



AstirO- 1710R

User's Manual

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INTRODUCTION

About this User Manual

This user manual contains instructions for the proper and safe use of the E & R Trolley, and for patient & user safety and comfort, which has to be strictly followed.

This User Manual has to be read and followed by every person using or handling this E & R Trolley. In case of any query, Kindly contact Midmark India Pvt. Ltd.

ABOUT THIS PRODUCT

- This Trolley is non-invasive medical devices used for resting and treatment of the patients by medical / paramedical / hospital personnel to help and support the patient in diagnosis, prevention, treatment or alleviation of the disease.
- This trolleys are patient support and patient rest facility which help medical personnel in carrying out their medical procedures comfortably, minimizing the risks while moving and handling the patient.
- These Manual Trolleys are manufactured and supplied in non-sterile condition for use in normal hospital environment.
- This trolley is manually operated for short term carrying/ transfer of patient and use in trauma care Unit/critical care unit.

1710R Features

Please refer to the 1710R Emergency and Recovery Trolley catalogue for the salient features of this Product.



Technical Data

Please refer to the 1710R Emergency and Recovery Trolley catalogue for the technical data of this product.



Add – On Accessories

Please refer to the 1710R Emergency and Recovery Trolley catalogue for various accessories available and compatible with this product.



Trolley 1710R for patient

In this trolley there are two section with removable X-Ray permeable stretcher, Height adjusted by foot operated Hydraulic pump, Gas spring assisted Trendelenburg /Reverse Trendelenburg tilt position and backrest also raised on gas spring mechanism.

DEFINITIONS

Operator

The operator is the person appointed by the owner (i.e. clinic, hospital management, etc.) who will be responsible for the safe operation of this Trolley.

User

A user is a person who is capable of assessing the clinical condition of the patient e.g. specialist medical personnel, doctors, nursing staff, attendants, etc. Based on their training experience or through the instructions, they are entitled to operate the Trolley on their responsibility or to carry out work on it and can recognize and control possible risks to the patient as well as the Trolley.

Patient

A patient is a person who is ill, infirm, disabled, or in need of care & occupying this Trolley. Each time the Trolley is allotted to a new patient it is recommended that the patient is instructed by the operator or the user about the functions important for his/her comfort and safety.

SAFETY

In this User Manual, the following safety symbols are used

Danger: This symbol will appear wherever safety instructions are designed to protect people from physical harm. The symbol stands for imminent danger of death or serious injury.



Caution: This symbol will appear where situations are described, which might be dangerous, and which might inflict slight injuries.



Advice: This symbol will appear in front of additional helpful pieces of advice.



A dot in front of the text implies the action that is required to be taken.



Safety Instructions

- Always use original accessories that have been designed and approved for use with the Trolley
- Ensure that the Trolley is assembled and installed following the instructions given in this user manual
- Restrict child visitors without proper attendants. Supervision is necessary to avoid any mishap due to unintended movement of the Trolley
- Persons with reduced physical or mental abilities & children must not be allowed to use & handle the Trolley without proper supervision.
- Do not allow any visitor to sit on the Trolley, as it may cause overloading. (Refer Section-Operation).
- Accessories or any devices used along with the Bed should be as per its intended use specified and approved by Midmark.
- Always use a mattress of the correct size and type. Before operating the Trolley, make sure that the patient is safely positioned to avoid entrapment or imbalance.
- Ensure that the trolley move on a smooth step less floor without any obstruction in its path to prevent any inconvenience to the patient and damage to undercarriage of the trolley.
- Ensure that castor with center locking always lock when it is stationary.
- Keep some gap between walls and Trolley while in a stationary position and also while moving from one place to another
- Keep the user manual handy with the operator/user for ready reference
- Always place the head side of two section removable stretcher top correctly above the oxygen cylinder cage provision in order to avoid any injuries to patient during emergency.
- Patient should be advised not to sit on edge of any section when it is in extended full length position

Midmark (India) Pvt. Ltd. Recommended the use of original mattress that have been design and tested specially for this trolley .Mattress impermeability could be affected by needle sticks. User should be instructed to avoid punctures caused by improper use of improper needle sticks. Failure to do so could result in cross – infection & patient injury. The mattress should be regularly inspected for punctures, rips, tears, or other such damage and replace with suitable mattress if require.

The shape and height of side railing is optimize to provide patient safety from accidental roll over at the same me facilitating the user to provided easy access for emergency treatment and assistance to the patient.

ENVIRONMENTAL SPECIFICATIONS

Usage, Storage and Transport

Temperature	-10° C to 50°C
Relative Humidity	0% to 95% non-condensing
Atmospheric Pressure	800 to 1060 hPa
Altitude	< 200Qm

INSTALLATION



1. Unpack all the components carefully.
2. If the packing is drenched by rain, water, or other liquids, inform this matter to the operator.
3. Each trolley is supplied with the following components as per the packing list:

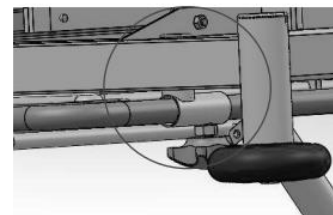
Rubber Buffer	- 4 No.
Oxygen cylinder cage	- 1No.
Telescopic Saline Rod	- 1No.
Stretcher Top	- 1No.
Base cover	- 2Nos
T-Paddle	- 2Nos.
Head and Foot Bow	- 2Nos.

Buffer

Remove the buffer holder from frame. Fix the rubber buffer in the buffer holder with bush and bolt at all four corner as shown above.



Head Bow



- Place it at suitable position on head side.
- Remove Bow from frame and mount it on suitable parking place as shown above

Oxygen cylinder cage



Before placing the cylinder cage make sure place it at suitable position on head side.

Base Cover OR Storage Tray-

Place the storage tray/base cover on base frame on it at suitable place/T-Paddle



IV Pole



- Insert IV rod in any one of four position given on side of tubular frame.
- The IV rod has a safe working load 5 Kg. Do not exceed the load capacity of IV is over loaded, personal injury or equipment damage may occur.

Safety Side Rail-



- Collapsible type side rail are provided for safety of patient.
- Immobilize the trolley.
- To rise the safety side rail, slide the railing lever in upward direction and lift the railing.
- To down the safety side rail, slide the railing lever in upward direction and get down the side rail.
- Please take care figure and hand entrapment while operating the safety side railing.
- Do not use the safety side railing for lift and move the trolley.

- The Shape and height of side railing is optimized to provide patient safety from accidental roll over at the same me at the same facilitating the user to provide easy access for emergency treatment and assessment to the patient.

Although the safety side railing have been design to reduce the risk of patient injury, the potential exist for patient Entrapment, particularly in agitated or disoriented patient, patient who have cognitive disability or have uncontrolled body as well as patient who lack the physical strength to extract theme sleeve if they get entrap.

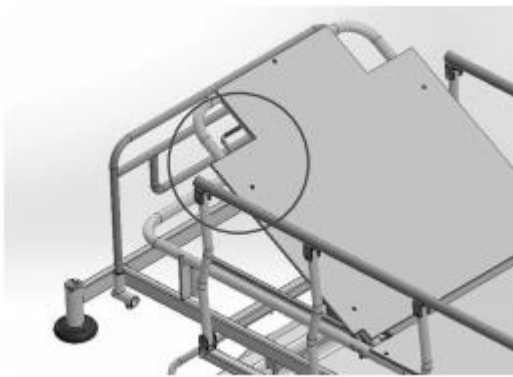


With due to consideration to environment limitation, material use to make the device are not affected by contact with any bio chemical or bio waste. When use as per intended purpose ,all material use in and accessory do not facilitate any breeding or growth of bio contaminant on there own.



OPERATION

Adjusting Backrest Section-



- Backrest section is adjustable on gas spring system.
- For operate gas spring pull the lever rod.

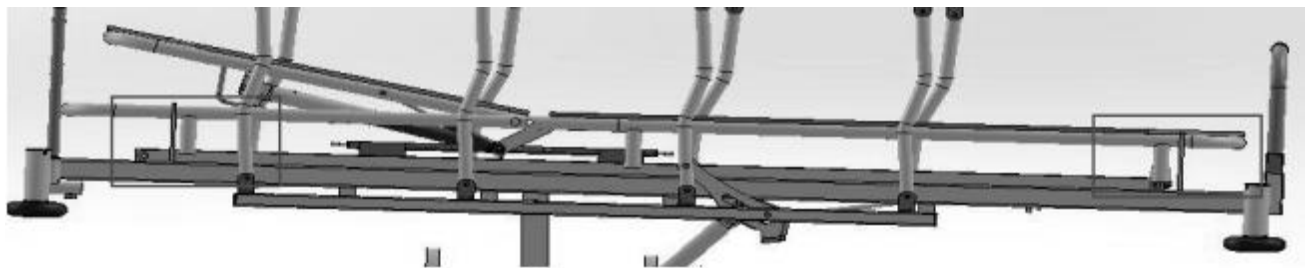
Person operate the backrest should care to avoid the entrapment of figure /hand between stretcher top and backrest.

Rexene cover Mattress- (Optional & Product specific)



- Rexene cover mattress of suitable size to be positioned on stretcher top.

Removable Stretcher top



- Stretcher top is removable.
- Make sure leg of stretcher top place on suitable position (Inside the both mounting flat).

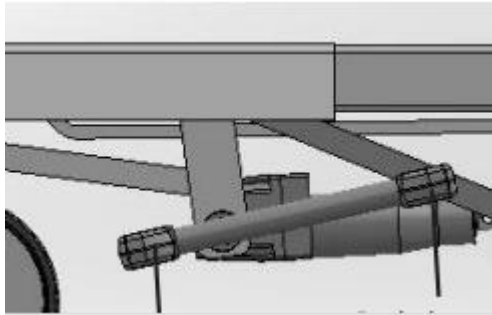
Ensure the patient is secure to the stretcher top with safety belt and mattress. -

Trendelenburg and Reverse Trendelenburg Tilt Adjustment-



- Pull the gas spring activating handle toward the rubberized and rise or lower top Frame. Release the gas spring activating handle when desired position is achieved.

Adjusting the height-



- The height can be lowered and raised as desired with help of pedal fix on hydraulic pump. Pump the pedal to raise the height and press release the lever to lower height.
- Pump the pedal and press release lever gently. Do not step on it with force.

Do not open or temper the pump. Function can affect and dust partial can damage the valve.



Provision of X-Ray Cassette-

- X-Ray Cassette holder is provided which can move under stretcher along the length.
- For using of X-ray Cassette, rise the backrest by using the backrest lever.

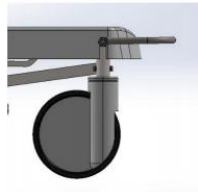
Using of X-Ray Cassette holder-

- Rise the backrest and slide cassette holder thru length.
- Rise the railing by using railing lever and then slide X-ray cassette from R.H. (R.H. from push/pull handle)

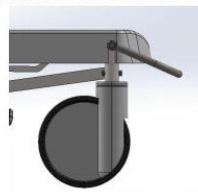
Castor and breaking mechanism-

- 1710R trolley is equipped with four 200 mm high grade synthetic castor two center lock, one direction lock and one free .
- To lock the trolley press downward the center locking paddle, for direction lock rise up the paddle.

UNLOCK CONDITION



TOTAL LOCK CONDITION



DIRECTION LOCK CONDITION



MAINTENANCE & CLEANING

Each time before putting the trolley in to service the user must check

- All function are in satisfactory working condition before the trolley is allotted to the next patient.
- Lubrication of all the mechanism joint /pins/moving point /tightening of bolts should be carried out at least once in three months, to avoid unnecessary ply, sound and wear tear of the trolley.
- At regular intervals carry out a visual inspection and check for any mechanical damage (eg. rivets, screw etc.)
- If any damage or malfunction is observed, immediately report this matter to the operator.
- If the trolley is not in use, it should be storage in dry and rodent free indoor environment on a flat surface with gradient not more than 5 degrees.
- Depending on the uses, certain moving parts may require replacement due to wear & tear. We recommend timely replacement with original spares for safety and trouble free operation.

CLEANING & DISINFECTING

- The Trolley is not suitable for machine wash or steam cleaning.
- Do not use water jet for cleaning.
- The Trolley cannot tolerate the influence of strong solvent, basic or alkaline liquids & caustic agents.
 - The cleaning agents must not contain any substance which bring about any change in the structure or adhesive property of the plastic.
 - The Trolley should be properly cleaned and disinfected to avoid infection and stains before the next use.
- Immobilize the trolley & remove all the detachable accessories and components before cleaning. Any prolonged contact of urine or acid on mild steel can corrode the surface. Keep the surface dry at all me.
- Wearing suitable protective clothing, clean the surface with a disposable cloth soaked in a neutral detergent and hot.

Do not expose the trolley to excessive moisture as corrosion may cause personal injury or equipment damage.



Product and its defective parts especially element made of plastic, steel and rubber material should be disposed off in accordance with the statutory rules and regulation prevailing for such disposal. The user is advised to contact Midmark India Pvt. Ltd. For further assistance.



Routine Inspection Check List: Inspection by the User (Recommended Frequency: Every new allotment but not later than three months)



Checks	Observation	Ok	Not ok	Description of faults
Visual check of the mechanical components				
Main Frame	Damage, Deformation			
Screw and rivet are tight	Missing/loose			
Base cover	Missing			
Proper placement of stretcher top.	Backrest placed on head side of main frame.			
Performance check of mechanical component				
Side Rail(Product Specific)	Secure Engagement, Release.			
Castor	Locking, Release, Total lock, Direction lock.			
Height(Product Specific)	Test as per instruction for operation.			
Tilt(Product Specific)	Test as per instruction for operation.			
Backrest(Product Specific)	Test as per instruction for			
Sign	Result of inspection		Date	

Troubleshooting Guide

Problem	Possible Causes	Remedy
Height function not working(Product specific)	<ul style="list-style-type: none"> Hydraulic pump failure Foot pedal loose, damage. 	<ul style="list-style-type: none"> Replace hydraulic pump Tighten the foot pedal or replace
Tilt function not working (product specific)	<ul style="list-style-type: none"> Gas Spring operate lever tight or out of alignment Gas spring fail 	<ul style="list-style-type: none"> Adjust the lever Replace gas spring
Castor	<ul style="list-style-type: none"> Castor broken 	<ul style="list-style-type: none"> Replace castor

Disposal:

Product and its defective parts especially elements made of plastic, steel, rubber material should be disposed of following the statutory rules and regulations prevailing for such disposal. The user is advised to contact Midmark India Pvt. Ltd. for further assistance.



WARRANTY & SERVICE

Midmark India Pvt. Ltd. warrants solely to the end-users of this Trolley that for a period specified in the warranty certificate, such Trolley shall perform as per its intended use. The foregoing warranties shall not apply if the Product has been subjected to:(a) physical abuse, misuse, abnormal use, or use not consistent with Midmark India Pvt. Ltd.'s published directions, (b) any modification by anyone other than Midmark India Pvt. Ltd., or third parties designated by Midmark India Pvt. Ltd., or (c) fraud, tampering, negligence or accidents, depending upon the nature of the products.

Limitation Of Liability: In no event shall Midmark India Pvt. Ltd., be liable or obligated to the end-user in any manner for any special, non-compensatory, consequential, indirect, incidental, statutory or punitive damages of any kind. Including, without limitation. For injury or loss of life, lost profits lost sales. Lost revenue, loss of any software or data. or loss of use of any hardware, software or data, regardless of the form of action, whether in contract, tort, negligence, strict product liability, or otherwise, even if Midmark India Pvt. Ltd., has been informed of or is aware of the possibility of any such damages in advance. Midmark India Pvt. Ltd.'s total aggregate liability under this agreement and in relation to anything which Midmark India Pvt. Ltd., has done or not done in connection with this agreement shall be limited to the price of the products purchased and paid for by the end-user during the period in which such liability arises. The limitations set forth above shall be deemed to apply to the maximum extent permitted by applicable law and notwithstanding the failure of the essential purpose of any limited remedies.

In order to maintain functional safety and right to claim under the warranty only original 'Midmark' replacements parts may be used for ordering replacement parts, customer service request and further question, please contact our technical support department.

Disclaimer

Every effort has been made to ensure that the information in this user manual is valid. Midmark India Pvt. Ltd., reserves the right to change the information in this document without prior notice."

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