

# Archimedes

user instructions



*Simple solutions for everyday independence*

The Archimedes by Mangar International, 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.



## WARNINGS

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- 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 bath.
- Ensure that the suction cups adhere firmly to the bath before use.
- The Archimedes is designed to go as low as possible in the bath. In baths 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.
- Do not allow the Archimedes to lie on its back in the bath water.
- Ensure that the transfer flaps will be clear of any obstructions, such as bath handles and soap dishes, as the seat section is raised.
- Only recharge the battery with the Mangar International 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 bath or when reaching into the bath to retrieve items.
- Disconnect the hand control from the actuator before transporting so as to avoid accidental operation of the lifting mechanism.
- The suction cups on the base section and on the hand control contain latex. No other part of the product or associated packaging contains latex.

## Standard Contents

- 1 x Archimedes Bathlift (inc. two transfer flaps) **(A)** fig.1).
- 1 x Sealed Hand Control **(B)**.
- 1 x Battery charger **(C)**.
- 1 x User Instructions.

## Getting Started

**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:

- 1
  - Connect the hand control to the battery charger and plug the charger into a mains power supply **OUTSIDE THE BATHROOM** and allow the battery to charge overnight (see "Battery Charging").

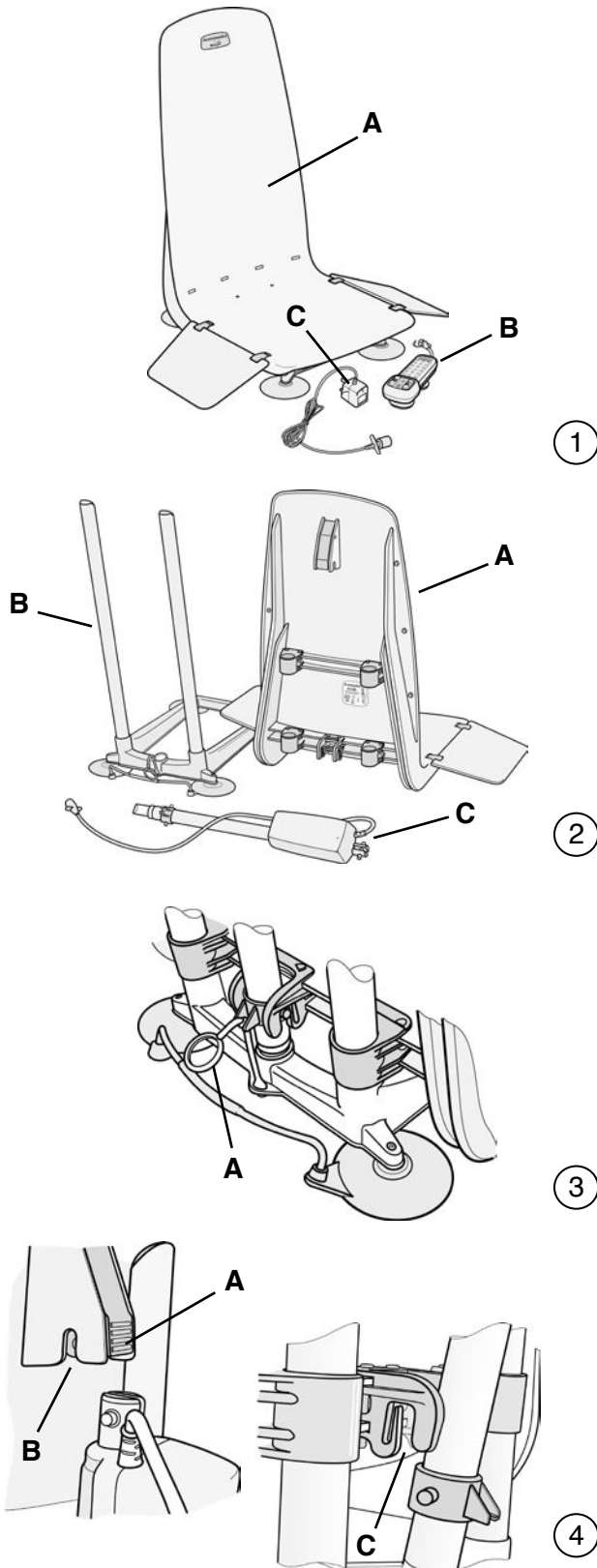
**Seat and base sections** - The Archimedes can be easily separated into three sections (fig.2).

- Seat section **(A)**
- Base section **(B)**
- Actuator **(C)**

**To separate the seat from the base section and actuator:**

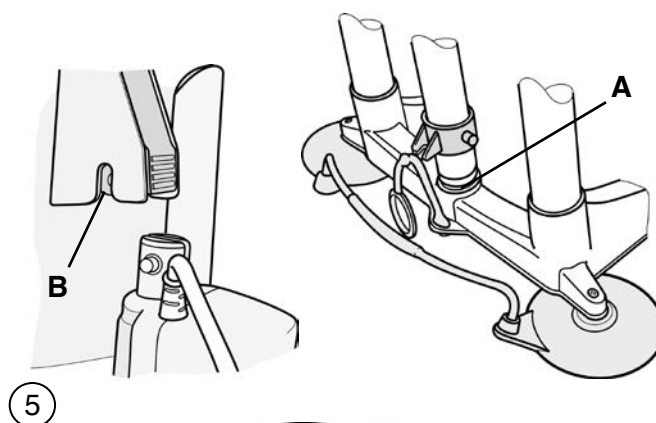
- 2
  - Fully lower the seat and fold the transfer flaps onto the seat.
  - Release the transit tie **(A)** fig.3) by pulling up the 'O' ring and lifting the ball clear of the slot in the locating collar on the actuator.
  - Press the lower part of the latch at the back of the seat **(A)** fig. 4) and lift the seat sufficiently to allow the actuator to disengage itself from the slot **(B)** and the actuator locator bracket **(C)**. 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.

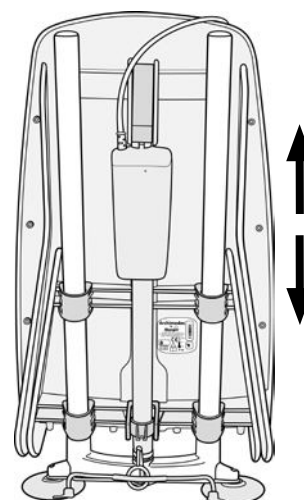


## Fitting the Archimedes in the bath

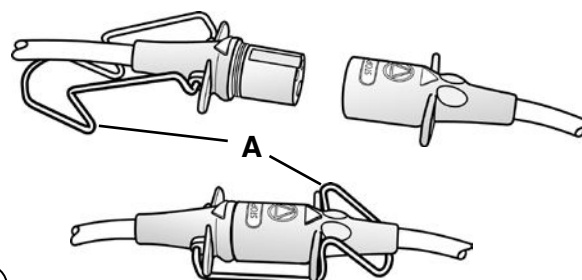
- Before placing the Archimedes in a bath, check that the surface where the suction cups will be sitting is clean and free from bath oil and cleaning residue. Remove anti-slip matting from this area. **WARNING:** The suction cups may not adhere properly on textured and non-slip areas of a bath.
- Remove the actuator and seat section from the base (see “Getting Started”). Moisten each of the suction cups and place the base section as close to the back slope of the bath as possible. Reposition the actuator in the socket at the back of the base unit (**A** fig.5).
- 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 (**B**) at the back of the seat section and make sure that it ‘clicks’ into place. **NOTE:** Ensure that the seat can slide freely up and down before using the Archimedes (Fig 6).
- Plug the hand control into the actuator lead and close the retaining clip (**A** fig 7).
- Fill the bath with water at a suitable temperature.



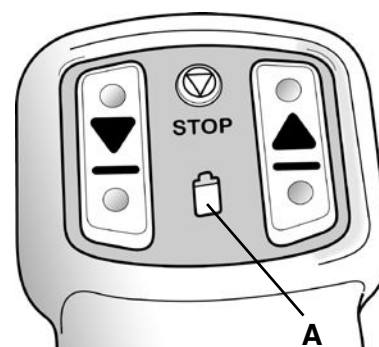
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## Hand Control

The hand control is a completely sealed unit containing a rechargeable battery and battery state indicator light; it contains no user serviceable parts. DO NOT attempt to open.

### Battery State Indicator

When either the ‘Up’ or ‘Down’ buttons are pressed, the indicator light (**A** fig.8) shows the state of the battery as follows:

**GREEN** - OK to use.

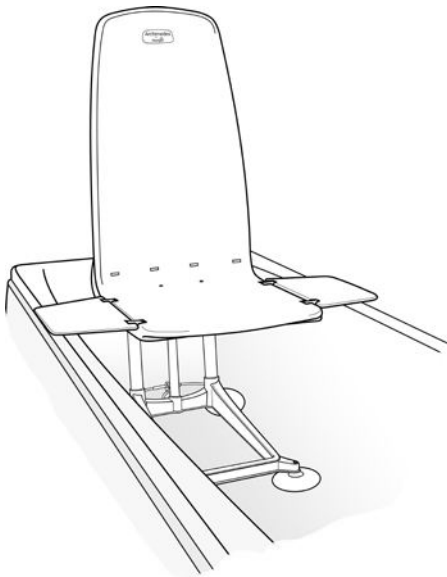
**FLASHING GREEN** - OK to use but the battery needs to be recharged after this bath.

**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.

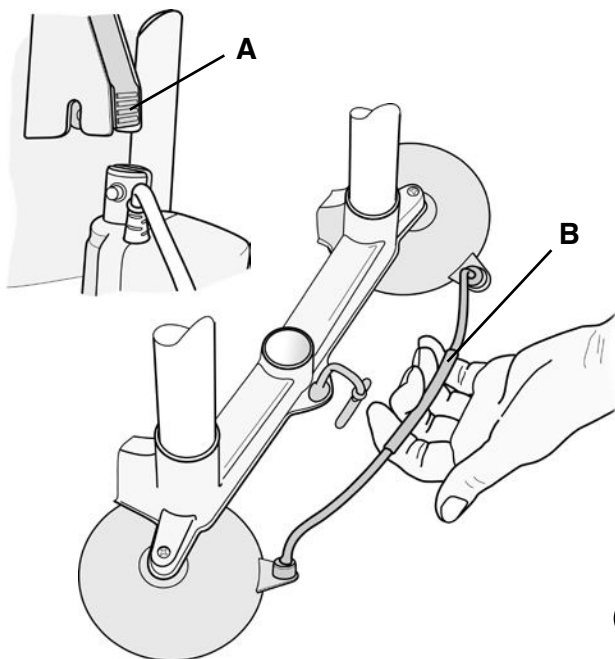
The battery is not replaceable. When it reaches the end of its working life, indicated by failure to accept or retain charge (frequently showing red on the battery state indicator), the complete hand control will need to be replaced with a new one. It should be disposed of in accordance with local regulations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



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## Emergency Stop Button

In an emergency, the seat movement can be stopped at any time by pressing the '**STOP**' button on the hand control (**A** fig.9).

**NOTE:** Releasing the 'Up' or 'Down' buttons at any time will also stop the seat movement.

## Using the Archimedes

**WARNING:** Please note that the hand control incorporates an important safety feature which will ensure that the seat cannot be lowered unless there is sufficient battery power to raise it again. To action this feature effectively **ALWAYS RAISE THE SEAT USING THE HAND CONTROL** and USE IT to lower yourself into the bath.

- Press the 'Up' button on the hand control to raise the seat.
- Release the 'Up' button when the seat is level with the edge of the bath. **NOTE:** Make sure that the transfer flap is level with, and supported on, the edge of the bath (fig.10) before transferring.
- Sit on the flap and transfer across onto the seat.
- Press the 'Down' button to lower yourself. Releasing the button at any point will stop the seat.
- To raise the seat, press the 'Up' button. Release the button when the transfer flap is level with, and supported on, the edge of the bath.

## Removing the Archimedes from the bath

- Fully lower the seat.
- Fold the transfer flaps onto the seat.
- Press the latch at the back of the seat (**A** fig.11) and lift the seat clear of the base.
- Lift out the actuator.
- Lift the suction cup release handle at the back of the base section (**B** fig.11) and tilt the base forwards.
- Continue tilting the base forwards. This will automatically release the suction on the front suction cups and the base section can then be lifted from the bath. **NOTE:** DO NOT use the suction cup release handle (**B**) to tilt or lift the base section. NEVER attempt to release suction on the rear suction cups by pulling on the guide bars.

## Battery Charging

- Disconnect the hand control from the actuator.
- Connect the hand control to the battery charger (fig.12).
- Plug the battery charger into a mains power supply outside of the bathroom and switch on. The amber light on the charger (**A** fig.12) will light up to indicate that the charger is properly connected and charging.

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 bath. It is best to separate the seat and base sections prior to cleaning. The Archimedes can be disinfected using a proprietary sterilising solution such as 'Milton' or other antibacterial cleaner.

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

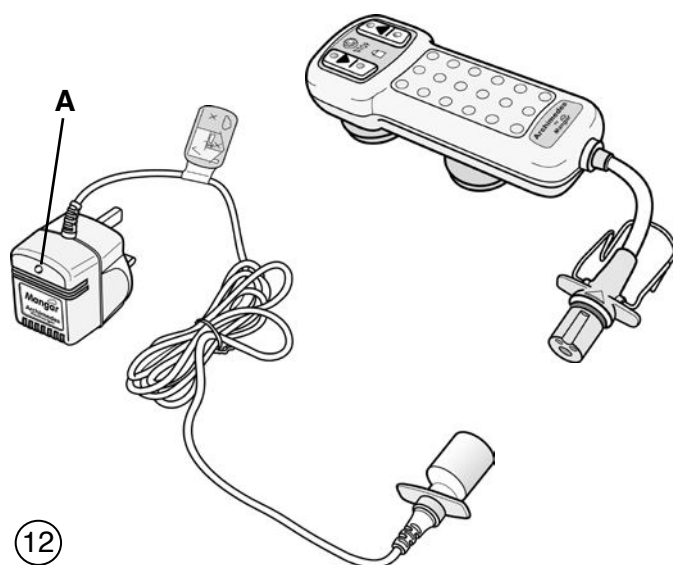
**NOTE:** It is especially important to thoroughly clean your Archimedes after each bath if 'Dettol' or similar products have been added to the bath water.

## Storage

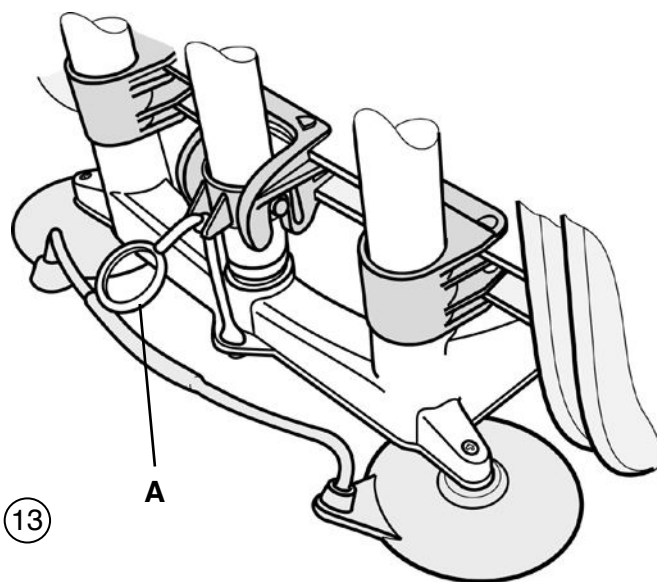
The Archimedes should be stored with the seat section fully lowered and the hand control disconnected. During long term storage, it is recommended that at approximately three month intervals, the battery is put on charge overnight.

When stored for long periods, ensure that the Archimedes is thoroughly dry and stored in a dry environment.

The transit tie (**A** fig.13) should be attached to the seat section to allow the Archimedes to be easily picked up and moved.



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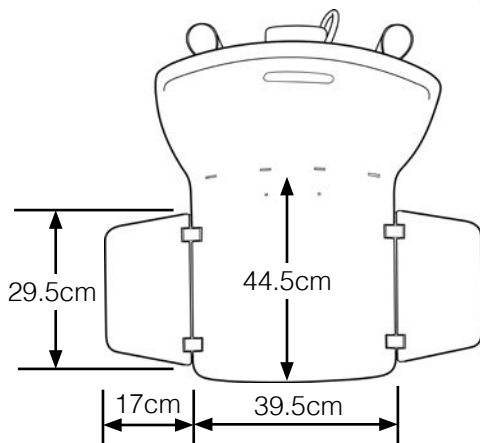
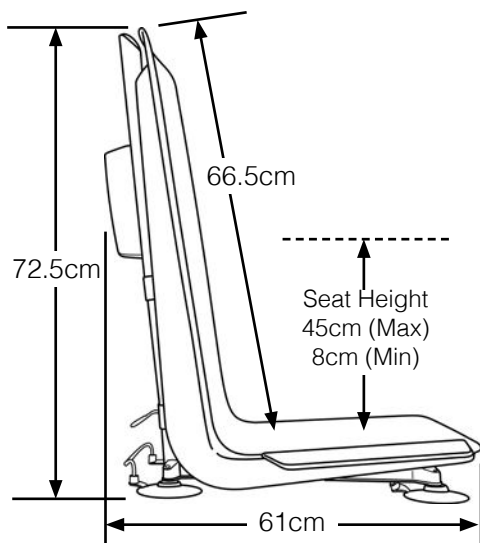
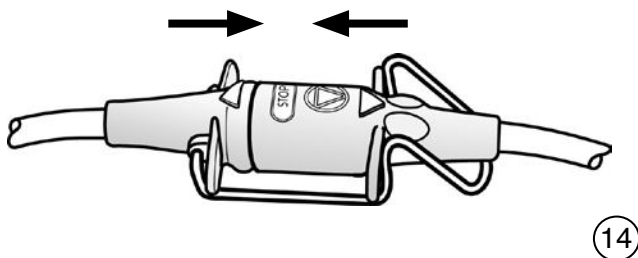
## Maintenance

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 NOTE: If the Archimedes is used with the assistance of a professional carer, the Archimedes becomes classed as 'work equipment' under the 'Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)' and would recommend that the Archimedes undergoes a thorough examination at intervals not exceeding 24 months, in accordance with the 'Thorough Examination Schedule' - available through Mangar International.

If required, Mangar International can provide the above inspection within an annual service contract. Please contact our Customer Service Department for further details.

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



## Fault Finding

### If the seat fails to rise:

- Check that the hand control plug is FULLY pushed into the actuator lead socket (fig.14).

### If the seat fails to lower:

- Check to see if the battery state indicator light 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 lead socket (fig.14).

## Specifications

### Archimedes

Max.user weight:	165kg (26st/364lbs)
Total weight:	10kg
Seat section only:	5,2kg
Base section only:	2,8kg
Actuator:	2 kg
Seat height (Min/Max):	8cm/45cm
Actuator power input:	12V: 7,5A
Environmental protection:	IP66

### Hand Control (Battery)

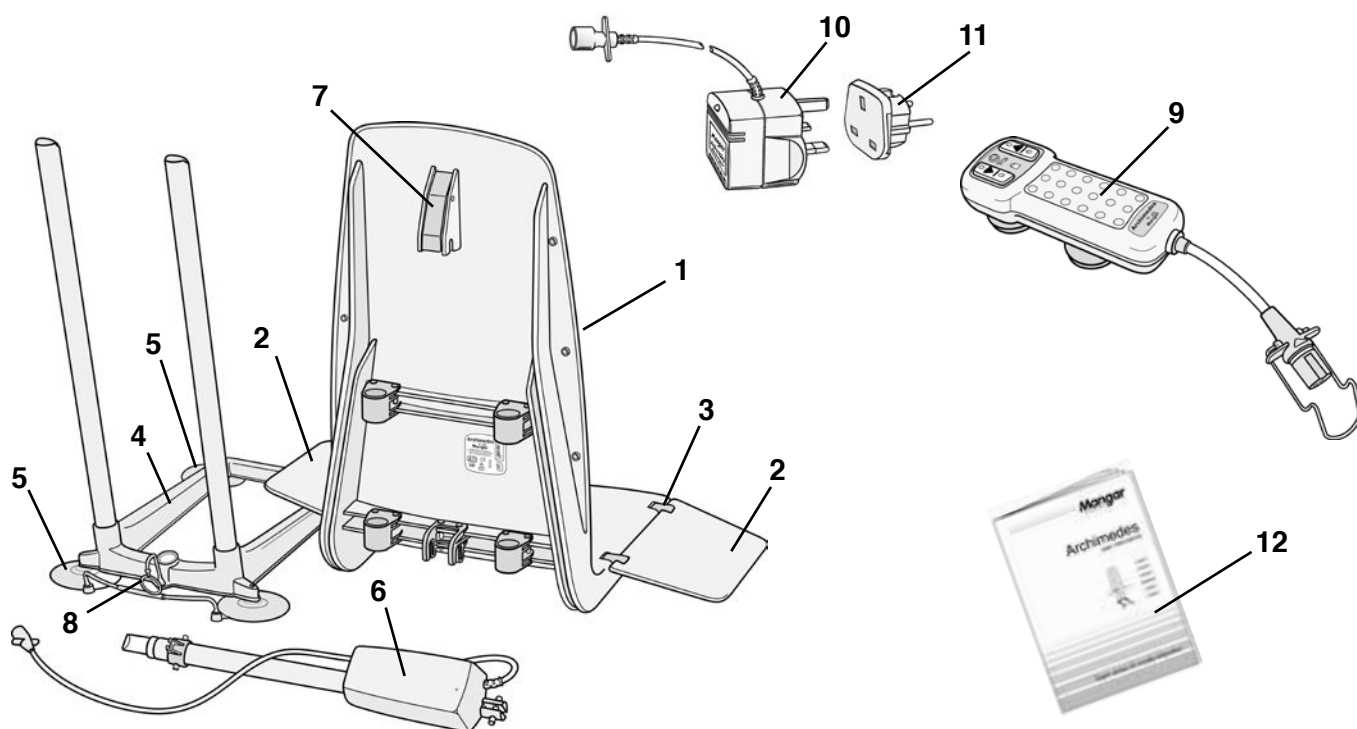
Type:	Ni-Cd
Output (Max):	14V: 10A
Internal protection:	Self resetting fuse
Environmental protection:	IP67

### Battery Charger

AC Input:	230V: 1,22VA: 50-60Hz
DC Output:	17.4V: 70mA
Internal protection:	Self resetting thermal cut-out
Environmental protection:	IP50
Double insulated Class II Equipment	
This product is suitable for transporting in aircraft.	

## Parts List

1	Seat Assembly	LA0010	8	Transit Tie	LA0017
2	Flap	LA0011	9	Hand Control	LA0018
3	Hinge (Set of 2)	LA0012	10	Battery Charger	LA0019
4	Base Assembly	LA0013	11	European Electrical Adaptor	LA0020
5	Suction Cup (Set of 4)	LA0014	12	Instruction Booklet	MI0173
6	Actuator Assembly	LA0015			
7	Actuator Latch	LA0016			



## Symbols used on labels and instructions

	Attention		Dangerous Voltage		Emergency 'STOP' button		Hot Surface
	Consult instructions		Type BF equipment (Protection against electric shock)		Press to raise seat		Duty cycle I = Operating time O = Non operating time
	Alternating Current		Battery State Indicator		Press to lower seat		Sealed against the effects of showers
	Direct Current		Max/Min Operating Environmental Temperature		Date of manufacture		Sealed against the effects of immersion in water to a depth of 1 metre
	Class II Double Insulated Equipment		Maximum user weight limit		Recycle do not dispose of in household waste		No protection against water ingress



### Product Disposal

Dispose of in accordance with local regulations. For further guidance, please contact your supplier.

### Warranty

The guarantee is given against defects in material and workmanship and comprises piece, parts and labour. The guarantee is not valid in the case of fair wear and tear, wilful damage, common neglect, misuse or unauthorised 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 the warranty period, the defect will be rectified free of charge providing that:

- (a) Reasonable evidence is provided (e.g. purchase invoice, delivery note) that the claim is being made within the warranty period.
- (b) The defect is not attributable to accidental damage (either in transit or otherwise), misuse or unauthorised repair.

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

We strive to provide our customers with reliable and durable products of the highest quality. In addition to our standard warranty, and for added peace of mind, our Customer Service Department offers an **Annual Service and Clean package**.

Mangar International reserves the right to alter product specifications and/or any of the information contained within this document without notice.



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fitting instructions

# flap guards

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