Unpacking and Assembly Instructions

To make sure that your new precision balance reaches you in perfect condition, it has been shipped to you with each component packed securely in a protective, expanded polystyrene container.

Follow these instructions and you can assemble your balance in just a few minutes.

1. Remove the poly-container from the shipping carton and place it so that you can see the base. See Figure 1.

2. Snip the strap and lift off the upper half of the poly-container. Remove the base. (The powder trickler stand has been preassembled in the base.)

3. Remove the balance head from the lower half of the poly-container. Invert the balance head and set it in the recess of the top half of the poly-container. See Figure 2.

4. Screw the threaded rod into the hole in the balance head until it stops.

5. Slide the column down over the threaded rod. Hold the base and powder trickler stand in your left hand and slide them down over the threaded rod. (Both the column and base are "keyed." You cannot put them into place incorrectly.)

6. Slip the plate over the threaded rod into the slotted area on the base. Securely tighten the nut with the throwaway wrench.

7. Turn the balance over. The powder trickler stand may be adjusted by lifting the left edge and sliding it up or down.

8. Hang the pan support and the pan from the upper hook on the end loop. That's all there is to it!

Zerosing the Balance

It is wise to zero the balance periodically since foreign material may accumulate on the beam or pan and cause a slight change in the pointer's position. Whenever the balance is moved to a new location, the balance should be checked and zeroed, if necessary.
Weighing

Determination of the weight of a specimen placed on the pan of a Dial-O-Grain 504 balance is a very simple and rapid operation. The following procedure is the result of intensive research and is recommended as the fastest method for performing a weight determination.

1. Rotate the dial to the 10 GN position.
2. Move the 2000 GN poise on the rear beam to the first notch which causes the pointer to drop, then move it back one notch, causing the pointer to rise.
3. Move the 100 GN poise to the first notch which causes the pointer to drop.
4. Turn the knob slowly until the end reading device is perfectly centered.

Note: With a little practice, you will become proficient in learning exactly how fast to turn the dial to come exactly to balance position the first time.

Care and Maintenance

General

Never apply oil or any lubricant to the knives or bearings; this will impair performance.

Cleaning

Keep the balance clean at all times, being particularly careful not to let dirt accumulate near the bearings. Foreign matter can be most easily removed with an air syringe. When the balance is not being used, it should be protected by a balance cover. (Part No. 110, $1.50)

From time to time it may be necessary to clean the damping magnet faces. This is best done by inserting a piece of scotch tape into the damper vane slot, pressing it against the magnet face. The tape will pick up foreign material and prevent it from interfering with movement of the damper vane.

Calibration of the Dial

When the balance is properly adjusted for zero balance and a load of 10 grains is placed on the pan, a setting of 10 grains on the dial should cause the beam to come to balance. If not, a calibration adjustment is indicated.

Calibration is accomplished by increasing or decreasing the effective length of spiral spring. To accomplish this, remove the dial housing cover, loosen the two screws on the spring clamp (using a jeweler's screwdriver) and slide the spring under the clamp either to provide more usable spring or less usable spring. Re-tighten the screws making sure that the spring has not been twisted so that the spiral does not lie in a flat plane.

If the error in calibration was such that it required a dial setting of greater than 10 grains to balance a 10 grain weight on the pan, decrease the amount of the effective spring by pulling the spring into the clamp from the free end.

Replacement Parts List

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Name</th>
<th>Req'd</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-03</td>
<td>Bearing</td>
<td>2</td>
</tr>
<tr>
<td>1034</td>
<td>Friction Plug</td>
<td>2</td>
</tr>
<tr>
<td>1035-03</td>
<td>Bearing Cover</td>
<td>2</td>
</tr>
<tr>
<td>4516</td>
<td>Damper Vane</td>
<td>1</td>
</tr>
<tr>
<td>4578</td>
<td>End Loop Assembly</td>
<td>1</td>
</tr>
<tr>
<td>4579</td>
<td>Pan Support Cover</td>
<td>1</td>
</tr>
<tr>
<td>4950</td>
<td>Scoop</td>
<td>1</td>
</tr>
<tr>
<td>9703</td>
<td>Balance Compensator Assembly</td>
<td>1</td>
</tr>
<tr>
<td>4541-01</td>
<td>Beam Assembly</td>
<td>1</td>
</tr>
<tr>
<td>9702-01</td>
<td>Pan Support Assembly</td>
<td>1</td>
</tr>
<tr>
<td>9716-00</td>
<td>Triciler Stand</td>
<td>1</td>
</tr>
<tr>
<td>7125</td>
<td>Powder Triciler</td>
<td>1</td>
</tr>
</tbody>
</table>

Accessories

| 110 | Balance Cover |

Don't forget the many other fine Ohaus products for the recloder:

- A broad selection of high quality ballet moulds and casting accessories.
- The Du-O-Measure—A powder-measure using a single drum for pistol and rifle charges.
- A wide variety of general accessories that will add to the enjoyment of your hobby.

Write today for the latest Ohaus catalog.

OHAUS SCALE CORPORATION

Phone: (201) 377-8600

Printed in U.S.A.