8.0 RE-CALIBRATION OF SPACE
ATTENTION: PLEASE READ BEFORE PROCEEDING.

RE-CALIBRATION OF SPACE

NO RE-ADJUSTMENT of space is required when changing from one code card to another. The space indicator marks on each code card are positioned for correct lateral alignment when using the factory cutter wheels. No special spacing washers are required on either side of the cutter.

The need to re-adjust the space is rare and should be done only after the more common causes for mis-cut keys are eliminated.

Remember, when originating a key by code you do not have access to an operable key. Quite often code numbers are mis-read, locks are coded incorrectly when they are new and code books occasionally have typographical errors. Be aware of these unintentional errors that detract from the successful cutting of keys by code. After eliminating the above mentioned causes for mis-cut keys and checking for correct depth calibration - then proceed.
CUTTING TOO CLOSE OR TOO FAR FROM THE TIP ON KEYS GAUGED FROM THE TIP.

Select an original large cylinder type cut key such as Best or Falcon.
Put on the correct cutter and insert the correct card. Then, gauge and clamp the key.
Place a white piece of paper beneath the cutter for improved vision of alignment.

NOTE: Unplug machine for these and the following operations.
Rotate lateral crank to position the key with the most easily seen cut carefully centered beneath the cutter as shown. Rotate the depth crank until the cutter is fairly deep within the cut, (Deepest cuts are usually the easiest to see.)
If space indicator needle is centered over the corresponding space mark the space adjustment is correct. Go no further.
If the space indicator needle is offset to the right, the machine is cutting too close to the tip.
If the space indicator is offset to left, the machine is cutting too far from the tip.
(Note: Re-calibration of tip does necessitate re-calibration of shoulder space. See next section.)
Rotate the lateral crank until the indicator needle is centered over the corresponding space mark as shown. Rotate the Depth crank until the cutter is fairly deep within the cut.
Loosen the four set screws that hold the pivot arm onto the pivot arm shaft. DO NOT REMOVE PIVOT ARM.
Re-position the space indicator needle if it has moved while loosening the set screws.
With a small rawhide or plastic mallet, “lightly” tap the lower left side of the pivot arm until the pin seat of the cut is directly opposite the flat of the cutter, as shown previously. (Be sure all FOUR set screws are loose.)
With the cutter aligned opposite the cut and the space indicator needle centered over the corresponding space mark, tilt the machine up, if necessary, (without disturbing the setting) and re-tighten the set screws.
CUTTING TOO CLOSE OR TOO FAR FROM THE SHOULDER ON KEYS GAUGED FROM THE SHOULDER.

Select an original large cylinder type cut key, such as Schlage.
*Always check spacing on a tip stop key first, before adjusting for shoulder gauged keys.
Insert the correct Code Card. Put on the correct cutter.
Gauge and clamp the key.
Place a white piece of paper beneath the cutter for improved vision alignment.
Rotate lateral crank to position the key with the most easily seen cut carefully centered beneath the cutter as shown. Rotate the depth crank until the cutter is fairly deep within the cut. If space indicator needle is centered over the corresponding space mark the space adjustment is correct. Go no further.
If the space indicator needle is offset to the right, the machine is cutting too far from the shoulder.

If the space indicator needle is offset to left, the machine is cutting too close to the shoulder.

(Note: Recalibration of shoulder spacing **does not necessitate** recalibration of tip space.)
NOTE: Unplug the machine for these and the following operations.

Rotate the lateral crank towards you until the space indicator needle is centered over the corresponding space mark as shown.
Loosen the key on the vise. Slide the key until the pin seat of the cut is directly opposite the flat of the cutter as shown. Tighten the key on the vise.
Loosen the set screw that holds the shoulder gauge turn bar onto the (1024XB) pivot arm.
After loosening the set screw, swing the shoulder gauge upward and rotate the turn bar. If there is resistance, squirt some WD-40 or equivalent on the threaded end of the turn bar. Then work loose by jointly swinging the shoulder gauge and rotating the turn bar as shown.
Now that the turn bar is loose, rotate the turn bar clockwise or counter-clockwise to move the shoulder gauge toward the shoulder of the key. The left side of the gauge should end up just barely touching the shoulder of the key as shown (as in normal gauging) do not use pliers or any tool that will scratch or mar the surface of the turn bar.
Tighten the set screw that holds the turn bar onto the pivot arm.