



### Operating manual

#### **Serial Number:**





Registered at Medical Products Agency, Sweden, as a MD Class 1 product, MDD 93/42EEC.

TR reserves the right to make design changes and/or improvements without notice.



Always study this manual carefully before operating the Shower Trolley.

Operating instructions and recommended maintenance procedures are explained in the following pages.

If you have any questions regarding the operation or maintenance of your Shower Trolley and cannot find the answer in this manual, please contact us.

Only qualified staff, who understand all operating and safety procedures may operate this equipment.

The Trolley is designed for years of trouble free operation, with proper use and maintenance.





### **Table of Content**

Introduction	3
Intended Use, Product Description and Technical Specifications	4
Safety and Control Instructions	5
Features and Controls for the Shower Trolley	6
Height Control for TR 2000 Hydraulic Shower Trolley	7
Height Control for TR 3000 Battery Operated Shower Trolley	7
New battery charger magnetic plug for the TR 3000 shower trolley	8
Charging instructions for Battery Operated TR 3000	9
Side rails	10
Castor breaks	10
Straight steering castors	11
Tilting the stretcher	11
Drainage hose and plug	11
Cleaning and disinfection of the Shower Trolley	12
Attachment of the mattress	12
Patient Handling - Procedures for the Shower Trolley	13
Patient Transfer from Wheelchair onto Trolley	13
Patient Transfer from Bed onto Trolley	14
Showering patient	15
Routine Maintenance	16
Labels	17
Maintenance record	18
Training record	18





#### Introduction

Dear Customer,

Thank you for choosing one of our quality products. We hope you enjoy the TR 2000/3000 Shower Trolley.

This manual shall, in conjunction with staff training, ensure that the operator/user is always using and/or operating the TR 2000/3000 correctly.

TR requires that each user has read and understands the entire operating manual and that they can apply the instructions as specified. This applies to anyone who was not present at the in-service.

This instruction manual should generally be kept easily accessible for every user. Copying the whole manual is encouraged since its sole purpose is to improve the standard of training and safety.

Please order another copy from us if the instruction manual is lost or unusable, or if it has become illegible over time.

If you require further information or have any questions please do not hesitate to contact TR or ask one of our qualified partners.

Please make sure you have read, understood and applied the information on the following pages.



### Intended Use, Product Description and Technical Specifications

#### Produkt model(s):

TR 2000 TR 2000-S TR 2000-L TR 2000H (-S) (-L)

The device "TR 2000" is a hydraulic operated shower trolley.

The patient is typically a person who is unable to take care of their own personal hygiene. The device is not intended to be used with patients that exceed a weight of 150 kg.

The device is intended to ease transferring and caring of the patient. Typical situations where the device is used include transporting the patient to and from a shower area, showering and cleaning the patient and dressing the patient and changing diapers.

The device is not intended to come in contact with injured skin.

The user is any adult person who is capable of reading and understanding the operating manual and is qualified to care for dependent persons/patients.

Before using the device, the user must read and understand the operating manual.

The device is intended to be used indoors in all types of care facilities and private homes, including hygiene areas.

#### Produkt model(s):

TR 3000 TR 3000-S TR 3000-L TR 3000H (-S) (-L)

The device "TR 3000" is a battery operated shower trolley.

The device is intended to ease transferring and caring of the patient. Typical situations where the device is used include transporting the patient to and from a shower area, showering and cleaning the patient and dressing the patient and changing diapers.

The patient is typically a person who is unable to take care of their own personal hygiene. The device is not intended to be used with patients that exceed a weight of  $150\ kg$ .

The device is not intended to come in contact with injured skin.

The user is any adult person who is capable of reading and understanding the operating manual and is qualified to care for dependent persons/patients.

Before using the device, the user must read and understand the operating manual.

The device is intended to be used indoors in all types of care facilities and private homes, including hygiene areas.

#### **Product Description**

Product	Description	Art no
TR 2000	Hydraulic shower trolley, standard, L = 1900 mm	0522010
TR 2000-S	Hydraulic shower trolley, pediatric, L = 1600 mm	0522015
TR 2000-L	Hydraulic shower trolley, long, L = 2100 mm	0522016
TR 3000	Battery operated shower trolley, standard, L = 1900 mm	0522000
TR 3000-S	Battery operated shower trolley, pediatric, L = 1600 mm	0522005
TR 3000-L	Battery operated shower trolley, long, L = 2100 mm	0522006

#### **Technical Specifications**

Length	1600/1900/2100 mm/63"/75"/83"
Width	705 mm/27 <sup>3/4</sup> "
Height	625 - 925 mm/24 <sup>1/2</sup> " - 36 <sup>1/2</sup> " 685 - 985 mm/27 - 39
<b>Working Load Limit</b>	150 kg/330 ibs
Chassic	Powder coated stainless and zink plated steel
Castors	Two castors with brakes and two with straight steering
Control	Foot control for height adjustment
Mattress, pillow	Flame retardant material - Grey (Standard)/Yellow or Blue (Option)
Battery (TR 3000)	Rechargeable 24 V

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#### **Group Subsidiaries**





### Safety and Control Instructions

If you have a question regarding the operation or maintenance of your Shower Trolley and cannot find the answer in this manual, please call us.

- Only qualified staff, who understand all operating and safety procedures may operate the equipment.
- Always physically check water temperature before and during showering.
- The patient must be positioned comfortably on the stretcher mattress, with side rails securely locked.
- Never leave the patient unattended.
- Do not let the patient sit on the short ends on the stretcher.
- Make sure that all parts that come in contact with the patient are intact and without sharp edges.
- Ensure that the Trolley can be moved, raised or lowered safely to avoide any pinch injuries to patient.
- Castor brakes must be securely locked on the Trolley before transferring a patient and once in position over a drain.
- Operate the Trolley carefully when transporting patients through narrow corridors or over irregular uneven surfaces.
- Wipe under the Stretcher to prevent water dripping on the floor
- Trolley must be cleaned after each use. Always read and follow detergent supplier instructions.

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

- Never clean mattress and pillow in gas sterilization unit.
   Mattress and pillow will explode.
- The TR battery charger is the only one approved for charging the Trolley.

- Do not use battery charger in wet or damp areas potential shock hazard.
- It is recommended that the Trolley batteries are charged daily or whenever Trolley is not in use.
   Batteries can not be overcharged.
- Check that castor brakes and straight steering are clean and free from damage.
- That siderails are in place and free from damage and all screws are tightened.
- Mattress and pillow must be kept well maintained in place.
- Ensure that the foot pedal on the hydraulic Trolley is swung out of the way when not in use.
- Trolley must be inspected visually for sign of wear. Trolley should not be used if defects are noted. Prompt service is required.

**Warning:** Do not use the Shower Trolley 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 fully read and understands the instructions in this manual.

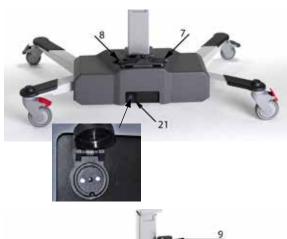




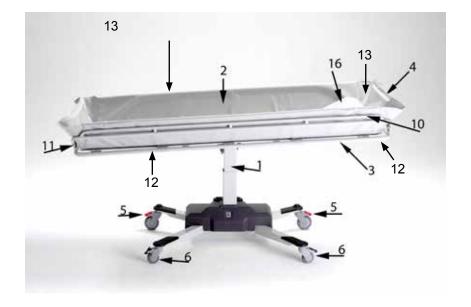
### Features and Controls for the Shower Trolley

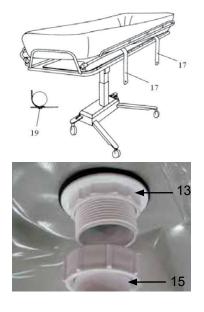
Position	Description
1	Support column
2	Mattress
3	Stretcher
4	End supports
5	Positive brake castors
6	Straight steering castors
7	Foot control for raising stretcher
8	Foot control for lowering stretcher
9	Foot pedal for raising and lowering stretcher on the hydraulic trolley
10	Side rails (nurse/bed side)
11	Side rail lock
12	Release handle for end tilt
13	Drain
14	Drain plug
<b>1</b> 5	Drain hose
16	Removable head pillow
17	Attachment strap

	Backrest wedge pillow (option)	
19	Studs for mattress attachment straps	
21	Battery charger input	









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### Features and Controls for the Shower Trolley

#### Height Control for TR 2000 Hydraulic Shower Trolley

Raise and lower the Shower Trolley with the foot pedal (9)

- Raise the Shower Trolley by pumping the pedal (9).
- Lower the Shower Trolley by pressing the same pedal all the way down.

The Shower Trolley lowers smoothly when the pedal is pressed all the way down and stops immediately when the pedal is released. When new, it is recommend to add some down force with your hand on the stretcher surface.

Note: When not in use, swing pedal (9) up against column to narrow Shower Trolley chassis.

Load limit is 150 kg/330 lb.

If the stretcher hits the top position or is overloaded a safety valve opens in the hydraulic piston and the stretcher stops.

#### **Height Control for TR 3000 Battery Operated Shower Trolley**

Raise and lower the Shower Trolley with the foot control (7) (8).

- Raise the Shower Trolley by pressing the "up" arrow symbol to the right(7).
- Lower the Shower Trolley by pressing the "down" arrow symbol to the left (8).

The Shower Trolley raises and lowers smoothly when the foot arrow symbols are activated and stops immediately when the foot arrow symbols are released.

Load limit is 150 kg/330 lb.

If the stretcher hits the top position or is overloaded, an audible tone sounds.







### Features and Controls for the Shower Trolley

The new battery charger magnetic plug is mounted on the TR 3000 from Serial no: 1401-21704

Charge the Trolley daily or when the low battery audible tone sounds, when pressing the "up" foot control arrow.

Use only the 24 V DC battery charger model delivered by TR Equipment.

**Note:** Connect the battery charger to the trolley before it is connected to the mains. Insert the battery charger magnetic plug into chassis base. Make sure that the plug is completely in place.

- Plug the battery charger into the mains.
- When the battery charger is properly connected, an indicator on the battery charger will be lit.
   If not, recheck the connections.
- The indicator informs the charging cycles, yellow while charging and green when the batteries are fully charged.
- Maximum charging time is 8 hours. The batteries can never be overcharged.
- When the charging is completed, disconnect the battery charger from the mains, before you disconnect it from the trolley.
- A flat fuse (15 A) is connected between the batteries under the cover.

Chassis cover, attached with Velcro, is removed by just pulling it straight up on the column, for availability. No tools required.

#### **Batteries**

If changing the lead batteries, deposit in accordance with local regulations.













### Features and Controls for the Shower Trolley

#### Charging instructions for Battery Operated TR 3000

Charge the Trolley daily or when the low battery audible tone sounds, when pressing the "up" foot control arrow.

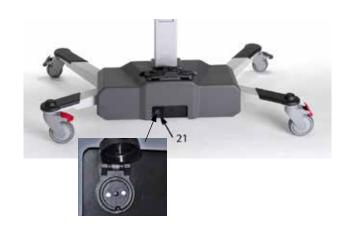
- Use only the 24 V DC battery charger model delivered by TR Equipment.
- Insert the battery charger plug into chassis base (21).
   Make sure that the plug is completely in place.
   Note: Connect the battery charger to the Trolley before it is connected to the mains.
- Plug the battery charger into the mains.
- When the battery charger is properly connected, an indicator on the battery charger will be lit. If not, recheck the connections.
- The indicator tells the charging cycles. Yellow while charging and green when the Trolley is ready for use.
- Maximum charging time needed is 8 hours. The Trolley can never be overcharged.
- When the charging is completed, disconnect the battery charger from the mains and then disconnect it from the Trolley.
- A flat fuse (15 A) is connected between the batteries under the cover.

Chassis cover, attached with Velcro, is removed by just pulling it straight up on the column, for availability. No tools required.

#### **Batteries**

If changing the lead batteries, deposit in accordance with local regulations.









## Features and Controls for the Shower Trolley

#### **Side Rails**

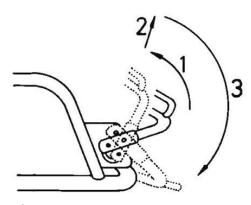
The "bed side rail" (transfer side) is easily lowered to a horizontal position for a safe patient transfer and raised again before transport.

Pull the rail to a vertical position (1), lift the rail to release the two locks at the end of the rail (2) and swing it down to a horizontal position (3).

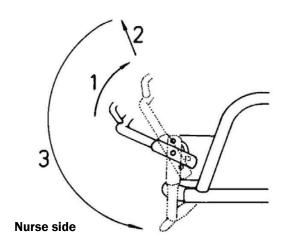
The side rail on the "nurse side" (opposite the transfer side) pivots freely under the stretcher when performing the steps described above.

Raise the side rail by simply pulling it back into its upright position. Lower it and the two locks will automatically lock into place.

When travelling through narrow doorways, reduce the Trolley width by holding the side rails in a vertical position.



Bed side



#### **Castor Brakes**

To lock the positive, toe-operated brakes on the two castors (5), press down the end on each red brake lever until it clicks into position.

To release, step on the raised part on the red lever.

To increase the stability also activate the two grey straight steering castors (6).



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### Features and Controls for the Shower Trolley

#### **Straight Steering Castors**

The "bed side" castors (6) can be locked for straight steering.

Lock the straight steering on "the front" castor facing the direction you are transporting.

To lock the straight steering, press down the gray locking lever on castor. Make sure the wheels locks into position.

To release the straight steering, step on the raised gray lever.

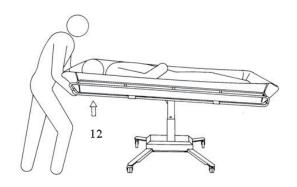


#### **Tilting Stretcher**

To drain the Trolley mattress, tilt either end of the stretcher by pulling the release handle for end tilt (12), located under the end supports on the stretcher.

For levelling, pull handle again while you steplessly tilt the stretcher.

**Warning:** If the patient needs "Trendelenburg" position, only qualified staff who understands the procedures may operate the Trolley.



#### **Drain Hose**

The flexible drain hose simply fits onto either of the two drain outlets on the mattress.

Pull out and bend the hose to prevent splashing when using the Trolley over a drain.

To reduce water dripping on the floor, after use, bend the drain hose nozzle upwards.

#### **Drainage Plug**

The drainage plug for each outlet is fastened with a nylon string on the stretcher frame.



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### Features and Controls for the Shower Trolley

#### Cleaning and disinfection of the shower trolley:

The unit must be cleaned and disinfected immediately after use. Dry the unit well, before fastening the mattress and prepare the unit for its next use.

The shower trolley is manufactured and designed for easy cleaning.

The stretcher has a removable mattress and pillow made of PVC coated fabric.

**Warning:** Never clean the mattress and/or pillow in a gas sterilization unit. Mattress and pillow will explode.

For a thorough cleaning of the shower trolley the mattress and pillow should be removed.

Loosen the straps (17) of the fastening buttons (19).

Remove the mattress and put the side rails in raised position. Then tilt the hinged plastic plate against the side rail. After cleaning the stretcher, mattress and pillow, thoroughly rinse the parts with the patient shower and wipe dry before the trolley is returned to service.

**Note:** The use of detergents and disinfectants respective manufacturer's instructions and recommendations, as well as the instructions/notes described below.

#### Remarks:

- Use natural, slightly alkaline detergent containing no solvents. (Remove the detergent immediately after cleaning in accordance with the specified exposure time)
- Do not use liquid solvent cleaners such as for example trichlorethylene. This can damage the PVC coated fabric of the mattress and pillow.
- Do not use iodine based disinfectants. These can discolor the PVC coating on the mattress and pillow.
- Alcohol based disinfectants can be used but alcoholic strength must not exceed 40 percent as there is a risk of damage on the surfaces of the shower trolley.
- Do not use water hotter than maximum 45°C.
- Avoid excessive friction and abrasive detergents when cleaning, as this may damage the surfaces of the shower trolley.

- Do **not** put the shower trolley out to dry in the sun or near a heater, as this may cause discoloration.
- · Avoid damage from overheating.
- Regular cleaning prolongs the life-span of the product.

Talk to your suppliers and manufacturers of the disinfectants that you use to clarify the utility of the disinfectant or to find a suitable disinfectant.

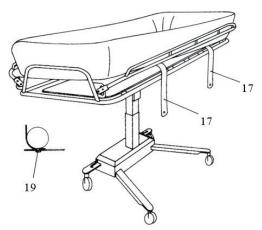
**Note:** Wipe the stretcher dry also on the underside to prevent water dripping on the floor.

**Note:** Place only completely dry mattress and pillow on the shower trolley.

#### **Attachment of the mattress**

The waterproof mattress is attached to the stretcher with two fastening straps (17), that fits over the knobs (19) on the underside of the stretcher.





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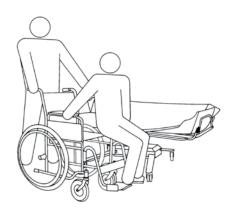


### Patient Handling - Procedures for the Shower Trolley

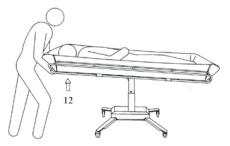
#### **Patient Transfer from Wheelchair onto Trolley**

You can raise or lower the Shower Trolley to match wheelchair height and thus ease the transfer of wheelchair patients. Two attendants are recommended.

- 1. Tilt the stretcher to a flat position with the release handle (12) and lower both side rails.
- 2. Lower the Trolley, using pedal (9), or on the battery operated trolley use the "down" left arrow symbol (8), for lowering to minimum height.
- 3. Position the Shower Trolley castors and lock the castor brakes and straight steering.
- 4. Remove the wheelchair armrest and remove or swing the footrest clear on the transfer side.
- 5. Centre the wheelchair close to the Trolley "nurse side" and lock the wheelchair wheels.
- 6. Transfer patient laterally between wheelchair and Trolley, supporting patient under arms
- 7. Position patient comfortably on Stretcher, then raise and lock both side rails. Remove the wheelchair. Raise Trolley, using pedal (9), or on the battery operated Trolley use the "up" right arrow symbol (7), to convenient transport height.
- 8. Unlock the brakes and activate one straight steering castor when transporting.
- Transport the patient. To return patient to wheelchair from Trolley simply reverse step 1 to 7 in an opposite procedure.









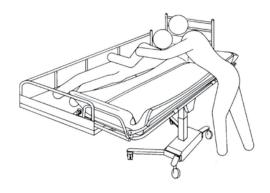
### Patient Handling - Procedures for the Shower Trolley

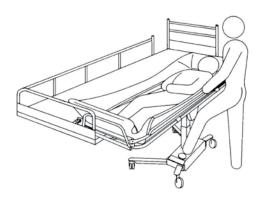
#### **Patient Transfer from Bed onto Trolley**

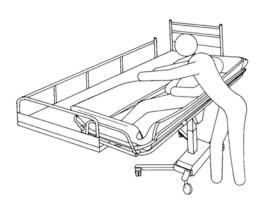
Follow the recommended procedures. Do not omit any steps. Stay in sequence.

- 1. Make sure the bed guard rail is raised on the side of the bed opposite from the Trolley.
- 2. Turn the patient to his/her side, facing away from the Trolley.
- 3. Lower both side rails. The side rail on the transfer side stops horizontally.
- 4. Move the Trolley over the bed and lower the Stretcher onto the bed mattress, using pedal (9), or on the battery operated trolley press the left arrow symbol (8) for lowering. The lowering will automatically stop when the Stretcher hits the bed surface.
- 5. Lock the castor brakes (5).
- 6. Transfer the patient to a comfortable position onto the Stretcher mattress.
- 7. Lift and secure both side rails before the Trolley is pulled away from the bed.
- 8. Raise the Stretcher, using pedal (9) on the hydraulic Trolley, or on the battery operated Trolley use the right arrow symbol (7).
- 9. Unlock the castor brakes (5) and pull the Trolley away from the bed.
- 10. Tilt the stretcher to a comfortable angle for the patient and adjust the trolley height to an ergonomically transporting height. Activate one straight steering castor (6) for easy steering when transporting.

Warning: Never leave patient unattended.











### Patient Handling - Procedures for the Shower Trolley

#### **Showering Patient**

When showering, the patient must remain on the Shower Trolley stretcher with the side rails securely locked at all times.

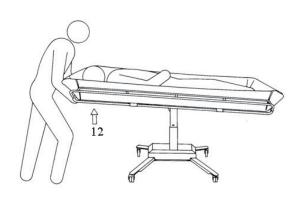
Warning: Never leave patient unattended.

Always physically ensure that the water temperature is as desired before and during showering or bathing..

- Place the Shower Trolley foot end over a floor drain or sink and attach the drainage hose and drain plug (if desired).
- 2. Position and brake the castors.
- 3. Tilt the stretcher for a comfortable position and to aid drainage by pulling the end tilt release handle (12) under the head end on the stretcher.
- 4. Shower the patient. Body fluids and faeces must immediately be removed to prevent mattress stains.
- 5. After the patient is showered keep him/her warm wrapped in a bath towel.
- 6. After showering, thoroughly drain the Trolley and replace drain plug and bend the drain hose nozzle upwards to prevent water dripping on the floor.
- 7. Tilt the stretcher to a comfortable angle for the patient.
- 8. Adjust the trolley height to an ergonomically height and if desired, activate the straight steering device (6) for easy steering when transporting.

**Warning:** If the patient needs "Trendelenburg" position, only qualified staff who understand the procedures may operate the Trolley.







#### Routine Maintenance

The recommended frequency of these maintenance routine procedures will depend on how often the equipment is used.

It is good practice to establish these procedures and then adjust the frequency as your conditions indicate. TR Equipment recommends a schedule is kept on file with signatures of the individual(s) conducting the inspections, should questions arise at a later date.

Shower Trolleys should immediately be taken out of operation if defects or irregularities are noted. Prompt service is required.

#### **Daily Maintenance**

 Clean the Trolley, mattress and pillow after each use with mixed, nonabrasive type of detergent, according to your detergent supplier instructions.

**Note:** Do not use solvent based cleaning liquids, which can damage or stain the PVC coating on the mattress and pillow.

- Use a sponge or brush and remove any soap or lime deposits and feces promptly to avoid spots/stains.
   Rinse thoroughly with fresh water.
- For complete cleaning and disinfection instructions, please see page 10.
- It is recommended that the Trolley batteries are charged daily or whenever the shower trolley is not in use. Batteries cannot be overcharged.

**Warning:** Never clean mattress and pillow in gas sterilization unit. Mattress and pillow will explode.

#### **Weekly Maintenance**

 Visually inspect the Shower Trolley interior to make sure there are no nicks or cracks which may scratch the patient.

#### **Monthly Maintenance**

- Check that all screws and fastenings are tight.
   It's important that all screws and fastenings are checked and tightened if needed including those not easily visible. Inspection of all fasteners and screws under the chassis cover is also expected during the monthly maintenance.
- Check components under chassis cover for signs of damage or high level of wear.

- Drive belt on TR 3000 battery operated Shower Trolley must be inspected visually for signs of wear. Raise and lower the stretcher while doing the inspection to easier identify any damages on the belt.
- Side rails should be inspected to ensure they are in good condition and that all fasteners are in place and functioning properly.
- Castors should be inspected to ensure they are clean and that the locking and straight steering are fully functioning.
- Tilting mechanism should be examined to ensure that it is functioning properly.
- Check that the retaining screws for the mattress cleaning/retaining straps are in place and secure.
- Check the TR 2000 hydraulic system to ensure its smooth operation throughout entire lift range.
- Check the TR 3000 raise/lower system to ensure smooth operation throughout entire lift range.

#### **Annual Maintenance**

- To keep the Shower Trolleys running smoothly, we recommend you to use silicon-spray or some grease between the two square columns.
- On the TR 2000 raise the stretcher to its top position and spray or put some grease on the square stainless steel tube.
- On the TR 3000 lower the stretcher to its lowest position. Lift the mattress and the plastic stretcher. Remove the square lid on top of the column and spray or grease the gap between the two square stainless steel tubes.
- Trolleys should be immediately taken out of operation if defects or irregularities are noted. Prompt service is required.

#### Every three (3) years

 Replace drive belt on TR 3000 battery operated Trolley (for instructions and spare parts see Service Manual)

#### **Batteries**

If changing the lead batteries, deposit in accordance with local regulations.

We recommend that the batteries in the product are replaced every three (3) years.



#### **Head office**

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### Labels on the TR 2000/3000

1.	150 Kg	Maximum working load
2.	[III]	Mandatory to read the operating manual before use
3.	*	Do not sit on the edges of the stretcher
4.	R	TR Equipment AB Logotype
5.	MADE IN SWEDEN YYYY - MM THE SQUARM AND REPORT STATES IN THE PROSECUTION OF SIZE OF SWEDEN AND STATES OF STATES OF STATES OF STATES OF SWEDEN AND STATES OF SWEDEN AND SWED SWED SWED SWED SWED SWED SWED SWE	The identification label states the product's model- and part number, serial number, date of manufacture, the manufacturing country and the name and address of the manufacturer.  REF = Model - and part number  CE = CE marking in accordance with the Medical Devices  Directive 93/42/EEC as a Medical Device Class 1.  SN = Serial number

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### Maintenance record

Date	Description	Signed by

## Training record

Date	Description	Signed by

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