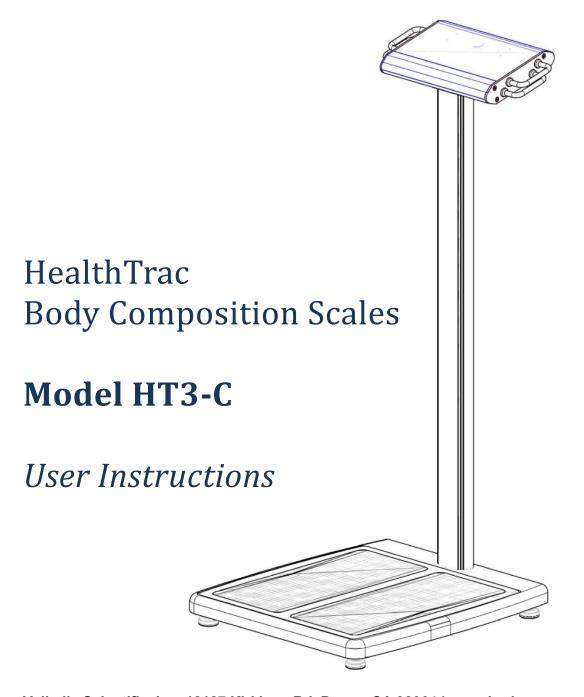
# HealthTrac Body Composition Scale





Valhalla Scientific, Inc. 12127 Kirkham Rd. Poway CA 92064 | www.bodycompscale.com

© Valhalla Scientific, Inc. 2017

## **Table of Contents**

Section I - Installation	4
Caution and Warnings	4
Scale Specifications	5
Receiving and Inspection	5
Scale Parts	6
Assembly	7
Powering up	10
Section II - Operations	11
How to Take a Measurement	11
How to Recall the Last Measurement	12
Section III – Understanding Results and Norms	13
Section IV - Special Modes	15
Weight Only Mode	15
Athletic Mode	15
Bodybuilder Mode	15
Section V – Customizing	16
Lock Option	16
Physician ID	16
Patient ID Option	17
Section VI – Maintenance	18
Serial Number and other Technical Information	18
Calibration	19
Zero Calibration	19
Cleaning	19
Troubleshooting	20

#### **Section I - Installation**

#### **Caution and Warnings**

- Individuals who have internally implanted medical devices, such as Pacemakers, should not use this equipment due to the risk of malfunction to the device that may be caused by the weak electrical current.
- To prevent injury and damage to your scale, please follow these instructions very carefully.
- Assemble and operate the scale per the enclosed user instructions.
- For accurate weighing, this scale must be placed on a flat, stable surface.
- For accurate weighing, verify before each use the proper operation according to the procedure described in this manual.
- Operating this scale at voltages and frequencies other than specified can damage the equipment and will void the warranty.
- Do not transport the scale with any weight on the platform.
- Do not exceed recommended weight limit of 1000 lbs for this scale.
- Do not use in the presence of flammable or explosive materials.
- To prevent patient injury, the patient must be attended to throughout the entire weighing event.
- Operate this scale exclusively with the power adapter provided. Use of an unspecified adapter will void the warranty, and can pose a serious safety hazard.
- Prior to using this scale, inspect the power adapter cord for cracking or fraying, or for broken / bent plug prongs.
- Prior to using this scale, ensure that the power adapter is plugged into an outlet with the rated voltage appropriate for operation.
- Ensure that the power adapter outlet is wired to a circuit breaker or other protected power source.
- Ensure that the power adapter and scale do not come in contact with liquids, excessive temperature, or excessive humidity.
- Unplug the power adapter, and carefully store both the power adapter and adapter cord before moving the scale.

Note: This scale has been factory calibrated, and does not require calibration prior to use.

## **Scale Specifications**

Capacity and Resolution	1000 lb x 0.1 lb			
Power Requirements	110Vac/220Vac to 6VD0	110Vac/220Vac to 6VDC/2.5A		
Environmental	Operating temperatures: 0°C to 50°C Storage temperatures: -15°C to 65°C) Humidity: 70% or less up to 40°C non-condensing			
Physical Dimensions	Platform Length: 20" Width: 18" Height: 2.25" Weight: 27 lbs.			

#### **Receiving and Inspection**

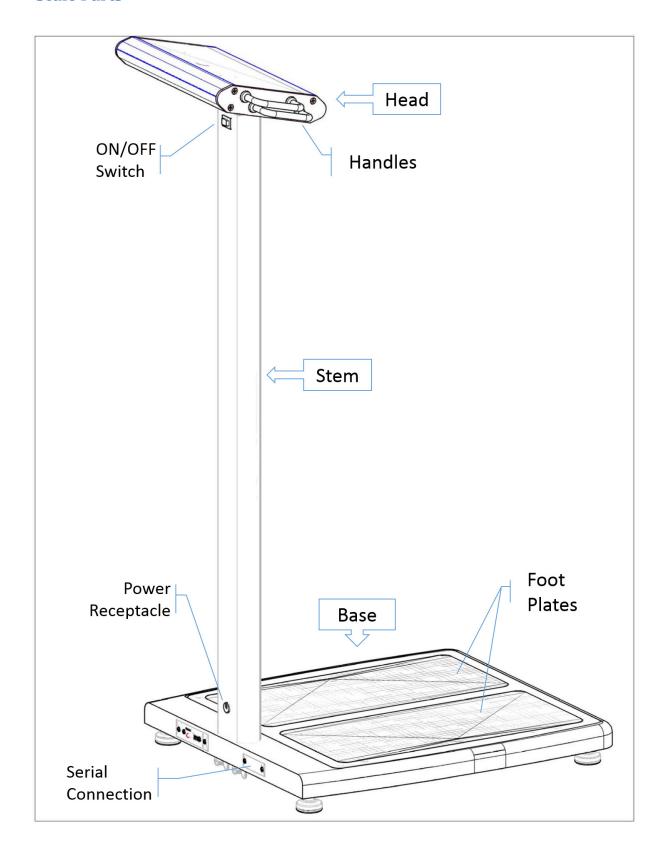
Each HT3-C scale is shipped disassembled in one carton. Carefully inspect the carton for shipping damage before unpacking. If damage is found, contact your shipper or a Valhalla Scientific, Inc. representative immediately at 1-800-548-9806 or 858-457-5576. Claims must be filed with the shipper as soon as possible after receipt of the package. The following information details what you will find inside the main carton as you unpack the parts for assembly.

Included in the box are:

Scale (Base and Stem/Head Assembly), Feet (4), Lock Washers (4), Butterfly Nuts (4), Power Supply, Surge Protector, RS-232 Cable, Serial to USB Converter Cable, Manual.

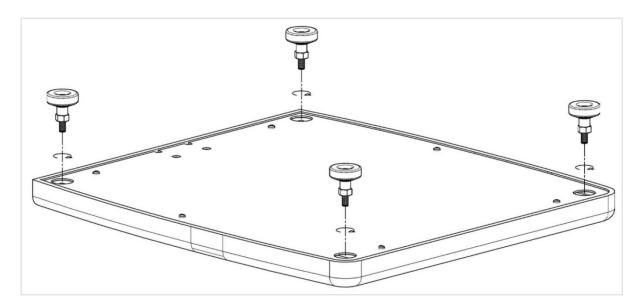
To prevent scratching any components, carefully remove each assembly from the carton and unwrap the packing materials. Set the carton aside for storage. To avoid damaging the scale parts when unpacking, do not use a box cutter, knife, scissors, or any sharp object to open the protective inner packaging.

## **Scale Parts**



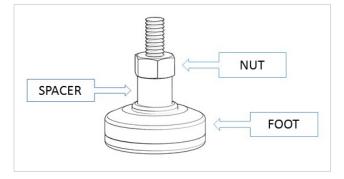
## **Assembly**

Step 1. Remove the base from the box and install the four feet.



NOTE: The feet sub-assembly, come pre-assembled. There are 3 components to each foot assembly:

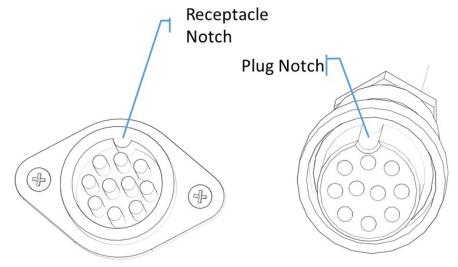
- Foot
- Space
- Nut



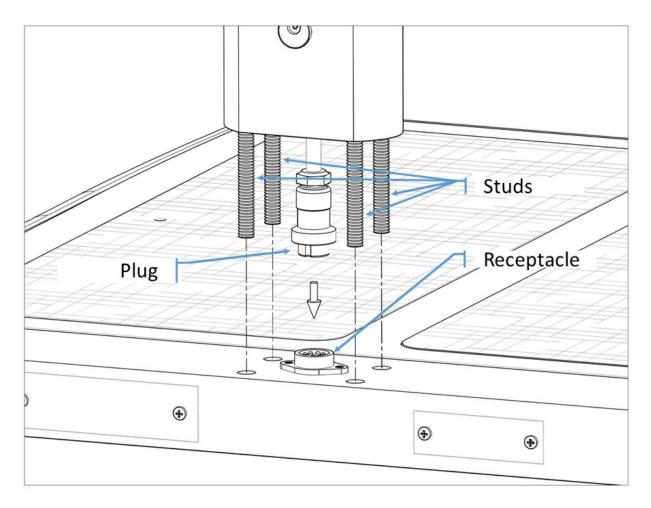
#### DO NOT DISASSEMBLE FOOT

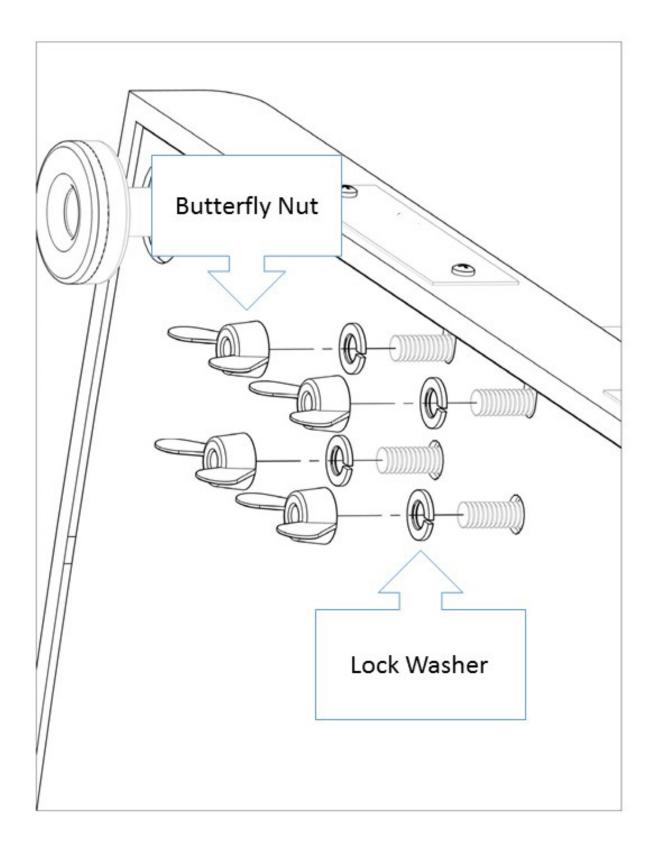
Removing the nut and/or spacer from the foot assembly will cause the scale to malfunction.

Step 2. Connect the plug from the stem to the receptacle on the base. To properly connect, the notches on the plug and receptacle must align.



Step 3. Align the 4 studs from the stem to the 4 holes on the base and insert.

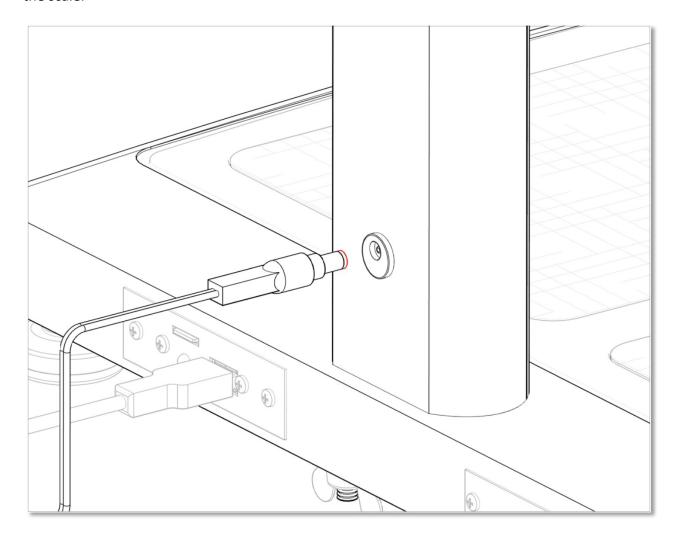




Step 4. While holding the stem and studs in place, carefully tip the scale at an angle to view the bottom of the base. Insert the 4 lock washers and tighten the butterfly nuts to the 4 studs.

## **Powering up**

Before plugging the power supply into the wall, verify that the ON/OFF switch located on upper part of the stem is in the OFF position. Connect the power supply to the wall socket and then to the scale.



Once the connection is made, flip the switch to the ON position.

When the HT3-C turns on, the screen will briefly display a start-up message which includes the Serial Number and other technical information.

The startup will be followed by a synchronization countdown. Once the display goes blank, the scale is ready to be used.

## **Section II - Operations**

#### How to Take a Measurement

- 1. Have the patient remove their shoes and socks and stand on the scale.
- 2. Ensure the patient remains still while the scale measures their weight.
- When prompted, enter the Age.Press the flashing ENTER button to confirm.
- 4. The screen will prompt you to enter the Height.

The height may be entered in the following format. A height of 6 feet 2 inches can be entered as:

6+2

The ½ button is used to add a half inch to the height.

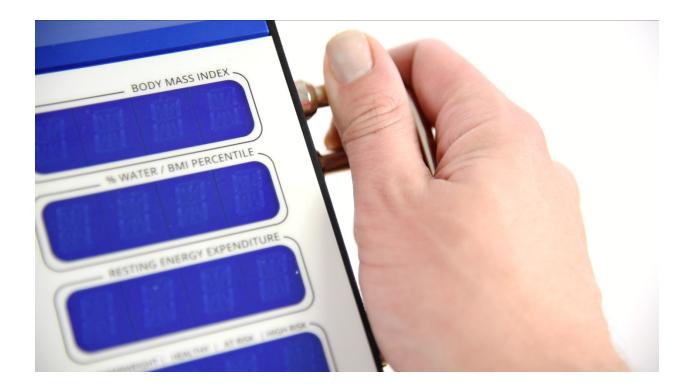
For example 5 feet 7.5 inches is entered as:

5+7+1/2

If a wrong number is pressed, press CLR (clear) to start over.

Press the flashing ENTER button to confirm the height and move to the next step.

- 5. When prompted, select Male or Female and press the flashing ENTER button to confirm selection.
- 6. When prompted, have the patient grip the handles so that the palm of each hand makes contact with both handles on both sides of the display module. The thumb should rest gently on top of upper handle. The scale will now measure their bio-impedance and display their results.



7. To transfer the results, select graphic or plain and press ENTER.

#### **How to Recall the Last Measurement**

The HT3-C allows the user to recall the last measurement and resend it. To recall the last results:

- 1. Press the RCL button on the display panel. The data will be displayed. The display is be cleared by pressing the CLR button.
- 2. To transfer the results, select graphic or plain and press ENTER.

The last results will be erased if the scale is turned off.

## **Section III - Understanding Results and Norms**

In order to determine a discernable change in body composition a 3 % change in body weight is recommended.<sup>1</sup>

**Body Weight**: Indicates the gross total body weight.

**8 Body Fat**: Total Percent of Body Fat. Norms are based on age<sup>2</sup>

		%Body Fat Norms		
Male:	Under Fat	Optimal	Overfat	Obese
Ages 10-11	<13	13-23	23-28	28+
Age 12	<12	12-23	23-28	28+
Age 13	<12	12-22	22-27	27+
Age 14	<11	11-21	21-26	26+
Age 15	<10	10-21	21-25	25+
Ages 16-18	<10	10-20	20-24	24+
Ages 18-39	<10	10-21	21-26	26+
Ages 40-59	<11	11-22	22-27	27+
Ages 60+	<13	13-24	24-29	29+
Female:	Under Fat	Optimal	Overfat	Obese
Age 10	<16	16-28	28-32	32+
Ages 11-13	<16	16-29	29-33	33+
Ages 14-16	<16	16-30	30-34	34+
Age 17	<16	16-30	30-35	35+
Age 18	<17	17-31	31-35	35+
Ages 18-39	<20	20-34	34-39	39+
Ages 40-59	<21	21-35	35-40	40+
Ages 60+	<22	22-36	36-41	41+

**Body Mass Index**: BMI is a value derived from the mass (weight) and height of an individual.

The BMI is defined as the body mass divided by the square of the body

height.

**% Body Water:** Proper hydration norms are based on % body fat<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Schoeller, Dale. Human Body Composition: Human Kinetics, 2005. Print

<sup>&</sup>lt;sup>2</sup> Based on National Institute of Health/World Health Organization Guidelines.

<sup>&</sup>lt;sup>3</sup> Schoeller, Dale. Human Body Composition: Human Kinetics, 2005. Print

Proper Hydration Ranges				
Body Fat%	Male %Water	Female %Water		
10-15	72-65	60-56		
16-23	64-59	55-49		
24-28	58-54	48-44		
29-34	53-49	43-39		
35-40	48-45	38-33		

**REE:** Resting Energy Expenditure is the number of calories required over 24

hours to maintain vital organs and body functions. REE is determined by integrating the muscle mass value as a predictive variable for each

individual.

Health Status: The health status indicator window is based on recommended BMI

ranges<sup>4</sup>.

Health Status Ranges				
	Underweight	Healthy	At Risk	High Risk
BMI	< 18.5	18.5 – 24.9	25 – 29.9	> 30

Fat Free Mass: Fat Free Mass refers to the portion of the body composed of muscle,

bones, organs and fluids.

Caloric Burn Rates: Caloric Burn Rates are determined by adding the REE calories to various

levels of physical activity. For your own calculations, remember 3500

calories make one pound of fat.

**Visceral Fat:** Visceral fat is body fat that is stored within the abdominal cavity and is

therefore stored around a number of important internal organs such as

the liver, pancreas and intestines.

Visceral Fat Level Range⁵				
Normal High Very High				
1-9	10 – 14	15+		

<sup>&</sup>lt;sup>4</sup> Based on CDC Guidelines

<sup>&</sup>lt;sup>5</sup> Simplified Estimation Method for Visceral Adipose Tissue. North American Association for the Study of Obesity.

## **Section IV - Special Modes**

#### **Weight Only Mode**

The HT3-C allows you to take weight only measurements.

To enable this measurement mode: Press Weight Only before stepping onto the scale.

The scale will display WGT ON. Step on the scale and press **Enter**. The display will count down from 5 to 1 and display your weight.

To clear the weight: Press **CLR** 

#### **Athletic Mode**

To qualify as "athletic", the individual must meet the following requirements:

Work out 40 minutes in duration (20 min aerobic/20 min anaerobic), 3 days a week, for at least the last 6 months.

To enable the Athletic Mode predictive equation:

- 1. Before stepping on the scale, Press 7. The screen will display: [ATH MODE Y/N?]
- 2. Press the **YES** key to enable the Athletic Mode equations, **NO** to cancel.

These steps will enable the Athletic Mode for a single use. After the test is performed, the HT3-C will automatically return to Standard Mode measurements.

## **Bodybuilder Mode**

To qualify as a "bodybuilder" the individual must be at least 20% above their ideal weight (as defined in the Metropolitan Life Height/Weight Tables), and that weight must be primarily muscle mass.

To enable the Bodybuilder Mode predictive equation:

- 1. Before stepping on the scale, Press 8. The screen will display: [BB MODE Y/N?]
- 2. Press the **YES** key to enable the Body Builder Mode equations, **NO** to cancel.

These steps will enable the Bodybuilder Mode for a single use. After the test is performed, the HT3-C will automatically return to Standard Mode measurements.

## **Section V - Customizing**

#### **Lock Option**

The Lock option allows you to "lock" the HT3-C and prevent it from being used by unauthorized people. When the HT3-C is locked, you will be required to enter an authorization ID before each test.

To enable the Lock feature:

- 1. Press 3 to access Settings Menu Menu Password (PW): 7538
- 2. When prompted [MENU ?], press # 9. The screen will display: [PIN? Y/N?]
- 3. Press the YES key to enable the Lock Pin Option, NO to cancel.

The default authorization ID number is 1234. The ID can be changed at any time.

To change the Authorization ID Number:

- 1. Press 9 to access Maintenance Menu Menu Password (PW): 7538
- 2. When prompted [MENU ?], press # 1. Enter (PW): 1973
  The screen will display: [NEW PIN ----]
- 3. Enter the new 4 digit ID.

Note: The master PIN/Password is 1973 and this number can always be used to access the menu should you forget the new PIN/Password.

#### **Physician ID**

The HT3-C allows the user to set a physician's ID. The ID can be a number up to 8 digits.

To set the Physician ID:

- 1. Press **5** before stepping on the scale. The screen will display: [ID 0000 0000]
- 2. Enter the preferred ID, up to 8 digits and press ENTER.

The Physician ID can be changed or reset at any time.

## **Patient ID Option**

The Patient ID option gives you the choice of using a Patient ID with every test. When you first receive the scale, the Patient ID function is set to OFF.

To enable the Patient ID Option:

- 1. Press **3** to access Settings Menu *Menu Password (PW):* **7538**
- 2. When prompted [MENU ?], press # **4**. The screen will display: [ID MODE Y/N?]
- 3. Press the YES key to enable the Patient ID Option, NO to cancel.

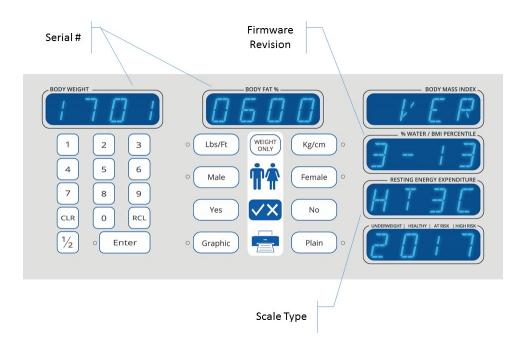
#### **Section VI - Maintenance**

The following pages provide instructions for maintenance, cleaning, calibration, and troubleshooting for the HT3-C scale.

Caution: Before first use, or after long periods of non-use, check the scale for proper operation and function. If the scale does not operate correctly, refer to qualified service personnel.

- 1. Check overall appearance of the total scale for any obvious damage, wear, and tear.
- 2. Inspect the AC adapter for cord cracking or fraying, or for broken/bent prongs.

#### **Serial Number and other Technical Information**



To access technical information about the scale, press [4] on the keypad. The screen will display Serial Number, Firmware Revision, and Model Number of the scale. Press [CLR] cancel.

#### **Calibration**

For Calibration instructions, please contact Valhalla Scientific, Inc. Customer Service at

1-800-548-9806 or 858-457-5576.

#### **Zero Calibration**

Press 0 when scale is idle to reset any zero offset.

#### **Cleaning**

Proper care and cleaning is essential to ensure a long life of accurate and effective operation.

Caution: Disconnect the scale from the power supply prior to cleaning the unit.

- 1. Clean all external surfaces with a clean damp cloth or tissue. Mild antimicrobial or antibacterial soap and water solution may be used. Dry with a clean soft cloth.
- 2. Do not immerse the scale into cleaning or other liquid solutions.
- 3. Do not use Isopropyl Alcohol or other solutions to clean the display surface.
- 4. Do not use abrasive cleaners.

# **Troubleshooting**

Issue	Cause	Solution
Scale does not turn on.	Wrong power supply used	Verify that the factory provided power supply
		unit is being used.
	Damaged power supply	Contact technical support at 1-800-548-9806 or
		858-457-5576.
	No power to AC outlet	Verify that the outlet used has power.
	Power strip is off	Reset or turn on the power strip.
	Power supply not connected	Verify that the power supply is properly
		connected to the power receptacle.
	Power Switch in the OFF position	Turn the power switch to the ON position.
Scale not sensing	Feet are not installed on the base	Verify that all four feet have been properly
weight		installed on to the base. Refer to the assembly
		procedure in the manual.
	Standoff or nut removed from feet	Verify that during assembly, spacer or nut was
		not removed from the feet before installing
		them to the base. See assembly step 1.
	10 Pin plug is disconnected	Remove the stem/head assembly from the base
	-	and verify that the cylindrical 10 pin plug is
		connected to the receptacle. Refer to the
		assembly procedure in the manual.
Inconsistent weight	Scale is not on a level surface	Turn the scale off. Move the scale to a level
measurements		surface or adjust the leveling feet.
Scale does not process	User did not remove shoes and	Remove shoes and socks and try again
body composition after	socks	
patient grips handles.	Very dry or callused hands or feet	Use lotion on hands and/or feet.

For additional information, call 1-800-548-9806 or 858-457-5576

Visit our website at:

www.bodycompscale.com