ACART

INSTRUCTION MANUAL





SPACE SAVER TABLES

(Manual and Electric Height Adjust)



Read and understand all of the instructions and safety information in this manual before operating this product.



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DESCRIPTION OF PRODUCT

This manual covers MAC Medical Space Saver

Table Models:

TSPS-1000-6030

TSPS-1000-7230

PURPOSE OF THIS MANUAL

This manual covers the operation and maintenance of the MAC Medical Space Saver Tables.

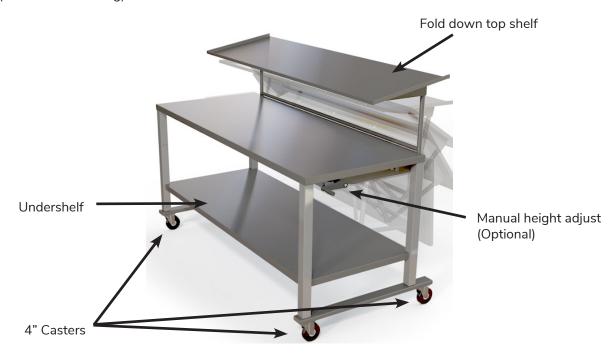
KEEP THIS MANUAL



STANDARD FEATURES - SPACE SAVER TABLES

MAC Medical Space Saver Tables come standard with:

- 100% stainless steel construction
- Fold down top shelf with lip (space saving feature)
- One undershelf
- 2" square legs
- 4" casters (2 swivel & 2 locking)



Optional Features of Space Saver Tables:

- Ergonomically friendly adjustable heights, adjustable manually or electronically
- Manual adjustable height range: 36" 55"
- Electronic adjustable height range: 36" 54"

Model Numbers and Overall Dimensions

Base Model	Overall Dimensions		
	Depth	Width	Height
TSPS-1000-6030	30	60	36
TSPS-1000-7230	30	72	36



GENERAL SPECIFICATIONS

Power Requirements:

120 Volt, 60 HZ, single phase, 15 amp GFCI protected electrical outlet, installed per local building codes, and provides protective grounding.

UL Approved:

All individual electronic components are UL Approved and/or recognized.

Table Installation:

Space Saver Tables with the Electronically Adjustable Height Option require a power source to operate the hydraulic system.

- 1. Place the table so that its left side (where the power unit is located) is near a 120 VAC GFI power outlet.
- 2. Plug in the table cord.
- 3. On the initial start-up, set the Maximum and Minimum heights on the Control Pad as shown on page 11.
- 4. After the initial start-up and Control Pad setting, thereafter simply use the up or down arrow buttons on the Control Pad to raise or lower the height of the table.



UNPACKING INSTRUCTIONS

Inspection

- 1. Receiving area must meet all State and Local regulations prior to unpacking.
- 2. Customer must inspect skid and Table both before and after unpacking to determine if any items were damaged during shipping.
- 3. All damaged items must be listed on the Bill of Lading.
- 4. Customer is responsible for the proper disposal of all packing materials. The disposal of these items must meet all State and Local regulations.

Unpacking the Stainless Steel Table

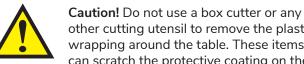
Stainless steel tables are shipped on well-constructed wooden skids. Two steel bands secure the Table to the skid. The stainless steel surfaces of the part are protected by heavy cardboard end caps, and by layers of plastic wrapping.

Care must be taken while unpacking the stainless steel table to avoid damage. Do not drop tools on the table or scratch the surfaces with sharp edges.

IMPORTANT: Wear gloves and eyewear during the unpacking operation.

Retain all shipping materials until the table is completely unpacked and inspected for damage.

- 1. Use tin snips to cut the metal bands holding the box to the wooden skid (Fig 1).
- 2. Remove metal staples holding one end of the packing carton together.
- 3. Slide out table from side of packing carton with two attached cardboard end caps (Fig 2).
- 4. Remove two cardboard end caps.
- 5. Remove the plastic protective wrapping.



other cutting utensil to remove the plastic wrapping around the table. These items can scratch the protective coating on the stainless steel, allowing the surface to rust.



Fig. 1: Boxed Table



Fig. 2: Wrapped Table with End Caps

- 6. The Space Saver Table is now ready for use.
- 7. Discard shipping and packing materials in compliance with state and local regulations.
- 8. When not in use, tables must not be double stacked while in storage. While still in their shipping cartons, tables must not be double stacked when not in use.



FOLDING THE ADJUSTABLE TOP SHELF (Space Saver Feature)

The Top Shelf of a Space Saver Table can easily be folded down or up. The process to fold the shelf down or up is best accomplished by two people.

Folding the Adjustable Shelf Down

- 1. To fold the shelf down, pull the table 3 4 feet away from the wall. (**NOTE**: If performing this operation using a table with the Electronic Height Adjust Option, unplug the table from its power source first).
- 2. Pull out the Spring Plunger Knobs located on either side of the table (Fig. 3).
- 3. Holding on to the front and back edges of the shelf, rotate the shelf down until it is fully retracted (Fig. 4).
- 4. Push the table back against the wall. If using the Electronic Height Adjust Table, it may now be plugged back in to its power source.

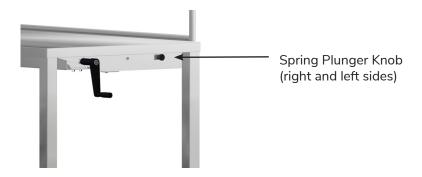


Fig 3: Spring Plunger Knob



Fig. 4: Folding the Adjustable Shelf



Folding the Adjustable Shelf Up

- 1. If performing this operation on a table with the Electronic Height Adjust Option, unplug the table from its power source.
- 2. Pull the table 3 4 feet away from the wall.
- 3. Holding on to the front and back edges of the shelf, rotate it up and forward until fully unfolded as in Figure 4 (reversed).
- 4. Push in on the Spring Plunger Knobs on either side of the table (Fig 3).
- 5. Push the table back against the wall. If using the Electronic Height Adjust Table, it may now be plugged back in to its power source.



MINIMUM/MAXIMUM ADJUSTABLE HEIGHTS FOR A SPACE SAVER TABLE

Minimum/Maximum Adjustable Height, Manual Height Adjustment

The Minimum height of a Manual Height Adjust Space Saver Table is 36" (from floor to tabletop).

The Maximum height of a Manual Height Adjust Space Saver Table is 55" (from floor to tabletop).

The Minimum Overall height is 54" (from floor to fully extended fold-down shelf).

The Maximum Overall height is 73" (from floor to fully extended fold-down shelf).

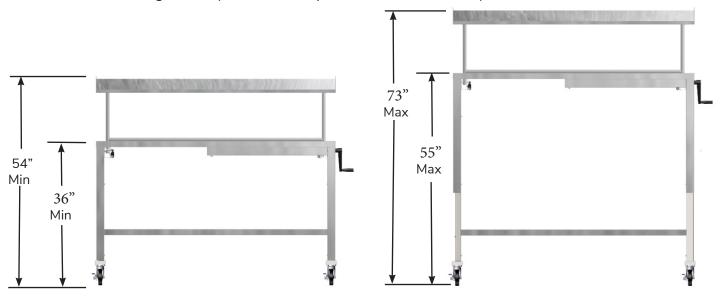


Fig. 5: Space Saver Table Manual Adjust Min/Max Heights

Minimum/Maximum Adjustable Height, Electronic Height Adjustment

The Minimum height of an Electronic Adjust Space Saver Table is 36" (from floor to tabletop).

The Maximum height of an Electronic Adjust Space Saver Table is 54" (from floor to tabletop).

The Minimum Overall height is 54" (from floor to fully extended fold-down shelf).

The Maximum Overall height is 72" (from floor to fully extended fold-down shelf).

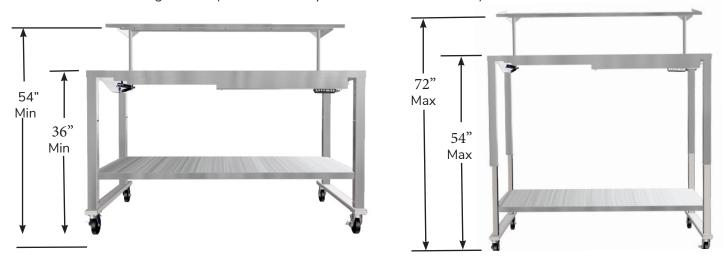


Fig. 6: Space Saver Table Electronic Height Adjustment Min/Max Heights



HEIGHT ADJUSTMENT - MANUAL HYDRAULIC PUMP WITH HANDCRANK

For Space Saver Tables equipped with the Optional Manual Hydraulic Pump with Handcrank (Figs. 7-8), the Handcrank can be folded to disappear under the table.

- 1. Crank the table to the desired height
- 2. Pull the Crank outward, then rotate downward to fold the handle under the table (Fig. 9).

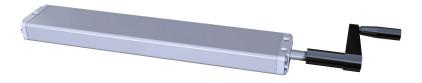


Fig. 7: Manual Hydraulic Pump with Handcrank



Fig. 8: Hydraulic Pump and Handcrank Location



Fig. 9: Hydraulic Pump Handcrank unfolded and folded



HEIGHT ADJUSTMENT - MOTORIZED ADJUSTABLE HYDRAULICS

The Control Panel feature is available for Space Saver Tables with the Electronic Adjustable Height Option. The Control Panel allows the user to operate the Space Saver Table's hydraulics.

Features	Electrical Specifications	
4 Memory Positions	Primary Voltage 120V, 10A	
Digital Display of the Height	Engine Voltage 24 VDC	
Overload Protection	Nominal Rating Approximately 340 VA	
Thermal Protection	Standby Power < 0.6W	
	Nominal Speed 180 min-1	
	Protection Type IP 20	

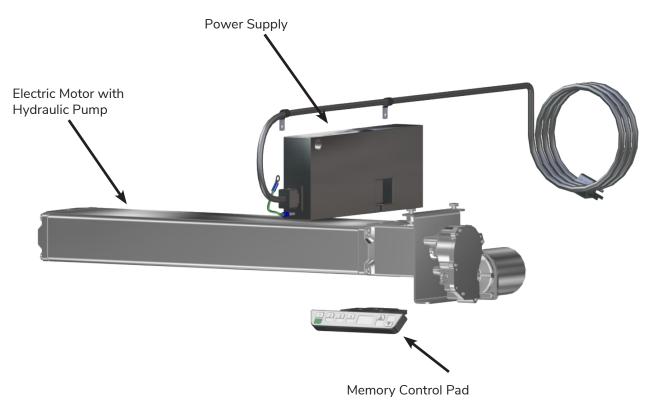


Fig. 10: Memory Control Pad, Power Unit, Electric Motor and Hydraulic Pump



CONTROL PANEL SETUP AND OPERATION

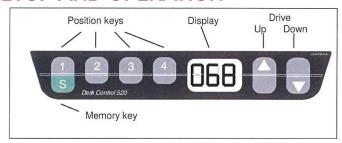


Fig. 11: Memory Control Keypad

At the first power-on, follow these steps:

Note: US customers will see the values in the display in terms of US Inches. European customers will see display values in terms of EU Centimeters.

1. First start up

- a. The display will initially flash "027" (US) or "068" (EU).
- b. Press the "Down" arrow button (see illustration above) until the lower US:36"/EU:91 cm end position is reached.
- c. The table moves down with half speed. Moving up is not possible.
- d. Adjust the readout (in Centimeters) to reflect the actual height with the "1" button (plus) and the "2" button (minus).
- e. Moving up or down is not possible.
- f. Press the "S" (green button) to confirm.
- g. After the confirmation the display will flash US:"036"/ EU:"091".
- h. Use the "Up" arrow button to move to the upper US:54"/EU:137 cm limit.
- i. The table will move at half speed and half power.
- Adjust the readout in US inches/EU centimeters to reflect the upper position with the "1" button (plus) and the "2" button (minus).
- k. Confirm with the "S" button.
- I. After confirmation the display will flash "137".
- m. After the confirmation the height is shown and the Control Box is ready for normal operation.

2. Operation up / down

- a. Press the "Down" arrow button or the "Up" arrow button until the desired height of the table has been reached.
- b. The display always shows the actual height in US inches or EU centimeters.
- c. The table moves as long as the key is pressed, or until the end position is reached.

3. Saving of a position

- a. This function allows the user to save a particular operating height on one of the four preset buttons.
- b. Press the "S" button (Display: "5 -").
- c. Press one of the following buttons: "1", "2", "3", or "4".
- d. After having pressed one of the position buttons listed above, an "S" and one of the position buttons is read on the display (i.e. "S3").
- e. At the end of the memory procedure, a double "Click" is heard and after 2 seconds the actual height is read on the display (i.e. "073").
- f. If there is a power failure or the unit is unplugged, the programmed presets are retained (up to 24 hours).



4. Reset of the Control Unit

- a. Press and hold "1", "2", and the "Up" arrow at the same time until it flashes "S5". The control is now in the adjustment mode.
- b. Release "1", "2", and the "Up" arrow. Press the Up arrow until the display shows "S7". Then press "S" to set.
- c. Then press the down arrow. The table will now move down. Checking with a tape measure, lower the table down to US:36"/ EU:91 cm.
- d. Then hold "2" until it reads "000".
- e. Then press "S" to set. It will then display "035".
- f. Hold the Up arrow to US:54"/ EU:137 cm (check the height with the tape measure).
- g. Then press "1" until it reads "137". Then press "S" to set.

5. Setting of Indicated Height

- a. Press the "S" button. Display will read "5 -".
- b. If the key is not pressed within 5 seconds, the control returns to standard mode again.
- c. Press the "Down" arrow button now for about 5 seconds until the display starts flashing. (Example: display flashes: "073").
- d. The height can also be set with the "Up" (plus) or with the "Down" (minus) arrow buttons. During this procedure the table does not move.
- e. If the position is correctly set, the new height can be saved by pressing the "S" button.
- f. The position is saved and the display stops flashing.
- g. The new height is also saved. If no button is pressed within 5 seconds, the display stops flashing automatically.



REPLACING THE MEMORY CONTROL PANEL

Removing the Existing Memory Control Pad



Fig. 12: Remove Old Memory Control Pad

If the Memory Control Pad must be replaced (due to damage), first remove the existing Memory Control Pad:



UNPLUG THE TABLE FROM ITS POWER SOURCE.

- 2. Remove three screws attaching the Controller to the table mounting plate (Fig. 12).
- 3. Unplug the old Memory Control Pad cord from the Power Supply Unit.
- 4. Remove the old Memory Control Pad.



Installing the Replacement Memory Control Panel

- 1. Position the replacement Memory Control Pad on the mounting plate under the front edge of the table. Align the three holes in the control panel with holes in table mounting plate.
- 2. Insert three screws into the holes of the Memory Control Pad, attaching the Memory Control Pad to the table mounting plate (Fig. 13).



Item #	Part #	Description	QTY
1	H0090-PDB-110	Memory Control Pad with Power Cord	1
2	H0012-01	Self-Tapping Screws	3

Fig. 13: Attach a New Memory Control Pad

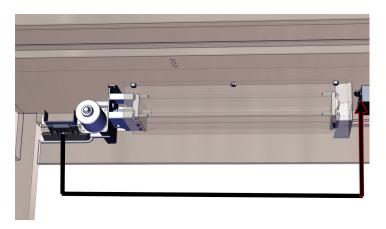


Fig. 14: Plug in Memory Control Pad Cord to Power Unit

- 3. Plug the control pad cable into the round receptacle of the table Power Supply Unit (Fig. 14).
- 4. Plug the table cord back into its power source.
- 5. Program the Replacement Memory Control Pad as shown on page 15.



Fig. 15: Power Unit Receptacle (viewed from back of unit)



Programming the Replacement Memory Control Pad

After the new Memory Control Pad has been installed, it must be programmed.

1. Press and hold Buttons "1", "2", and the "Up" Arrow at the same time. The Memory Control Pad is now in the adjustment mode.



2. Release Buttons "1", "2", and the "Up" arrow. Press the "Up" arrow until the display reads "S7".



3. Next, press the "S" button.



4. Press the "Down" Arrow. The table will now move down. Verify height of table is 36" with a tape measure.



5. Press and hold "2" button until "000" is displayed. Press GREEN (SET) Button. Display will now read US:"036"/EU:"091".

6. Press and hold "Up" Arrow until the table raises to US:54"/EU137 cm. Verify height of table is 54" with a tape measure.



- 7. Press and hold "1" button until the display reads "137". Next, press the "S" button.
- HOLD UP ARROW

 1 2 3 4 43 A

8. The Memory Control Pad is now ready for use.





Casters and Wheels - Care and Maintenance

Users of the Stainless steel tables are responsible for the proper care, use and maintenance of the equipment. The tables can become damaged and unsafe if used improperly.

- Never overload the tables.
- Do not drop heavy loads on the tables.
- Do not move the tables at high speeds.

Using the tables in any of the above conditions can result in failure of the Casters, Wheels or other parts of the equipment.

Periodically inspect the bottom of the tables and look for any of the following issues –

- Broken welds
- Loose nuts or bolts. These should be tightened.
- Frame distortion. This could be caused by an overloaded table, or by impacts with other objects while the table was being moved.

Casters:

• Make sure the Casters are in good condition. For Swivel Casters, if the caster has excessive play due to wear, it may need to be replaced. If it does not turn freely, corrosion or dirt may also make it necessary to replace it.

Wheels:

- Wheels should be checked for visible tread wear. Flat spots due to accumulation of material, such as string or thread, can cause the wheel to bind.
- Rubber tires can be badly worn, which can make it hard to steer the cart and can damage the floor. Replacement wheels and casters should be kept on hand to keep equipment in working order.



Instructions for Cleaning Space Saver Tables

Space Saver Tables must be cleaned on a regular basis to prevent any unnecessary damage to the stainless steel surfaces.

When cleaning the table, make sure to use the proper approved cleaning agents and cleaning materials.

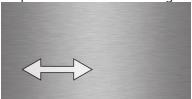
CAUTION DO NOT USE these Cleaning Materials	CAUTION DO NOT USE these Cleaning Agents	
Abrasive Pads	Hard Water (water with a pH reading above 7.0)	
Scrapers	Hydrochloric Acid	
Steel Wool	Steam or high pressure water	
Wire Brushes	Bleach or any compounds containing chlorine or Sodium hypochlorate, or ammonium chloride salts	

Approved cleaning materials and agents

- Soft, clean lint-free cloth
- Non-abrasive cleaning pads
- Soft bristle brush
- Mild detergents
- Sodium Bicarbonate (baking soda)
- Distilled water (pH rating 7) alone or with a mild detergent
- White vinegar (in a spray bottle)
- Isopropyl Alcohol
- Hospital-grade non-bleach disinfectants
- Cleaners approved for use on stainless steel

Cleaning Stainless Steel Surfaces

- 1. Using a damp, lint-free cloth and approved cleaner, wipe down the entire exterior surface of the stainless steel table. Using a damp, lint-free cloth with distilled water and a mild detergent, wipe down the entire exterior surface of the stainless steel table.
- 2. Wipe the steel surface along the direction of its grain as shown below.



3. Let the cleaned table air dry.

Cleaning Decals or Printed Labels

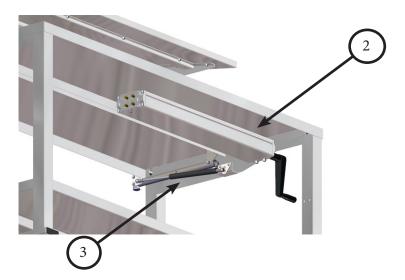
- Use only distilled water and a mild detergent applied with a clean, dry lint-free cloth to clean decals or printed labels.
- Cleaning agents can remove or smear any printing from decals and print labels.
- Cleaning agents can damage plastic materials used in manufacturing covers for electronic items such as touch-screen pads.



Replacement Parts - General







Item ID	Part Number	Description	QTY	Models
1	T0008-C	4" Swivel Casters	2	All
1	T0008-C-L	4" Swivel Casters w/ Brakes	2	All
2	H0090-03	Hydraulic Pump w/ Crank	1	All
3	H0107-02	Gas Spring	2	All
4	H0109-01	Spring Plunger	2	All



Notes

Limited Lifetime Warranty

MAC Medical warrants to the original purchaser that its Proprietary Products will be free from defects in workmanship or materials under normal use and service for the life of the product, so long as owned by the original purchaser, according to the limitations set forth below.

WARRANTY

Defective products shall be repaired or replaced at MAC Medical's option at no cost to the original purchaser provided:

- The customer must obtain a written return authorization supplied by MAC Medical's customer service department. The product must be returned, properly packaged, with a copy of the original sales receipt and copy of the RMA authorization.
 Please call (877) 828-9975 or (618) 476-3550 to receive a return authorization.
- 2. The customer must pre-pay freight charges to and from MAC Medical and must ship merchandise properly packaged, in a way the product will not be damaged during transit to the factory. MAC Medical does not warranty any freight damage to or from the factory. It is the customer's responsibility to inspect the product for packaging damage before signing the BOL.

This warranty does not apply to products, which have been subject to abuse, misuse, accident, modification, alteration, tampering, negligence, lack of routine maintenance or misapplication; or products that have been repaired by other than MAC Medical or its authorized representatives.

This warranty does not apply to glass, fabrics, vinyl, seat coverings, cushions, padding or their stitching, gluing or installation. Component parts not manufactured by MAC Medical, such as casters, caster inserts, any components made from rubber or plastic, circuit boards, fan heaters, plumbing parts, electrical switches and other components are also excluded. For these component parts, MAC Medical will pass on the original manufacturer's warranty to MAC Medical equipment original purchasers. Please consult factory for questions regarding the warranties of these component parts. This warranty does not apply to custom fabricated products. Consult factory.

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