

# The HA90

## TREATMENT TABLE



  
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 HA90 Table 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 Table will provide you with solid, reliable service

for many years to come.

# READY FOR USE

Your Hill HA90 comes ready to plug into any 110 outlet.

**Stain Resistant Vinyl Upholstery**



**Protective acrylic base**

Encloses all interior parts

**Electric Foot Pedal**  
for height adjustment



Manual Switch



**Manual or Electric Lift Back**

## SPECIFICATIONS

- Lifting capacity - 450 pounds
- Acrylic thermo-plastic base
- Ultra-Cell® foam for comfort and shape retention
- Electric requirement - 110 volts, 60 Hz., 2.7 amps.  
or where specified - 220 volts, 50 Hz.  
Electric Lift-Back 5.1 amps.
- Height Range - 22"-35"
- Shipping weight approximately 250 lbs.
- Standard width 24", optional 27" and 30"

# TABLE CARE

This page and the following pages contain some helpful suggestions for keeping your Hill Table in excellent working order plus some technical drawings and service sheets for instruction in the event of a problem.

## 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 soap and water 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) but avoid everyday use of products that contain alcohol as they will eventually cause the material to break down. 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.

# TROUBLE SHOOTING

## Problem

The table is making a high-pitched squealing sound, usually when reaching the high end of the stroke.

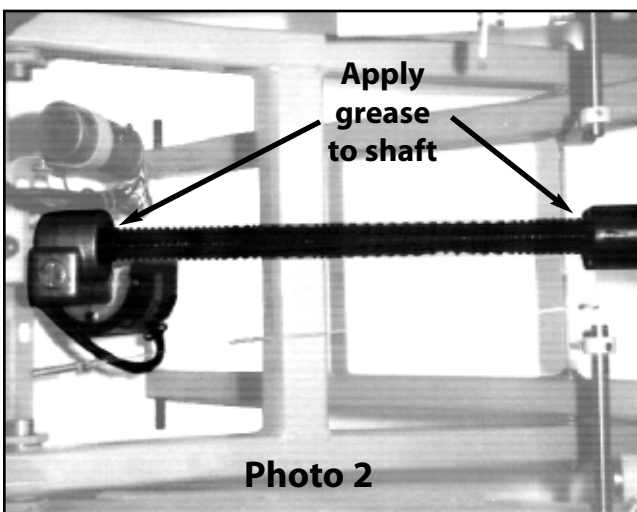
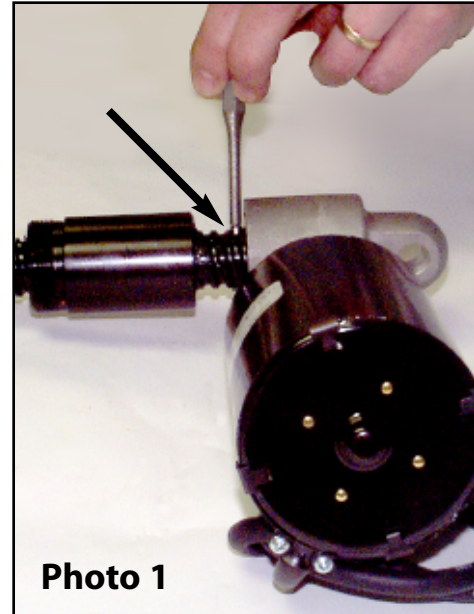
## Solution

The actuator pin needs adjustment.

Do the following to fix the problem:

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

1. With the foot pedal, adjust the table to the down position. Unplug the table.
2. Gently roll the table over on its side to expose the underside of the base.
3. Locate the pin on the actuator shaft (see photo 1). Notice that it protrudes out both sides of the shaft. Use a hammer and a punch (or screwdriver) to gently tap the pin on one side to make it protrude further out the opposite side of the shaft. Now plug the table back in and run the actuator to see if the squealing has stopped. If not, tap the pin gently from either side until it does.
4. Apply grease to both sides of the actuator shaft as shown in photo 2.



# 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.

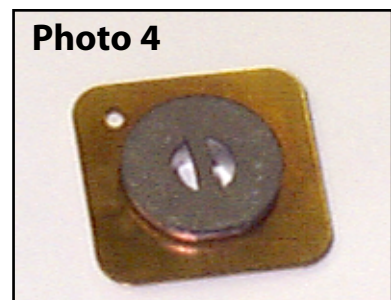
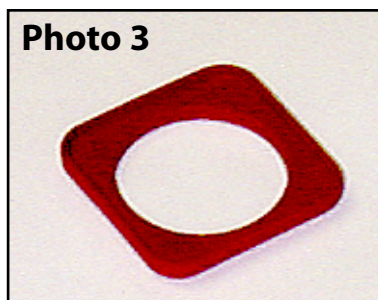
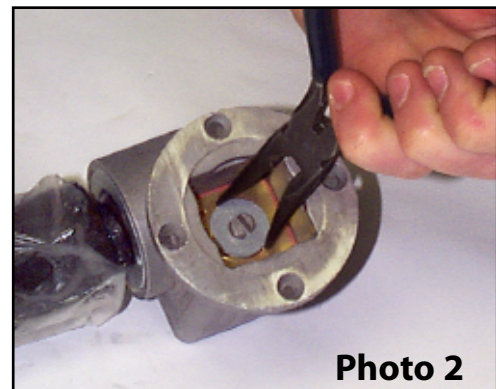
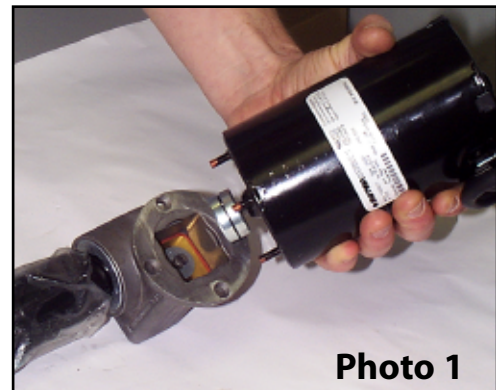
## Solution

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



# 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. If your table has a grease fitting (see Photo 1), first remove it with a pliers or adjustable wrench.

3. For actuators that do not have a grease fitting, 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.

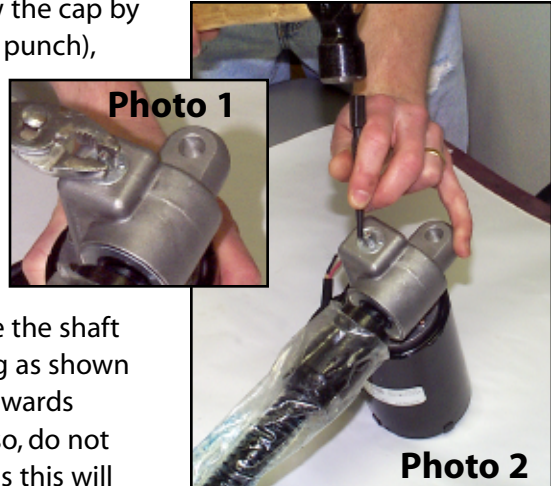
4. Take the new worm gear and coat it completely and generously with grease.

5. 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 worm gear upwards enough to grasp it with your fingers but no further. Also, do not turn the actuator shaft after removing the worm gear as this will make placing the new one more difficult.

6. Remove the old worm gear.

7. 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.

8. While continuing to hold the actuator shaft, replace the cap and tighten.



# *At Your Service*

## **THE HILL LABORATORIES GUARANTEE**

Your Hill Laboratories HA90 Table 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.

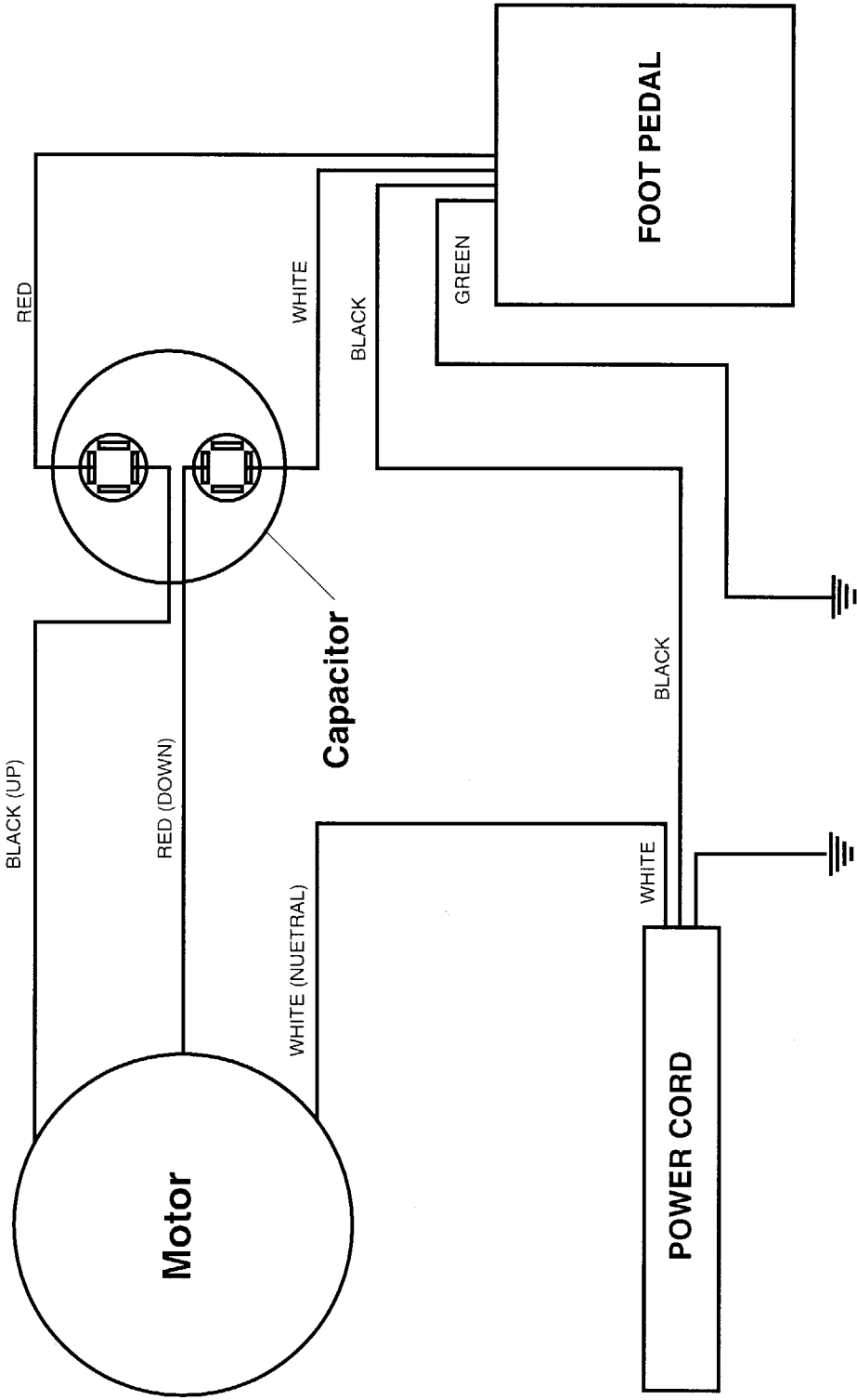
We appreciate your business and your confidence in our product. Our aim is to provide you with excellent service and satisfaction for many years to come.

*Howard A. Hill*

President of Hill Laboratories Company

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

# WIRING DIAGRAM



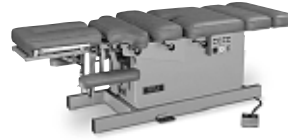
# Tables Manufactured by Hill Laboratories



Anatomotor  
Massage w/Traction



HA90C



Air-Drop HA90C



Air-Flex  
w/4 Drops



A-F-T  
Automatic Flexion Table



HA90



HA90 Lift Back



Mat Table



PT Mobilization



Rath Mechanical  
McKenzie Technique



Hi-Lo Tilting



Repex Table  
McKenzie Technique



HA90E



90MD



Dermatology Chair



Wound Care Chair



Podiatry Model



Counterstrain  
(multi-positional)



HA90 Tilt  
Vascular/Diagnostic



Occupational Table



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