



How-Do-We-Do-That?

Instructions for operating the Tubular Key Cutting Machine 181D

Keep Oil Cup Well Filled With Oil – Metal chips should not be Allowed to pile up on the machine.

Proper Speed for the Cutter Shaft is 200 RPM

Operation

1. Place the original key which you wish to duplicate on the projected stud on the left hand post of the machine, near the pulley, and with the guides or projection of the key on top, turn the key slightly counter clock-wise (in direction of the arrow) until the first pin groove rests against the measuring pin on the machine. Press the key all the way in and read the depth of the cut on the dial by means of the pointer.
2. Mark down that number and then repeat for each successive pin position, one at a time, turning in the direction of the arrow until all seven (7) pin positions have been decoded.
3. Place the key blank in the cutting position, as far as it will go, until the end of the key blank rests against the stop and tighten the clamp. It can only go in the hole one way because of the projecting guide on the blank. Move the stop out of the way, or you will cut into it.
4. Turn the top dial, which marked "Start". That corresponds to the first position on the decoding stud. Set the lower dial to the proper depth number corresponding to the combination you must just have compiled for this key.

5. Start the motor and move the right hand carriage spindle by means of the handle, as far as it will go. It will stop automatically at the right depth corresponding to the number you have set on the lower dial. Move the carriage SLOWLY in order to insure the life of the cutter.
6. Turn the upper dial one position (it can move only one way) for cutting each pin position consecutively. Be sure to set the lower dial on your combination for that particular pin position.
7. Continue this operation until all seven (7) pin positions have been cut and you will have a key the exact duplicate of the original sample key.

Adjustments

This machine was thoroughly and accurately adjusted before shipment. After the machine has been used for some time, or if cutter has been replaced, re-adjustment may be necessary.

This is done as follows:

Depth Adjustments

Place a key blank in cutting position, select any depth and make the cut. Then, remove the blank and place it on the projecting stud and read the depth on the dial. If the cut is too deep, or not deep enough, it will be necessary to adjust the cutter. The cutter is held in place by a set screw on the drive shaft. Loosen this set screw, and then move cutter out if machine is not cutting deep enough, or move cutter in if cut is too deep. Be sure to tighten set screw before making any test cuts.

To adjust the machine for cuts breaking into inner ring of the blank or too far from center of blank, loosen the two (2) nuts on the base of the carriage support. Then move the complete carriage towards rear if cuts are breaking the ring, or forward if cutting too far from center of blank. Be sure to tighten the two (2) nuts before making any test cuts.

Cutting Keys by Code

When no key is available and all you have is a code, look in the code book, computer or contact through the Internet Forums and ask your friend there for the cutting numbers after giving the codes.

Again insert the key blank in the cutting position, as far as it will go, until

the end of the blank rest against the stop and tighten the clamp. Move the stop out of the way.

Turn the top dial to "Start", which is the first position of the cutting numbers. Set the lower dial to the depth of the decoded cutting number.

Start the motor and use the handle to cut the first cut. It will stop automatically at the depth you have set. Release the handle and set the upper dial to the next cutting position, and the depth dial to the next cut settings. Now cut the second cut, keep going until all the cuts are cut according the decoded cutting numbers.

