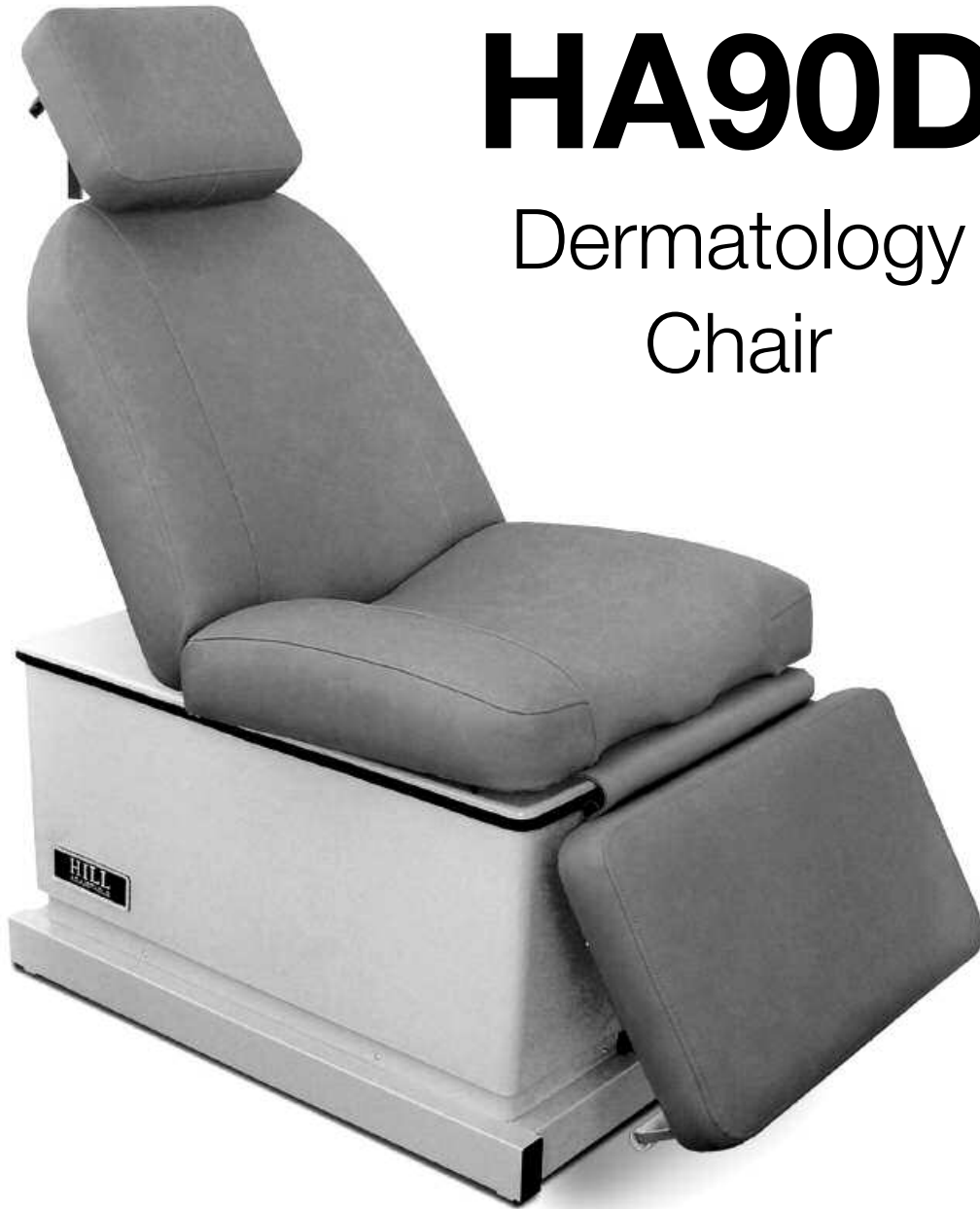


Hill HA90D

Dermatology
Chair




Hill Laboratories
COMPANY

REFERENCE MANUAL

Congratulations!

And welcome to the Hill Laboratories family.

HillLaboratories Company has been making

quality a family business since 1945.

Your Hill HA90D 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 HA90D comes ready to plug into any 115 outlet.



Specifications

- Table Rating - 250 lbs. / Static Tested at 4x Rating
- Rated at 250 pounds.
 - Height Range - 22"-35", with Trendelenburg - 24"-37"
 - Standard width 26"
 - Acrylic thermo-plastic base
 - Ultra-Cell® foam for comfort and shape retention
 - Shipping weight approximately 250 lbs.
 - Electric requirement - 115 v~, 60 Hz., 10 A., where specified - 230 v~, 50 Hz.
Optional receptacle in base - 115VAC, 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.)

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.

Symbols - Each of the symbols below are used in the Hill Wound Care Chair labeling. An explanation of each is below.



Attention Symbol
consult accompanying
documents



**Dangerous Voltage
Symbol**



**Type BF Applied
Part Symbol**



**Ground
Symbol**

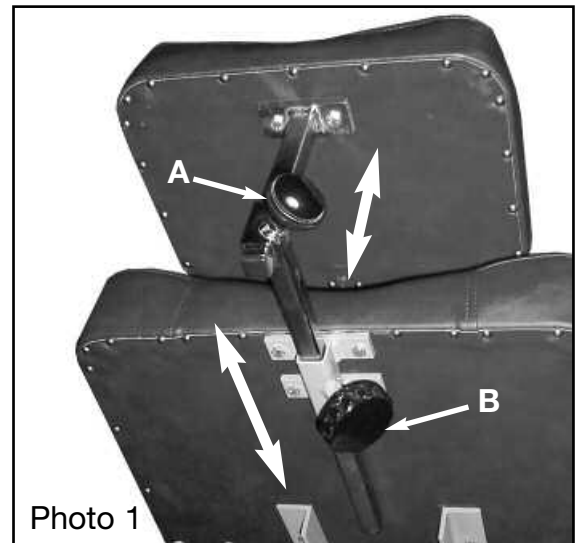


**Alternating Current
Symbol**

Table Features

Adjustable Headpiece

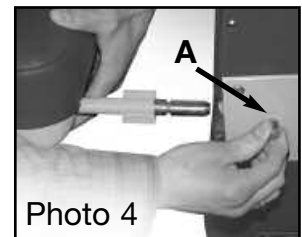
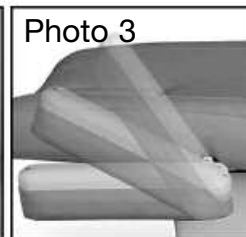
The adjusting headpiece can be moved in both the forward-backward direction and up-down. To adjust the forward position of the headpiece, loosen the black knob directly behind the head cushion ("A", photo 1) and adjust the cushion position. Then, retighten the knob. Repeat the same procedure for the up and down adjustment ("B", Photo 1). 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.



Examination Armboard



The Examination Armboard inserts from

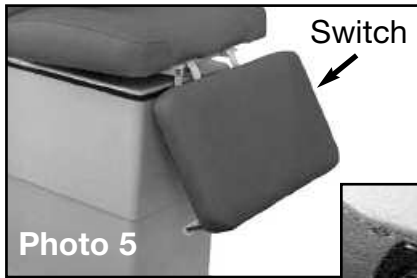
either side of the chair and tightens with a

knob. It can be positioned and locked at various angles vertically and horizontally as shown in the photos left and right.

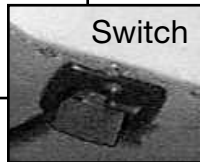
The Armboard is rated at 10 pounds/tested with 80 pounds.



Table Features



Switch



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.

Gooseneck Lamp with Receptacle

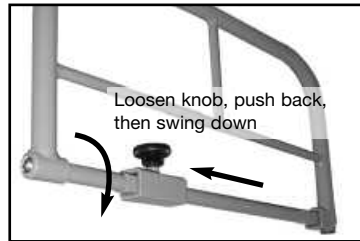
To use the Gooseneck Lamp, insert the post into the mounted receiver and tightened the knob, turning clockwise. The lamp plugs into the 120 Volt, 5 amp. rated receptacle located at the head-end of the chair—in the center of the table frame. Be careful to position the lamp wire so that it does not interfere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



Foot Pedals

Your HA90D 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 90° perpendicular.

Table Features



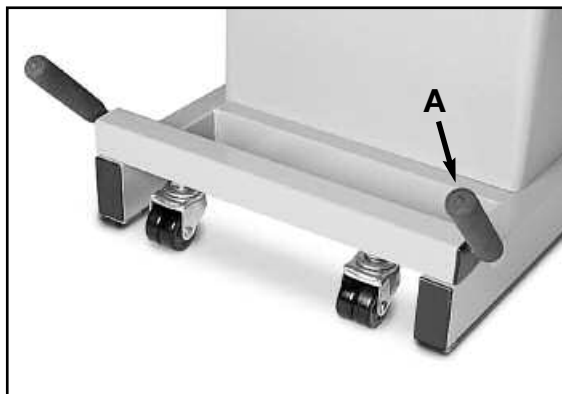
Side Rails

Optional side rails are mounted at each side of the seat cushion and very helpful for increased security while patient is posi-

tioned 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.

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

The optional casters are located at both ends of the table base and facilitate easy table movement. The photo shows the casters in the disengaged position. To move the table you must engage the casters at both ends of the base. To engage, push the handles ("A") down towards the

floor - this will lift the table approximately 1/2" from the floor. Repeat this step with the casters at the opposite end of the base. Move the table as desired. Be sure to disengage both sets of casters before using the table. **IMPORTANT:** Never move table with caster while anyone is on the table.

Trouble Shooting

Problem

The table is making a rumbling or grinding sound when the height is adjusted and/or the height of the table slips downward when height is not being adjusted.

Solution

The actuator brake needs to be replaced. Do the following to fix the problem:

1. Adjust the table height to the highest setting. Unplug the table, and then remove the screws around the bottom of the plastic base skirting. Next, lift the inside skirt up so that it slides inside the outside skirt and then attach the bottom of the skirts together with masking tape to keep them up and out of the way while you work.

IMPORTANT: It is not necessary to remove the actuator from the table as shown here.

2. Remove the 3/8" nuts that hold the black motor to the actuator casing (2 or 3 depending on the age of the table). Then lift the motor off the casing to expose the interior and the actuator brake (Photo 1)

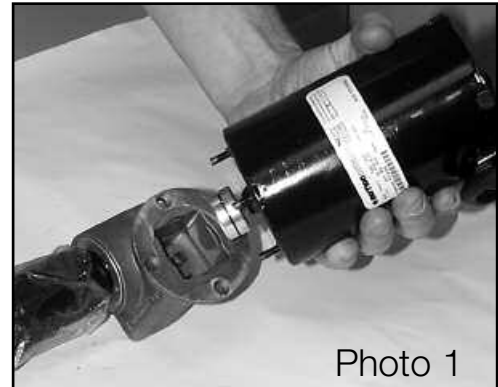


Photo 1

3. Using a needle nose pliers, grasp the actuator brake on both sides and carefully remove it and the gasket underneath (see photos 2 and 3).
4. Clean the inside the casing, removing any grease and dirt. Insert the new gasket and brake being careful that the "smooth side" of the brake is face up (photo 4).



Photo 2

5. Reattach the motor with nuts. Lower the inside skirt and secure with screws.

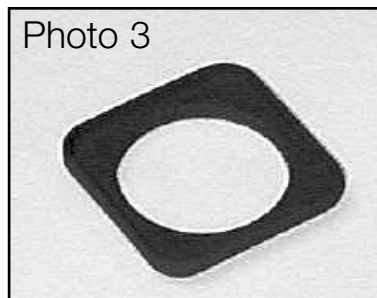


Photo 3

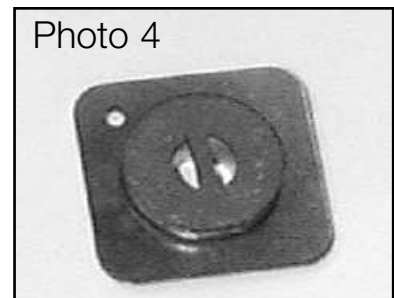


Photo 4

Trouble Shooting

Problem

The table is making a high-pitched winding sound when the height is adjusted.

Solution

The actuator worm gear needs to be replaced. Do the following to fix the problem:

IMPORTANT: It is not necessary to remove the actuator from the table as shown here!

1. Adjust the table height to the middle height setting. Unplug the table, and then gently tip the table up so that it stands on the foot end of the table.
2. Unscrew the cap by tapping counter clockwise with a hammer and nail (or punch), angling the nail into the depressions in the cap as shown in photo 2.
3. Take the new worm gear and coat it completely and generously with grease.
4. Take a rag and wrap it around the actuator shaft (see photo 4). Then with your hand on the rag, slowly rotate the shaft clockwise until the worm gear pops up from the casing as shown in photo 3. **IMPORTANT:** Only rotate the wormgear upwards enough to grasp it with your fingers but no further. Also, do not turn the actuator shaft after removing the wormgear as this will make placing the new one more difficult.
5. Remove the old worm gear.
6. Insert the new worm gear into the casing, aligning it with the "half-moon slots in the brake at the bottom of the hole. If the gear does not immediately align, then grasp the actuator shaft with your hand, and slightly rotate the shaft. The gear will pop into place as you move the shaft (it may be necessary to pull the gear back out and rotate the actuator slightly.) When the gear is properly seated, it should recede approximately 1/4 inch below the top of the casing in order to replace the cap.
7. While continuing to hold the actuator shaft, replace the cap and tighten.



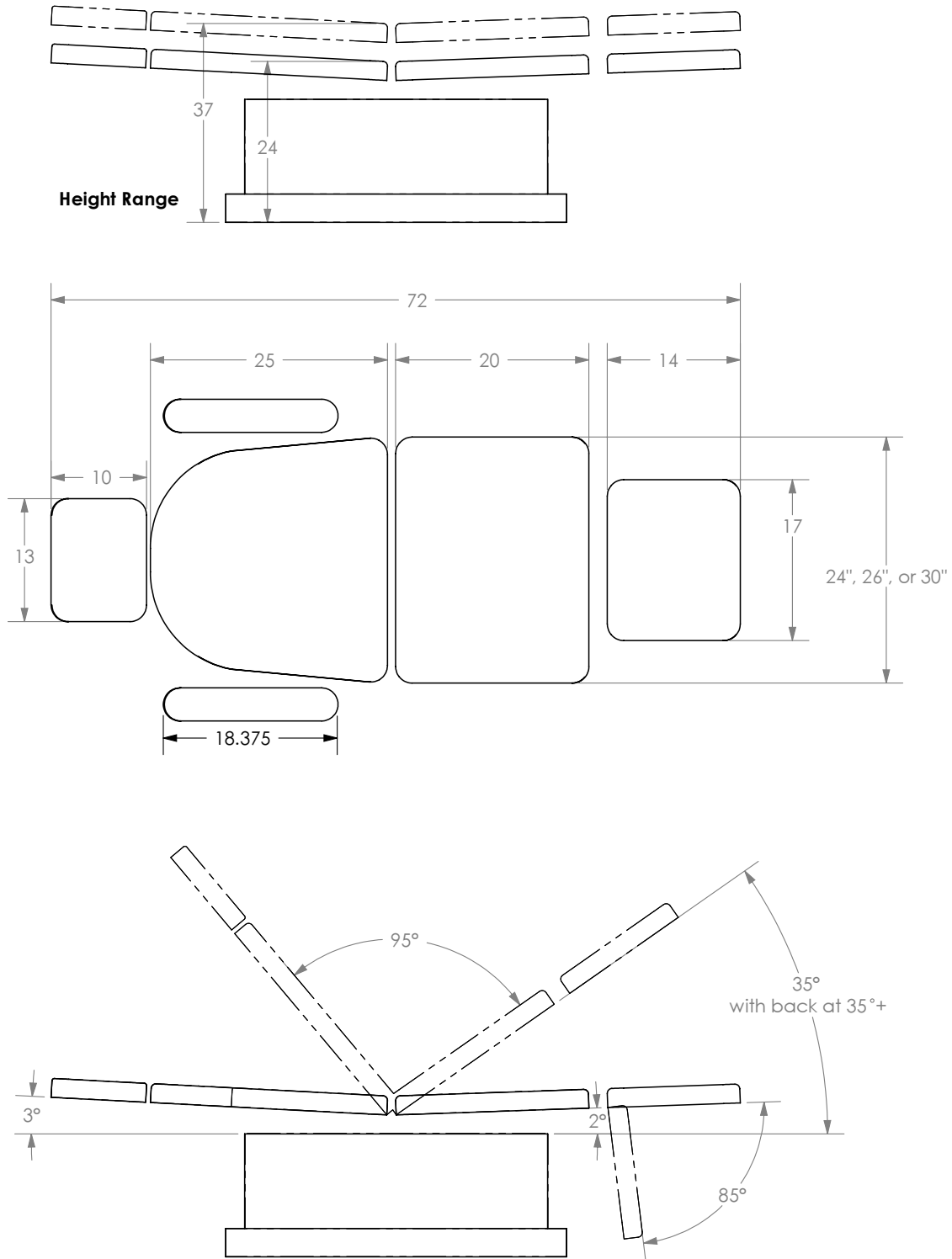
Photo 1



Photo 2

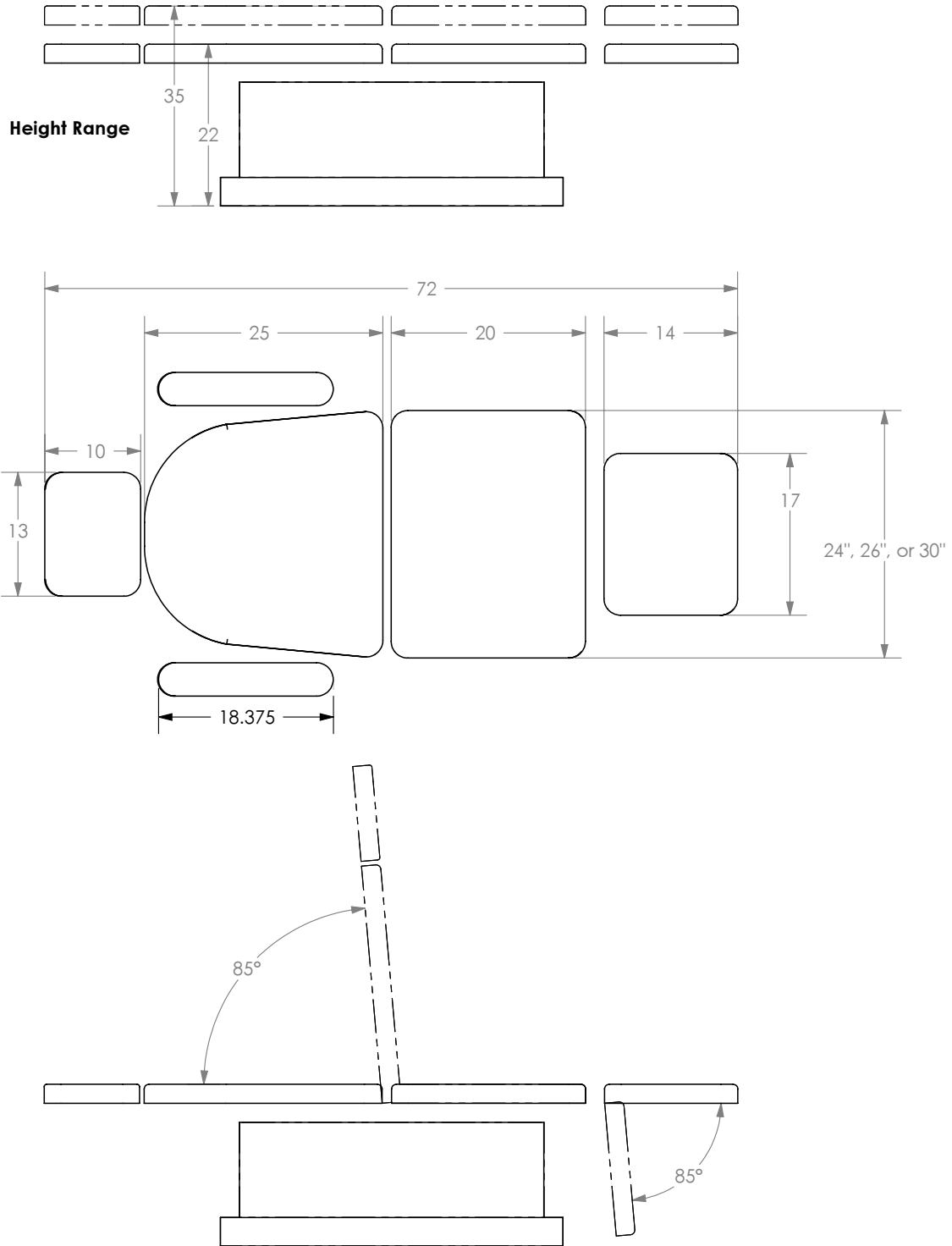
Diagrams

Derm, with Trendelenburg - Dimensions



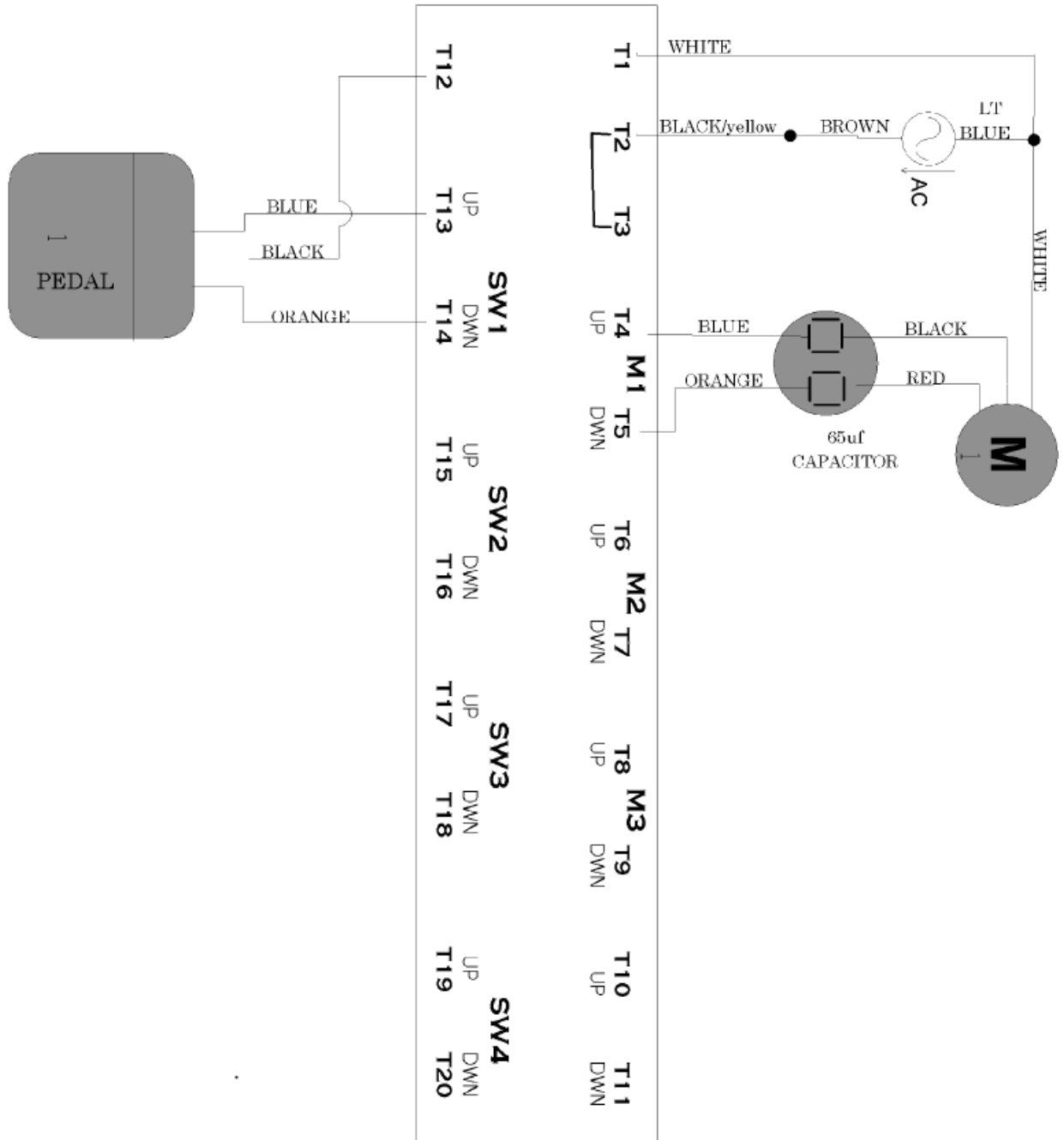
Diagrams

Derm - Dimensions



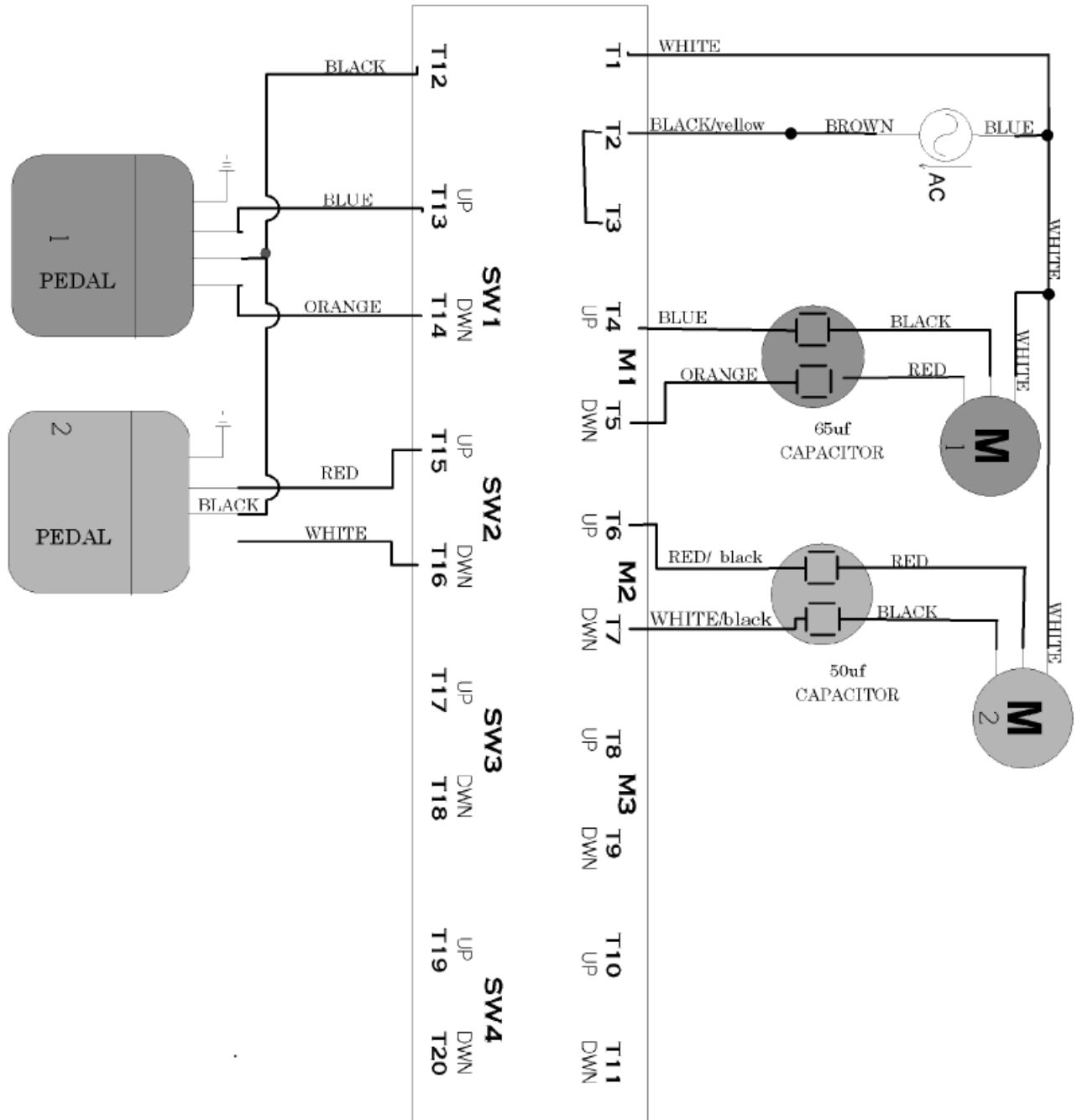
Wiring Diagrams

Single Motor Diagram



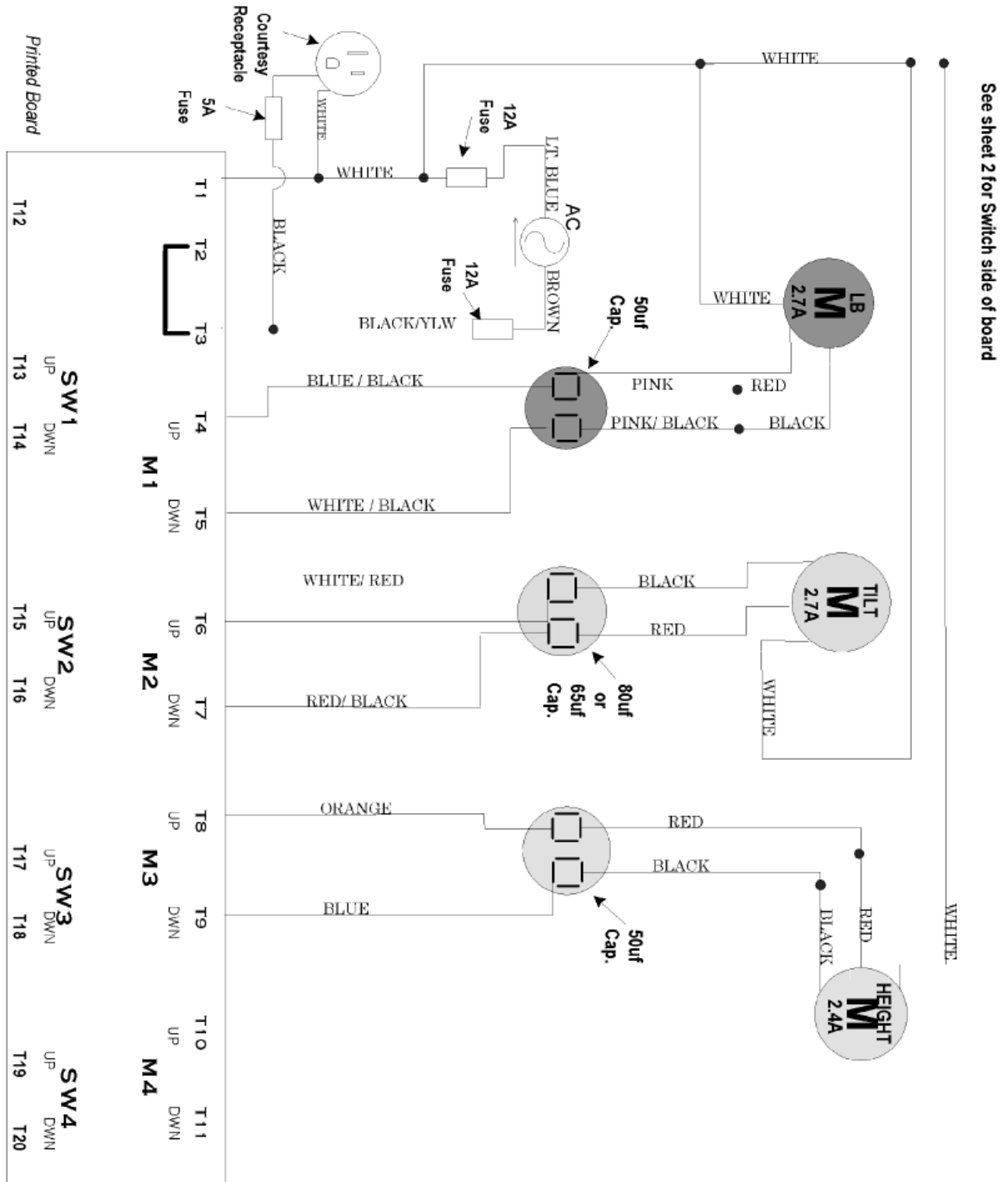
Wiring Diagrams

Two Motor Diagram



Wiring Diagrams

Three Motor Diagram



At Your Service

The Hill Laboratories Guarantee

Your Hill Laboratories 90D 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 _____

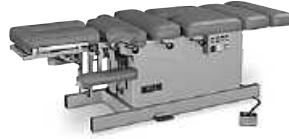
Tables Manufactured by Hill Laboratories



Anatomotor
Massage w/Traction



HA90C



Air-Drop HA90C



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



Occupational Table



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