



Ohaus Corporation
29 Hanover Road
Florham Park NJ
07932-0900

FIELD TEST SCALE
Models 2400-11 and 2400-12

Instruction Manual

INTRODUCTION

This manual covers Installation and Operation for the Ohaus Field Test Scale, Models 2400-11 and 2400-12.

DESCRIPTION

The Field Test Scale is a very compact design and provides accurate weighings of a wide variety of heavy materials, even under the most adverse conditions. Applications include: road construction sites, weighing of soil samples, archaeological samples, and mineral samples. The Field Test Scale is ruggedly built and designed for field applications where accurate measurements must be made. The large stabilized pan will hold oversized samples without tipping, and the weighted base keeps the entire scale rock steady. Model 2400-11 permits readings up to 500 g taken from a single sliding-weight beam with a readability of 5 g. A set of slotted weights, stored in the base, extend the capacity up to 16 kg. Model 2400-12 has a capacity of 36 lb with a readability of 0.01 lb.



Figure 1. Field Test Scale with Slotted Weight Set.

SCALE COMPONENTS

Figure 2 illustrates the various components of the Field Test Scale. Refer to this figure when assembling the scale after unpacking.

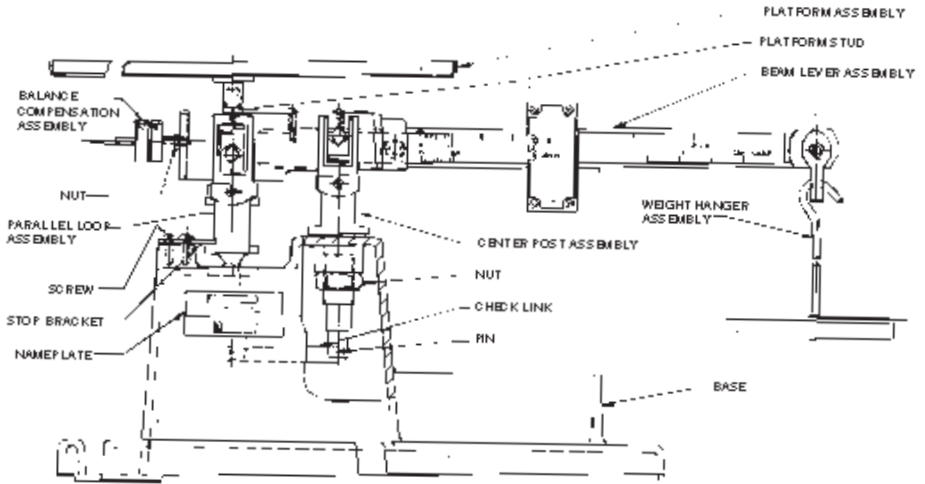


Figure 2. Field Test Scale Components.

The Field Test Scale is equipped with a universal beam, graduated in both avoirdupois (A) and metric (B) calibrations. The appropriate scale to be used is determined by the attachment weight calibration (avoirdupois or metric).

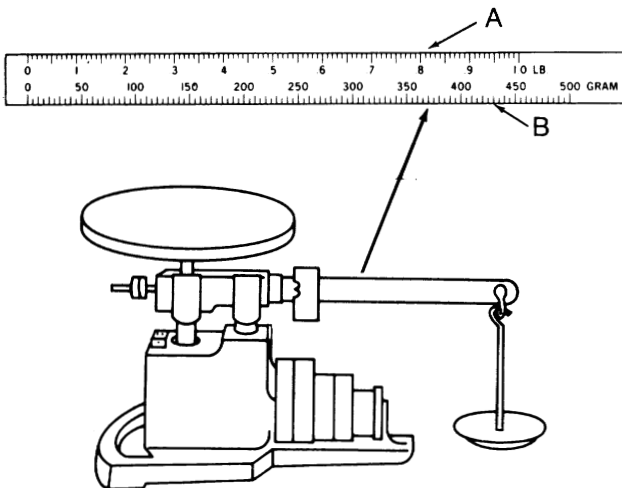


Figure 3. Beam Graduations.

UNPACKING

Carefully unpack the Field Test Scale as follows:

1. Refer to Figures 4, 5 and 6.
2. Remove attachment weight hanger **C**.
3. Remove insert **D**.
4. Remove insert **E** which surrounds the base.
5. Remove insert **F** which contains the beam assembly.
6. Remove box **H** containing attachment weights.
7. Remove scale base **I**.
8. Finally, lift the bottom insert and remove the scale pan.

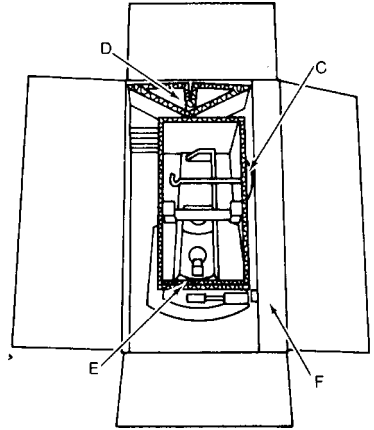


Figure 4.

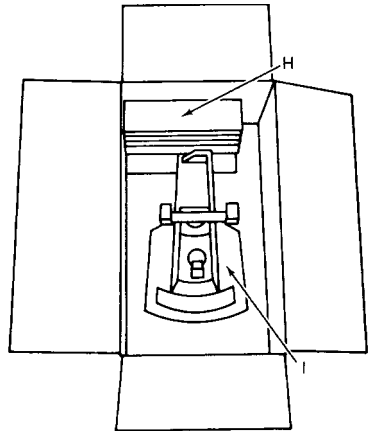


Figure 5.

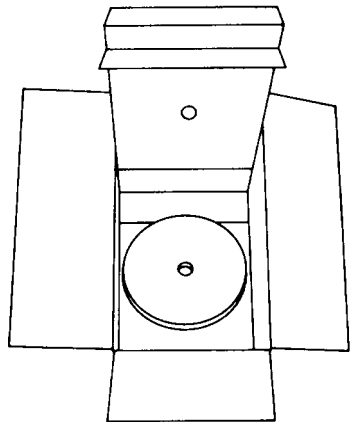


Figure 6.

ASSEMBLING THE FIELD TEST SCALE

Refer to Figure 7 when assembling the Field Test Scale.

1. Remove screws from bearing covers and slip covers off center post **N**.

NOTE: Be careful not to lose screws, covers and thrust plates.

2. Remove tape from loop **J** and remove pin. Save the pin.

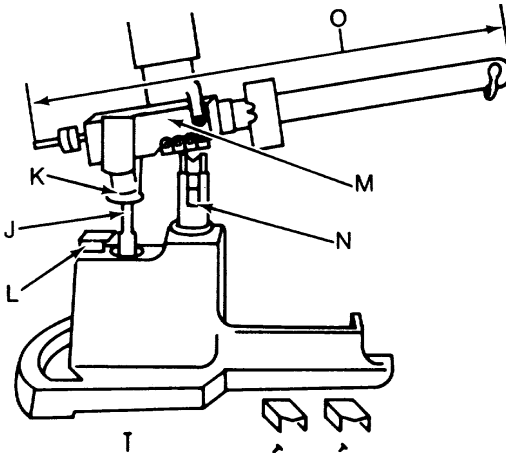


Figure 7. Base Assembly.

3. Hold beam assembly **O** in position shown in Figure 7 and lower loop **J** through the hole in the base. Be sure loop stop **k** swings under base stop **L** and then lower beam assembly so that fulcrum pivots **M** rest in center post.

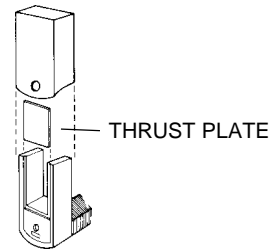


Figure 8. Bearing Covers.

4. Position the black thrust plates in the center post slots as shown in Figure 8.

5. Slip the bearing covers back into place over center post **N**.

6. Replace screws and tighten in place.

7. Screw on scale plate.

8. Now carefully invert the scale as shown in Figure 9.

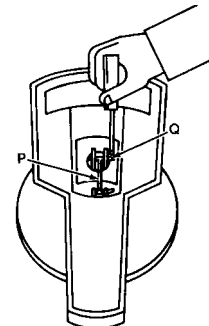


Figure 9. Scale Inverted.

ASSEMBLING THE FIELD TEST SCALE (CONT.)

9. Swing check line P into slot in loop and replace pin Q. (NOTE: Be sure pin also goes through the hole in the check link.)
10. Use a screwdriver to bend over pin Q which projects from loop. (NOTE: Position screwdriver as shown and hit firmly with hand to bend pin.)
11. Return scale to upright position.
12. Place attachment weight hanger in loop and weights on weight rack as shown in Figure 10.

The Field Test Scale is now ready for use and should look like Figure 10.

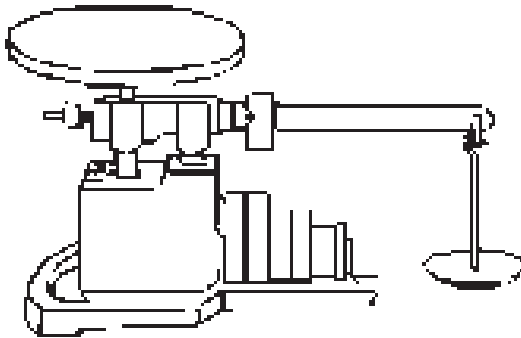


Figure 10. Assembled Field Test Scale.

WEIGHING

1. Set the scale on a reasonably level surface. The level condition is not critical, however, it should not be obviously badly out of level.
2. The scale is in balance when the beam oscillates between the limiting stops. Adjust the zero balance before beginning to use the scale so that the beam will oscillate in that manner, that is with the poise set to the left side of the beam. For adjustments to zero the scale, turn the balance compensation weights on the left end of the beam (knurled nuts).
3. To weigh, place the object on the pan, slide the poise on the beam to a position to cause the beam to oscillate between the stops. If the item being weighed exceeds the beam capacity, add sufficient slotted attachment weights to cause the end of the beam to move down. Then slide the poise back on the beam until a balanced condition is achieved. The weight is the value of the total accumulation of attachment weights plus the value read from the position of the poise on the beam.

TRANSPORTING THE SCALE

The Field Test Scale is portable and can be moved from place to place without damage. A handle has been provided in the back edge of the base. When transporting the scale, pick it up by the handle, not by the scale beam or the platform pan assembly. Be sure to remove the attachment weights and the attachment weight hanger before picking up the scale.

CARE AND MAINTENANCE

With reasonable care, your Field Test Scale can be kept in good working order.

1. Avoid severe impacts to the platform or the beam.
2. Keep the scale clean. Foreign material should not be permitted to accumulate in the pivot and bearing areas.
3. Never apply oil or any lubricant to the pivots or bearings.

REPLACEMENT PARTS

	<u>Part No.</u>
500 Gram Slotted Attachment Weight	2420-20
1 Kg Slotted Attachment Weight	2241-21
2 Kg Slotted Attachment Weight	2240-20
5 Kg Slotted Attachment Weight	2239-20
1 Lb Slotted Attachment Weight	2421-20
2 Lb Slotted Attachment Weight	2237-21
5 Lb Slotted Attachment Weight	2422-20
10 Lb Slotted Attachment Weight	2235-20
Weight Hanger Assembly	2428-00
Pin	P6113-05
Check Link	2404-00

SERVICE INFORMATION

For Service assistance in the United States, please call Ohaus Corporation toll-free at (800) 526-0659. An Ohaus Product Service Specialist will be available to help you.



LIMITED WARRANTY

Ohaus products are warranted against defects in materials and workmanship from the date of delivery through the duration of the warranty period. During the warranty period Ohaus will repair, or, at its option, replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to Ohaus.

This warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than Ohaus. In lieu of a properly returned warranty registration card, the warranty period shall begin on the date of shipment to the authorized dealer. No other express or implied warranty is given by Ohaus Corporation. Ohaus Corporation shall not be liable for any consequential damages.

As warranty legislation differs from state to state and country to country, please contact Ohaus or your local Ohaus dealer for further details.

Ohaus Corporation
29 Hanover Road,
Florham Park, NJ 07932, USA
Tel: (973) 377-9000,
Fax: (973) 593-0359

With offices worldwide.