

# Ohaus Harvard Junior Balance Model HJ2001

## - OPERATING MANUAL -

### INTRODUCTION

This manual covers Installation, Operation and Maintenance for the Ohaus Harvard Junior Balance. To ensure proper operation of the Balance, please read this manual completely.

### DESCRIPTION

The Ohaus Harvard Junior Balance is a precision weighing instrument, designed to provide years of service with virtually no maintenance. The Harvard Junior Balance employs a two-pan design, with the added advantage that it comes standard with two styles of weighing platforms as well as a set of weights.

Two-pan Balances of this type are commonly used for comparative weighing to determine the difference in mass between two objects rather than their absolute value. Maximum Balance capacity for the Harvard Junior is 2kg/5.0lbs. Both the Platforms and the bowls used on the Balance are 6" diameter.

### UNPACKING

Harvard Junior Balances are shipped as follows:

- Completely assembled Balance
- Instruction manual & activity guide
- Two 6" diameter bowls
- Weight set
- Warranty Card

Your new precision Balance has been packed in a carton specifically designed to protect it during shipment. Follow these instructions and your Balance will be operational in just a few minutes.

- Remove the Balance from the carton by pulling on the Styrofoam inserts.
- Remove the weight set from the end of the Styrofoam insert.
- Remove the inserts from Balance.
- Remove the manual, activity guide and warranty card from the carton.
- Verify that all items have been included in you package.
- All loose packing material should be retained if you anticipate any future shipment of the Balance.

### BALANCE SETUP

Place the Balance on a reasonably flat, level surface away from sources of vibration and drafts. Carefully remove the two red round rubber washers from between the Base and Platform End Loops. The washers have been designed to remain with the balance and should be reinserted any time the balance is relocated or stored.

Place the two Bowls on the matching color coded platforms. This will result in the Balance being very nearly at zero.

### OPERATION

#### *Zeroing the Balance*

Setting the balance exactly at zero can be accomplished in using two different devices.

- If there is only a small adjustment required you can adjust the knurled Zero Adjust Knob which is located at the right end of the Beam.
- If the out of balance condition exceeds the adjustment capacity of the knurled Zero Adjust Knob located at the right end of the beam, use the larger Zero Adjust feature located on the rear of the beam by sliding the knob to the approximate location to balance out the beam then use the fine adjust feature by rotating the zero adjust knob to get an exact zero.

It is advisable to check the zero balance periodically because foreign material may accumulate on the Platform or the Beam. This can produce a slight change in the zero balance position. In addition, whenever the Balance is moved, the zero balance must be rechecked. Any appreciable change in the inclination of the working surface will affect accuracy. The Base of each Balance is leveled on a surface plate at the factory and will rest evenly on any perfectly flat surface. The Balance may rock slightly if the working surface is not absolutely flat. This should be eliminated by shimming under the base to eliminate the rocking.

## WEIGHING

### *To determine weight of object*

- Make sure that pointer is lined up with center graduation.
- Place the object to be weighed on one pan/bowl. The pointer will swing to the same side as the object to be weighed.
- Place masses on other pan/bowl until the pointer is again lined up with the center graduation.
- The weight of the object is the sum of the masses on the platform.

### *To compare the weights of two objects*

- Make sure that pointer is lined up with center graduation.
- Place the first object to be weighed on one pan/bowl. The pointer will swing to the same side as the first object placed on the scale.
- Place the second object on the other pan/bowl. The pointer will point toward the heavier object.

## CARE AND MAINTENANCE

The following practices will assure that your Balance will give you years of satisfactory and trouble-free service.

When the Balance is not in use, remove any heavy mass or weight from the Platforms. Replace the transportation/storage locks to prevent oscillation and prevent unnecessary wear. The balance is designed to be stackable while being stored so long as the transportation/storage locks are in place. Do not stack balances without the rubber storage locks secure. It is not recommended that you stack the balances over 3 units high, and be sure that the stacked balances are stored in a secure area where they cannot be easily knocked over and cause accidental harm or injury to students or teachers. Use and store the Balance in places free of vibration.

**Never** lubricate the scale bearings. The Bearings in these Balances are high grade polished agate V-blocks and the knife edges are hardened, precision-ground steel. This type of Bearing works most efficiently when clean and dry.

Keep the Balance clean at all times, being particularly careful not to let dirt accumulate in the vicinity of the Bearings. If the Bearings should become dirty, try to clean them using an air syringe. The Model 106-00 Balance Cover is recommended to keep the Balance clean when not in use.

## SPECIFICATIONS

Capacity 2000g/ 5.0 lbs

Readability 0.5g

Platform size Plate & Bowl (in/cm) 6/15.2 diameter.

## REPLACEMENT PARTS

Green Pan 150mm (HJ)	80252062
Yellow Pan 150mm (HJ)	80252063
Green Bowl 150mm (HJ)	80252064
Yellow Bowl 150mm (HJ)	80252065
Manual (HJ)	80252063
Transport/Storage Lock (HJ)	80252066
Activity Guide (HJ)	80252067
Balance Cover	106-00

## WARRANTY 3 years

To protect your investment, register your product at [www.ohaus.com](http://www.ohaus.com) and download 2 additional Harvard Jr. activities for free. Please use the "Date Code" printed on the outside of the box when asked for the serial numbers during your registration.



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