

## HT485: PHYSICIAN MECHANICAL BEAM SCALE ASSEMBLY & OPERATION INSTRUCTIONS

### PLEASE SAVE THESE INSTRUCTIONS FOR FUTURE USE

Info: The most current version of these instructions can be found online at <u>www.grahamfield.com</u> Tools required for assembly: Phillips screwdriver, wrench (included)

## **SAFETY GUIDELINES—PLEASE READ BEFORE USE**

- ▲ WARNING: Important! Read and understand these instructions before assembling or using the Physician Mechanical Beam Scale. Ensure the scale is assembled as described in this document before use. If the scale is not properly assembled and adjusted, personal injury and/or damage to the scale could result.
- ▲ WARNING: DO NOT use this product without proper instruction from a healthcare professional.
- → WARNING: If components are damaged or missing, contact your Graham-Field<sup>®</sup> authorized distributor immediately. DO NOT use substitute parts.
- ☆ WARNING: GF Health Products, Inc. assumes no responsibility for any damage or injury caused by improper assembly or use of this product.

### **INTENDED USE**

The intended use of the HT485 Physician Mechanical Beam Scale, shown in Fig. 1, is the measurement of body weight and height. It is ideal for use in health clinics and doctor practices. The designation of this product meets the OIML international Recommendation R76.

#### **UNPACKING**

Unless the scale is to be used immediately, retain box and packaging materials for storage until use is required.

- 1. Carefully remove all components from the carton.
- 2. Inspect all components.
- 3. If damage is evident to the contents, please notify the carrier and your Graham-Field authorized distributor.

#### **ASSEMBLY**

Refer to pictures at right during assembly.

#### **Pillar Installation**

- 1. Set the scale base on a flat, dry working surface such as a table.
- 2. Install the pillar in the scale base frame bracket, with scale face facing platform, as shown in Fig. 2.
- 3. Install the eight bolts and washers that secure the pillar to the scale base. Use a Phillips screwdriver to tighten the bolts.



Fig. 1: HT485 Physician Mechanical Beam Scale



Fig. 2: Pillar Installation

## **Steelyard Rod Attachment**

- 1. Place the scale on a table or flat working surface as shown in Fig. 3.
- 2. The long lever extends through the center of base length. Wires are wrapped around the long lever at the factory, securing it to the base, to prevent movement during shipping. Wrapped wire locations are shown in Fig. 3. Remove and discard these wires.
- 3. Insert the wrench in the small hole in front of the steelyard rod (the steelyard rod is inside the pillar). Use the wrench hook to pull the steelyard rod hook over the long lever, as shown in Fig. 4 and 5.
- 4. Push the long lever frontward, then hook the steelyard rod bearing on the long lever pivot.

Info: Ensure the force lever assembly linkage is centered and properly aligned. The linkage must float freely in order for the scale to weigh properly. To see the linkage, tip the scale slightly to one side and look up underneath the top weigh beam.

5. Gently place the scale upright on the floor.

# Height Rod Installation

- 1. Install the height rod back-side slots over the two pillar front-side bolts and slide the height rod down until securely attached to the pillar as shown in Fig. 6 and 7.
- 2. Use the included wrench to tighten the two hex head bolts as shown in Fig. 8. Do not overtighten.

# Wheel Installation

- 1. Align wheel bracket with scale platform so that the wheel bracket side with holes is against frame back and wheels face outward.
- 2. Install the two screws and washers that secure the wheels to the scale base as shown in Fig. 9 and 10.
- 3. Ensure wheels are level.
- 4. Use Phillips screwdriver to tighten the screws.



# **Counterpoise Weight Installation**

- 1. Position the main poise weight in the slot at 390 lb / 180 kg, and position the accessory poise weight at zero, as shown in Fig 11.
- Position the 50 lb / 20 kg counterpoise weight in the first slot, as shown in Fig. 12 and Detail A.
- 3. The scale capacity is now 490 lb / 220 kg.

# **OPERATION**

Info: Ensure scale is on a level, stable surface when in use. Do not place the scale on a soft surface such as carpet; this could result in inaccurate weight measurement.

## Moving the Scale

- 1. Hold the two pillar side faces to keep the front side of the platform away from the ground and rotate the scale backward.
- 2. Roll scale carefully on both wheels.
- 3. Return the scale gently to upright position.

# **CLEANING AND MAINTENANCE**

- To remove dust and dirt, wipe scale gently with a clean, soft, damp cloth.
- To disinfect, wipe scale gently with a clean, soft, cloth dampened with disinfectant.

## Zero Adjustment

To ensure accurate weight measurement, zero adjustment should be performed after assembly and before use.

- 1. Ensure the scale is on a level, flat surface.
- 2. Check the scale's eye loop area— ensure the scale pointer is equally balanced between the top and bottom of eye loop area. Gently use your finger to hold the scale pointer until it touches the bottom of the eye loop area. Release the scale pointer and let it move freely up and down within the eye loop area until it settles in the eye loop area center.
- 3. If the scale does not settle in the center of the eye loop area (it is not balancing properly), adjust the small zero balance weight. Use a screwdriver to turn the zero adjusting screw; this will cause the zero balance weight to move accordingly.

# Info: When the scale pointer settles in the center of the eye loop area, it is properly balanced.



## **TROUBLESHOOTING**

Problem	Solution
Zero balance of beam	The weigh beam must be balanced so that the scale pointer comes to rest in the center of the eye loop area when both poise weights are set at zero. Adjust the balance by turning the zero adjusting screw at the left end of the weigh beam.
Beam does not move freely	<ol> <li>Ensure the beam pointer is not touching the side of the eye loop. If the beam pointer is touching the side of the eye loop, proceed to step 2.</li> </ol>
	<ol> <li>Ensure the linkage is centered and properly aligned. The linkage must float freely in order for the scale to measure weight accurately. To see the linkage, tip the scale slightly to one side and look up underneath the top weigh beam.</li> </ol>
Scale platform rocks excessively	When you push down on any corner of the platform, you should not feel any significant rocking. Ensure the scale is always installed on a level, stable surface. Do not place the scale on a soft surface such as carpet.
Beam does not move during weight measurement	<ol> <li>The poise weights may be set to a higher weight than the person's actual weight: Reset the weights to a lower weight.</li> </ol>
	2. Ensure the steelyard rod is properly connected and aligned as previously described.

#### **SPECIFICATIONS \***

Maximum weight capacity	490 lb / 220 kg, using 50 lb / 20 kg counterpoise weight. See Counterpoise Weight Installation	
Graduation	0.25 lb / 100 g	
Height rod range	24 inch - 84 inch / 60 cm - 210 cm	
Minimum value of height per division	0.25 inch / 5 mm	
Platform size	14.76 inch x 10.83 inch / 375 mm x 275 mm	
Overall dimensions (L x W x H)	20.87 inch x 10.83 inch x 58.46 inch / 530 mm x 275 mm x 1485 mm	
* Specifications are subject to change without notice		

## TWO-YEAR LIMITED WARRANTY

GF Health Products, Inc. offers a two-year limited warranty against manufacturing defects on the HT485 Physician Mechanical Beam Scale. This warranty does not include calibration of the scale.

During the warranty period, defective items will be repaired or replaced at the option of GF Health Products, Inc. This warranty does not include any labor charges incurred in replacement part(s) installation or any associated freight or shipping charges to GF Health Products, Inc.

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