40*.

6 Perform a functionality test according to section *Care and Preventive Maintenance on page 52*.

7 Choose a designated area, where the *IFU* should be kept and is easily accessible at all times.

8 Make sure the thermostatic mixer has been calibrated according to the *Assembly and Installation Instructions* by an Arjo service technician.

9 **WARNING**

To prevent scalding, make sure that the water mixer has been calibrated. Confirm that responsible organization has established calibration routines.

10 Make sure to have a rescue plan ready in case of a patient emergency.

Actions Before Every Use

(5 steps)

1 Check that all parts are in place. See section *Parts Designation on page 10*.

2 Check bath and accessories for damage.

3 If any part is missing or damaged - do NOT use the product.

4 Check the liquid level of disinfection bottle (*P220* only).

5 **WARNING**

To prevent cross-contamination, always follow the disinfection instructions in this *Instructions for Use.*

Before every use, make sure the *System 2000* bath is cleaned and disinfected according to section *Cleaning and Disinfection Instructions on page 40*.

NOTE

If you have any questions, please contact your local Arjo representative for support and service. The contact information is listed on the last page of this *IFU*.

System 2000 Bathtubs

Rhapsody®

1600 mm (63”)

1900 mm (75”)

2150 mm (85”)

White

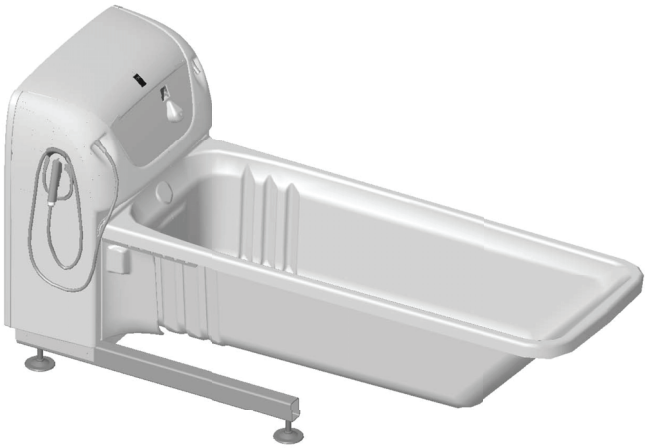


Primo®

1600 mm (63”)

1900 mm (75”)

White

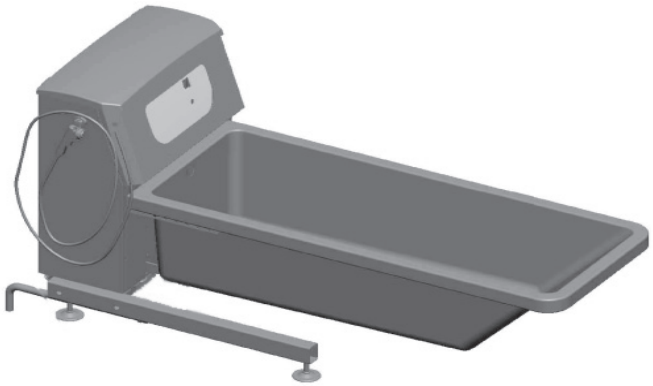


Primo® Ferro

1870 mm (73 5/8”)

2120 mm (83 1/2”)

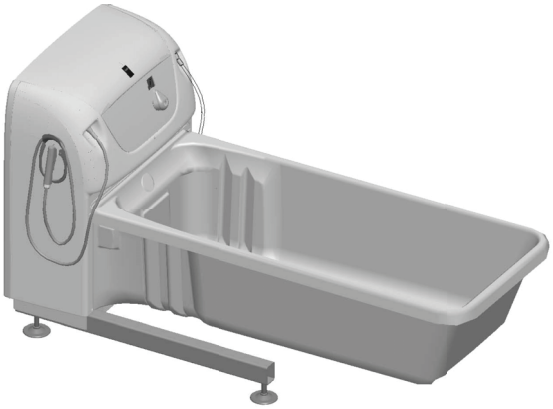
Stainless steel



Harmonie™

1680 mm (66 1/8”)

White



Intentionally left blank

Parts Designation

1 Control panel lid

2 Control panel

3 Patient shower handle

4 Filling spout

5 Dispenser outlet for shampoo and bath oil (*ArjoSound* water conditioner)

6 Surface overflow outlet and drain control knob

7 Temperature/water level sensor

8 Temperature/water sensors

9 Drain with a drain plug

10 Foot support

11 Bathtub 

12 Drainage hose

13 Foot pad for 1680 mm (66 1/8”), 1870 mm (73 5/8”) and 1900 mm (75”) bathtubs.

14 “Duck Foot” for 1600 mm (63”), 2120 mm (83 1/2”) and 2150 mm (85”) bathtubs.

15 Pillow

16 Toiletry tray (optional)

17 Emergency lowering (optional)

18 Compartment for shampoo/bath oil (*ArjoSound* water conditioner) and disinfectant.

19 Lock bracket

Disinfection unit (optional)
Not WRAS approved

20 Disinfection spray handle

21 Disinfectant bottle compartment under shampoo/ bath oil (*ArjoSound* water conditioner).

22 Flow meter

Hydromassage™ system (optional)

23 Water flow and air mix control

24 *Hydromassage* system outlet with quick coupling device

25 Suction inlet

26 Treatment hose with nozzle (accessory)

Hydrosound® system (optional)

27 *Hydrosound* system transducer plate

28 Intensity control knob

Sound & Vision® system (optional)

29 *Sound & Vision* system light

30 Speakers

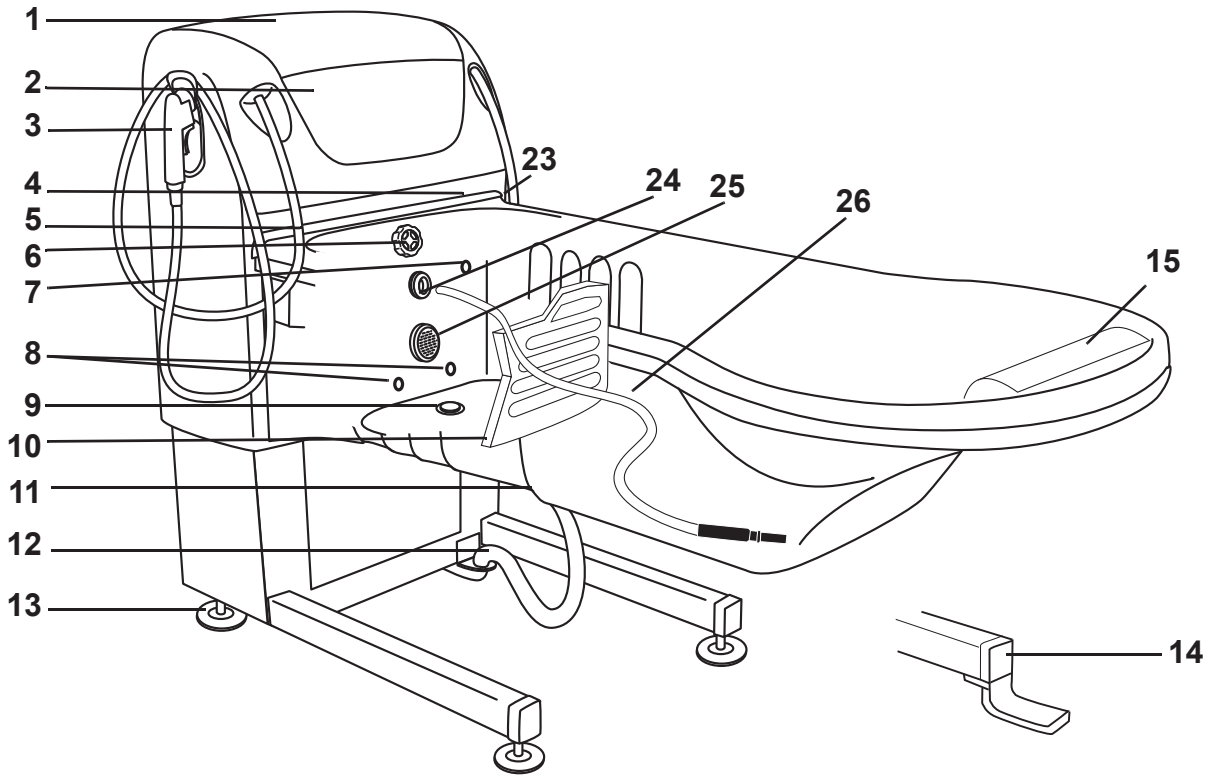
31 Remote control

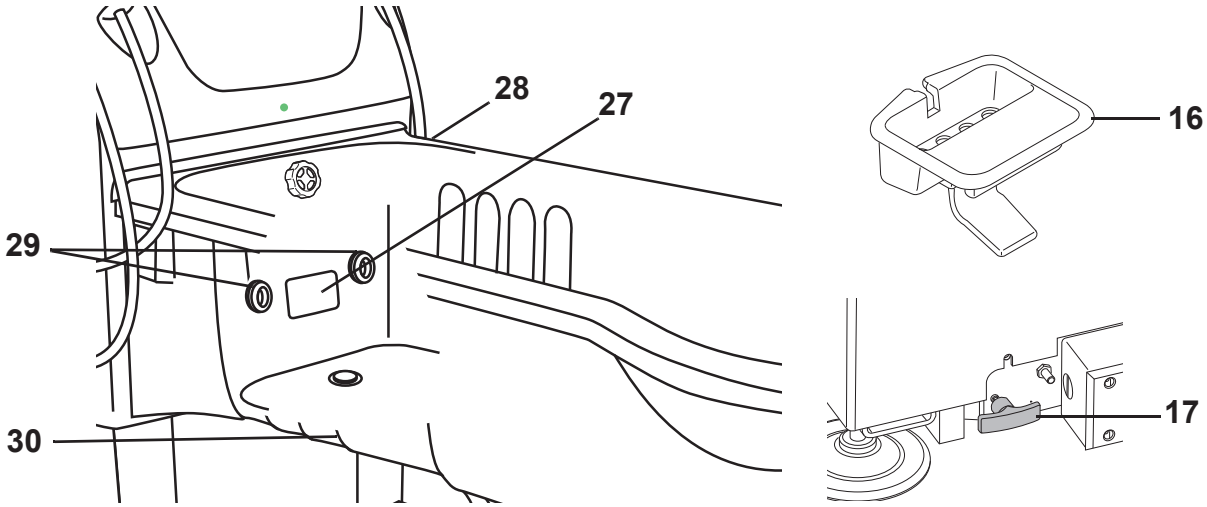
32 USB connector

33 USB memory stick

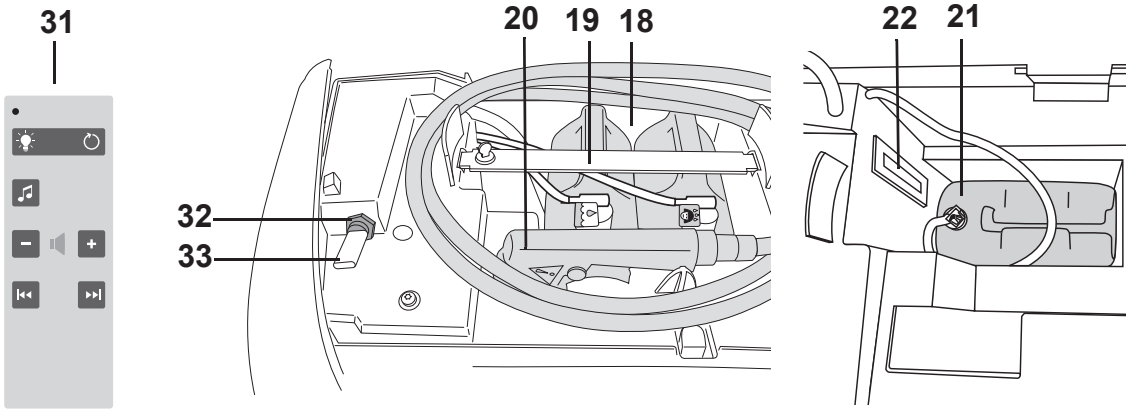


Type B, Applied part.
Degree of Protection - Electrical shock



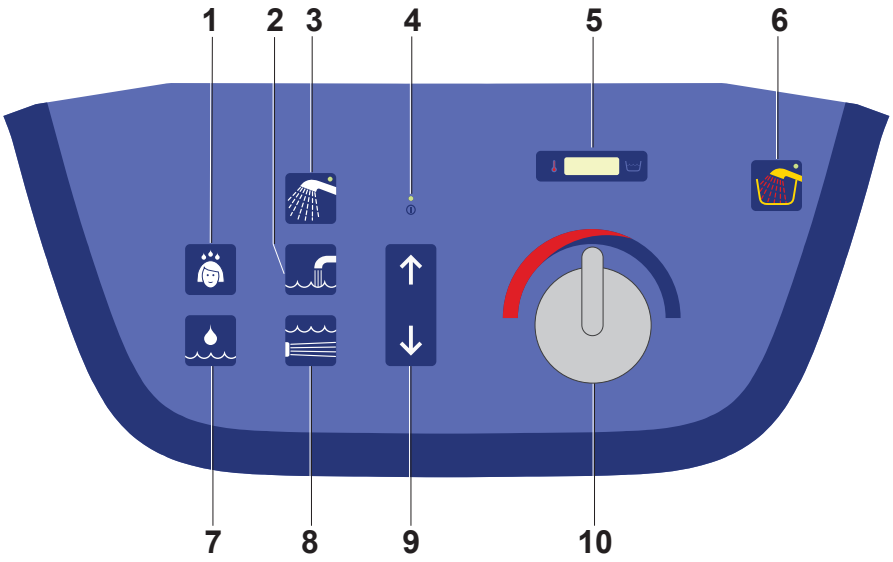


UNDER THE CONTROL PANEL LID



Control Panels

P220 Control Panel



1 Shampoo/body wash ON/OFF

2 Autofill ON/OFF

3 Shower ON/OFF

4 Mains power indicator

5 Temperature display - bathtub water

6 Disinfection ON/OFF

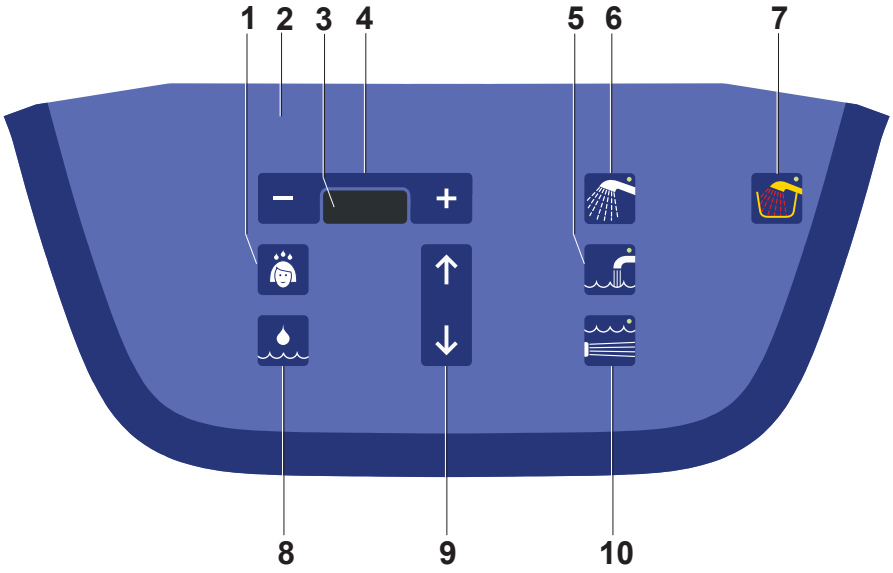
7 Bath oil/*ArjoSound* water conditioner ON/OFF

8 *Hydromassage/Hydrosound* system ON/OFF

9 Raise and lower the bathtub

10 Temperature setting knob

P300 Control Panel



1 Shampoo/body wash ON/OFF

2 Hidden button (change default setting according to *Change Default Setting (P300 only) on page 27*)

3 Display - temperature, filling, bathtub water and disinfectant, error codes etc.

4 Temperature setting: colder (-), warmer (+)

5 Autofill ON/OFF

6 Shower ON/OFF

7 Disinfection ON/OFF

8 Bath oil/*ArjoSound* water conditioner ON/OFF

9 Raise and lower the bathtub

10 *Hydromassage/Hydrosound* system ON/OFF

Buttons and Displays



P300



P220

Autofill Button

1 Press Autofill button to fill bath to preset level.

2 LED lights up when filling is active (P300).
No LED is available on P220.

3 Press the Autofill button again to stop the filling.



Shower Button

1 Press the Shower button to start the shower.

2 Press the Shower button again stop the shower.

3 LED lights up when active.

4 The shower function shuts off after 15 minutes. Press Shower button to restart.



Raise Bathtub Button

- Press and hold in the Raise Bathtub button to raise the bathtub.



Lower Bathtub Button

- Press and hold in the Lower Bathtub button to lower the bathtub.

Temperature Display - Bathtub water (P220)

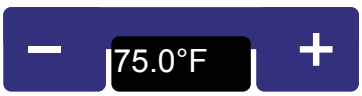
The display shows the current water temperature in the bathtub.

- *P220* has a mechanical and electronic scalding protection.



Display (P300)





The display shows the temperature of the filling water, active shower and disinfectant liquid from the disinfection spray handle.

- Press plus (+) for warmer water and press minus (-) for colder water.
- Press plus (+) or minus (-) to select between preset autofill levels.
- Provides digital adjustment of the *Hydrosound* system.
- Built-in electronic scalding protection.



P300 StandbyMode

- The display will show two dashes when there is no water in the bathtub and no functions are activated.



Shampoo/Body Wash Button

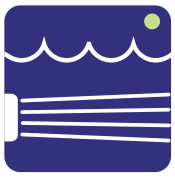
- Press the Shampoo/Body Wash button to dispense shampoo/body wash from the outlet.



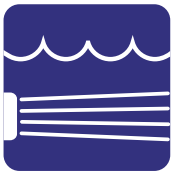
Bath Oil/ArjoSound™ Water Conditioner Button

1 Press the Bath Oil/*ArjoSound* water conditioner button to dispense Bath Oil/*ArjoSound* water conditioner from the outlet.

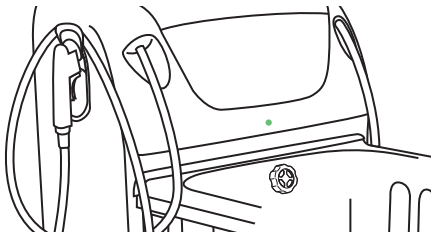
2 Baths equipped with the *Hydrosound* system have *ArjoSound* water conditioner instead of Bath Oil.



P300



P220



Hydromassage™/Hydrosound® System Button (optional)

The bath is either equipped with *Hydromassage* system or with the *Hydrosound* system.

1 Press the *Hydromassage/Hydrosound* system ON/OFF button to start hydromassage (built-in jets) or hydrosound (low frequency ultra sound).

2 Press the *Hydromassage/Hydrosound* system ON/OFF button again to stop hydromassage/hydrosound.

3 LED lights up green when active (P300).
LED is placed below the control panel on *P220*. It lights up green when *hydrosound* is active (no indication for *hydromassage* on P220).

4 The *Hydromassage/Hydrosound* system will automatically shut itself off after 15 minutes. There is a waiting time of 15 minutes time before the function can be restarted.



Disinfection Button (optional)

Note that the button is always on the panel but the function might not be included.

- Press the disinfection button to activate disinfection unit.
- LED lights up when active.
- Low disinfectant warning indicators (*P300* only).
- Button only works when there is no water in the bathtub and no functions are activated.

Product Description/Functions

Fig. 1

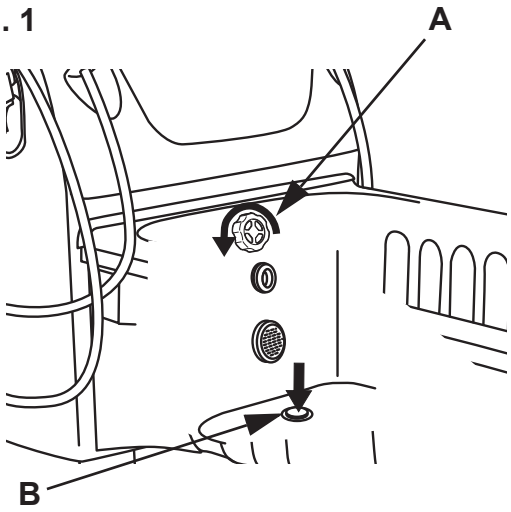
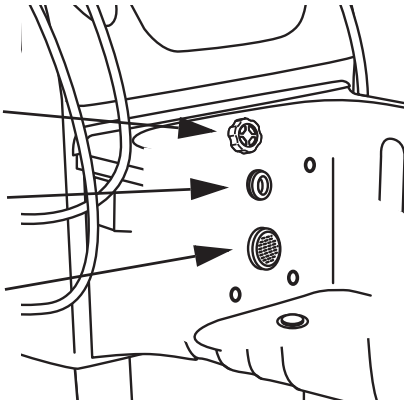


Fig. 2



Fig. 3



Drain Control Knob

Turn the drain control knob **(A)** to open and close the drainage plug **(B)** of the bathtub. **(See Fig. 1)**

- Turn **Clockwise** to **open**.
- Turn **Counter Clockwise** to **close**.

The drain control knob is equipped with a built-in surface overflow outlet to prevent water to overflow the bathtub.

Autofill

The bath is equipped with an autofill function that prefills the bathtub to a preset water level. The preset autofill levels fluctuate depending on water pressure.

1 Press the Autofill button to start prefill. **(See Fig. 2)**

2 LED lights up when filling is active (P300).
No LED is available on P220.

3 The Autofill stops automatically when prefill level is reached.

4 Press the Autofill button to stop filling at any time during Autofill.

NOTE

If the Autofill button is pressed after the preset water level is reached, bathtub filling continues.

To adjust water level on the *P220,* call an Arjo service technician.

The *P300* has three different Autofill levels, Low, Normal and High. The preset level is Normal. **(See Fig. 3)**

To change between autofill levels, follow instructions below (*P300 only*).

Normal level

(preset, 30 s over the top sensor)

1 Push the Autofill button

2 The display shows: - - - -

After 8 s the filling water temperature is shown and no more level adjustments are possible.

Low level (preset, minus 20 s below the top sensor)

1 Push Autofill button

2 Push the minus (-) button

3 The display shows: 

4 After 8 s the filling water temperature is shown and no more level adjustments are possible.

High level (preset, 60 s over the top sensor)

1 Push autofill button

2 Push the plus (+) button

3 The display shows: 

After 8 s the filling water temperature is shown and no more level adjustments are possible.

Each level can be adjusted according to *Change Default Setting (P300 only) on page 27*.

Shower Handle

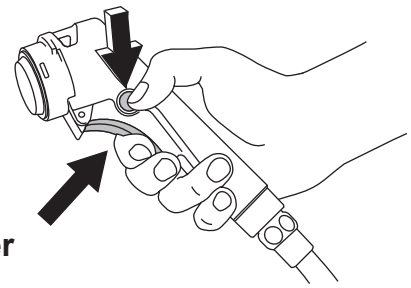
- Press the  Shower button to start the shower. The LED will turn green when active.
- Press the trigger on the shower handle to let water out.
- Hold the trigger in for constant water flow.

To get continuous water flow without having to hold in the trigger do as follow: **(See Fig. 1)**

- Press the trigger and push in the lock button on the side. The water will continue to flow without having to press the trigger.
- Release lock button by pressing the handle trigger and the lock button will pop up by itself.

The patient shower can not be activated during bathtub filling.

Fig. 1 **Lock Button**



Shower/Disinfection System (UK market only)

For UK version MPA system will flush 24 h after last use.

Fig. 1 *P220*
World



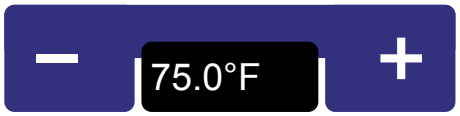
P220
USA



Fig. 2 *P300*
World



P300
USA



P220 Temperature Display

(See Fig. 1)

Temperature display

- Shows the current bathtub water temperature.

P300 Display

(See Fig. 2)

- Shows the preset autofill level first.
- Shows the active filling or shower temperature.
- Shows the current bathtub water temperature when filling and shower is not activated.
- During disinfection the display shows the temperature of the disinfectant.

Scalding Protection

WARNING

To prevent scalding if the scalding protection is activated, remove the patient from the bath immediately in a safe manner.

If a dangerous temperature level of 45 °C (113 °F) is reached, the scalding protection shuts off the water in less than 10 s.

- ***P220*** has a mechanical (calibration and mixer) scalding protection which disables high temperature settings.
- There is in addition to the mechanical scalding protection an electronic one equipped with two sensors. When scalding protection turns on, all the LEDs flash and a beeping sound will be heard.
- ***P300*** has an electronic scalding protection and is equipped with three sensors. The display shows - - - - and a beeping sound will be heard. During this time the *P300* recalibrates.

Reset scalding protection (P220 only) (5 steps)

1 Make sure both LEDs at the Disinfection/Autoclean button and the Patient Shower button have stopped flashing.

2 Turn the knob on the thermostatic mixer to COLD.

3 Press the Tub Filling button and fill the bathtub until the temperature display shows 30-35 °C (86-95 °F).

4 Press the Shower button. Lift off the shower handle, direct it away from yourself down into the bathtub. Press the trigger on the shower handle.

5 Allow a few seconds for the water to reach correct temperature.

Fig. 1

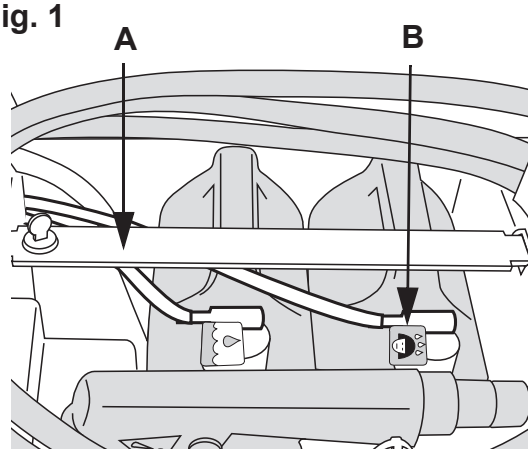


Fig. 2

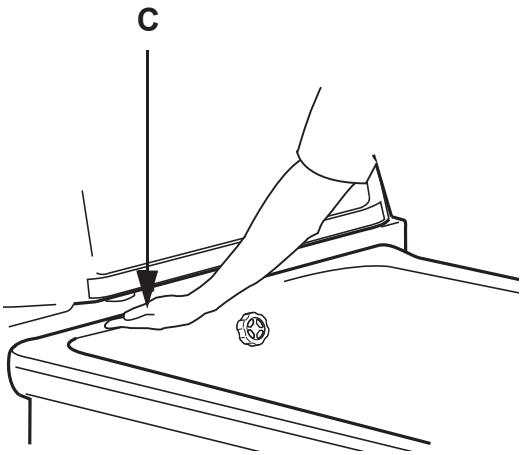


Fig. 3

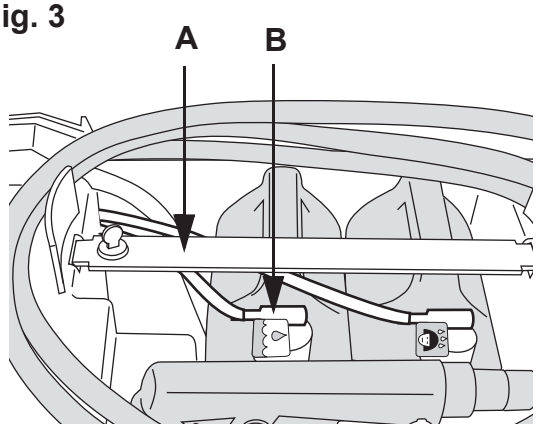
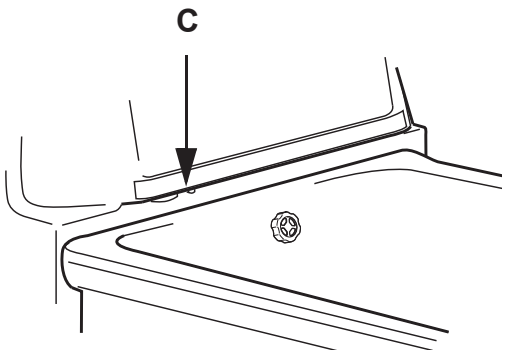


Fig. 4



Reset scalding protection (P300 only) (4 steps)

P300 resets and recalibrates automatically.

1 Wait until the display indication - - - - disappears.

2 Press the Tub Filling button until the display shows 30-35 °C (86-95 °F).

3 Press the Shower button. Lift off the shower handle, direct it away from yourself down into the bathtub. Press the trigger on the shower handle.

4 Allow a few seconds for the water to reach correct temperature.

Shampoo/Body Wash (optional)

The Shampoo/Body Wash bottle is placed under the control panel lid and lock bracket **(A)**. **(See Fig. 1)**

The bottle should be mounted to its corresponding treatment hose and bottle connection **(B)**. **(See Fig. 1)**

Arjo recommends to use Arjo Care™ shampoo and body wash, a mild all-in-one soap.

- Press the Shampoo / Body Wash button while holding your hand under the dispenser outlet **(C)**. **(See Fig. 2)**

The *P300* dosage time is preset but can be changed. See section *Change Default Setting (P300 only) on page 27*.

Bath Oil/ArjoSound™ Water Conditioner (optional)

The Bath Oil / *ArjoSound* water conditioner bottle is placed under the control panel lid and lock bracket **(A)**. **(See Fig. 3)** The bottle should be mounted to its corresponding treatment hose and bottle connection **(B)**. **(See Fig. 3)**

Arjo recommends to use Arjo Oil™ as a bath oil or *ArjoSound* water conditioner if the bath comes with the *Hydrosound* system.

- Press the Bath Oil / *ArjoSound* water conditioner button to dispenser directly into the bath water **(C)**. **(See Fig. 4)**
- A bath system with the *Hydrosound* system has *ArjoSound* water conditioner instead of bath oil (Arjo Oil™).

The *P300* dosage time is preset but can be changed. See section *Change Default Setting (P300 only) on page 27*.

Raise and Lower Bathtub

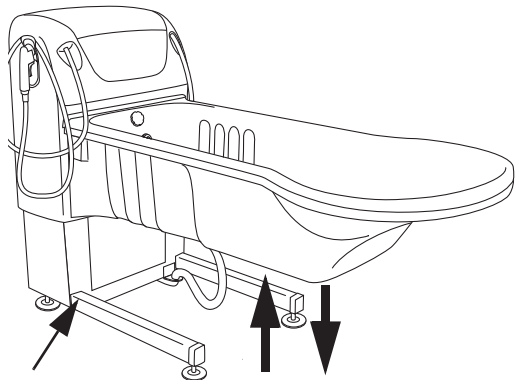
WARNING

To avoid entrapment of the patients or caregivers legs or feet, make sure that they are kept clear of all obstacles.

WARNING

To avoid the device in use from tipping, do not raise or lower other equipment close to it and be aware of stationary object when lowering.

Fig. 1

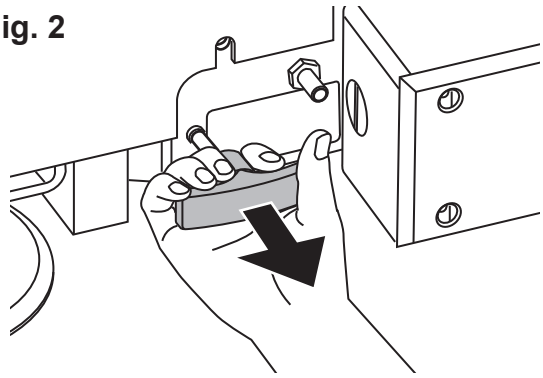


The bathtub can be raised and lowered for an ergonomic working height for the caregiver. **(See Fig. 1)**

- Raise the bathtub to a preferred height by pressing the raise the bathtub button.
- Lower the bathtub to a preferred height by pressing the lower the bathtub button.

Emergency Lowering (optional, not for UK market)

Fig. 2



In case of a power failure were the bathtub needs to be lowered do as follows:

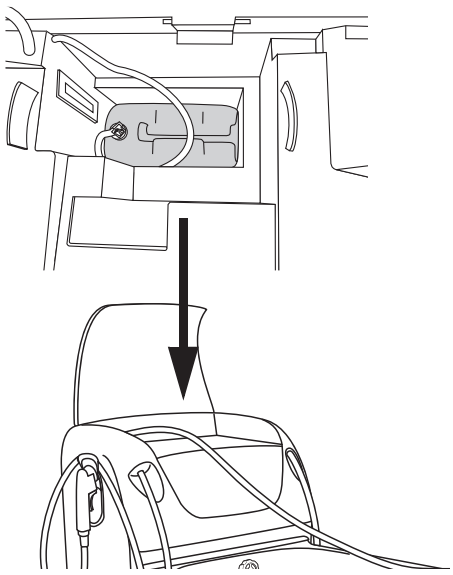
- Pull the emergency lowering handle on the bottom rear side of the panel. **(See Fig. 2)**
- The bathtub will move down as long as the handle is being pulled.

NOTE

If a buzzing sound is heard, the battery is low. Please contact your local Arjo service technician.

Disinfection Unit (optional)

Fig. 3



The bath has a built-in disinfection unit. The disinfectant bottle is located under the control panel lid and under the shampoo and bath oil bottles. **(See Fig. 3)**
The disinfectant bottle cap is adjustable and regulates the disinfectant/water ratio.

Under the control panel lid, there is a disinfection spray handle and a flowmeter. The flow meter shows the liquid mix ratio between the disinfectant and water.

Continue with the steps on the next page.

To use the disinfectant, see section *Cleaning and Disinfection Instructions on page 40.*

- The LED will turn green when active.
- The disinfection will only turn on if all other functions are turned off and there is no water in the bathtub.
- If the disinfectant bottle is empty on the *P300*, all the LED's will start flashing when pressing the disinfection button. A 5 s long beeping sound will be heard and it is not possible to disinfect the bath. The display will show StOP.
- Replace with a full disinfection bottle and try again (see section *Replace Disinfectant Bottle (System 2000 bath with disinfection option only) on page 42*).
- *P300* has automatic disinfection for the *Hydromassage* system (*P220* optional).

Fig. 1

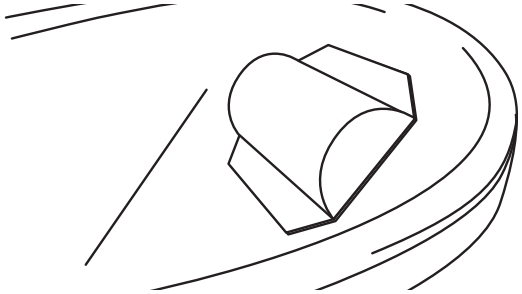
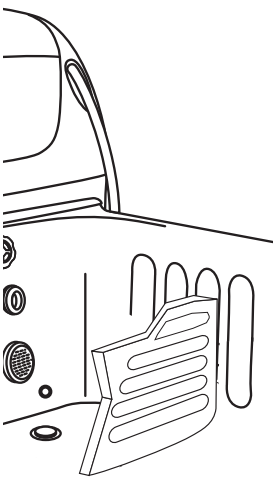
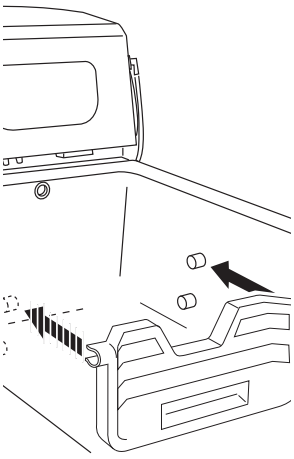


Fig. 2

Rhapsody®
Primo®
Harmonie™



Primo® Ferro



Pillow

The pillow is adjustable and attaches to the bathtub with suction cups located on the backside of the pillow. **(See Fig. 1)**

- Wet suction cups improve the grip.
- Place the pillow in a most convenient and supportive possible way for the patient.

Foot Support

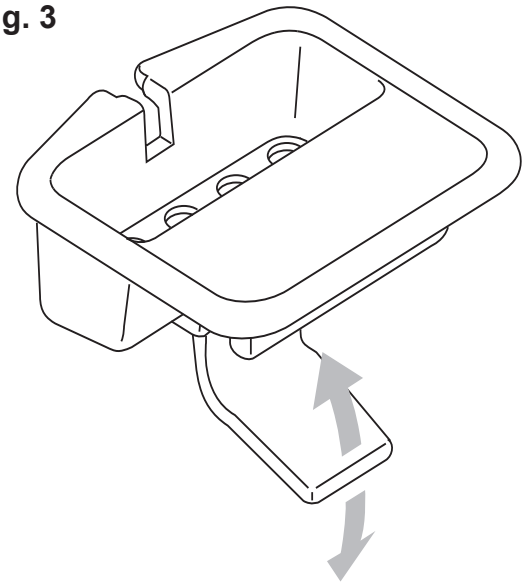
The foot support is adjustable and can be placed in three different positions, depending on the patient's length. **(See Fig. 2)**

- Place the foot support in one of the three slots. For Primo® Ferro snap it in place.

Toiletry Tray (optional)

The tray can be hung on the side of the bathtub rim. It can be used to keep bathing utensils near by. Adjust the support as necessary. **(See Fig. 3)**

Fig. 3



Hot Water Flush (Kit)

Refer to separate Hot Water Flush Kit P300.

Hydromassage System

Fig. 1

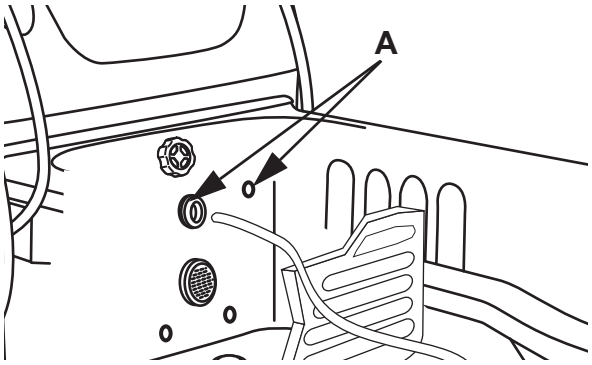


Fig. 2

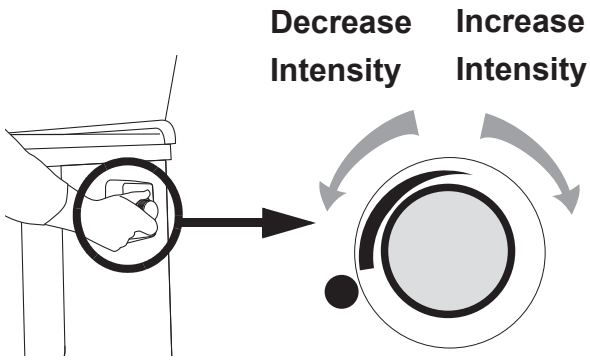
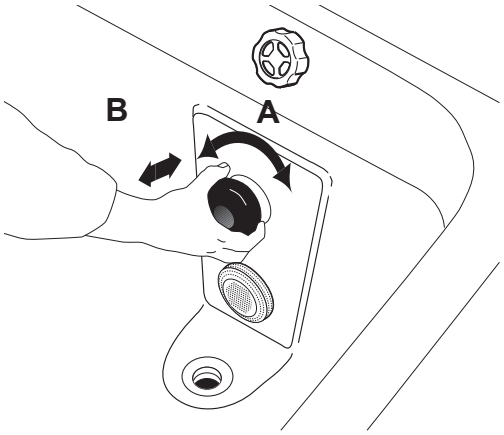


Fig. 3



WARNING

To avoid hair entrapments under water, always install the *Hydromassage* system suction cover before use.

CAUTION

Turn the hydromassage water intensity knob clockwise at highest intensity in order to prevent water leakage on the floor. The leakage occurs from the built-up water pressure in the *Hydromassage* system. (See Fig. 2)

Use Hydromassage™ System

(12 steps)

1 Fill the bathtub with water at desired temperature over the *Hydromassage* system outlet and top sensor **(A)**. **(See Fig. 1)**

2 Start the hydromassage by pressing the *Hydromassage* system button on the control panel.

3 The default runtime is 15 minutes after which the hydromassage will automatically end. Wait 15 minutes to restart.

- During the 15 minutes of runtime, the hydromassage can be stopped at any time by pressing the *Hydromassage* system button.
- Always turn the *Hydromassage* system off when finished.

4 The water flow is adjustable with the knob located on the upper right side of the bathtub. **(See Fig. 2)**

- Start at a **low intensity** by turning the knob **counter clockwise.**
- **Increased intensity** of the water flow by turning the knob **clockwise**.

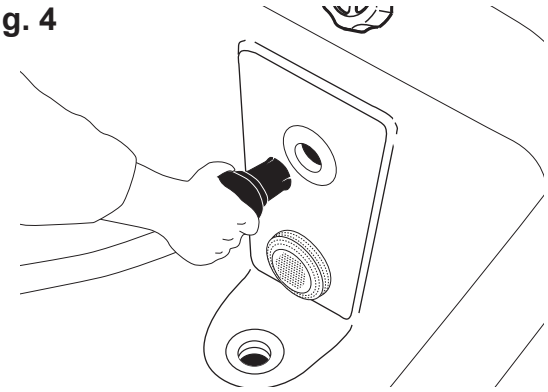
5 Adjust the direction of the water-jet by turning the *Hydromassage* system outlet **(A)**. **(See Fig. 3)**

- Remove the adjustable *Hydromassage* system nozzle **(B)** if you want the jet to cover a wider area (just pull it out). **(See Fig. 3)**

6 When finished the hydromassage, turn the *Hydromassage* system off by pressing the *Hydromassage* system button.

Continue with the steps on the next page.

Fig. 4

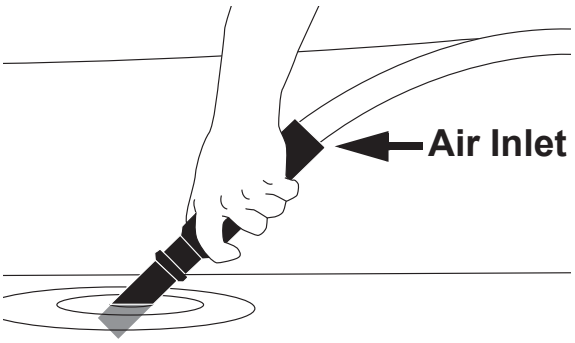


Continue Hydromassage with Treatment Hose (optional)

7 If hydromassage is turned on, stop it by pressing the *Hydromassage* system button before the treatment hose is connected.

- Remove the *Hydromassage* system nozzle (just pull it out).
- Connect the treatment hose to the quick coupling device in the bathtub. **(See Fig. 4)**
- The treatment hose and the built-in jet within the bathtub cannot be used simultaneously.

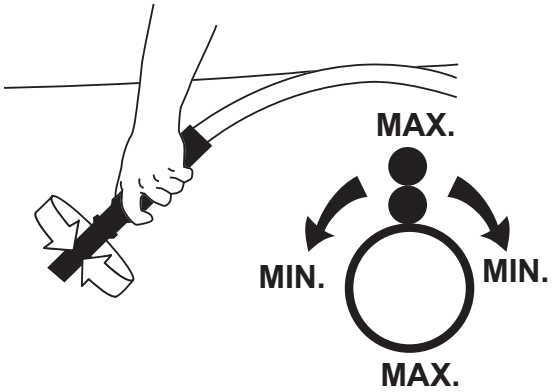
Fig. 5



8 Direct the treatment hose nozzle into the water. Make sure the air inlet is above the water surface. **(See Fig. 5)**

9 Hydromassage from the treatment hose starts when the *Hydromassage* system button on the control panel is pressed.

Fig. 6

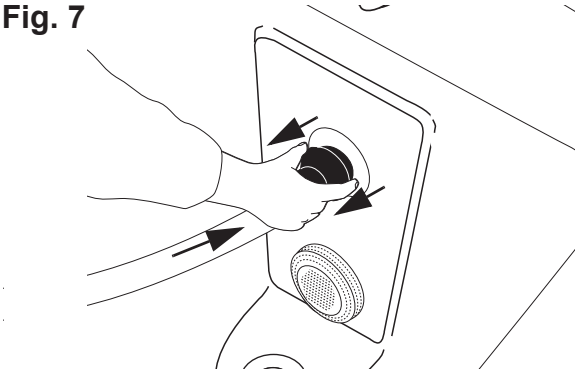


10 To adjust the jet stream intensity, turn the outermost part of the treatment hose nozzle. **(See Fig. 6)**

- When the two dots on the nozzle are aligned, the jet stream is at its highest intensity.
- When turning the nozzle 90°, the jet stream intensity decreases.
- When turning the nozzle additional 90°, the jet stream intensity increases and so on.

11 When finished the hydromassage, turn the *Hydromassage* system off by pressing the *Hydromassage* system button.

Fig. 7



12 Remove the treatment hose from the quick coupling device by pushing in the treatment hose while pulling the treatment hose bracket back. **(See Fig. 7)**

Hydrosound System

The Hydrosound® system is a method of cleaning patient by means of low frequency and low intensity ultra sound. Working together with water, it is an effective and skin friendly method of cleaning the skin.

The amount of time and intensity setting used for the *Hydrosound* system cleaning is a matter of choice consistent with the degree of patient cleanliness required and patient comfort. The longer the time of exposure and the greater the intensity setting, the more efficient the cleaning will be.

For patients experiencing *Hydrosound* system cleaning for the first time, it is recommended that the intensity is set at the lower levels before using the higher intensity settings.

WARNING

To avoid injury, never use the *Hydrosound* system function when pregnant.

WARNING

To avoid damage to hearing, make sure to keep the patients head above water when using the *Hydrosound* system.

Use Hydrosound® System

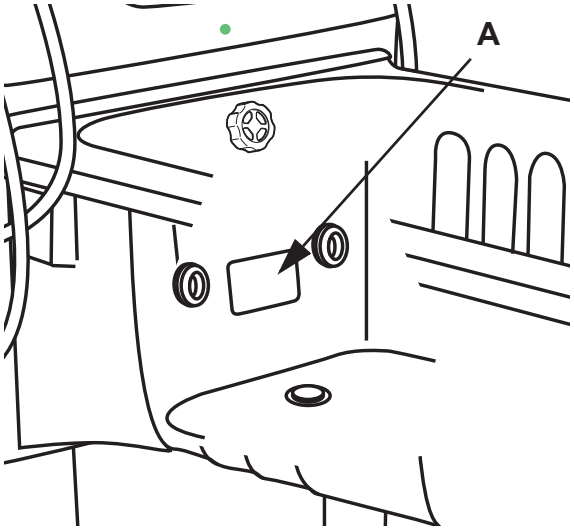
(10 steps)

Before starting the *Hydrosound* system:

1 Fill the bathtub with water. Make sure that the water level covers the top of the *Hydrosound* system Transducer Plate **(A)**. **(See Fig. 1)**

2 Check the water temperature by hand to make sure it is not too cold or hot.

Fig. 1



CAUTION

Only use *ArjoSound* water conditioner with the *Hydrosound* system. Do not use bath oils and other skin conditioners with the *Hydrosound* system as they may inhibit the ultra sound pressure waves.

Continue with the steps on the next page.

Fig. 2

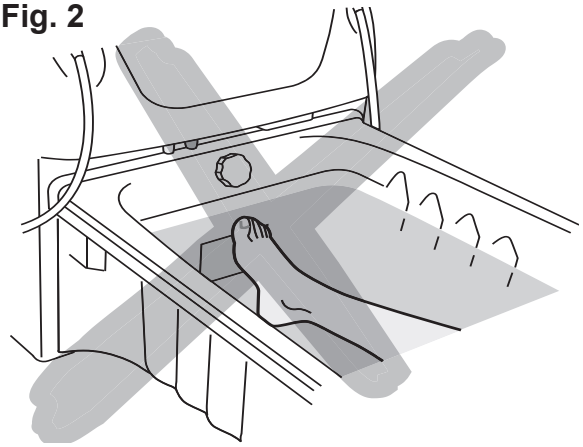


Fig. 3

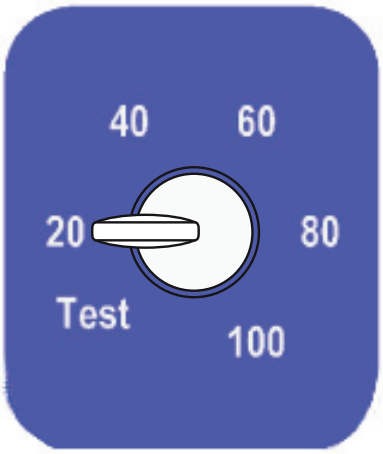
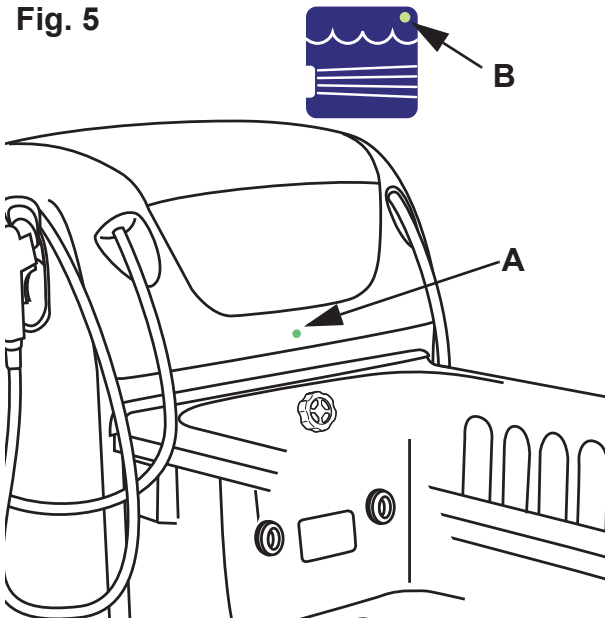


Fig. 4



Fig. 5



3 Add *ArjoSound* water conditioner by pressing the *ArjoSound* water conditioner button on the control panel and check that the conditioner mixes into the water.

WARNING

To avoid burns, avoid continuous contact with the *Hydrosound* system transducer plate while in operation. (See Fig. 2)

4 Start the *Hydrosound* system by pressing the *Hydrosound* system button on the control panel. The default runtime is 15 minutes after which the *Hydrosound* system will automatically end. Wait 15 minutes to restart.

5 Stop the *Hydrosound* system at any time by pressing the *Hydrosound* system button again.

6 On *P220,* it is possible to select different intensity levels by turning the knob on the upper right side of the bathtub. **(See Fig. 3)**

- The intensity is increased by turning the knob clockwise.

On *P300* select intensity by pressing the, plus (+) and minus (-) on the display. **(See Fig. 4)**

- The levels 20, 40, 60, 80 or 100 mW/cm^2 and test can be chosen step by step.

7 The LED **(A)** on P220 or the LED **(B)** on the *Hydrosound* button on P300 will show a steady green light and a buzzing sound from the transducer plate will be heard when any active level is selected. **(See Fig. 5)**

- The buzzing sound will increase with each higher level.

8 The test level is used to check the intensity level of the *Hydrosound* and to make sure it's in its specific range. If it passes the test it turns itself off and the *Hydrosound* system needs to be restarted.

- *P300* will get a TEST text in the display.

9 If it fails the test, the *P220* will flash a yellow light when in test mode. The *P300* will show -04- in the display as an error. Contact an Arjo service technician if it fails the test.

- The same yellow light will flash in normal mode if problem occurs while using the *Hydrosound* system.

10 When finished, press the *Hydrosound* system button to stop.

Sound & Vision System

The Sound & Vision® system is a pleasant colourful underwater lighting and soft music stimulus which enhances the benefits of bathing. It calms a stressed or anxious patient.

The *Sound & Vision* system can be combined with still bath, *Hydromassage* system or the *Hydrosound* system.

WARNING

To avoid electric shock, only use the USB memory stick in the connector on the bath.

Use Sound & Vision System

(4 steps)

1 To activate the *Sound & Vision* system:

- Start by opening the control panel lid.
- Then, unscrew the black cap counter clockwise to get to the USB outlet.
- Plug in the *Sound & Vision* system memory stick.

2 Press the MP3 button on the hand control to start the music. Only MP3 files can be read and only files from the root (not in "folders").

- the *Sound & Vision* system always starts of at a very low volume. Use the volume buttons to adjust volume to desired level.
- the *Sound & Vision* system hand control LED flashes when active.

3 Press the *Sound & Vision* system light button on the hand control to get colored light in the bathtub.

- Press the one more time to change light colour.
- Choose between red, green, blue, pink and yellow.

4 To start a rotation of different light colours press the automatic light colour change button.

- Press the button for 2 s to turn the light off.

NOTE

The music function will stop automatically 30 minutes after activation. Press the MP3 player button on the hand control for continued listening.

Sound & Vision System Hand Control

1 LED - activity indicator

2 *Sound & Vision* system Light - ON/OFF

3 Automatic light colour change - ON/OFF

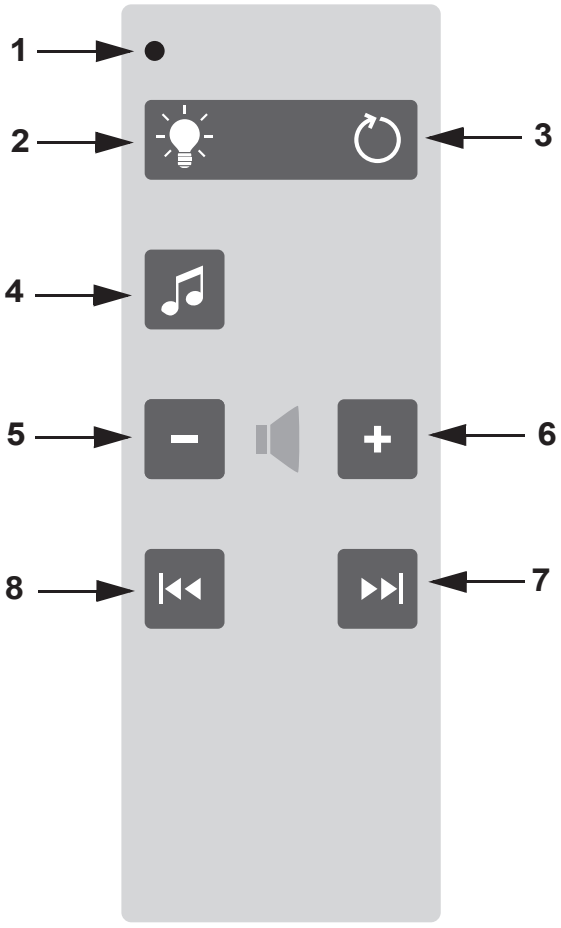
4 MP3 player ON/PAUSE

5 Reduce (-) volume.

6 Increase (+) volume

7 MP3 track forward

8 MP3 track reverse



Change Default Setting (P300 only)

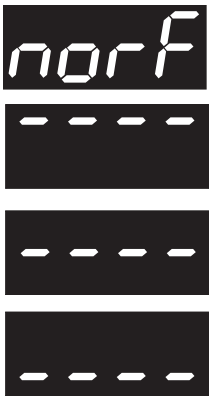
(4 steps)

1 To change the default setting, press the hidden button and one of the function buttons (see section *Control Panels on page 12*). Press the two buttons simultaneously for at least 2 s. When pressing the hidden button a beep will be heard.

2 To toggle between two settings press the hidden button.

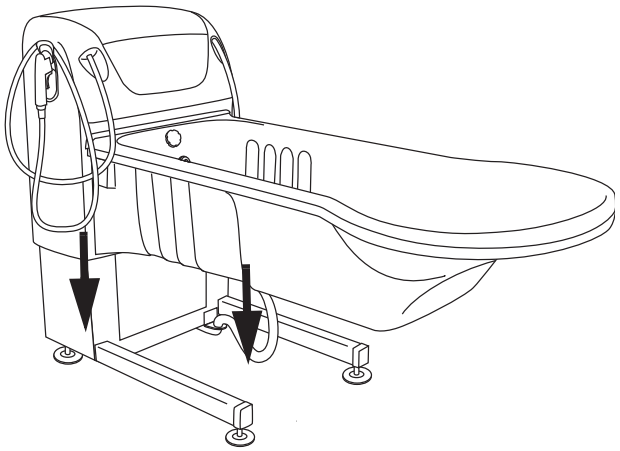
3 Adjust values with the plus (+) and minus (-) buttons.

4 Press the selected function button to confirm the setting before continuing.

Function Button	Alternative Settings (Display Code)	Settings Interval (Preset)	Default values
Filling 		Filling temp. 18-43 °C (Europe, Japan) Filling temp. 64-109 °F (USA) Filling time can be changed to / from -200 (which is 20 s from the bottom) to filling time up to 500 s. Each level can be adjusted individually. The levels depend on the water pressure.	37 °C (Europe, Japan) 99 °F (USA) 60 s High 30 s Normal -20 s Low
Showering 		Shower temp. 18-42 °C (Europe, Japan) Shower temp. 18-41 °C (UK) Shower temp. 64-108 °F (USA)	37 °C (Europe, Japan) 37 °C (UK) 99 °F (USA)
Disinfect 		Disinfect. temp. 20-40 °C (Europe, Japan) Disinfect. temp. 68-104 °F (USA)	25 °C (Europe, Japan) 77 °F (USA)
Bath Oil  ArjoSound water conditioner		Preset Bath Oil/*ArjoSound* water conditioner dosage time within 1 to 5 s If set to 0 s, the dosage will continue as long as the Bath Oil/*ArjoSound* water conditioner button is pressed. 1 s = 4 ml Bath Oil/*ArjoSound* water conditioner	3 s (12 ml)
Shampoo 		Preset shampoo dosage time within 1 to 5 s If set to 0 s, the dosage will continue as long as the Shampoo button is pressed. 1 s = 4 ml Shampoo	3 s (12 ml)
Hydrosound System 		Preset the *Hydrosound* system intensity 20, 40, 60, 80 or 100 mW/cm²	60 mW/cm²

Bathe Patient using a Lift Hygiene Chair

Fig. 1



Preparations for Bath

(5 steps)

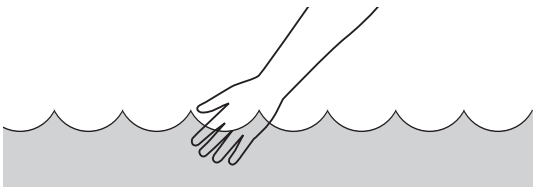
Alenti, Calypso and Combilift are the recommended Arjo lift hygiene chairs that can be used with the *System 2000* bath.

See *Alenti, Calypso and Combilift IFU before use.*

1 Lower the bathtub to lowest height. **(See Fig. 1)**

2 Press the Autofill button to fill the bathtub. Select Autofill level on *P300*. (See section *Product Description/Functions on page 16*.)

3 **WARNING**



To prevent scalding, always check the water temperature with your naked hand before directing the water on the patient. Do not use gloves as it may insulate to the extent that the water temperature can be misjudged. Point the flow of the water away from the patient.

Place your naked hand in the water stream and make sure the water temperature is not to hot or to cold.

- **P220:** The display will oscillate in the beginning of the filling. Wait until the desired water temperature is reached on the display. If needed, adjust the temperature with the temperature knob.
- **P300:** The display will flash the current temperature until the preset temperature is reached. If needed, adjust the temperature with the plus (+) and minus (-) buttons.

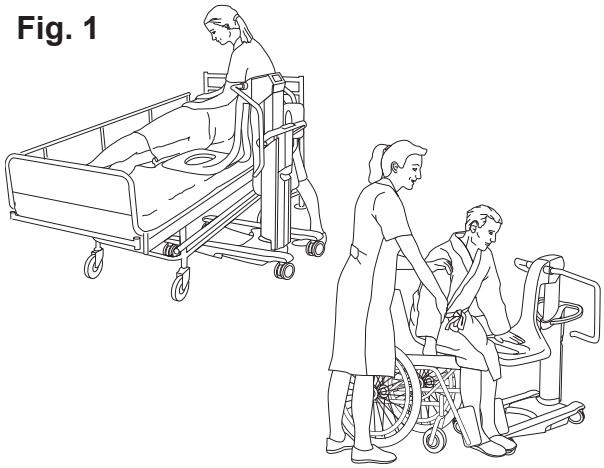
4 Close the drainage plug and attach the pillow.

5 Additional filling is achieved by continuously pressing the Autofill button.

Transfer and Bathe Patient

(13 steps)

Fig. 1



1 Undress the patient and cover him or her with towels to keep warm.

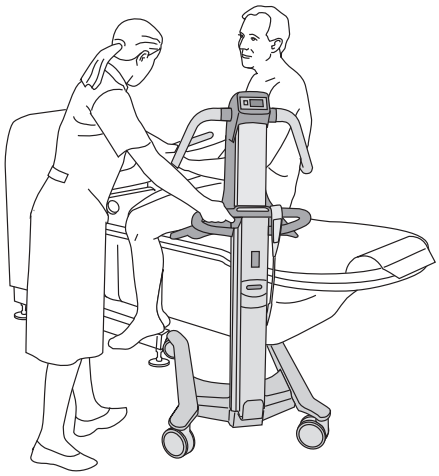
2 A sitting patient can be transferred from their bed or wheelchair into the bath with a lift hygiene chair. **(See Fig. 1)**

3 **WARNING**

To avoid entrapment, make sure to keep the patients hair, arms and feet close to the body and use designated grab supports during any movement.

Transfer the patient to the bath.

Fig. 2



4 Position lift hygiene chair diagonally to the side of the bath with sufficient sideways clearance. **(See Fig. 2)**

5 **WARNING**

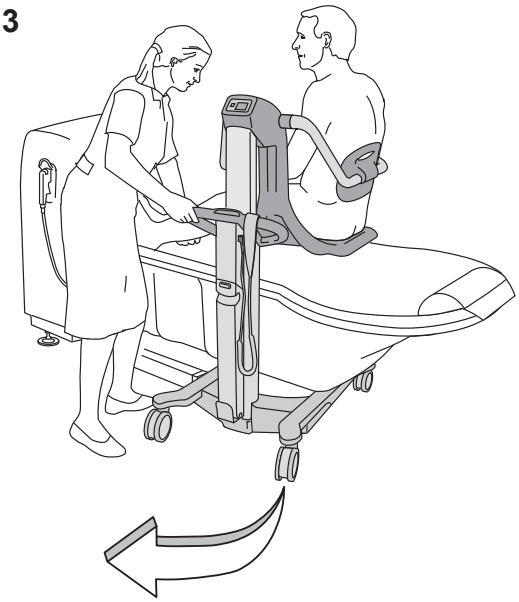
To avoid entrapment or pinching of genitals, make sure there is enough clearance during movement over the tub edge, toilet, bedpan or other furniture.

Raise the lift hygiene chair to where it and any genitals clears the bathtub rim.

6 **WARNING**

To avoid entrapment of the patients or caregivers legs or feet, make sure that they are kept clear of all obstacles.

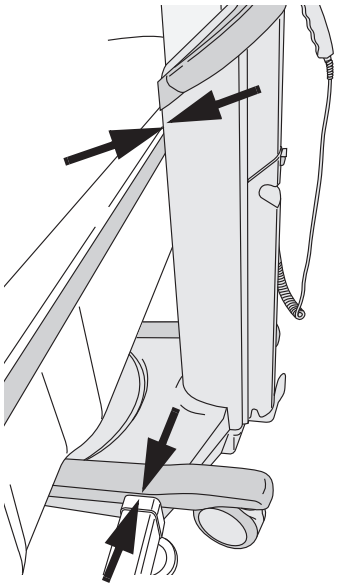
Fig. 3



Move the lift hygiene chair towards the bath and help the patient to move his or her legs over the bathtub rim while rotating the lift in place. Let the patient feel the water with his or her legs. Adjust temperature, if needed. **(See Fig. 3)**

Continue with the steps on the next page.

Fig. 4



7 Centre chair over the bathtub until it reaches a stop against the bath. Make sure the lift hygiene chair is docked against the bath legs and the bathtub rim. **(See Fig. 4)**

Fig. 5



8 Adjust the lift hygiene chair to an ergonomic working height. **(See Fig. 5)**

9 **WARNING**

To avoid entrapment or pinching of genitals, make sure there is enough clearance during movement over the tub edge, toilet, bedpan or other furniture.

Raise the bath, but make sure that there is enough room for body parts between the bottom of the bath and the seat.

10 If the patient desires and is capable, there is the option of folding away the back rest.

- Lean the patient forward and place their hands on the driving handle.
- Then move the back rest up and out of the way, thus allowing the patient to recline against the back of the bathtub and pillow.

11 Attach the foot support if needed.

12 Bathe the patient.

13 Use the *Hydromassage*, *Hydrosound* or *Sound & Vision* system, if available.

Shower Patient

(14 steps)

1 After bathing, open the drain and let the water run out.

2 Let the patient place their hands on the driving handle and lean forward. Move the back rest to its original position.

3 Make sure that the patient keeps holding on to the driving handle.

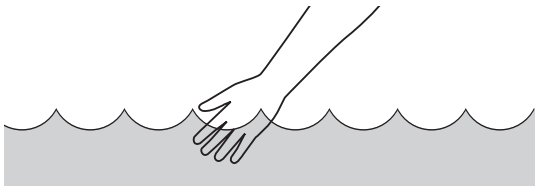
4 To separate the chair seat from the bottom of the bathtub, lower the bathtub to its lowest height or raise the lift hygiene chair.

5 Lift off the shower handle, hold it over the bathtub.

6 Press shower button on the control panel (the LED lights up green when active).

7 Direct the shower handle away from the patient.

8 **WARNING**



To prevent scalding, always check the water temperature with your naked hand before directing the water on the patient. Do not use gloves as it may insulate to the extent that the water temperature can be misjudged. Point the flow of the water away from the patient.

Press the trigger on the shower handle and direct the water stream away from the patient. Place your naked hand in the water stream and make sure the water temperature is not to hot or to cold.

Continue with the steps on the next page.

Fig. 1

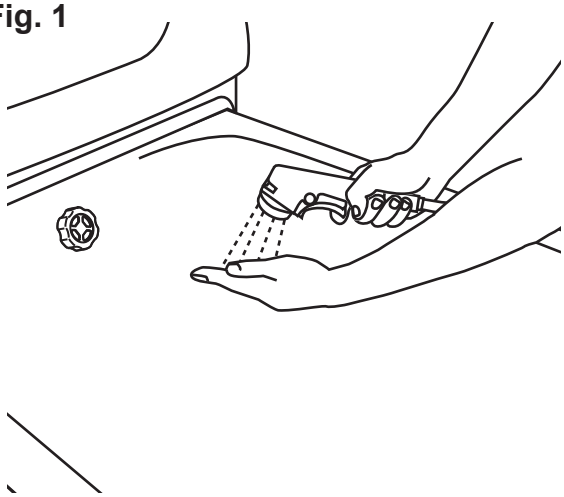
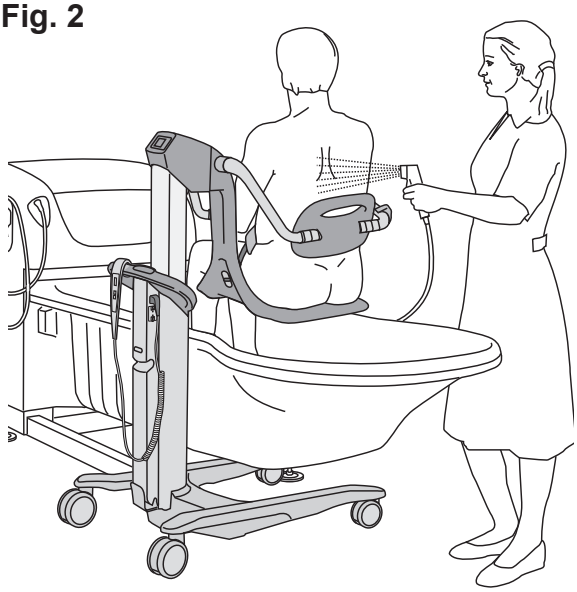


Fig. 2



9 • **P220:** Check the water temperature by placing your naked hand in the water stream. **(See Fig. 1)**
If needed, adjust the temperature with the temperature knob.
• **P300:** The display shows the temperature value. Allow a few seconds for the water to reach the preset temperature. Check the temperature setting on the display. If needed, adjust the temperature on the control panel with the plus (+) and minus (-) buttons.

10 Let the patient to feel the water by hand before directing the water stream on the patient. Adjust water temperature, if needed.

11 To keep the trigger handle in for a longer period of time, activate the lock button by pushing it in. To unlock, push the trigger handle.

12 Shower the patient. **(See Fig. 2)**

13 To stop the shower, press the shower button on the control panel again.

14 Make sure the shower trigger is unlocked before placing the shower handle back into the holder.

Fig. 1

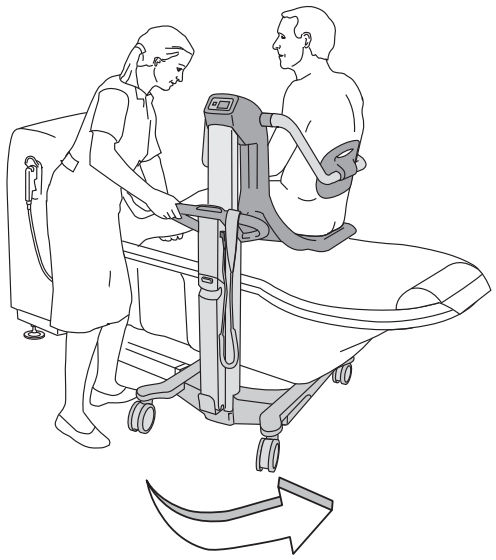


Fig. 2

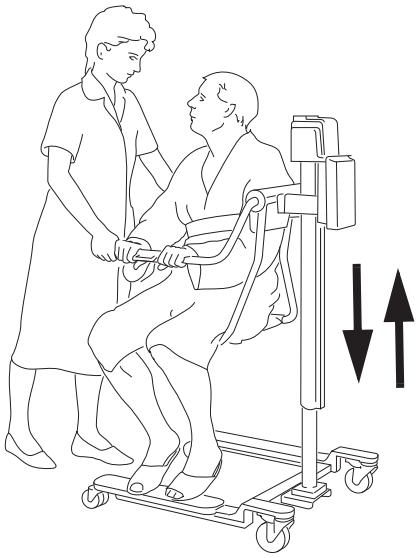
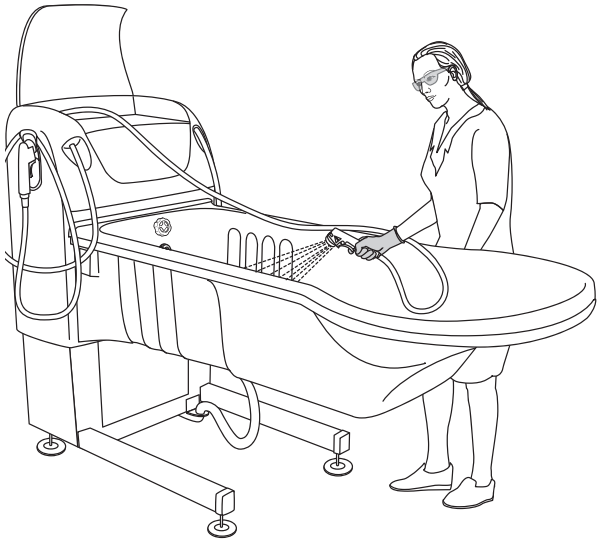


Fig. 3



End the Bath

(9 steps)

1 Dry the patient, as well as the underside of the seat, to prevent water from dripping on the floor.

2 Place one or two towels on the patient or a bathrobe, if possible, to keep him or her warm.

3 Lower the bathtub to its lowest height.

4 **WARNING**

To avoid entrapment or pinching of genitals, make sure there is enough clearance during movement over the tub edge, toilet, bedpan or other furniture.

Raise the hygiene chair to where it and any genitals clears the bathtub rim.

5 Help the patient to move his or her legs over the edge of the bathtub while rotating the lift away from the bathtub. Make sure there is sufficient sideways clearance between the bathtub and lift hygiene chair. **(See Fig. 1)**

6 Lower the lift hygiene chair.

7 Dry the remaining wet body areas.

8 Adjust the lift hygiene chair to an ergonomic transfer height for the caregiver. **(See Fig. 2)**

9 When transferring the patient straight from the bathtub to bed, put a towel on the bed under the lift hygiene chair seat to avoid making the bed wet. Dry the patient thoroughly when lying down in bed.

Disinfect After Each Patient

(1 step)

1 Make the bath ready for the next patient. The bath and lift hygiene chair must be fully disinfected after each use to prevent cross contamination. See section *Cleaning and Disinfection Instructions on page 40*. **(See Fig. 3)**

For *Alenti Disinfection*, see *Alenti IFU.*

Bathe Patient using a Lift Bath Trolley

Miranti and *Bolero* are the recommended Arjo lift bath trolleys that can be used with the *System 2000* bath.

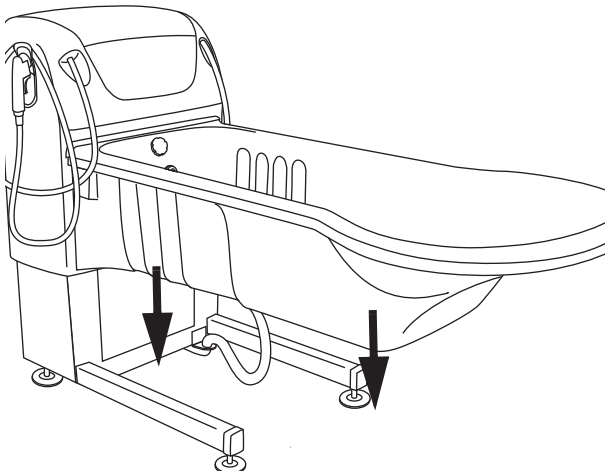
Compatible with bath sizes: 1870 mm (73 5/8”), 1900 mm (75”), 2120 mm (83 1/2”) and 2150 mm (85”).

See Miranti and Bolero IFU before use.

Preparations for Bath

(7 steps)

Fig. 1



1 Lower the bath to its lowest height. **(See Fig. 1)**

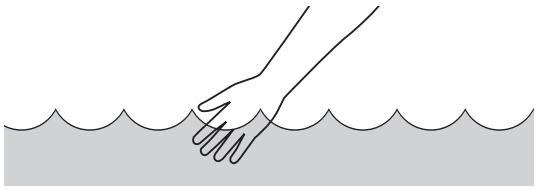
2 Remove the foot support and the pillow.

CAUTION

To prevent equipment damage when using a lift bath trolley, the foot support and pillow must be removed.

3 Press the Autofill button to fill the bathtub with water. Select autofill level on *P300* (see section *Product Description/Functions on page 16*).

4 **WARNING**



To prevent scalding, always check the water temperature with your naked hand before directing the water on the patient. Do not use gloves as it may insulate to the extent that the water temperature can be misjudged. Point the flow of the water away from the patient.

5 Place your naked hand in the water stream and make sure the water temperature is not to hot or to cold.

- **P220:** The display will oscillate in the beginning of the filling. Wait until the desired water temperature is reached on the display. If needed, adjust the temperature with the temperature knob.

Continue with the steps on the next page.

- **P300:** The display will flash the current temperature until the preset temperature is reached. If needed, adjust the temperature with the plus (+) and minus (-) buttons.

6 Close the drainage plug.

7 Additional after filling is achieved, by continuously pressing the Autofill button.

Transfer and Bathe

(13 steps)

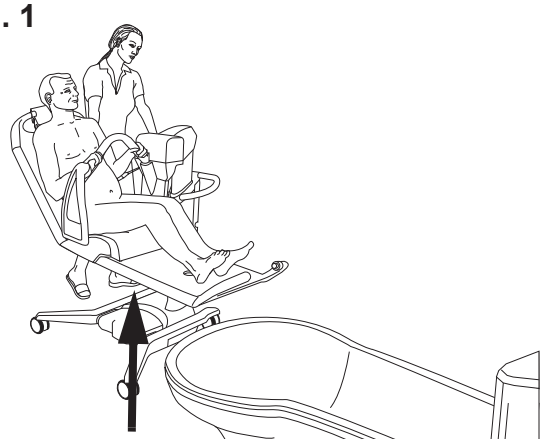
1 A bedridden patient can be transferred from bed with the help of a *Miranti* lift bath trolley.

2 Undress the patient and cover him or her with towels to keep warm.

3 Position the lift bath trolley behind and to the side of the bath.

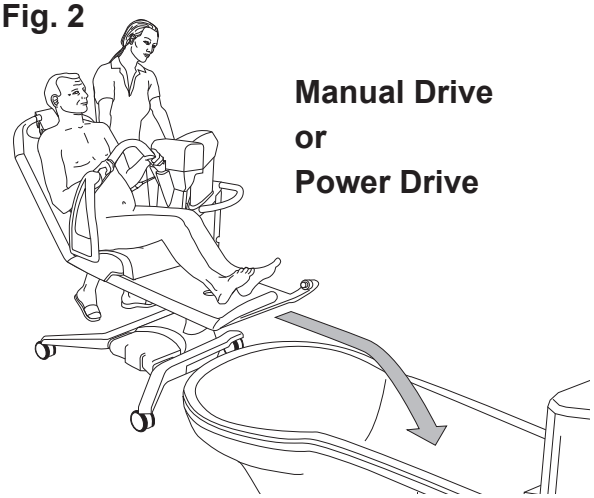
4 Raise the lift bath trolley stretcher up in order to clear the edge of the bathtub. **(See Fig. 1)**

Fig. 1



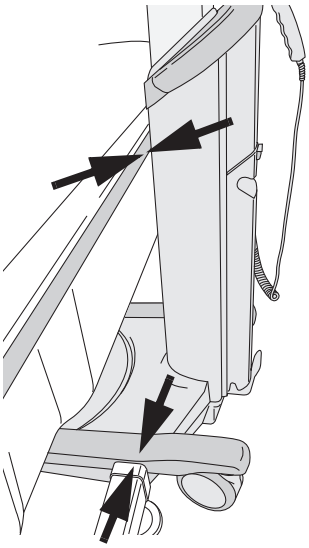
5 Move the lift bath trolley with patient diagonally in over the bathtub. **(See Fig. 2)**

Fig. 2



6 Move the trolley centrally over the bathtub until it reaches a stop against the bathtub legs and rim. **(See Fig. 3)**

Fig. 3

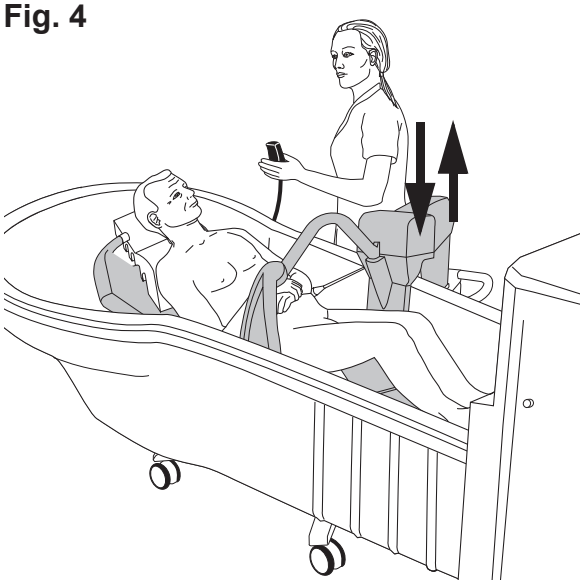


CAUTION

To prevent damage to the equipment, make sure the "Duck Foot" bath legs go underneath the lift bath trolley chassis.

Continue with the steps on the next page.

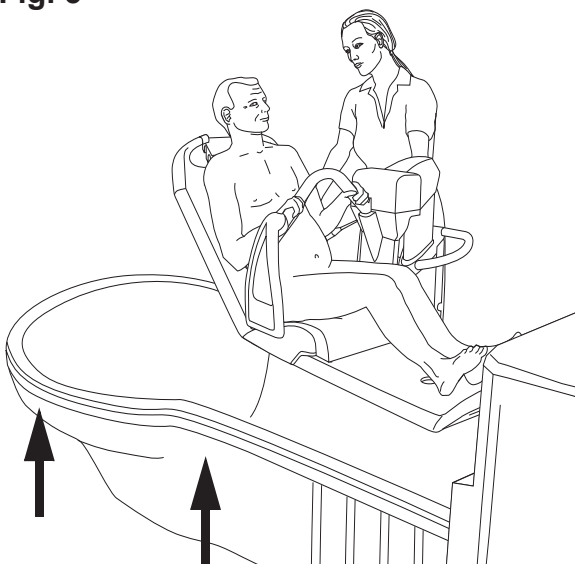
Fig. 4



7 Make sure the stretcher is centred over the bathtub.

8 Adjust the lift bath trolley to an ergonomic working height. **(See Fig. 4)**

Fig. 5



9 Raise the bath so that the stretcher is touching the bottom of the bathtub. **(See Fig. 5)**

10 Lower the back rest to a comfortable position for the patient.

11 Attach the foot support if needed.

12 Bathe the patient.

13 Use the *Hydromassage*, *Hydrosound* or *Sound & Vision* system, if available.

Use the Shower

(13 steps)

1 After bathing, open the drain and let the water run out.

2 Raise the back rest and let the patient place their hands on the security grip.

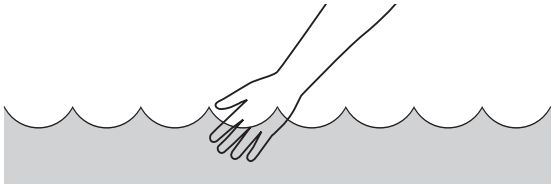
3 To separate the stretcher from the bottom of the bathtub, lower the bathtub to its lowest height or raise the lift bath trolley.

4 Grab shower handle, hold it over the bathtub.

5 Press shower button on the control panel (LED lights up green when active).

6 Direct the shower handle away from the patient.

7 **WARNING**

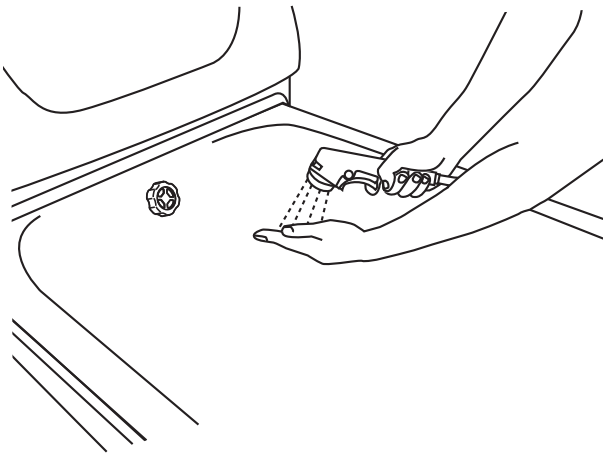


To prevent scalding, always check the water temperature with your naked hand before directing the water on the patient. Do not use gloves as it may insulate to the extent that the water temperature can be misjudged. Point the flow of the water away from the patient.

Press the trigger on the shower handle and direct the water stream away from the patient. Place your naked hand in the water stream and make sure the water temperature is not to hot or to cold.

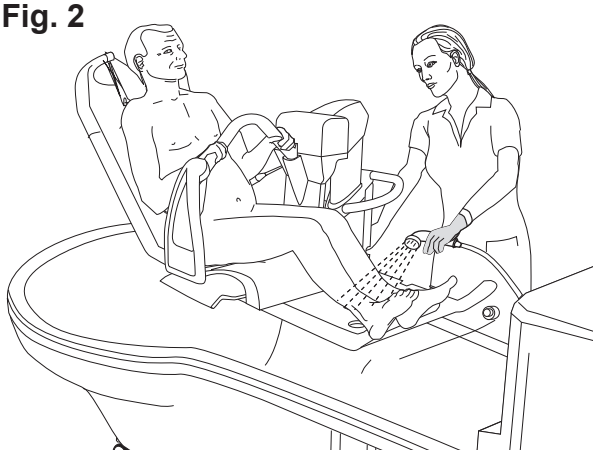
8
- **P220:** Check the water temperature by placing your naked hand in the water stream. If needed, adjust the temperature with the temperature knob. **(See Fig. 1)**
- **P300:** The display shows the temperature value. Allow a few seconds for the water to reach the preset temperature. Check the temperature setting on the display. If desired, adjust the temperature on the control panel with the plus (+) and minus (-) buttons.

Fig. 1



Continue with the steps on the next page.

Fig. 2



9 Let the patient to feel the water by hand before directing the water stream on the patient. If needed, adjust water temperature.

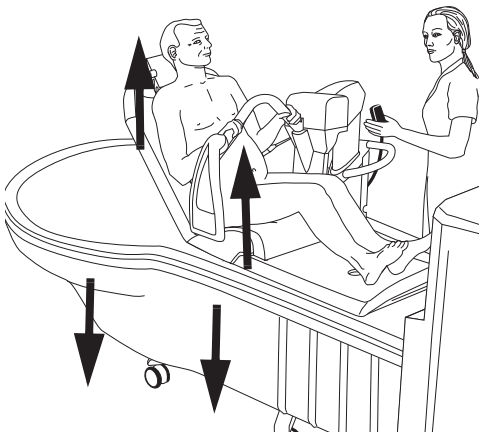
10 To keep the trigger handle in for a longer periods of time, activate the lock button by pushing it in. To unlock, push the trigger handle.

11 Shower the patient. **(See Fig. 2)**

12 To stop the shower press the shower button again.

13 Make sure the shower trigger is unlocked before placing the shower handle back into the holder.

Fig. 3



End the Bath

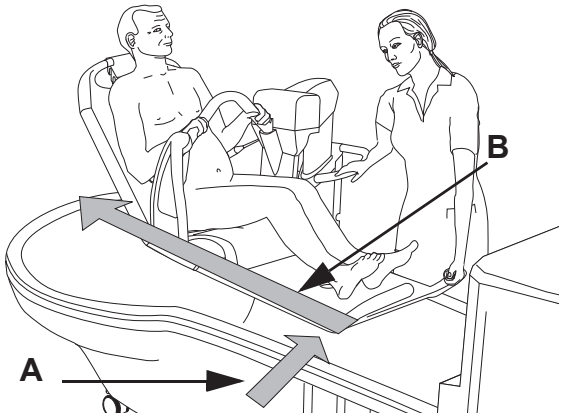
(6 steps)

1 Dry the patient, as well as the underside of the stretcher, to prevent water from dripping on the floor.

2 Place one or two towels on the patient to keep him or her warm.

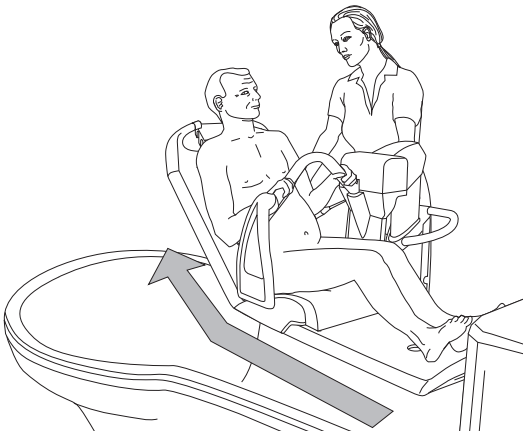
3 Lower the bathtub to lowest height and raise the stretcher. **(See Fig. 3)**

Fig. 4 Power Drive



4 <u>Manually</u> pull the lift bath trolley out approximately 30 cm (1 foot) from the bathtub **(A)**. Then activate the power drive on the handle bar at the foot end and move the lift bath trolley along the side of the bath **(B)**.
(See Fig. 4)

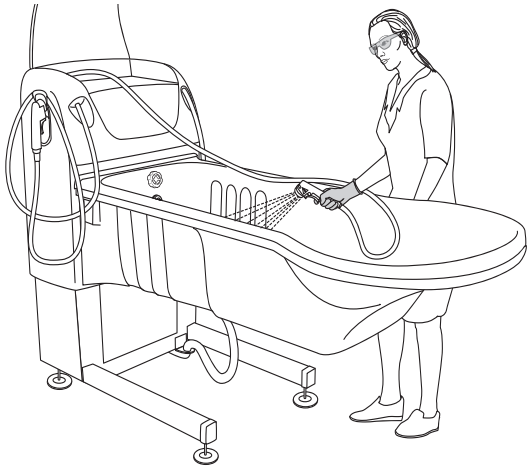
Fig. 5 Manual Drive



5 If there is no power drive, just pull the lift bath trolley away manually along the side of the bath. **(See Fig. 5)**

6 When moving the patient straight from the bath to bed, put a towel on the bed under the lift bath trolley stretcher at to avoid making the bed wet. Dry the patient thoroughly when lying down in bed.

Fig. 1



Disinfect After Each Patient

(1 step)

1 Make the bath ready for the next patient. The bath and the lift bath trolley must be fully disinfected after each use to prevent cross contamination. See section *Cleaning and Disinfection Instructions on page 40*. **(See Fig. 1)**

For cleaning and disinfection of the *Miranti* lift bath trolley, see the *Miranti* IFU.

Cleaning and Disinfection Instructions

Thorough disinfection routines are necessary to stop the build-up of bacteria on and in the equipment. This is particularly vital in cases where the *System 2000* bath is in a shared facility.

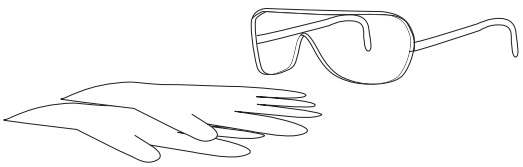
WARNING

To prevent cross-contamination, always follow the disinfection instructions in this *Instructions for Use.*

WARNING

To avoid eye or skin irritation, never disinfect in the presence of a patient.

WARNING



To avoid eye and skin damage, always use protective glasses and gloves. If contact occurs rinse with plenty of water. If eyes or skin becomes irritated, contact a physician. Always read the material safety data sheet of the disinfectant.

CAUTION

To avoid damage on the equipment only use Arjo branded disinfectants.

Arjo Disinfectants

For optimal performance only use Arjo Disinfectants. If you have any questions regarding disinfecting the equipment or wish to order disinfectant (see section *Parts and Accessories on page 69*), please contact your Arjo Customer Service located on the last page.

Accessories for Cleaning and Disinfection the System 2000 bath

- Protective glasses
- Protective gloves
- Disinfectant filled spray bottle or the disinfection spray handle.
- Water filled spray bottle or the shower handle
- Cloths – wet and dry
- Disposable towels
- Soft bristled brush
- Long handled soft bristled brush

Microbiological Formation Prevention

In order to enhance the on-site curative actions (chlorine or thermal shock), which do not guarantee a reduction of the contamination long term, make sure to follow the instructions below.

Installation precautions

In order to limit the growth of bacterial flora, it is necessary to take action at four levels:

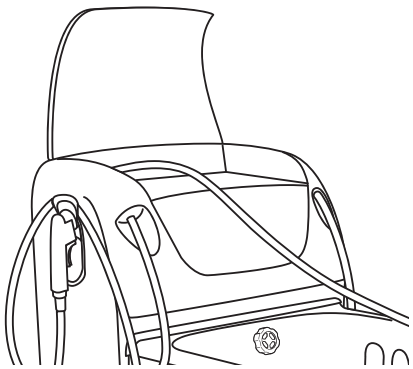
- Avoid stagnating water and make sure proper water circulation;
- Take precautions against the formation of scale and corrosion based on the water quality;
- Maintain a high water temperature all the way from the hot water dispenser to the different distribution pipes;
- Mix hot and cold water as close as possible to the point of use.

Use

- Make sure that the water circulates in the bath and the shower on a daily basis *even if the bathtub is not used*; and particular to make sure to remove any water that may be left behind in the hose.
- Let the water flow approximately 5 minutes before the first bath of the day.
- Clean and disinfect the bathtub according to the *IFU* before the first bath of the day and after the bath of each patient.

Do not forget to contact Arjo for the annual Preventive Maintenance visit.

Fig. 1



Replace Disinfectant Bottle (System 2000 bath with disinfection option only)

(12 steps)

WARNING

To prevent cross-contamination, always follow the disinfection instructions in this *Instructions for Use.*

1 Put on protective glasses and gloves.

2 Open the compartment for the disinfectant bottle. **(See Fig. 1)**

3 Remove bracket and shampoo/bath oil bottles, if any.

4 Disconnect the suction part from the disinfectant bottle. **(See Fig. 2)**

5 Discard the old bottle and replace with a new one.

6 Connect the suction part to the new bottle.

7 Grab the disinfection spray handle.

8 Press the disinfection button.

9 Adjust the water temperature until it reaches approximately 25 °C (77 °F) to eliminate disinfectant fumes.

10 Spray disinfectant in the bathtub. **Keeping an eye on the flowmeter (See Fig. 3)**.

11 Check the liquid mix ratio on the flowmeter so that it is in accordance with the setting range stated in this *IFU*. **(See Fig. 3**)

Fig. 2

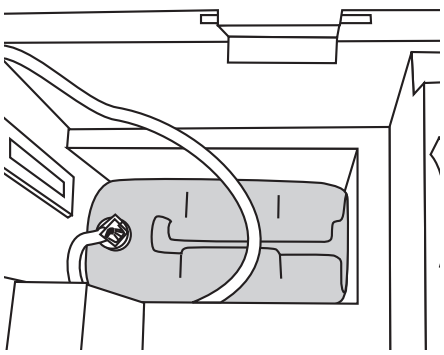


Fig. 3

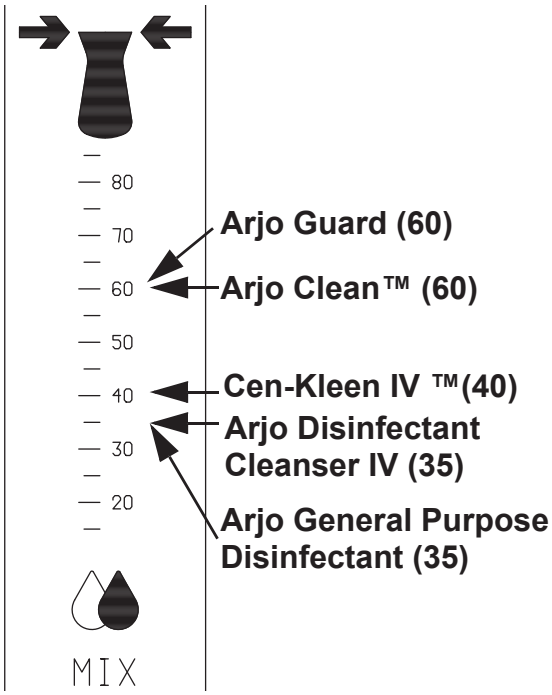
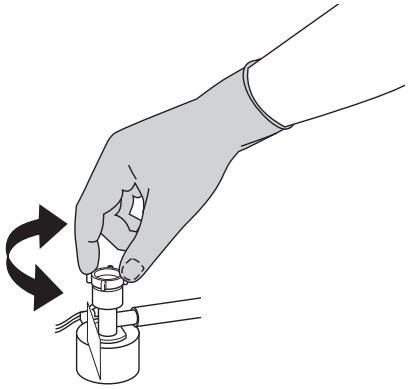


Fig. 4



12 If necessary, adjust the bottle cap by hand to get the right mix ratio. **(See Fig. 4)**

Clean and Disinfect with Disinfection Spray Handle (Still Bath and Hydrosound System)

(38 steps)

Fig. 1

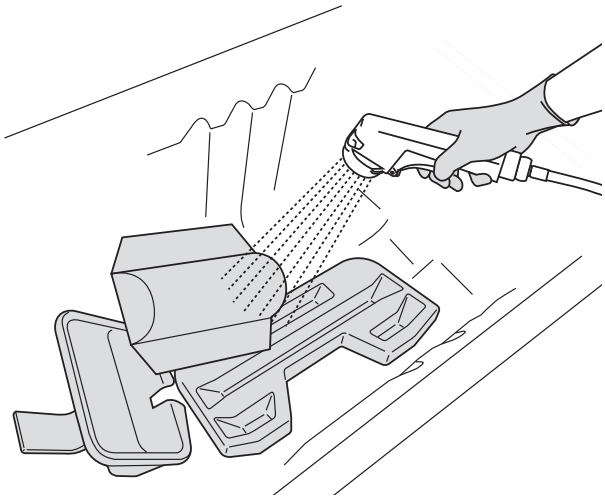
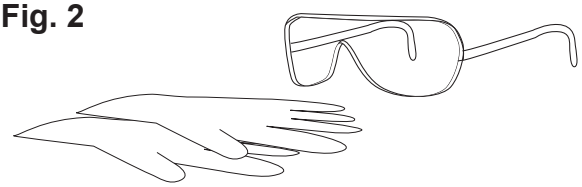


Fig. 2



Remove visual residue (Step 1-6 of 38)

1 Check the level of disinfectant.

2 Raise the bathtub to convenient working position.

3 Make sure all functions are turned off.

4 Open drain to empty any left over water.

5 Detach and place the accessories (if applicable) such as pillow, foot support and toiletry tray at the bottom of the bathtub.

6 Shower and rinse the bathtub and the accessories in the bottom of the bathtub with water to remove visible residue. Turn the accessories and rinse again. **(See Fig. 1)**

Clean (Step 7-23 of 38)

7 Put on protective gloves and eye wear. **(See Fig. 2)**

8 Open the panel lid, lift out the disinfection spray handle and hold it over the bathtub.

9 Press the disinfection button to start.

10 Hold the disinfection spray handle over the bathtub rim, then press the trigger. **Keep an eye on the flowmeter.**

11 Spray until the flowmeter shows the correct liquid mix ratio. If the flow meter value is not correct, adjust it according to section *Replace Disinfectant Bottle (System 2000 bath with disinfection option only) on page 42*.

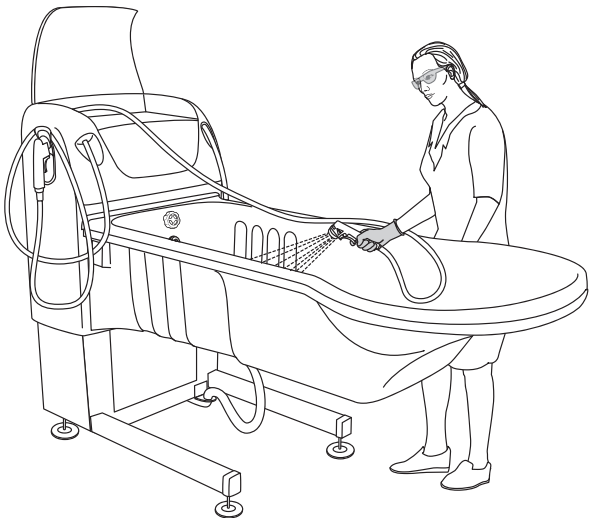
12 Adjust water temperature so that it reaches approximately 25° C (77 °F) (P220 only) to eliminate disinfectant fumes.

13 Spray disinfectant in the drain. Use a long handled brush to scrub the drain.

14 Close the drain.

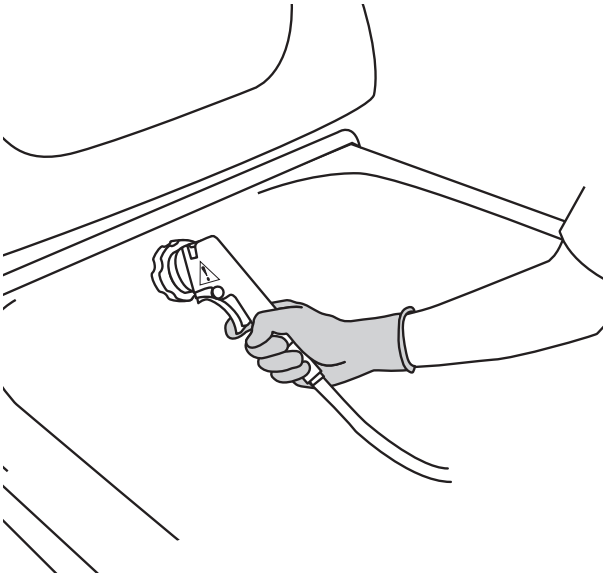
Continue with the steps on the next page.

Fig. 3



15 Spray disinfectant using the disinfection spray handle on all internal bathtub surfaces and the accessories at the bottom of the bathtub. Turn the accessories and spray on the other side. Pay attention to parts and knobs and sensors attached to the bathtub surface such as drain control knob/surface overflow outlet. **(See Fig. 3)**

Fig. 4



16 Spray into the surface overflow outlet. **(See Fig. 4)**

17 Press the disinfection button again to turn it off.

CAUTION

Never use green or brown Scotch-Brite nor steel wool on the bath as it may scratch the surface.

18 Scrub the surfaces of the bathtub, loose parts and accessories with a soft bristle brush or cloth (to remove any deposits e.g. skin flakes). Scrub thoroughly, especially on handles and hand control. **(See Fig. 5)**

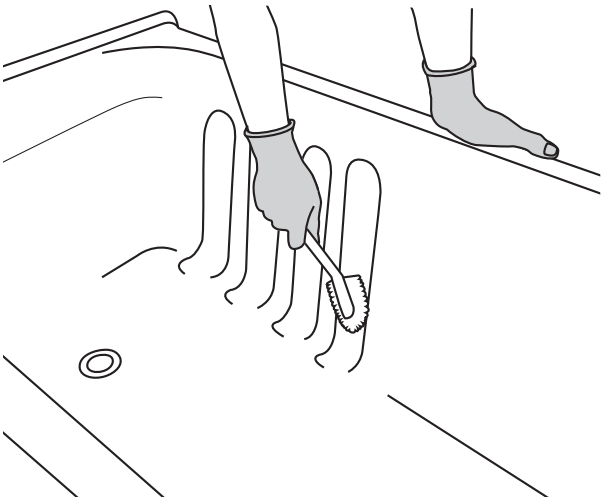
19 Open the drain.

20 Rinse all parts clean with plenty of water having a temperature of approximately 25 °C (77 °F) using the shower handle to remove disinfectant.

21 Soak a cloth in disinfectant.

22 Wipe all other contact areas such as the outside of the bath (particularly behind the head), metal sensory knobs, hand control and the wheel chassis (optional) with the cloth.

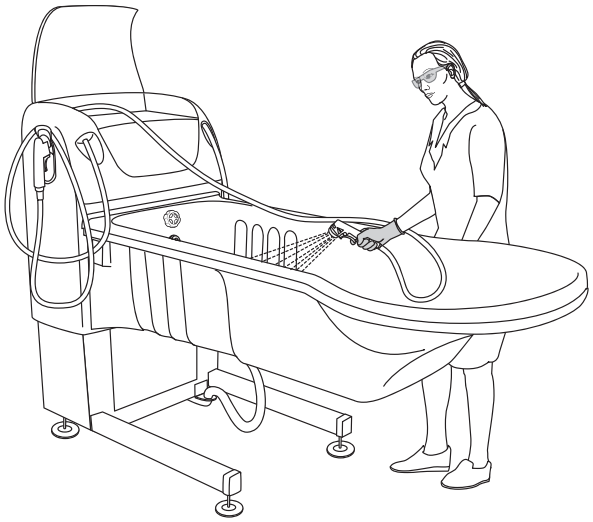
Fig. 5



23 Wet a new cloth with water and remove all traces of disinfectant on contact areas. The cloth should occasionally be rinsed in running water when removing disinfectant.

Continue with the steps on the next page.

Fig. 6



Disinfect (Step 24-38 of 38)

24 Direct the disinfection spray handle towards the drain and spray disinfectant in the drain.

25 Close the drain.

26 Spray disinfectant using the disinfection spray handle on all internal bathtub surfaces and the accessories at the bottom of the bathtub. Turn the accessories and spray on the other side. Pay attention to parts and knobs and sensors attached to the bathtub surface such as drain control knob/surface overflow outlet. **(See Fig. 6)**

27 Allow an appropriate contact time of the disinfectant according to the instructions on the bottle.

Push the disinfection button on the control panel to end the disinfection cycle.
Automatic Disinfection only: If the preset disinfection time has not elapsed other functions are disabled for:

- 2 minutes for the *P300* and the display will show - - - - .
- 2 minuter for the *P220*
- 10 minutes for the *P220 US*
- 6 minutes for the MPA system (UK Only)

28 Place the disinfection spray handle back behind the disinfection cover and close the cover.

29 Open the drain.

30 Push the button for shower.

31 Rinse all parts clean with water having a temperature of approximately 25 °C (77 °F) using the shower handle to remove the disinfectant.

32 Soak a cloth in disinfectant.

33 Wipe all other contact areas such as the outside of the bathtub (particularly behind the head), metal sensory knobs, hand control and wheel chassis (optional) with the cloth.

34 Allow an appropriate contact time of the disinfectant according to the instructions on the bottle.

35 Wet a new cloth with water and remove all traces of disinfectant on contact areas. The cloth should occasionally be rinsed in running water when removing disinfectant.

36 Leave to air dry.

NOTE
Let the pillow dry with the suction cups upwards.

37 Attach any accessories.

Fig. 1

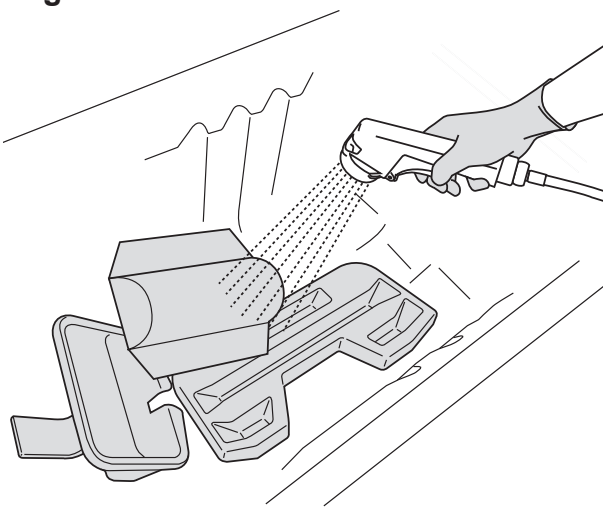


Fig. 2

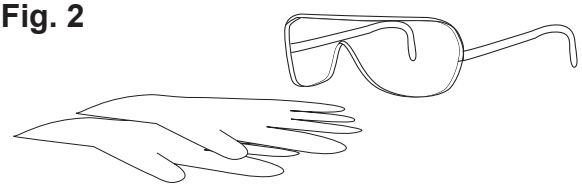
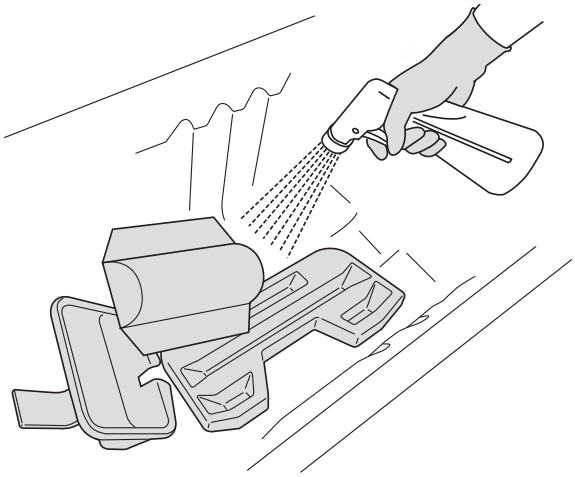


Fig. 3



Clean and Disinfect with a Spray Bottle

(29 steps)

Remove visual residue (Step 1-5 of 29)

1 Raise the bathtub to convenient working position.

2 Make sure all functions are turned off.

3 Open the drain to empty any left over water.

4 Detach and place the accessories (if applicable) such as pillow, foot support and toiletry tray at the bottom of the bathtub.

5 Shower and rinse the bathtub and the accessories in the bottom of the bathtub with water to remove visible residue. Turn the accessories and rinse again. **(See Fig. 1)**

Clean (Step 6-16 of 29)

6 Put on protective gloves and eye wear. **(See Fig. 2)**

7 Spray disinfectant in drain. Use a long handled brush to scrub drain.

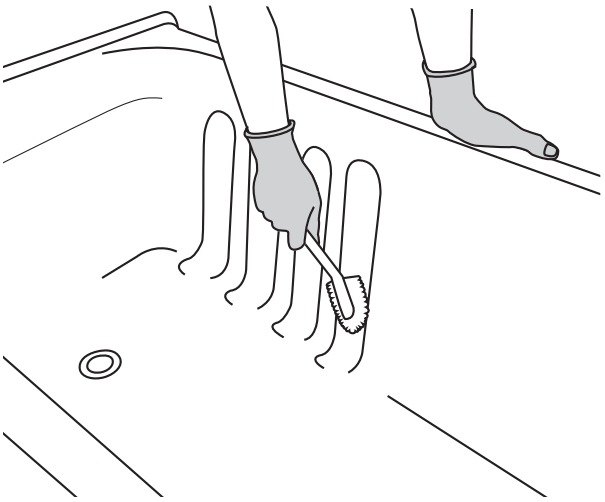
8 Close the drain.

9 Spray disinfectant using the spray bottle on all internal bathtub surfaces and the accessories at the bottom of the bathtub. Turn the accessories and spray on the other side. Pay attention to parts and knobs and sensors attached to the bathtub surface such as drain control knob/surface overflow outlet. **(See Fig. 3)**

10 Spray into the surface overflow outlet.

Continue with the steps on the next page.

Fig. 4



CAUTION

Never use green or brown Scotch-Brite nor steel wool on the bath as it may scratch the surface.

11 Scrub the surfaces of the bathtub, loose parts and accessories with a soft bristle brush or cloth (to remove any deposits e.g. skin flakes). Scrub thoroughly, especially on handles and hand control. **(See Fig. 4)**

12 Open the drain.

13 Rinse all parts clean with plenty of water having a temperature of approximately 25 °C (77 °F) using the shower handle to remove disinfectant.

14 Soak a cloth in disinfectant.

15 Wipe all other contact areas such as the outside of the bathtub (particularly behind the head), metal sensory knobs, hand control and the wheel chassis (optional) with the cloth.

16 Wet a new cloth with water and remove all traces of disinfectant on contact areas. The cloth should occasionally be rinsed in running water when removing disinfectant.

Continue with the steps on the next page.

Fig. 5

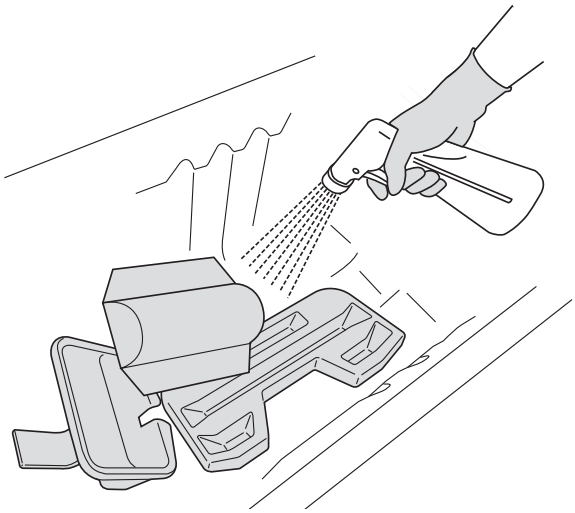
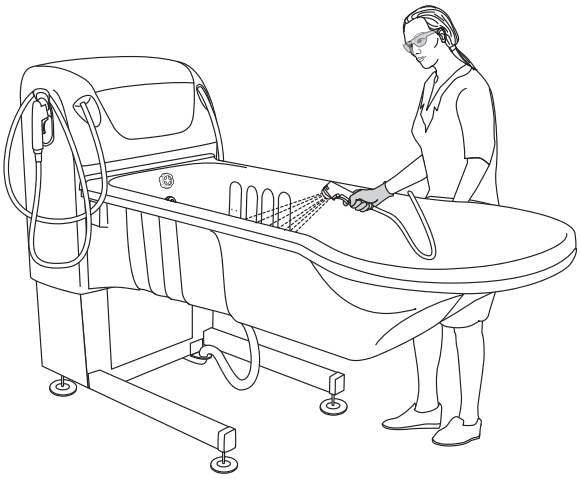


Fig. 6



Disinfect (Step 17-29 of 29)

17 Use a spray bottle and spray disinfectant in drain.

18 Close the drain.

19 Spray disinfectant on all internal bathtub surfaces and the accessories at the bottom of the bathtub. Turn the accessories and spray on the other side. Pay attention to parts and knobs and sensors attached to the bathtub surface such as drain control knob/surface overflow outlet. **(See Fig. 5)**

20 Allow an appropriate contact time of the disinfectant according to the instructions on the disinfectant bottle.

21 Open the drain.

22 Push the button for shower.

23 Rinse all parts clean with water having a temperature of approximately 25 °C (77 °F) using the shower handle to remove the disinfectant. **(See Fig. 6**)

24 Soak a cloth in disinfectant.

25 Wipe all other contact areas such as the outside of the bathtub (particularly behind the head), metal sensory knobs, hand control and wheel chassis (optional) with the cloth.

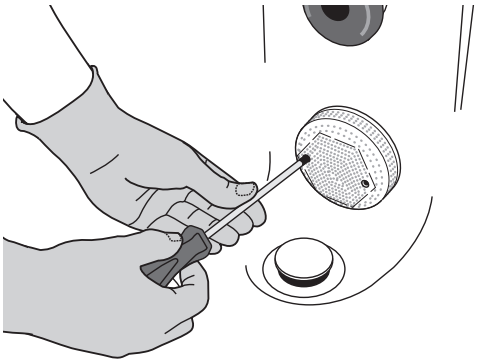
26 Allow an appropriate contact time of the disinfectant according to the instructions on the disinfectant bottle.

27 Wet a new cloth with water and remove all traces of disinfectant on contact areas. The cloth should occasionally be rinsed in running water when removing disinfectant.

28 Leave to air dry.

29 Attach any accessories.

Fig. 1



Clean and Disinfect Hydromassage™ System with Automatic Disinfection

(10 steps)

1 Check the level of the disinfectant.

2 Raise the bathtub to an ergonomic working height.

3 Close the drainage plug.

4 Unscrew the screws and remove the suction inlet screen. Clean the suction inlet screen separately. **(See Fig. 1)**

5 Press the disinfection button and this will start the disinfection cycle. Disinfectant will come out from the *Hydromassage* system nozzle. The disinfection cycle will end with the *Hydromassage* system being rinsed with water.

6 Spray disinfectant into the surface overflow outlet. **(See Fig. 2)**

7 Continue with the remaining disinfection instructions according to section *Clean and Disinfect with Disinfection Spray Handle (Still Bath and Hydrosound System) on page 43*.

8 Let the disinfectant act according to the time printed on disinfectant bottle.

9 Press the Shower button and rinse the surface overflow outlet.

10 When disinfection is completed, attach the suction inlet screen, put the screws back and tighten them gently.

Fig. 2

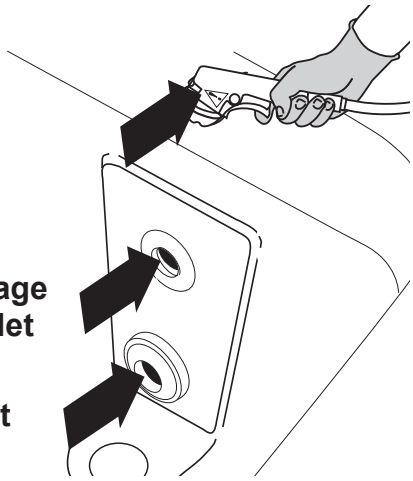
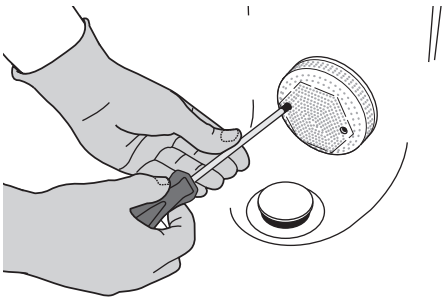


Fig. 1



Disinfect Hydromassage™ System <u>without</u> Automatic Disinfection

(18 steps)

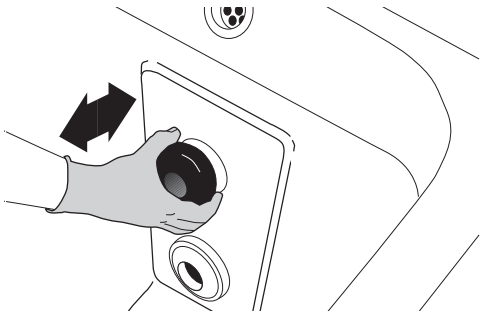
1 Check the level of the disinfectant.

2 Raise the bathtub to convenient working position.

3 Open the drainage plug.

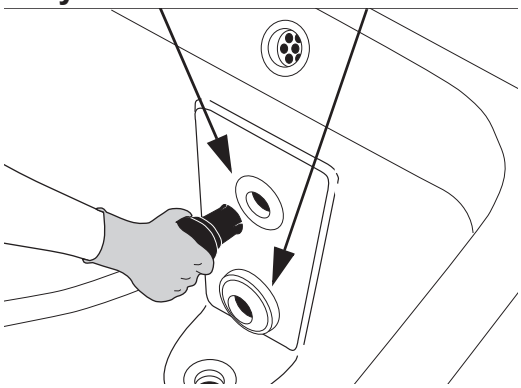
4 Unscrew the screws and remove the suction inlet screen. Clean the suction inlet screen separately. **(See Fig. 1)**

Fig. 2



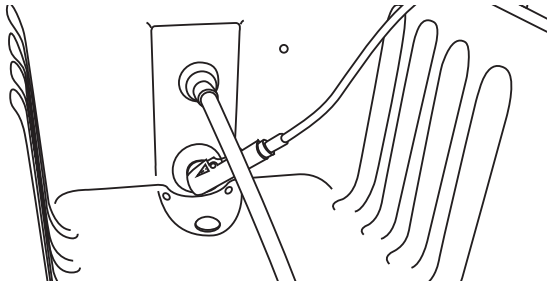
5 Only pull out the turnable *Hydromassage* system nozzle if a treatment hose is going to be connected. **(See Fig. 2)**

Fig. 3 **Hydromassage System Outlet** **Suction Inlet**



6 Insert the treatment hose, if any, in the *Hydromassage* system outlet. **(See Fig. 3)**

Fig. 4



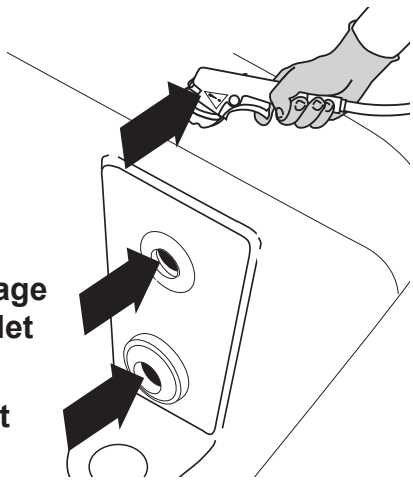
7 Spray disinfectant into the suction inlet until foam will come out of the *Hydromassage* system nozzle/treatment hose. **(See Fig. 4)**

Fig. 5

Surface Overflow Outlet

Hydromassage System Outlet

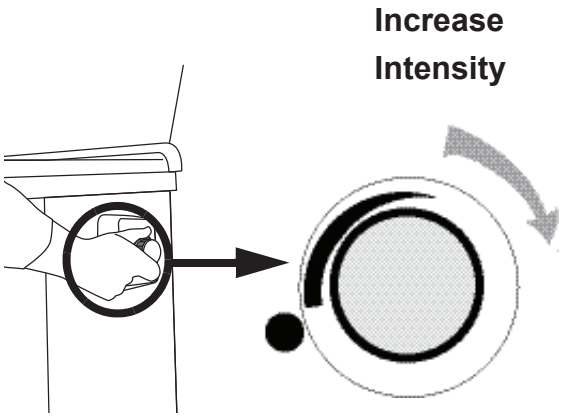
Suction Inlet



8 Spray disinfectant into the surface overflow outlet. **(See Fig. 5)**

Continue with the steps on the next page.

Fig. 1



9 Let the disinfectant act according to the time printed on disinfectant bottle.

10 Press the disinfectant button to disinfectant off.

11 Press the shower button and connect the shower handle to the suction inlet.

12 Make sure the *Hydromassage* system knob is turned clockwise at highest intensity to prevent water leakage on the floor. **(See Fig. 1)**

13 Press the trigger and rinse until the water comes out **clear** from the *Hydromassage* system nozzle/treatment hose.

14 After the rinse, remove the treatment hose, if any, and let it hang dry on the holder.

15 Put the nozzle back into the *Hydromassage* system outlet.

16 Rinse the surface overflow outlet with water as well.

17 Continue with the remaining disinfection instructions according to section *Clean and Disinfect with Disinfection Spray Handle (Still Bath and Hydrosound System) on page 43*.

18 When disinfection is completed, attach the suction inlet screen, put the screws back and tighten them gently.

Remove Lime Deposits, Mini Corrosion and Discolouration (Primo® Ferro, Stainless Steel bath only)

(4 steps)

1 Cover the area with stainless steel cleaner and let it work for 10-20 minutes.

2 Rinse with plenty of water.

3 Dry with a clean cloth to avoid water marks.

4 Afterwards treat it with a stainless steel polish to get the preventative coating against fingerprints and water marks.

Care and Preventive Maintenance

The *System 2000* bath is subject to wear and tear, and the following actions must be performed when specified to make sure that the product remains within its original manufacturing specification.

WARNING

To avoid malfunction resulting in injury, make sure to conduct regular inspections and follow the recommended maintenance schedule. In some cases due to heavy use of the product and exposure to aggressive environment more frequent inspections should be carried out. Local regulations and standards may be more stringent than the recommended maintenance schedule.

NOTE
Product cannot be maintained and serviced while in use with the patient.

Preventive Maintenance Schedule: System 2000 bath

CAREGIVER OBLIGATIONS Action/Check	Between Patients	Every DAY	Every WEEK	Every MONTH	Every YEAR
Clean and Disinfect	X				
Check liquid levels		X			
Visually check all exposed parts			X		
Check pillow, foot support and toiletry tray			X		
Visually check hoses, pipes and connections			X		
Perform functionality test			X		
Check / clean shower heads				X	
Check / clean filters, incoming water				X	
Exercise the thermostat mixer (P220 only)				X	
Yearly checks by qualified personnel only					X
Check electrical installation (to be performed by authorized electrician)	Intervals according to local requirements				

WARNING

To avoid injury to both the patient and the caregiver, never modify the equipment or use incompatible parts.

Fig. 1

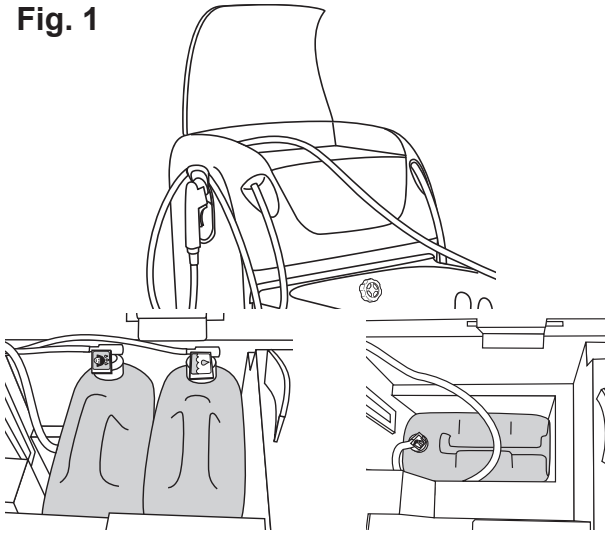


Fig. 2

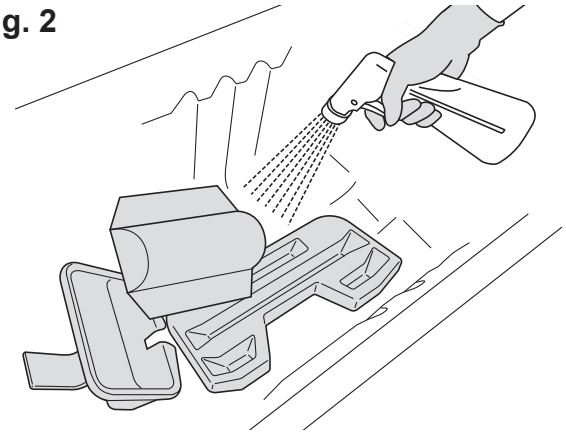
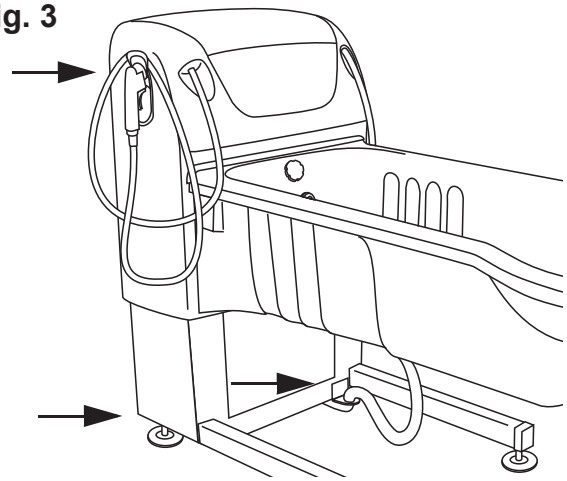


Fig. 3



Caregiver Obligations

Caregiver obligations shall be carried out by personnel with sufficient knowledge of the *System 2000* bath following the instructions in this *IFU*.

If the product deviates from normal (function or in appearance) immediately contact your local Arjo Service for support.

Between Patients

Clean and disinfect:
Before every use, make sure the *System 2000* bath is cleaned and disinfected according to section *Cleaning and Disinfection Instructions on page 40*.

Every week

- **Check liquid levels:**
  Check liquid levels in the bottles of disinfectant, shampoo and bath oil (*ArjoSound* water conditioner). **(See Fig. 1)**

- **Visually check exposed parts:**
  1 Visually check all exposed parts, especially where personal contact is made by either the patient or caregiver.
  2 Make sure no cracks or sharp edges have developed that could cause the patient or caregiver injury or that has become unhygienic and can cause cross-contamination. Any use of chlorine, alcohol can damage the bathtub and cause cracks.

- **Check accessories:**
  Check pillow, foot support and toiletry tray to make sure there are no cracks or tears that would allow water to get into the filling and cause cross contamination. If there is such damage, replace. **(See Fig. 2)**

- **Visually check hoses, pipes and connections:**
  Visually check for leaks of any kind underneath the bathtub. **(See Fig. 3)**

Continue with the steps on the next page.

Fig. 4

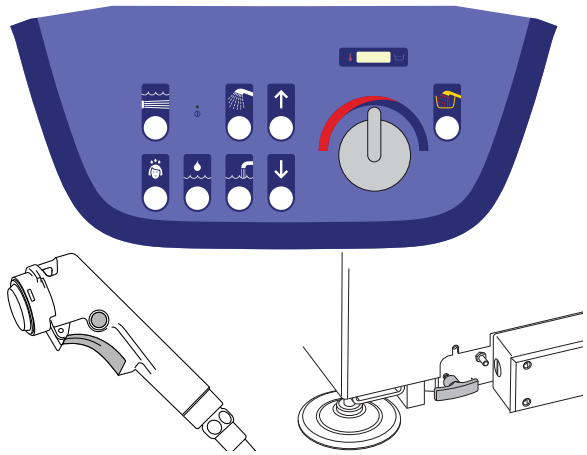


Fig. 1

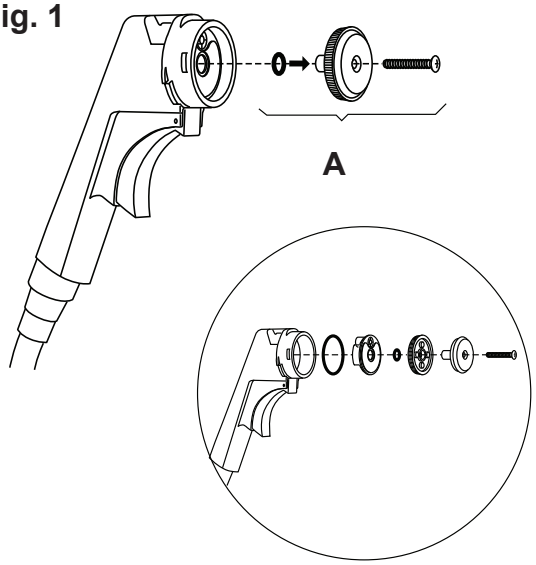
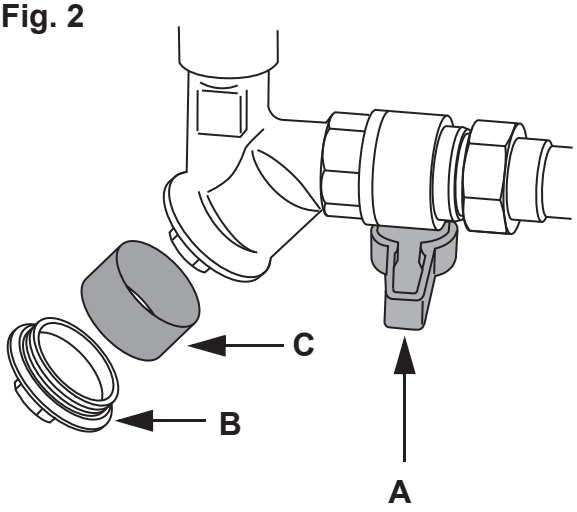


Fig. 2



- **Perform functionality test (See Fig. 4):**
  1. Test all functions. Water (fill and shower), Disinfection, *Hydromassage* system, *Hydrosound* system test mode (see section *Hydrosound System on page 24*) and the *Sound & Vision* system (see section *Sound & Vision System on page 26*).
  2. With water on: check shower hose and shower handle for damage. Replace if damaged. Shower handle can be replaced without Arjo support**.**
  3. Check the emergency lowering function, if any.

Every month

- **Remove and clean the shower head (See Fig. 1):**
  1. Loosen the screw.
  2. Remove all loose parts.
  3. Clean carefully.
  4. Re-assemble. The parts **(A)** must be assembled before they will be set into the handle. **(See Fig. 1)**
  5. Tighten the screw carefully.

- **Check/clean filters for incoming water:**
  A rinsing valve with a filter is mounted on each of the two water supply hoses found under the bathtub. Rinse filter in both valves according step by step instructions below.

WARNING

Pressurised system and risk of scalding. Make sure that the valve (A) is closed before removing the cap, this is especially important for the hot water valve.

  1. First, close the valves **(A)**. The handles (red for hot water and blue for cold) should be in a cross position. **(See Fig. 2)**
  2. Then, remove the cap **(B)** with a wrench. **(See Fig. 2)**
  3. Finally, pull out the filter **(C)** and clean it carefully in water. **(See Fig. 2)**
  4. Reassemble.
  5. Open the valves.

- **Exercise the thermostat mixer (P220 only):**
  Turn the temperature control back and forth over the whole temperature range with water on. This is particularly important in areas with hard water.

Yearly Checks by Qualified Personnel Only

The *System 2000* bath must be serviced once a year in accordance with the *Maintenance and Repair Manual*.

To make sure that you have a problem free and safe operation, it is recommended to have regular scheduled services with calibration of the thermostatic mixer and thermometer by a trained technician. Relocation of the bath, significant changes or modifications in local water supply may require re-calibration of the thermostatic mixing valve.

Contact your local Arjo service representative to sign for a service agreement.

WARNING

To avoid injury and/or unsafe product, the maintenance activities must be carried out at the correct frequency by qualified personnel using correct tools, parts and knowledge of procedures. Qualified personnel must have documented training in maintenance of this device.

NOTE
All Caregiver Obligations are to be checked when performing the Qualified Personnel Service. For details, see separate service instructions.

Troubleshooting

NOTE
Before starting the troubleshooting check: Power supply, Water supply and the LEDs on control panel. If the problem can not be solved with the problem solving actions below, please contact an Arjo authorized technician.

PROBLEM	ACTION
Only the water flow to the shower is slow.	Check and clean the shower head according to section *Care and Preventive Maintenance on page 52*.
Water flow from shower and filling spout is slow.	1 In order to feel if any hot water is coming in, feel the incoming hot water line to see if hot. 2 Check and clean filter for incoming water according to section *Care and Preventive Maintenance on page 52*.
Disinfection does not work.	1 Make sure the bathtub is empty of any left over water. 2 Make sure shower, fill or *Hydromassage* system/ *Hydrosound* system is not activated and try again. 3 If the LED on the control panel is flashing and beeping (*P300* only), it indicates that the disinfectant level in the bottle is running low and needs to be replaced. See section *Cleaning and Disinfection Instructions on page 40*.
Autofill function will not stop filling.	Metal sensory plugs need cleaning because of collected residue build up. See section *Cleaning and Disinfection Instructions on page 40*.
The *Sound & Vision* system hand control is not working.	1 The LED on the remote control should flash when active. 2 If it is not flashing, replace the *Sound & Vision* system hand control.
The *Sound & Vision* system sound is not working, but bathtub light is working.	1 The USB memory stick may be defective. If possible, check the USB LED light for indication. Solid light = power ON, Flashing light = reading. 2 Test another USB memory stick.
No *Sound & Vision* system light but sound is working.	Light is broken and it needs to be replaced by an Arjo authorized technician.
Fill or shower function stops. (Scalding protection).	Reset the scalding protection according to *Reset scalding protection (P220 only) (5 steps) on page 18* or *Reset scalding protection (P300 only) (4 steps) on page 19*.
Water on the ground.	1 Check for leakage on incoming water and the bath drainage hose. 2 The bath has short-circuited and the bath is filling up continuously with water. For both actions turn off the electrical supply and turn of the water supply.

Error Codes (P300 only)

Display Messages

During an internal failure the system will beep for 5 s and an error code will show up on the display. The bathtub can be raised or lowered during these error codes. If an error code is displayed, proceed as following:

1 Note the number of the error code. (-01-, -02-, -03-, -04- or -05-).

2 Write down the error code and press any button one time to reset the error code.

3 Stop using the bath and call qualified personnel and report the malfunction and the error code that is being displayed.

Display message	Cause	Remarks
	**Temperature sensor error**	Only raising and lowering of the bathtub is possible. All other functions are blocked until confirmation.
	**Calibration error**	Only raising and lowering of the bathtub is possible. All other functions are blocked until confirmation.
	*Hydrosound* **system error** Transducer not connected Transducer in air Transducer hot Test mode *Hydrosound* system	All other functions can be used.
	*Hydrosound* **system error** Intensity too high	All other functions can be used.
	**Level sensor error**	Only bathtub filling is blocked
	Please wait *Hydrosound* system pause or Rinsing of *Hydromassage* system pump or Manual calibration or Disinfectant pause or Mixer span exercise (every 15th bath cycle) or Electronic scalding protection active.	Only raising and lowering of the bathtub is possible. All other functions are blocked. Beep is scalding protection.
	**Low level in disinfectant bottle** Active for 5 s. *Disinfection ON/OFF* is flashing.	Replace the disinfectant bottle according to *Replace Disinfectant Bottle (System 2000 bath with disinfection option only) on page 42*.

Technical Specifications

A full technical description of the *System 2000* can be found in the service documentation, please contact Arjo for a copy. Contact information appears on the last page of this IFU.

Site Requirements

NOTE
All drainage, water and electrical installation work should be carried out by qualified personnel, in accordance with local and national regulations.

Electric supply, Europe and North America	
Voltage	230/240 V (Europe) 120 V (North America) 100 V (Japan) 220 V (Korea) 230 V (Saudi Arabia)
Number of phases	Single phase AC
Frequency	50 Hz (Europe) 60 Hz (North America) 50/60 Hz (Japan) 60 Hz (Korea) 60 Hz (Saudi Arabia)
Power consumption (maximum)	1100 VA
Fuse	6 A (Europe) 10 A (North America) 12 A (Japan) 6 A (Korea) 6 A (Saudi Arabia)
Protective earth	Yes
Potential equalisation	Yes
Power supply cord	Replaceable by qualified personnel

WARNING

To avoid electric shock, make sure that the equipment is connected to:

- **Continuously powered supply mains with protective earth.**
- **Separate fuse and ground fault circuit interrupter (GFCI)**
- **A mains disconnection device**
- **Equipotential bonding point**

All installations must be in accordance with local codes and regulations.

Mains disconnection device	
Permanently installed in wall. Visible and accessible at all times	
Mains transient voltage	4 kV*
Creepage distance	3 mm*
Air clearance	1.8 mm*
Direction of movement	Up and down, right and left, clockwise and counterclockwise
* If local regulations are higher, then they have to be met.	

Water supply	
Cold/Warm Water	3/4” B.S.P female
Connect with shut off valves between unit and supply net, minimum through Ø 16 mm	
Maximum static pressure	6 bar (600 kPa, 87 psi)
Minimum operating pressure (all markets except UK market) Minimum operating pressure (UK market)	2 bar (200 kPa, 29 psi) 1 bar (100 kPa, 14.5 psi)
Required cold water temperature	2 - 20 °C (36 - 68 °F)
Required warm water temperature	60 - 80 °C (140 - 176 °F)
Drain position	Floor or wall

Floor	
Maximum floor load	990 kg /0.91 m^2
Maximum floor pressure	1.8 N/mm^2

Operating conditions	
Ambient temperature	40 °C (104 °F)
Relative humidity	30% - 75% Rh
Atmospheric pressure	800 hPa to 1060 hPa

Transport and storage	
Ambient temperature	-20 °C to 70 °C (-4 °F to 158 °F)
Relative humidity	10% - 80% at 20 °C (68 °F)
Atmospheric pressure	500 hPa to 1100 hPa

Environmental	
Microbiological demands Fulfil WHOs demands on drinking water and the Drinking Water Directive (DWD) in EU. Specifications below have a different value from microbiological demands above.	
Ph Range	Ph 7.5 - Ph 9
Conductivity (minimum)	More than 2.7 mS/m
Chloride (maximum)	Less than 250 mg/l
Hardness	Less than 20 °dH
Alkalinity	60 - 200 mg/l HCO_3
Installation of the *System 2000* bath	Refer to Assembly and Installation Instructions
Pollution degree	2

End of Life Disposal

- Equipment that has electrical and electronic components should be disassembled and recycled per Waste of Electrical and Electronic Equipment (WEEE) or in accordance with local or national regulation.
- Disinfection liquids – if you have extra liquid, it's safe to pour it down the drain with running water. These products are water soluble and usually mixed with water when used for cleaning, your municipality will treat these cleaners the same way they would if you used them for cleaning.
- The packaging containers should be recycled according to the national or local regulations.

Technical Requirement	
Maximum patient weight	182 kg (401 lbs)
Safe Working Load (patient + water)	500 kg / 1102 lbs
IP Class according to IEC 60529	IP X4
IP Class according to IEC 60529 *Sound & Vision* system hand control	IP X7
Electrical Protection Type	I
Electrical Protection Degree	B
Degree of fire protection	In accordance with standard IEC 60601-1
Maximum duty cycle, lifting	2 minutes ON 18 minutes OFF
Maximum duty cycle, *Hydrosound* system/*Hydromassage* system	15 minutes ON 15 minutes OFF
Thermometer	
Range	10-50 °C (50-122 °F)
Accuracy	+/-1 °C (1.8 °F)
Resolution	0.1 °C (0.18 °F) P220 0.5 °C (0.9 °F) P300

Allowed Combinations		
Arjo Product	Lift	Bathtub length
Alenti	All models	System 20, 23 and 25
Miranti	All models	System 23 and 25
Calypso	All models	System 20, 23 and 25
Bolero	Not pediatric	System 23 and 25
Bolero	Pediatric	System 20, 23 and 25
Combilift	Classic	System 20, 23 and 25
Combilift	Stretcher	System 23 and 25
Combilift	Hanger bar	System 20, 23 and 25
Maxi Twin	All models	System 20, 23 and 25
Maxi Move	Not Large Hanger bar	System 20, 23 and 25
Maxi Sky	Not Maxi Sky 1000 (Large)	System 20, 23 and 25
Maxi Sky 2 Plus	All models	System 20, 23 and 25
Marisa	All models	System 20, 23 and 25
No other combinations are allowed		

Sound Levels	
Sound level at raising/lowering, no load	69 dBA
Sound level at raising/lowering, full load	68 dBA
Sound level at hydromassage/air spa	76 dBA
Sound level at bathtub filling	80 dBA
Sound level at shower start	55 dBA

Water volumes for bathtubs (interval depending on bathtub model and bathtub size)	
Filling time at 3.0 bar (43.5 PSI) dynamic pressure, 80 °C (176 °F) HW	3 - 7.5 minutes
Water content up to overflow level	262 - 409 l 69.2 - 108 US gallons
Water content up to autofill level	185 - 282 l 48.9 - 74.5 US gallons
Drainage time - High Position	4.2 - 6.6 minutes
Drainage time - Low Position	6.9 - 10.8 minutes
Minimum drainage capacity	100 l/minute 26.4 US gallons/minute
Product measure	see *Assembly and Installation Instructions*

List of Standards and Certificates

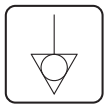
STANDARD/ CERTIFICATE	DESCRIPTION
EN/IEC 60601-1:2005 AMD1:2012	Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance
ANSI/AAMI ES60601-1 (2005) AMD 1 (2012)	Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance
CAN/CSA-C22.2 No. 60601-1:14	Medical Electrical Equipment - Part 1: General Requirements for Basic Safety and Essential Performance
CSA B45.5-02	CSA Standard for Plastic Plumbing Fixtures
ANSI Z124.1.2-1995	Standard for Plastic Bathtub Units
ANSI/ASME A112.19.7-1995	Whirlpool Bathtub Appliances
ANSI/ASME A112.19.8-1987	Suction Fittings
ASSE 1001-1988, CSA B64.1.1-2008	Pipe Applied Atmospheric Type Vacuum Breaker
ASSE 1056, CSA B64.1.2	Back Siphonage Vacuum Breakers
ANSI/ASSE 1014-1989	Hand Held Shower
ANSI/ASSE 1016-2005	Individual Thermostatic, Pressure Balancing and Combination Pressure Balancing and Thermostatic Control Valves for Individual Fixtures.
EN 1717:2000	Protection against pollution of portable water in water installation and general requirements of devices to prevent pollution by backflow.

Labels

Label explanation

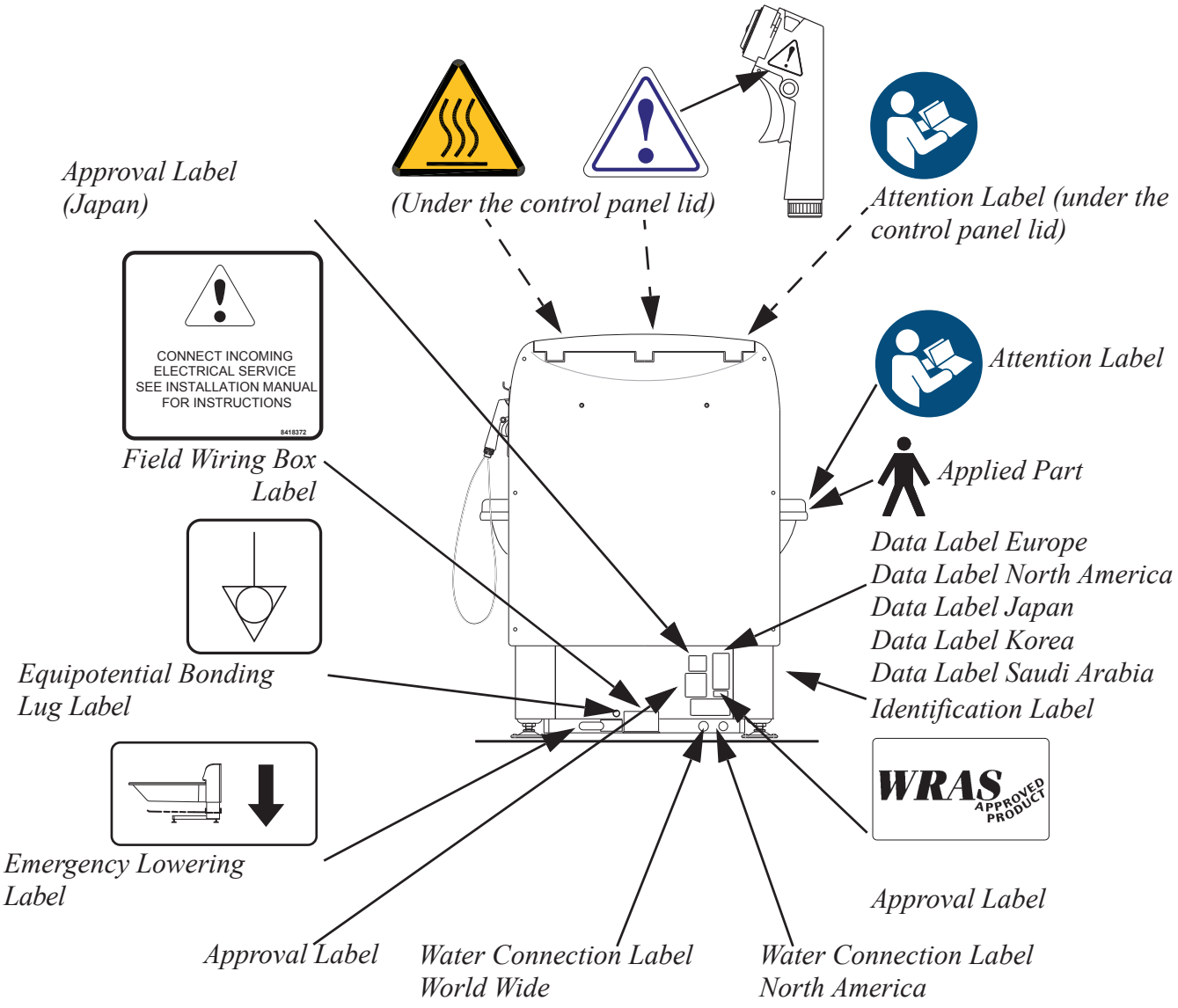
Applied Part	Type B, Applied part: protection against electrical shock in accordance with IEC 60601.
Attention Label	Important user information for correct use.
Approval Label	States approvals for the current product.
Calibration Label	States that a calibration has to be done before first use and after every installation. See *Assembly and Installations Instructions* and call an Arjo technician.
Data Label	States technical performance and requirements, e.g. Input Power, Input Voltage and maximum Patient Weight etc.
Emergency Lowering Label	States emergency information, see section *Emergency Lowering (optional, not for UK market) on page 20*.
Factory	Name and address of the manufacturer
Field Wiring Box Label (USA and Canada only)	States where to connect the incoming electrical service.
Identification Label	States the product identification, serial number and year and month of manufacturing.
Water Connection Label	States required maximum/ minimum temperature for cold and hot water and maximum/ minimum water pressure.

Symbol explanation

	Lifting Stroke
	Label for equipotential connection point (bonding lug)
Safe Working Load (SWL)	Maximum weight of patient and water
Input Voltage	Voltage feed
Input Power	Power
Class 1	Type of protection - grounded
IP X4	Degree of Protection (i.e. the product is protected against splashing water)
ED max	Time span (Duty cycle) of Hi/Lo, *Hydromassage* system and *Hydrosound* system being turned ON and OFF.
CE 2797	CE marking indicating conformity with European Community harmonised legislation Figures indicate Notified Body supervision.
	Separate electrical and electronic components for recycling in accordance with the European Directive 2012/19/EC (WEEE)
	Read the *IFU* before use.
	Warning! Hot surface!
	General warning

Approval label explanation

PS E	The PSE is a mandatory mark for Japan according to the *Electrical Appliance and Material Safety Law (DENAN).*
UL CERTIFIED SAFETY US-CA E347873	Classified by Underwriters Laboratories Inc. with respect to electrical shock, fire, mechanical, hazards and other specified hazards only in accordance with the Approvals and List of Standards (previous page).
kiwa gecertificeerd WATERLEIDING-TECHNISCH VEILIG	Dutch safety certification for water safety to the standards NEN-EN 1717, NEN 1006. KIWA evaluation guidance for backflow protection Water worksheets 3.8
WRAS APPROVED PRODUCT	(Water Fittings) Regulations 1999 (the Water Byelaws 2000 in Scotland)
	Name and address of the manufacturer
	Manufacturing date
MD	Indicates the product is a Medical Device according to EU Medical Device Regulation 2017/745



Electromagnetic Compatibility

Product has been tested for compliance with current regulatory standards regarding its capacity to block EMI (electromagnetic interference) from external sources.

Some procedures can help reduce electromagnetic interferences:

- Use only Arjo cables and spare parts to avoid increased emissions or decreased immunity which can compromise the correct functioning of the equipment.
- Ensure that other devices in patient-monitoring and/or life-support areas comply to accepted emissions standards.

WARNING

Wireless communications equipment such as wireless computer network devices, mobile phones, cordless telephones and their base stations, walkie-talkies, etc. can affect this equipment and should be kept at least 1.5 m away from the equipment.

Intended Environment: Professional Healthcare Facility Environment

Exceptions: HF Surgical Equipment and the RF Shielded room of an ME SYSTEM for magnetic resonance imaging

WARNING

Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

Guidance and manufacturer's declaration – electromagnetic emission		
Emission test	**Compliance**	**Guidance**
RF emissions CISPR 11	Group 1	This equipment uses RF energy only for its internal functions. Therefore its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. This equipment 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.
RF emissions CISPR 11	Class B	
Harmonic emissions IEC 61000-3-2	Class B	
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration - electromagnetic immunity

Immunity test	IEC 60601-1-2 test level	Compliance level	Electromagnetic environment - guidance
Electrostatic discharge (ESD) EN 61000-4-2	±2kV, ±4kV, ±8kV, ±15kV air ±8kV contact	±2kV, ±4kV, ±8kV, ±15kV air ±8kV contact	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material the relative humidity level should be at least 30%
Conducted disturbances inducted by RF fields EN 61000-4-6	3V in 0,15 MHz to 80 MHz 6V in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80% AM at 1 kHz	3V in 0,15 MHz to 80 MHz 6V in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80% AM at 1 kHz	Portable and mobile RF communications equipment should be used no closer to any part of the product, including cables, than 1.0m, if the transmitter's output power rating exceeds 1W ([a]) Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, should be less than the compliance level in each frequency range ([b]). Interference may occur in the vicinity of equipment marked with this symbol: 
Radiated RF electromagnetic field EN 61000-4-3	Professional Healthcare environment 3 V/m 80 MHz to 2,7 GHz 80% AM at 1 kHz	Professional Healthcare environment 3 V/m 80 MHz to 2,7 GHz 80% AM at 1 kHz	
Proximity fields from RF wireless communications equipment EN 61000-4-3	385 MHz - 27 V/m 450 MHz - 28 V/m 710, 745, 780 MHz - 9V/m 810, 870, 930 MHz - 28 V/m 1720, 1845, 1970, 2450 MHz – 28 V/m 5240,5500, 5785 MHz - 9V/m	385 MHz - 27 V/m 450 MHz - 28 V/m 710, 745, 780 MHz - 9 V/m 810, 870, 930 MHz - 28 V/m 1720, 1845, 1970, 2450 MHz - 28 V/m 5240,5500, 5785 MHz - 9V/m	
Electrical fast transient/burst EN 61000-4-4	±1kV SIP/SOP ports ±2kV AC port 100kHz repetition frequency	±1kV SIP/SOP ports ±2kV AC port 100kHz repetition frequency	Mains power supply should be that of a typical comercial or hospital environment.
Power frequency Magnetic field EN 61000-4-8	30A/m 50 Hz or 60 Hz	30A/m 50 Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Guidance and manufacturer's declaration - electromagnetic immunity

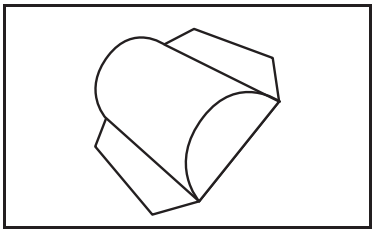
Immunity test	IEC 60601-1-2 test level	Compliance level	Electromagnetic environment - guidance
Surge IEC 61000-4-5	±0,5kV ±1kV; ±2 kV, AC Mains, Line to Ground ±0,5kV ±1kV, AC Mains, Line to Line	±0,5kV ±1kV; ±2 kV, AC Mains, Line to Ground ±0,5kV ±1kV, AC Mains, Line to Line	
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	0% UT; 0,5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0° 0% UT; 250/300 cycle	

NOTE: U_T is the AC mains voltage prior to application of the test level.

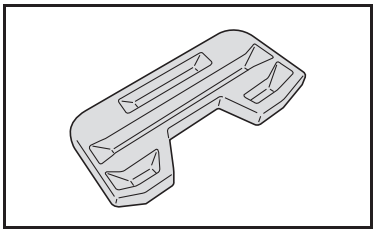
[a] Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the product lift is used exceeds the applicable RF compliance level above, the product should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary.

[b] Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 1 V/m.

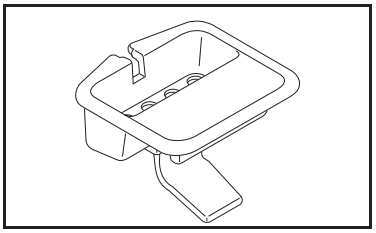
Parts and Accessories



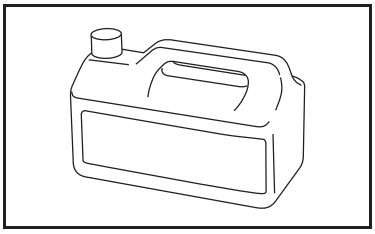
8331457-03 - Grey
Pillow



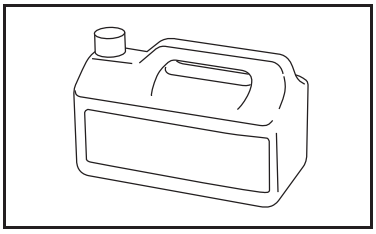
8138678 - Transparent
Foot Support
8154647-04 -Primo®
Ferro
Foot Support



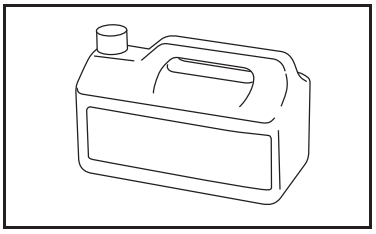
ARA 0007-01
Toiletry tray



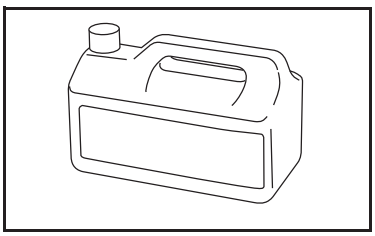
For disinfectant
contact the Arjo local
representative



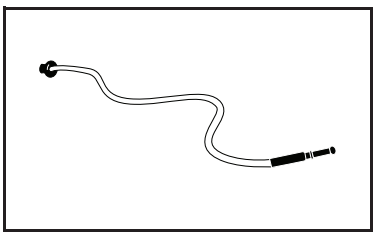
SRB4000
Arjo Oil™ (Bath Oil)
2 X 2 Litre bottles



SRB5000
Arjo Care™ (Shampoo,
Body Wash)
4 X 2 Litre bottles



SRB1000
ArjoSound™
Water Conditioner
(for Hydrosound System)
2 X 2 Litre bottles



ARA 0500-03
Hydromassage Treatment
Hose inclusive holder

No picture available

ARA 3333-04
Booster Pump

No picture available

ARA 0300-031
Foundation Frame

Intentionally left blank

AUSTRALIA
Arjo Australia
Building B, Level 3
11 Talavera Road
Macquarie Park, NSW, 2113,
Australia
Phone: 1800 072 040

BELGIQUE / BELGIË
Arjo Belgium nv
Evenbroekveld 16
9420 Erpe-Mere
Belgium
T: +32 (0) 53 60 73 80
F: +32 (0) 53 60 73 81
E-mail: info.belgium@arjo.com

BRASIL
Arjo Brasil Equipamentos Médicos Ltda
Rua Marina Ciufuli Zanfelice, 329 PB02 Galpão - Lapa
São Paulo – SP – Brasil
CEP: 05040-000
Phone: 55-11-3588-5088
E-mail: vendas.latam@arjo.com
E-mail: servicios.latam@arjo.com

CANADA
Arjo Canada Inc.
90 Matheson Boulevard West
Suite 300
CA-MISSISSAUGA, ON, L5R 3R3
Tel/Tél: +1 905 238 7880
Free: +1 800 665 4831 Institutional
Free: +1 800 868 0441 Home Care
Fax: +1 905 238 7881
E-mail: info.canada@arjo.com

ČESKÁ REPUBLIKA
Arjo Czech Republic s.r.o.
Na Strzi 1702/65
140 00 Praha
Czech Republic
Phone No: +420225092307
e-mail: info.cz@arjo.com

DANMARK
Arjo A/S
Vassingerødvej 52
DK-3540 LYNGE
Tel: +45 49 13 84 86
Fax: +45 49 13 84 87
E-mail:
dk_kundeservice@arjo.com

DEUTSCHLAND
Arjo GmbH
Peter-Sander-Strasse 10
DE-55252 MAINZ-KASTEL
Tel: +49 (0) 6134 186 0
Fax: +49 (0) 6134 186 160
E-mail: info-de@arjo.com

ESPAÑA
Arjo Ibérica S.L.
Parque Empresarial Rivas Futura, C/Marie Curie 5
Edificio Alfa Planta 6 oficina 6.1-.62
ES-28521 Rivas Vacia, MADRID
Tel: +34 93 583 11 20
Fax: +34 93 583 11 22
E-mail: info.es@arjo.com

FRANCE
Arjo SAS
2 Avenue Alcide de Gasperi
CS 70133
FR-59436 RONCQ CEDEX
Tél: +33 (0) 3 20 28 13 13
Fax: +33 (0) 3 20 28 13 14
E-mail: info.france@arjo.com

HONG KONG
Arjo Hong Kong Limited
Room 411-414, 4/F, Manhattan Centre,
8 Kwai Cheong Road, Kwai Chung, N.T.,
HONG KONG
Tel: +852 2960 7600
Fax: +852 2960 1711

ITALIA
Arjo Italia S.p.A.
Via Giacomo Peroni 400-402
IT-00131 ROMA
Tel: +39 (0) 6 87426211
Fax: +39 (0) 6 87426222
E-mail: Italy.promo@arjo.com

MIDDLE EAST
Arjo Middle East FZ-LLC
Office 908, 9th Floor,
HQ Building,North Tower,
Dubai Science Park,
Al Barsha South
P.O Box 11488, Dubai,
United Arab Emirates
Direct +971 487 48053
Fax +971 487 48072
Email: Info.ME@arjo.com

NEDERLAND
Arjo BV
Biezenwei 21
4004 MB TIEL
Postbus 6116
4000 HC TIEL
Tel: +31 (0) 344 64 08 00
Fax: +31 (0) 344 64 08 85
E-mail: info.nl@arjo.com

NEW ZEALAND
Arjo Ltd
34 Vestey Drive
Mount Wellington
NZ-AUCKLAND 1060
Tel: +64 (0) 9 573 5344
Free Call: 0800 000 151
Fax: +64 (0) 9 573 5384
E-mail: nz.info@Arjo.com

NORGE
Arjo Norway AS
Olaf Helsets vei 5
N-0694 OSLO
Tel: +47 22 08 00 50
Faks: +47 22 08 00 51
E-mail: no.kundeservice@arjo.com

ÖSTERREICH
Arjo GmbH
Lemböckgasse 49 / Stiege A / 4.OG
A-1230 Wien
Tel: +43 1 8 66 56
Fax: +43 1 866 56 7000

POLSKA
Arjo Polska Sp. z o.o.
ul. Ks Piotra Wawrzyniaka 2
PL-62-052 KOMORNIKI (Poznań)
Tel: +48 61 662 15 50
Fax: +48 61 662 15 90
E-mail: arjo@arjo.com

PORTUGAL
Arjo em Portugal
MAQUET Portugal, Lda.
(Distribudor Exclusivo)
Rua Poeta Bocage n.º 2 - 2G
PT-1600-233 Lisboa
Tel: +351 214 189 815
Fax: +351 214 177 413
E-mail: Portugal@arjo.com

SUISSE / SCHWEIZ
Arjo AG
Fabrikstrasse 8
Postfach
CH-4614 HÄGENDORF
Tél/Tel: +41 (0) 61 337 97 77
Fax: +41 (0) 61 311 97 42

SUOMI
Arjo Scandinavia AB
Riihitontuntie 7 C
02200 Espoo
Finland
Puh: +358 9 6824 1260
E-mail: Asiakaspalvelu.finland@arjo.com

SVERIGE
Arjo International HQ
Hans Michelsensgatan 10
SE-211 20 MALMÖ
Tel: +46 (0) 10 494 7760
Fax: +46 (0) 10 494 7761
E-mail: kundservice@arjo.com

UNITED KINGDOM
Arjo UK and Ireland
Houghton Hall Park
Houghton Regis
UK-DUNSTABLE LU5 5XF
Tel: +44 (0) 1582 745 700
Fax: +44 (0) 1582 745 745
E-mail: sales.admin@arjo.com

USA
Arjo Inc.
2349 W Lake Street Suite 250
US-Addison, IL 60101
Tel: +1 630 307 2756
Free: +1 80 0 323 1245 Institutional
Free: +1 800 868 0441 Home Care
Fax: +1 630 307 6195
E-mail: us.info@arjo.com

JAPAN
Arjo Japan K.K.
東京都港区虎ノ門三丁目7番8号　ランディック第2虎ノ門ビル9階
電話：+81 (0)3-6435-6401

Address page - REV 25: 01/2020

www.arjo.com

At Arjo, we are committed to improving the everyday lives of people affected by reduced mobility and age-related health challenges. With products and solutions that ensure ergonomic patient handling, personal hygiene, disinfection, diagnostics, and the effective prevention of pressure ulcers and venous thromboembolism, we help professionals across care environments to continually raise the standard of safe and dignified care. Everything we do, we do with people in mind.

ArjoHuntleigh AB
Hans Michelsensgatan 10
211 20 Malmö, Sweden
www.arjo.com

CE
2797