

# Owner's Manual

## H.U.T.™Table

MEDICAL POSITIONING INC

Owner \_\_\_\_\_

Model \_\_\_\_\_

Serial Number \_\_\_\_\_

Date \_\_\_\_\_

Medical Positioning, Inc. • 1717 Washington • Kansas City, MO 64108 • 800-593-3246 • [www.medicalpositioning.com](http://www.medicalpositioning.com)

# Table of Contents

---

HUT™Table

HUT™Table with Drop Section

---

General		
Introduction	3	
Safety Features	5	
Electrical Requirements	6	
Patient Positioning	8	
1. Tilt Positioning Procedures	9	
2. Echo Procedures	11	
Operation	HUT™Table	14
1. Drop Section Operation		14
2. Non-Pinch Closure		16
3. Hand Wand		17
4. Foot Rest		19
5. Inclinator		19
6. Level		19
7. Caster use		20
8. Restraint belts		21
9. Manual Crank Handle		22
Cleaning Instructions		23
Troubleshooting Guide		25
Parts List		27
Parts Diagram		28
Warranty		29
Accessories		
Headrest Assembly		30
Arm Board		32
Collapsible Safety Rail Operation		33
Paper Roll Holder Installation		34
Pediatric / Geriatric Adapter Use		35
Specification Sheets		
HUT™Table		36

## **PREVENTATIVE MAINTENANCE**

---

The following Preventative Maintenance should be performed annually:

- Visually inspect all mechanical assemblies and moving parts on the product insuring smooth, steady operation
- Visually inspect all fasteners (bolts, nuts, screws, etc.) to insure all are fully installed. Tighten as necessary.
- Visually inspect all electrical cables and wires for signs of abrasion or other damage. If damaged, replace.
- Visually inspect all electrical connections to insure they are fully and properly connected. Reconnect as necessary.
- Visually inspect the hand wand or foot control. If damaged, replace.
- Operate all drop section latch mechanisms to insure proper engagement of latch into receiver. Adjust if necessary.
- Operate all motors to insure full extension, retraction and correct operation. The motors are permanently lubricated and require no maintenance.
- Operate all accessories to insure proper attachment and operation. Tighten, adjust or replace if necessary.

# MEDICAL POSITIONING, INC.

1717 Washington Street  
Kansas City, MO 64108

## Rapid Response HUT™ Table and HUT™ Table

	RR HUT™ Table	HUT™ Table
Maximum Distributed Load:	1000 Lbs.	1000 Lbs.
Voltage:	120 VAC	120 VAC
Amperage:	7.0 Amps	1.6 Amps
Leakage Current:	<100 uA	<100 uA
Cycle:	60 Hz	60 Hz
Duty Cycle:	10%	10%

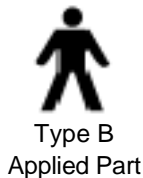
### UL 60601-1 CLASSIFICATIONS:

- Class 1 Equipment
- Type B Applied part
- Degree Of Protection Against Ingress Of Water / IPX0
- Equipment Not Suitable For Use In Flammable Anesthetic Mixture

All electrical circuitry is isolated from chassis.

Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or Hospital Grade".

The power cord is to be used for mains disconnection.



MEDICAL EQUIPMENT WITH RESPECT TO ELECTRICAL SHOCK,  
FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE  
WITH UL 60601-1 AND CAN/CSA c22.2 NO. 601.1

Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked "Hospital Only" or Hospital Grade"

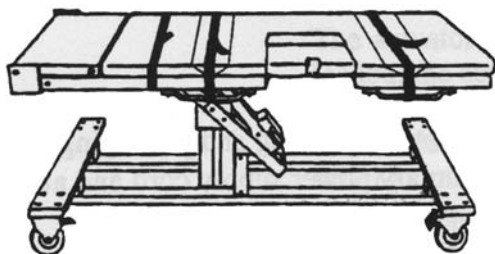
Transportation and storage:  
Temperature range within -40 to +70 degrees C  
Relative humidity range within 10% to 100%  
Atmospheric pressure range within 500 to 1060 hPa

# Multi-Purpose Tables

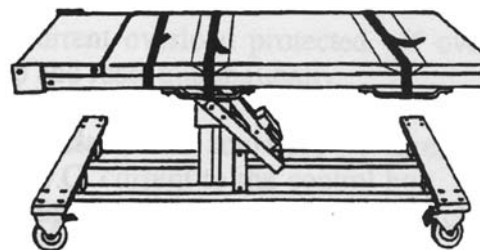
---

## Introduction

Your HUT™Table has been tested to insure perfect operation on day one. Please closely inspect your HUT™Table when you receive it to insure no damage has occurred during shipment. Because the HUT™Table is a complex piece of equipment you are offered the below precautions.



HUT™Table with Drop Section



HUT™Table

---

## To Avoid Injury or Damage

### REVERSE TRENDELENBURG (foot end down) SAFETY NOTICE - PLEASE READ

This table has been supplied with a folding footboard that **MUST BE USED IN THE UPRIGHT POSITION WHEN TILTING THE TABLE MORE THAN 15° REVERSE TRENDELENBURG (foot end down)** to prevent patient from sliding off table surface.

To reduce the risk of electrical shock, do not remove secured covers. Refer servicing to qualified personnel.

Lock all casters before using equipment.

Place hand wand on hook or holder when not in use. Keep pneumatic tube clear of moving parts.

Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked “hospital only” or “hospital grade”.

Grounding continuity should be checked periodically.

Protect vinyl upholstery from sharp objects and abrasion to avoid damage.

Refer to instructions located in this manual for vinyl cleaning recommendations.

Do not use abrasives to clean painted surfaces.

Risk class is 2G.--120 VAC, 50 to 60hz.

---

## In This Section

Your HUT™Table has been shipped to you in “plug and play” condition. In this section you will perform an initial test of your HUT™Table to insure that each function is in correct working order. After reviewing this manual you are ready to begin using your HUT™Table.

---

## HUT™System Test Procedure

- | <u>Step</u> | <u>Action</u>   |
|-------------|---|
| 1           | After removing padding and packaging materials, locate primary power supply cord and attach to suitable grounded 120 VAC outlet.  |
| 2           | To test actuator functions, locate the hand control wand (Figure 1) and depress each function button <b>one at a time</b> . (Depressing multiple buttons simultaneously may prevent motors from operating.) |

**\*\*Note:** Trendlenburg (Head Down)

The force of the gas filled assist cylinder will prevent the table from going much below the level position when attempting to move the table in the Trendelenburg position. Simply applying patient weight (or applying pressure to the head end of the table) during testing will overcome the resistance of the gas filled cylinder and allow the table to go into the complete Trendelenburg (head down) position.

- |   |  |
|---|--|
| 3 | If any function does not operate perform the test procedures listed in the “Troubleshooting Guide” located in this manual. |
|---|--|

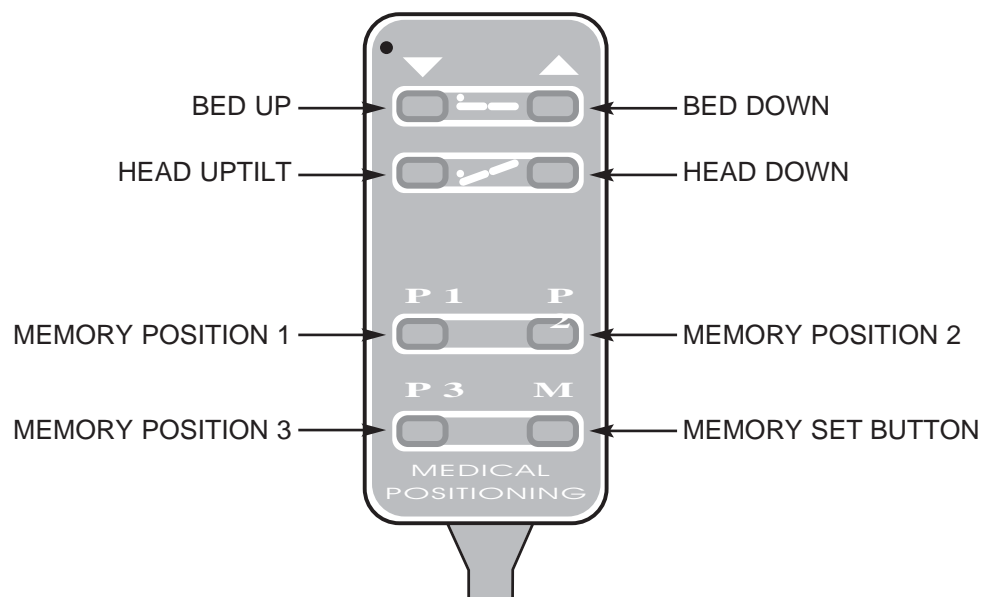


Figure 1

# Safety Features

---

## In This Section

This section lists the safety features built into your HUT™Table.

---

## Safety Features

The HUT™Table is equipped with multiple automated safety features to prevent danger or damage during use. The entire system is isolated to UL & IEC 60601-1 and CAN/CSA c22.2 No 601.1

The actuator assemblies are current overload protected. If overloaded, the actuators will stop and reset automatically.

The sealed hand-held wand operates the actuators by directing small amounts of low voltage D.C. current to the control box. All of the actuator drives are equipped with internal limit switches which automatically prevent over-extension.

The HUT™ Bed is equipped with total locking, sealed bearing, braking casters at all four corners.

A level indicator is located on the side of the bed surface to allow quick repositioning to level after tilt procedures.

The foot board has a friction hinge. The hinge protects against bodily injury by preventing accidental or abrupt closure.

The HUT™Table is equipped with battery backup. In the event of a power outage, the bed can be operated for a limited time on it's own power supply.

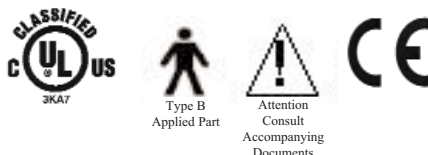
## HUT™Table Examination Tables 120 VAC Models

Maximum Patient Load:	500 lbs.
Maximum Static Load:	1,000 lbs.
Voltage:	120 VAC
Amperage:	1.6 A
Leakage Current:	<100 uA
Cycle:	60 Hz
Duty Cycle:	10% (1 Min. On, 9 Min. Off)

### IEC 60601-1 CLASSIFICATIONS:

- Class I Equipment
- Type B Applied part
- Degree Of Protection Against Ingress Of Water / IPX0
- Equipment Not Suitable For Use In Flammable Anesthetic Mixture

All electrical circuitry is isolated from chassis.  
Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked “Hospital Only” or Hospital Grade”



UL CLASSIFIED MEDICAL EQUIPMENT WITH RESPECT TO ELECTRICAL SHOCK,  
FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE  
WITH UL 60601-1 AND CAN/CSA C22.2 NO. 601.1

The HUT™Tables are recognized to the following standards

UL 60601-1    IEC 60601-1    CAN/CSA C22.2 No. 601.1

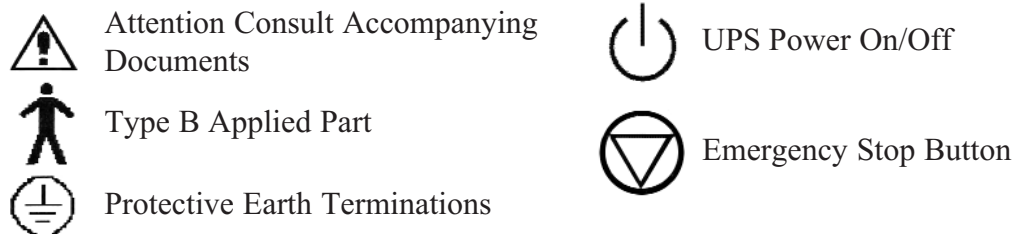
### Environmental

- Mains power quality should be that of a typical commercial or hospital environment
- Power frequency magnetic fields should be at levels characteristic of a typical location in a commercial or hospital environment.

### Transport Conditions

- Temperature range: -40°F (-40°C) to 150°F (70°C)
- Relative Humidity range: 10% to 100%
- Atmospheric pressure range: 14.76 inHg (500 hPa) to 31.30 inHg (1060hPa)

### Definition of Symbols used



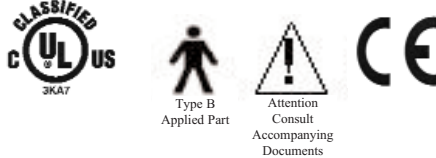
## HUT™Table Examination Tables 230 VAC Models

Maximum Patient Load:	500 lbs..
Maximum Static Load:	1,000 lbs..
Voltage:	230 VAC
Amperage:	0.8 A
Leakage Current:	<100 uA
Cycle:	50 Hz
Duty Cycle:	10% (1 Min. On, 9 Min. Off)

**IEC 60601-1 CLASSIFICATIONS:**

- Class I Equipment
- Type B Applied part
- Degree Of Protection Against Ingress Of Water / IPX0
- Equipment Not Suitable For Use In Flammable Anesthetic Mixture

All electrical circuitry is isolated from chassis.  
Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked “Hospital Only” or Hospital Grade”



UL CLASSIFIED MEDICAL EQUIPMENT WITH RESPECT TO ELECTRICAL SHOCK,  
FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE  
WITH UL 60601-1 AND CAN/CSA C22.2 NO. 601.1

The HUT™Tables are recognized to the following standards

UL 60601-1    IEC 60601-1    CAN/CSA C22.2 No. 601.1

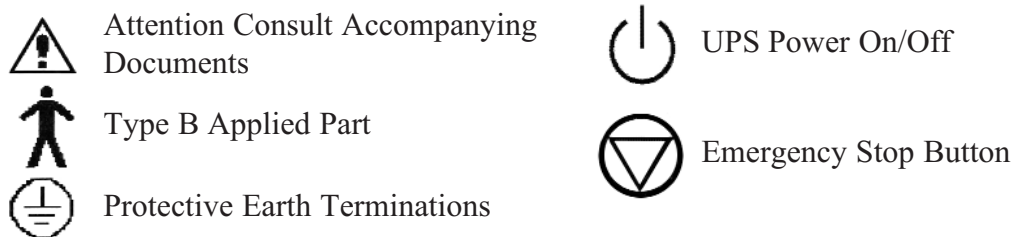
**Environmental**

- Mains power quality should be that of a typical commercial or hospital environment
- Power frequency magnetic fields should be at levels characteristic of a typical location in a commercial or hospital environment.

**Transport Conditions**

- Temperature range: -40°F (-40°C) to 150°F (70°C)
- Relative Humidity range: 10% to 100%
- Atmospheric pressure range: 14.76 inHg (500 hPa) to 31.30 inHg (1060hPa)

**Definition of Symbols used**



# Patient Positioning

---

## Introduction

Your HUT™Table is designed for multiple uses including:

- ◆ Unexplained Syncope
- ◆ Neurocardiogenic Syncope
- ◆ Chronic Fatigue Syndrome
- ◆ Most Non-invasive Procedures

When equipped with optional drop section, use expands to:

- ◆ Echo / Stress Echo / Doppler Studies
- ◆ Vascular & Carotid Echo

When not needed for one of the above procedures, your HUT™Table also functions as a conventional exam table.

In the following sections you will learn how to properly place a patient on the examining surface. Syncope placement is outlined in the following section. Echocardiography placement using a drop section begins on page I-11.

With your HUT™Table, you are equipped with an economical and versatile tool that will save space and eliminate the need for several different exam tables.

# Tilt Positioning Procedures

## In This Section

You will learn how to correctly position patients on your testing surface. **Before you begin, be sure the casters are in the locked position--refer to “Caster Use” section for detailed instructions.**

## Patient Positioning Procedure

<u>Step</u>	<u>Action</u>
1	Extend the HUT™Table to it's full 85° vertical position. Always use caution in the foot area when the bed is in use since pinching or crushing is possible in this area.
2	Aid the patient to a position standing on the foot board with back against the table.
3	Fasten the patient restraints using the appropriate illustration in Figure 2. (For patient positioning with use of drop section see pages I-11 - I-13)

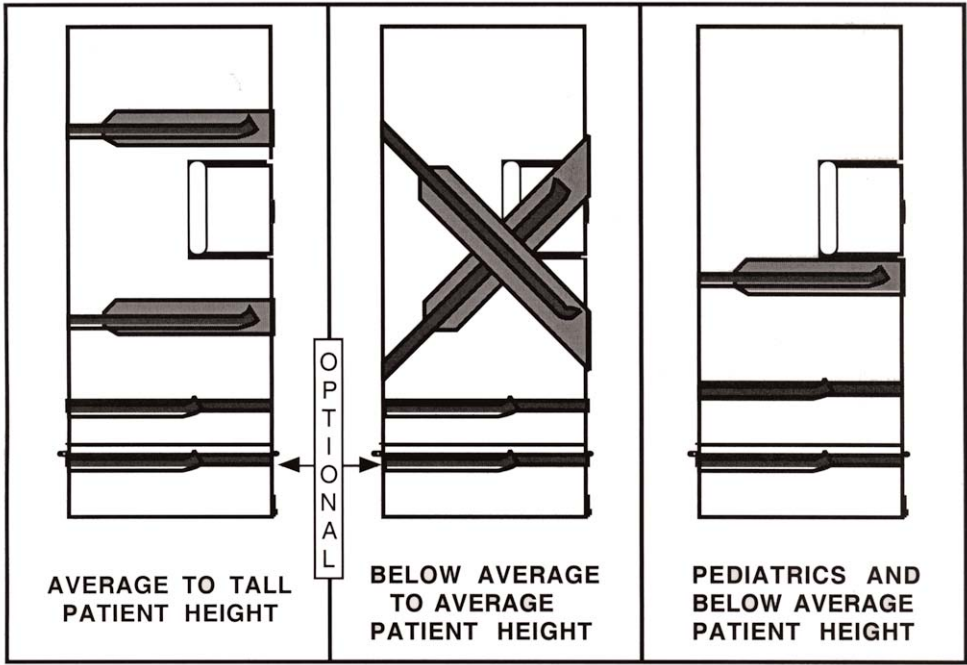
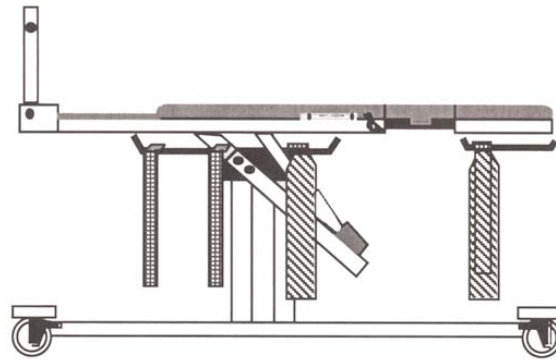


Figure 2

---

## Tilt Procedures (conn.)

<u>Step</u>	<u>Action</u>
4	Proceed with your clinical protocol for tilt testing.
5	Assist patient from the table.
6	Store patient restraints as shown in Figure 3.



**Restraint Belts Shown in Storage Position**

Figure 3

*WARNING! VELCRO HOOK AND LOOP WILL EVENTUALLY WEAR OUT. TO INSURE PROPER WORKING CONDITION AND TO PREVENT PATIENT INJURY, CHECK AND REPLACE PERIODICALLY.*

# Echo Positioning Procedures

---

## Echo Procedures Introduction

American Echo, Inc. is the only provider of the patented drop section which allows a sonographer to:

- ♦ place the patient in a full left lateral decubitus position
- ♦ improve image clarity
- ♦ reduce image acquisition time
- ♦ provide uninhibited access to the apical window
- ♦ expand intercostal spaces (with SafeTwedge™)
- ♦ reduce foreshortening of apical images

The American Society of Echocardiography provides supporting commentary in the “Recommendations for Quantitation of Two Dimensional Echocardiograms” on the value of the drop section as well as the optimum patient position for performing an echocardiogram.

It is recommended that for obtaining optimum apical views, the patients be positioned in steep lateral recumbency for examination. Once this position has been achieved, it should be maintained with a wedge or pillow...(When) the patient is in a steep left lateral position, it is frequently difficult to transect the true apex unless there is a mattress with a scoop or excavation at the point where the apex impulse is generally located...Lack of specialized examining tables makes quantitative measurements more difficult in the critical care setting where modifying the bed is not practical. <sup>1</sup>

With your imaging surface from American Echo, you are well-equipped to start improving the quality of your images.

---

## In This Section

You will learn how to correctly position patients on your imaging surface to optimize the results of your echo studies. **Before you begin, be sure the casters are in the locked position--refer to “Caster Use” section for detailed instructions.**

---

## Patient Positioning Procedure

<u>Step</u>	<u>Action</u>
1	Place a SafeTwedge™ flush with the head end of the bed (where the drop section is located). The SafeTwedge™ should be evenly centered between the sides of the bed.
2	With the drop section closed, ask the patient to lie on their back on the imaging surface.

(continued)

<sup>1</sup>Nelson B. Schiller, MD, et al. “Recommendations for Quantitation of the Left Ventricle by Two-Dimensional Echocardiograms,” *Journal of the American Society of Echocardiography*, 1989, Vol. 2, pp. 358-367.

---

## Echo Positioning Procedures (conn.)

<u>Step</u>	<u>Action</u>
3	Explain to the patient that you will be opening the drop section. While the patient will not feel anything, <i>do not surprise the patient by opening the drop section without warning.</i>
4	Adjust the patient so that he or she is in the middle of the bed (side to side) and so that the patient's armpit or axilla is aligned with the top edge of the drop section. (See Figure 4)

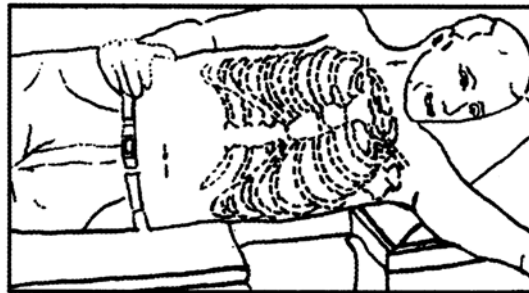


Figure 4

If there is any question about proper positioning, roll the patient up onto their left side, open the Imaging Window Drop Section (for instructions on how to operate the drop section, refer to pages I-14 to I-16) and locate the patient's imaging windows. Make any adjustments required to patient position.

*If you are beginning a procedure such as a treadmill exercise echo where the patient will be off and then back on the bed, you should alert the patient to his / her current position and explain to the patient he / she must assume the same position post exercise. Some sonographers use tape on the bed to mark the hip location and tell the patient to return to that marked position following exercise. This technique can be useful, but **BE CAREFUL, image windows frequently shift with exercise.***

(continued)

---

## Echo Positioning Procedure (conn.)

<u>Step</u>	<u>Action</u>
5	<p>When imaging (both resting and stress) it is helpful to ask the patient to place their left hand behind their head. This keeps their arm clear of the imaging window.</p> <p>When using this product with small children, senior citizens or well-endowed women, a Pediatric / Geriatric Adapter (available from American Echo) may be helpful.</p>
6	<p>Parasternal views can be obtained with the drop section either open or closed. When obtaining apical images, always open the drop section. At the completion of the study, but before the patient gets up to leave the exam surface, be sure to securely close the drop section.</p>

# Operation HUT™ Table

---

## Introduction

The HUT™ Table is shipped assembled and ready for use. Each function has been pre-tested to insure perfect working order on day one. A “**Troubleshooting Guide**” is included to instruct you in the event of a malfunction.

---

## In This Section

You will be instructed on the proper use of the HUT™Table, including:

- drop section operation
- non-pinch flap
- using the hand wand
- foot rest
- inclinometer use
- level
- caster use
- restraining belts
- annual maintenance

---

## Drop Section Operation

The HUT™Table product line is equipped with special features, including a unique one hand release locking mechanism and a Non-Pinch Flap designed to operate in connection with the Drop Section. The Drop Section is incorporated into Echo™ Bed, Echo™Table, Echo™Positioning Systems, HUT™Table and Stress Echo™Bed models. One of the many benefits of the Drop Section is that it safely allows 30% improvement in image acquisition time<sup>1</sup>.

---

## Drop Section Operation (conn.)

The drop section is designed to be opened or closed easily with one hand. ***Do not place other hand within the drop section area during operation.***

- | <u>Step</u> | <u>Action</u>   |
|-------------|---|
| 1           | To open the drop section, locate the metal handle mounted on the bottom of the drop section at the front edge. (See Figure 5) |

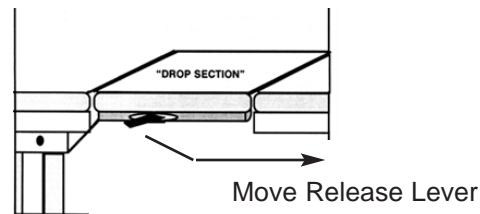


Figure 5

- |   |  |
|---|--|
| 2 | Pulling the handle outward, from under the drop section, will release the latch mechanism and allow the drop section to swing open. <b><i>Do not abruptly yank or jerk on handle, it is designed to work with a smooth, steady pull.</i></b> |
| 3 | To close the drop section, grasp the pull tab (fabric loop) located on the front edge of the drop section and lift the drop section smoothly until it is securely in the full, upright and locked position. (See Figure 6)                   |

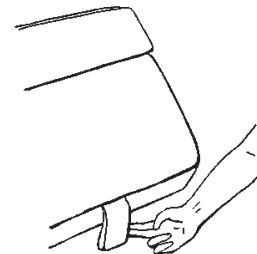


Figure 6

- |   |   |
|---|---|
| 4 | It is not necessary to "slam" the drop section closed. <b><i>Slamming the drop section closed will startle the patient and may result in damage to the mechanism.</i></b> After closing, always lift up on the drop section to assure that it is totally locked before patient entry or exit. |
|---|---|

---

## Non-Pinch Closure

The Non-Pinch Closure Flap, located at the back edge of the Imaging Window Drop Section, prevents the patient from being pinched when the drop section is closed after imaging.

Examine the Non-Pinch Closure Flap with the drop section open and closed. The flap attaches to the bed surface with hook and loop tape and can easily be adjusted whenever necessary. (See Figure 7)

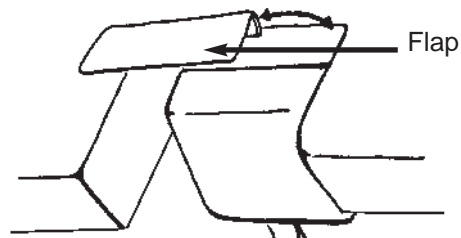


Figure 7

The drop section should not be operated without the non-pinch closure flap in place.

Occasionally the flap may become bent or creased. When that occurs, remove the flap from the bed surface by separating the Velcro tapes. Next, return the flap back to original shape by bending it farther in the opposite direction of the bend or crease and allowing it to spring back to flat.

Should the flap require replacement, you may order one through Medical Positioning, Inc. at 1-800-593-3246.

---

# Hand Wand Procedure - Memory Positioning Instructions

*Your handwand will contain appropriate functions for the bed shipped.*

- 1 Initialize all of the actuators by running each actuator (one at a time) to it's fully retracted position. This would be; lower the height actuator all the way down, position the lateral tilt actuator to level and place the bed in reverse Trendelenburg position (the Trendelenburg actuator is fully retracted in this position).
  
- 2 Using the buttons on the hand wand, utilizing as many of the actuator motors as necessary but running only one actuator at a time, place the bed in the desired position for the first memory selection. When you are satisfied with the position attained, press and hold-down the [P 1] and [M] buttons at the same time. An audible tone will be produced by the actuator control box when the memory position is stored.

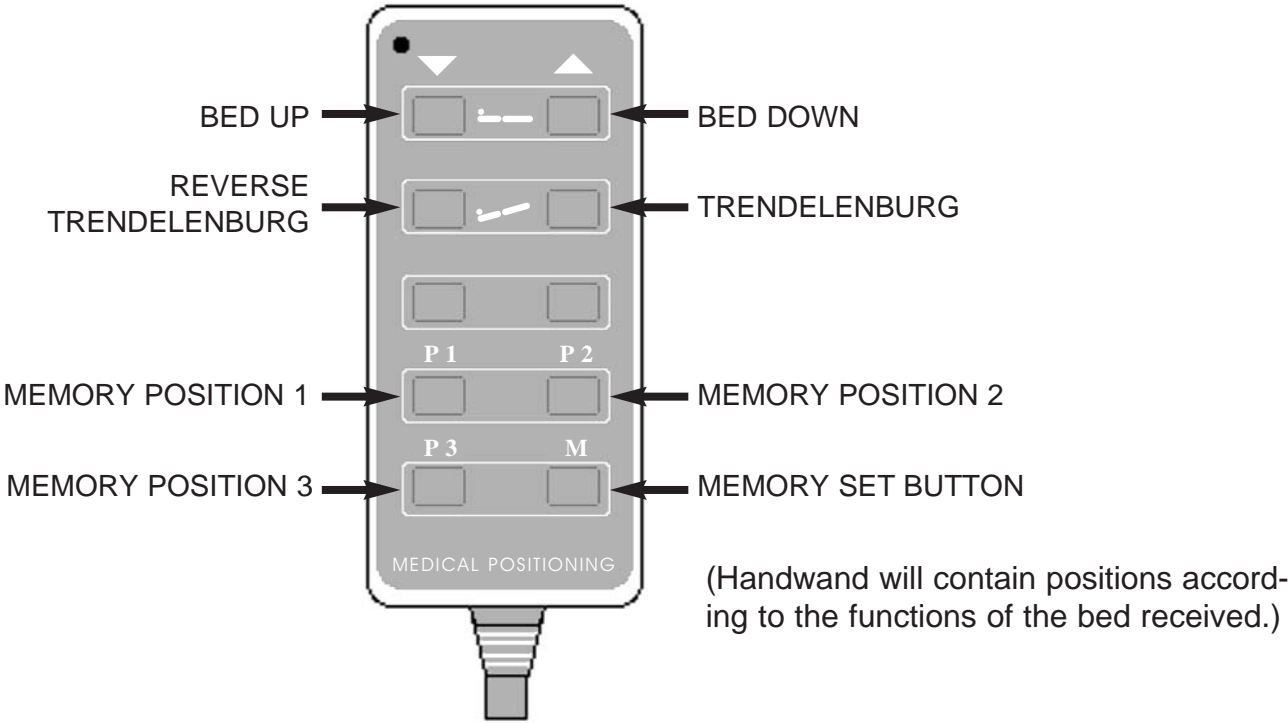


Figure 8

**Hand Wand Procedure - Memory Positioning Instructions (conn.)**

<u>Step</u>	<u>Action</u>
3	Repeat step 2 for memory positions 2 and 3, using the [P 2] button for memory position 2 and the [P 3] button for memory position 3.

<u>Step</u>	<u>Action</u>
4	To change any of the stored memory positions, repeat steps 1 and 2 for the position you wish to change. It is not necessary to reprogram all of the positions in order to change only one or two of them.

The hand wand attaches to the bed in one of the two (2) following ways: Beds without safety rails - The hand wand has a Velcro strip on the back and the bed has Velcro on the side. (See Figure 9)

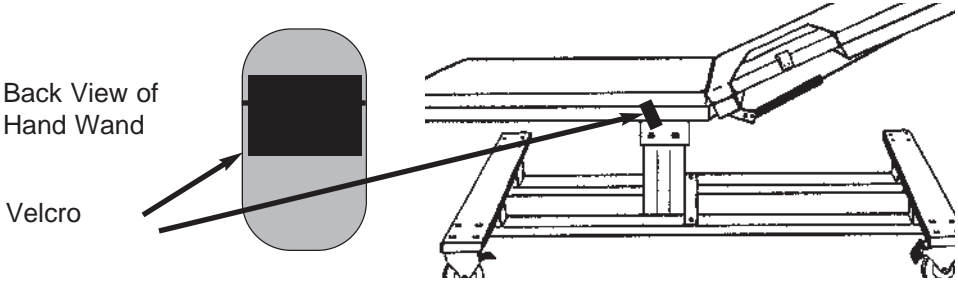


Figure 9

Beds with safety rails - The hand wand has a hook installed on the back which is designed to hang on the safety rail. (See Figure 10)

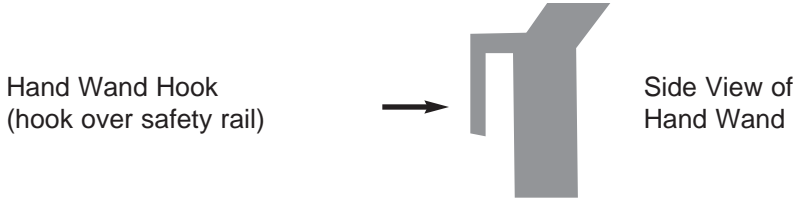


Figure 10

---

## Foot Rest, Inclinometer and Level

Foot Rest	The foot rest is located at the foot the bed. Notice that this board is slightly difficult to move in order to prevent inadvertent falling on patients.
Inclinometer	The inclinometer is a crescent shaped gauge at the head of the bed that shows the degree of tilt.
Bubble Level	The bubble level is located on the left side of the inclinometer and demonstrates the level of the bed.

**REVERSE TRENDELENBURG (foot end down) SAFETY NOTICE - PLEASE READ**  
This table has been supplied with a folding footboard that **MUST BE USED IN THE UPRIGHT POSITION WHEN TILTING THE TABLE MORE THAN 15° REVERSE TRENDELENBURG (foot end down)** to prevent patient from sliding off table surface.

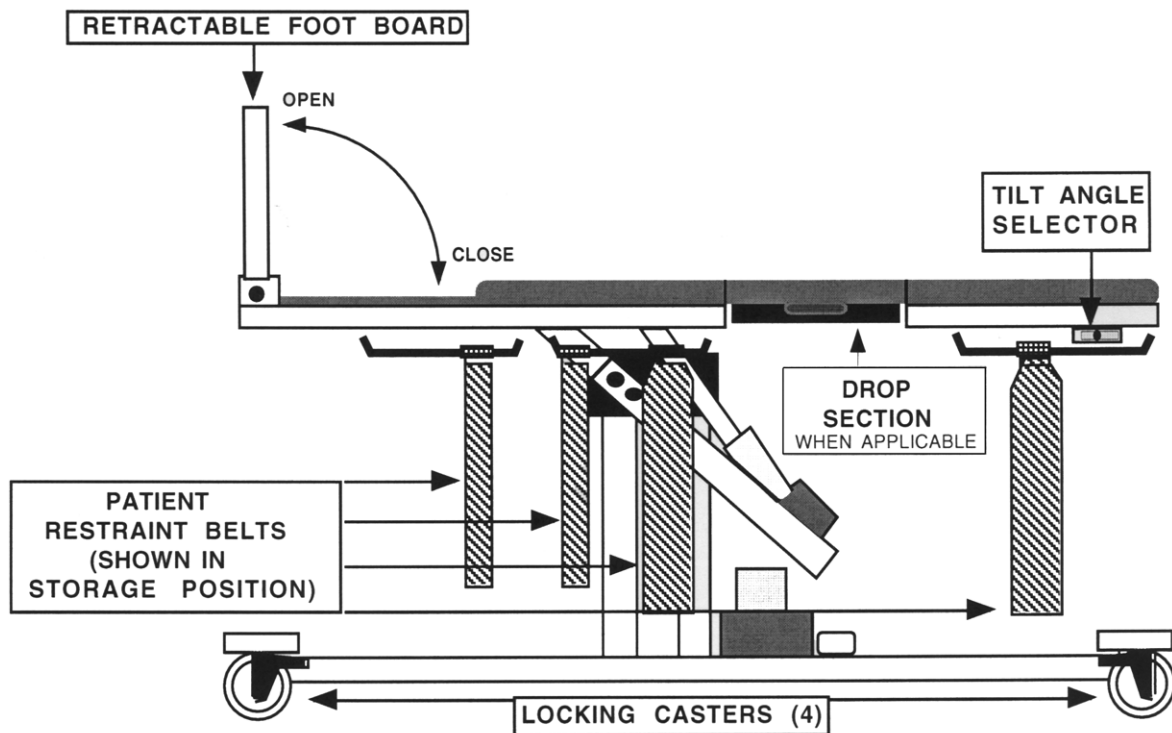


Figure 11

# Caster Use

## Procedure

The casters included on your HUT™ Table are total locking casters. When in the locked position, the caster is prevented from both rolling and swiveling. *Before beginning any procedure involving a patient, be sure the casters are in the locked position.*

- | <u>Step</u> | <u>Action</u>  |
|-------------|--|
| 1           | To lock the caster, step down on the outermost edge of the black locking tab located at the top of the caster wheel. (See Figure 12) |

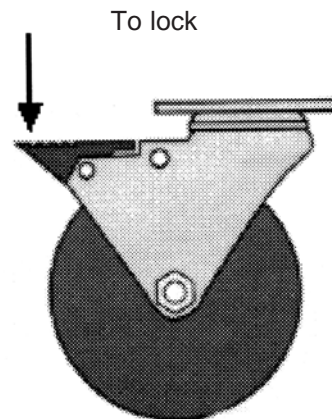


Figure 12

- |   |   |
|---|---|
| 2 | To unlock the caster step down on the top, innermost edge of the locking tab or lift up on the outermost edge of the tab. (See Figure 13) |
|---|---|

To release

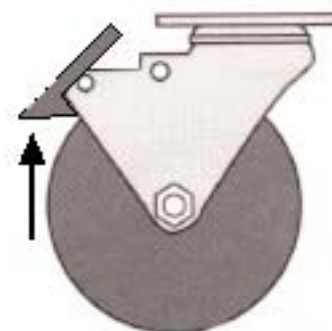


Figure 13

# Restraint Belts

## Patient Restraints Use

The below diagrams demonstrate restraint belt usage for different patient characteristics (Figure 14) and storage positions (Figure 15).

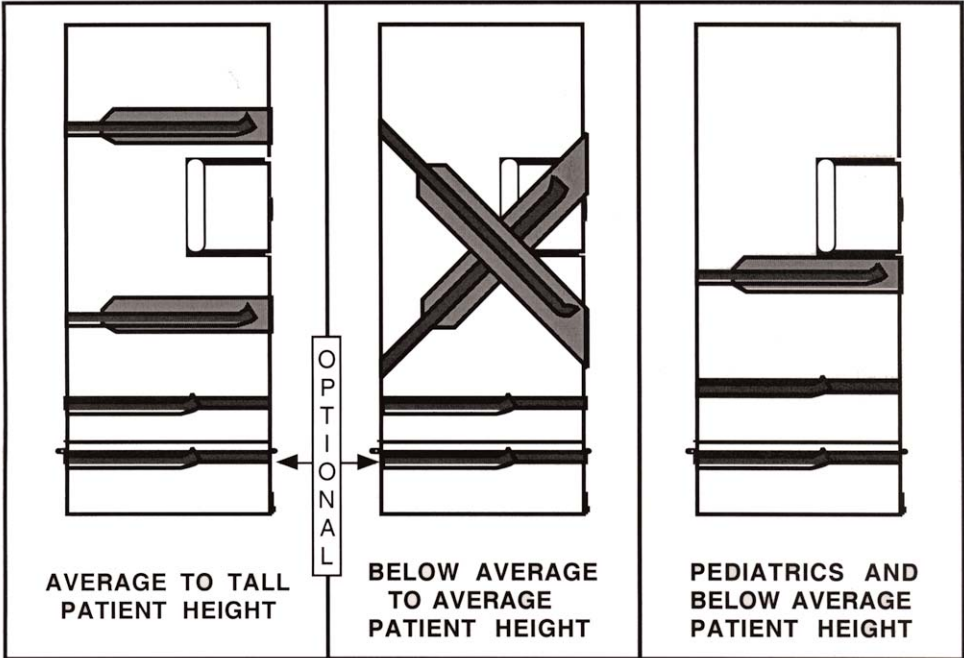


Figure 14

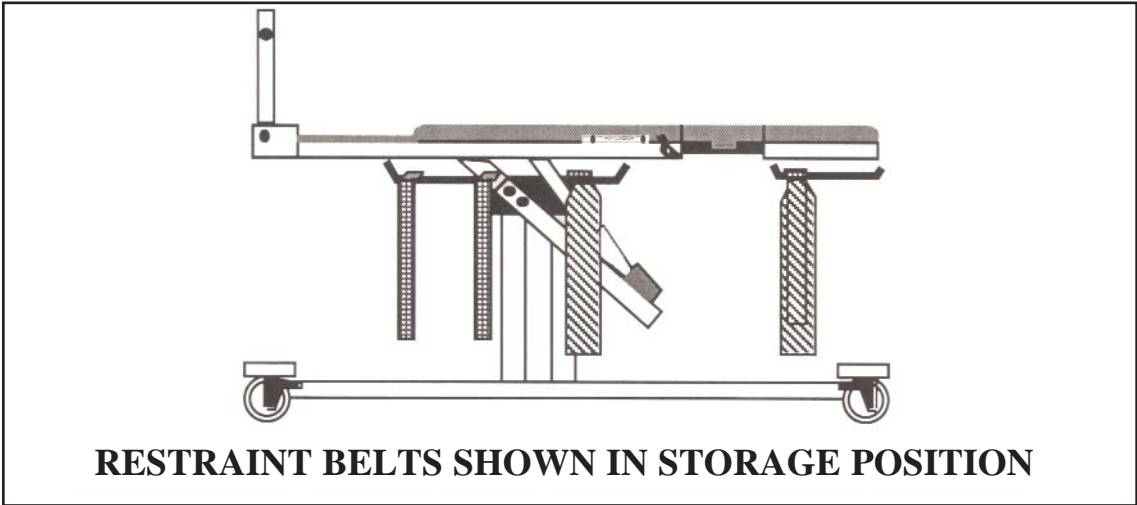


Figure 15

*WARNING! VELCRO HOOK AND LOOP WILL EVENTUALLY WEAR OUT. TO INSURE PROPER WORKING CONDITION AND TO PREVENT PATIENT INJURY, CHECK AND REPLACE PERIODICALLY.*

# Manual Crank Handle

## Manual Lowering of HUT™ Table

To be used only for EMERGENCY LOWERING of Head-up Tilt Table in the event of extended power failure or actuator malfunction

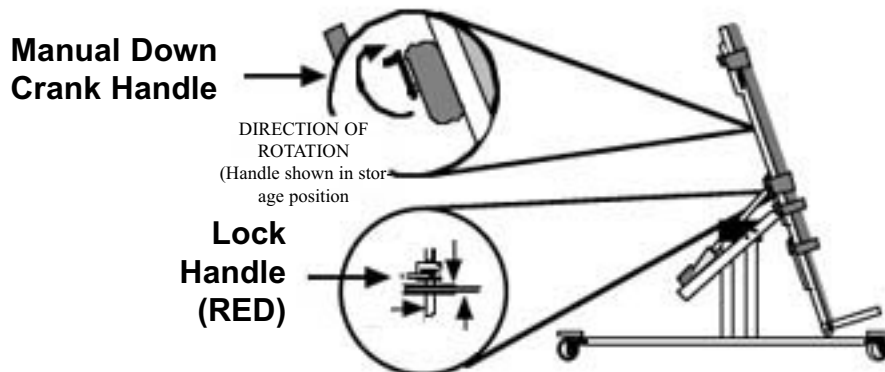


Figure 16

## Emergency Manual Lowering Instructions

- | <u>Step</u> | <u>Action</u>  |
|-------------|--|
| 1           | Locate the LOCK HANDLE (Red Lever) at the top of the actuator's push tube. Pull the lever to unlock the actuator. This actuator is required to activate the MANUAL DOWN CRANK HANDLE.  |
| 2           | Locate the MANUAL CRANK HANDLE below the medial table frame on the patient's right side (Figure 16).   |
| 3           | Grasp the handle and rotate it as shown in the above illustration, until the head of the bed has lowered to a desirable position. <b>Note:</b> Rotating the handle in the opposite direction may cause the head of the bed to elevate momentarily, but continued rotation will result in the mechanism "skipping" with no further elevation. This is a normal operation for the mechanism and will not harm it. The mechanism was designed for emergency lowering of the head of the bed only. |
| 4           | Push the LOCK HANDLE (Red Lever) into the locked position to re-engage the actuator. This action deactivates the MANUAL DOWN CRANK HANDLE.   |
| 5.          | After using the MANUAL CRANK HANDLE, it is necessary to reinitiate the actuator to re-establish the memory program positioning. Place the MANUAL CRANK HANDLE in the storage position (Figure 16) Refer to the "Hand Wand Procedure-Memory Positioning Instructions" in the Users Manual for memory positioning programming.   |

# Cleaning Instructions

Please note that substances such as imaging gels and alcohol will not damage the vinyl surface when immediately removed. Studies have shown that exposure for longer than a few minutes can damage the top coat and will eventually discolor vinyl.

**The painted metal and plastic surfaces can be cleaned with normal cleaners and disinfectant.**

<u>Step</u>	<u>Action</u>
1	Clean and/or disinfect with liquid cleaner of choice being careful to follow label instructions provided with cleaner. (Always test a small area first to determine suitability of solution.)
2	Wipe the surface clean with a wet cloth after applying cleaners and disinfectant to remove excess residue build-up.

**ALWAYS READ MANUFACTURERS INSTRUCTIONS AND WARNINGS BEFORE USING ANY CLEANING PRODUCT OR DISINFECTANT.**

**The vinyl upholstered surfaces can be cleaned in one of the following ways:**

<u>Step</u>	<u>Action</u>
1	When caught quickly, most everyday stains like grease, blood and black felt tip pens can be wiped right off. Use mild soap and water. For more stubborn stains, a variety of concentrated and solvent type cleansers (including alcohol, naphtha and bleach) may be used without damaging the surface. (Abrasive household cleaners and steel wool should be avoided - see the guide for complete care and cleaning procedures.)
2	Everyday soil can usually be removed using a soft cloth or sponge with mild soap and water. Spills and accidents require immediate attention for best results. In many cases, stains may be cleaned simply with warm water alone. If the stain is allowed to set, more concentrated cleaners may be required.

---

## Cleaning Instructions (conn.)

**The following guide covers many of the most common staining agents. During independent laboratory testing, many were allowed to stand for up to 40 hours with excellent cleaning results.**

Generally speaking, always start with the mildest cleaning agents first. **Never use harsh powdered abrasive cleansers or steel wool.** Products containing bleach, ammonia or alcohol (Lysol™) should be wiped from the surface with a wet cloth after use. Residue from these products **will** damage vinyl surfaces.

<u>Step</u>	<u>Action</u>
1	Remove excess spill with damp cloth. Clean with 1:1 mix of Ivory™ soap and water. Rinse with clean water and dry.
2	Use straight application of concentrated cleaners such as Formula 409™ or Fantastik™ Spray Cleaner. Then wipe with clean cloth.
3	Use a 1:1 mix of ammonia and water or a 1:4 mix of bleach and water. Rinse with clean water and dry.
4	Use straight application of naphtha (lighter fluid). Rinse thoroughly with clean water and pat surface dry. (see note below)
5	Use 1:1 mix of isopropyl alcohol and water. If stain persists, use straight alcohol. Rinse thoroughly with clean water pat surface dry. If stains remain, use a 1:1 mix of acetone and water. Rinse with clean water and pat surface dry. (see note below)

Note: For cleaning that requires steps 4 or 5 - use a soft cotton cloth saturated with the cleaning material, rub the stain in circles 10 times. Pat dry with another soft cotton cloth and check results.

This information is not a guarantee and does not relieve the user from the responsibility of the proper and safe use of the product and all cleaning agents.

Formula 409™ is a trademark of the Clorox™ Company.

Fantastik™ Spray Cleaner is a trademark of the Texize Division of Dow Consumer Products, Inc.

Ivory™ is a trademark of Procter and Gamble.

Lysol™ is a trademark of Reckitt & Colman Inc.

# Troubleshooting Guide

A “**Troubleshooting Guide**” is included to instruct you in the event of a malfunction. If you are experiencing any of the following symptoms, this guide may help you quickly solve the problem. If, after consulting this guide, you are still unable to operate your HUT™Table or Rapid Response™HUT™ Table please contact Medical Positioning Incorporated at 1-800-593-3246. Please have the following information ready when you call:

1. Model Number or Name of Product
2. Date Received
3. Condition When Received
4. Symptom (or problem) Encountered & Result of Troubleshooting Procedure

Symptom	Probable Cause	Suggestion
<p>No Actuator Function. Actuator(s) Not Running.</p>	<p>Power cord not plugged all the way in wall receptacle.</p> <p>Power outlet receptacle not supplying 120 VAC power.</p> <p>The power cord may be separated from the control box.</p> <p>Hand wand not properly connected to control box.</p> <p>Actuator power cord not fully connected to control box.</p>	<p>Push power cord securely into receptacle.</p> <p>Check power availability or plug unit into another receptacle.</p> <p>Inspect “ready light” on control box. (See Figure 18 )</p> <p>Securely press end of hand wand power cord into control box</p> <p>Securely press end of actuator power cord receiver (Figure 18). Inspect control box continuity light on handwand (Figure 17)</p>

Illustrations

The following illustrations correspond with the instructions outlined in the **“Troubleshooting Guide”**.

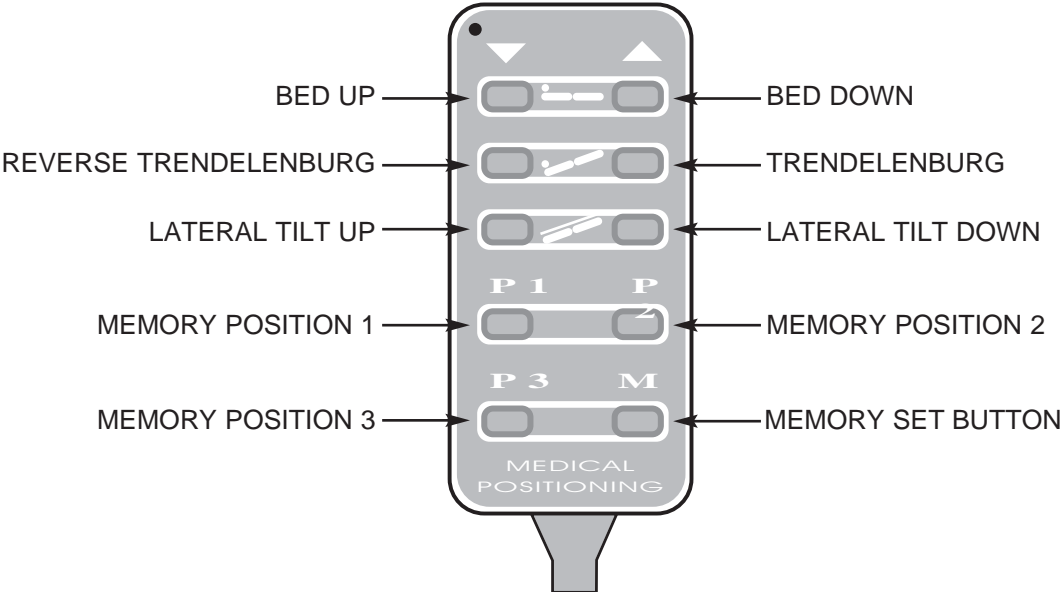


Figure 17

24 VOLT D.C. TRANSFORMER/ ACTUATOR CONTROL BOX

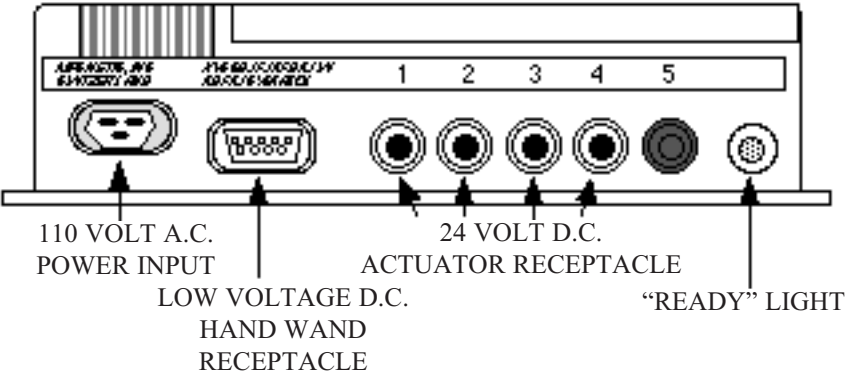
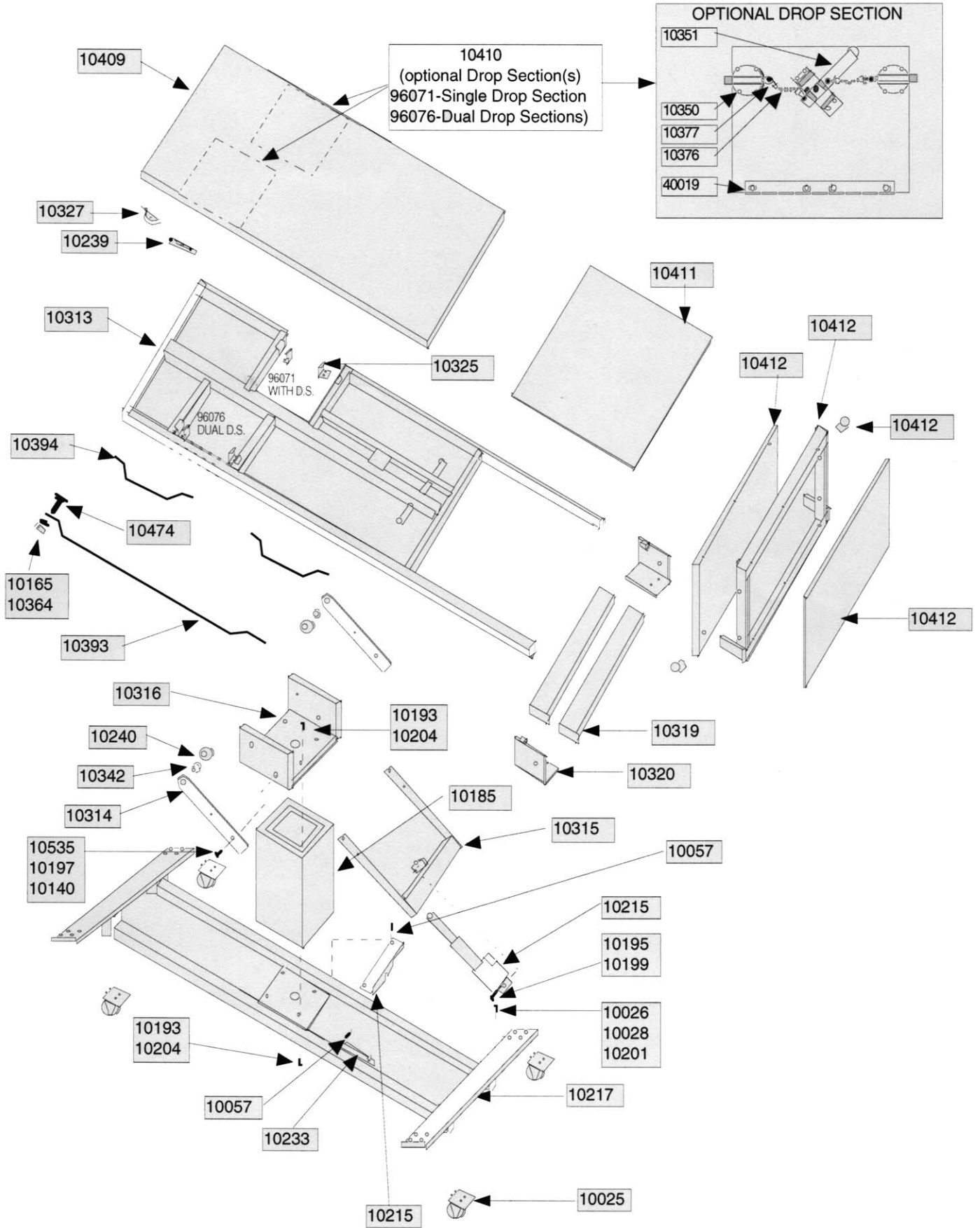


Figure 18

# Parts List

10313	FRAME,BED HUT-1
10314	BAR, PIVOT HUT-2
10315	MOUNT, ACTUATOR HUT-3
10316	FRAME, TOP COLUMN HUT-4
10317	SHAFT, SYNCOPIE HUT-5
10318	FOOTREST HUT-6
10319	WEIGHT HUT-7
10320	BRACKET, HINGE HUT-8
10427	COVER, CUT-OUT ETB-9
10217	FRAME, BASE EPS-3
10251	PROTECTOR, PLUG EPS-16
10325	COVER, LATCH FOW-5
10348	BAR, DROP SECTION STOP FOW-8
10405	BOLT, HEX 1/4-20 X1
10026	BOLT, HEX 5/16 X 1 1/2
10535	BOLT, HEX 3/8-16 X 1 3/4" GR-8
10282	BOLT, HEX 3/8-16 X 2 1/2" GR-8
10193	BOLT, HEX 10mm X 40mm
10474	BOLT, ELEVATOR 1/4-20 X 2 3/4"
10195	BOLT, SHOULDER 12mm X 35mm
10423	BOLT, CARRIAGE 1/4-20 X 1 1/4
10359	BOLT,HEX 10/24 X 1
10057	SCREW, PHILLIPS PAN HEAD, #8 X 1
10476	SCREW, PHILLIPS PARTICLE BOARD #8 X 3
10477	SCREW, PHILLIPS PARTICLE BOARD #8 X 1
10165	NUT, HEX 1/4-20
10028	NUT, HEX, 5/16-18
10197	NUT, HEX, 3/8-16 GRADE 8
10199	NUT, NYLOCK, 10mm
10364	WASHER, LOCK 1/4
10255	WASHER, INTERNAL TOOTH, 5/16"
10254	WASHER, INTERNAL TOOTH, 3/8"
10140	WASHER, LOCK, 3/8"
10256	WASHER, INTERNAL TOOTH, 10mm
10203	WASHER, FLAT 1/2
10342	BEARING, FLANGE #EF1620-16
10240	COLLAR,SET SCREW, 7/8" ID
10284	GROMMET, CATERPILLAR #2692
10239	LEVEL, POCKET 5
10327	GAGE, LEV-O
10350	LATCH, #AE3/22388
10351	HANDLE, #PIN100
10376	CHAIN, #10 STAINLESS STEEL BEAD
40019	SPRING, LATCH #C28S/C28C
10377	COUPLING, CHAIN END
10481	RELEASE, DUAL REMOTE #FA4319000
	RESTRAINT, HUT PATIENT
10242	TAPE, HOOK & LOOP, PRESSURE SENSITIVE 1" HOOK
10243	TAPE, HOOK & LOOP, PRESSURE SENSITIVE 1" LOOP
10244	TAPE, HOOK & LOOP, PRESSURE SENSITIVE 2" HOOK
10211	TAPE, HOOK & LOOP, PRESSURE SENSITIVE 2" LOOP
10385	PLUG, NYLON HOLE
10403	FOOT TREAD, TEXTURIZED #383
10388	KNOB, BLACK PLASTIC #85202
40019	"LABEL, TILT GAGE"
10393	"RAIL, BELT LARGE #33-36"
10394	"RAIL, BELT SMALL #30-10"
10245	POWER CORD 16/3 SJT
10278	POWER STRIP #ULHC4-15
10025	"CASTER, PLATE #22-5156-45"
10185	"ACTUATOR, HT / LC 12XWDK2U-001"
10215	"ACTUATOR, SY/ SHU 16UBAK-031"
10229	"WAND, CLASSICO-2 MOTOR H/TR #PHC2-130834"
10409	"H.U.T. MAIN SECTION - FIBERWOOD, H.U.T. 101"
10410	"H.U.T. DROP SECTION - PLYWOOD, H.U.T. 102"
10411	"H.U.T. FOOT BASE - MASONITE, H.U.T. 103"
10412	"H.U.T. FOOT REST COVER - PLYWOOD, H.U.T. 104"
10413	"H.U.T. FOOT REST - PLYWOOD, H.U.T. 105"
10421	UPHOLSTERY KIT

# HUT™ DIAGRAM



# Warranty

## HUT™ TABLES

**Lifetime - Structural Components**  
**1 Year - Electrical, Mechanical & Vinyl Fabric**

This product is fully guaranteed against defects in material or workmanship, for the period indicated above commencing with receipt by the original end user. If a product fails due to a manufacturing defect, we will repair or authorize repairs to the product without charge or replace it at our option.

We use only the finest materials available, but even these premium quality materials will not last forever. Repairs due to normal wear, accident, improper care, or negligence, where we are not at fault, will be performed for a reasonable charge. The warranty does not apply if the product has been modified without the advance written permission of Medical Positioning or purchased in the USA for export.

Medical Positioning makes no other warranty, either expressed or implied, with respect to this product. Medical Positioning specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

The remedies provided herein are customer's sole and exclusive remedies. In no event shall Medical Positioning be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

Product shall not be returned to Medical Positioning, Inc. without prior written authorization from Medical Positioning, Inc. If a product is returned without prior authorization, customer is responsible for all shipping charges and any applicable duties and/or taxes. When a repair is made on site, (solely) at the request of the customer, the customer is responsible for all travel costs.

**Medical Positioning Incorporated**

1717 Washington  
Kansas City, Missouri 64108  
(816) 474-1555  
800-593-3246  
FAX (816) 474-7755

WARR1098

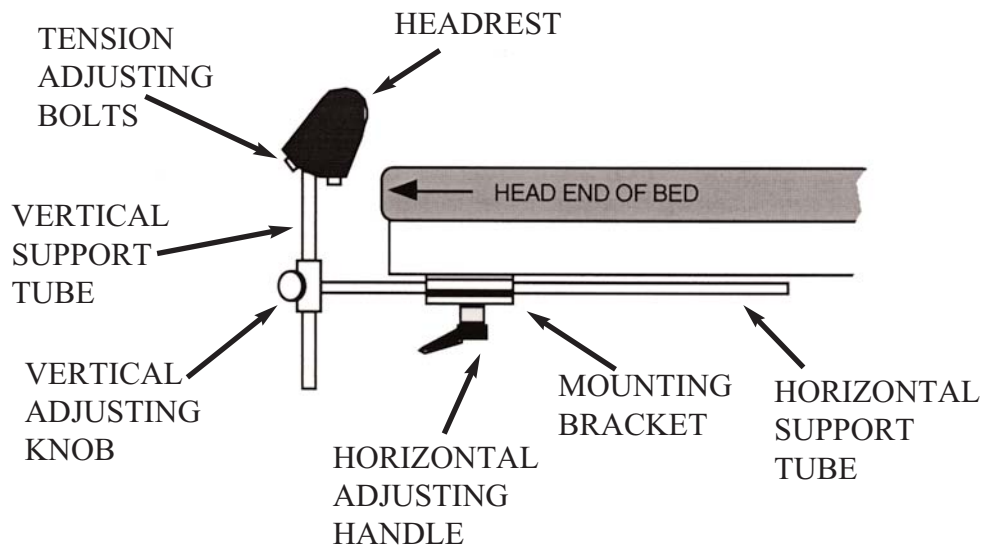
**U.S. Patents:** 6,353,949 B1; 5,950,262; 5,919,131; 347,691; ,184,363; 5,461,739; 6,367,104 B1; 5,250,262; 5,367,104 B1; 6,832,399 B2; 6,557,196 B2; 7,082,268: **International Patents:** 195 81 706; 2,304,568; Additional Patents Pending

# Headrest Assembly

THE HEADREST IS PACKAGED SEPARATELY DURING SHIPMENT TO AVOID POSSIBLE DAMAGE

## Headrest Installation

<u>Step</u>	<u>Action</u>
1	Loosen the <b>Horizontal Adjusting Handle</b> (located on the bottom of the upper bed frame, near the head of the bed)
2	Insert the <b>Horizontal Support Tube</b> into the <b>Mounting Bracket</b> as shown and secure the <b>Head Rest</b> in place by rotating the Horizontal Adjusting Handle in a clock-wise direction.
3	Vertical adjustment of the headrest can be achieved by loosening the <b>Vertical Adjusting Knob</b> and lifting the <b>Headrest</b> to the desired height.
4	The angle of the <b>Headrest</b> can be achieved by rotating it at the point it is joined to the <b>Vertical Support Tube</b> . The tension of the swivel mechanism can be adjusted by tightening or loosening the 3 tension adjusting bolts shown. (4 mm allen wrench required)



---

## Head Extension Installation, conn.

- 2 Lift the end of the upholstered section up from the metal frame enough to slide the square end of the Head Extension between the metal frame and the upholstered section. Slide the square end of the Head Extension under the upholstered section until the vertical flange rests against the metal frame.
- 3 Gently tighten the four (4) upholstery attachment screws that you previously loosened.

*DO NOT OVER TIGHTEN THE SCREW. OVER TIGHTENING IS NOT NECESSARY AND COULD CAUSE THE SCREWS TO STRIP FROM THE BOTTOM OF THE UPHOLSTERED SECTION.*

# Arm Board

---

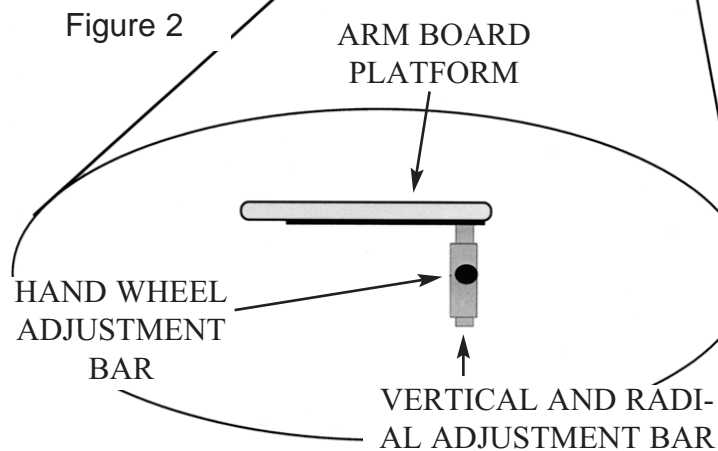
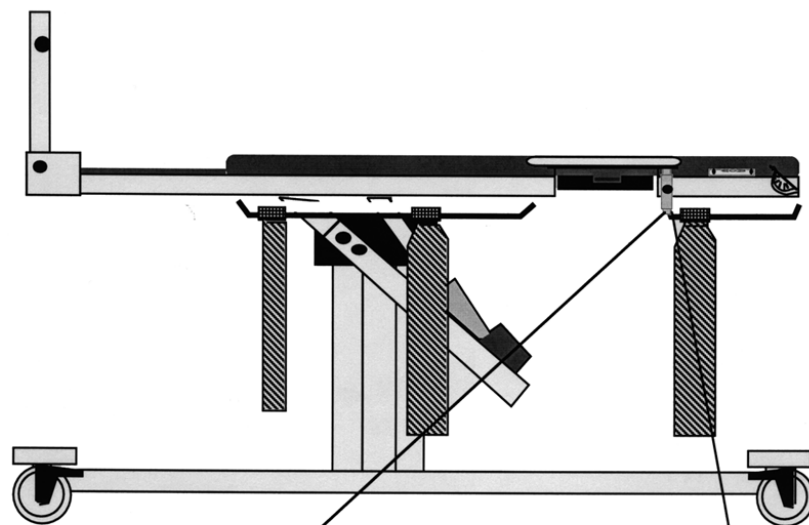
## Introduction

The arm board is an accessory item that may have been purchased on your HUT™Table or may be installed at a later date.

---

## Arm Board Installation

- | <u>Step</u> | <u>Action</u>  |
|-------------|--|
| 1           | Loosen <b>Hand Wheel Adjusting Knob</b> .  |
| 2           | Slide the <b>Vertical and Radial Adjustment Bar</b> into the Stationary Receiver Tube. |
| 3           | Adjust arm board to proper height and position.  |
| 4           | Tighten <b>Hand Wheel Adjusting Knob</b>   |



# Collapsible Safety Rail Operation

---

## Introduction

Collapsible Safety Rails are an accessory item that may have been purchased on your HUT™Table or may be installed at a later date.

---

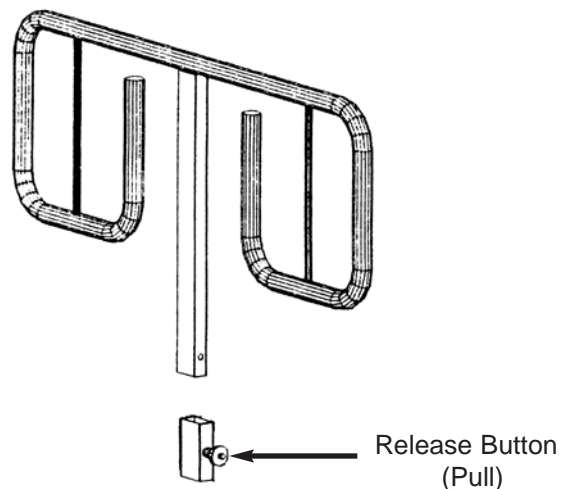
## In This Section

You will be instructed on how to operate the collapsible safety rails.

---

## Collapsible Safety Rail Operation Procedure

<u>Step</u>	<u>Action</u>
1	To remove the safety rail, hold the safety rail with one hand (to prevent it from dropping) while you pull the release button with the other hand. (See Figure below)
2	To lower or replace the safety rail, pull the release button, insert and lower the safety rail all the way down. Let go of the release button.
3	To raise the rail, lift the safety rail until the locking tab of the release button engages the locking hole in the safety rail preventing it from further movement.



# Paper Roll Holder Installation

---

## Introduction

The paper roll holder and cutter is an accessory item that may have been purchased with your HUT™Table or may be installed at a later date.

---

## In This Section

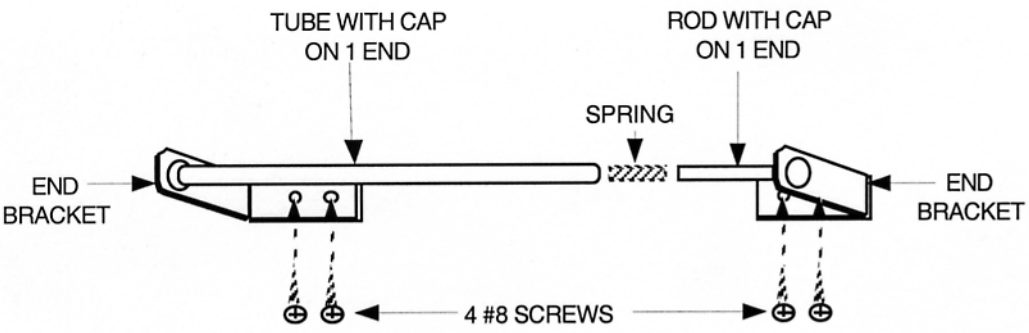
If the bought at time of purchase, the paper roll holder was pre-installed at the factory to insure proper fit, then removed to prevent damage during shipment. You will be instructed on how to re-install the paper roll holder.

---

## Paper Roll Holder Installation

Tools Needed: 1 Phillips Head Screwdriver

<u>Step</u>	<u>Action</u>
1	Install the paper roll holder at the head of the bed as shown in below , using the 4 (four) #8 screws provided. Carefully place the screws through the paper roll holder mounting brackets and re-install into the bed. <b>Do not over tighten the mounting screws. Over tightening may cause the threads to strip.</b>



# Pediatric / Geriatric Adapter Use

---

## Introduction

The pediatric/geriatric adapter can be placed over the open "Drop Section" imaging window to lessen the size of the opening when imaging smaller patients. It should be removed when not in use.

---

## In This Section

You will be instructed on how to properly place the Pediatric / Geriatric Adapter.

---

## Pediatric / Geriatric Adapter Use

*In order to use the pediatric/geriatric adapter it is necessary to first remove the "Non-Pinch Closure" flap.*

- | <u>Step</u> | <u>Action</u>  |
|-------------|--|
| 1           | Lower the Drop Section.  |
| 2           | Remove the Non-Pinch Closure Flap by grasping one side of the Flap and gently separating the hook and loop attachment. |
| 3           | Position the adapter locator flanges within the imaging area.  |



- |   |   |
|---|---|
| 4 | With the drop section lowered, align the top edge of the non-pinch closure flap, (within the access cavity) with the top edge of the bed surface. |
| 5 | Press the hook and loop attachment strips together.   |

**Important:** When the adapter is not required, simply lift up and out to remove. **Replace the "Non-Pinch Closure" flap to insure patient comfort and safety.**

# HUT™ Table

## Specifications for Model 1011, 1111, 1211

### Model

1011 – HUT™Table

1111 – HUT™Table with Single Drop Section

1211 – HUT™Table with Dual Drop Section



### FEATURES

#### Model 1011:

- Dual fail-safe backup system:
  - Power loss battery backup
  - Manual hand crank
- Fully adjustable 4 belt patient restraint system
- Head Up Tilt - electrically adjustable to 85°
- Trendelenberg - electrically adjustable 0°-15°
- Tilt rate of 6.5° per second
- Fully programmable - 3 position memory
- Height - electrically adjustable 30" - 38"
- Folding foot platform
- 1000 lbs. load capacity
- 5 Inch , 2 way locking casters
- Sealed, water resistant, low voltage, control wand with self-retracting, coiled power cord
- Certified patient safe - pinch point free design

#### Model 1111 - All 1011 Features Plus:

- 14" x 12" Exam drop section
- One hand rapid release
- Patented non-pinch flap
- #817 head elevation wedge

#### Model 1211 - All 1011 & 1111 Features Plus:

- 14" x 12" Right sided sonographer 2 Way drop section w/ exam side remote release

### SPECIFICATION

LENGTH	73"
WIDTH	30"
WEIGHT	380 lbs.
LOAD CAP.	1000 lbs.
LIFT CAP.	500 lbs.
FOAM	Cal. B.F.T.B. #117
VINYL	Fed. Spec. Cec-A-680A D.O.T. FAR 25.8536, M.V.S. 302 Port of NY/ Boston F.D. Code
ELECTRICAL	120 VAC, 1.6 amps max, 50/60 Hz, UL 601, CSA 222.2 No. 601.1, IEC 60601-1

### WARRANTY

<b>Lifetime</b>	Structural Components
<b>1 Year</b>	Electrical, Mechanical & Vinyl Fabric (see warranty for complete details)

### OPTIONS

- Rigid or Collapsible Safety Rails
- Arm Board
- Head Extension
- 4 different positioning SafeTwedges™
- Paper Roll Holder & Cutter
- I.V. Pole and two holders
- Foot Switch
- 71 optional vinyl colors

FDA Registered Establishment



FDA Listed

**U.S. Patents:** 6,353,949 B1; 5,919,131; 347,691; ,184,363; 5,461,739; 6,367,104 B1; 5,250,262; 5,367,104 B1; 6,832,399 B2; 6,557,196 B2; 7,082,268; **International Patents:** 195 81 706; 2,304,568; Additional Patents Pending

MEDICAL POSITIONING