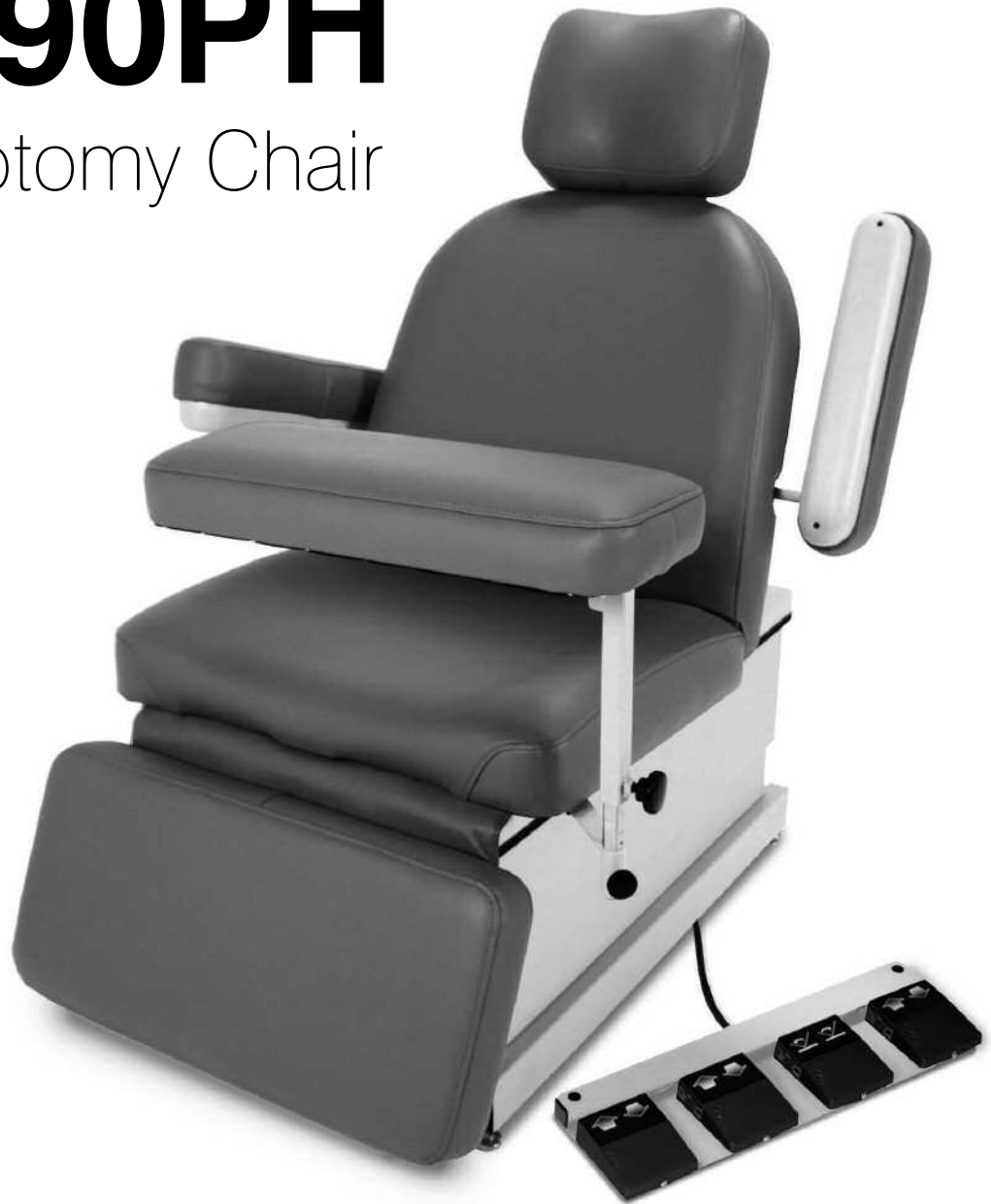


# Hill HA90PH

Phlebotomy Chair



  
Hill Laboratories  
COMPANY

REFERENCE MANUAL

# *Congratulations!*

And welcome to the Hill Laboratories family.

Hill Laboratories Company has been making

quality a family business since 1945.

Your Hill HA90PH 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.

# *At Your Service*

## The Hill Laboratories Guarantee

Your Hill Laboratories 90PH has been thoroughly tested and inspected before shipment. All parts are guaranteed against defect in materials for one full year from date of purchase. During this period, any such defect will be remedied by Hill Laboratories or by a factory-authorized repair service without charge.

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.

*Howard A. Hill*

President of Hill Laboratories Company

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

# Ready for use

Your Hill HA90PH comes ready to plug into any 115 outlet.



## Specifications

### Table Rating

400 lbs./Static Tested at 4x Rating/Rated at 250 lbs.\*

**Height Range** - 19"-34"

**Standard Width** - 26"

**Length Reclined** - 70"

### 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 (2 motor), 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**



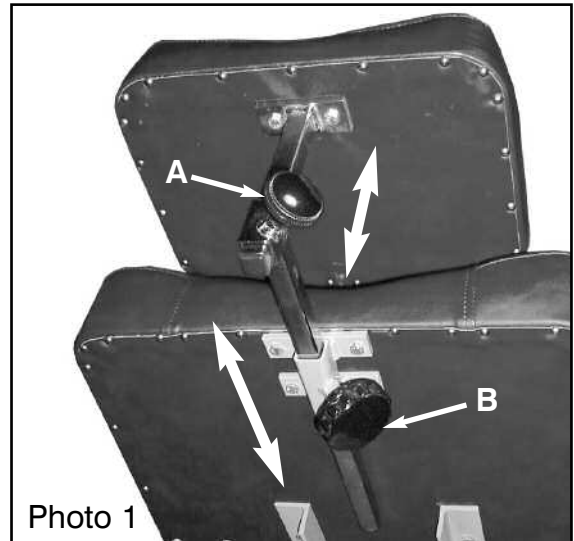
**Alternating Current  
Symbol**

# 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", photo 1) and adjust the cushion position. Retighten the knob. Adjustment for the up and down position is the same: Loosen knob ("B", Photo 1), adjust height; retighten knob.

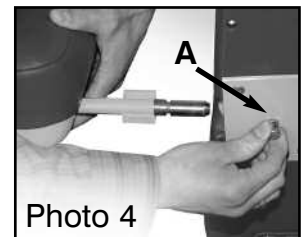
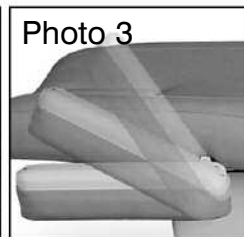
***Rated at 20 pounds and tested with 160 pounds.***



## Fold-Down, Removeable Armrests

When fold-down armrests

are positioned in the normal position (Photo 2), they are easily folded back by lifting from the bottom until the armrests rest parallel with the back cushion (Photo 3). Rated at 10 pounds and tested with 80 pounds. Photo 4 shows how the armrests are removed by pulling out on a spring-pin (see "A") and then pulling out on the armrest.

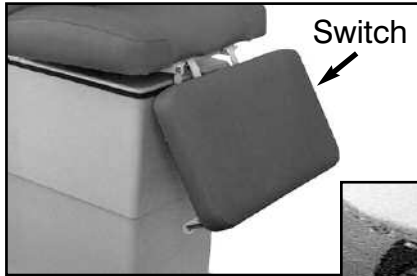


## Lap Armboard

The multi-positional armboard adjusts in height, angle and from front to back providing sturdy, fast and comfortable positioning for the patient. Loosen knobs for the various positional adjustments and tighten when in desired placement for optimum patient comfort.

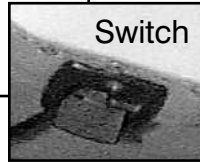


# Table Features



## 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.

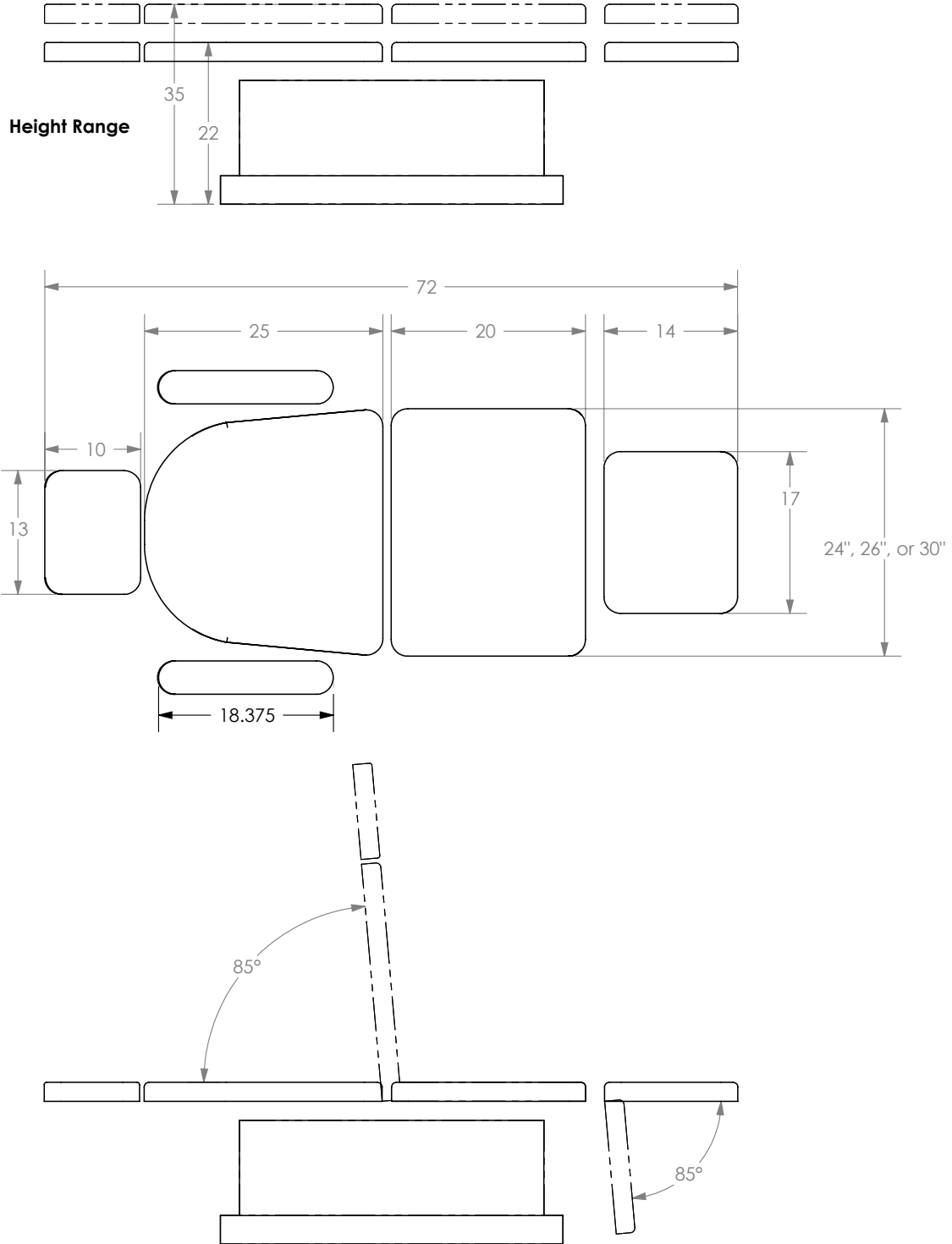


## Foot Pedals

Your HA90PH has up to four foot pedals 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 80° perpendicular.

# Diagrams

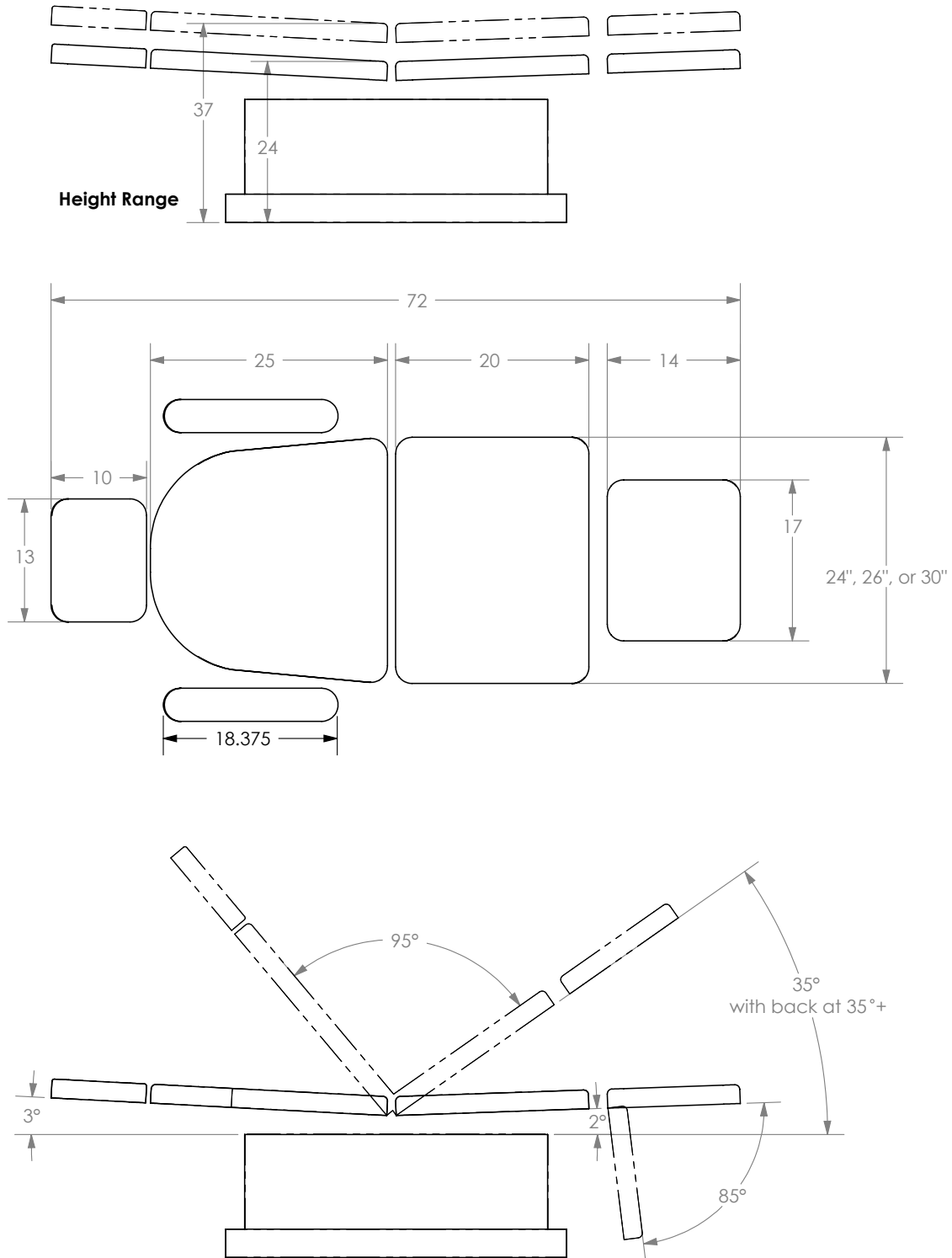
## 90PH - Dimensions





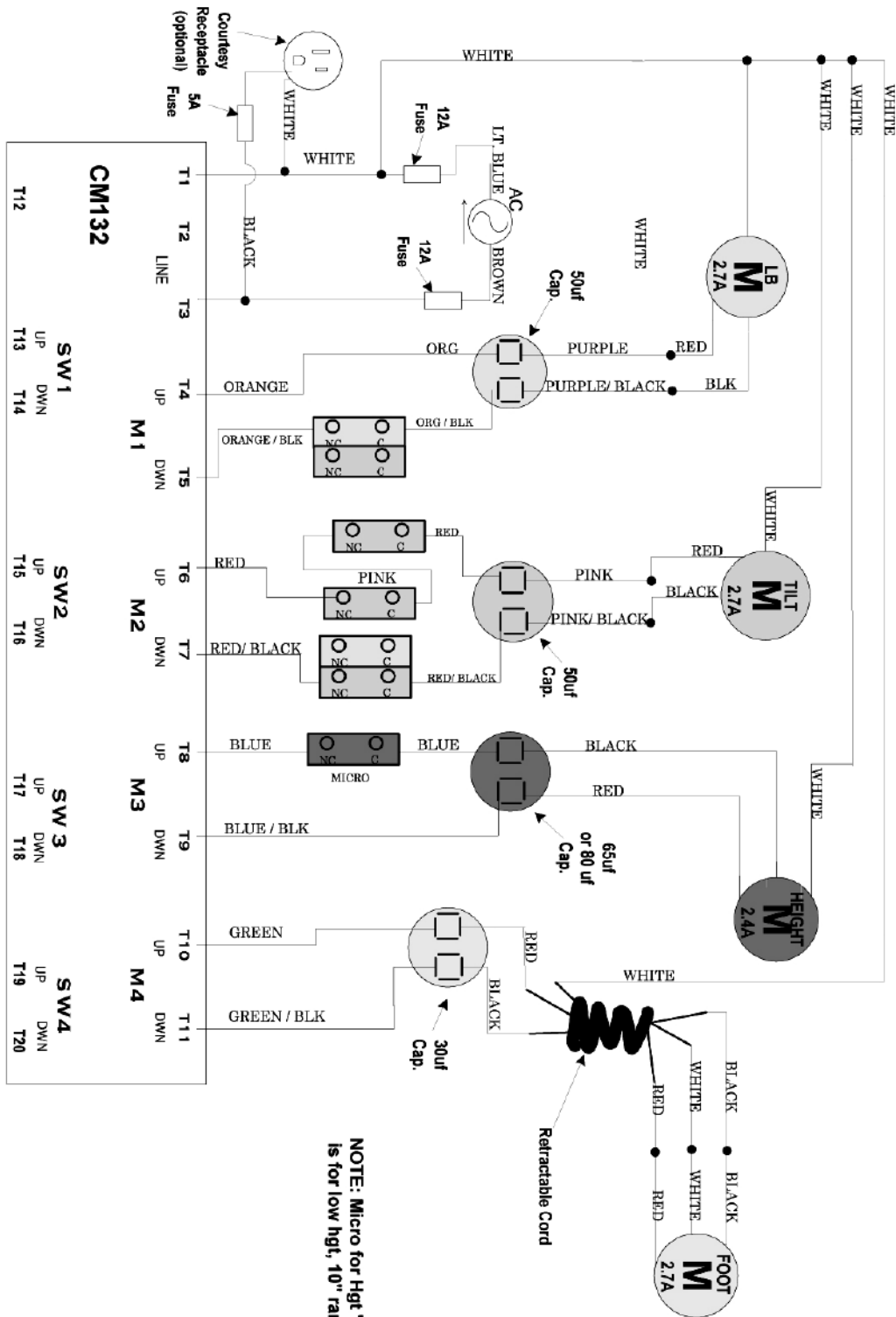
# Diagrams

## 90PH with Trendelenburg - Dimensions



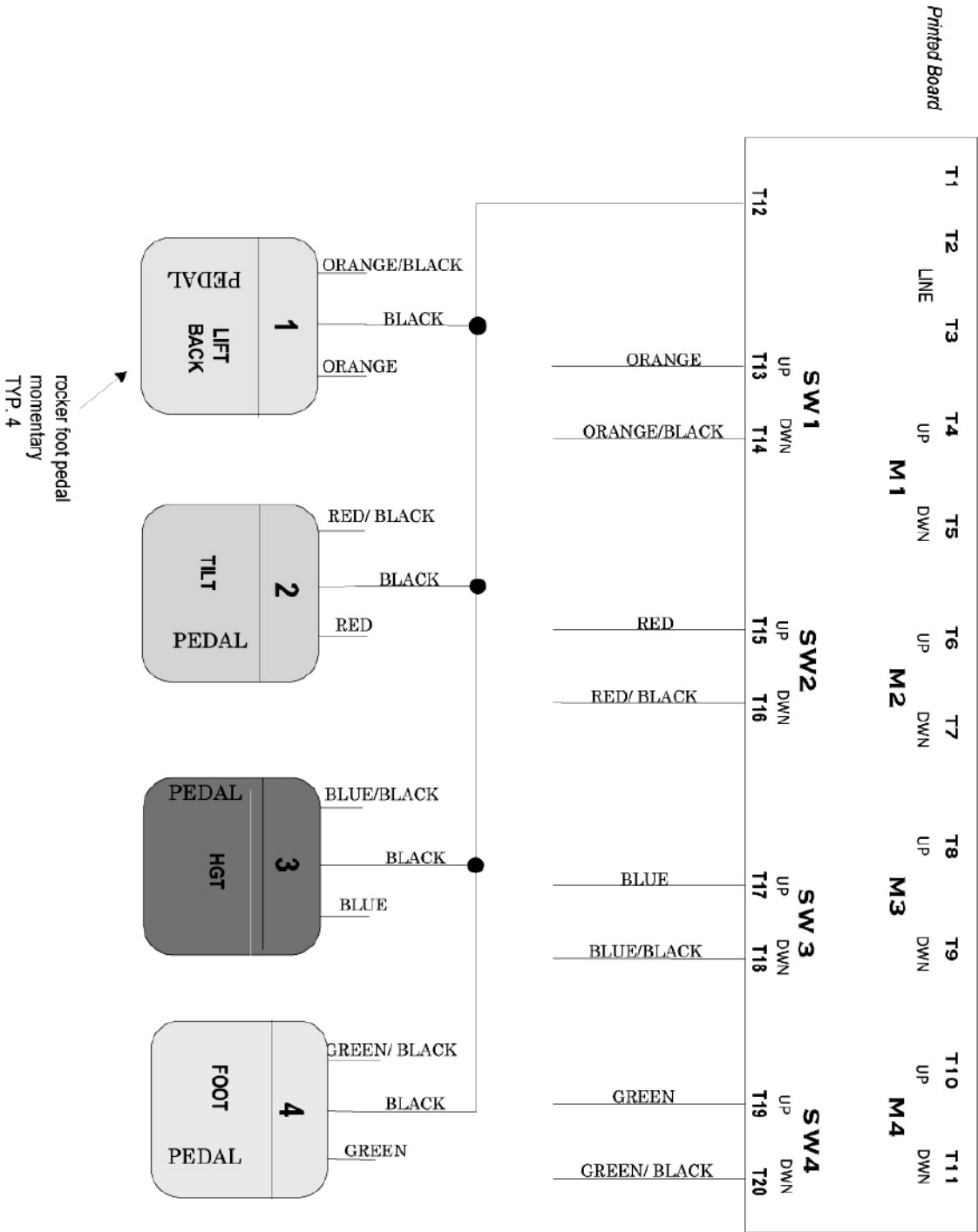
# Wiring Diagrams

## 4 Motor Diagram. Part 1



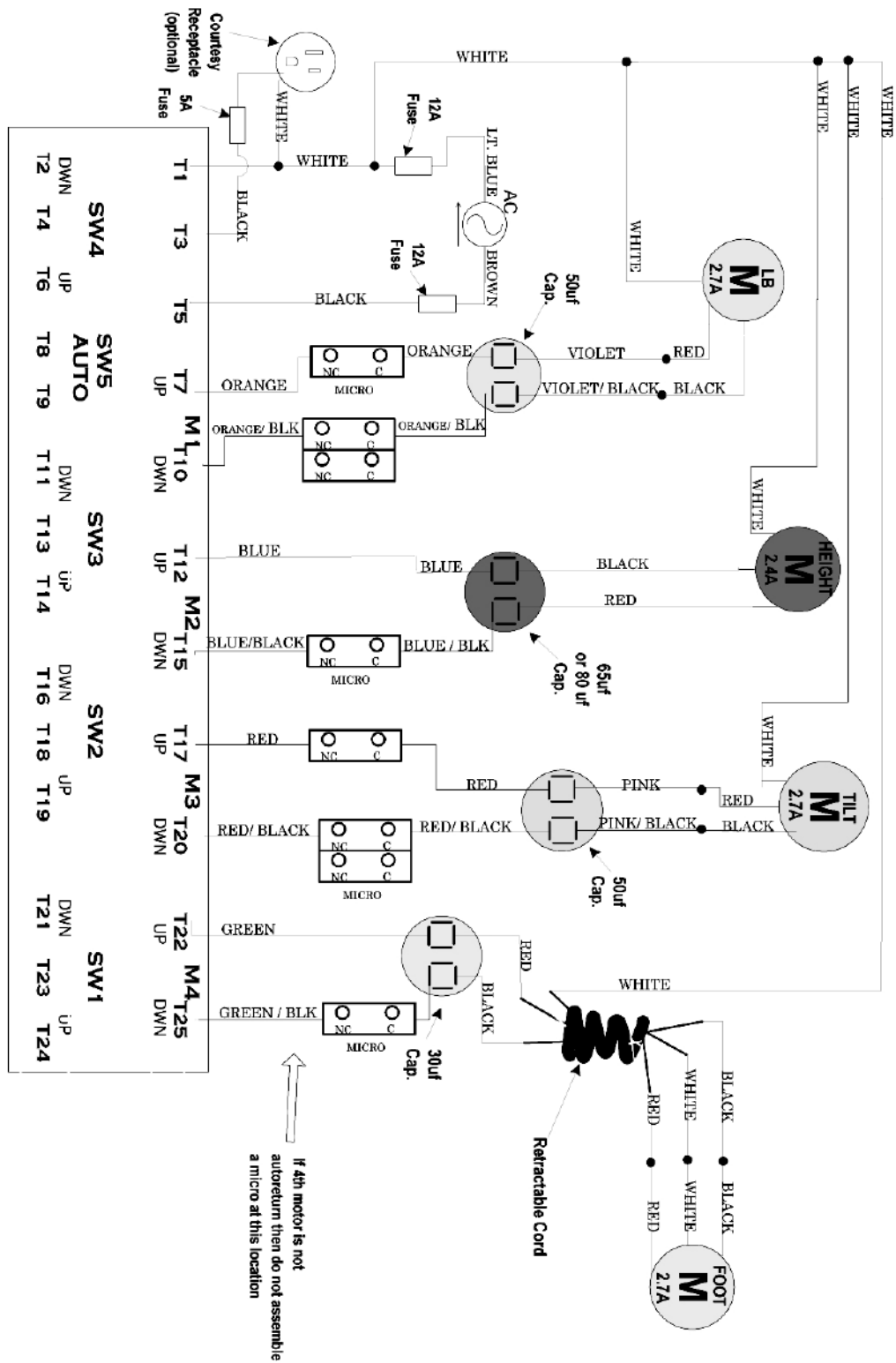
# Wiring Diagrams

## 4 Motor Diagram. Part 2



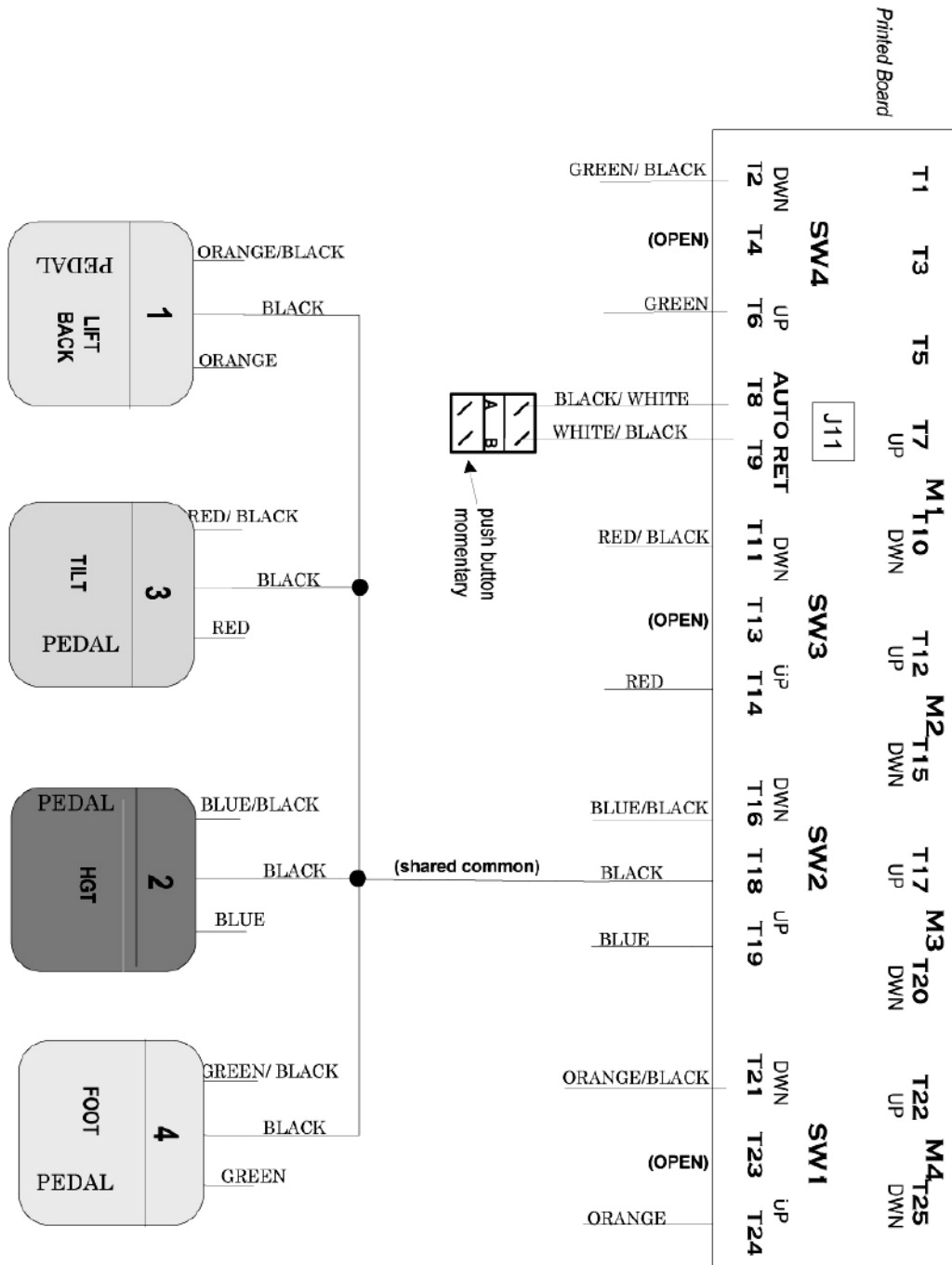
# Wiring Diagrams

## 4 Motor Diagram with Auto-Return, Part 1



# Wiring Diagrams

## 4 Motor Diagram with Auto-Return, Part 2



**NOTE:** 1. Join all pedal commons (black) in pedal assembly.  
 2. When a shunt is placed across the two pins at J11 then only motors 1,2,3 will respond to autoreturn

# Tables Manufactured by Hill Laboratories



Anatomotor  
Massage w/Traction



AFT Automatic  
Flexion



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  
Active Rehab Device



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