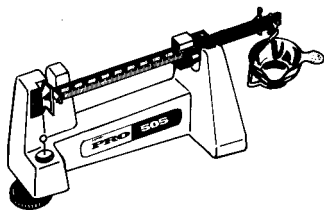
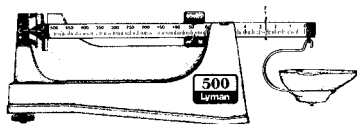


# SETTING UP YOUR LYMAN PRECISION RELOADING SCALE



**Pro 505 Scale**



**Lyman M-500 Scale**

The Lyman Scale sets up quickly and easily. First remove the base casting from the carton.

Now grasp the scale beam and move the large poise (or balance weight) to the right to the zero setting. Rotate the scale beam until the magnetic damper plate (copper colored) is in the straight-up position. Align the beam bearings on the base casting and rotate the beam 90 degrees into position so that the knife edge is resting on the vee block bearing.

Next, remove the lower pan from the carton and hook it to the pan hook wire on the small poise end of the beam. The pan arm's "elbow" should face inward, towards the base casting. The final step in assembly is placing the dump pan in the lower pan. The scale is now ready to "zero".

## **Zeroing (Calibrating)**

Set the assembled scale on a secure level surface, free from drafts or vibration. Move both poise (balance weights) to the "zero" position and adjust the leveling screw under the left end of the base casting until the beam pointer rests on "zero". Rezero the scale every time you use or move it.

## **Weighing**

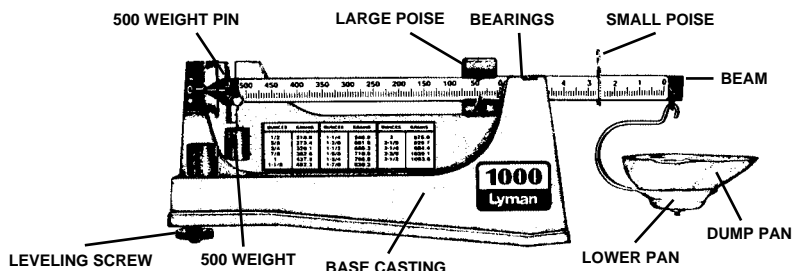
To weigh a bullet, shot or powder charge, place the weight in the dump pan, making certain the moulding of the lower pan fits the dump pan properly. Move the large poise to the left to the first notch which causes the beam pointer to drop below zero, then move the large poise back one notch. Now move the small poise to the left until the beam pointer indicates zero. This is your reading.

## **Weight Measurement Specifications**

### **Pro 500, M-500 Scale**

Both the Pro 500 and the M-500 Scale (formerly D-7) have a capacity of 505 grains, 500 from the large poise scale and five (5) from the small poise scale. They are accurate to plus or minus 1/10 of a grain and have been carefully calibrated at the factory. Measurements on the small poise run from 0-5 grains marked in 10th grain increments.

## Precision Reloading Scale (continued)



## Lyman M-1000 and Pro 1000 Scales

### M-1000 and Pro 1000 Scales

The M-1000 and Pro 1000 scale has a capacity of 1005 grains; 1000 from the large poise scale, when the 500 counterweight is placed on a special pin located at the extreme left end of the beam, and five grains from the small poise scale. Before using this feature, be certain the scale has been properly zeroed (see Zeroing). With the 500 counterweight in place on the pin, add 500 grains to the actual scale readings. Please note that the 500 counterweight does not weigh 500 grains.

### Model 500 Metric Scale

The Model 500 Metric scale has a capacity of 32.75 grams, 32.50 from the large poise scale and .25 from the small poise scale. It is accurate to plus or minus .005 gram and has been carefully calibrated at the factory. Measurements on the small poise scale represent grams from 0- .25 marked in .005 gram increments. Measurements on the large poise scale run from 0-32.50 grams marked in .25 increments.

### Reading the Measurements on the Pro 500, M-500 (D-7) or M-1000 and Pro 1000 Scales

To read the measurement, first look at the large poise scale. If, for instance, the poise is directly over the 100 mark, you will know that it is reading 100 grains. If it is one scribe mark to the left, the reading will be 105 grains; two scribe marks to left, and the reading will be 110 grains, etc. To this measurement you must add the reading from the small poise scale. If, for instance, the small poise is positioned over the one and the large poise is over 100, the reading will be 101 (add the small poise scale reading to the large poise scale reading for your total measurement). If the large poise scale reads 105 grains and the small poise scale reads 2.2 grains, you know the total measurement is 107.2 grains.

## Precision Reloading Scale (continued)

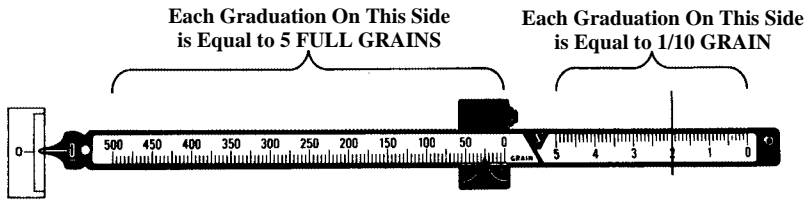


Figure 16

### An Example

Figure 16 shows a setting of 27.0 grains. If you wanted to decrease this 1/10 grain, you would simply move the small poise one notch to the right.

### Reading the Measurements on the M-500 Metric scale

To read the measurement, first look at the large poise scale. If, for instance, the poise is directly over the 6 mark, you will know that it is reading 6 grams. If it is one scribe mark to the left, the reading will be 6.25 grams, two scribe marks to the left, and the reading will be 6.50 grams, etc. To this measurement, you must add the reading from the small poise scale. If, for instance, the small poise is positioned over the .10 and the large poise is over 6, the reading will be 6.10 grams (add the small poise scale reading to the large poise scale reading for your total measurement). If the large poise scale reads 6.25 grams and the small poise scale reads .15 grains, you know the total measurement is 6.40 grams.

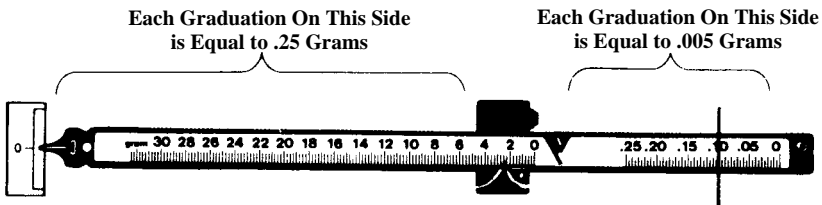


Figure 17

### An Example

Figure 17 shows a setting of 2.6 grams. If you wanted to decrease this .005 grams, you would simply move the small poise one notch to the right.

### Useful Scale Information

For precise powder measurements, use the Lyman #55 Powder Measure and the Lyman Powder Dribbler in conjunction with your Scale as follows:

Adjust the Lyman #55 Powder Measure to throw a slightly low charge of powder into the dump pan of your Lyman Scale. Return the charged dump pan to your scale, then use the Powder Dribbler to add the final granules of powder to meet your desired preset weight.

### Lyman Archer's Scale

Your Archer's scale has a specially designed pan which will allow you to weigh your arrow shaft when balanced properly in the pan. It should be noted that some heavier arrows

### ***Precision Reloading Scale(continued)***

will have to be weighed independently from the broadhead or field point for a total weight.

***Please note that an Archery Scale cannot be converted to a Powder Scale***

For weighing instructions, please refer to the Zeroing (calibrating) and Weighing section.

### **Care of Your Lyman Scale**

Move the large poise about halfway down the beam when transporting or storing the scale to avoid possible damage to the bearings.

Cover the scale when not in use, to prevent accumulation of dust on the bearings. **DO NOT** allow any oil to accumulate on the bearings as this will affect accuracy and sensitivity of the scale.

### **CAUTION**

Static electricity will affect the accuracy of reloading scales. **DO NOT** place Styrofoam packing materials closer than 6" to the scale and periodically re-check Zero calibration during use.

**DO NOT** remove, sell, or exchange any part of the "balance unit" as it is not safe to assume that these parts are interchangeable with any other scale. These parts are balanced-in together.

If any are misplaced or broken, return to Lyman complete, and we will replace the part and re-balance the scale with a minimal charge.

### **Conversion Table Ounces to Grains**

OUNCES	GRAINS	OUNCES	GRAINS	OUNCES	GRAINS
$\frac{1}{2}$	218.8	$1-\frac{1}{8}$	492.2	$1-\frac{3}{4}$	765.6
$\frac{5}{16}$	246.1	$1-\frac{3}{16}$	519.5	$1-\frac{13}{16}$	793.0
$\frac{5}{8}$	273.4	$1-\frac{1}{4}$	546.9	$1-\frac{7}{8}$	820.3
$\frac{11}{16}$	300.8	$1-\frac{5}{16}$	574.2	$1-\frac{15}{16}$	847.7
$\frac{3}{4}$	328.1	$1-\frac{3}{8}$	601.6	2	875.0
$\frac{13}{16}$	355.5	$1-\frac{7}{16}$	628.9	$2-\frac{1}{16}$	902.3
$\frac{7}{8}$	382.8	$1-\frac{1}{2}$	656.3	$2-\frac{1}{8}$	929.7
$\frac{15}{16}$	410.2	$1-\frac{9}{16}$	683.6	$2-\frac{3}{16}$	957.0
1	437.5	$1-\frac{5}{8}$	710.9	$2-\frac{1}{4}$	984.4
$1-\frac{1}{16}$	464.8	$1-\frac{11}{16}$	738.3		