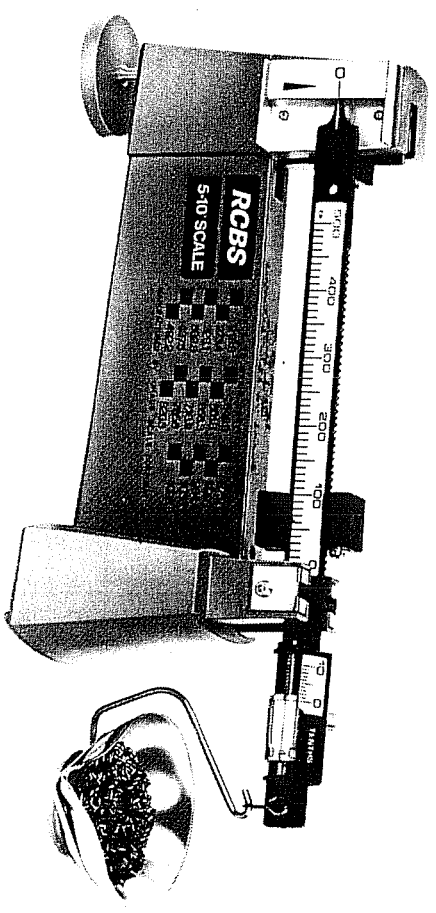


# RCBS

# Model 5.10 Scale Instructions



Sporting Equipment Division



## IMPORTANT

Since the powder charge is the most critical portion of a reloaded cartridge, it is very important that you take a few minutes to read these instructions carefully to gain an understanding of the use of the micrometer poise before attempting to weigh powder charges.

## About Your RCBS Precisioneer® Model 5-10 Reloading Scale

Your RCBS Scale is a Precisioneer instrument that will provide a lifetime of service and accuracy if given the proper care. It is capable of accurately weighing powder or other items from 1/10th of a grain up to 510 grains.

The unique Micrometer Poise is the first major improvement in reloading scales in several years and is easy to set and read.

The Magnetic Damper assures you of instant, accurate readings without unnecessary oscillation of the Beam.

The All-metal Base provides the necessary weight for proper stability, and coupled with the extra-large Leveling Foot, reduces the tendency to tip.

The anodized Scale Pan is designed with scoop for ease in pouring powder. The Pan fits snugly in the Pan Support Assembly to prevent tipping when long objects are weighed.

### FULL NINETY DAY WARRANTY

This RCBS reloading product is manufactured exclusively for RCBS by Ohaus Scale Corporation. The manufacturer warrants that this product will function properly for ninety days from the date of purchase. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

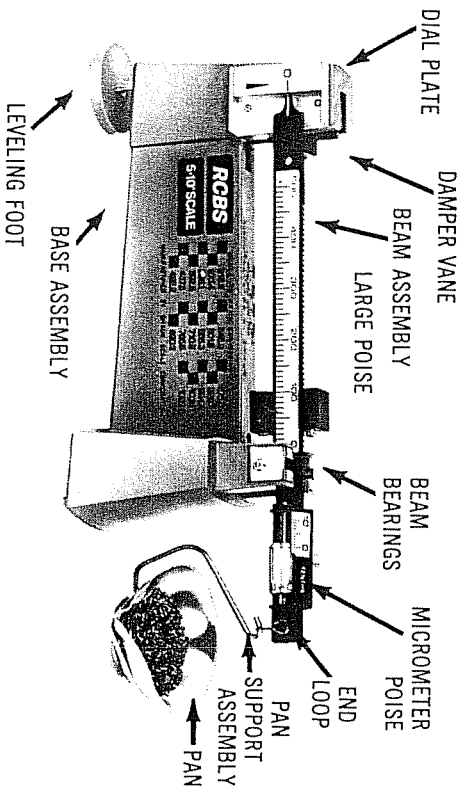
If this RCBS reloading product does not perform properly within ninety days after purchase, RCBS or its representative will repair it without charge to you. If RCBS is unable to repair it, you will have the option of replacement of the product or refund of the purchase price.

These remedies are not available if the product becomes defective or is damaged by misuse, careless handling, or other circumstances beyond the manufacturer's control, or if the defect or damage is caused by failure to follow the operating and maintenance instructions packaged with the product. Carefully read and follow these instructions in order to use the product properly and prevent the occurrence of defect or damage.

The manufacturer and RCBS accept no obligation other than repair of the product, and replacement or refund if repair cannot be made. The manufacturer and RCBS will not be responsible for any incidental or consequential loss or damage resulting from the use of this product, even if the loss or damage is caused by the fault of the manufacturer. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.)

For warranty or other service on this product, contact RCBS, 605 Oro Dam Boulevard, Oroville, California 95965 (telephone 916-533-5191), or return the product to your RCBS dealer or any representative designated by RCBS, transportation charges prepaid, with proof of date of purchase and a description of the problem.

Manufactured for RCBS by Ohaus Scale Corporation, 29 Hanover Road, Florham Park, New Jersey 07932 (telephone 201-377-9000).



### UNPACKING AND SETUP

Your RCBS Proportioned Potloading Scale was carefully packed in a specially designed carton to protect it in shipment. **Unpack it carefully!** You will find these four components in the carton:

1. Base Assembly
2. Beam Assembly
3. Pan Support Assembly
4. Pan

Place the Base Assembly on a reasonably flat and level surface. Insert the Beam Assembly in its slotting, making sure to position the copper damper vane in the slot at the end of the Base Assembly. Hang the Pan Support Assembly and Pan from the End Loop.

The Pan Support Assembly is designed to cradle the Pan so that long heavy objects such as cases and loaded cartridges can be weighed without tipping the Pan off its support. The Pan Support may be rotated within the wire hanger for a more convenient working angle.

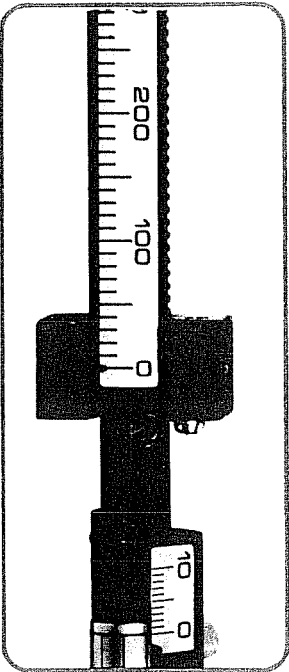
### HOW TO CARE FOR YOUR SCALE

Keep the Scale clean at all times and be particularly careful to prevent the accumulation of dirt on the pivots and bearings. Never apply oil or any lubricant to the pivots or bearings; this will lower the accuracy of the Scale.

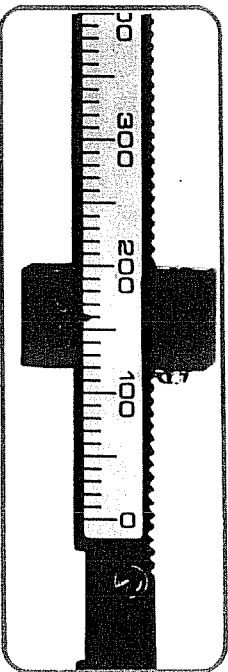
#### HOW TO USE THE LARGE POISE (500 GRAIN)

The principle of the large poise consists of an accurately adjusted weight which moves parallel to the longitudinal axis of the beam and which is positioned at weight values by means of a pawl engaging notches in the beam. The poise run is from 0 to 500 grains. The equally-spaced notches divide this distance into 50 equal parts so that each subdivision is equivalent to 10 grains of weight.

To zero the large poise, move it to the position where the pawl, located on the right side of the poise, engages the first notch on the right end of the poise travel. The poise indicator will line up with the zero graduation.



To increase weight values, move the poise to the left and line up the indicator with the desired graduation. Always make sure that the pawl is seated in the notch. Illustrated is a setting of 160 grains.



**Do not attempt to set the large poise at any position except firmly seated in a notch.** Always use the micrometer poise for weight values between the 10 grain increments of the large poise.

#### HOW TO USE THE MICROMETER POISE (10 GRAIN)

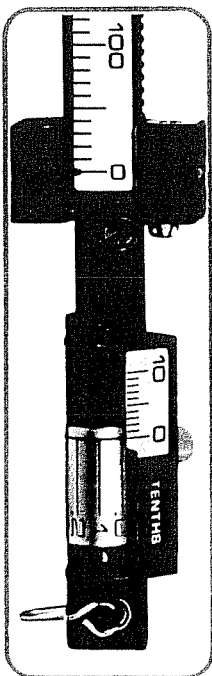
The principle of the micrometer poise consists of an internally threaded weight, also accurately adjusted, which rotates on a fixed screw or spindle. The pitch of the screw thread is  $1/24''$ , or 24 threads per inch, and exactly matches the spacing of graduations on the 0-10 grain scale. Therefore, one complete revolution ( $360^\circ$ ) of the poise around the spindle will move the poise longi-

tudinally a distance equivalent to 1 grain of weight (10 revolutions for 10 grains).

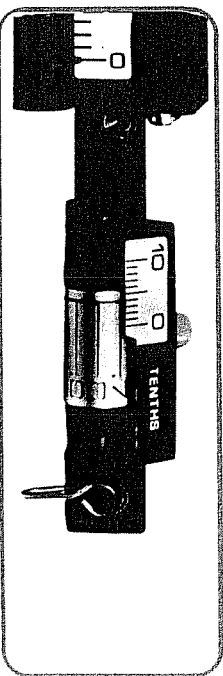
The cylindrical surface of the micrometer poise is subdivided into 10 equal parts by means of the long horizontal lines which are numbered from 0-9. Rotating the poise from one of these lines to the next moves the poise longitudinally  $1/10$  the distance of a complete revolution or a distance equivalent to  $1/10$  grain of weight.

A nylon screw coming in from the back of the beam is used to lock the micrometer poise in place to prevent movement during weighing. Only light finger pressure is required to tighten or loosen this screw.

To zero the micrometer poise, line up the radial indicator line near the left end of poise with the zero graduation on the 0-10 grain scale and line up the zero line on the surface of the poise with the reading edge of 0-10 grain scale.



To increase weight values, rotate the front surface of the poise upward with your thumb, which will cause the poise to travel to the left. The indicator line near the left end of the poise will indicate grain values while the horizontal lines on the poise will indicate tenths of a grain. Illustrated is a setting of a 3.7 grains.



Notice that the indicator line is between the 3 grain graduation and the 4 grain graduation, indicating more than 3 grains but less than 4 grains, and the .7 grain horizontal line is lined up with the reading edge of the scale.

**Do not attempt to use the micrometer poise with the indicator line outside the limits of 0-10 grain graduated scale.** Weighing errors may result.

#### HOW TO ZERO BALANCE THE SCALE

Place both the large poise and the micrometer poise at zero. If the scale has been placed on a reasonably level surface, the beam pointer will come to rest fairly close to the zero graduation on the dial plate. Raise or lower the left end of the base by means of the leveling foot to line them up.

**The scale should be zero balanced before use and checked periodically during use for maximum accuracy and protection against error.**

#### MAGNETIC DAMPING

Your RCBS Precisioneered Reloading Scale is equipped with magnetic damping which causes the beam to come to rest quickly without affecting sensitivity or accuracy. It operates on the principle of a permanent magnetic field resisting the motion of a non-magnetic, copper damper vane attached to the beam.

The pole faces of the damping magnets are positioned on both sides of the  $\frac{1}{4}$ " wide slot that the damper vane travels in when the beam is in place.

The only maintenance required is to keep these magnets free of magnetic particles which could interfere with free movement of the damper vane.

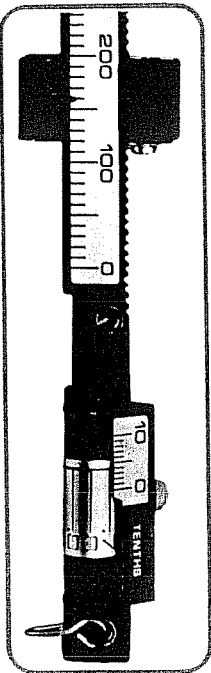
The magnetic damping is effective at all loads and will speed up weighing.

#### HOW TO WEIGH

To weigh an unknown, such as the throw of charge from a powder measure, place it in the scale pan. Move the large poise to the first notch which causes the beam pointer to drop below zero and then move it back one notch. Next, rotate the micrometer poise to the position which brings the beam pointer to zero. The weight of the unknown is the sum of the two poise readings.

Note: Read the micrometer poise to the nearest .1 grain.

Illustrated is a total weight of 163.7 grains.



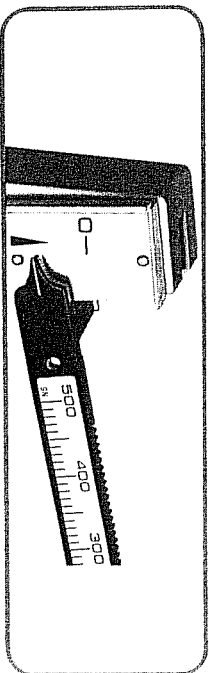
#### APPROACH-TO-WEIGHT FEATURE

Your RCBS Precisioneered Reloading Scale incorporates a unique approach-to-weight feature developed by Ohaus Scale Corporation. This feature allows you to pour powder quickly without overshooting the weight wanted. It is useful to the reloader who

either weighs out each powder charge on his scale or who uses the scale to weigh charges dispensed from a powder measure. In either case you pre-set the powder weight wanted on the poises. This will bring the beam pointer below the zero mark.

As the powder poured into the scale pan begins to approach the pre-set weight, the beam pointer will move slowly upward past the arrowhead on the dial plate. This visually tells you that very little more powder is needed to balance the scale.

The visible indication of approach to a balanced condition allows for rapid pouring of powder until close to balance and then slower pouring to a final zero balance. This feature prevents annoying overshooting and the need to remove powder from the pan.



**When making repeated weighings in this manner, avoid weighing errors by making sure that the poises remain in their correct positions and are not accidentally moved.**

The approach-to-weight leaf spring has been adjusted at the factory, by means of the hex socket set screw accessible from the top surface of the base, so that in its free position it just touches the underneath side of the base near the damper vane slot without exerting any upward force. It should rarely require any adjustment by the user.

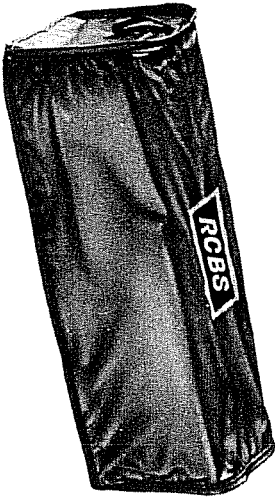
**RCBS**

Sporting Equipment  
Division

**OHAMARK**  
INDUSTRIES

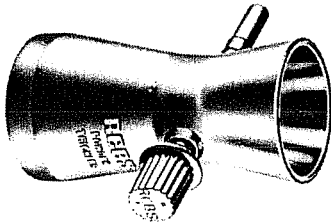
# RCBS POWDER HANDLING ACCESSORIES AVAILABLE AT YOUR GUN DEALERS

## RCBS SCALE COVER



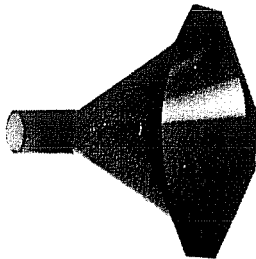
This soft, vinyl dust cover protects your Scale when not in use. Folds easily for storing.

## RCBS POWDER TRICKLER



Here's the fast, easy way to balance scales with precision powder charges. Merely twist knob and powder trickles into the scale pan a kernel at a time. Has large capacity powder reservoir and an extra large base to minimize tipping over. For use with most powder scales.

## RCBS POWDER FUNNEL



For powder charging just a few cases at a time! Large, easy-to-use, plastic Powder Funnel in two sizes: .22 to .45 calibers, and .17 to .45 calibers. Specially designed drop tube prevents powder spills around case mouths. Antistatic treatment prevents powder from sticking. Square lip stops Funnel from rolling.

RCBS, OROVILLE, CALIFORNIA 95965