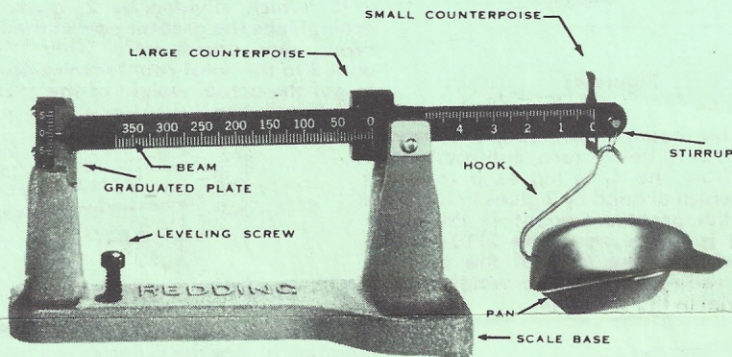


REDDING

MODEL NO. 1

POWDER AND BULLET SCALE



The Redding #1 Powder and Bullet Scale is offered to those reloaders who prefer a scale that does not have a beam dampening device. This scale features a simple two counterpoise system and a graduated over and under plate for fast accurate measurements. Each increment of the graduated plate indicates 1/10 grain allowing the operator to check variations in the powder charges or bullet weights without adjusting the counterpoises.

The instructions to follow describe a manual method of dampening in addition to the recommended method of using this scale in which no dampening action is used. The non-dampened method is the most accurate and precise when using a scale with the accuracy and sensitivity characteristics of the Redding #1. Most analytical balances where the utmost degree of accuracy is required are operated in this manner.

Redding scales are extremely sensitive precision instruments and should be handled accordingly. With proper care, you will receive many years of service and satisfaction.

SET UP AND ZERO ADJUSTMENT

1. Place the beam assembly in place and attach the pan hook and pan.
2. Place the scale in a reasonably level position, as near eye level as practical for easy reading and set both counterpoises at "0".
3. Adjust the leveling screw until the pointer end of the beam also aligns with "0" on the graduated plate.
4. Your scale is now zeroed, ready to use and will accurately measure any amount up to 380 grains.

OPERATION

Each graduation on the left-hand (large counterpoise) side of the main bearing is equal to five grains for a total of 375 grains. Each graduation on the right-hand (small counterpoise) side of the main bearing is equal to one-tenth grain for a total of five grains. Thus, any weight from .1 grain to 380 grains can be determined on this scale.

The calibrations on the graduated plate at the pointer end of the beam are also graduated in one-tenth grain increments. Thus, small variations in weight can be determined without readjusting the counterpoises.

When setting the scale to desired weight setting, the amount shown at each counterpoise is always added and the total is the amount the scale is set to.

EXAMPLE: For desired setting of 43.6 grains, Set large counterpoise at 40.0 grains
Set small counterpoise at 3.6 grains
Total (Scale setting) 43.6 grains

READING A NON-DAMPENED SCALE

When your scale has been set up as previously described and the counterpoises adjusted to an approximate setting to permit the beam to swing freely, the actual weight of material can be read as follows:

Note the number of graduations the pointer end of the beam swings above and below the zero of the graduated plate. Subtract the smaller number of graduations from the larger and divide by two. The result will be the variation from the counterpoise setting, over or under, depending upon whether the largest deviation is above or below zero.

The following examples are given for clarification.

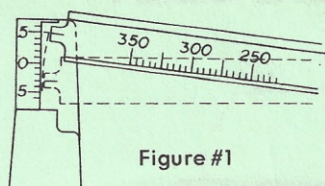


Figure #1

Here the beam is swinging $1/10$ above zero to $5/10$ below zero. Subtracting the $1/10$ from the $5/10$ leaves a result of $4/10$ which divided by 2 gives $2/10$. Since here the greater amount of the beam swing is below zero, the $2/10$ is subtracted from the total of the counterpoise settings to give the weight of the material in the scale pan.

Beam is swinging from $3/10$ below zero to $5/10$ above zero. Subtract the $3/10$ from the $5/10$ leaving a difference of $2/10$, which, divided by 2, gives $1/10$ grain. Since the greater part of the beam swing was above zero, this $1/10$ is added to the total counterpoise settings to get the actual weight of the material in the scale pan.

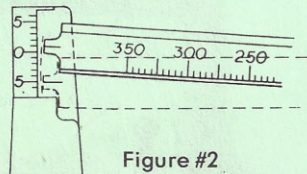


Figure #2

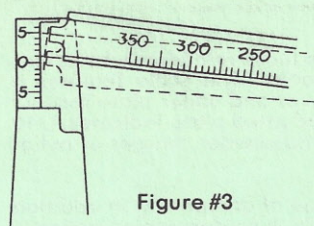


Figure #3

In this example, we have a different situation in that the swing of the beam is all on one side of the center zero mark. When this occurs, the two readings are added together rather than subtracted and the result is divided by two. In the example illustrated, the beam swing is from $1/10$ above zero to $5/10$ above zero which, added together gives a result of 6. This divided by 2 gives an answer of $3/10$. Since the beam swing is above zero, the $3/10$ is added to the counterpoise setting.

In each case, the figure that is added to or subtracted from the counterpoise settings is simply the actual resting point of the beam when it comes to a complete stop.

MANUAL DAMPENING

With the powder charge or bullet in the scale pan and the counterpoises properly set, the beam can be brought to rest quickly by placing the left thumb lightly against the face of the graduated plate and rotating the thumb inward until it very gently contacts the face of the moving beam. Release contact immediately and repeat one or two times until the beam comes to a stop. This method can be learned very quickly after a short period of practice.

CLEANING AND REPAIRS

It is imperative that the scale be kept clean and handled carefully so that the one-tenth grain accuracy of this precision instrument can be maintained for years of satisfactory service.

The slightest amount of dust and dirt on the beam or main bearing will effect accuracy and sensitivity.

Cleaning can be accomplished with soft clean tissue paper, "Q" tips or a very delicate camera lens brush. Never use lubrication of any kind or attempt to alter the scale in any way. Do not attempt to clean the main bearing or seat with a hard instrument, file or stone. If scale becomes inaccurate due to damage, accident, or rough handling it should be returned to the factory. For a very minimal charge your scale will be repaired, cleaned and recalibrated as good as new.

PARTS

The replacement of almost any part of the scale will effect the balance and calibration. Note the pan and pan hook are assembled and adjusted individually to each scale and are not interchangeable from one scale to another.

Should replacement of the pan, pan hook or any other part become necessary write to factory for instructions, or return the entire scale for repair and recalibration.

Any unauthorized attempt to repair or alter the scale in any way will void the guarantee.