

"Your Total Patient Lift Solution"

EZ 900 Bathtubs

Operator's Instructions



EZ Way, Inc. PO Box 89 Clarinda, IA 51632 1-800-627-8940 www.ezlifts.com Study this manual carefully before operating your bathing system.

This bath system is intended for professional use only where the patient is under supervision of trained personnel.

Operating instructions and recommended maintenance procedures are explained in the following pages. If you have any questions regarding the operation or maintenance of your bathing system and cannot find the answer in this manual, please contact us at 1-800-627-8940.

The system is designed for years of trouble-free operation, with proper use and maintenance. Bathtub and shower water must be run at least every three days.

Height Adjustable Models

EZ 900H EZ 900HC cleaning EZ 900HCW cleaning/whirlpool

Fixed Height Models

EZ 900F

EZ 900FC cleaning

EZ 900FCW cleaning/whirlpool

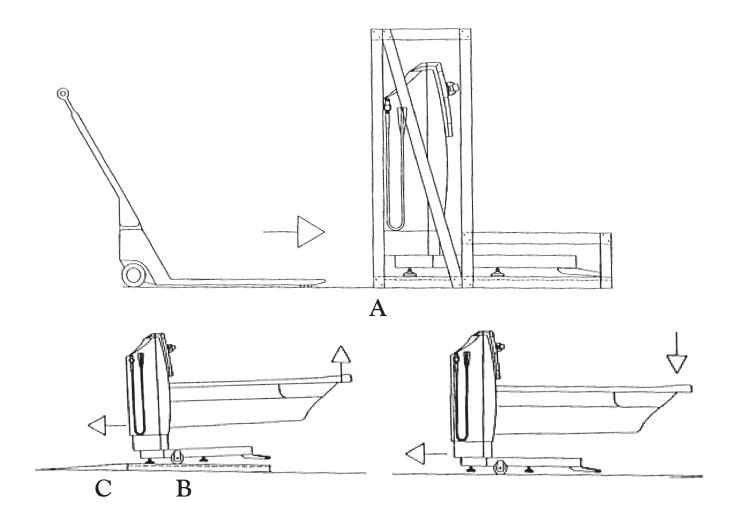
Unpacking Instructions

Unpack the EZ 900 Height Adjustable Bathtub panel by removing the screws (A) on both sides of the pallet and remove the crate.

Assemble the bathtub (cardboard box) to the panel by removing the back of the panel, and use the transport wheel beam (B) and wooden ramp L=4'1" (C), if ordered, to unload off pallet. The transport wheel beam can also be used to transport the bathtub in place into the bathroom.

EZ Way recommends using at least two people when handling and transporting the tub.

Measurements: 5' x 3'2" x 4'4" (L x W x H). Gross weight: 500 lbs.



Features and Controls

Bathtub Height Adjustment and Filling

| Position | Description |
|----------|----------------------------------|
| 1. | Bathtub up/down control buttons |
| 2. | Thermoscopic mixer |
| 3. | Thermometer |
| 4. | On-off valve for bathtub filling |
| 5. | Bathtub filling spout |
| 6. | Bathtub overflow drain |
| | Drain-close/open |
| | |

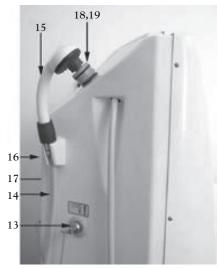
Patient Shower

| Position | Description |
|----------|------------------------------------|
| 2. | Thermoscopic mixer |
| 3. | Thermometer |
| 9. | On-off valve for patient showering |
| 10. | Patient shower hose |
| 11. | Patient shower handle |
| 12. | Handle bracket |



Cleaning System (C) Position Description

| Position | Description |
|----------|---|
| 13. | Shut-off safety valve |
| 14. | Spray equipment hose |
| 15. | Spray handle |
| 16. | Spray handle bracket |
| 17. | Mixing setting screw (inside the panel) |
| 18. | Detergent filling lid |
| 19. | Yellow cleaning adapter, for whirlpool |



Whirlpool System (W)

| Position | Description |
|----------|------------------------------------|
| 20. | Motor control on/off for whirlpool |
| 21. | Adjustable whirlpool jet |
| 22. | Aeration control valve |
| 23. | Whirlpool inlet safety screen |
| 24. | Adjustable footrest, two positions |



Autofill Controls

Bathtub Filling

Start the automatic bathtub filling process by pressing the "bathtub filling symbol" (4) to the left of the thermostat (2). The green light (30) will be lit and water will fill the bathtub.

The red "running water" light (31) to the right of the thermometer indicates that the thermometer shows the filling water temperature and can be adjusted by turning the thermostat knob (2).

When the water level reaches the "waterline" inside the bathtub, (about 53 gallons, 200 liters) the bathtub filling will automatically stop and both the green (30) and the red light (31) will switch off.

The light (33) automatically indicates that the thermometer shows the still bathtub water temperature.

More water can be added into the bathtub. When pressing the "bathtub filling symbol" (4) once more, the green light (30) will flash and water will be added for approximately one minute.

This procedure can be repeated or stopped by pressing the "bathtub filling symbol" (4).

WARNING: Always physically check water temperature before and during bathing/showering to ensure that the thermoscopic mixer (2) is functioning.

Showering

Remove the shower handle (11) from the panel and hold it over the bathtub away from the patient.

Press the "shower handle symbol" (9) to the right of the thermostat. The green light (32) will illuminate and water will spray from the shower handle.

The red "running water" light (31) to the right of the thermometer indicates that the thermometer shows the running shower water temperature and can be adjusted by turning the thermostat knob.

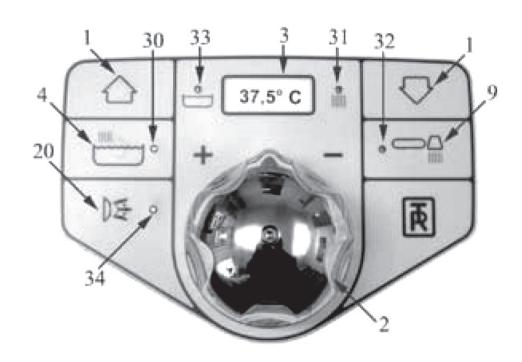
Stop the water flow by pressing the "shower handle symbol" (9) once. Both the green (32) and the red (31) lights will switch off. The procedure can be repeated.

The shower water flow is preset when installing the bathtub. If other shower flows are required, set the water flow by adjusting the black ball valve inside the panel.

Whirlpool

To start the whirlpool system, press the whirlpool symbol (20) and the green light (34) will be lit. To stop the whirlpool system, press the whirlpool symbol (20) and the green light (34) will switch off.

Important: Never start the whirlpool when the water level is below the jet (21). Read separate whirlpool instructions.



Basic Operating Procedures

Use the following controls for filling tub and showering patients. The Whirlpool and cleaning system are described separately.

Controls

The 900 Bathing System control panel and bathtub are made of fiberglass. It has a thermoscopic mixer (2) for the bathtub filling and the patient shower. The thermoscopic mixer regulates water valve temperature for the bathtub fill and the patient shower.

To calibrate the thermoscopic mixer, see enclosed product manual.

In addition, there are shut-off valves for the tub fill (4) and patient shower (9).

The thermometer (3) measures bathtub filling water and patient shower temperature in C.

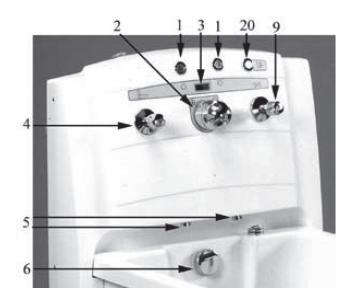
The temperature probe is located close to the thermoscopic mixer (2) to provide an accurate reading of water temperature as the bathtub fills.

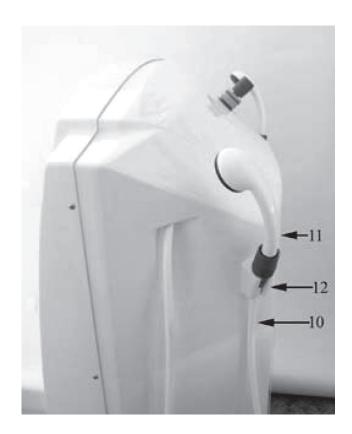
By monitoring the thermometer, you can precisely regulate water temperature with use of the thermoscopic mixer (2) as the tub fills or when the patient shower (11) is used.

Height of the tub is adjusted with the tub up/down controls (1). The tub can be adjusted to any level from 600 mm (24") to 1000 mm (40") above the floor.

To lower the tub, press and hold the down button (1). To raise the tub, press and hold the up button (1).

When releasing the up or down buttons, the bathtub stops in desired height position.





Shower System Operation

The patient shower includes a handle (11) located on the right side on the panel, the thermoscopic mixer (2) and a shut-off valve (9) on the front of the control panel. The handle nozzle has a rubber strainer which is easy to clean, just rub your thumb over the strainer.

Using the Shower

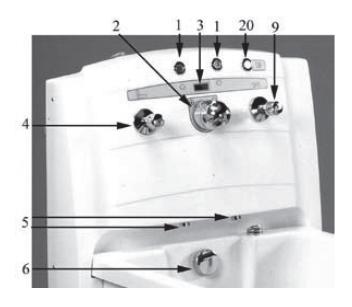
- 1. Lift the shower handle (11) and hold it over the tub, away from patient.
- 2. Turn valve (9) to "ON" position for patient shower.
- 3. Set the thermoscopic mixer (2) to desired temperature.
- 4. Physically test water temperature and adjust thermoscopic mixer (2) to suit. Adjust water flow with shutoff valve (9) located on front of control panel.
- 5. Shower or rinse patient with shower handle.
- 6. After showering, turn valve (9) to "OFF" position and return handle (11) to its bracket (12).

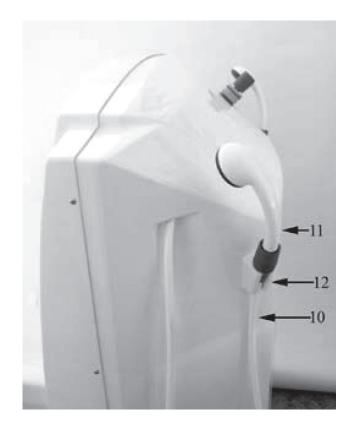
The patient shower system is also useful for rinsing residue and debris from tub when cleaning (see cleaning system description).

Please note: Shower handle should not be held in the bath water while bathing.

Whirlpool

The shower hose shall be used when flushing the whirlpool system, see separate description.





Whirlpool System Operation

The EZ whirlpool system allows you to regulate both water flow directions and quantity of air.

Using the Whirlpool System

- 1. Turn the adjustable whirlpool outlet jet (21), located at the drain end of the tub, counter-clockwise to completely open position.
- 2. Fill the bathtub making sure that the water level covers the outlet jet (21). Also, ensure that the whirlpool inlet screen (23) is in place. WARNING: Always physically check water temperature before and during bathing/ showering to ensure that the thermoscopic mixer is functioning.
- 3. Set the adjustable whirlpool outlet jet (21) for desired flow direction. Centred for the perineal area or to either side for circular flow. The adjustable jet rotates in a friction housing and is easily turned to the desired position. Avoid placing the jet in a full upward position, as this could cause the water to splash.
- 4. With the patient in the bathtub, turn on the whirlpool unit by pushing the "ON-OFF" control button (20) on the control panel. Make sure the whirlpool inlet screen (23) is not obstructed so that full flow is maintained.
- 5. To make any further adjustments in water flow direction, change the adjustable whirlpool outlet jet (21).
- 6. Increase or decrease whirlpool stream by turning the air control (22).
- 7. Turn the whirlpool unit off by pushing the "ON-OFF" control button (20) on the control panel.

Please note: If the whirlpool motor starts without any jet stream in the bathtub, verify that the adjustable whirlpool outlet jet (21) located at the drain end of the tub is fully open. If not, turn it counter-clockwise to completely open position. Verify that the screen (23) is in place. Do not start the pump if the screen is missing.

WARNING: Disconnect electric power before attempting any service or repair.



Patient Handling

Preparing Tub for Use

- 1. Close the drain plug by turning the overflow drainage knob (6).
- 2. Set adjustable foot rest (8) into position appropriate for the patient's legs.
- 3. Fill tub using on-off valve (4).
- 4. Set and monitor fill water temperature with thermoscopic mixer (2) and thermometer (3).

Please note: Footrest is not used when patients are transferred into the tub on EZ Way's stretcher lift.

WARNING: Always physically check water temperature before and during bathing/showering to ensure that the thermoscopic mixer (2) is functioning.

Ambulatory Patient Transfer

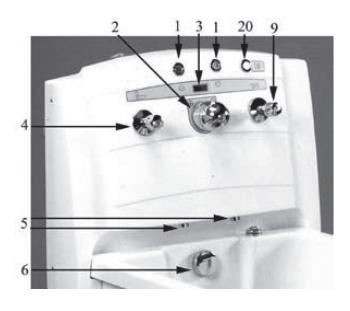
For patient comfort and safety, we recommend that ambulatory patients are transferred directly into the prefilled tub on EZ Way's stretcher/chair lift.

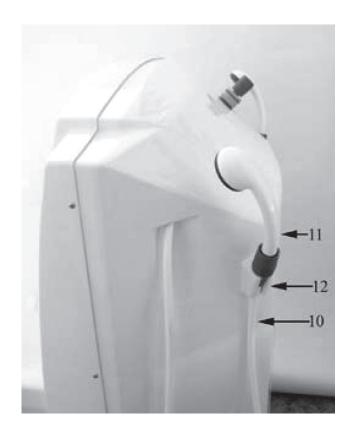
Refer to the Mobile Bath Lift System operating manual for correct procedures. See page 10 of this manual for "Patient Transfer into Tub" for recommended procedures for bathing patients on the chair lift and stretcher lift.

Ambulatory patients can step into the tub, in its lowest position, with assistance. When patient is comfortable, raise tub with the tub lift control (1) on the panel to a comfortable working height.

After use, lower the tub to allow the patient to exit.







Patient Handling

Patient Transfer into Tub with EZ Mobile Bath Lift System

While sitting, safely secured patients can be transferred directly into the tub on the height-adjustable EZ Mobile Bath Lift System. Refer to the EZ Mobile Bath Lift System operator's manual for correct procedures.

Transferring Patient on Mobile Bath Lift System into Tub



- Prefill the tub in its lowest position and physically test water for proper temperature.
 Move patient on the chair into position over tub and lock the chair lift casters.
 The adjustable footrest in the tub can be used together with the chair to add patient comfort and security. Important: Raise chair seat to ensure clearance of all body parts over the tub rim. This is to avoid the patient from being pinched between tub rim and chair frame during transfer.
- 2. Raise the tub to a comfortable working height. When the tub is in place, lower the chair into the tub. For added patient comfort, arm support and backrest can be rotated to outer side of tub rim. Important: Make sure that the patient's arms are crossed over his/her body. This to avoid pinching arms or fingers between chair frame and tub rim when chair is lowered or raised.
- 3. After bathing, lower the tub to raise the patient above water level to allow water to drip into the tub. You can use the patient shower system to rinse the patient in this position. The patient can then be dried or wrapped in a bath towel and transferred away from the bathtub.

Please note: Wipe beneath chair to prevent water from dripping on the floor.

Important: Safety belts must be securely fastened around patient at all times. For further details, refer to the EZ Mobile Bath Lift System operator's 10



manual.

Recumbent Patient Transfer, EZ Way Stretcher Lift Recumbent patients can be transferred directly and safely into the tub, on the height-adjustable EZ Way stretcher lift. Refer to the EZ Mobile Bath Lift System operator's manual for correct procedure.

Transferring Patient on Stretcher Lift into Tub

- 1. Prefill the tub in its lowest position and physically test water for proper temperature. Move patient on the stretcher lift over tub and lock the lift casters. **Important:** Raise the stretcher to ensure clearance over the rim of the tub. This is to avoid the patient from being pinched between tub rim and stretcher frame during transfer. The footrest in the tub is not used together with the stretcher.
- 2. Raise the tub to a comfortable working height. When the tub is in position, you can lower the stretcher into the tub using the lift. Important: Before raising or lowering the tub, make sure that the patient's hands firmly grasp the stabilizing bar on stretcher or that the patient's arms are crossed over his/her body. This is to avoid pinching arms or fingers between the stretcher frame and tub rim when the stretcher is lowered or raised.
- 3. After bathing, lower the tub to raise the patient above the water level to allow water to drip into the tub. You can use the patient shower system to rinse the patient in this position. The patient can then be dried or wrapped in a bath towel and transferred away from the bathtub.

Please note: Wipe beneath stretcher to prevent water from dripping on the floor.

Important: Safety belts must be securely fastened around patient at all times. For further details, refer to the EZ Mobile Bath Lift System operator's manual.

Cleaning System Operation

Important: This system is never to be used on patients, only on equipment.

The cleaning detergent is mixed with cold water to minimize inhalation.

The cleaning spray handle (15) on the yellow hose is located on the side of the control panel in a bracket (16).

Water flow is controlled by a shut-off safety valve (13) with a key, located on the left end wall of the control panel.

Detergent is automatically mixed with the water, in a pre-set concentration of approximately 2%, controlled by a mixing setting screw (17) on the injector inside the panel. When an alternative calibration setting is required, see next column.

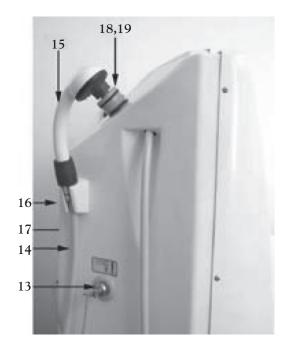
Daily Use of the Cleaning System:

- 1. Remove the cleaning spray handle (15) from bracket (16). Hold the handle over the bathtub while opening the shut-off safety valve (13) with the special key.
- Briefly spray the cleaning mixture into the tub while checking the color, smell and the foam of the mixture. Spray over all interior surfaces of the tub. Remove residue and debris with cloth or brush.
- 3. To clean the EZ chair lift and stretcher lift, position them over the tub and spray them with cleaning mixture. The chair and stretcher have removable pads and the stretcher has a head pillow that can be placed in the tub for cleaning.
- 4. After cleaning, rinse with fresh water using the shower handle on the right side of the control panel.

Detergent Filling

Open the lid (18) on top of the panel and fill with maximum 4-1/3 cups (1.5 liter) of concentrated detergent.

WARNING: Avoid skin or eye contact with cleaning/detergent, which can be highly corrosive. If contact is made, rinse immediately with excess water. If irritation occurs, consult a doctor. Always read and follow detergent supplier directions carefully.



Calibrating the Detergent Mixture of the Cleaning System

Detergent is automatically mixed with the cold water, in a pre-set mixture of 2% at the factory.

If an alternative calibration is needed, follow the instructions below to achieve a mixture of 2% or what is recommended by your detergent supplier.

To calibrate the mixing setting, you will need:

- Screwdriver
- Measuring cup of at least 10 ounces
- Bucket with at least 3-gallon capacity
- A. Remove the back panel cover.
- **B.** Empty the detergent bottle by loosening its hose from the injector. When empty, connect the hose to the injector again.
- C. Fill the measuring cup with 8 ounces of concentrated detergent, open the detergent bottle lid (18) and pour it into the bottle.
- D. Place the empty 3-gallon bucket in the tub and hold the cleaning spray handle (15) with yellow hose over the bucket for filling.
- E. Open the cleaning key-grip safety valve (13) to completely open position and spray into the bucket.
- F. Observe the water level when bucket fills while the bottle empties. Bucket should reach the 3-gallon mark at the same time as the bottle empties. If bucket fills first, turn the detergent mixing setting screw (17) on the injector slightly counter-clockwise, using the screwdriver. If bottle empties first, turn the detergent mixing setting screw (17) slightly clockwise.

- **G.** Repeat procedures A-F until the mixture is as required.
- H. Close cleaning key-grip safety valve (13), and return the cleaning handle (15) to the bracket (16) on the side of the panel.
- I. Attach the back panel cover.

The cleaning system is now ready for use. See detergent filling on previous page.

Once the proper mixture setting is established, no further calibration is required unless a different detergent is used.

Please note: Mixture should be calibrated in accordance with your detergent supplier.

Whirlpool System Cleaning

Clean the Whirlpool System

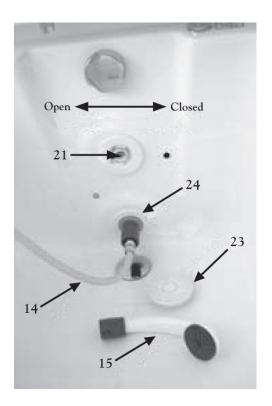
A tailor-made yellow whirlpool inlet cleaning adapter (19) for the whirlpool system is delivered separately with the EZ 900 HCW. It is to be stored on top of the detergent filling lid (18).

- 1. Turn the adjustable whirlpool outlet jet (21) located at the drain end of the tub counter-clockwise to completely open position.
- 2. Remove the whirlpool inlet safety screen (23) by turning the screen counter-clockwise.
- 3. Fit in the yellow adapter (19) placed on top of the detergent filling lid (18) to the whirlpool inlet (24).
- 4. Remove cleaning shower handle (15) from yellow cleaning hose (14) by pressing the dots on the quick coupling.
- 5. Snap the hose with its coupling onto the adapter and flush cleaning through the system by turning the cleaning "key" (13) on the side of the panel.
- 6. Cleaning mixture will flush through the whirlpool outlet (21) into the tub.
- 7. When this is done, turn cleaning system off and repeat procedure with patient shower handle (11) to flush system with fresh water.
- 8. Return the yellow adapter (19) onto the top of the detergent filling lid (18).

Safety and Control Instructions

- Ensure that the bottle is filled with detergent, see previous page.
- Never use cleaning shower handle on patients as detergent is highly corrosive. The hose is placed opposite the patient shower to prevent misuse.
- Equipment must be cleaned after each use.

WARNING: Avoid skin or eye contact with detergent, which is highly corrosive. If contact is made, rinse immediately with excess water. If irritation occurs, consult a doctor. Always read and follow detergent supplier instructions.





Cleaning the Adjustable Whirlpool Jet (21)

Cleaning the jet: Turn the "jet friction housing" counter clockwise 90° and pull it out. Clean the jet and the housing.

Cleaning the valve housing: Remove by lifting the two hooks (inside the housing) and pull it out.

Cleaning the valve (inside): Turn it counterclockwise and pull out.

Cleaning the Screen (23)

Remove the whirlpool inlet safety screen by turning it counter clockwise.

WARNING: Avoid shin or eye contact with detergent, which is highly corrosive. If contact is made, rinse immediately with excess water. If irritation occurs, consult a medical doctor. Always read and follow label directions carefully.



Routine Maintenance

Daily Maintenance

- Clean the tub after every use.
- Check the cleaning supply at least daily, depending on the frequency of use.
- Avoid abrasive cleaners which may scratch the gel coat finish of the fiberglass bathtub and the panel.
- When the tub is not in use, lower it to its lowest position and make sure all valves are closed.
- Clean the strainers on the patient and cleaning shower handles by rubbing it with your thumb.
- Visually inspect the tub interior to make sure there are no nicks or cracks which may scratch the patient.

Please note: Iodine, bromine, and methylene blue can discolor the fiberglass.

The recommended frequency of these maintenance procedures will depend on the hardness of your water supply and how often the equipment is used. It is good practice to establish these routine procedures on a weekly basis and then adjust the frequency as your conditions indicate.

All mechanical parts inside the bathtub panel are maintenance free.

WARNING: The equipment must not be used in any way that varies from the safety precautions and operating procedures detailed in this manual.

The equipment must not be operated by anyone until the user has read and understands the operating manual.

Installation Instructions

Bathroom Layout

Recommended room size: 10' x 11', or larger.

EZ Way recommends at least two people assemble the bathtub.

Plumbing Rough - In

- The EZ Way installation set includes check valves, valve with strain, NPT20 nipples and flexible hoses.
- All other pipes and fittings to and from bath connections are to be supplied by others and installed to comply with local building and plumbing regulations.
- To eliminate pipe debris it is essential that supply pipes are thoroughly flushed before connecting the bathtub.
- Level the bathtub legs by adjusting the feet.
- Avoid any kinks on the hose curve when connecting to the bathtub.
- The bathtub drainage shall be connected to floor or wall drainage.
- The thermostat is preset at the factory. Read the Rada 320 Series Product Manual when calibrating the thermostat.

TECHNICAL SPECIFICATIONS

| Weight Filled: 1,100 lbs. Weight Empty: 500 lbs. Water Volume: 66 USG 40-85 psi. Water Pressure: Inlet dynamic pressures nominally balanced to within 10% of each other during flow Flow Rate: 2-32 USG Hot Water Temperature: 150° F, recommended Drainage: .45 USG per second | | |
|---|------------------------|--|
| Water Volume: 66 USG 40-85 psi. Water Pressure: Inlet dynamic pressures nominally balanced to within 10% of each other during flow Flow Rate: 2-32 USG Hot Water Temperature: 150° F, recommended | Weight Filled: | 1,100 lbs. |
| Water Pressure: Inlet dynamic pressures nominally balanced to within 10% of each other during flow Flow Rate: 2-32 USG Hot Water Temperature: 150° F, recommended | Weight Empty: | 500 lbs. |
| Water Pressure: Inlet dynamic pressures nominally balanced to within 10% of each other during flow Flow Rate: 2-32 USG Hot Water Temperature: 150° F, recommended | Water Volume: | 66 USG |
| Hot Water Temperature: 150° F, recommended | Water Pressure: | Inlet dynamic pressures nominally balanced |
| , , , , , , , , , , , , , , , , , , , | Flow Rate: | 2-32 USG |
| Drainage: .45 USG per second | Hot Water Temperature: | 150° F, recommended |
| | Drainage: | .45 USG per second |

Electrical Rough-In

Standard electrical requirements: 110 volts, 60 Hz, 16 Amps.

Permanent connection installed by others.

Please note: All electrical conduit, fitting and wire to bath is to be supplied and installed by your professional electrician in accordance with local or applicable electric code as a minimum requirement.

Main switch, in accordance with IEC 328, with green signal lamp, 16 A main fuse and earth circuit breaker are not included and must be separately purchased.

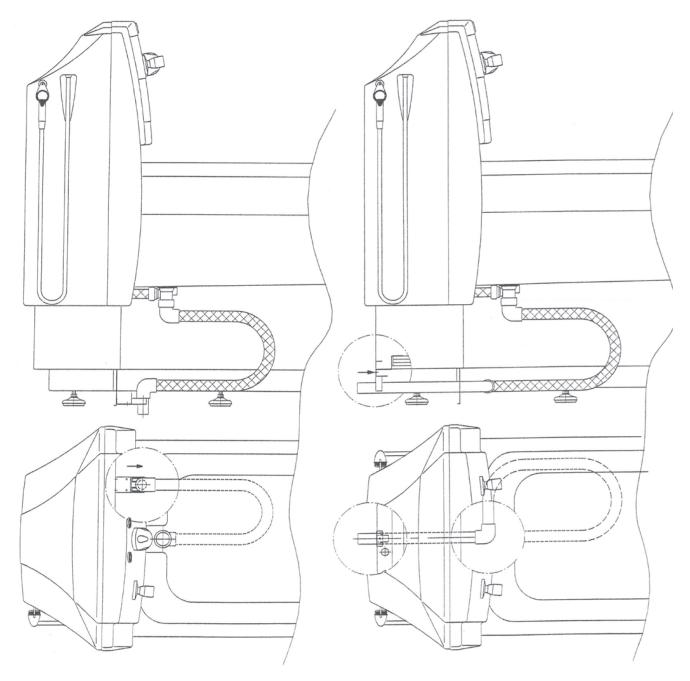
CAUTION: Polarity and grounding must be correct. Improper connection may result in injury.

- Black 1 for Neutral/Common
- Black 2 for Line/Hot
- Yellow/green for ground

No serviceable parts are located inside of the bathtub.

Environmental Conditions

- Ambient temperature range of +10° C to +40° C
- Relative humidity range of 30% to 75%
- Atmospheric pressure range of 700 hPa to 1060 hPa



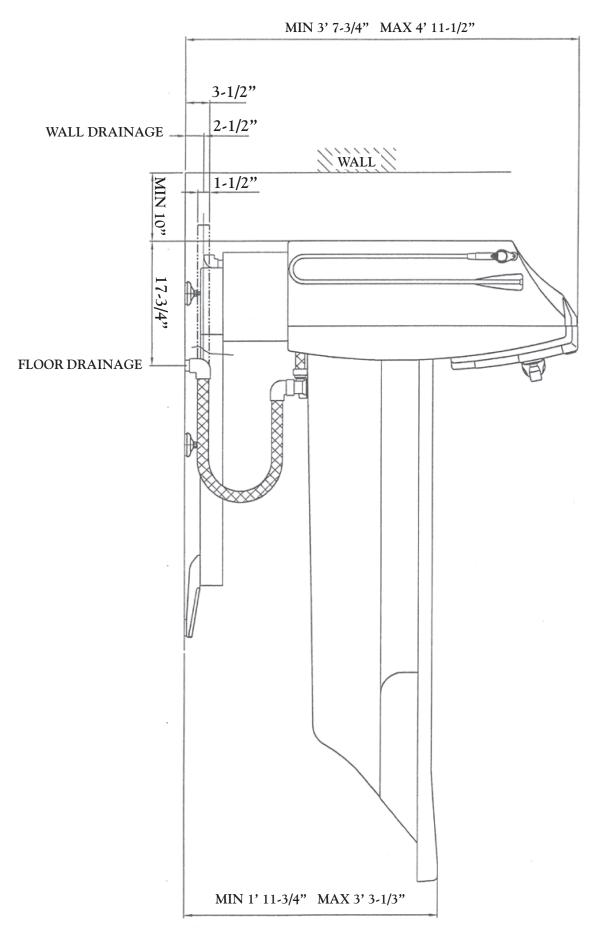
Floor Drainage

Mount the bracket for the drainage pipe to the front of the panel. Adjust by cutting the length of the pipe.

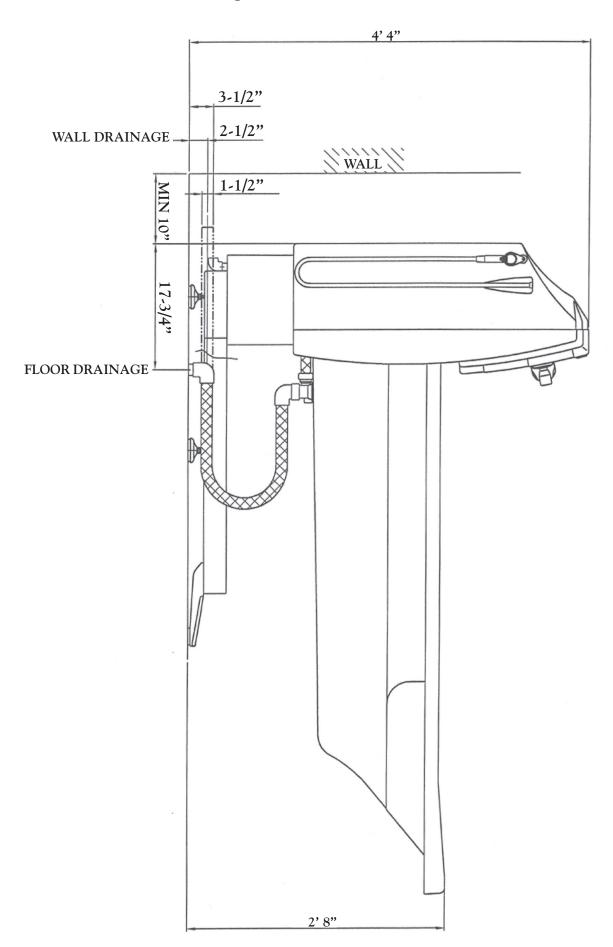
Wall Drainage

Mount the bracket for the drainage pipe to the back of the panel.

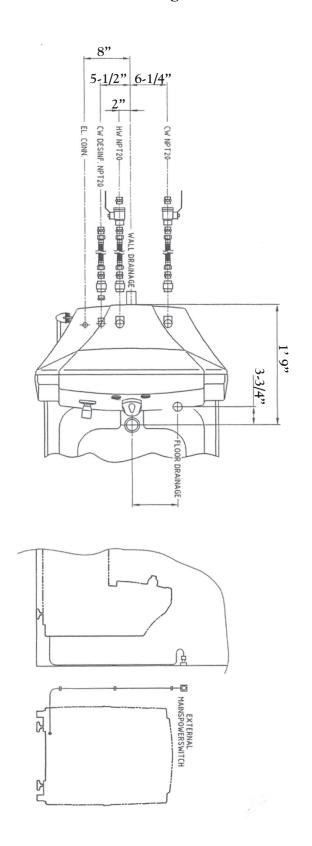
900 HCW Installation Drawing

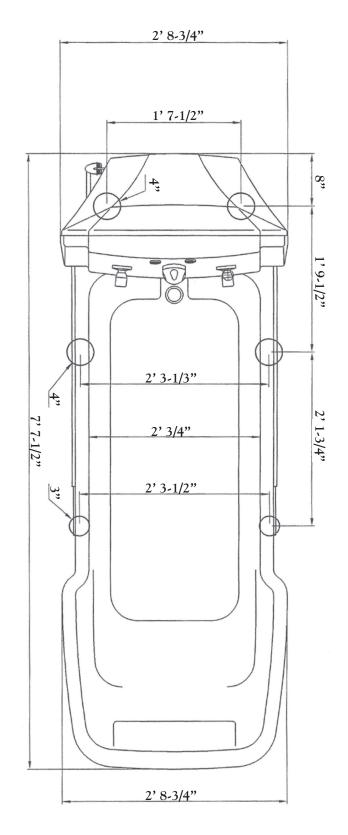


900 FCW Installation Drawing

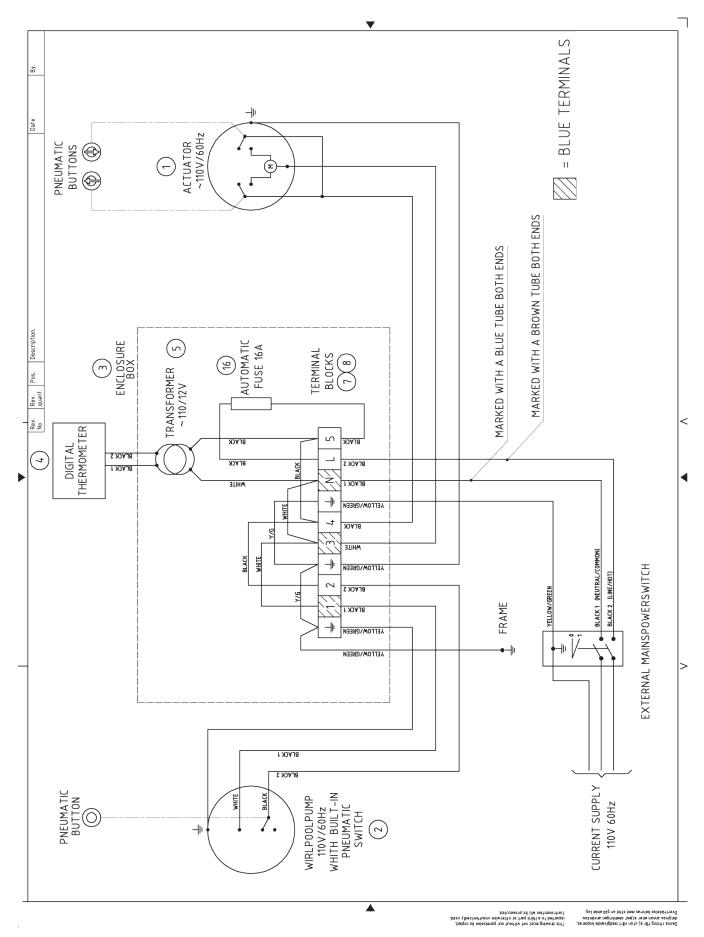


Installation Drawing

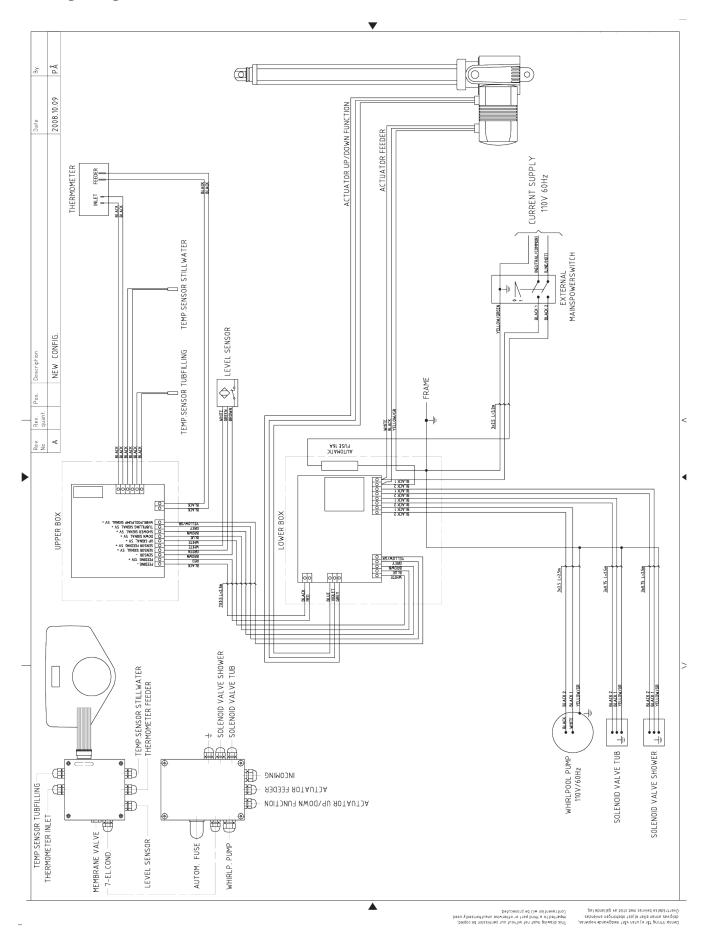




Wiring Diagram



Wiring Diagram



Labels Placed on Bathtub



BATHTUB FILL SHUT-OFF VALVE



PATIENT SHOWER SHUT-OFF VALVE





BATHTUB CONTROL UP/DOWN BUTTONS



CLEANING SHOWER EQUIPMENT. NEVER TO BE USED ON PATIENTS. ALWAYS CONSULT OPERATING MANUAL.



DETERGENT FILLING, MAX 0.40 GALLONS (1.5 LITRES). ALWAYS CONSULT OPERATING MANUAL.



WHIRLPOOL EQUIPMENT MOTOR CONTROL ON/OFF.



WHIRLPOOL EQUIPMENT AERATION CONTROL VALVE

Class 1 equipment.

IP Protection Class IP 65 defined in IEC 529.
6=Complete protection against Human Contact.
Dust-proof against foreign bodies.
5=Water protection against water jets from a nozzle in all directions.



Type B applied part.

WARRANTY, CE MARK & TECHNICAL SPECIFICIATIONS:

EZ Way 900 Height Adjustable Bathtub

Warranty: EZ Way warrants that its products are free from defects in materials and workmanship for a period of one year from the date of delivery. EZ Way mattresses and pillow of fabric covered PVC over polyester foam shall be warranted for a period of six months from the date of delivery. This warranty is in lieu of any other warranty or representation, expressed or implied. Warranties of MERCHANTABILITY or FITNESS FOR ANY PARTICULAR USE OR PURPOSE are expressly excluded. EZ Way will not be responsible for any expenses, inconvenience or incidental or consequential damages occasioned by the use, loss of use, or misuse of the products, or by the failure of the products to conform to the warranty set forth above. This warranty becomes void if the product shows evidence of mishandling, tampering, installation or use contrary to the applicable instruction materials, shipping damage, or repair. Routine cleaning, adjustment, and normal cosmetic and mechanical wear are not covered by this warranty.



CE mark: Certificate of registration at the LÄKEMEDELSVERKET Medical products agency in Sweden Dnr.452:2008/83584.

Free sales certificate at the LÄKEMEDELSVERKET Medical products agency in Sweden.

TECHNICAL SPECIFICATIONS

| Length: | 92" | |
|-----------------------------------|--------------------|--|
| Width: | 33" | |
| Overall Weight (Empty): | 650 lbs. | |
| Working Load Limit: | 330 lbs. | |
| Operating Height Range (Bathtub): | 23" - 39" | |
| Power Supply: | 230 V/110 V, 60 Hz | |