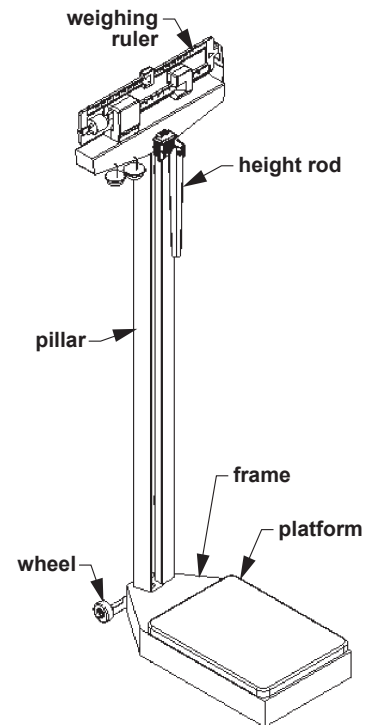


*Info: The most current version of these instructions can be found online at [www.grahamfield.com](http://www.grahamfield.com).*

*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 GF authorized distributor immediately. DO NOT use substitute parts.**
- ⚠ **WARNING: Notice for California Customers- California Proposition 65 WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive or developmental harm.**
- ⚠ **WARNING: GF Health Products, Inc. assumes no responsibility for any damage or injury caused by improper assembly or use of this product.**



**Fig. 1: HT485 Physician Mechanical Beam Scale**

**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.

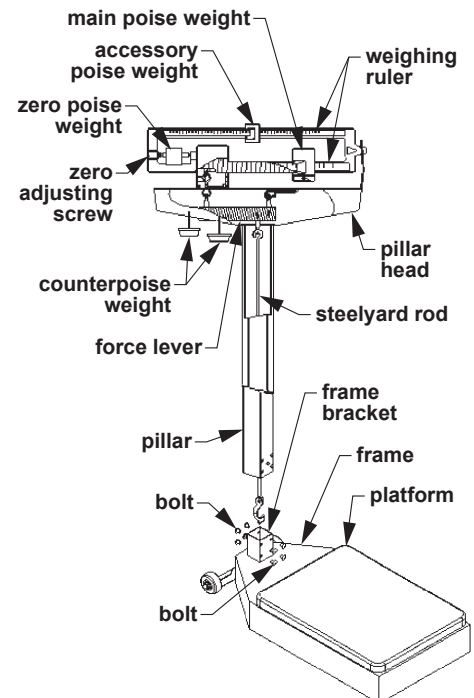
1. Carefully remove all components from the carton.
2. Inspect all components.
3. If damage is evident to the contents, please notify the carrier and your GF authorized distributor.

**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. 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.*

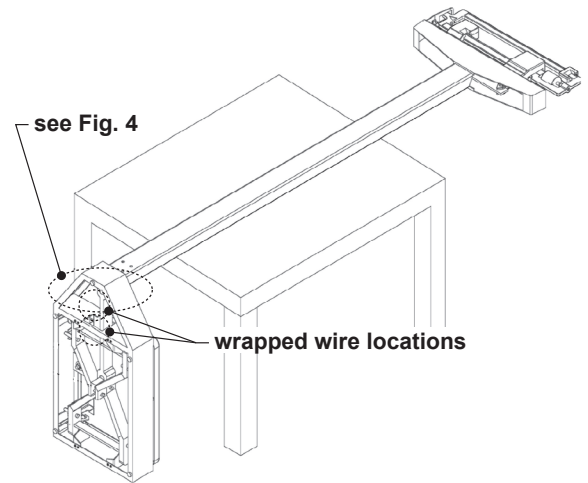
5. Gently place the scale upright on the floor.

## **Height Rod Installation**

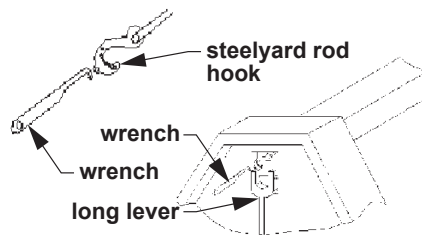
1. Install the height rod back-side slots over the two pillar front-side bolts and slide the height rod down until securely attached to the pillar as shown in Fig. 6 and 7.
2. Use the included wrench to tighten the two hex head bolts as shown in Fig. 8. Do not overtighten.

## **Wheel Installation**

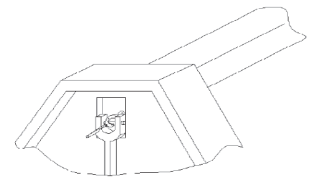
1. Align wheel bracket with scale platform so that the wheel bracket side with holes is against frame back and wheels face outward.
2. Install the two screws and washers that secure the wheels to the scale base as shown in Fig. 9 and 10.
3. Ensure wheels are level.
4. Use Phillips screwdriver to tighten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



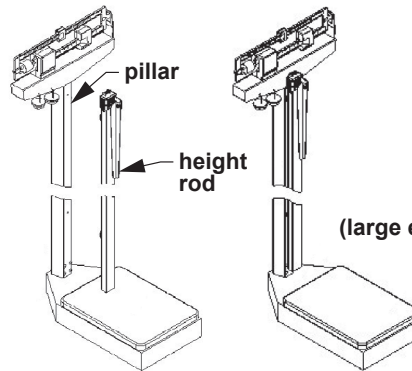
**Fig. 3: Steelyard Rod Attachment**



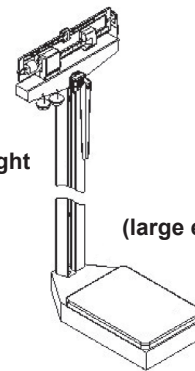
**Fig. 4: Attach Steelyard Rod to Long Lever**



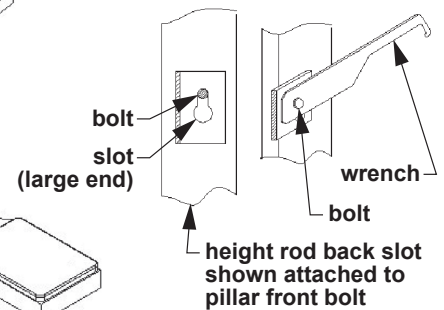
**Fig. 5: Steelyard Rod Attached to Long Lever**



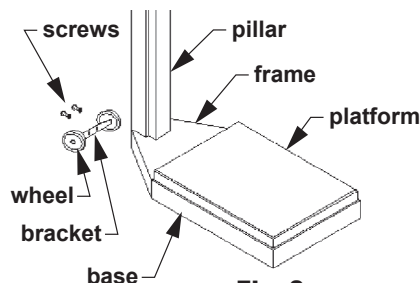
**Fig. 6: Attach Height Rod to Pillar**



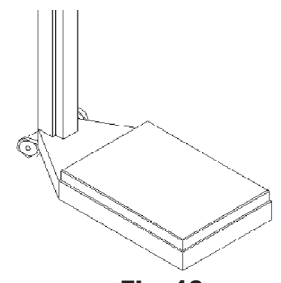
**Fig. 7: Height Rod Attached to Pillar**



**Fig. 8: Tighten Attachment Bolts**



**Fig. 9: Attach Wheels to Base**



**Fig. 10: Wheels Attached to Base**

## 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.
2. 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.

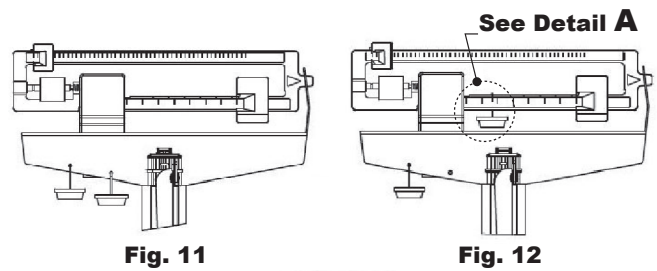


Fig. 11

Fig. 12



Detail A

## 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 style="list-style-type: none"> <li>1. 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> <li>2. 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 style="list-style-type: none"> <li>1. The poise weights may be set to a higher weight than the person's actual weight: Reset the weights to a lower weight.</li> <li>2. Ensure the steelyard rod is properly connected and aligned as previously described.</li> </ol>

## SPECIFICATIONS

Maximum weight capacity	490 lb / 220 kg, using 50 lb / 20 kg counterpoise weight. See <i>Counterpoise Weight Installation</i>
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

## LIMITED WARRANTY

### SCOPE OF WARRANTY

GF Health Products, Inc. ("GF") warrants to the original purchaser only that it will replace or repair components, at GF's sole discretion, that are defective in material or workmanship under normal use and service. All warranties are conditioned upon the proper use of the products strictly in accordance with good commercial practice and applicable GF instructions and manuals, including proper use and maintenance. To the extent that a component is warranted by a third party, GF conveys all of its rights under that warranty to the original purchaser, to the extent permitted. This limited warranty shall only apply to defects that are reported to GF's customer service team within the applicable warranty period and which, upon examination by GF or its authorized representative, prove to be a warranty item. This limited warranty is not transferable. Within the guidelines set forth in this document, this product is warranted for two years. The applicable warranty period shall commence from date of shipment to the original customer, unless there is an expiration date on the component in which case the warranty shall expire on the earlier of warranty period or the expiration date.

### OBTAINING WARRANTY SERVICE

A GF Customer Service Representative must authorize warranty service. Please contact the GF Customer Service department by calling 770-368-4700, sending a fax request to 770-368-2386 or by e-mailing a request to [cs@grahamfield.com](mailto:cs@grahamfield.com). Specific directions will be provided by the Customer Service Representative. Failure to abide by the specific directions will result in denial of the warranty claim.

### EXCLUSIONS

The warranty does not cover and GF shall not be liable for the following:

- 1) Defects, damage, or other conditions caused, in whole or in part, by misuse, abuse, negligence, alteration, accident, freight damage, tampering or failure to seek and obtain repair or replacement in a timely manner;
- 2) Products which are not installed, used, or properly cleaned and maintained as required in the official manual for the applicable product;
- 3) Products considered to be of a non-durable nature including, but not limited to: casters, filters, fuses, gaskets, lubricants, and charts;
- 4) Accessories or parts not provided by GF;
- 5) Charges by anyone for adjustments, repairs, replacement parts, installation or other work performed upon or in connection with such products which are not expressly authorized in writing, in advance, by GF;
- 6) Any labor or shipping charges incurred in the replacement part installation or repair;
- 7) Costs and expenses of regular maintenance and cleaning; and
- 8) Representations and warranties made by any person or entity other than GF.

### ENTIRE WARRANTY, EXCLUSIVE REMEDY AND CONSEQUENTIAL DAMAGES DISCLAIMER

THIS WARRANTY IS GF'S ONLY WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. GF MAKES NO IMPLIED WARRANTIES OF ANY KIND INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF ANY MODEL OR SAMPLE WAS SHOWN TO THE CUSTOMER, SUCH MODEL OR SAMPLE WAS USED MERELY TO ILLUSTRATE THE GENERAL TYPE AND QUALITY OF THE PRODUCT AND NOT TO REPRESENT THAT THE PRODUCT WOULD NECESSARILY CONFORM TO THE MODEL OR SAMPLE IN ALL RESPECTS. THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PARTS. GF SHALL NOT BE LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO: DAMAGES FOR LOSS OF PROFITS OR INCOME, LOSS OF USE, DOWNTIME, COVER, OR EMPLOYEE OR INDEPENDENT CONTRACTOR WAGES, PAYMENTS AND BENEFITS.

The warranties contained herein contain all the representations and warranties with respect to the subject matter of this document, and supersede all prior negotiations, agreements and understandings with respect thereto. The recipient of this document hereby acknowledges and represents that it has not relied on any representation, assertion, guarantee, warranty, collateral contract or other assurance, except those set out in this document.

For additional information on this product or this warranty, please contact a GF Customer Service Representative.

### NOTES:

- 1) Additional terms and conditions may apply.
- 2) Freight claims must be notated on the Bill of Lading and must be made with immediacy. The ICC regulations govern specific requirements for freight claims. Failure to abide by those regulations may result in a denial of the freight claim. GF will assist you in filing the freight claim.
- 3) Claims for any short shipment must be made within thirty (30) days of the invoice date.



**GRAHAM-FIELD**  
[www.grahamfield.com](http://www.grahamfield.com)

GF Health Products, Inc. is not responsible for typographical errors. For the most updated and current information on packaging, warranties, products and specifications, including the most current version of these instructions, please visit our website at [www.grahamfield.com](http://www.grahamfield.com).  
Graham-Field and HealthTeam are registered trademarks of GF Health Products, Inc.

© 2011 GF Health Products, Inc. • 2935 Northeast Parkway • Atlanta, GA 30360 • tel 770-368-4700 • fax 770-368-2386 • Made in China