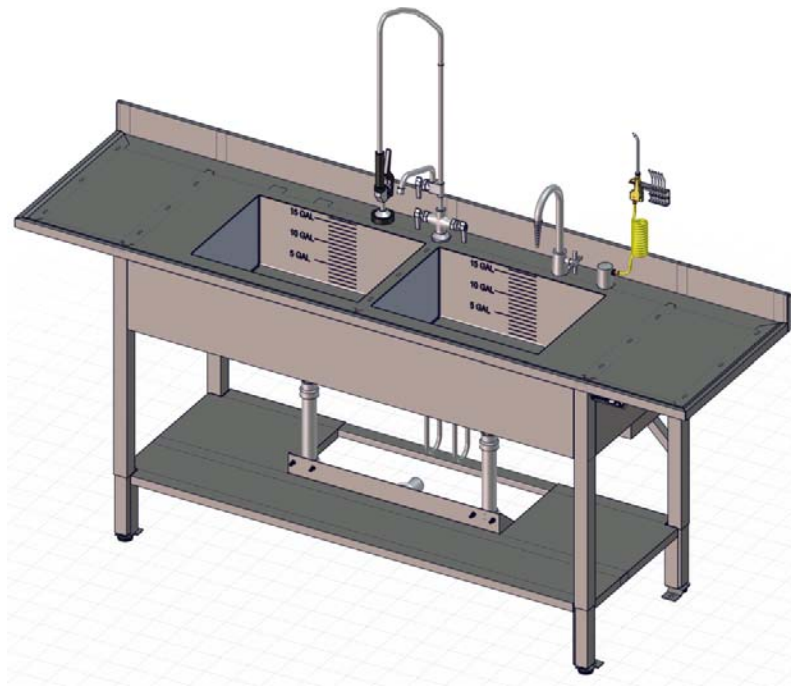




ADJUSTABLE HEIGHT SINK

INSTALLATION – OPERATION – MAINTENANCE



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WARNINGS AND CAUTIONS

Following is a list of the safety precautions, which must be observed when operating this equipment. WARNINGS indicate the potential for danger to personnel, and CAUTIONS indicate the potential for damage to equipment. These precautions are repeated (in whole or in part), where applicable, throughout the manual. It is important to review these precautions before using the equipment.

WARNING-INJURY HAZARD:

REPAIRS AND ADJUSTMENTS should be only attempted by experienced mechanics fully acquainted with this equipment. Use of inexperienced, unqualified persons to work on the equipment, or the installation of unauthorized parts, could cause serious personal injury, or result in costly damage. Always unplug power cord from power source prior to attempting any repairs or servicing.

WARNING:

DO NOT operate in a potentially explosive atmosphere.

CAUTION-POSSIBLED EQUIPMENT DAMAGE:

When cleaning the sink, use a non-abrasive polish. Rub in a back and forth motion in the same direction of the surface grain. Sink is to be wiped down only. DO NOT use a sprayer to wash and/or rinse sink.

NOTE: This product is to be used strictly for the purpose it was designed for. If this product is used in a manner not specified by MAC MEDICAL, the protection provided by the equipment may be impaired. MAC MEDICAL disclaims all liability for the consequences of this product being used for other than what it was designed for. Product modification or misuse can be dangerous. MAC MEDICAL disclaims all liability for the consequences of product alterations or modifications, as well as for the consequences which might result from the combination of this product with other products, whether supplied by MAC MEDICAL or by other manufacturers, unless such a combination has been specifically endorsed by MAC MEDICAL.



AVERTISSEMENTS ET PRÉCAUTIONS

Voici une liste des consignes de sécurité, qui doivent être respectées lors de l'utilisation de cet équipement. AVERTISSEMENTS indiquent le potentiel de danger pour le personnel, et PRECAUTIONS indiquent le potentiel de dommage matériel. Ces précautions sont répétées (en tout ou en partie), où il est applicable, dans le manuel. Il est important de prendre ces précautions avant d'utiliser l'équipement.

ATTENTION : RISQUE DE BLESSURE:

AJUSTEMENTS et réparations doit être tentées uniquement par des mécaniciens expérimentés entièrement connaissance avec cet équipement. Utilisation des personnes inexpérimentées, non qualifiés pour travailler sur l'équipement ou l'installation de pièces non autorisées, pourrait entraîner des blessures graves ou causer des dommages coûteux. Débranchez toujours le cordon d'alimentation de la source d'alimentation avant d'entreprendre toute réparation ou entretien.

ATTENTION :

Ne fonctionne pas dans une atmosphère explosible.

ATTENTION-RISQUE DE DOMMAGES MATÉRIELS :

Lors du nettoyage de l'évier, utilisez un produit à polir non abrasif. Frotter une dos et quatrième motion dans le même sens du grain de surface. Évier doit être essuyé seulement. **Ne pas** utiliser un pulvérisateur pour laver ou rincer l'évier.

NOTE : Ce produit doit être strictement utilisé à cette fin, pour qu'il ait été conçu. Si ce produit est utilisé d'une manière non spécifiée par MAC MEDICAL, la protection assurée par l'équipement peut être altérée. MAC MEDICAL décline toute responsabilité pour les conséquences de ce produit étant utilisé pour autre que ce qu'il a été conçu pour. Modification du produit ou une mauvaise utilisation peut être dangereuse. MAC MEDICAL décline toute responsabilité pour les conséquences des modifications des produits ou des modifications, ainsi que pour les conséquences qui pourraient résulter de la combinaison de ce produit avec d'autres produits, si fourni par MAC MEDICAL ou par d'autres fabricants, à moins que cette combinaison a été expressément approuvée par Mac médical.



GENERAL SPECIFICATIONS

1. **MATERIAL:**

- **Sink Basin and Sink Top:** 14 GAUGE, 300 SERIES STAINLESS STEEL
- **Sink Skirt:** 18 GAUGE, 300 SERIES STAINLESS STEEL.
- **Sink Shelf:** 16 GAUGE, 300 SERIES STAINLESS STEEL.
- **Sink Base Tubing:** 16 GAUGE 300 SERIES STAINLESS STEEL.

2. **ALL PLUMBING SUPPLIED BY CUSTOMER.**

3. **UTILITY REQUIREMENTS:**

- It shall be the customer's responsibility for incoming water / DI / air, meeting manufactures requirements. See product cut sheet for details.
- It shall be the customer responsibility to insure by use of pressure regulators, or other means, that maximum specified pressures are not exceeded.
- Water lines should be flushed clean before water connections are made.
- It shall be the customer's responsibility to ensure that water supplies are properly protected for internal cross connection control, in accordance with local building and plumbing requirements.
- It shall be the customer's responsibility to eliminate water hammer conditions should they occur in the service piping.
- **COLD WATER:**
 - 20 TO 50 PSIG 70 DEG F MAX.
- **HOT WATER:**
 - 20 TO 50 PSIG 120 DEG F TO 140 DEG F.
- **DI WATER:**
 - Flow Rate: 10-50 PSIG
 - Rated Operating Pressure: 20-125 PSI
 - Rated Operating Temperature: 40-140 DEG F.
- **AIR:**
 - Quick tip blow gun complete with five (5) different tips that are quickly changed by a quick push and pull. Comes with a popular hooked blow gun body. The rubber tip and the needle tip should be used with 30 PSI air hose.
 - **Air Hose:** 1/4" I.D. X 10' Flexcoil retracting air and water, brass fittings with NPT threads (1/4" MPT swivel).
 - **LOW TEMP:** -40 DEG TO +125 DEG F
 - **HIGH TEMP:** -40 DEG TO +180 DEG F.
 - **VACUM RATING:** 27" HG @ 72 DEG F.
 - **AIR INLET:** Deck mount fitting, turret base 3/8" NPT female, single 3/8" NPT female outlet, 3/8" IPS mounting shank with locknut and washer. 3/8" IPS X 2-1/2" OAL. Low-Pressure brass threaded pipe fitting 3/8 male X 1/4 female pipe size, hex reducing bushing.

4. **POWER REQUIREMENTS:**

- 120V, 60 Hz, Single phase, 15 AMP GFIC Protected electrical outlet (By Others), installed per local building codes, and provides protective earth.

5. Net weight of sink is 242 LBS single basin, 293 LBS double basin, and 388 LBS triple basin.

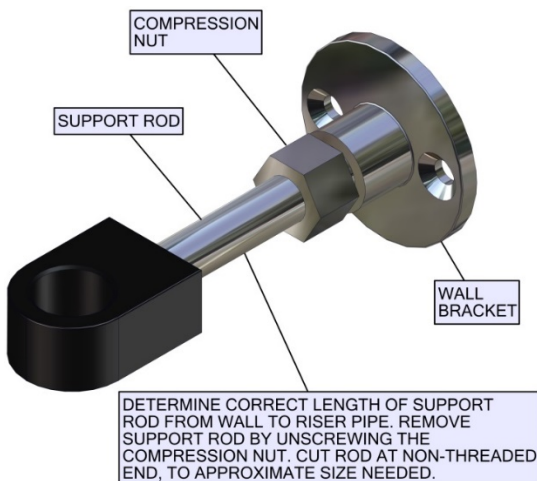
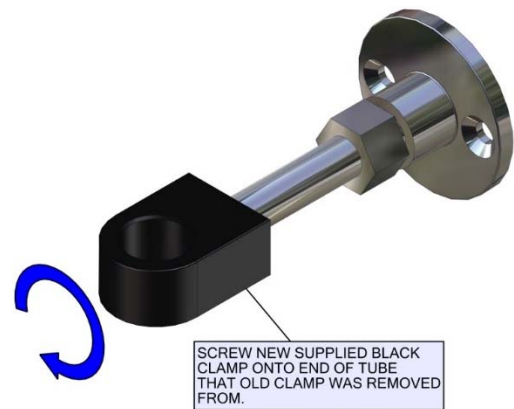
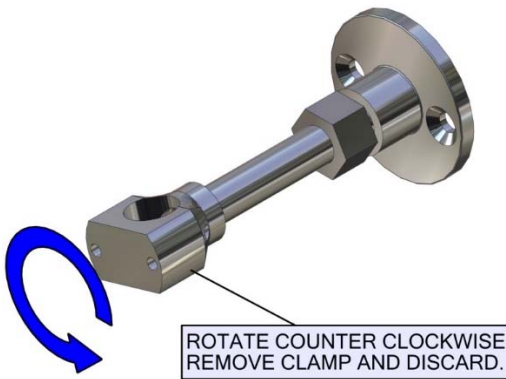
6. Sink is "ETL" and "cETL" certified.

7. All individual electronic components are UL approved and/or recognized.



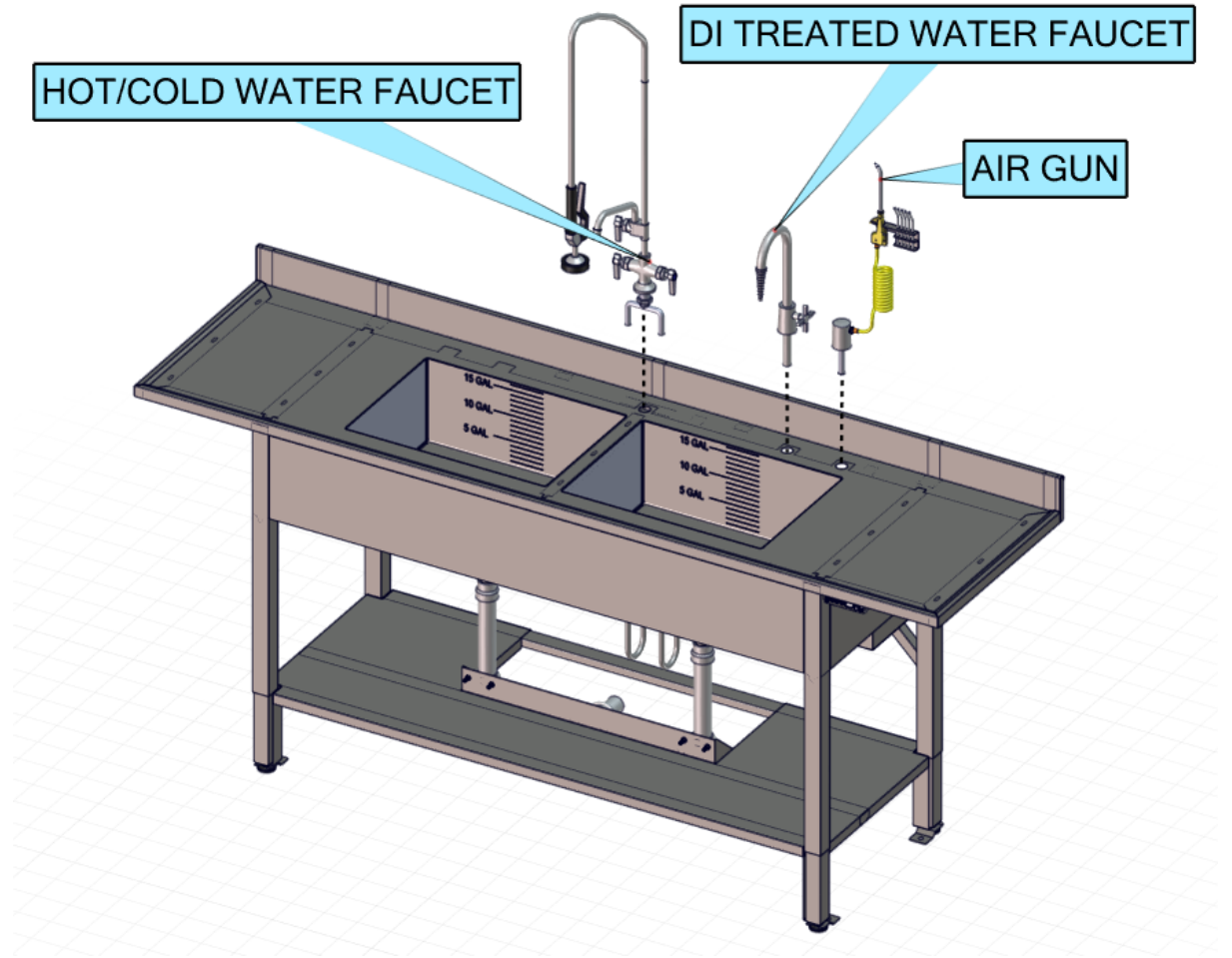
Installation

- Carefully uncrate the adjustable sink.
 - The mounting hardware is located under the sink, secured to the shipping materials. Be sure to remove all hardware before discarding packaging.
- Check supply and waste terminal location.
 - Be sure all connections are safely accessible and in proper working condition.
 - For proper sink operation the hot water temperature must at least be 120 deg. F.
- Install the sink:
 - With the help of an assistant(s), move the adjustable sink into the desired location. Ensure that the sink is not positioned so that it is difficult to disconnect power to the sink if needed.
 - Ensure that a 120V GFI outlet is accessible. **DO NOT** plug the unit in at this time.
 - Install the Hot/Cold water faucet. (Sink Sprayer Mount - Installation pictures below)





- d. Install the Air Gun.
- e. Install the DI treated water faucet.



Left to Right Work Flow Shown

Fig 1



- f. Install the basin drain(s).
- g. Connect basin drain to existing floor or wall drain in accordance with applicable local code standards.

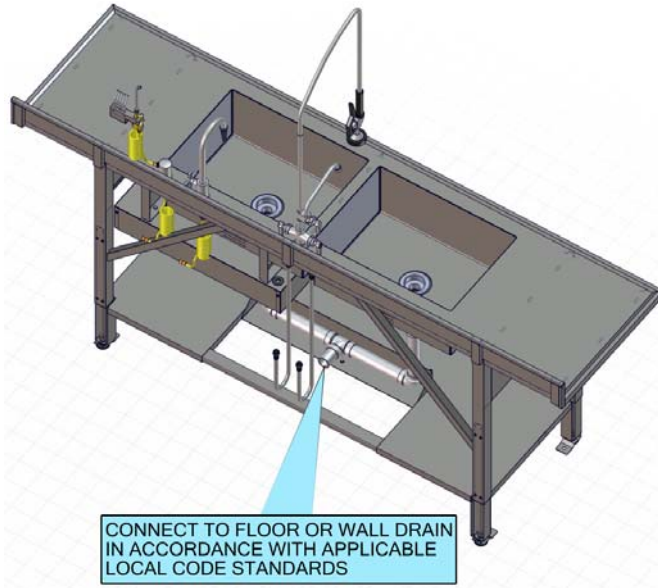


Fig. 2

- h. Connect Hot and Cold water lines to the existing Hot and Cold inlet water lines in accordance with applicable local code standards.
- i. Connect the DI treated water line in accordance with applicable local code standards.
- j. Connect the Air Gun to existing pressure-regulated air line in accordance with applicable local code standards.

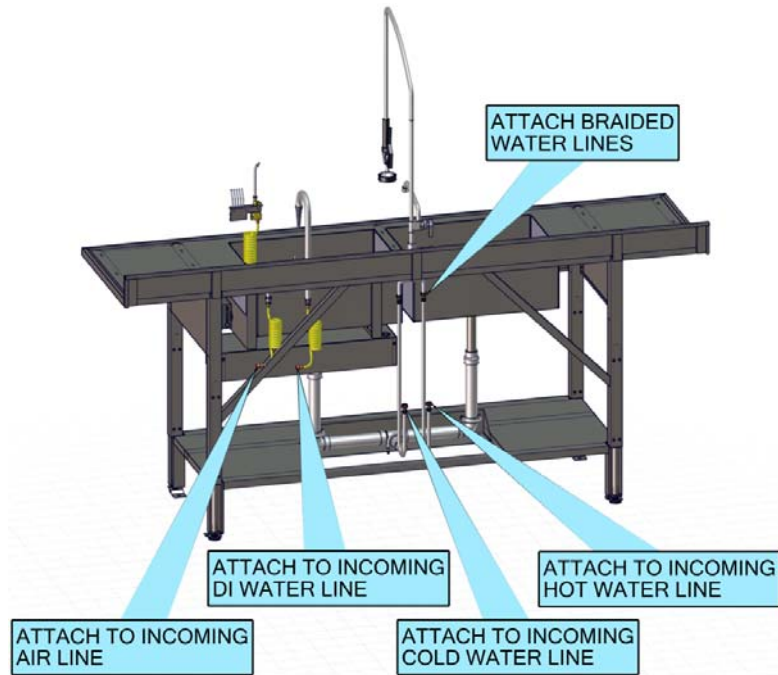


Fig. 3



- k. Using the feet levelers on sink legs, level the sink.
- l. Bolt sink feet to the floor (typ. 4 plcs) (Reference Picture #1). Use appropriate hardware for floor material type. (Per Local Building Code)

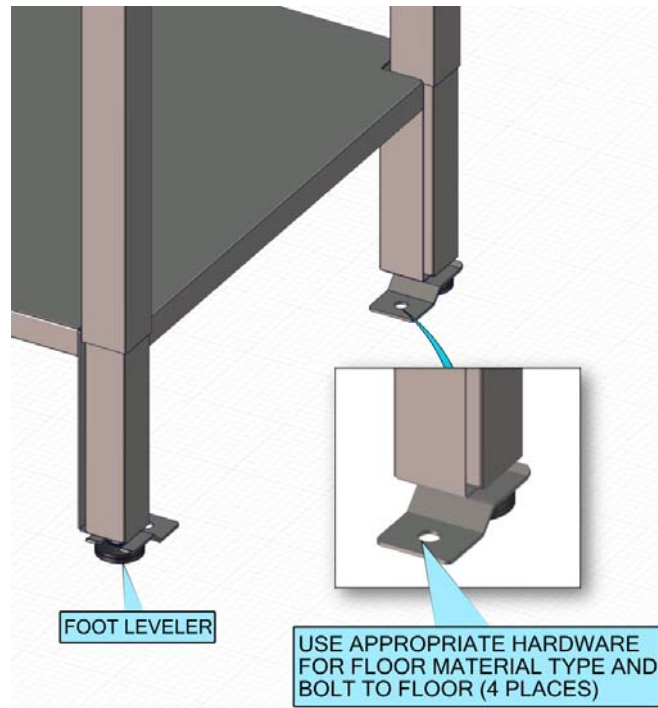
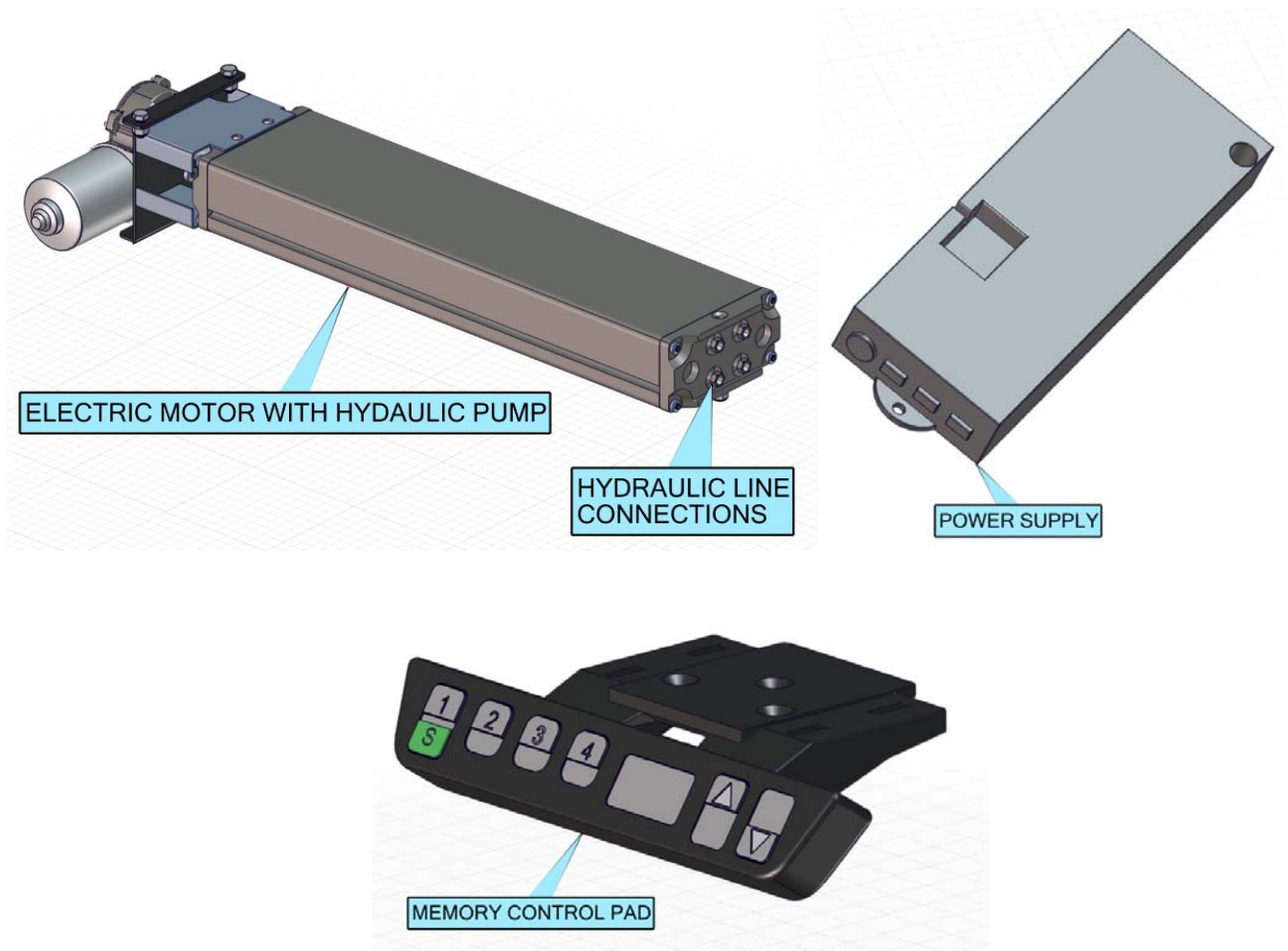


Fig. 4

- m. Plug power cord into 120V GFI outlet (If power cord is lost or damaged replace with equally rated power cord. An inadequate power cord could cause injury).



Technical Data

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

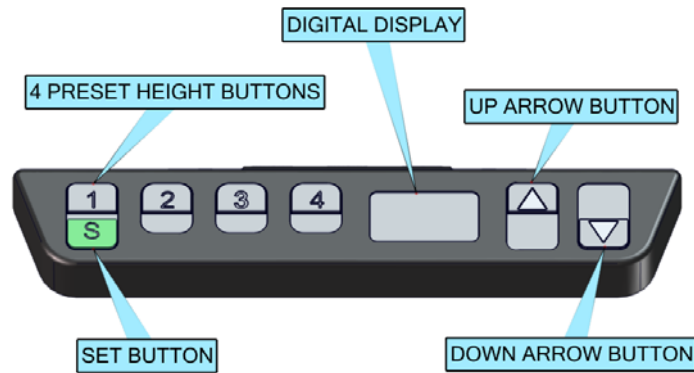


Fig. #5

FIRST START UP

At the first power-on the following steps are necessary:

The display will initially flash "068".

Press the "Down" arrow button (Ref Fig. 1) until the lower 86cm (34") end position is reached. The sink moves down with half speed. Moving up is not possible.

Adjust the read out (in Centimeters) to reflect the actual height with the "1" button (plus) and the "2" button (minus). Moving up or down is not possible.

Press the "S" button to confirm. After the confirmation the display will flash "088".

Use the "Up" arrow button to move to the upper 106cm (42") limit. The sink will move at half speed and half power.

Adjust the read out to reflect the upper position with the "1" button (plus) and the "2" button (minus).

Confirm with the "S" button.

After the confirmation the height is shown and the control box is ready for normal operation.

OPERATION UP / DOWN

Press the "Down" arrow button or the "Up" arrow button until the desired height of the sink has been reached.

The display always shows the actual height in Centimeters (i.e. "078" = 78 centimeters).

The sink moves as long as the key is pressed, or until the end position is reached.



SAVING OF A POSITION

This function allows the user to save a particular operating height on one of the four preset buttons.

Press the “S” button (Display: “5 –“).

Press one of the following buttons: “1”, “2”, “3”, or “4”.

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”).

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”). If there is a power failure or the unit is unplugged, the programmed pre-sets are retained.



NOTE

MAC MEDICAL presets button “1” at lowest sink height and button “4” at highest sink height. These can be changed by the customer if desired.



ATTENTION

If the position button is not pressed again within 5 seconds after having pressed the memory button, the actual height is read again on the display and nothing is saved.

MOVING TO A SAVED POSITION

If the sink is turned on for the first time, all positions are corresponding with the lower end position. This function allows the sink to move to a saved height again.

Press and hold one of the following buttons, “1”, “2”, “3”, or “4”.

The sink moves towards the position as long as the button is pressed. If the button is not pressed anymore, the sink stops. If the button is pressed, the sink moves until the saved position is reached.



ATTENTION

If any other button is pressed while the sink is moving towards the saved position, the sink stops.



NOTE

To reach a position, the button has to be pushed the entire time, until the desired position is reached.



NOTE

This unit has limited operation of 2 minutes on / 18 minutes off.



RESET OF THE CONTROL UNIT

If the sink becomes misaligned, the lower limit of travel must be reset (as in first startup).

Press the “1”, “2”, and “Down” arrow buttons at the same time and hold this combination until the display shows “S 0”.

The control is now in the reset mode.

Press the “Up” arrow button as often as needed until the display shows “S 7”.

Press the “S” button.

The display will flash “068”; continue to “First Start Up” procedure.

SETTING OF INDICATED HEIGHT

With this function the indicated height can be changed.

Press the “S” button. Display will read “5 –”.

If the key is not pressed within 5 seconds, the control returns to standard mode again.

Press the “Down” arrow button now for about 5 seconds until the display starts flashing. Example: display flashes: “073”.

You can set the height with the “Up” (plus) or with the “Down” (minus) arrow buttons. During this procedure the sink does not move.

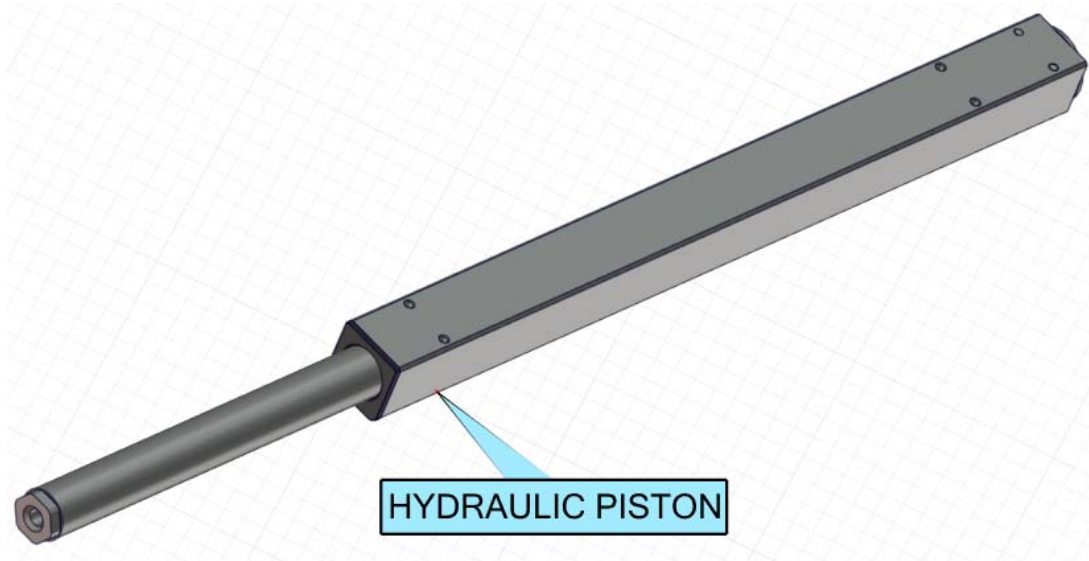
If the position is correctly set, the new height can be saved by pressing the “S” button.
The position is saved and the display stops flashing.

The new height is also saved, if no button is pressed within 5 seconds the display stops flashing automatically.



NOTE

Please note, that at this adjusting procedure the sink position will not change. Only the display changes.



Load max. 1.500 N per cylinder

Type LA / LD	Lift (mm)	Cylinder body length (mm)	Hole spacing (mm)
LA / LD 1430	300	442	340
LA / LD 1450	500	667	450
LA / LD 1460	600	767	145 / 450

Brief Description:

Explanation using "LA 1430" as an example

LA = Linear unit type A, 14 = Piston Diameter (14mm), 40 = Cylinder lift (30 CM)