Archimedes

bathlift

Operating Instructions
The Archimedes is a light weight battery powered actuator driven bathlift, designed to be easily operated. The Archimedes will give many years of trouble free bathing, requiring only routine cleaning and battery recharging. Please ensure that you read and fully understand these instructions before using your Archimedes bathlift.

CONTENTS

Pg 2  Warnings
Pg 3  Getting Started
Pg 4  Emergency Stop
Pg 4  Fitting the Archimedes in the bathtub
Pg 5  Using the Archimedes
Pg 5  Removing the Archimedes from the bathtub
Pg 6  Hand Control
Pg 6  Battery State Indicator
Pg 6  Battery Charging
Pg 7  Cleaning/Storage
Pg 7  Maintenance
Pg 7  Fault Finding
Pg 8  Parts List
Pg 9  Specifications
Pg 10  Symbols used on labels, instructions and packaging
Pg 11  Warranty

WARNINGS

• Ensure that you have read and fully understand these instructions before attempting to operate the Archimedes.
• The Archimedes should only be used as a bathing aid, NEVER use it out of a bathtub.
• The Archimedes is designed to go as low as possible in the bathtub. In bathtubs with exceptionally narrow or curved sides/bases, it may be unsuitable. Always check that the chair section is free to lower to its full extent and rise again freely. Be certain that it is positioned correctly before use.
• Ensure that the suction cups adhere firmly to the bathtub before use.
• Do not allow the Archimedes to lie on its back in the bathtub water.
• Ensure that the transfer flaps will be clear of any obstructions, such as handles and soap dishes, as the seat section is raised. NOTE: To avoid flaps becoming caught under handles, Flap Guards are available as an accessory.
• Only recharge the battery with the Mangar battery charger supplied with the Archimedes.
• NEVER recharge the battery in the bathroom, outdoors or in a damp environment.
• Do not use in the presence of flammable anaesthetic mixtures with air, oxygen or nitrous oxide.
• Do not operate the actuator when it is disconnected from the base.
• Do not use the Archimedes as a support to steady yourself when cleaning the bathtub or when reaching into the bathtub to retrieve items.
• If the Archimedes causes electrical interference with another piece of electrical equipment, move the equipment further apart until the interference stops.
Getting Started

Standard Contents (Fig.1)
1 x Archimedes Bathlift (A) (including two transfer flaps).
1 x Sealed Hand Control (B) (containing rechargeable battery).
1 x Battery charger (C).

Unpacking - Remove the contents from the packaging and check them to make sure that no damage has been caused during transit. If it has, contact your supplier immediately.

Battery - This must be put on charge before using your Archimedes for the first time as follows:

- Connect the hand control to the battery charger and plug the charger into a power supply OUT SIDE THE BATHROOM and allow the battery to charge overnight (see “Battery Charging” page 6).

Seat and base sections - The Archimedes can be easily separated into three sections: Seat, Base and Actuator (Fig.2).

To separate the seat from the base section and actuator:

- Fully lower the seat and fold the transfer flaps onto the seat.
- Release the transit tie (A fig.3) by pulling up the ‘O’ ring and lifting the ball clear of the slot in the locating collar on the actuator stem.
- Press the lower part of the latch at the back of the seat (A fig. 4) whilst lifting the seat sufficiently to allow the actuator to disengage itself from the slot in the latch (B fig.4) and the actuator locator bracket (C fig.4). The actuator can now be removed from the base section.

- Lift the seat section clear of the base section.
- Reassemble in the reverse order. Do not reattach the transit tie unless you are intending to carry the assembled Archimedes.

The transit tie should only be reattached to the back of the seat section in order to keep both the seat and base sections together whilst carrying the Archimedes.
**Emergency Stop**

As a safety feature of the Archimedes bathlift, in an emergency, the seat movement can be stopped at any time by pulling the hand control away from the actuator cable. This disconnects the hand control plug (A fig.5) from the actuator cable socket (B fig.5).

In order for this safety feature to function effectively, the connection between the hand control and actuator cable must separate easily when the hand control is pulled away from the actuator cable. If the hand control is accidently dropped outside of the bath whilst bathing, it may become detached from the actuator cable and fall out of reach. The ‘Hand Control Keeper’ (C fig.5) should be fitted so as to allow easy retrieval of the hand control.

The ‘Hand Control Keeper’ allows the hand control connection to separate, but keeps the hand control attached to the actuator cable, allowing easy retrieval.

**Fitting the Archimedes in the bathtub**

- Before placing the Archimedes in a bathtub, check that the surface where the suction cups will be sitting is clean and free from bath oil and cleaning residue. Remove anti-slip matting from this area. **WARNING:** The suction cups may not adhere properly on textured and non-slip areas of a bathtub.

- Remove the actuator and seat section from the base (see “Getting Started” page 3). Moisten each of the suction cups and place the base section as close to the back slope of the bathtub as possible. Reposition the actuator in the socket at the back of the base unit (A fig.6).

- Fold the transfer flaps onto the seat and slide the seat section onto the base section. Position the top end of the actuator into the slot in the latch at the back of the seat section (A fig. 7) and make sure that it ‘clicks’ into place.

- Fit the ‘Hand Control Keeper’ cord between the actuator cable and hand control (Figs. 5 & 8).

- Plug the hand control into the actuator cable (Fig.8).
Using the Archimedes

- Press the \( \uparrow \) button on the hand control to raise the seat.
- Release the \( \downarrow \) button when the seat is level with the edge of the bathtub.

**NOTE:** Make sure that the transfer flap is level with, and supported on, the edge of the bathtub (Fig. 9) before transferring.

- Sit on the flap and transfer across onto the seat.
- Press the \( \downarrow \) button to lower yourself. Releasing the button at any point will stop the seat.
- To raise the seat, press the \( \uparrow \) button. Release the button when the transfer flap is level with, and supported on, the edge of the bathtub.

**WARNING:** In an emergency, the seat movement can be stopped at any time by disconnecting the hand control by pulling it away from the actuator cable (Fig. 10).

Removing the Archimedes from the bathtub

- Fully lower the seat.
- Fold the transfer flaps onto the seat.
- Press the lower part of the latch at the back of the seat (A Fig. 11) to release the actuator and lift the seat clear of the base and place it on the bathroom floor.
- Lift out the actuator from the base section.
- Lift the suction cups release handle at the back of the base section (A Fig. 12) and _tilt the base forwards by pushing on the guide bars or seat back._

**NOTE:** DO NOT use the suction cup release handle to tilt or lift the base section. NEVER attempt to release suction on the rear suction cups by pulling on the guide bars.

- Continue tilting the base forwards. This will automatically release the suction on the front suction cups and the base section can then be...
**Hand Control**

The hand control is a completely sealed unit containing a rechargeable battery and battery state indicator light.

**Battery State Indicator**

When either the ▲ or ▼ buttons are pressed, the indicator light (A fig.13) shows the state of the battery as follows:

**GREEN** - OK to use.

**FLASHING GREEN** - OK to use but the battery needs to be recharged after this bath.

**RED** - The battery needs recharging before use. The seat will not lower. **NOTE:** The microprocessor in the hand control will not allow the seat to be lowered if it detects that there will not be enough battery power to raise it again.

The battery is not replaceable. When it reaches the end of its working life, indicated by failure to accept or retain charge (frequently showing red on the battery state indicator), the complete hand control will need to be replaced with a new one. It should be returned to your supplier for safe disposal. **DO NOT** dispose of the hand control with your normal trash. Batteries should be disposed of in accordance with local regulations.

**Battery Charging**

- Disconnect the hand control from the actuator.
- Connect the hand control to the battery charger (Fig.14).
- Plug the battery charger into a power supply **outside** of the bathroom and switch on. The green light on the charger will light up to indicate that the charger is properly connected to the hand control.

When the battery needs recharging, the hand control should be left on charge over night. The hand control can be left on charge continuously without damaging the battery or charger. **We recommend that the hand control is left continuously on charge when the Archimedes is not in use, as a matter of routine.**
Cleaning

Regularly clean your Archimedes with the same non-abrasive cleaners that you normally use on your bathtub. It is best to separate the seat and base sections prior to cleaning. The Archimedes can be disinfected using a proprietary sterilizing solution or any antibacterial cleaner.

Regular cleaning will help to prolong the life and efficiency of your Archimedes bathlift.

Storage

The Archimedes should be stored with the seat section fully lowered and the hand control disconnected. When stored for long periods, ensure that the Archimedes is thoroughly dry and stored in a dry environment.

The transit tie (A fig.15) should be attached to the seat section to allow the Archimedes to be easily picked up and moved.

After long term storage, the hand control should be charged overnight before the Archimedes is put back into service.

Maintenance

Other than routine cleaning, the Archimedes has been designed to be maintenance free, however, we recommend that your Archimedes is inspected annually by either your supplier or other suitably qualified person. Please contact your supplier for further advice.

There are no user-serviceable parts in the Archimedes. Repairs or servicing must only be carried out by your supplier or other authorized person.

Fault Finding

If the seat fails to rise:
• Check that the hand control plug is FULLY pushed into the actuator cable socket (Fig.16).

If the seat fails to lower:
• Check to see if the battery state indicator light (A fig.16) is showing RED. If it is put the hand control on charge overnight.
• Check that the hand control plug is FULLY pushed into the actuator cable socket (Fig.16).
Specifications

Archimedes
Max. user weight: 330lbs
Total weight: 22lbs
Seat section only: 11½lbs
Base section only: 6lbs
Actuator: 4½lbs
Seat height (Min/Max): 2¾” to 17¼” (approx)
Actuator power input: 12V: 7.5A
Environmental protection: IP66

Hand Control
Battery type: NiCad
Output: 12V: 7.5A
Internal protection: Self resetting fuse
Environmental protection: IP67

Battery Charger
AC Input: 110V: 1.22V 60Hz
DC Output: 17.4V: 70mA
Internal protection: Thermal cut-out
Environmental protection: IP50
Double insulated Class II Equipment

This product is suitable for transporting in pressurized aircraft holds.

Parts List
1. Seat Assembly
2. Flap
3. Hinge (Set of 2)
4. Base assembly
5. Suction Cup (Set of 4)
6. Actuator Assembly
7. Actuator Latch
8. Transit Tie
9. Hand Control
10. Hand Control Keeper (with instrs)
11. Battery Charger
12. Flap Guards (Pair)
13. Instruction Booklet
**Specifications**

**Archimedes**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Max. user weight:</td>
<td>330lbs</td>
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<tr>
<td>Total weight:</td>
<td>22lbs</td>
</tr>
<tr>
<td>Seat section only:</td>
<td>11½lbs</td>
</tr>
<tr>
<td>Base section only:</td>
<td>6lbs</td>
</tr>
<tr>
<td>Actuator:</td>
<td>4½lbs</td>
</tr>
<tr>
<td>Seat height (Min/Max):</td>
<td>2¾” to 17½” (approx)</td>
</tr>
<tr>
<td>Actuator power input:</td>
<td>12V: 7,5A</td>
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<tr>
<td>Environmental protection:</td>
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**Hand Control**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Battery type:</td>
<td>NiCad</td>
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<tr>
<td>Output:</td>
<td>12V: 7,5A</td>
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<tr>
<td>Internal protection:</td>
<td>Self resetting fuse</td>
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<td>Environmental protection:</td>
<td>IP67</td>
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**Battery Charger**

<table>
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<th>Specification</th>
<th>Value</th>
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<td>AC Input:</td>
<td>110V: 1,22VA: 60Hz</td>
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<tr>
<td>DC Output:</td>
<td>17.4V: 70mA</td>
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<tr>
<td>Internal protection:</td>
<td>Thermal cut-out</td>
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<td>Environmental protection:</td>
<td>IP50</td>
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Double insulated Class II Equipment

This product is suitable for transporting in pressurized aircraft holds.
### Symbols used on labels and instructions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tr>
<td>!</td>
<td>Attention</td>
</tr>
<tr>
<td>⚠️</td>
<td>Consult instructions</td>
</tr>
<tr>
<td>✅</td>
<td>Alternating Current</td>
</tr>
<tr>
<td>⚡</td>
<td>Direct Current</td>
</tr>
<tr>
<td>☐</td>
<td>Class II Double Insulated Equipment</td>
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<tr>
<td>🛡️</td>
<td>Do not connect to mains power in a bathroom or outdoors</td>
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<tr>
<td>⚡️</td>
<td>Dangerous Voltage</td>
</tr>
<tr>
<td>⚡️</td>
<td>Type B equipment (Protection against electric shock)</td>
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<tr>
<td>🚫</td>
<td>Battery State Indicator</td>
</tr>
<tr>
<td>℃</td>
<td>Max/Min Operating Environmental Temperature</td>
</tr>
<tr>
<td>⌚️</td>
<td>Duty Cycle</td>
</tr>
<tr>
<td>⌚️</td>
<td>I = Operating time</td>
</tr>
<tr>
<td>⌚️</td>
<td>O = Non operating time</td>
</tr>
<tr>
<td>🚧</td>
<td>Maximum user weight limit</td>
</tr>
<tr>
<td>🗑️</td>
<td>Date of manufacture</td>
</tr>
<tr>
<td>🗑️</td>
<td>Recycle do not dispose of in household trash</td>
</tr>
<tr>
<td>🔻</td>
<td>Press to raise seat</td>
</tr>
<tr>
<td>🔻</td>
<td>Press to lower seat</td>
</tr>
<tr>
<td>✈️</td>
<td>IP 66 Sealed against the effects of showers</td>
</tr>
<tr>
<td>✈️</td>
<td>IP 67 Sealed against the effects of immersion in water to a depth of 1 metre</td>
</tr>
<tr>
<td>✈️</td>
<td>IP 50 No protection against water ingress</td>
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### Symbols used on packaging

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<tr>
<td>☔️</td>
<td>Keep packaging dry</td>
</tr>
<tr>
<td>⚠️</td>
<td>Handle with care</td>
</tr>
<tr>
<td>℃</td>
<td>Max/Min storage temperature</td>
</tr>
<tr>
<td>📦</td>
<td>Net &amp; Gross Weights</td>
</tr>
<tr>
<td>🌟</td>
<td>Stack no more than three high</td>
</tr>
<tr>
<td>🍾</td>
<td>Recycle packaging</td>
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<tr>
<td>🌟</td>
<td>Max/Min humidity when transporting in pressurized aircraft hold</td>
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<tr>
<td>🌟</td>
<td>90%RH 10%RH</td>
</tr>
<tr>
<td>🌟</td>
<td>Max/Min pressure when transporting in pressurized aircraft hold</td>
</tr>
<tr>
<td>🌟</td>
<td>125 kPa 73 kPa</td>
</tr>
<tr>
<td>🌟</td>
<td>Max/Min temperature when transporting in pressurized aircraft hold</td>
</tr>
<tr>
<td>🌟</td>
<td>+50°C -10°C</td>
</tr>
</tbody>
</table>
Warranty

Mangar International guarantees this product for a period of two years.

The guarantee is given against defects in material and workmanship and comprises piece, parts and labor. The guarantee is not valid in the case of fair wear and tear, wilful damage, common neglect, misuse or unauthorized alteration or repair by unqualified persons.

The following statements do not affect the consumer’s statutory rights. This product is sold on the understanding that in the event of any defect of manufacture or material appearing within two years of the date of receipt of this product, the defect will be rectified free of charge providing that:

(a) Reasonable evidence is provided (e.g. purchase invoice, delivery note) that the product was not purchased more than two years prior to the date of the claim.

(b) The defect is not attributable to accidental damage (either in transit or otherwise), misuse or unauthorized repair.

Archimedes serial number: .................................
Hand control serial number: .................................
Date of purchase: .................................
Invoice/Delivery note number: .................................