Hill Anatomotor Table

Owner's Manual

Hill Laboratories COMPANY

Quality and Innovation Since 1945.

Congratulations!

And welcome to the Hill Laboratories family.

Hill Laboratories has been making quality a family business since 1945. Your new Anatomotor is built on an established Hill tradition of innovation and value. Our reputation rests on the confidence that *your* Hill Table will strengthen this legacy by providing you with solid, reliable service for many years to come.

At Your Service

The Hill Laboratories Guarantee.

Your Hill Laboratories table has been thoroughly tested and inspected before shipment. All parts are guaranteed against defect in materials for one full year from the 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.

For tables beyond the warranty period, our service technicians are standing by to serve you. They can be reached toll-free at 1-877-445-5020 from 9 am - 5 pm E.S.T., Monday through Friday. After hours, please leave your name, phone number and a brief description of your concern. Your call will be returned promptly the next business day.

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

President, Hill Laboratories

Hill Anatomotor Manual

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Product Features

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6. Foot pad
7. Traction Control Unit
8. Counter Traction Bracket
9. Counter Traction Unit
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11. Control Panel (controls time, heat, vibration, tilt and speed options)
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17. Cervical traction device

***Traction Stool (not shown)

1.2 Specifications

- Model #100: Includes Traction, Back and Leg Rollers
- Model #200: Rollers Only
- Optional Features: Can be added only at the time of manufacture
- Height: 22” - 30” as ordered (height cannot be altered once manufactured)
- Width of Table Top: Standard 21", 24" with variable speed. Stationary - 24”
- Length of Table Top: 6’3”
- Electrical Requirements: 115 V - 60 cycle or 230 V - 50 cycle if specified
- Space Requirement: Model #100 - 9’; Model #200 - 7’3”
  Model ST2 or ST3 (Stationary) - 6’3”
- Weight (Uncrated): Model #100 - 265 lbs; Model #200 - 225 lbs.
- Shipping Weight: Model #100 - 320 lbs; Model #200 - 280 lbs.

Table Care

2.1 Cleaning your Table

Hill table upholstery may be cleaned with Hill Laboratories' Vinyl and Leather Cleaner or any household dishwashing liquid mixed with water. Hill also offers Protex™ Disinfectant Spray and wipes to protect against pathogens, such as MRSA, HIV, Staph and the H1N1 Swine Flu Virus. Many stubborn stains can be removed by applying 91% rubbing alcohol (isopropyl alcohol) to the stain and wiping with a dry, soft, lint-free cotton cloth, towel or soft bristle brush. Be sure to rinse thoroughly with water.

Caution: Some solvents are highly flammable; 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.

2.2 Caution and Symbol Explanation

Caution: Children should never be left alone in a room with the table but should always be accompanied by an adult.

Caution: Always unplug the table before performing any maintenance.

Caution: Check table once a year to make sure all internal and external bolts are secure.

Caution: The power cord should be located to avoid risk of tripping or having objects rolled over or placed on top of it. Damaged cords should be replaced with another of hospital grade.

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

Symbols **- Each of the symbols below are used in your table 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

Don't Touch Symbol

Basic Table Functions

Note: See a full demonstration video at www.HillLabs.com/Anatomotor-Video

3.1 Anatomotor Controls

The follow section describes each of the Anatomotor controls with a brief explanation of use. Thoroughly familiarize yourself with the controls before operating the table.

Note: Not all models are equipped with all the control features listed below.

1. Heat Button
2. Tilt Top (indicator light)
3. Vibration Button
4. Cervical-OFF-Lumbar Switch
5. Timer
6. Upper and Lower Roller Adjustment
7. Variable Speed Dial

Heat Button (Optional)

The heat control switch activates a metal strip heater located in the frame below the rollers. A mild heat is radiated up through the rollers to the top pad where it averages approximately 105°F (40° C), thus providing a soothing warmth to the spinal area. The heating unit takes approximately 5 to 10 minutes to warm up and may be left on all day, if so desired. The heat's effectiveness is reduced if turned on and off for each patient.

2. Tilt Top (Optional) (Indicator Light)

The Tilt-Top Light comes on when the Tilt-Top is in use. To raise the Tilt Top:

1. Remove the filler block. Failure to do so will result in damage to the table.
2. Set the timer to the "off" position.
3. Push the cervical-lumbar switch to "lumbar" so that the table top glides to the foot end. The tilt top will not raise unless it is in this position.
4. Press the foot pedal control to the desired position. The right side will raise the top; left side will lower.

5. The indicator light will illuminate as soon as the tilt top is activated. Due to internal safety switches, the table top will not glide back and forth until the top is completely lowered and the indicator light is out.
6. The timer must be reset in order for the table top to glide back and forth.

Note: It is often more comfortable if the patient turns to their side, knees slightly bent, before activating the tilt top.

3. Vibration Button (Optional)

The vibrator unit administers a soothing vibration at a single speed of 3200 cycles per minute. The vibrator is located on the inside frame so that most of the vibration is felt through the rollers. Occasionally, excessive vibration noise may occur due to some types of flooring. If you experience this problem, place rubber pads or small pieces of carpeting under each foot of the table.

4. Cervical-Lumbar Switch

The Cervical-Lumbar Switch controls where the gliding top stops at the end of a treatment cycle. With the timer off and set to “Cervical”, the table top will stop at the cervical end of the table. Similarly, when set to “Lumbar” the table top will stop at the lumbar end. When used properly, the Cervical-Lumbar Switch ensures that a patient is never left under constant traction pull at the end of a treatment.

Setting the Cervical-Lumbar Switch to the "OFF" position will stop the table instantly. It also allows the operator to leave the patient in constant traction when desired. When using only the rollers, the switch may be turned to either the cervical or lumbar position. Both of these are considered "ON" positions. The table will not glide back and forth without both the timer and the Cervical-Lumbar Switch placed in an "ON" position. Tables with rollers only will usually have an "ON/OFF" switch instead of the Cervical-Lumbar Switch.

5. Timer

The timer sets the treatment time for the patient. The timer can be set from 1 to 30 minutes by turning the dial clockwise to the appropriate number. The average treatment time is 7 to 10 minutes. A bell will ring at the end of treatment. The operator may stop the table before the timer rings by turning the timer to the "OFF" position. This will not harm the timer in any way.

6. Upper and Lower Roller Controls

The back roller handles raise and lower the thoracic and lumbar rollers. The rollers are locked in place by turning the handle counter-clockwise to the higher numbers. When the desired roller height is reached, move the Lock Lever to the left (photo 1, A) and while holding it there, release your hand from the roller handle to lock (photo 1, B). To lower the rollers, push the handle toward the higher numbers without touching the lock lever, then return the handle to the down position. (Refer to back roller section for detailed information.)

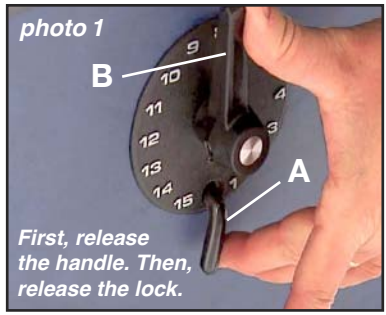


photo 1

First, release the handle. Then, release the lock.

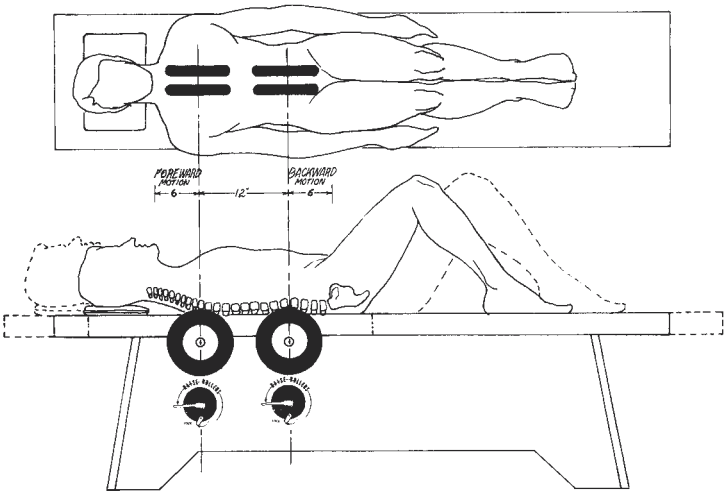
7. Variable Speed Control (Optional)

The speed control dial can be turned to slow the movement of the table top from 4.5 to 15 seconds. This allows the traction to be applied for a longer time period. When treating with rollers only, the speed control should be set on 4.5 seconds.

Massage and Passive Motion

A Gliding Top

The Anatomotor top glides back and forth just under the normal respiration rate, moving the patient over the rollers approximately eight cycles per minute. This rate of massage induces relaxation and is very important during traction to achieve a more effective treatment in a shorter period of time. The rollers are spaced 12 in. (30.5 cm) apart. The gliding top moves 6 in. (15.25 cm) off center position in both directions covering a 24 in. (61 cm) span of the spinal area.



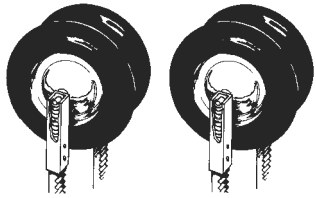
4.1 Back Rollers

The two sets of semi-pneumatic back rollers are housed on springs and are designed to straddle the spine. They offer a controlled deep kneading massage and spinal mobilization to each articulation of the spine. The adjustable back rollers allow a controlled treatment for the kyphotic and lordotic curvature of the spine. Since the rollers are spring mounted, they will depress at approximately 30 lbs. (11 kg.) of pressure reducing the possibility of traumatizing the patient. However, care should be taken to make certain that the roller height is comfortable for each patient.

Using Back Rollers

1. Remove the Filler Block (see page 2, #21)
2. Position the patient so that the full spinal area is over the opening of the table top (see illustration on previous page).

2. It is generally recommended that the patient flex his or her legs while keeping his or her feet flat on the foot pad. This position flattens the normal lumbar curvature, thus providing a more equalized roller pressure in that area.
3. Set the timer and switch to the "on" position (either cervical or lumbar).



4. The roller settings can be determined by the feeling of resistance through the back roller handle. As the patient is gliding back and forth, raise the rollers until a firm resistance is felt, then lock in position as described in previous section “Basic Table Functions, *Upper and Lower Roller Controls*”. Roller settings will vary according to a patient's tolerance and condition.
5. Determining where the back rollers are treating the patient is easy. While the table is in motion, locate the center axis of the roller handle and follow straight up.
6. The patient may be positioned higher or lower on the table top depending on his or her height and where the treatment is required. The position of the back rollers is very important when using traction (see “Using Traction”).
7. The numbers on the Roller Control Dials are used as reference to aid in maintaining and recording uniform levels of treatment. Each increase in number represents 1/6 in. (0.4 cm) height adjustment.

4.2 Leg Rollers

The reciprocating action of the Anatomotor top also provides motion for leg massage and passive exercise to the knees and hips. The leg rollers can be placed into any one of the four positions of the leg roller brackets. The various positions are designed to accommodate the different heights of patients and to massage different areas of the legs. As with any treatment, the leg massage should be used with the doctors discretion.


photo 2

Caution: Leg rollers should be avoided with patients who have severe varicosity or phlebitis.


photo 3

Using Leg Roller Massage

1. With the timer off, set the switch to the cervical position.
2. Position the patient comfortably on the table top (shoes removed).
3. Place the leg rollers beneath the patient's legs in the desired treatment area. For the average height patient, position #2 is for the calf area; Position #4 is for the upper thigh area.
4. Center the rubber leg rollers on the bar and rest the patient's legs on top of the rollers.
5. Place filler block, firm side up, under the heels of the patient. This will result in a milder massage to the leg area.

6. To start the treatment, set the timer (approx. 5 to 7 min.). The patient will instantly receive the reciprocating deep kneading massage. If less pressure on the legs is desired, a pillow may be placed on top of the filler block, raising the heels. The filler block may be removed if a more vigorous massage is desired.
7. The timer will ring at the end of the treatment.

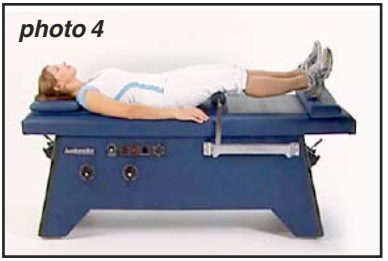


photo 4

Procedure for Venous Return Massage

A venous return can be described as a one-way milking action which is designed to push the blood and lymph towards the heart. Administering this procedure to the lower leg will help drain the ankle area of fluids. The operator should follow the same procedure as for leg roller massage. Generally, position the leg rollers in position #2 of the leg roller brackets, and set the timer to approximately 5 to 7 minutes. The patient should flex his or her knees slightly as the table top glides to the head end (photo 5) and then place his or his or her legs in contact with the leg rollers as the table top glides to the foot end (photo 6).


photo 5


photo 6

4.3 Passive Exercise

The leg rollers can also be used to create passive exercise in the knee and hip area. The degree of knee flexion the patient receives is correlated to the position of the leg rollers in the leg roller brackets. Determine how much flexion the patient can tolerate and set the leg rollers accordingly. Generally, position #2 is a good starting point. Increased flexion can be achieved during the treatment by having the patient move down toward the leg roller bar or by moving the bar to position #3 or #4.

Procedures for Passive Exercise

1. Position the patient so the full spinal area is in the opening of the table top. Stop the top in the Lumbar position. Spread the leg rollers apart and place the feet on the axle (preferably with shoes off).
2. Set the timer to approximately 7 to 10 minutes and the switch to the "on" (either cervical or lumbar) position.


photo 7

3. Both sets of back rollers can be used, and the lower set of rollers will create a mild rocking of the sacrum.

Using Traction

5.1 How the Traction Control Unit Works

The Hill Anatomotor traction table provides both intermittent and constant traction. The traction control unit works on the principle of a friction disc brake. The harness is attached to the patient and the traction control unit. Intermittent traction occurs through the reciprocating motion of the gliding top. The top moves against the controlled friction created by the traction control unit. Constant traction is achieved by turning the cervical-lumbar switch off during the pull cycle of traction.

Regulating Traction Pull

photo 8

To regulate tension, turn the calibrated hand dial clockwise. The top number of the dial corresponding to the pointer is the amount of traction being applied (photo 8, A). Due to the return springs on each side of the traction unit, there is a built-in resistance factor of approximately 7 to 10 lbs. (3 to 4 kg.). Therefore, this is the minimum pull you can achieve.

The hand dial is self-locking to the position you select. As you dial to the high numbers, the hand dial will become slightly harder to turn, which also indicates increased pull is being applied.

Important! Before treating any patient, make absolutely sure that the hand dial is turned all the way down, counter-clockwise, to 10 LBS. This assures that each patient's treatment will start at the minimum pull. ALSO, the dial may be adjusted *during a treatment* BUT PREFERABLY ONLY IN THE REST CYCLE.

5.2 Traction Tips

The Effective Way to Determine Traction Pull

The most effective way to administer traction is to feel by hand the joint or spinal area to which traction is being applied. While palpating the area, the operator can easily feel joint separation and muscle structure. After determining the desired pull for each individual patient, the dialed number can be recorded and used as a reference point for subsequent treatments.

Reduce Traction Treatment Time with Back Rollers

To achieve good results during traction, it is important to have the patient physically and mentally relaxed. Therefore, the combination of back rollers during traction offers many benefits and advantages including the reduction of treatment time to approximately 10 to 12 minutes.

Other Factors to Consider when Using Traction

1. Patient weight and muscle structure will alter the amount of pull required.
2. Back rollers relax muscles and reduce the need for the traction to overcome much of the muscle tautness.
3. The back rollers will decrease the amount of friction of the body weight on the surface of the table top. Therefore, when the back rollers are used in conjunction with traction, less poundage is required.
4. Lumbar back rollers can create a pelvic tilt or lumbar flexion when using lumbar traction.
5. Various traction angles and the position of the patient (such as placing legs on a stool for lumbar traction) will often change the amount of traction required.

Intermittent vs. Constant Traction

It is important to determine when to use intermittent traction versus constant traction. Because intermittent traction increases circulation, it will often aggravate an acute condition. Therefore, if traction is desired for an acute patient, most doctors recommend that constant traction be applied. The first treatment should be of short duration and low poundage. For the variable-speed model, the speed can be set for a longer cycle at pull and rest.

5.3 Preparing the Anatomotor for Traction

Prior to administering any form of traction, the following steps must be followed.

1. Set the Timer to "OFF" (page 4, #5) and set the Cervical-Lumbar Switch in the opposite direction of the Traction Control Unit placement. For example, to place the Traction Unit at the lumbar (or foot) end of the table, set the Cervical-Lumbar Switch (page 4, #4) to "CERVICAL" so that the table top will automatically stop at the cervical (or head) end. This will allow placement of the traction unit at the foot-end. Similarly, set the C/L switch to "LUMBAR" if the traction unit is to be placed at the cervical end.

photo 9

2. By pushing up on the lever (photo 9, A) the Traction Control Unit can now be pushed squarely into the Base Plate. There is no need to push down on the lever lock because it is self-locking.
   Important! Ensure that the Hand Dial is set at the minimum weight.
3. With the Timer still in the OFF position, set the Cervical-Lumbar Switch to correspond with the traction unit's present position. The top will then move and stop next to the traction unit.
4. If countertraction is needed, consult following section "Treating with Traction" then insert the Countertraction Unit into the Countertraction Bracket as shown in photo 10. The Countertraction Unit and the Traction Control Unit should never be positioned at the same end of the table at the same time.

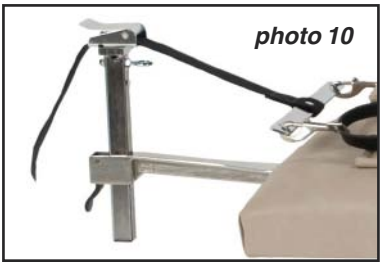
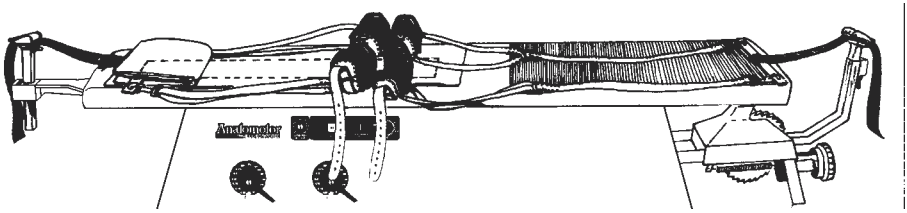


photo 10

5.4 Treating with Traction

Lumbar Traction (applied with Thoracic and Iliac Harnesses)

When using the thoracic and iliac harnesses, traction is being applied primarily to the 4th and 5th lumbar area. As you dial to the higher weight, you can determine the amount of pull required by checking the area to which you are applying traction. This is done by rocking the patient's knees, which are flexed, to one side so that you may feel by hand the lumbar spine. During the pull cycle, you can determine how much weight is required to create a mild separation of the lumbar spine. The average poundage used is approximately 1/2 the body weight. This will vary according to muscle structure and distribution of body weight.



Applying Traction with Thoracic and Iliac Harnesses

1. Follow steps 1 to 4 under section "Section 5.3, Preparing the Anatomotor for Traction." *The "T" Buckle (See "Parts" #129A, page 20-21) should be lowered all the way down in the traction unit.*
2. Place the harnesses on the table as illustrated above.
3. Position the patient on the table so the base of the sacrum is approximately 5 in. (13 cm) above the lower cut-out section of the table top. Place arms through the looped straps and attach the thoracic harness below the lower rib cage. The iliac harness generally overlaps the thoracic harness (up to the bottom of the belt). It is secured very firmly above the crest of the ilium.
4. Secure the web strap through the counter traction buckle assembly at the head end. Tighten the web strap at the foot end by pushing the traction control arm forward 3 to 4 in. (7 to 8 cm) and feeding the web strap through the buckle assembly.

It is not necessary to push down on the flap of the buckle as it is self-locking.

5. The patient's legs should be flexed to flatten the lumbar curve. Use of a flexion stool is often more desirable for reducing the lumbar curve.
6. Make certain the traction control unit is dialed to the minimum weight. With the switch in the lumbar position, set the timer to the desired time (approximately 10 to 12 minutes). The table will start instantly.
7. If not contraindicated, the rollers should now be set into position. They are very effective for relaxing muscles and creating flexion of the lumbar spine during the traction pull cycle. The rollers should not be used when constant traction is desired.
8. To set poundage, dial the poundage gauge during the rest cycle. The top returning toward the traction arm is referred to as the rest cycle. The top moving away from the traction arm is referred to as the pull cycle.
9. Traction should be applied gradually during the first several rest cycles of the reciprocating top.

   Important! At no time should the traction control unit be set to the full poundage desired in the first pull cycle.

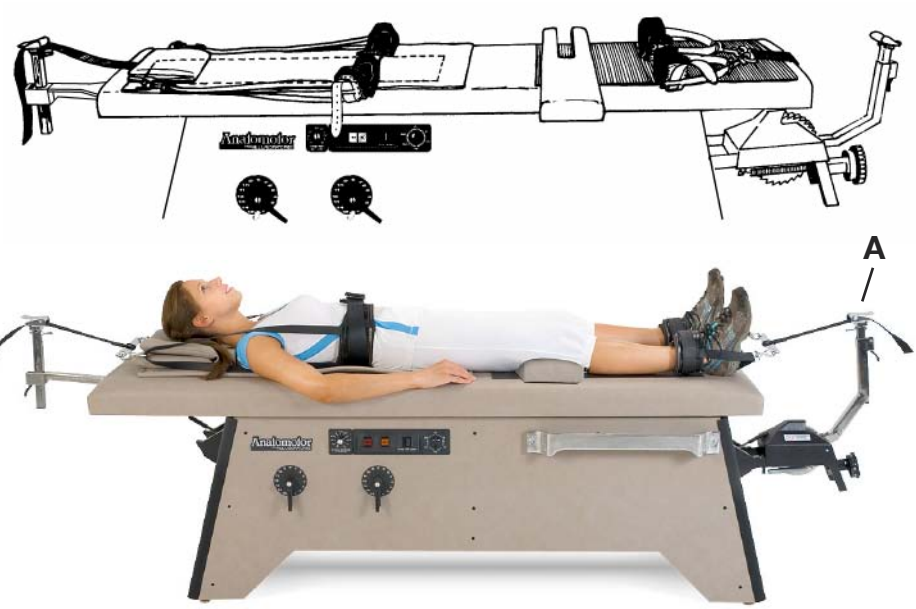
10. When the timer rings, the table will stop out of the traction pull cycle.
11. When constant traction is required and after the desired amount of pull has been determined, place the switch to the "off" position when the table top has moved approximately 3/4 of the way during the pull cycle. The timer can be set for the desired constant pull time. When the timer rings, press the switch to "lumbar". The top will then return to the relaxed traction position.
12. At the end of the traction treatment, turn the traction dial to the minimum weight and lower the rollers. Release the web straps from both buckle assemblies and remove the harnesses from the patient.
13. In order for the patients muscle structure to readjust, it is recommended that he or she rest on the Anatomotor for 1 to 2 minutes. Walking slowly will also help balance the muscle structure.

Unilateral Lumbar Traction

To apply unilateral traction with the iliac harness, replace the iliac spreader bar with the "D" ring strap (see “Parts”, #110, page 20-21). The "D" ring strap can be attached to either side of the harness in order to create pull on just one side of the pelvic region. Start with low poundage and work up to desired level of pull.

Lumbar or Buck’s Traction (applied with ankle harnesses)

The ankle harnesses are also used for lumbar traction. They are designed to apply traction to the lumbar spine as well as the full group of lumbar muscles. Doctors often recommend this type of traction for the patient and with sciatica when pull is desired on just one leg. Traction to the knee and hip area can also be achieved. Approximately 1/4 to 1/3 of the body weight is required with both legs in traction; 1/8 to 1/4 of the body weight with single leg traction. The recommended treatment time is 7 to 10 minutes.



Applying Traction with Ankle Harnesses

1. Follow steps 1 to 4 under the section "Section 5.3, Preparing the Anatomotor for Traction".
2. Place the harnesses on the table as illustrated above.
3. Position the patient on the table so that the base of the sacrum is 5 in. (13 cm) above the lower cut-out section of the table top. Place the arms through the looped straps and attach the thoracic harness below the rib cage. Fasten the ankle harnesses, making certain the velcro is pressed firmly together. (To increase patient comfort or, for patients with smaller ankles, insert the foam pads that came with your table into the ankle harnesses).
4. At the foot-end, adjust the T-Buckle to the lowest height and feed the web strap through the buckle assembly (see “A”, photo above). Tighten the web strap by pushing the traction control arm towards the table about 3 to 4 in. (7 to 8 cm.) while feeding the web strap through the buckle assembly.
5. To eliminate direct pull on the knees, place the filler block under the knees as illustrated. Increasing the knee flexion with additional pillows will change the angle of pull and, thus, increase the traction pull even if the calibrated dial has not been increased.
6. Make certain the traction control unit is dialed to the minimum weight. With the switch in lumbar position, set the timer to the desired time (approximately 7 to 10 min.). The table will start instantly.
7. If not contraindicated, the back rollers should now be set into position. Constant traction is not recommended when using the ankle harnesses.
8. To set the poundage, dial the gauge during the rest cycle. The top returning toward the traction arm is referred to as the rest cycle. The top moving away from the traction arm is referred to as the pull cycle.

9. Traction should be applied gradually during several rest cycles of the reciprocating top, and desired pull should be checked by palpating the area which is being tractioned.
10. When the timer rings, the table will stop out of the traction pull cycle.

Single Leg Traction

Single leg traction is often administered when treating sciatica. Although the pull is commonly administered to the short, painful leg, such treatment is not always the rule. Careful diagnosis of x-rays, muscle testing, etc. should be your guide.


photo 11

1. Apply both ankle harnesses, as in bilateral traction, and determine the amount of pull that is required for the patient (usually 1/4 to 1/3 of the body weight).
2. After 1 to 2 minutes of bilateral traction, decrease the traction pull to approximately 1/8 to 1/4 of the body weight.
3. Switch to single leg traction by holding the traction arm while it is returning to the rest cycle. Remove the spring clip on the ankle harness from the "D" ring strap releasing traction from the one leg (photo 11).
4. Prior to the end of the treatment it is recommended that you switch back to bilateral traction for approximately 1 to 2 minutes. This will help equalize the muscle structure.

Direct Knee Traction

To achieve direct pull to the knee area, remove the filler block. Mobilization techniques can be performed under constant traction. Stop the table top near the end of the pull cycle.

5.5 Treating with Cervical Traction

The Traction Control Unit

To administer cervical traction, the Traction Control Unit needs to be inserted at the head-end of the table. Remove the pillow and make sure your poundage is turned to the lowest setting (photo 8). The Cervical Traction Device fits into the bracket on the table top (photo 12). Move the Lumbar-Cervical Switch to the cervical position and insert the short T-buckle into the Traction Control Unit. With the insert pad facing the ceiling, position the patient's occipital region into the upper inside ridge of the cradle support. Tighten the tension knob until the patient feels a slight, inward pressure (photo 13). Gently secure the forehead strap. Pull the web strap firmly through the T-buckle assembly (photo 14). Set the timer


photo 12

to 7-10 minutes. Adjust the upper set of rollers to relax the thoracic area during traction. Adjusting the variable speed to 7 or 8 seconds of pull-and-release, is recommended for patient comfort. As the table returns to the relaxed position, slowly increase the poundage. Usually 20-40 pounds should be sufficient (the Cervical Device has a built in return spring of 10 pounds. This means that the patient experiences ZERO POUNDS of pull when the traction unit is set at 10 pounds and similarly, ten pounds less than the dial reads at each point). You can palpate the cervical area and feel a slight separation. When treatment has ended, treatment will stop in the cervical position. Release the tension on the T-buckle and loosen the tension knobs on the cradle support. Assist the patient to a seated position.


photo 13


photo 14

5.6 Arm-Shoulder Thoracic Traction

The gripper bar is used to administer traction to the upper dorsal area. The one set of back rollers (usually lower set) can be used in conjunction with this type of traction to treat the area between the scapulae. The rollers will aid in the expansion of the rib cage and will help respiration. Start with the table top in the cervical position. Traction: approximately 1/4 body weight. Treatment time: 7 to 10 minutes.

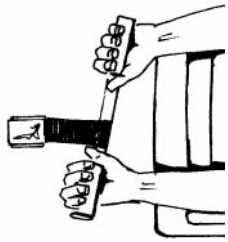
Bilateral Dorsal Pull

1. Follow steps 1 to 4 under section "Section 5.3, Preparing the Anatomotor for Traction".
2. Raise and secure the "T" buckle assembly (see Parts Description, 129A) in the traction unit (middle to upper position is advisable for patient comfort). Insert the

web strap of the gripper bar through the buckle assembly.

3. Position the patient so that his or her arms are fully extended when grasping the gripper bar (see illustration).
4. The switch should be in the "cervical" position and the traction weight set at the minimum. Set the timer to start treatment.
5. The lumbar rollers should now be raised to treat the thoracic area. (note: this is due to the fact that the patient is positioned further down on the table top.)
6. Gradually dial the traction weight according to the patient's needs.
7. To aid respiration, have the patient inhale during the traction pull cycle. As the rollers are moving to the dorsal area, they will help expand the chest area. Have the patient exhale during the traction rest cycle as the rollers are moving to the lumbar area.

Unilateral Dorsal Pull



Unilateral dorsal traction can be very beneficial to help counteract the curve of scoliosis. Follow the same procedure as previously described. Turn the traction weight down slightly and slide the gripper bar strap to one side (the concave side).

Passive Shoulder Motion

Passive shoulder exercise can be applied to help increase the range of motion. The ankle harness (one cuff only) is fastened around the wrist. As the table top reciprocates, The patient's arm will elevate. The amount of elevation will be determined by the length of the D-ring strap through the "T" buckle assembly. To achieve extension of the elbow-shoulder area, the traction unit can be placed at the foot end and traction applied in a downward motion.

Applying Passive Shoulder Motion

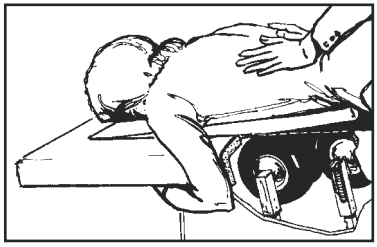
1. Position the table top at the cervical end. Fasten one of the ankle cuffs to the wrist.
2. Place the D-ring strap through the "T" buckle assembly approximately 1 inch.
3. Have the patient rest the opposite hand on the bent elbow that is being exercised.

4. Set the timer to start the table. As the patient is moving back and forth, shorten the strap slowly through the "T" buckle assembly to the point of the patient's tolerance.
5. Note that the traction control unit arm should not move as the table top is reciprocating. The opposite hand in step #3 should offer enough weight to the bent elbow to push it down during the rest cycle, but not enough weight to activate the traction control unit arm. To further increase the range of motion, the D-ring strap can be shortened periodically during the treatment time. The patient will receive approximately 80 passive exercise movement in a 10 minute treatment. Variable speed models should set speed dial to 4.5.

Suggested Techniques for Passive Shoulder Motion

1. The velcro cuff can be fastened to the biceps to abduct the arm.
2. The patient's arm can be moved across the chest if a different direction of movement is desired.
3. Muscle stimulation can be used simultaneously to help relax and reduce pain in the shoulder area. This will usually aid in achieving an even greater range of motion.

Spring-Loaded Table Top



You can easily convert the Anatomotor to a straight treatment table. When pressure is exerted in the form of manipulation or general palpation, a resilient action can be achieved.

1. Move the table top to the cervical position.
2. Place the filler block into the table top.
3. Once the patient is in the prone position, raise only the lower set of rollers to positions #9 to #12. This will raise and spring load the filler block.

Stationary Anatomotor

The Stationary Anatomotor is equipped for massage-only treatment and can not be used for traction therapy. Your Stationary-Top may be equipped with optional heat and vibration. Refer to sections 3.1 and 4.1 for use instructions.

Parts Description

#102 Thoracic Harness- The patient's arms fit through the shoulder strap and the harness is buckled firmly below the floating ribs for lumbar traction. The harness is attached to the spreader bar #104 and web strap #105 which in turn is attached to the counter traction unit #113.

#103 Iliac Harness- This harness has two long straps which parallel the legs. It usually overlaps the thoracic harness #102 slightly so that the harness may be positioned just above the crest of the Ilium. The harness is attached to the spreader bar #104 and web strap #105 which in turn is attached to the traction control unit #120.

#104 Spreader Bar is attached to the web strap #105 which feeds into the "T" buckle assembly #129.

#104 & #105 Spreader Bar and Web Strap attach the harness to "T" buckle assembly #129.

#107 Two-Section Pillow can be used flat for most purposes or folded for kyphotic patients.

#108 Top Pad is used to cover the rollers when the filler block is removed.

#109 Ankle Harnesses (pair) clip into the "D" ring #110 for lumbar traction. One harness may be used around the arm or wrist for passive shoulder motion.

#110 "D" Ring Strap is used to attach the ankle harness #109 to the "T" buckle #129 of the traction unit.

#111 Filler Block converts the Anatomotor to a straight treatment table. The notch in the block allows the patient to breathe freely in a prone position.

#112 Rubber Foot Pad protects the Anatomotor upholstery at the foot end of the table.

#113 Counter Traction Unit fits firmly into the counter traction bracket #125. It is used primarily at the head end of the table to counteract the pull during lumbar or total traction.

#114 Leg Rollers fit into any one of four slots on the leg roller brackets #123 of the Anatomotor. When not in use, this unit may be stored under the table.

#120 Traction Control Unit controls the amount of pull which is regulated through the calibrated hand dial. This unit fits into either the head or foot end base plate #122. The unit is inserted into the base plate while the base plate handle is held in the UP position and is secured by pushing the handle down once the traction unit is inserted. The angle of pull can be adjusted by raising or lowering the "T" buckle assembly #129B (should always be down for lumbar traction).

#121 Gripper Bar applies arm-shoulder traction. When not in use, the gripper bar may be stored on the base plate #122 at the head end.

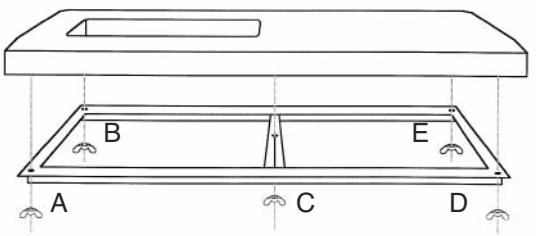
#125 Counter Traction Brackets are mounted on each end of the table top.

#129 The "T" assembly provides a means for attaching the traction harness and varying the angle of traction pull. The buckle is self-locking and will secure traction straps immediately upon release.

#130 Cervical Traction Device provides cervical traction with no pressure on the chin.

Maintenance

Your Anatomotor is practically maintenance free and will typically deliver years of service with little to no upkeep. Below, however, are a few basic instructions to assure that your Anatomotor will always run smoothly.



1. Always unplug the table before any servicing, cleaning or maintenance.

2. Remove the top of the table. A regular top has four wing nuts directly under the ends of the each side (see drawing above “A,B,D,E). A tilt-top table has three wing nuts; two at the foot end (D and E in drawing) and one under the middle of the top, just inside the roller opening (“C”).

2. Every 2 to 3 years your Anatomotor should be oiled. With top removed, apply 2 or 3 drops of common household oil to each side of all of the six casters that the table top glides back and forth on (see fig. 1).

3. Remove the caps on either side of the motor (caps will be yellow or red, see ‘A’, fig. 2). Remove the caps with a screwdriver and then with your household oil, put approximately 5 drops into each side.

4. Apply 3 or 4 drops of oil to the Push-Rod Bushing (see ‘B’ fig. 2).

5. Also apply a few drops of oil to the axles of the Back Rollers (see fig. 3)

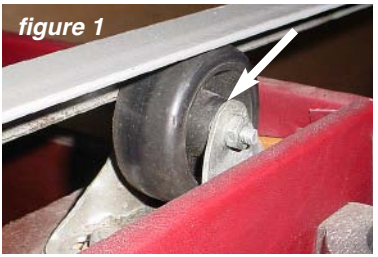


figure 1

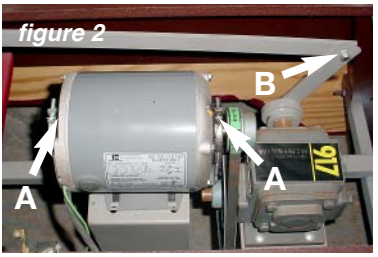


figure 2

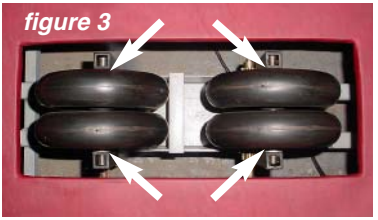


figure 3

6. Vacuum the inside of your Anatomotor for any dirt and debris that may have accumulated.

Support

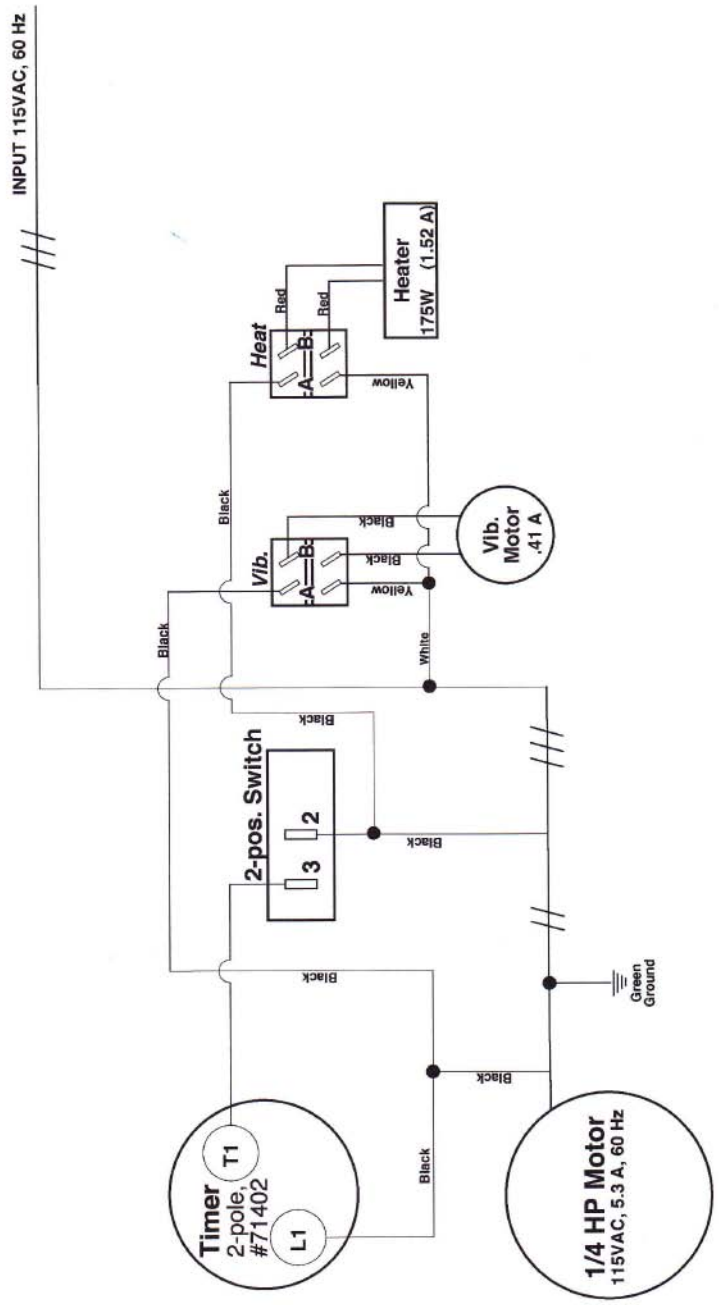
Additional service needed? Contact your local dealer or reach us directly:

Phone: 1-877-445-5020
Fax: 610-647-6297
Email: Support@HillLabs.com

Technicians are available 9 am - 4 pm E.S.T., Monday - Friday.

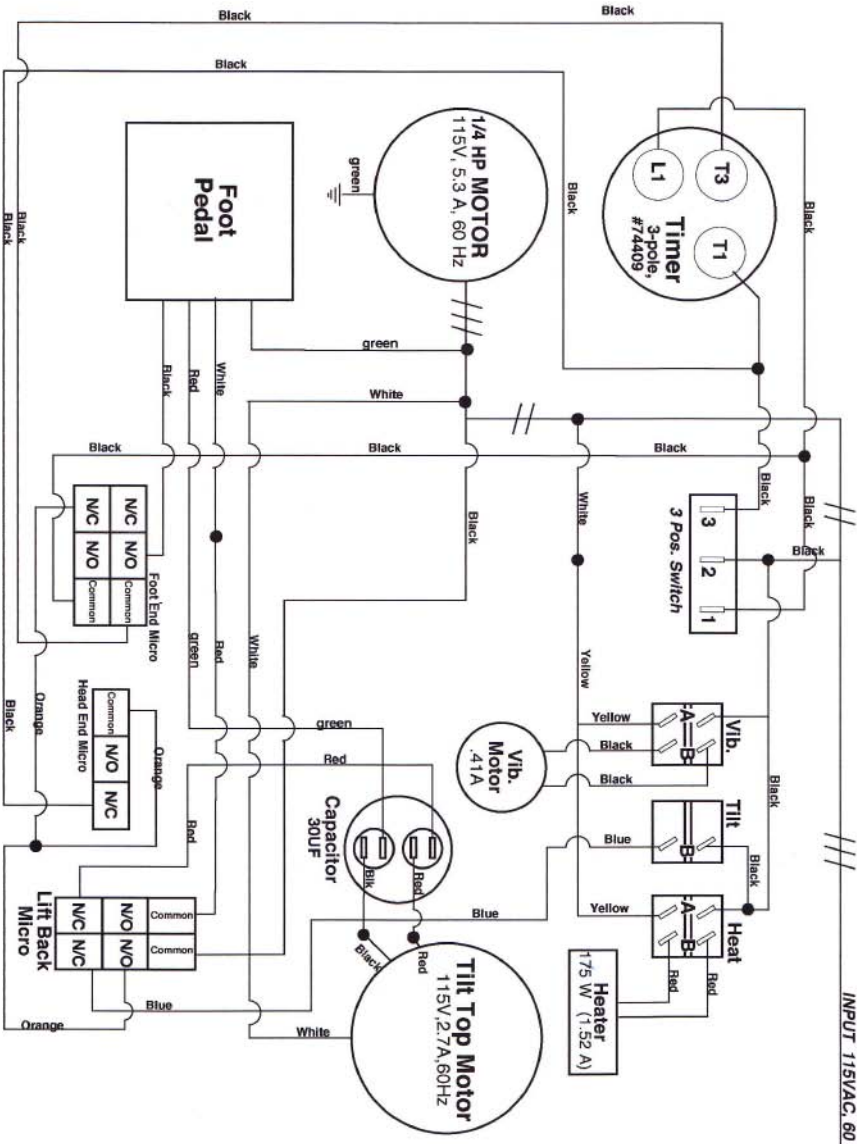
Wiring Diagram - Anatomotor and Stationary-Top, 115 Volt

With Heat and Vibration



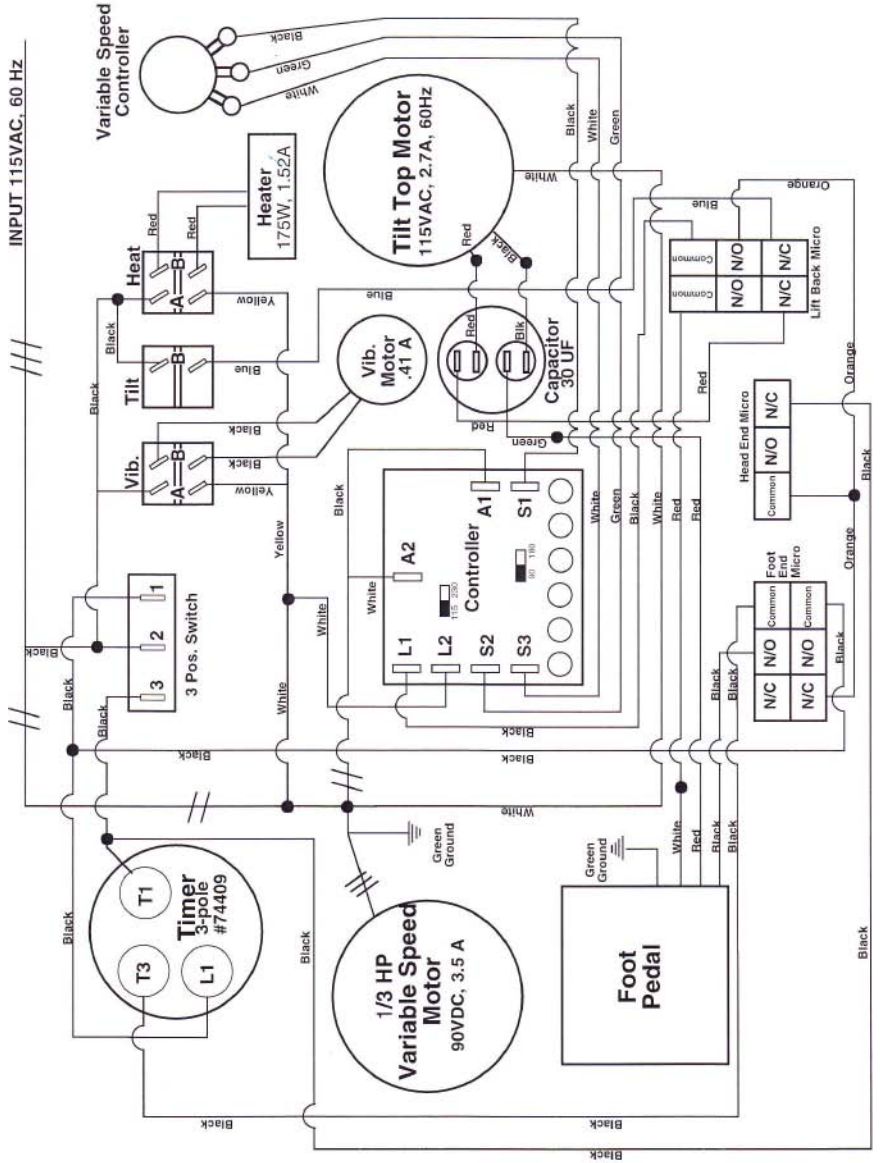
Wiring Diagram - Anatomotor, 115 Volt

With Heat, Vibration and Tilt Top



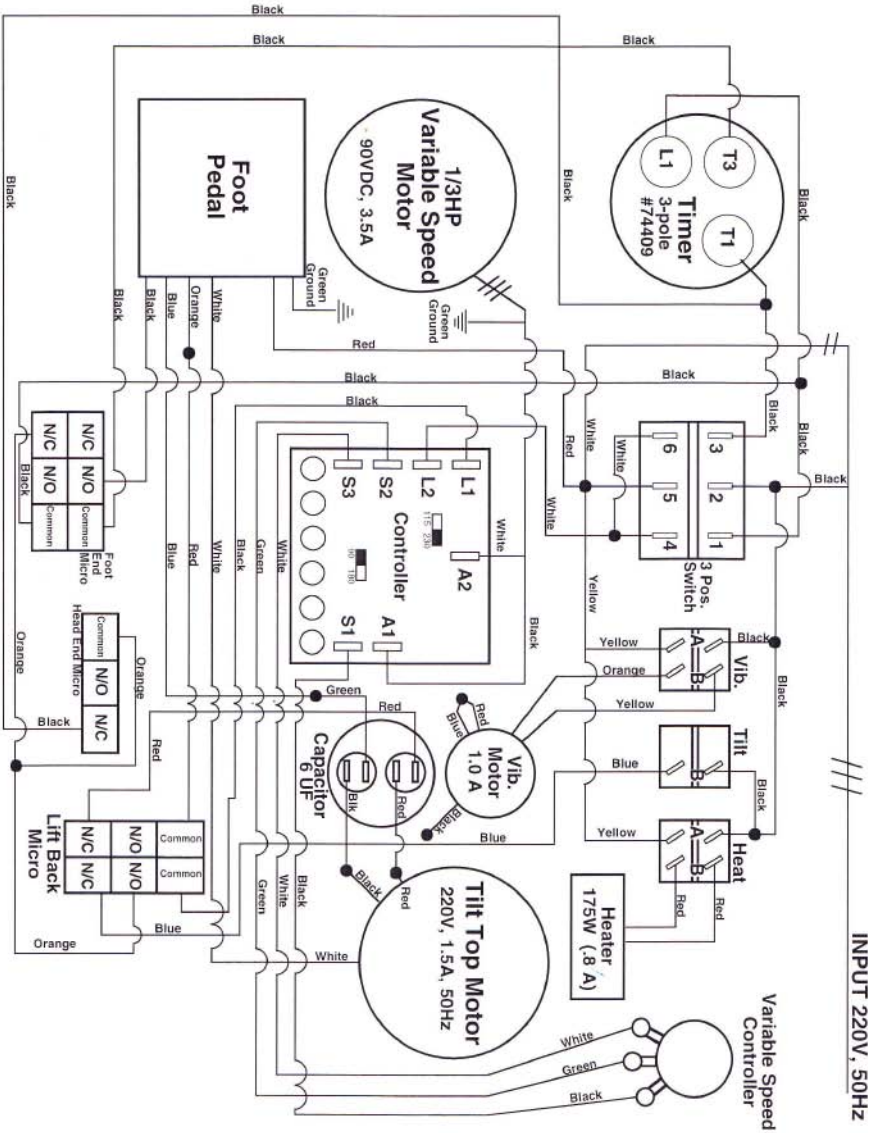
Wiring Diagram - Anatomotor, 115 Volt

With Heat, Vibration, Tilt Top and Variable Speed



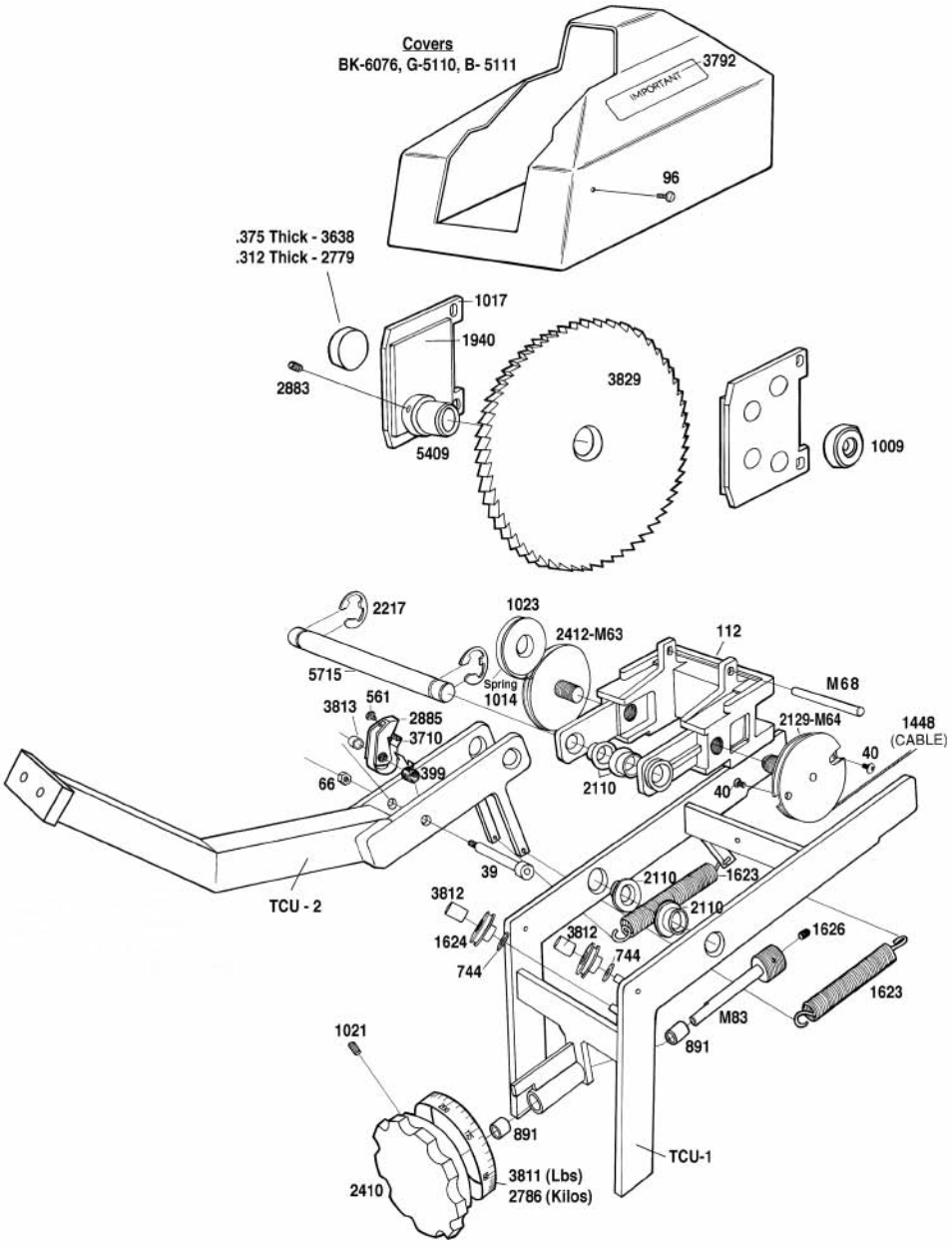
Wiring Diagram - Anatomotor, 220 Volt

With Heat, Vibration, Tilt Top and Variable Speed



Hill Traction Unit

Exploded View with Parts Numbers



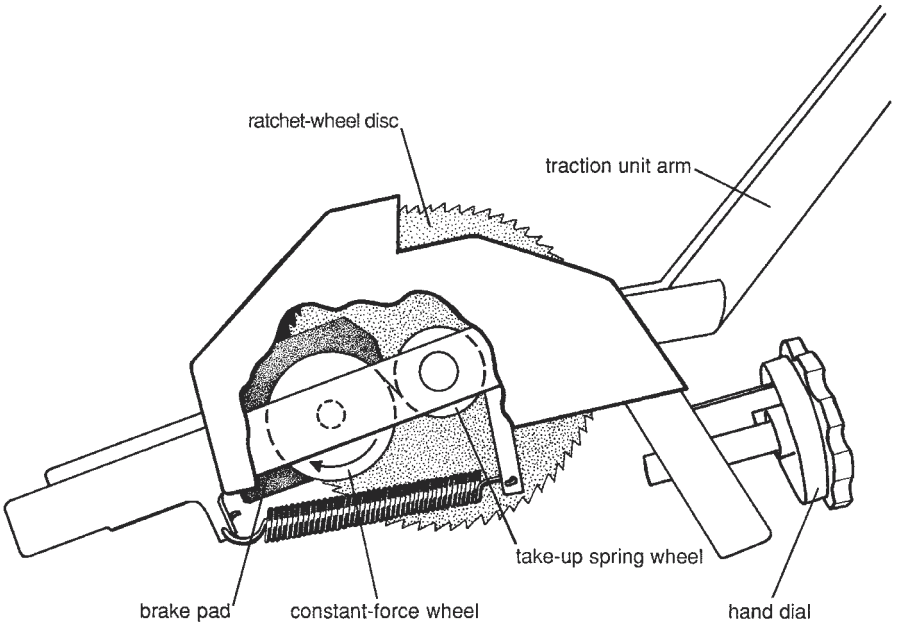
WARNING: DO NOT OIL THE TRACTION UNIT

Hill Anatomotor Traction Control Unit

Calibration Instructions

The traction control unit is designed with a self-adjusting constant-force spring. Occasionally the threads of this mechanism accumulate dirt. The force of the spring is diminished and requires assistance to properly set the break pads against the ratchet wheel disc. Follow these steps to reset the unit.

1. Turn the hand dial completely counterclockwise to the lowest pound setting.
2. Grasp the constant-force wheel and push it in the direction of the arrow (clockwise). Expect the wheel to move only a small amount - 1/64” to 1/8” or less. Do not try to force the wheel but exert a snug pressure.
3. The unit should now be calibrated.
4. A spring scale may be attached to the eyebolt of the T-buckle assembly to confirm the accuracy of pull. Position the T-Buckle at the lowest position and set the hand dial to 30 pounds. Pull the scale to make the rocker arm move 5 - 6 inches. The scale should measure 30 pounds. If you do not receive this reading, repeat step 2 with a firmer turning pressure to the constant force wheel.



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Hill Laboratories
COMPANY

3 N. Bacton Hill Road, Frazer, PA 19355 • www.HillLabs.com
610-644-2867 • 1-877-445-5020 • Fax 610-647-6297