

Fresenius Medical Care

MEDICAL TREATMENT CHAIR

INSTRUCTION
MANUAL

T600 SERIES



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1 INTRODUCTION, PURPOSE & GENERAL SAFETY ISSUES



The T600 series Medical Treatment Chair has been designed and manufactured with the intention of being used for medical procedures. These include blood collection, renal dialysis, chemotherapy and similar procedures that require comfortable and safe seating.

The patient should, at all times, be under the supervision of trained healthcare professionals who have been instructed by the manufacturer in the safe operation of the chair. The chair should never be used in a manner for which it was not intended.

The chair is designed so that the occupant will be seated in a typical seated position - hips moved back so that the occupant's spine is against the backrest, with legs outstretched and supported by the seat and leg rest. **The weight of the occupant must not exceed 200 kg for the T600 model and 300 kg for the T600B model.**

The chair is fitted with castors, which are specifically used to aid cleaning and/or positioning of the chair within the room. The chair should never be used to transport other items. **Ensure that the backrest is fully elevated before moving the chair.**

For models fitted with dual hand controls: the programmable unit is for the use of the staff members only, and the dual recline unit, where fitted, is to be used by the patient. **This ensures that the chair is not raised or lowered, or reclined onto an obstruction by the occupant, and that the staff member will ensure the area surrounding the chair is free from obstruction before adjusting it.**

It is the staff member's responsibility to ensure that prior to operating the chair, the surrounding walls or equipment will not come into contact with nor obstruct the free movement of the chair.

It is the staff members' responsibility to ensure the patient is briefed on the safe operation of the chair. If the staff member believes the patient cannot safely operate the chair, the staff member should remove the hand control from the patient's reach.

In an emergency, the chair can be lowered to the Trendelenburg position where CPR may be performed. It is the staff members' responsibility to ensure that the chair is in the correct position for CPR and that the resuscitation method used is **in line with hospital policy**. In addition, staff should ensure that the chair is adequate for those resuscitation methods, **in line with hospital policy**.

In general, no responsibility or liability can be accepted by the manufacturer for failure to adhere to the guidelines and instructions contained in this manual.

2 OPERATING THE MEDICAL TREATMENT CHAIR



1. Ensure the brakes are locked when the chair is stationary, and positioned to give minimum interference to staff.
2. The seat height may be raised to give maximum comfort whilst in the seated position and should be elevated to minimize bending of staff members. It is normal to cannulate whilst in this position, ensuring the legs are elevated.
3. The gas spring-assisted swivel armrests are positioned by loosening the lever and allowing the armrest to comfortably support the patients' arm. When in the desired position, retighten the lever.
4. If fitted, loosen the underneath knob to swivel the armrest out and retighten.
5. Fold out tray arm (if fitted) is accessed by opening the upper section outwards.



6. The patient has an individual hand control. This allows operation of the seat/footrest and backrest position. Allow the patient to position themselves for maximum comfort, and to regularly alter this position.



7. For safety, only nursing staff can operate the Hi/Lo function and this control should be kept out of reach of the patient at the rear of the chair.



8. In an EMERGENCY, press memory position #1 and the backrest and leg rest will go to their flattest position and the chair will lower until the backrest is supported by the rear support bar. **CPR may be performed in this position.**

NOTE: It is not intended that these instructions override any Hospital instructions for emergency treatment.



9. The armrests may be lowered flat to the seat level to allow side transfer of patient. Raise or lower the seat height to prevent unnecessary bending or lifting by staff members.

10. To allow the patient to rise from the chair, lower the chair and return it to the upright position. (press memory position #2)

11. Memory position #3 will be preset to a position suitable for renal dialysis, blood collection or similar procedures, for ICU and emergency wards, or to a position suitable for side transfer.

12. To reprogram the preset positions:

Drive the chair into the position you wish to store. To store into position number 1, press the S (for store) button for 5 seconds until beep sounds, then press number 1. You will hear a confirming 'beep'. Repeat these steps as required for positions 2 and 3.



13. Ensure procedural equipment is set up to avoid tubing and cords becoming trapped in the moving parts of the chair (e.g. arm rests). **DISCONNECT** procedural equipment prior to removing patient from chair.



14. The power cord should *always* be left in the power supply socket and switched on. The backup batteries will recharge automatically and slow to trickle charge when full.

3 INSTALLING THE MEDICAL TREATMENT CHAIR

Note: Transport damage, if any, should be inspected and reported immediately after delivery. No claims for transport damage will be accepted 7 days after delivery date.

At all times, when positioning the chair, care should be taken to ensure that no part of the chair comes into contact with any equipment or structures, particularly during emergency procedures.

Training can be provided on installation, and as such it is important to ensure that any staff members who are operating the chair have been trained by the manufacturer or its agent prior to use.

The installation procedure is as follows:

1. Position the chair.
2. Remove any temporary ties or packaging.
3. Plug the power cord to an approved power supply for the relevant country as indicated by the label.
4. Test the chair by taking it through its complete range of movements.

The power cord should be left in the power supply and switched on (Refer to section 3.2). The backup batteries will recharge automatically and slow to trickle charge when full.

The chair can be operated in the normal manner immediately after commissioning.

When moving the chairs within the building, always leave the temporary armrest covers on until the chairs are in their intended operating position.

3.1 WARNINGS AND PRECAUTIONS

The following table shows potential hazards that have been identified and the steps that should be taken to avoid them:

| IDENTIFIED HAZARD | CAUSE | PREVENTATIVE ACTION |
|--|--|--|
| Cushion support frame wear and tear or failure | Overuse, used over duty cycle limit, operator error or misuse. | <ul style="list-style-type: none"> • Service regularly. • Train all operators. • Check chairs regularly. • Don't lift chair unless safe to do so. |
| Chair stops responding to controls | Power cord damage, motor stops working, controls stop working. | <ul style="list-style-type: none"> • Don't push chair over power cords. • Don't place stress on power cords. • Only use approved parts and motors. • Use only as directed in this instruction manual. |
| Contamination on upholstery | Chair not cleaned effectively between patients, torn upholstery. | <ul style="list-style-type: none"> • Take care not to damage upholstery. • Damaged upholstery should be repaired or replaced immediately. • Clean and decontaminate chair with appropriate agents and procedures as described in this instruction manual. |
| Instruction manual not read or understood. | Staff turnover, new staff. | <ul style="list-style-type: none"> • Provide training for all new staff who will use the chair. • Ensure operation manual stays with the chair. |

3.2 BATTERY BACKUP

The battery should only be used in the event of no power supply and should not be the main source of power. As such, the power cord should be left in the power supply and switched on while the chair is in use. The battery must be charged for at least 12 hours before it can be used. The battery will automatically trickle charge until fully charged and should not be unplugged. Should the battery fail to charge, please contact Fresenius Medical Care Seating. The battery is not user replaceable. The chair must be connected to the power supply to recharge at least every 30 days.

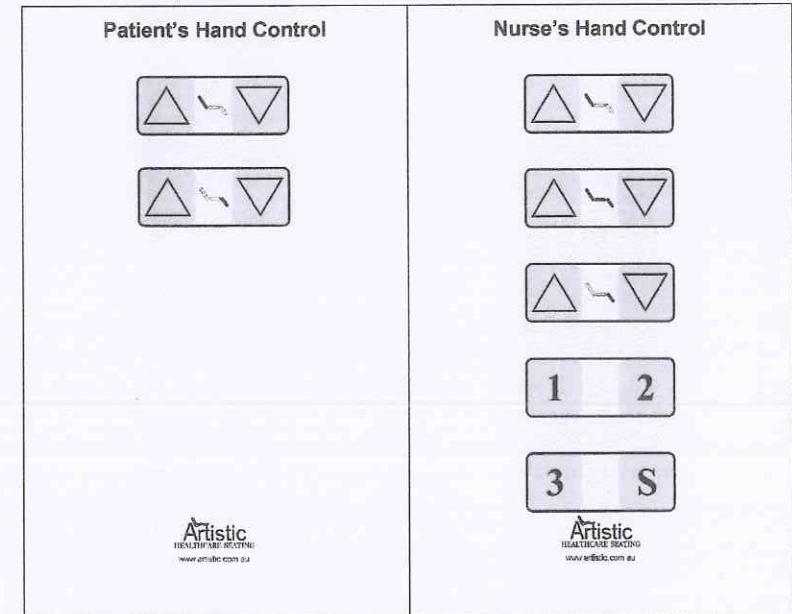
3.3 HAND CONTROLS & PROGRAMMING

Each T600 Medical Treatment Chair comes with two hand controls (The T600B series comes with one hand control only). One nurse-operated hand control and one patient-operated hand control. The patient's individual hand control allows operation of the seat/footrest and backrest position.

Allow the patient to position themselves for maximum comfort, and to regularly alter this position. **Only nursing staff can operate the Hi/Lo function and this control should be kept out of reach of the patient at the rear of the chair.**

For an explanation of symbols on the hand controls, see section 7.2.7.

3.3.1 LINAK Operated Chair

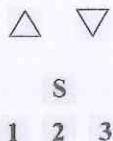


3.3.2 Programming chair position into the memory – LINAK

This can only be done using the nurse's hand control. A maximum of three positions may be programmed into the memory as follows:

1. Position the chair to the desired position using the up & down arrows for the backrest, whole chair and legrest.
2. When the chair is in the desired position, hold down the S (store) button for five seconds until beep sounds.
3. Once the beep is sounding, select one of the numbers, 1, 2 or 3 and press it within two seconds to store the pre-programmed position.

Note 1: For emergency stop, press any button.



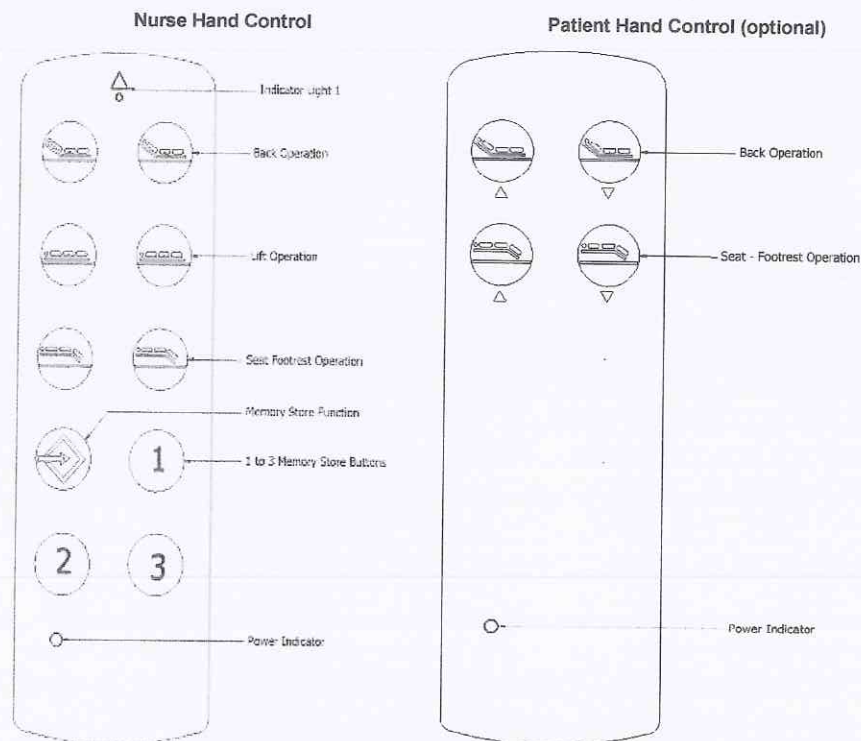
3.3.3 Calibrating the system – LINAK

If there is a loss of feedback from any of the actuators, a 'position lost' beep will be heard from the control box when any button is pressed. Re-calibrate as follows using the nurses hand control:

1. Press both up and down arrows of footrest - seat function simultaneously and hold until the beeping stops (this may take a few attempts)
2. Drive all actuators in to fully closed (down) position.
3. System is now calibrated.

3.3.4 DEWERT Operated Chair

Chairs fitted with the DEWERT system will have one or both of the following controls.



3.3.5 Display Functions – DEWERT

Indicator light

- Will light up when a key is pressed.

Power Indicator (LED)

- This will always be lit when mains/battery power is available.
- When only battery power is being used (no mains power available), the LED will only light up when a key is pressed.
- When battery is charging, the LED flashes yellow. When it is fully charged it will light up constantly.

4 MAINTENANCE



4.1 INSPECTION & SERVICING

No part of the chair is user-serviceable. All servicing must be carried out by Fresenius Medical Care Seating Pty. Ltd. or its authorised agent.

Routine servicing is highly recommended in order to maintain the safe operation of the chair. A regular inspection at least once a month is recommended to ensure that each chair operates safely and as intended by the manufacturer. Any faults or warranty claims should be reported immediately to the manufacturer or its agent. The battery cannot be changed by the user. If this is required please contact Fresenius Medical Care Seating or its authorised agent. No liability can be accepted by the manufacturer if the chair is operated whilst faulty and further damage occurs.

Areas to be checked include:

- Motors operate smoothly through cycle.
- No broken welds.
- Actuators connected properly.
- Controllers work through cycle.
- Upholstery not worn or torn.

4.2 CLEANING

Cleaning should conform to the standards set by the hospital. All materials used in the manufacture of the chairs have been found to be suitable to be cleaned with standard hospital cleaning products, however to ensure suitability, a test should be carried out on an inconspicuous piece of material, or a sample provided by the manufacturer.

The following should be used as a guideline only and no claims will be accepted for damage as a result of following these guidelines:



RECOMMENDED CLEANING PROCEDURE FOR MEDICAL TREATMENT CHAIRS

The following recommended procedure should only be used if it generally conforms to Infection Control guidelines of the hospital.

- | | |
|--------|--|
| Step 1 | Bodily fluids may carry infectious material. Ensure that protective garments and gloves are worn prior to commencing the cleaning operation. |
| Step 2 | If required, remove the seat and backrest by gently pulling or lifting them off their clips. |
| Step 3 | Remove as much of the spilt liquid as possible using a sponge type material with a dabbing motion. |
| Step 4 | Make up a diluted bleach solution (e.g. Miltons) of 1 part bleach to 30 parts water. |
| Step 5 | First test the solution on a small area of the vinyl. Then, pour onto spill area and wipe with a mopping action. |
| Step 6 | Use a general purpose detergent cleaner with warm water on a cloth for a final clean |
| Step 7 | Replace the seat and back rest by carefully clipping them back onto the frame. |



CAUTIONARY NOTES ABOUT BLEACH:

1. **Never allow bleach to mix with ammonia.** If you have recently used ammonia on or near the area you are about to clean, **do not use bleach.**
2. Always take care when working with bleach and keep it away from children. Bleach is not only poisonous and corrosive, but it can damage clothes and materials.
3. **Never use undiluted bleach**

4.3 FABRIC STANDARDS

Unless otherwise stated, standard upholstery fabrics used on these chairs conform to the following Australian Standards:

- Flame Retardant tested to AS1530.3*
- Cigarette Burn test AS 37441.1*
- UV stabilised AS1441.1*

*NOTE: This is for Fresenius Medical Care Seating -supplied fabric. Customer-specific fabric may not meet these standards.

4.4 TROUBLE-SHOOTING

In the event the chair fails to operate correctly please take the following steps prior to contacting Fresenius Medical Care Seating or its authorised agent.

1. Check the power point is active.
2. Check that the power cord is not damaged or worn. Check that the chair is plugged in and switched on correctly
3. Ensure that the batteries have been on charge for an overnight period at a minimum. This should occur at least every 30 days.
4. Ensure there are no nicks or cuts in the hand control or actuator cables.
5. Determine what is not operating as follows:
 - The seat motor (horizontally mounted under the seat).
 - The back motor (mounted behind the backrest).
 - The lift motor (mounted under the base).
6. Take note of the serial number (SN) of the chair. This can be found on the Type Label attached to the chair. An example of the label is in section 7.2.6.
7. If you are unsure about any aspect of the above steps, please contact Fresenius Medical Care Seating at the contact details provided on Page 10 of this manual.

5 ARRANGING A SERVICE

If none of the above steps have solved the problem, arrange a service as follows:

1. Complete the Service Request Form which can be found at the end of this manual (Appendix 1).
2. Fax the form to Fresenius Medical Care Seating on (03) 9764 8800.
3. Include your order number and any other information that will assist us in processing the repair if not covered under the warranty.

Note: Other contact details can be found below.

CONTACT INFORMATION

DESIGNER / MANUFACTURER / SERVICE CENTRE:



Fresenius Medical Care

FRESENIUS MEDICAL CARE SEATING (AUSTRALIA) PTY. LTD.
786 Stud Road
Scoresby
VICTORIA 3179
AUSTRALIA

TEL: +61 (0) 3 9780 9500
FAX: +61 (0) 3 9764 8800
ABN: 84 004 498 695

AGENT / DISTRIBUTOR:

<agent/distributor insert stamp here>

6 WARRANTY INFORMATION

The following information outlines the warranty and Conditions of Sale for the Medical Treatment Chair

1. Fresenius Medical Care Seating will repair or replace, at its discretion, any component or assembly, which exhibits failure or undue wear when subjected to normal use, and/or used in the manner which was intended at the time of sale.
2. The warranty is limited to the original purchaser at the original delivery address.
3. When sold by a reseller, this warranty covers costs at the premises of the reseller, and if required in approved situations, transport costs from the reseller to and from Melbourne, or to a third party specified by Fresenius Medical Care Seating (Australia) Pty. Ltd.
4. Use of non-recommended cleaning agents may void the warranty.
5. The T600 Series Medical Treatment Chair is covered by a 12 month warranty.
6. T600 Series Medical Treatment Chairs are not covered by warranty if used outdoors.
7. The use of unauthorised labour will void the warranty. Contact Fresenius Medical Care Seating prior to commencing work for approval.

If you are unsure about any aspect of this warranty, please contact Fresenius Medical Care Seating at the number given on Page 10 of this manual.

If you need to arrange a service, please see the instructions in sections 4 & 5 of this manual.

7 PHYSICAL DESCRIPTION

7.1 DESCRIPTION OF DEVICE

T600 Medical Treatment Chair consists of:

- Electrically powered chair with
 - three (3) actuators
 - one (1) or two (2) hand controls (one nurse control & one optional patient control)
 - adjustable armrests
 - adjustable neckrest
 - central locking rear castors
 - legrest
 - removable upholstery

7.2 TECHNICAL SPECIFICATIONS

7.2.1 Dimensions, Weight & Capacity

| | |
|-------------------|----------------|
| Dimensions | Height: 135 cm |
| | Width: 90 cm |
| | Length: 125 cm |
| Weight | 100 kg |
| Capacity | 200 kg |

7.2.2 Electrical Safety

Classification according to IEC 60601-1-1:1988

Degree of protection against electric shock

Type B 

CB 20 (Control Box) Specifications

Degree of protection against ingress of solids/liquids

IP66

Battery Capacity

1.2 AH, 24 V

Mains voltage

120, 230V~ 50/60 Hz

Hand Control Specifications

Degree of protection against ingress of solids/liquids

IP54 (Nurse Hand Control)

Degree of protection against ingress of solids/liquids

IP54 (Patient Hand Control)

Actuator Specifications

Degree of protection against ingress of solids/liquids

IPX4

7.2.3 Electrical Supply

| | |
|-------------------|-------------------|
| Input voltage | 110 – 240 V ~ |
| Nominal frequency | 50 – 60 Hz |
| Battery type | Lead Acid battery |
| Capacity | 1.2 Ah |
| Output voltage | 24 V DC |

7.2.4 Operating Conditions

| | |
|-----------------------------|----------------|
| Operating temperature range | 10°C – 40°C |
| Relative humidity | 30 – 70% |
| Atmospheric pressure | 700 – 1060 hPa |

7.2.5 Transport & Storage Conditions

| | |
|----------------------|----------------|
| Temperature range | 10°C – 40°C |
| Relative humidity | 30 – 70% |
| Atmospheric pressure | 700 – 1060 hPa |

7.2.6 Type Label

**Fresenius Medical Care
MEDICAL TREATMENT CHAIR**

SN 600Txxxxxxx Model: T600

Fresenius Medical Care South Asia Pacific Pty. Ltd.
Level 17, 61 Lavender Street Milsons Point NSW 2061 Australia

No user serviceable parts Power Supply: 220 – 240 V ~ 50 Hz 3 A
10% Duty Cycle 2 min. ON / 18 min. OFF

For Export Only
**Fresenius Medical Care
MEDICAL TREATMENT CHAIR**

SN 600Txxxxxxx Model: T600

Fresenius Medical Care South Asia Pacific Pty. Ltd.
Level 17, 61 Lavender Street Milsons Point NSW 2061 Australia

No user serviceable parts Power Supply: 110 – 120 V ~ 60 Hz 5.8 A
10% Duty Cycle 2 min. ON / 18 min. OFF

For Export only

7.2.7 Key to Symbols

| | |
|---|--|
| Serial Number | CE mark |
| Manufacturer | For indoor use only |
| Degree of protection against electrical shock: Type B | ATTENTION: Consult accompanying documents |

LINAK Hand Control Symbols

| | |
|----------|------------------------------------|
| 1 | Memory Position 1 |
| 2 | Memory Position 2 |
| 3 | Memory Position 3 |
| S | Stores chair position |
| | Backrest control |
| | Raise and lower the whole chair |
| | Legrest control |
| | Moves indicated part of chair up |
| | Moves indicated part of chair down |

DEWERT Hand Control Symbols

| | |
|--|------------------------------------|
| | Backrest adjustment |
| | Seat & footrest adjustment |
| | Lift adjustment |
| | Moves indicated part of chair up |
| | Moves indicated part of chair down |

Authorised Representative in the European Community



Fresenius Medical Care Deutschland GmbH
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D-61352 Bad Homburg Germany
Telephone: ++49 (0) 6172 609-0

8 LIST OF APPENDICES

| Appendix Number | Content |
|-----------------|----------------------|
| Appendix 1 | Service Request Form |

APPENDIX 1



Fresenius Medical Care

SERVICE REQUEST FORM

| | | | |
|-------------------------------------|--|---------------------------|--|
| Service Registration Number: | | Purchase Order No. | |
| | | Work order No. | |
| Initiated By and Date: | | Invoice Number | |
| | | | |

| CUSTOMER DETAILS | |
|-------------------------|--|
| Customer: | |
| Address: | |
| Billing Address: | |
| | |
| Contact: | |
| Phone Number: | |

| PRODUCT DETAILS | |
|-------------------------|--|
| Product Name: | |
| Serial Number: | |
| Job Number: | |
| Production Date: | |
| Upholstery: | |

| SERVICE REQUEST | |
|-----------------|--|
| | |
| | |
| | |
| | |

| ACTION TAKEN | |
|--------------|--|
| | |
| | |
| | |
| | |

| | | | |
|-------------------------------|-----------------------|----|-------------------------|
| Call Out Fee / Post | | \$ | |
| Parts costs | | \$ | |
| Travel and Labor costs | | \$ | |
| TOTAL: \$ | Warranty items | \$ | Discount \$ |
| | | | Invoice Total \$ |
| Service Completed By: | | | |
| Date: | | | |