

# Hill 90MD

Exam Chair



  
Hill Laboratories  
COMPANY

REFERENCE MANUAL

# *At Your Service*

## The Hill Laboratories Guarantee

Your Hill Laboratories 90MD has been thoroughly tested and inspected before shipment. All parts are guaranteed against defect in materials for one full year from date of purchase. Tables damaged by mishandling or accident will be repaired at a reasonable charge.

All correspondence should be directed to your local dealer, or when this is not possible, to Hill Laboratories directly.

We appreciate your business and your confidence in our product. Our aim is to provide you with excellent service and satisfaction for many years to come.

President of Hill Laboratories Company

*Howard A. Hill*

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

# *Congratulations!*

And welcome to the Hill Laboratories family.

Hill Laboratories Company has been making

quality a family business since 1945.

Your Hill 90MD is built in a tradition of

innovation and value that Hill Laboratories products

have become known for.

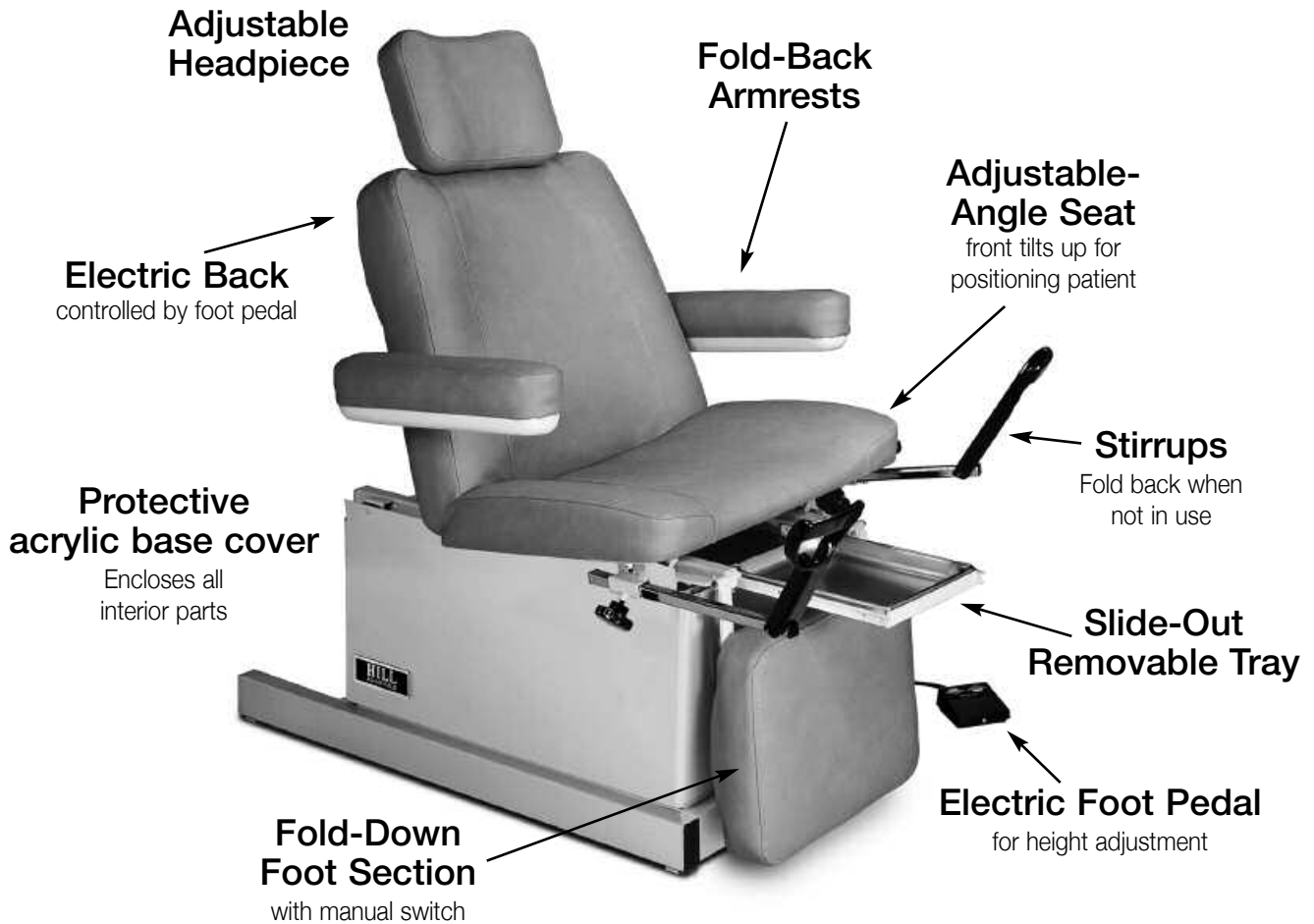
Our good name rests on the confidence that

your Hill Chair will provide you with solid, reliable service

for many years to come.

# Ready for use.

Your Hill 90MD comes ready to plug into any 115 volt outlet.



## Specifications

### Table Rating

Lifts up to 400 lbs. Static Tested at 1000 lbs.\*

**Height Range** - 22"-35"

**Standard Width** - 26", optional 26"

**Length Reclined** - 71", Extends to 79"

### Table Base Skirting

Acrylic thermo-plastic

### Foam

Ultra-Cell® for comfort and shape retention

### Shipping Weight

Approximately 250 lbs

### Electric Requirements

115 v~, 60 Hz., 10 A, where specified -  
230 v~, 50 Hz.

Receptacles in base - 115 v~, 250 Watt maximum

**Note:** Grounding reliability can only be achieved when the equipment is connected to an equivalent receptacle marked hospital only or hospital grade. There is no EMI concern related to the safe operation of this table.

### Transportation and Storage Conditions

#### Ambient Temperature Range:

-30°C to +60°C (-22°F to 140°F)

#### Relative Humidity

0% to 90% (non-condensing)

\*We have tested this model at 600 pounds. The UL standard requires static load testing at four times the rating stated on the label. The static load test was 1000 lbs. making the label rating 250 lbs.

# Table Care

## Cleaning Your Table

Your Hill Table comes upholstered in a highly durable vinyl material. Its appearance is guarded by Prefixx™ brand protective finish. Your upholstery may be cleaned with the Hill Laboratories Vinyl Cleaner or any non-abrasive household detergent without change to surface luster. Stubborn stains can be cleaned with most common solvent cleaners such as naphtha (lighter fluid), rubbing alcohol (IPA type), toluene, Coleman gas, turpentine (paint thinner), and nail polish remover (50/50 mixture of acetone and water) with no change to surface luster or color. One hundred percent acetone can also be used for short periods but it is suggested that it first be tested on an inconspicuous area of the table.

**Caution:** These solvents are highly flammable; exercise proper care when cleaning with these materials and do not use near open flame or intense heat. Wear rubber gloves during all cleaning activities. When cleaning other parts of your table (besides upholstery) use only nonabrasive household detergents and water.

## Cautions and Symbol Explanation

**Caution:** Be sure to unplug your table before performing any maintenance on the table.

**Caution:** The table should be checked once a year to make sure all internal and external bolts are secure.

**Caution:** The table should be in its lowest height position when not attended.

**Caution:** In case of power outage, the table will rely on the generator back-up of the facility where the table is installed for powering the table to its lowest position.

**Caution:** The power cord shall be located to avoid objects being rolled over or placed on top of it and also to avoid people tripping over it. Damaged cords should be replaced with another of hospital grade.

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

### Special Caution:

**To avoid injury or damage to the chair, NEVER SIT OR LEAN ON THE FOOT SECTION WHEN IT IS RAISED TO THE HORIZONTAL POSITION.** The foot section is designed to support a seated patient's feet and lower legs only. To prevent any problem from occurring, adjust the foot section down before a patient exits the chair.



**Symbols: - Each of the symbols below are used on your Hill model labeling. An explanation of each is below.**



**Attention Symbol**  
consult accompanying  
documents



**Dangerous Voltage  
Symbol**



**Type BF Applied  
Part Symbol**



**Ground  
Symbol**

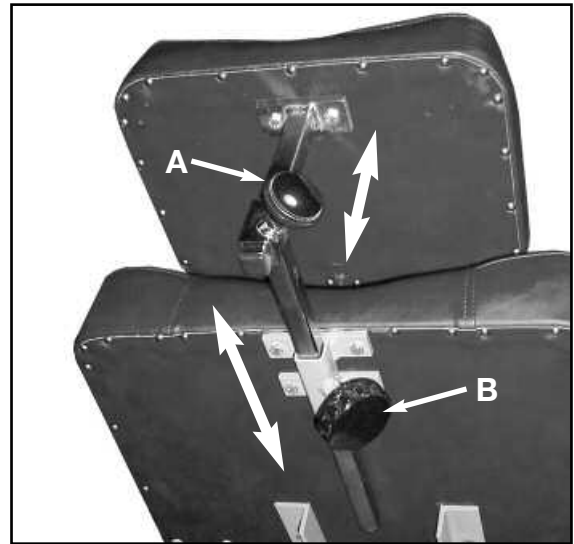


**Alternating Current  
Symbol**

# Table Features

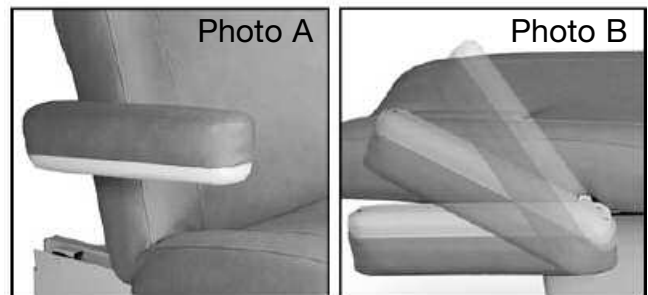
## Adjustable Headpiece

The adjusting headpiece can be moved in both the forward-backward direction and up-down. To adjust the forward position of the headpiece, loosen the black knob directly behind the head cushion ("A" in photo) and adjust the cushion position. Then, retighten the knob. Repeat the same procedure for the up and down adjustment ("B" in photo). Rated at 20 pounds and tested with 160 pounds.



## Fold-Down Armrests

When the fold-down armrests are positioned in the normal position (as shown in Photo A), they can be easily folded back by simply lifting from the bottom until the armrests are parallel with the back seat cushion as shown in Photo B. Rated at 10 pounds and tested with 80 pounds.



## Adjustable-Angle Seat

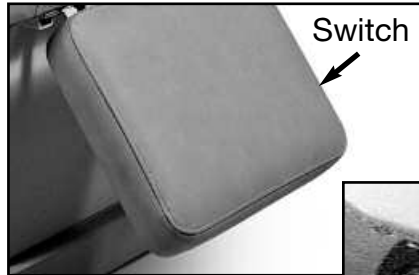
The Adjustable-Angle Seat has two positions and should only be adjusted before a patient mounts the chair. To adjust the angle, simply lift the front of the seat by hand—this will engage the support bars beneath the cushion (see photo). **Never attempt to adjust the angle while the patient is seated.** Once patient has exited the table, lift the front of the cushion and turn the knob (A, photo 4) clockwise to return support bars to flat position.



# Table Features

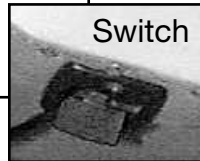
## Slide-Out Removable Tray

A stainless steel slide-out tray is positioned by simply pulling the tray frame forward to the desired position. The tray itself is fully removable for easy cleaning.



## Fold-Down Foot Section

The angle of the Fold-Down Foot Section is controlled by a manual switch located under the right side as you face the end of the chair. Press and hold the switch to freely adjust the angle of the cushion. Release to lock the cushion in place.



## Stirrups

The 90MD stirrups are located on both sides of the main seat cushion. Their length can be adjusted by loosening the black knob (A, photo A), pulling the stirrup out to the desired position, and then tightening the knob again. When not in use, the black foot section folds down and under the cushion (photo B).

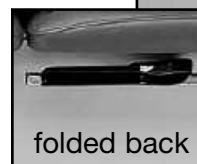
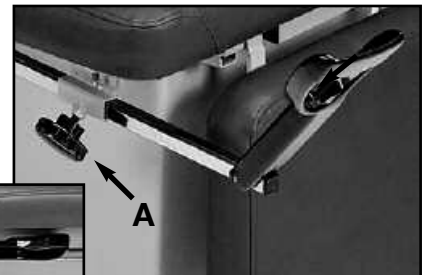


Photo B

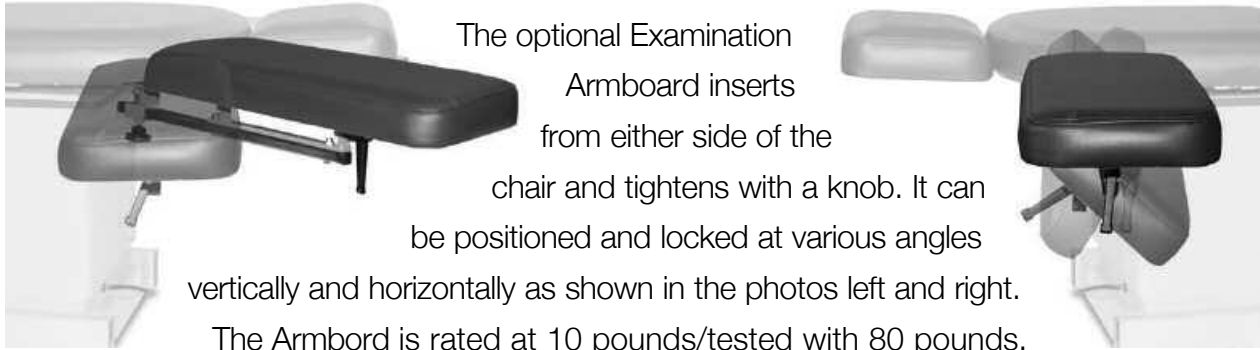


## Foot Pedals

Up to four foot pedals may be mounted together on one control. The far left pedal, marked **Back**, controls the angle of the back cushion. The middle-left pedal, labeled **Tilt**, controls the tilt angle of the seat cushion (Caution: The lift back cushion needs to be tilted up a minimum of 15° to tilt the table into the trendelenburg position. To avoid injury or damage, the lift back should not be operated without the flat plastic panel in place on top of the plastic enclosure.) The middle-right pedal, marked **Height**, controls table elevation. The far right pedal, labeled **Foot**, controls the angle of the foot section from horizontal to 90° perpendicular.

# Table Features

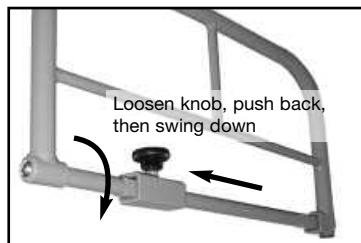
## Examination Armboard



The optional Examination Armboard inserts from either side of the chair and tightens with a knob. It can be positioned and locked at various angles vertically and horizontally as shown in the photos left and right. The Armboard is rated at 10 pounds/tested with 80 pounds.

## Gooseneck Lamp with Receptacle

To use the optional Gooseneck Lamp, insert the post into the mounted receiver and tightened the knob, turning clockwise. The lamp plugs into the 120 Volt, 5 amp. rated receptacle located at the head-end of the chair, in the center of the table frame. Be careful to position the lamp wire so that it does not interfere with free movement around the chair.



## Side Rails

Optional side rails are mounted at each side of the seat cushion and very helpful for increased security while patient is positioned on the chair.

To move the rails to the down position, loosen the black knob (see photo), push rail towards the back of the chair to disengage the square locking tube and then swing the rail to the down position.



# Table Features

## Rocker Foot Pedal

The optional Rocker Foot Pedal operates the height of the table from either side of the table base. Press the right side of the pedal for “UP” and the left side for “DOWN”. The pedal will return to the neutral position when released.



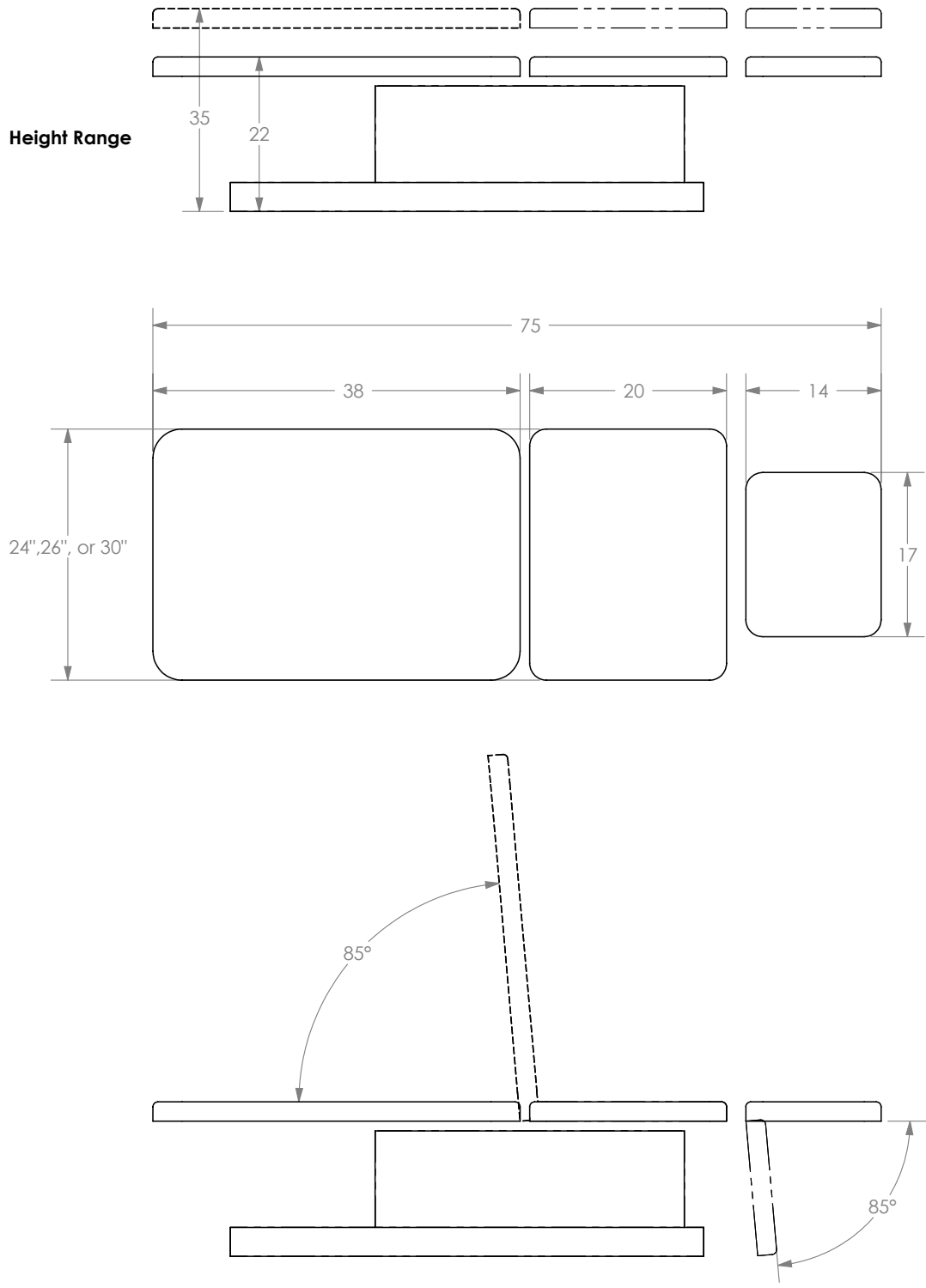
## Casters

If your Hill model is equipped with the optional caster system, they will be located on each end of the base. When not in use, the black handles will be resting in the down position as seen in the top photo, left. To engage the casters, use your foot or hand to lift the black handles to the up position on both ends of the base (as pictured in the bottom-left). This will engage the caster wheels and lift the table about 3/8” for easy movement around the room.

**Be careful to lower the handles to disengage the casters before using the table for treatment.**

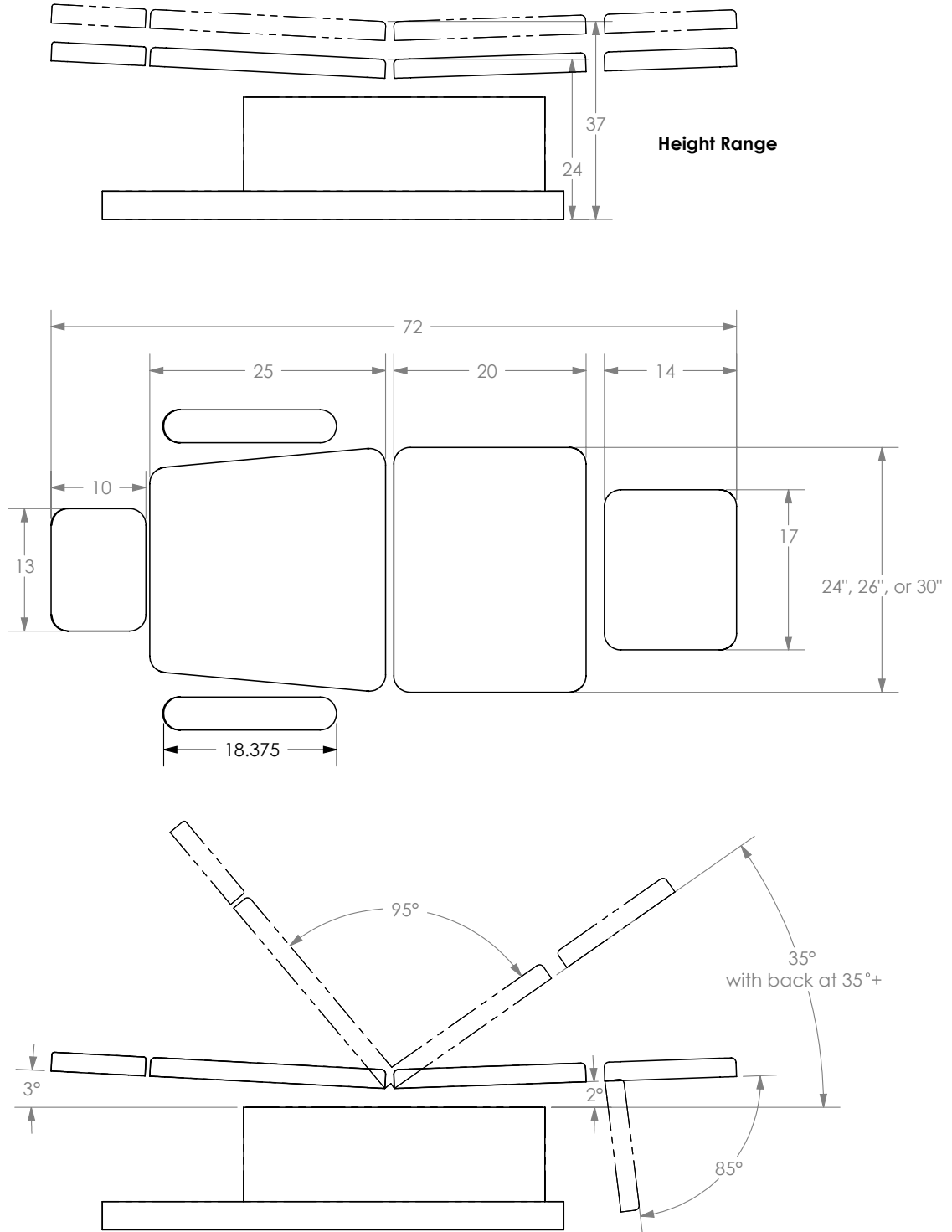
# Diagrams

## MD standard - Dimensions



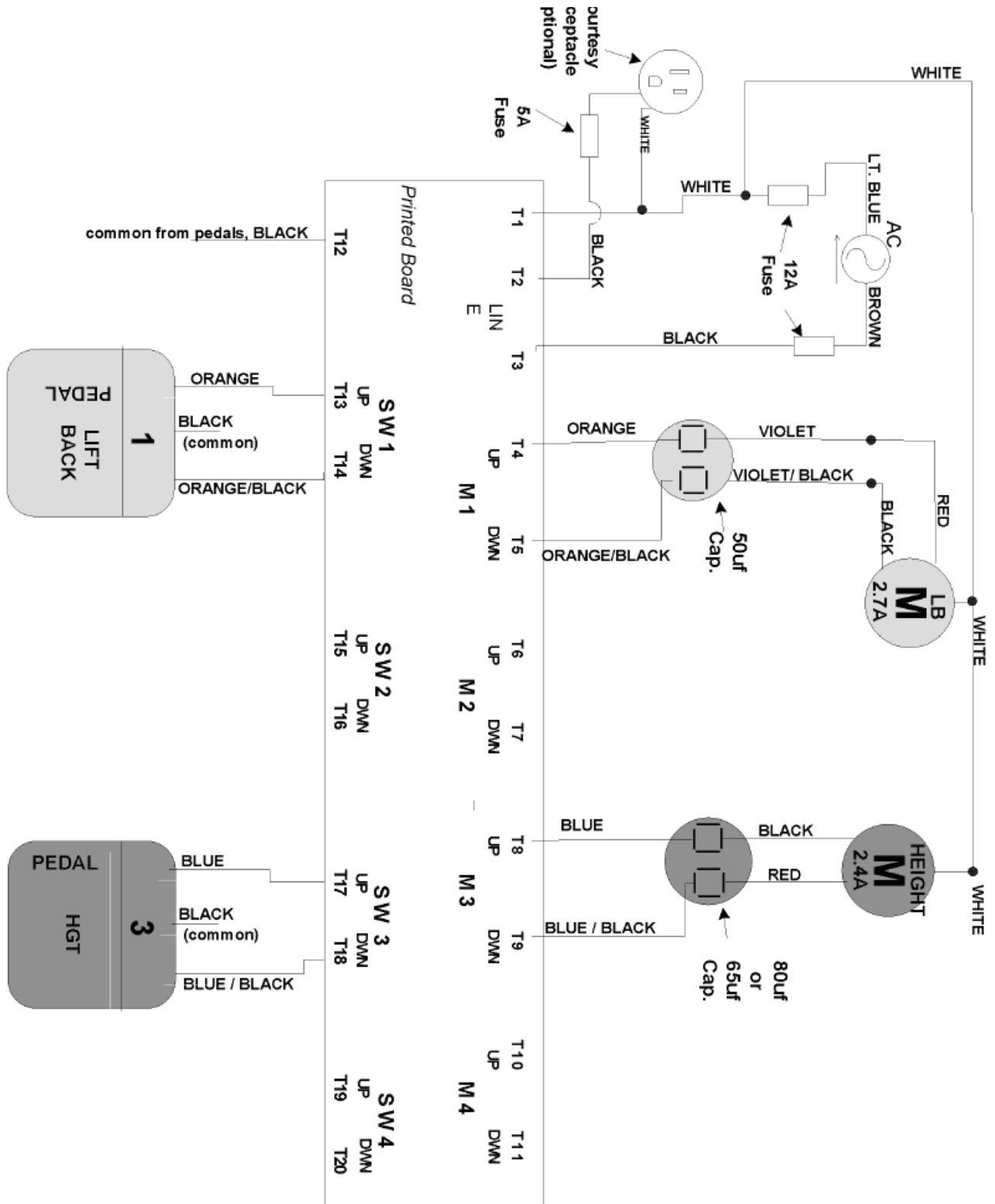
# Diagrams

## MD trendelenburg - Dimensions



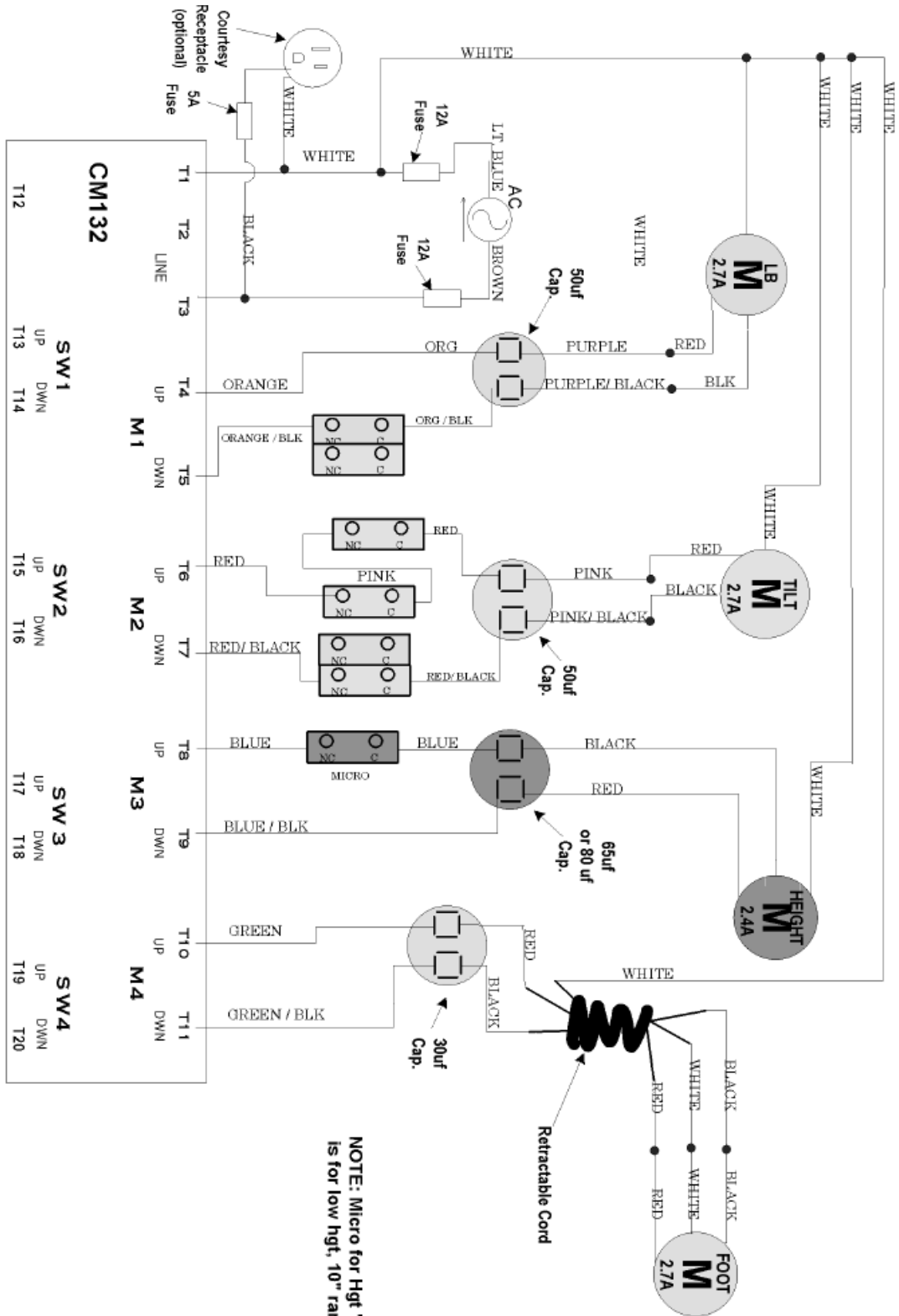
# Wiring Diagrams

## Two Motor Diagram



# Wiring Diagrams

## Three or Four Motor Diagram



NOTE: Micro for Hgt "up" is for low hgt, 10" range

# Tables Manufactured by Hill Laboratories



Anatomotor  
Massage w/Traction



90C



Air90C



Air-Flex  
w/4 Drops



Hi-Lo



HA90



HA90 Lift Back



Mat Table



PT Mobilization



Rath Mechanical  
McKenzie Technique



Repex Table  
McKenzie Technique



PT Tilting



HA90E



90MD



90D Dermatology  
Chair



90W Wound Care Chair



Podiatry Model



Counterstrain  
(multi-positional)



HA90V Tilt  
Vascular/Diagnostic



Neck Correct™  
Cervical Spine Rehab



P.O. Box 2028, 3 Bacton Hill Road, Frazer, PA 19355 • phone 1-877-445-5020 • 610-644-2867 • fax 610-647-6297 • [www.hilllabs.com](http://www.hilllabs.com)