

KEYBOARD WEIGH OFF & LEADING PROCEDURE

Ease the key bushings and pin hole, lubricate, and do a quick regulation before leading. Be sure that the jack (fly) top is below the repetition lever (balancier) top surface.

Either weigh the leads on a gram scale and sort them by weight, or plan to lead keys with the same leads, in the same position that is used to determine the leading pattern.

When re-leading an old keyboard, some or all of the existing leads must be removed and the holes plugged. If the old leads are large $\frac{1}{2}$ inch leads, grouped in an even pattern, and are close together and towards the front of the key (where they have the most effect) then it maybe necessary to remove only the last 2 or 3 leads closest to the balance pin. If the old leads are scattered, small (less than $\frac{1}{2}$ inch) or the keys are badly cracked, then it is better to remove them all. Remove all leads from accelerated actions.

To determine the leading, use 4 different gram weights for each key.

- #1 a gram weight that is the actual down weight desired.
- #2 a gram weight that is 1 gram less than #1.
- #3 a 25 gram weight
- #4 a 31 gram weight

Put the leads on a key using a Leading Template (see below). Adjust the leads on the key until the hammer, when brought to half stroke, will gently rise with the center of the "#1 gram weight" placed on the key 13mm back from the front edge of the key top. Adjust the leads so that the hammer will rise a little, again at half stroke, but not all the way up using "#2." Next use the "#3" on the key to make sure that the hammer will drop to the rest position. Lastly, use the "#4" to make sure that the hammer will stay above the rest position. If #3 and #4 do not show that the up weight is between 25 and 31 grams, then a different weigh off, such as a "concert weigh off," maybe necessary. If it is only a random few keys that don't have the desired up weight, then friction may be the problem and it should be corrected.

Leads in keys should be no closer than $\frac{3}{8}$ inch from the edge of one lead to another. Put all leads as close as possible to the front of the key so that fewer leads will be needed. Determining where to put the leads in the keys is made easier by using a Leading Template. A Leading Template can easily be made out of a piece of thin cardboard or plastic. On the sharps make sure that the edge of the first lead, closest to the front of key is at least $\frac{3}{8}$ inch away from the back edge of the front key bushing mortise.

Leading Template

