



Operating and Product Care Instructions

Introduction

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This product and its accessories have been manufactured by :

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'Neptune' is a registered trademark of Nibotechnics.

Foreword

Thank you for purchasing Nibotechnics equipment.

Your Neptune is one of a series of quality products designed especially for hospitals, nursing homes and other health care environments.

Please contact your local Nibotechnics representative or dealer if you have any questions about the operation or maintenance of your equipment (the telephone number appears on the last page of this manual).

All references to 'the resident' in these instructions refer to the person being lifted, and references to 'the caregiver' refer to the person who operates the Neptune.

References to left and right of the lift in these instructions are as viewed when you are standing at the rear of the Neptune, facing forward, (as viewed from the caregiver's pushing position).

Lifting operations in these instructions are described as if lifting a resident from a chair. The same operations can be performed effectively when lifting a resident from a wheelchair or sitting position on a bed, although a second caregiver should support the resident if the resident lacks sitting balance.

Operational Life

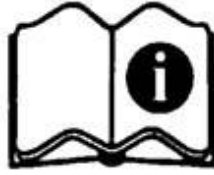
The operational life of the Neptune and its accessories e.g. chair etc. is dependent on the actual use conditions. Therefore, before use, always make sure that the lift is safe to use and has not been damaged (see Preventive Maintenance Schedule at the end of this document for details). If any damage should be observed, do not use the Neptune.

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1. Safety instructions



READ BEFORE USE

Before using your Neptune, familiarize yourself with the various parts and controls as illustrated in this document. Read this whole manual thoroughly before operating your Neptune in order to prevent injury or damage to the product.

Definitions used in these instructions:

WARNING

Means: Failure to follow these instructions may result in injury to yourself or to others.

CAUTION

Means: Failure to follow these instructions may cause damage to the products.

1.1 Intended use

The pool lift Neptune is a stationary lift that has to be mounted in- or onto the poolside floor before resident transfer. It has been designed to transfer residents from the poolside into the pool and the other way around, using a chair or stretcher that has been specially designed for the Neptune.

The Neptune has been designed to lift a person, who:

- is mobile, but may use a cane for support;
- is independent, can clean & dress himself;
- can tire quickly

The Neptune can also be used to lift a person, who:

- uses a walking frame or similar;
- can support herself to some degree;
- is dependent on caregiver, who is present in demanding situations;
- is not physically demanding for caregiver.

The Neptune can be used to lift a person, who:

- sits in a wheelchair;
- can partially bear weight on at least one leg;
- has some trunk stability;
- is dependent on caregiver in some situations.

The Neptune can be used to lift a person, who:

- sits in a wheelchair;
- no capacity to support herself;
- is dependent on caregiver in most situations.

Neptune shall always be handled by a trained caregiver who will care for the resident in accordance with these Operating and Product Care Instructions.

WARNING

A clinical assessment should be carried out by a qualified nurse or therapist before lifting residents for suitability of transfer in the Neptune e.g. residents who have curvature of the spine or who are subject to muscle spasms or other residents may not be suitable.

During resident transfer to and from the water, two caregivers are present. One to operate the lifter and the other to assist the resident at all times. Extra care should be given during resident transfer from the water when both resident and seat are wet.

1.2 General safety instructions

Only use Nibotechnics chairs, transporting equipment and stretchers that have been specifically designed for the Neptune.

Do not overload the Neptune beyond the approved lifting capacity (see page 7).

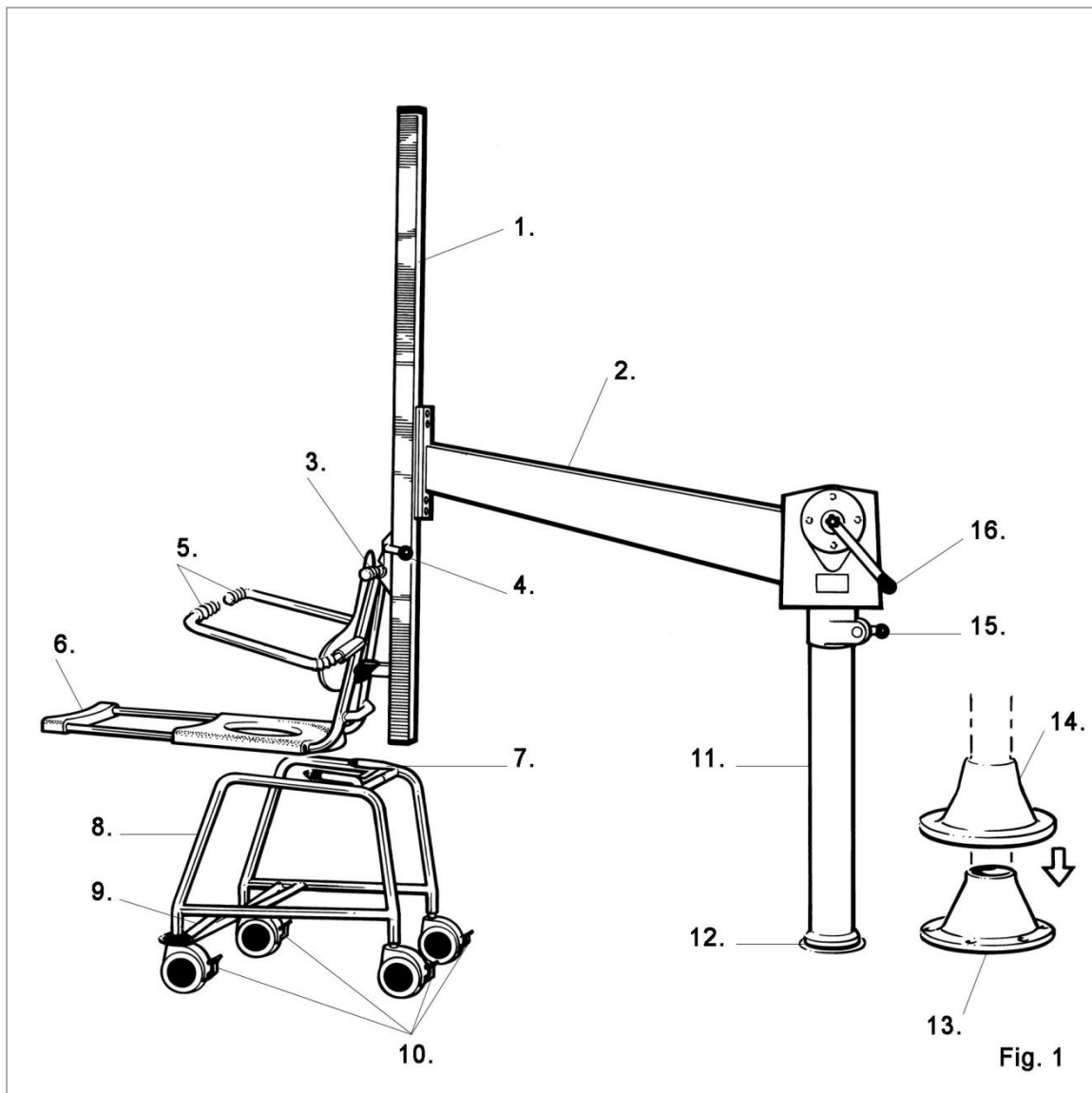
Do not manually lift the complete lifter but use the transporter for all transfers.

WARNING

Insert the support column correctly into the column location socket/base plate.

2. Product description / function

2.1 Parts referred to in the manual



- | | |
|--------------------------------------|----------------------------|
| 1. Mast | 9. Footrest |
| 2. Boom | 10. Braked castors |
| 3. Chair handle and hook up bar | 11. Support column |
| 4. Chair / Stretcher retaining catch | 12. Column location socket |
| 5. Fold back arm rest | 13. Base plate |
| 6. Extended leg rest | 14. Base cover |
| 7. Left prong with chair catch | 15. Rotation lock |
| 8. Detachable sub-chassis | 16. Winding handle |

2.2 Maximum capacities

Neptune (socket or base plate mounted):

- fitted with standard boom 680 mm:
160 kg (352 lbs)
- fitted with boom 1000 mm:
160 kg (352 lbs)
- fitted with boom 1200 mm:
127 kg (280 lbs)

The capacities may differ, depending on the type of boom. Inform yourself on the correct capacity by reading the label fixed to the main column housing, below the winding handle.

Neptune resident transporters:

The operation of the resident transporter units may differ, depending on the type selected.

Swimchair

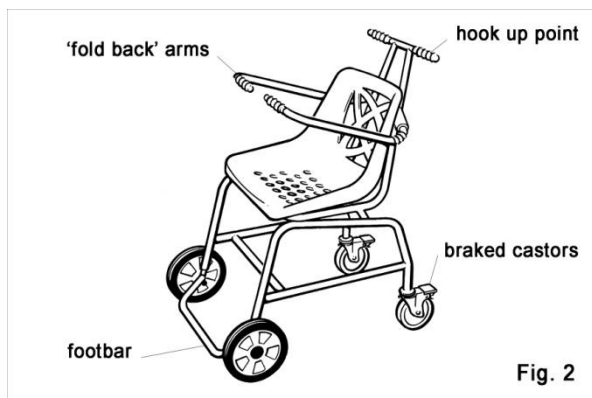


Fig. 2



Fig. 3

Detachable from the Neptune, but the whole unit is lowered into the pool.

This unit may be detached from the Neptune once in the water and lowered securely onto the pool floor, providing that the water depth is correct for the resident (see Fig. 3).

Toilet / Commode / Shower chair (TCS)

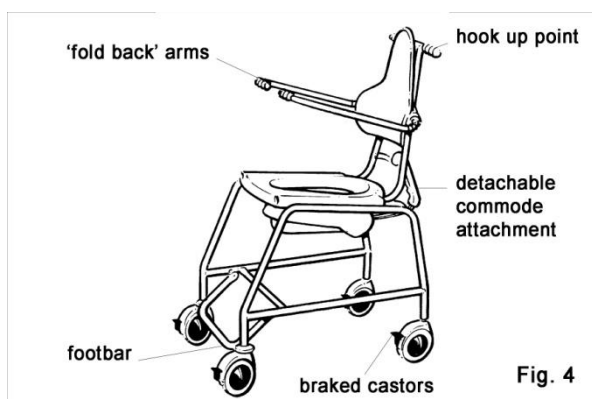
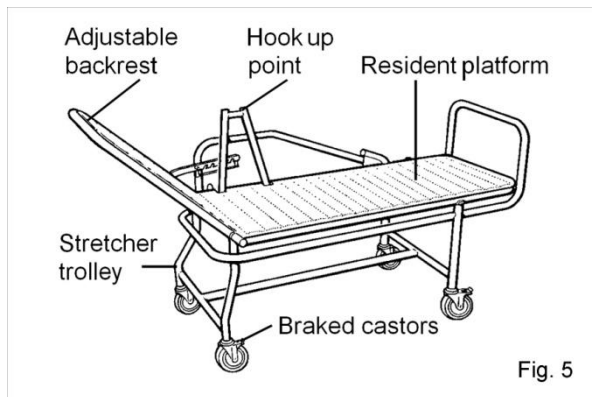


Fig. 4

The chair, which can be attached to / detached from the Neptune, has a removable sub-chassis. Only the chair is to go into the pool. Leg rest available. Toileting facility (see Fig. 4).

To help prevent the accidental release of the chair, a retaining catch is fitted to the left hand 'prong' of the sub-chassis. When the chair is pushed onto the chassis, the catch connects with a slot in the chair frame tube (see Fig. 10). Press the catch in to remove the chair.

Stretcher unit



The stretcher can be detached from the Neptune, but only the resident platform is intended to go into the pool (see Fig.5).

WARNING

Avoid any part of the resident's or caregivers body coming between parts of the lifter that join together or touch during operation e.g. when attaching seat or stretcher to mast etc.

3. Using your Neptune

3.1 Transferring to poolside with chair

The chair arms fold back for easy resident access. Once the resident is suitably dressed for swimming, transfer him/her into the chair (swimchair or TCS).

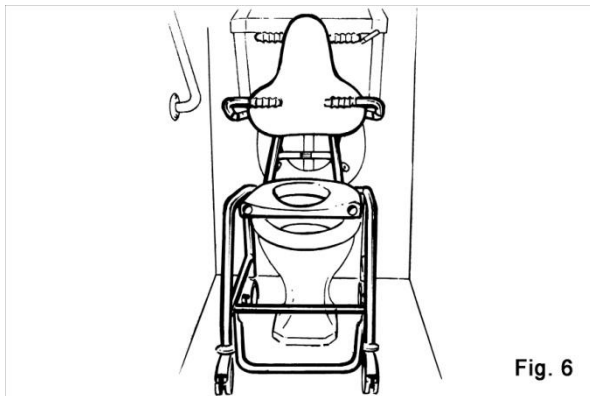
WARNING

Always ensure the brakes are on during transfer onto and of the chair.

Ensure the arm rests are folded forward, encircling the resident for safety during transfer.

Never leave the resident unattended.

Always work according to good bathing principles e.g. check water temperature, water depth, care of the resident, etc.



The TCS chair may be used over a toilet if necessary, when going to or from the poolside. Use the brakes when over a toilet (see Fig. 6).

3.2 Transferring to poolside using the stretcher

The resident may be taken to the pool from bedside or from another stretcher by using the stretcher/trolley unit.

Transfer the resident by sliding or rolling as appropriate.

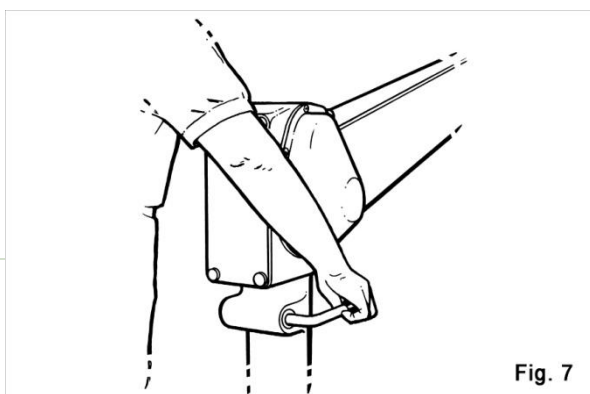
To adjust the backrest when the resident is on the stretcher, firstly support the resident clear of the backrest, then carry out the adjustment. (A second person may be required for this operation). To make the back more upright, simply lift up to the backrest before attaching the chair or stretcher.

WARNING

To lower the stretcher, hold the backrest and lift it slightly, then lift up the ratchet position plate by holding either of the ratchet plate knobs ONLY (See inset to fig. 10).

If the resident is unstable or restless, the safety rail may be used to protect the resident on the stretcher.

3.3 Attaching the chair or stretcher to the Neptune



Rotate the Neptune away from the pool.

Turn the rotation lock anti-clockwise to rotate (turn clockwise to lock) (see Fig. 7).

WARNING Make sure that the rotation lock is on desired position.

Reverse the chair unit or bring the stretcher, sideways on, towards the Neptune mast until the top of the support frame comes into the close proximity of the mast.

WARNING

Adjust the height of the mast so that the hook up bar (with retaining catch) can be positioned under the top of the chair or stretcher support frame. The top of the support frame must be firmly attached to the hook up bar and the retaining catch must have operated to hold the frame tube (see Fig. 8).

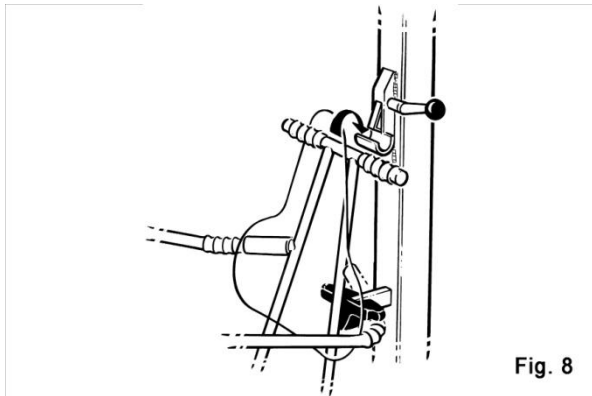


Fig. 8

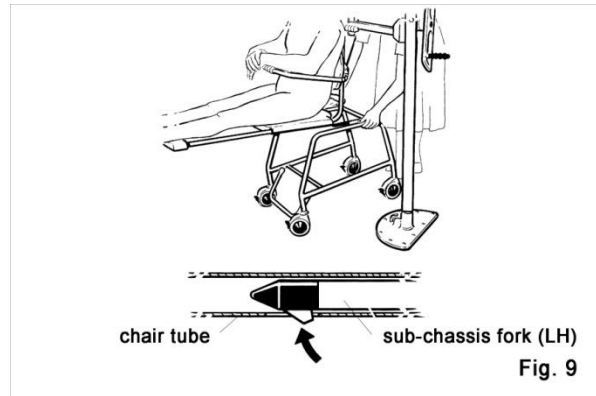


Fig. 9

Raise the mast so that the chair wheels are clear of the ground.

If you have a TCS chair, remove the sub-chassis. To help this action, take the resident's feet off the footrest by using the leg rest if desired. Operate the catch, situated under the left side of the seat, and gently move the sub-chassis backwards until free (see Fig. 9).

To move the stretcher away from its trolley after hook up to the Neptune, lift the lever situated at the foot end of the trolley. Check if the mast catch works, then raise the Neptune mast (see Fig. 10).

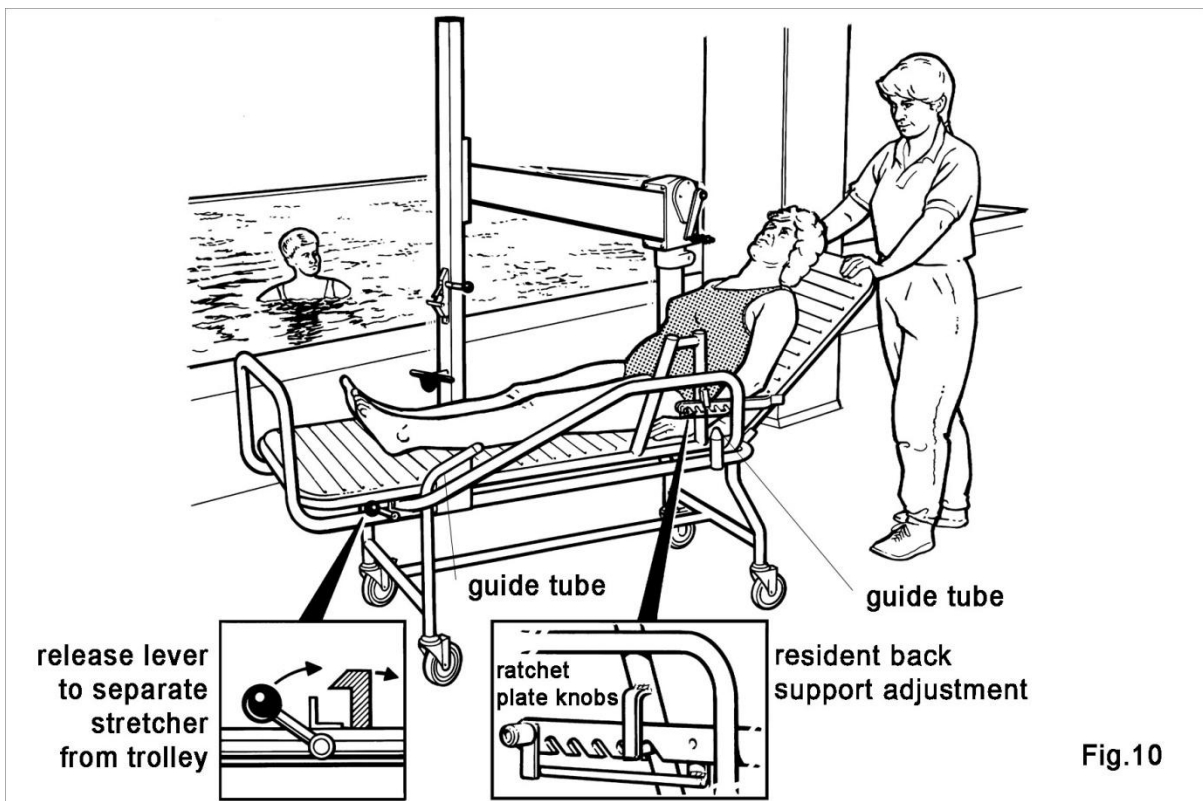
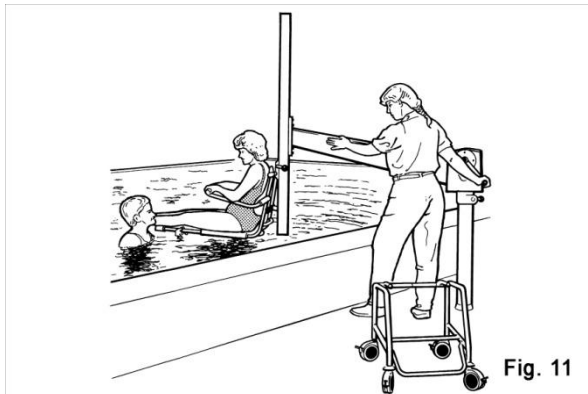


Fig.10

3.4 Transfer to the pool

Release the Neptune rotation lock (See Fig.1) by turning anti-clockwise.



Raise the resident sufficiently to clear the pool edge (raised edge poolsides only) (see Fig. 11).

For sunken pools, raise the resident so that the chair or stretcher sufficiently clears any obstruction.

WARNING

Ensure there is someone in the pool ready to help the resident into the water.

Move the resident over the pool by pushing sideways on the boom, until the desired position is reached.

WARNING

Engage the rotation lock firmly.

Lower the resident until deep enough in the water, indicated by the helper in the pool (usually mid-chest).

If the resident is on a stretcher with the shoulders raised, the water should come to shoulder level to improve buoyancies.

Fold back the chair arm rest(s) to get resident access, if required.

After the resident has been received by the helper in the pool, remove the mast from the water or return to repeat the procedure for the next resident.

WARNING

There should always be someone at the poolside competent to operate the Neptune while the resident(s) is in the water.

3.5 Transfer out of the pool

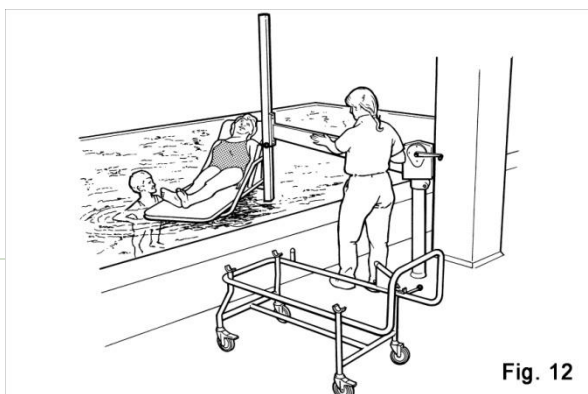
WARNING

Fold back the chair arms, then lower the chair or stretcher into the pool to the same depth as before. The helper should put the resident in the chair or stretcher and fold the encircling arm rests on the chair back around the resident or if using the stretcher, put the safety rails around the resident if required.

If using the swimchair and it has been removed from the Neptune mast in the pool, ensure it is correctly connected to the mast and that the chair retaining catch has operated before returning the resident to the chair.

Avoid any part of the resident's or caregiver's body coming between parts of the lifter that join together or touch during operation e.g. when attaching seat or stretcher to mast etc.

When resident and helper are ready, raise the resident from the pool until high enough to clear the poolside.



Release the rotation lock and rotate back over the poolside by pulling the boom towards you. When in position for transfer, engage the rotation lock.

If you need to use the TCS chair, raise the seat sufficiently high enough above the floor and insert the prongs of the sub-chassis unit into the chair

frame tubes (see Fig. 9) until the retaining catch works and locks.

Begin to lower the mast and at the same time open the chair retaining catch on the mast, just before the wheels of the sub-chassis contact the floor. Continue to lower the mast, keeping the chair retaining catch open, until the chair frame tube is clear of the hook up point. Push the chair away from the Neptune, apply the brakes and prepare the resident for return to the changing room.

When using the stretcher, position the stretcher trolley so that the stretcher can be lowered directly onto it, ensuring that the guide tubes on the stretcher trolley are in the position as shown in Fig. 10. Continue lowering, having opened the chair / stretcher retaining catch, until the stretcher connects with the locking catch on the trolley. Continue lowering until the hook up point is completely clear of the stretcher hook up tube.

WARNING

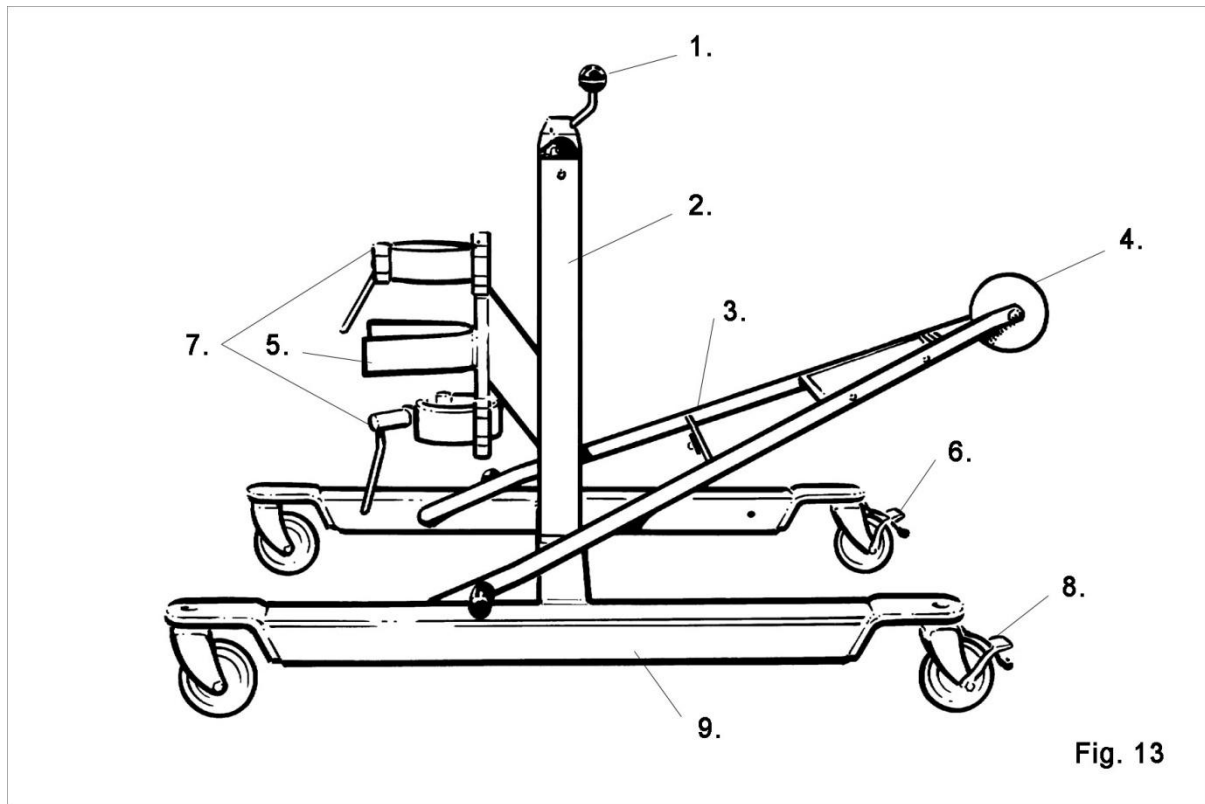
Ensure the brakes are applied whenever the trolley is not being moved.

To unhook the stretcher unit from the mast, push in the retaining catch lever on the mast and continue to lower the mast until the stretcher is clear of the hook up point.

Release the trolley brakes and return to the changing room.

4. Product description / function Neptune transporter

4.1 Parts referred to in this manual



- | | |
|----------------------|------------|
| 1. Winding handle | 6. Brake |
| 2. Mast | 7. Clamps |
| 3. Triangular steady | 8. Brake |
| 4. Guide roller | 9. Chassis |
| 5. Guide | |

5. Using your Neptune transporter

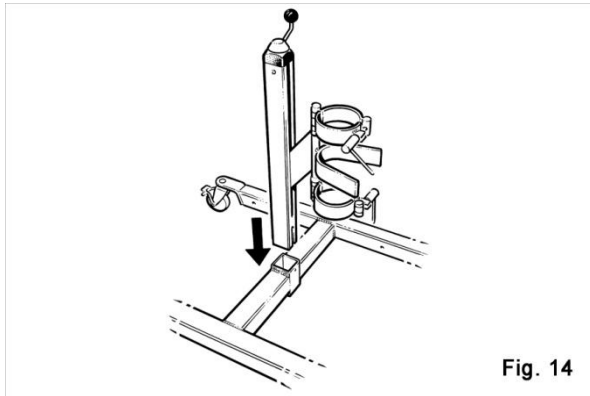


Fig. 14

Before using your Nibotechnics Neptune Transporter, it will have to be assembled as follows:

Remove the three major components (see Fig. 13) from their packaging. Remove and hold the screw from the lower end of the mast using the key provided. Carefully slide the mast into the chassis centre socket (see Fig. 14).

It can only go in one way.

Insert the screw through the chassis socket and tighten into the mast using the key (see Fig. 15).

The fitting position of the triangular steady depends on the Neptune boom length. Before continuing with your assembly, determine which boom length is fitted by measuring the distance referred to in Fig. 17. Also read the preparation of the Neptune transporter on pages 15-16.

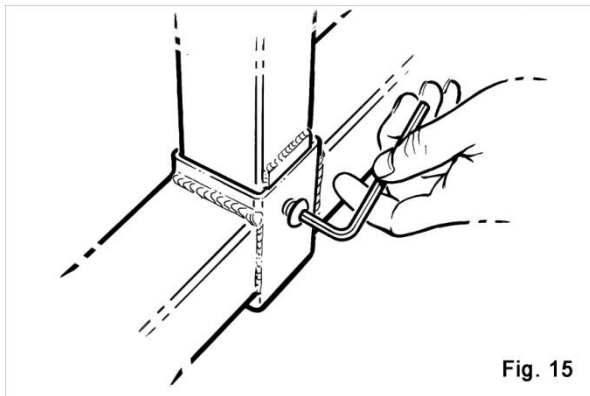


Fig. 15

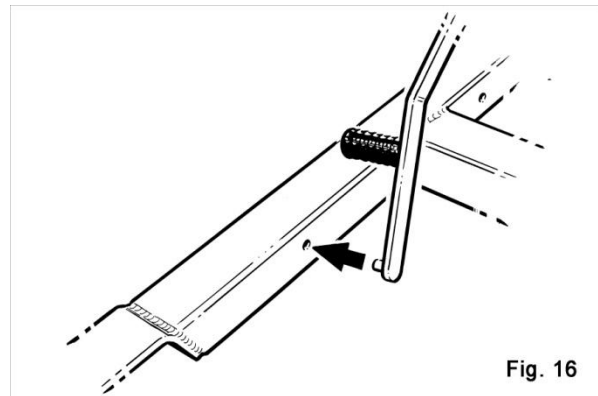


Fig. 16

When this distance has been measured and referring to Fig. 14, continue to fit the triangular steady into the chassis. First, position one of the location pegs into its hole (see Fig. 16).

Then carefully pull back the frame by applying slight pressure, just enough to allow the other peg to clear the chassis leg and insert into its hole (see Fig. 17).

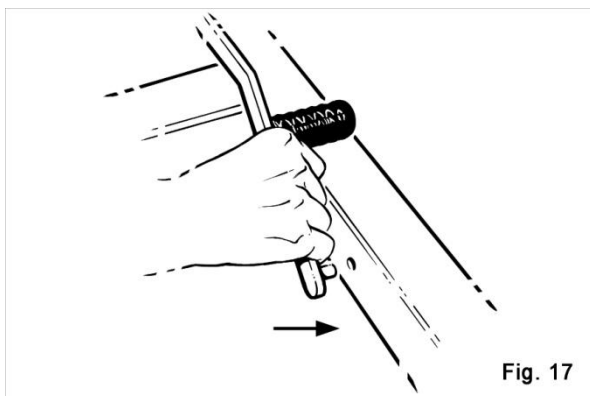


Fig. 17

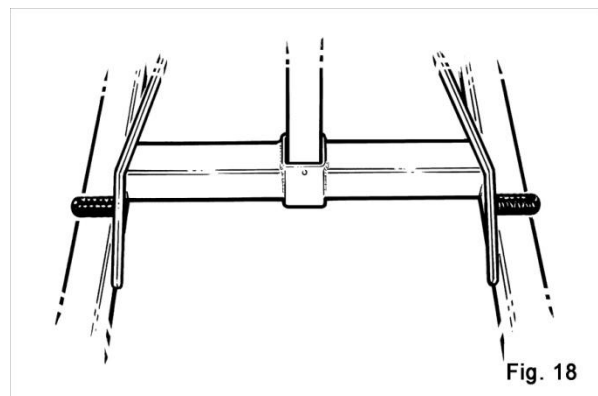
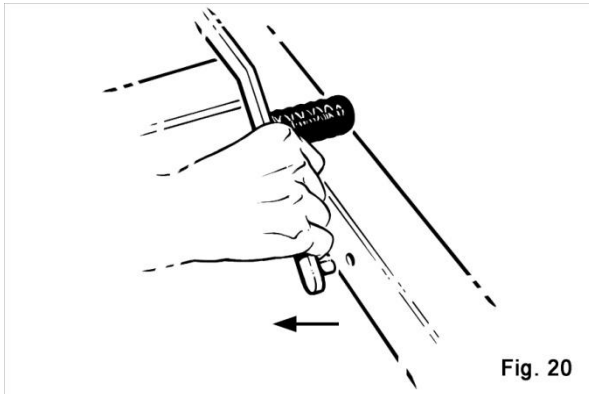


Fig. 18

The steady should move freely and the plastic covered stops will allow it to rest on the chassis in the operational position (see Fig. 18).

Your Neptune transporter is now ready for use.

5.1 Preparation of Neptune transporter



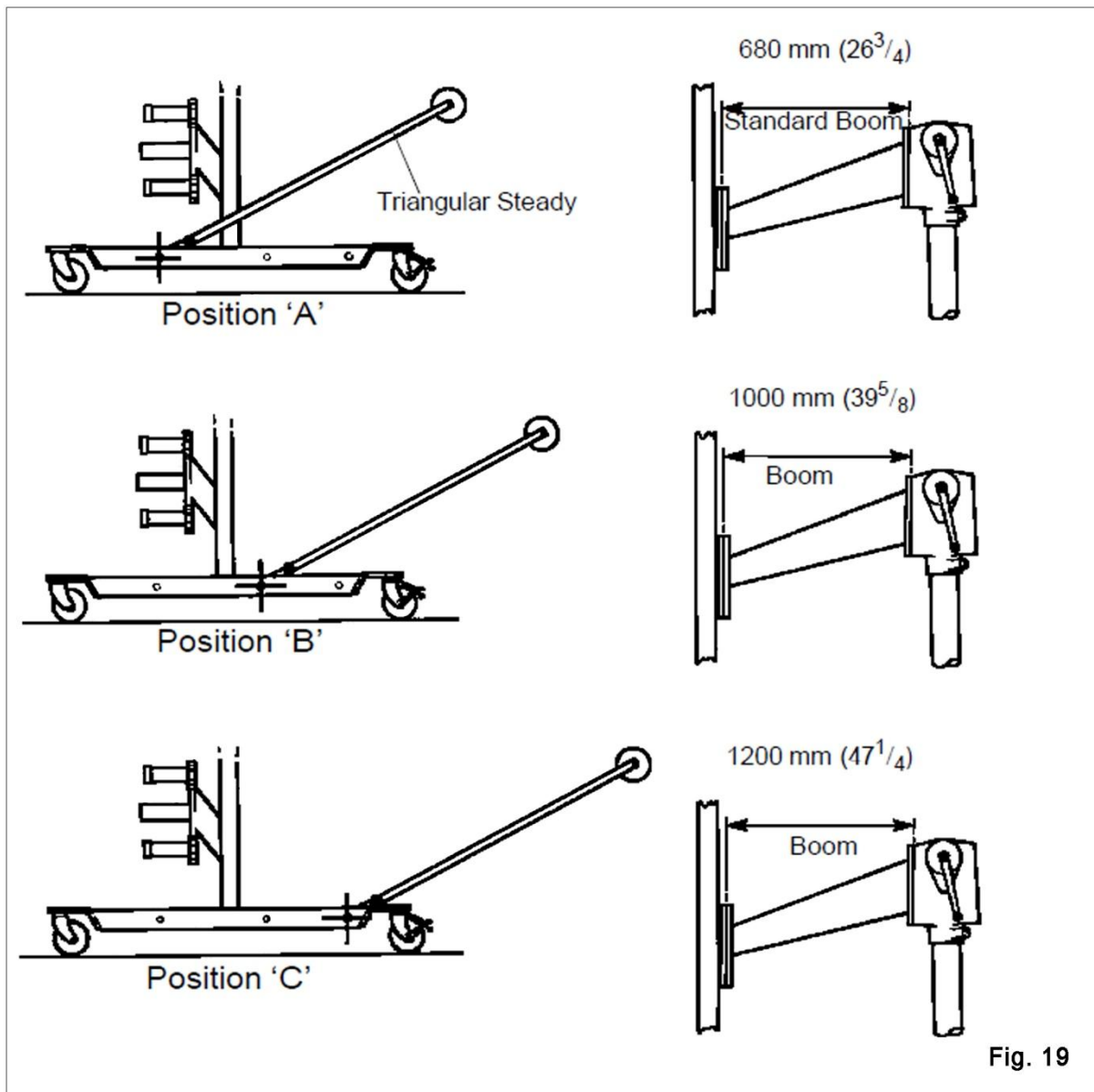
The triangular steady (see Fig. 13) of the transporter can be fitted in three separate positions.

Each position is intended for the different boom lengths that can be supplied with the Nibotechnics Neptune. Before attempting to use the transporter, ensure the steady is fitted in the correct position on the transporter, relative to the boom length of the Neptune to be lifted (see Fig. 19).

If after referring to Fig. 19 and measuring the Neptune boom, the triangular steady is found not

to be in the correct position, it can be easily repositioned as follows:

Temporarily pull back one of the steady side members (see Fig. 20) to pull out the pivot peg from its hole. Pull out the other frame peg and take the 'steady' away from the chassis. Reposition the frame referring to Fig. 19, reversing the above procedure.



Remove the chair or stretcher from the Neptune and move the boom (1) in Figs. 21 and 22 away from the pool edge, (see Fig. 21), lower the mast (2) to within 150mm (6") of the ground level.

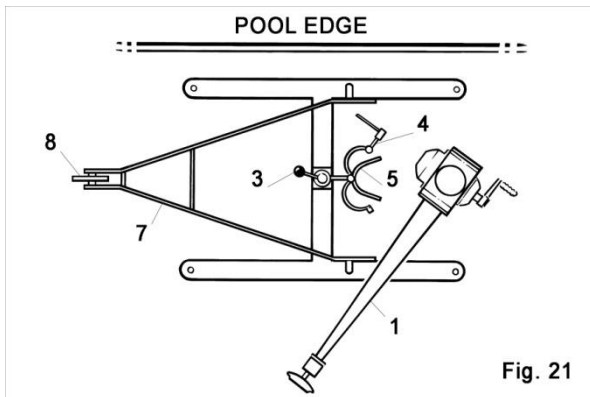


Fig. 21

Position the clamp section of the transporter at its lowest position by turning the winding handle (3) anti-clockwise.

Open the clamps (4) and approach the Neptune as shown in Fig. 21.

Engage the guide (5) with the Neptune column (6).

Lift the triangular steady (7) and rotate the Neptune boom (1) until it is in line with the guide roller (8) on the steady.

Lower the steady until the roller engages in the slot in the mast.

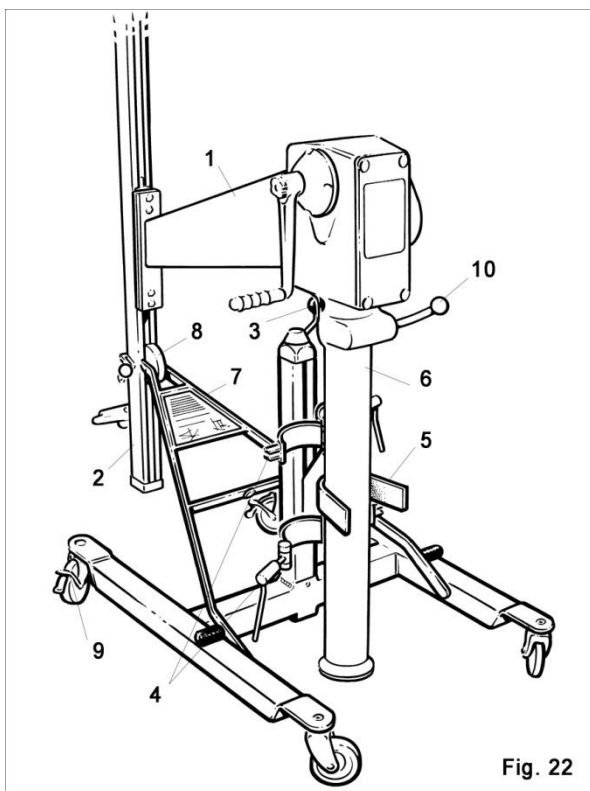


Fig. 22

Lock the transporter brakes (9) and secure the clamps (4) so they firmly grip the Neptune column (but are not over tight).

Tighten the Neptune swivel clamp (10).

Operate the winding handle (3) in a clockwise direction to raise the Neptune from its socket.

If the Neptune is tightly held in the socket, a slight rocking action should free it enough to be lifted out.

When the column is clear of ground level, release the transporter brakes and move the transporter, with the Neptune securely attached, carefully away.

To re-install the Neptune, reverse the above procedure.

CAUTION

Do not operate the winding handle (3) while the Neptune is held in the transporter.

Chairs / stretchers must not be attached to the Neptune while mounted on the transporter.

6. Care of your Neptune & transporter

For cleaning your Neptune, wipe down with a damp cloth using warm water to which a mild detergent has been added.

CAUTION

Do not use petroleum based solvents or similar, as these may damage plastic parts.

WARNING

If in any doubt about the correct functioning of the Neptune, withdraw it from use and contact the distributor.

UK LIFTERS ONLY: Important legislation came into force on 5th December 1998, which has an impact on the schedule of service for your patient lifter(s), variable height baths and other raising and lowering equipment. The Lifting Operations and Lifting Equipment Regulations (LOLER) 1998 and The Provision and Use of Work Equipment Regulations (PUWER 98) must be satisfied by the duty holder. A scheme of six monthly through examinations has been devised to comply with the law and details can be obtained from the distributor UK.

Spare parts, if required are available from Nibotechnics or their approved distributors.

Special tools are required for certain component replacement.

The simplest; safest and most effective way to maintain your product in good working order, is to have it methodically and professionally serviced by the distributor approved engineer using Nibotechnics approved spare parts.

For information on service and maintenance contracts, please contact your local distributor.

6.1 Environmental advice

When disposing of any items associated with the lifter, contact the appropriate local authority for advice.

For information on the maintenance instructions of your Neptune and transporter, direct yourself to the Preventive Maintenance Schedule in the back of this manual.

8. Technical specifications

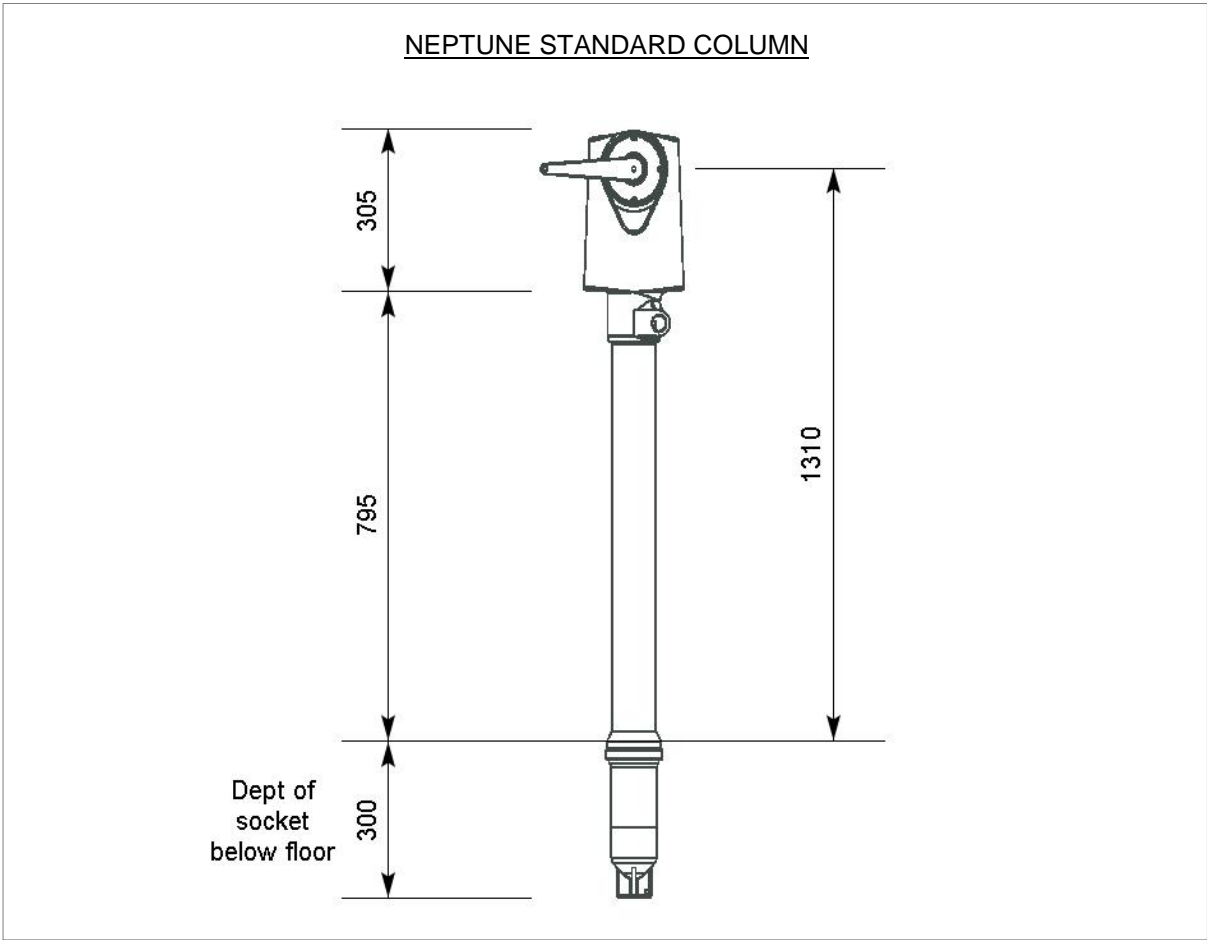
8.1 Component weights

<i>Neptune</i>	kg	lbs
Minimum weight (average)	70	154,32
Maximum weight (average)	85	187,39

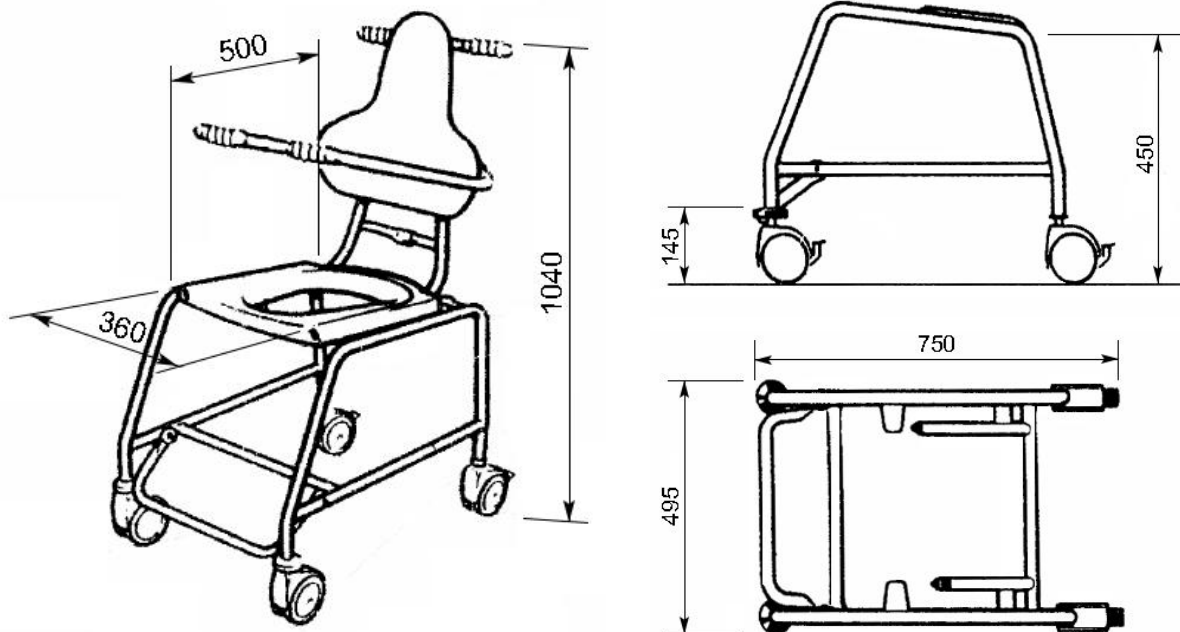
Maximum lifting capacities

Basic lift with a boom of 680 mm	160	352,74
Basic lift with a boom of 1000 mm	160	352,74
Basic lift with a boom of 1200 mm	127	279,99

8.2 Dimensions



COMMODE CHAIR & SUB-CHASSIS



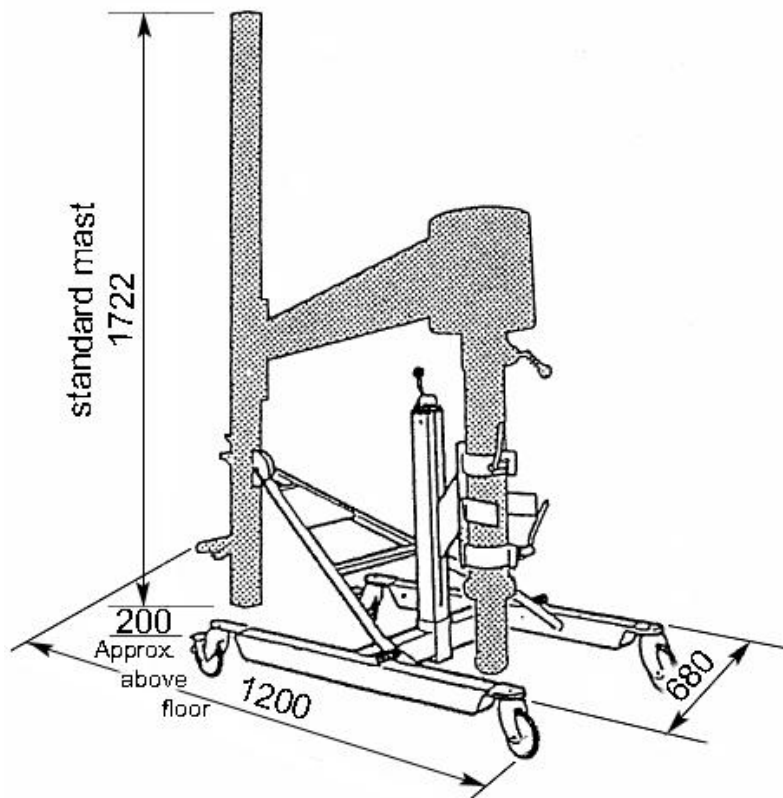
This is available in:

- AA1070 Chassis 450 with footrest
- AA1071 Chassis 475 with footrest
- AA1072 Chassis 500 with footrest
- AA1073 Chassis 525 with footrest
- AA1075 Chassis 450 with foot bar
- AA1077 Chassis 450 with foot bar + S/S Stems
- AA1078 Chassis 450 with footrest + S/S Spin-

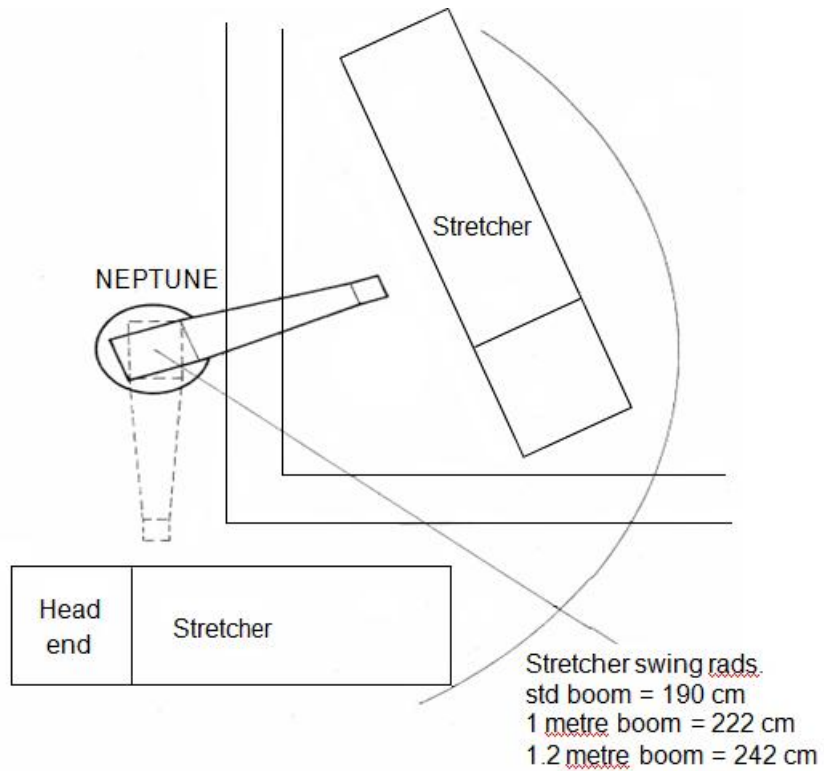
SWIMCHAIR



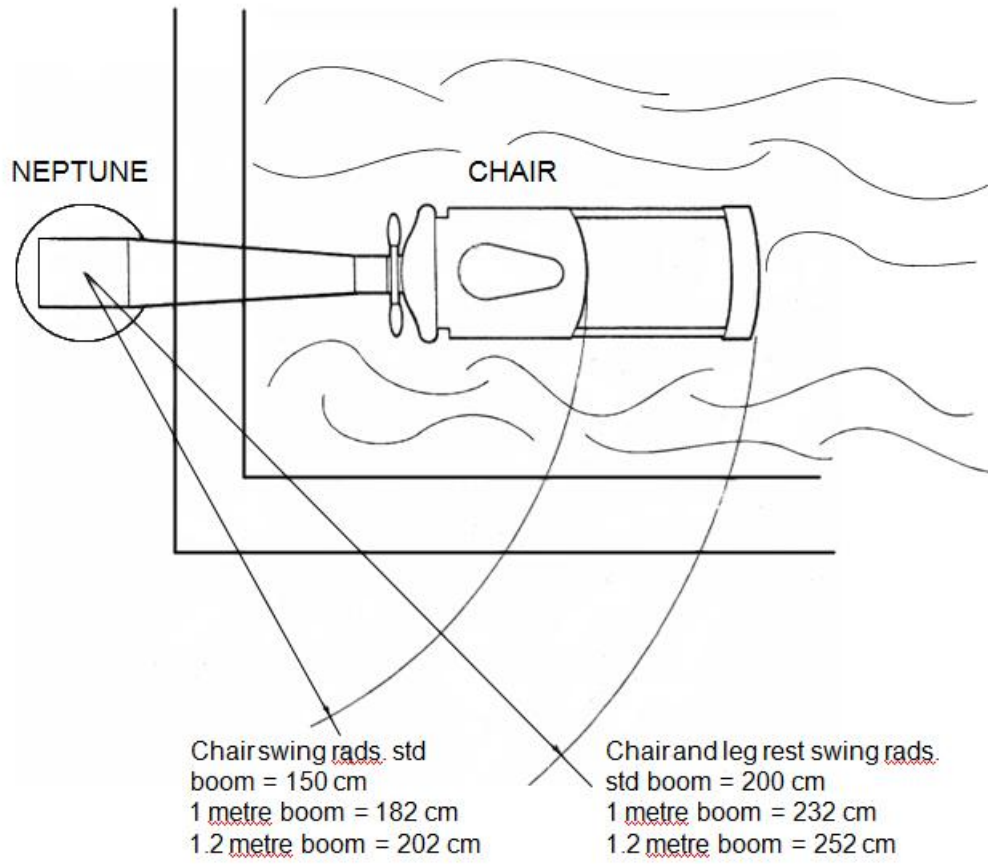
NEPTUNE TRANSPORTER



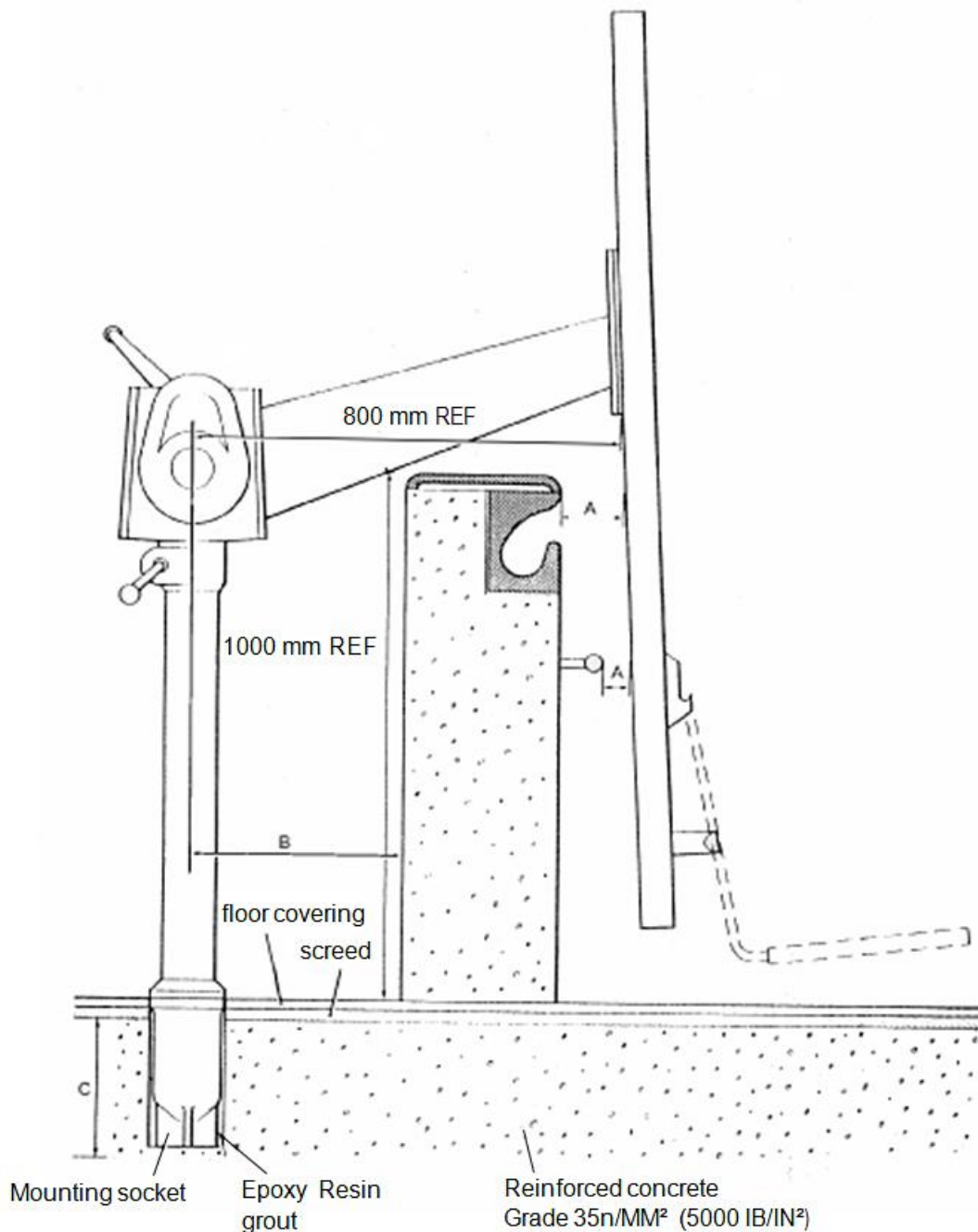
NEPTUNE WITH STRETCHER UNIT UPPER VIEW



**NEPTUNE WITH CHAIR UNIT, WITH AND WITHOUT LEG REST
UPPER VIEW**



**NEPTUNE POSITION A
SOCKET MOUNTED**



Check for services & ducts in locality of proposed foundations

Dimension 'A' 50 mm minimum recommended clearance between handrail & mast. If handrail not provided, 50 mm clearance applies from extreme edge of pool to mast or any other obstruction.

Dimension 'B' 350 mm minimum distance from edge of wall to centre line of column applies only when height of wall is maximum of 1000 mm.

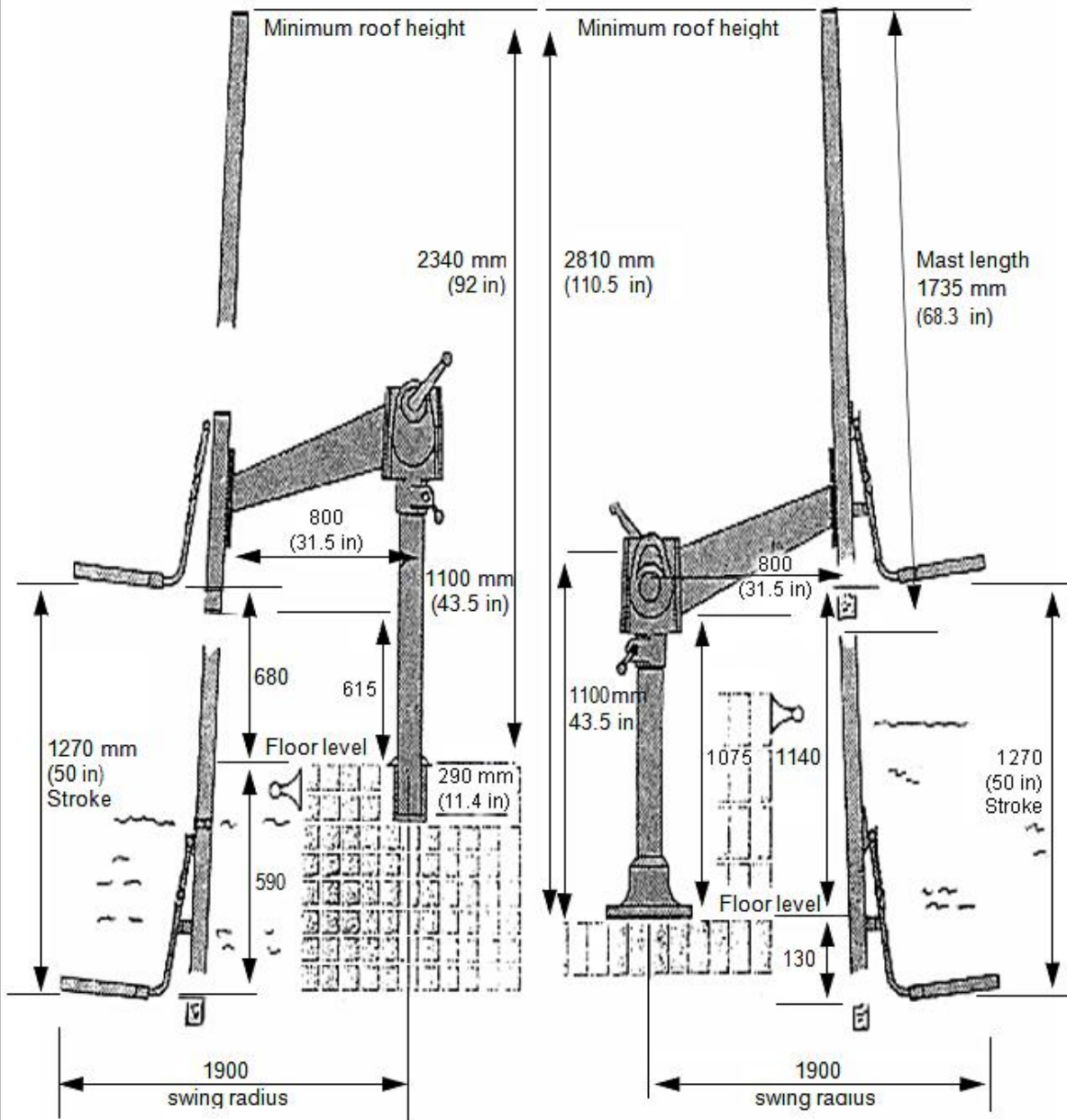
Dimension 'C' 250 mm minimum when screed is at 75 mm max for a minimum radius of 600 mm in all directions.

Hole size for mounting socket, diameter 1.30 mm, depth 285 mm

GENERAL MEASUREMENTS

Decklevel pools
Boom position B

Raised pools and therapy tanks
Boom position A

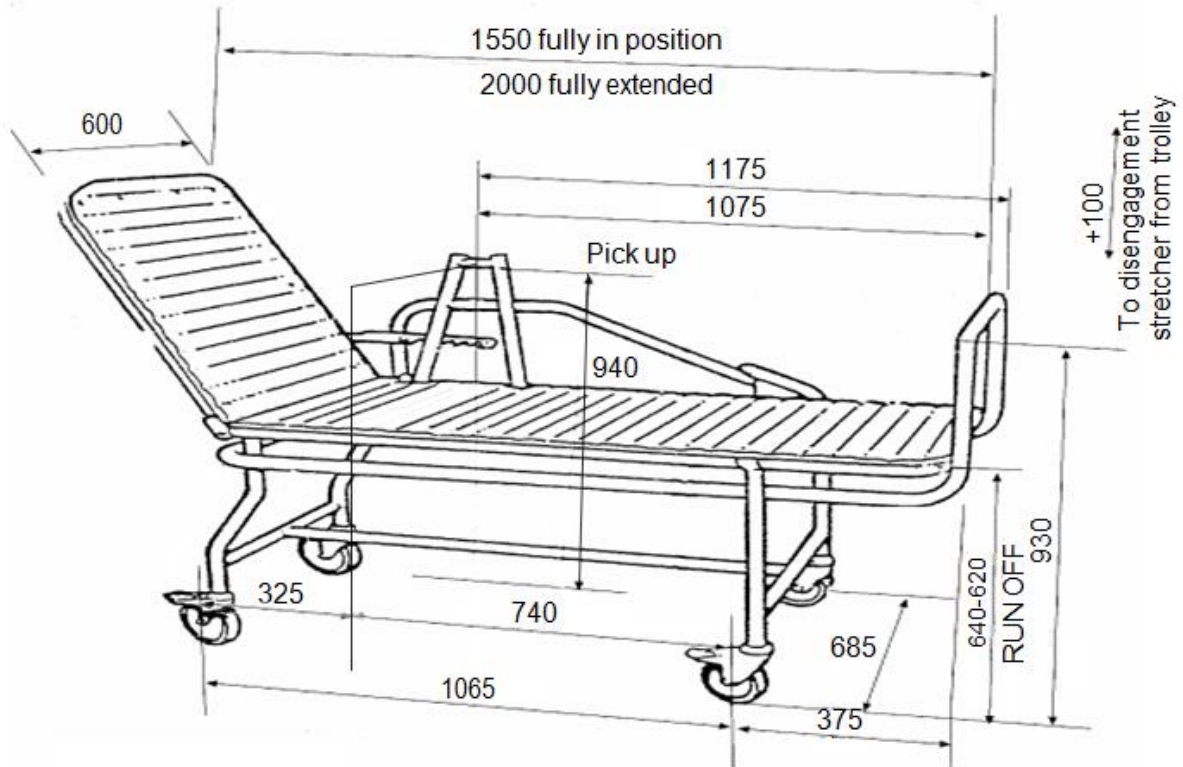


Space requirements
with standard boom (800 mm)

Radius of swing with chair unit	1500 mm (59 in)
Radius of swing with stretcher	1900 mm (75 in)
Radius of swing with chair and legrest	2000 mm (79 in)

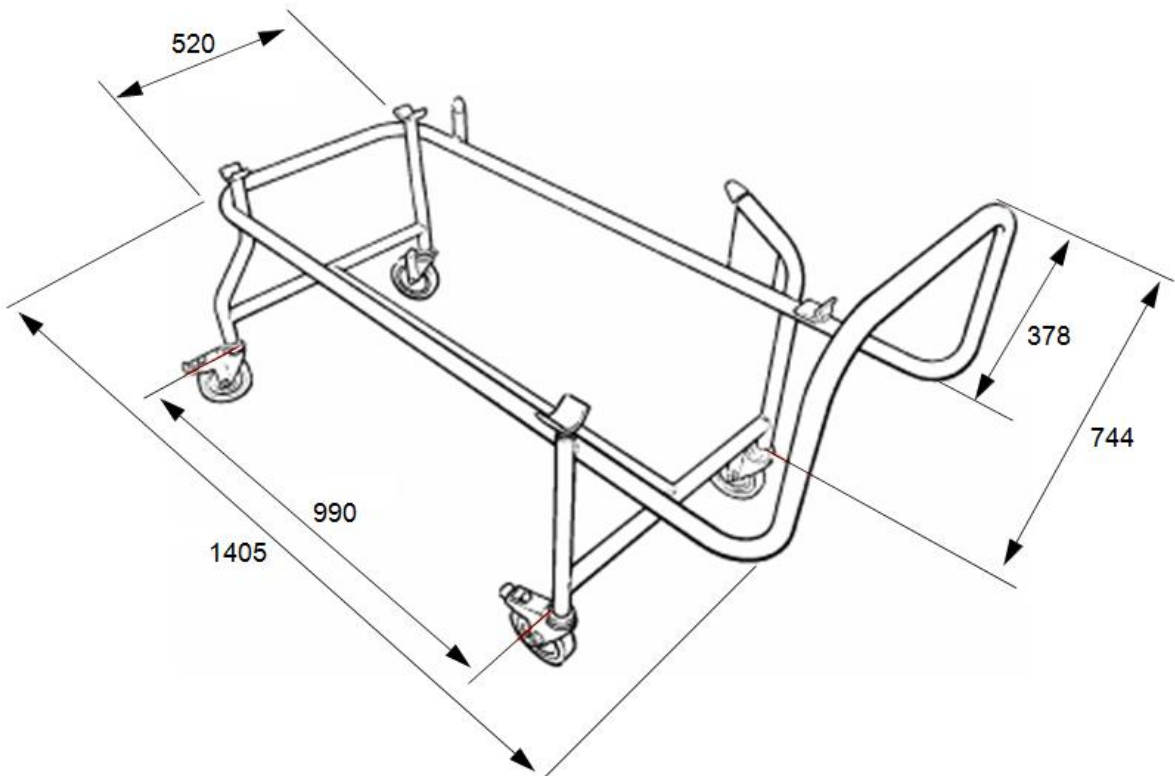
Difference between underside of stretcher and end of mast.

NEPTUNE STRETCHER



125 mm wheels

STRETCHER TROLLEY - OVERALL DIMENSIONS



9. Preventive Maintenance Schedule

The Neptune is subject to wear and tear, and the following actions must be performed when specified to ensure that the product remains within its original manufacturing specification.

WARNING

The points on this checklist are the minimum the manufacturer recommends. In some cases due to heavy use of the product and exposure to aggressive environment, more frequent inspections shall be carried out. Continuing to use this product without conducting regular inspections or when a fault is found will seriously compromise the user and residents' safety. Local regulations and standards may be higher than the manufacturers. Preventive maintenance specified in this manual can prevent accidents.

The parts which are entitled 'Checks to be performed by Qualified distributor personnel' have to be carried out by qualified personnel, using correct tools and knowledge of procedures. Failure to meet these requirements could result in personal injuries and / or unsafe product.

Action/Check	Before each use	Every day	Every week	Every 6 months	Every 12 months	Every 2 years
Nibotechnics SUB-CHASSIS, SEAT AND FRAME						
Visually inspect the sub-chassis to make sure the castors and footrest are securely attached before use.	X					
Examine all exposed parts, especially where there is personal contact with the resident's body. Make sure no cracks or sharp edges have developed that could cause resident or user injury or have become unhygienic. Replace where necessary.	X					
Carry out decontamination of the sub-chassis, seat and frame in accordance with the operating instructions.			X			
Make sure all instruction labels are firmly attached and are readable. See operating instructions for location of labels.			X			
Make sure all external fittings are secure, and all screws and nuts are tight.			X			
Make sure all 4 off castors rotate freely, are securely fitted into the frame and the brakes lock.			X			
Make sure the safety catch, locking the seat frame to the sub-chassis, operates freely			X			
Optional safety chain. If installed in the ends of the arm rests, inspect the safety chains for damage/distortion and make sure they are securely installed.			X			
Make sure the handgrips are secure. Replace as necessary.			X			
Nibotechnics AUTOLIFT electric						
Chair retaining catch, where fitted - Examine the catch to make sure it operates smoothly and the	X					

Action/Check	Before each use	Every day	Every week	Every 6 months	Every 12 months	Every 2 years
spring pressure is maintained.						
Examine all exposed parts, especially where there is personal contact with the resident's body. Make sure no cracks or sharp edges have developed that could cause resident or user injury or have become unhygienic. Replace where necessary.		X				
Where necessary, after each resident use, carry out decontamination of the AUTOLIFT electric in accordance with the operation instructions.		X				
Chair pick-up hook, where fitted - Examine the pick -up hook on the jib for deformation. If found bent/distorted in any way, withdraw lifter from service immediately and replace jib. See Fig. 1					X	
Where fitted, make sure the rotation lock release lever disengages smoothly and engages under its own spring load.					X	
Make sure all external fittings are secure, and all screws and nuts are tight.					X	
Make sure all instruction labels are firmly attached and are readable. Replace as necessary. See operating instruction for location of labels.					X	
A general visual inspection of all external parts should be carried out periodically and all functions should be tested for correct operation, to ensure that no ad-verse damage has occurred during use.					X	
Check that handset and switch work properly.		X				
Make sure that the battery is charged frequently to secure a safe lifting.		X				
Inspection to be done by approved service technician. Inspect all the components within the winding mechanism for wear and damage, paying particular attention to the following and replace where necessary. Spring retainer for damage to end face. Spring for damage or broken coils. Adjustment plunger for operation and corrosion. Regrease the threaded shaft and plunger using Energrease FG00-EP or equivalent. Check all functions for correct and smooth operation. Make sure the base is mounted securely to the floor. For electric hoists check all electric components and wires.						X

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