TM

Blitz
1 2 0 0 C M B

CODE MILLING KEY MACHINE

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Introduction

Congratulations on your purchase of the "Standard of the Industry" HPC Blitz Machine. From its introduction in the 1970's, it revolutionized the locksmith industry. The Blitz simplified the code cutting process, and its innovative design earned it 3 U.S. patents. It is the best selling code machine and has become an integral part of virtually every locksmith business.

The BlitzTM is very easy to use and extremely versatile. It cuts by actual manufacturer's depths and spaces. There is no need to convert to micrometer readings. With its rotating cutter head, the BlitzTM can cut high-security angle keys such as $Medeco^{\textcircled{\$}}$ (including $Medeco^{\textcircled{\$}}$)

This machine cuts accurate keys by code quickly and easily. The ease of changing from one manufacturer's specifications to another's is so simple, it is unparalleled. Even radically different changes can be set up in 10 to 30 seconds without wasting any key blanks.

This dramatic code cutting advancement is made possible through the use of code cards, which are inserted in the code machine. These cards have depth and space indicators, plus all the pertinent information such as cutter, jaw, code series, blanks and any special information you may need. Quite often, just replacing a code card is all that is required when making a change. Depth and space adjustments are never required in changing from one manufacturer to another. The Blitz Code Machine is a must for those who create master key systems or do code work.

A fully illustrated, step-by-step set of instructions is contained in the following pages. Please, be sure to spend some time reading and understanding all the steps thoroughly - so that NONE of the unique capabilities of this unusual machine is overlooked.

You will find, that cutting keys to dimensions more exact than the lock manufacturer's themselves produce is accomplished with extraordinary ease - on this machine!

PLEASE NOTE:

- This manual is for all motorized 1200 series code machines. These include all models of the 1200CMB (ACDC, 240V etc.)
- All usage, adjustment and maintenance functions are the same on all models.
- All pictures shown are of model 1200CMB.

*Medeco® is a registered trademark of Medeco Security Locks, Inc.

072208 36CMB-000-PR





PRODUCT PACKAGING CHECKLIST ACCESSORIES INCLUDED:





Binder With Storage Panels (CARD-B, CARD-BP)



Red Tip Gauge (CM-1054MA)



Horseshoe Tip Gauge (CM-1054R)



Code Card Deck* (DECK-150)



Key Gauging Shim (KBPS-1)



Wrenches (WRENCH-1, WRENCH-2, WRENCH-3)

*NOT included with 1200B series machines

OPTIONAL ACCESSORIES:



Carrying Case (1200 CASE)



Storage Panel (CARD-BP)



HPC Software



Tip Gauges (HT-125, HT-625, HT-SD, RT-SD)



Key Decoder (HKD-75)



Medeco[®] Jaw (MJ-1)



Medeco KeyMark[®] Jaws (MJ-2)



Medeco® 3 Freedom Jaws (MJ-3)



Schlage PRIMUS[®] Jaw (SPJ-1)



Automotive Super Jaw (ASJ-1200)



GM 10-Cut/ Ford 8-Cut Jaw (GMFJ-1)



Kaba Peaks Jaw (KPJ-1)



BlitzTM Tibbe Key Adapter Kit TIBBE-CMB



BlitzTM Tubular Key Adapter Kit (TKA-CMB)



Calibration Kit (CMB-CK)



Quick Nut (QN-100B)



Spacer Washer (SPR-5)



HPC Cutters



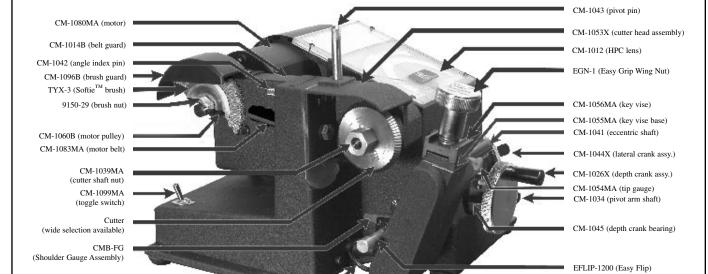


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PARTS DESIGNATION CHART FOR THE 1200CMB CODE MACHINE



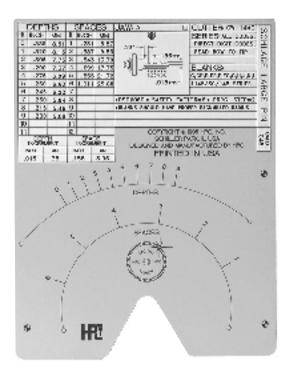


(Shoulder Gauge Safety Switch)

1.0 CODE CARDS



Typical Code Card



The correctly positioned depth of cuts is shown in the upper arc. The correct spacing of cuts is shown in the lower arc.



1200CMB SERIES CODE CARDS AVAILABLE FROM HPC

DESCRIPTION		CUTTER
American Motors (D, E, K, L)		
Arrow (A2)/Best/Falcon/Eagle		
Briggs & Stratton Disc (Gas Cap)		
Chicago/Fort Single-Sided Disc		
Chicago Pin		
Chrysler Pin (1969+)		
Corbin Disc		
Corbin Small Pin		
Eagle Small Pin Long Space		
Eagle Large Pin		
ord 5-Pin Double-Sided (1965+)		
General Motors Wafer (1936+)		
Hudson Small Pin		
lco Small Pin		
lco & Lockwood Large Pin llinois/Timberline Single-Sided Disc		CW-14MC
American Small Pin		
Kwikset Large Pin		
Kwikset Titan		
Master Small Pin (7K)		
Master Standard Large Pin (1K)		
Medeco Standard (.030 inc.)		
National Cabinet Single-Sided Disc National Cabinet Small Pin Standard		
National Large Pin		
Russwin Large Pin (not system 70)		
Russwin D&H Pre-System 70		
argent Large Pin		
Schlage Large Pin		
Segal Large Pin		
Caylor Small Pin		
Taylor Large Pin		
Welch Large Pin		
Weslock Large Pin/Vanguard		
KL Lock Letterbox (X, K Series)	C53	CW-1011
Tale Disc		
Vale Small Pin		
/ale Large Pin		
Dom 2H (44) Double-Sided		
Oom 2C (17) Single-Sided		
National Cabinet Lock Letterbox		
Abus Diskus Rekeyable		
ori L10 IC		
Schlage Everest IC		
ASSA Twin 6000		
/W (plain/shoulder side)		
Audi/Porsche/VW		
Volvo/VW (Gas Cap)		
ord Capri/Fiesta/Jaguar		
Merkur (German Ford) (1985-1989)		
3MW/Mercedes (11-Wafer) (1975+)		
Oatsun/Mazda/Triumph/Jaguar		
British Autos & Cycles		
ord Cargo Truck (1986+)/Sterling		
aguar XJ6 (10-Disc) (1988+)		
/olvo/ MG Primary & Secondary		
Volvo 240, 740, 760		
aab (1974+)		
Ford/Mazda Truck		
Mazda (1970-1980)		
ord/Mercury/Mazda		
Datsun/Subaru/GMC/Nissan (8-Disc)		
Ford/Mazda MPV Minivan 10-Cut		
Honda Ignition (thru '76) 2001-4949	CF70	CW-1011
Honda Door/Trunk (thru '76) Series 111111-444444	CF71	CW-1011
Series 111111-444444		
Acura (1900+)/Honda (1902+)		
Hyundai/Toyota/Isuzu/Mitsubishi		
Chevy Luv (B)/Toyota (1969+)	CF81	CW-1011
Toyota (unlettered) (1969+)		
GM-Chevy/Isuzu/Mitsubishi		
GM-Chevy Nova (R,S)	CF86	CW-1011

Toyota/Geo/Isuzu/Suzuki	. CF88	. CW-47MC*
Geo Tracker/Suzuki Sidekick/Isuzu		
Fiat Ignition (1967+)		
Fiat Secondary		
Fiat Strada (1981+)		
Iveco Truck (P, Z)		
Chrysler/Renault/Peugeot (Primary)		
Chrysler/Renault (Secondary)		
Chrysler/Renault (Secondary)		
Chrysler/Renault/Peugeot/Eagle		
Eagle Premier Ignition (1988+)		
Hyundai-U.S. (X-Series) (1986+)		
Yugo Secondary (Z)		
GM-Allante (1987+)		
GM-Pontiac LeMans (S) (1988+)	CF205	. CW-1011
GM-Cavalier (1991+)/"N" Body (1992+)		
GM-Saturn		
Toyota Corolla Wagon (1993+)		
Hyundai Sonata		
GM (1994+) Modular Ignition Program		
Kia 2003		
Kia/Hyundai 7-Cut (X,Y Series)		
Ford Aspire (Kia) 10-Cut (B Series)		
Nissan Pathfinder 96+		
Fiat Secondary		
Fiat Strada (1979-1980)		
Fiat Strada (1981+)		
Chrysler/Renault/Peugeot (Primary)		
Chrysler/Renault (Secondary)		
Chrysler/Renault (Secondary)		
Chrysler/Renault/Peugeot		
Eagle Premier Ignition (1988+)		
Hyundai-U.S. (X-Series) (1986+)	CF201	. CW-1011
Yugo Secondary (Z)		
Yugo Secondary (G)		
GM-Pontiac LeMans (S) (1988+)		
GM-Cavalier (1991+)/"N" Body (1992+)		
GM-Saturn		
Geo Prizm/Toyota Camry/Corolla		
Hyundai Sonata		
GM (1994+) Modular Ignition Program	CF215	. CW-1011
Kia 2003		
Kia/Hyundai 7-Cut (X,Y Series)		
Hyundai 8-Cut (S,T Series)		
Nissan Pathfinder 96+		
Kia Sephia 98+		
Mitsubishi Galant 8-Cut 99+		
Toyota 2001		
Honda Cycles (1983+)		
Kawasaki Cycles (1979+)		
Kawasaki 7-Cut (A,B Series)		
Kawasaki Cycles 93+		
Suzuki Cycles (1988+).		
Yamaha Cycles (1981+)		
Yamaha Cycle 77-86		
Kaba Peaks (140) (6-Pin) (A2)		
Kaba Peaks (150) (6- & 7-Pin) (A2)		
Medeco [®] Biaxial 60-Series	. CSP4	. CW-1012*
Corbin/Russwin/Emhart (system 70)		
Master Super Large		
Medeco Small Pin (thin head)		
Corbin (system 70) (X-class/27-99)		
Corbin/Russwin/Emhart (system 70)		
Russwin (system 70) (K,N) (1977+)		
Best Falcon Eagle Arrow IC A3 (.018 inc.)		
Best Falcon Eagle Arrow IC A4 (.021 inc.)		
Chicago/Steelcase Small Pin		
Ford 10-Cut		
LSDA (Taiwan) Large Pin		
	. 0.150	

DESCRIPTION CARD NO. CUTTER Chrysler Double-Sided (1989-1992) CX59 CW-1011 Chrysler Double-Sided (1993+) CX60 CW-1011 Ford Eight Cut (96+) CX101 CW-1011 Chrysler 98 8-Cut CX102 CW-1011 Saturn 2003+ CX263 CW-1011 Micrometer Card "B" Jaw (inch) CMBI	
Micrometer Card "B" Jaw (metric) CMBM Micrometer "A" Jaw (black tip-metric) CMHM Micrometer "A" Jaw (black tip-inch) CMHT Micrometer Card "A" Jaw (inch) CMMI Micrometer Card "A" Jaw (metric) CMMM Micrometer "A" Jaw (red tip-metric)	
No. DECK-25 Additional cards included with 1200CMBX Series	
Corbin Pre-Sys 70 X-Class 27/57/67/77 (Series + 97, 99, AR, BL, BR) C13 CW-90Me Corbin Pre-System 70 Z-Class (59 Series 60/70 & L Series) C14 CW-90Me Winkhaus 7H High Security C106 CW-1011 Strattec Tool Box, Office Furniture C385 CW-1011 TrioVing C419 CW-14Me Russwin 852 Class C852 CW-90Me Russwin 981 Class C981 CW-90Me Yale Large Pin CX9 CW-14Me Russwin A Class CX12 CW-90Me Russwin 752 CX13 CW-90Me Arco Rifkin Bank Bags CX18 CW-1011 Lori 80 CX27 CW-90Me Corbin Wide Key CX49 CW-14Me Lockwood CX57 CW-14Me	C* C
The following cards allow you to use standard pin kits to master key these manufacturers in .015" increments.	
to master key these manufacturers in .015" increments. Arrow New Large Pin. CMK2 CW-14M0 Corbin X Class CMK13 CW-14M0 Corbin Z Class Pre-System 70 CMK14 CW-14M0 Kwikset CMK31 CW-14M0 Corbin Z Class Pre-System 70 CMK31 CW-14M0 CMK33 CW-14M0 CMK33 CW-14M0 CMK30 CMK41 CW-14M0 CMK41 CW-14M0 CMK44 CW-14M0 CMK50 CMK50 CW-14M0 CMK50 CMK52 CW-14M0 CMK52 CMK57 CW-14M0 CMK57 CMK57 CW-14M0 CMK57 CW-14M0 CMK57 CW-14M0 CMK57 CW-14M0 CMK57 CW-14M0 CMK57 CW-14M0 CMK58 CMK57 CW-14M0 CMK58 CMK58 CW-14M0 CMK58 CMK58 CW-14M0 CMKX8 CMKX8 CW-14M0 CMKX8 CW-14M0 CMKX8 CW-14M0 CMKX8 CMKX8 CW-14M0 CMKX8	
to master key these manufacturers in .015" increments. Arrow New Large Pin. CMK2 CW-14Mt Corbin X Class CMK13 CW-14Mt Corbin Z Class Pre-System 70 CMK14 CW-14Mt Kwikset CMK31 CW-14Mt Lockwood CMK33 CW-14Mt Lockwood CMK43 CW-14Mt Sargent Sectional CMK44 CW-14Mt Weiser/Falcon CMK50 CW-14Mt Weiser/Falcon CMK52 CW-14Mt Yale Large Pin CMK57 CW-14Mt	

Safe Deposit Deck includes RT-SD, HT-SD & SPR-5.

Additional Cards

DESCRIPTION CARD NO CUTTER
Master Pro Series (6000K/7000K)
Assa 500 A
Assa 500 A Masterkeyed
Assa 500 B Masterkeyed
Assa 500 C Masterkeyed
Assa 700 A Masterkeyed
Assa 700 B Masterkeyed
Assa 700 C Masterkeyed
Assa 500 B
Assa 700 A
Assa 700 B
Marks High-Security
Medeco 3 Bi Level
Honda Ignition (thru '76) Series
(2001-4949)
Honda Door/Trunk (thru 1976)
(Series 111111-444444)
Hyundai F001-2500 and M1-2500 CF235 CW-1011
Kia/Hyundai 7-Cut (X,Y Series) CF301 CW-1011
Hyundai 8-Cut (S,T Series)
Ford Aspire/Kia 10-Cut (B Series) CF303 CW-1011
Nissan Pathfinder 96+
Honda Motorcycle ('76-'82) CMC30CW-1011
Kawasaki 7-Cut (A,B Series) CMC51A CW-1011
Suzuki Cycle 101-499 Series CMC70 CW-1011
Yamaha Cycle 77-86
Ford Eight Cut (96+)
Chrysler 98 8-Cut
Medeco Half Step

Private Label

DESCRIPTION	. CARD NO	. CUTTER
LSDA "LSA" Keyway	C101	. CW-90MC*
Clark Platinum Keyway	C102C	. CW-14MC
USCAN "Locksmith" Keyway	C108H	. CW-14MC

Replacement Cards for HPC Adapters

DESCRIPTION	CARD NO CUTTER
Tibbe	
Tubular	CTK1CW-128C*

NOTE: All code cards are available separately.

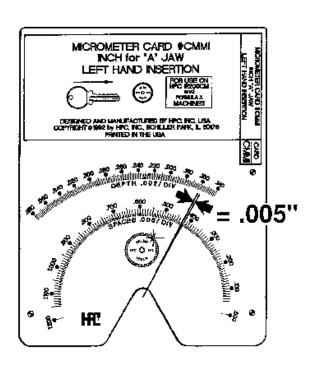
* These cutters are not supplied with the 1200CMB.

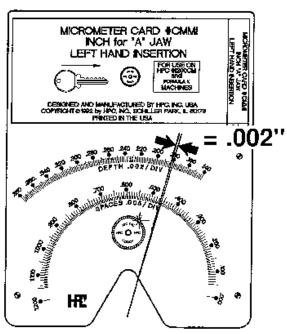




STORAGE - When not in use, the Code Cards should always be returned to the slotted panels within the easel type "stand up" notebook and stored away from direct sunlight or extreme heat. The cards are inserted sideways with the notch to the right, so that the card number and manufacturer's name shows. Additional storage panels may be ordered through your HPC Distributor.





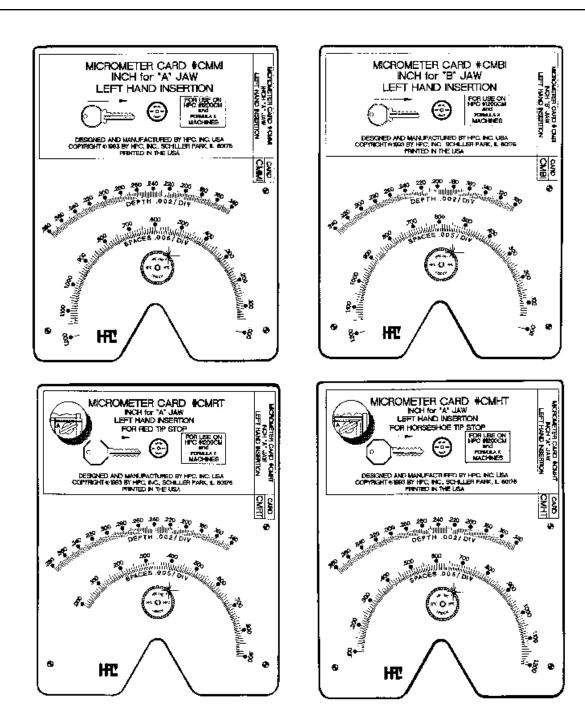


MICROMETER CARDS

CMMI	Micrometer Card "A" Jaw (inch)
CMBI	Micrometer Card "B" Jaw (inch)
CMRM	Micrometer Card "A" Jaw (red tip-metric)
CMRT	Micrometer Card "A" Jaw (red tip-inch)
CMHM	Micrometer Card "A" Jaw (black tip-metric)
CMHT	Micrometer Card "A" Jaw (black tip-inch)
CMMM	Micrometer Card "A" Jaw (metric)
CMBM	Micrometer Card "B" Jaw (metric)

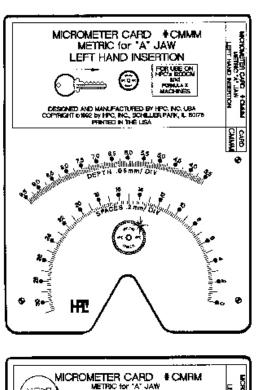
Universal micrometer cards allow you to cut keys to any lateral and depth dimension in thousandths of an inch (or hundredths of a millimeter). These eight cards provide the complete spectrum of flexibility of a "Dial Indicator" type machine.

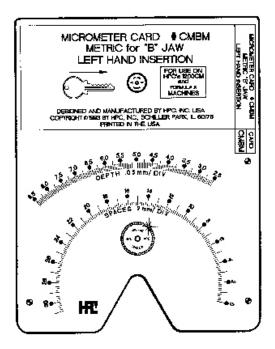


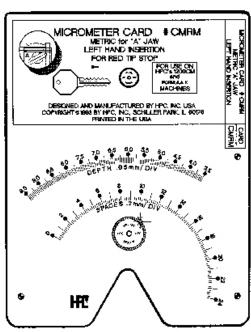


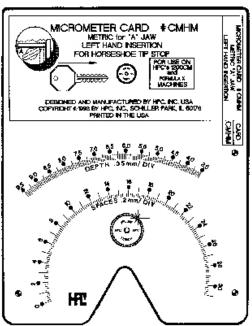
Micrometer cards in Standard.

1200CMB







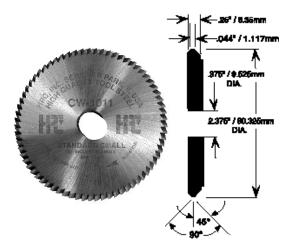


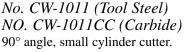
Micrometer cards in Metric.

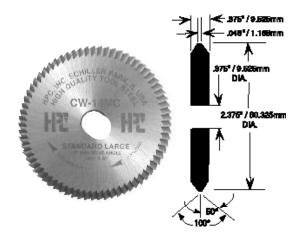
2.0 CUTTERS



CUTTERS SUPPLIED WITH 1200CM/CMB/MAX MACHINES



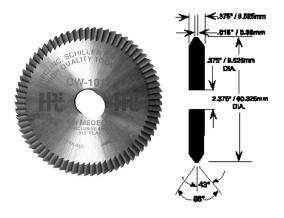




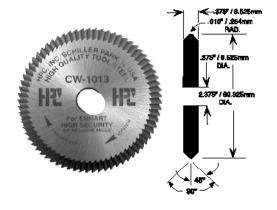
No. CW-14MC (Tool Steel) No. CW-14MCC (Carbide) 100° angle, standard large cylinder cutter.

The Model-1200CMB is supplied with two high speed cutter wheels. The CW-1011 cutter is used for cabinet locks, padlocks and most automotive blanks. The CW-14MC cutter is used for most standard large cylinder keys. The Machine is delivered and set-up with the CW-14MC cutter, and the CW-1011 cutter is placed in a slot in the styrofoam next to the machine.

OPTIONAL CUTTERS FOR 1200CM/CMB/MAX



No. CW-1012 Optional milling cutter has angle and pin seat for cutting Medeco[®] High Security.



No. CW-1013
Only available cutter with exact angle of cut and full "V" pin seat for Emhart High Security.

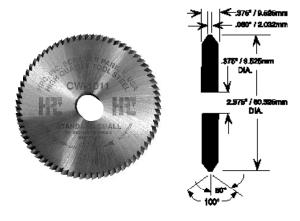
*Medeco® is a registered trademark of Medeco Security Locks, Inc.





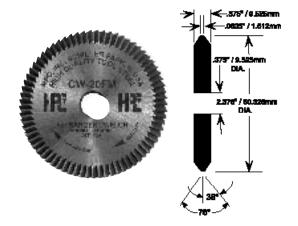


OPTIONAL CUTTERS FOR 1200CM/CMB/MAX CONTINUED

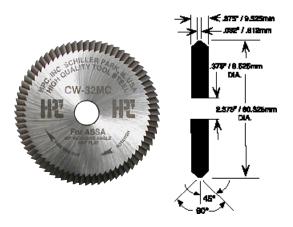


No. CW-1014

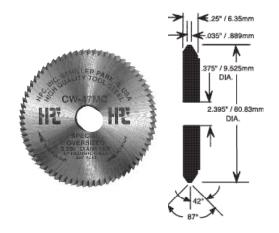
This specially designed cutter has .080 flat for one step cutting of Kwikset, Weslock, & Weiser using original pins.



No. CW-20FM 76° angle, double angle, flat mill tooth for Sargent.

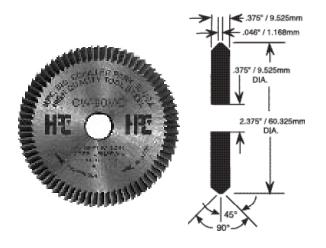


No. CW-32MC Specially designed 90° angle, tool steel cutter for ASSA keys with .032 flat.

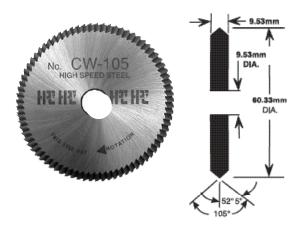


No. CW-47MC (Tool Steel) No. CW-47MCC (Carbide) 87° angle, tool steel cutter.

Optional cutters, such as CW-1012 (used with MJ-1 "C" jaw for the cutting of standard commercial Medeco[®] keys) are available. The correct cutter to be used is printed on each card. One of the important features of this machine, is its ability to maintain correct depths and spaces with virtually no set-up time involved, even when changing cutters. This feature is reliant upon using cutters whose outside diameters are matched and equal.

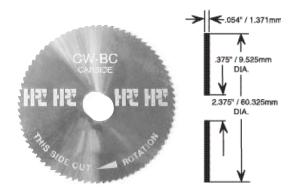


No. CW-90MC 90° angle, large cylinder cutter for shallow & deep cuts in adjacent positions. For Best, Falcon, Eagle, Arrow, Kaba, and IC core.

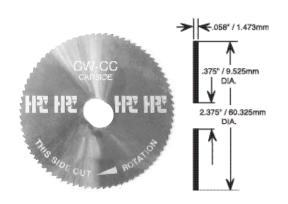


No. CW-105 105°, double angle cutter for ASSA.

SLOTTER CUTTERS FOR 1200CM/CMB/MAX



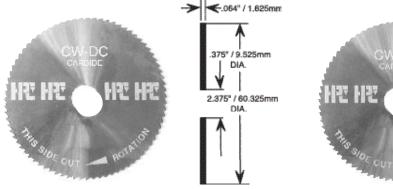
No. CW-BC*
.054 carbide slotter cutter for Yale.
*(requires spacer SPR-5)

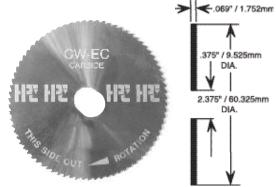


No. CW-CC*
.058 carbide slotter cutter for S&G, Yale, Lloyd Matheson.
*(requires spacer SPR-5)



More Slotter Cutters for 1200CM/CMB/MAX





No. CW-DC*

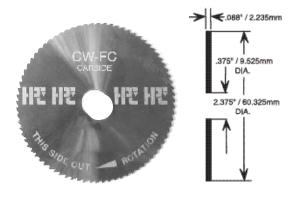
.064 carbide slotter cutter for S&G.

*(requires spacer SPR-5)

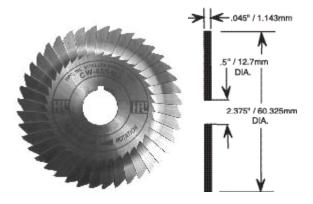
No. CW-EC*

.069 carbide slotter cutter for Diebold.

*(requires spacer SPR-5)



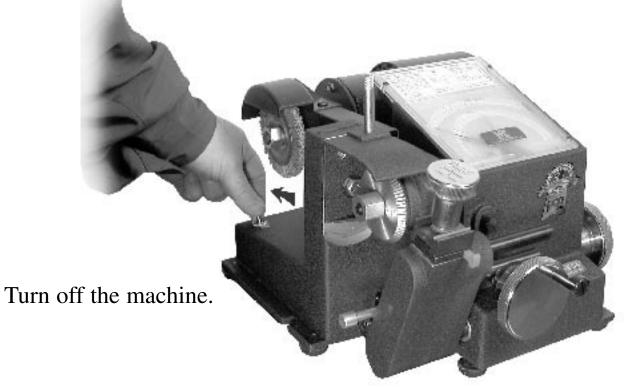
No. CW-FC*
.088 carbide slotter cutter for Mosler.
*(requires spacer SPR-5)



No. CW-45SMS*
.045 M2 tool steel combination standard/flat steel cutter for safety deposit boxes.
*(requires spacer SPR-5)

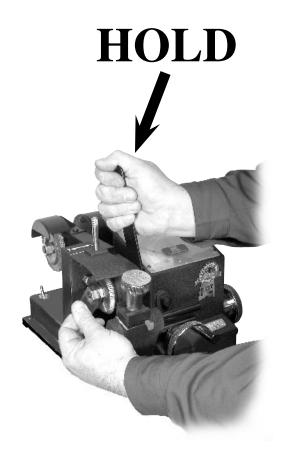
CHANGING CUTTERS

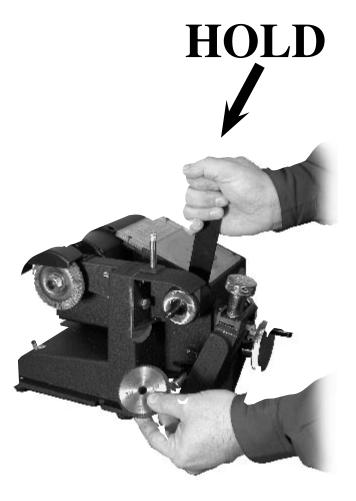
The following procedure is recommended when changing from one cutter to another.



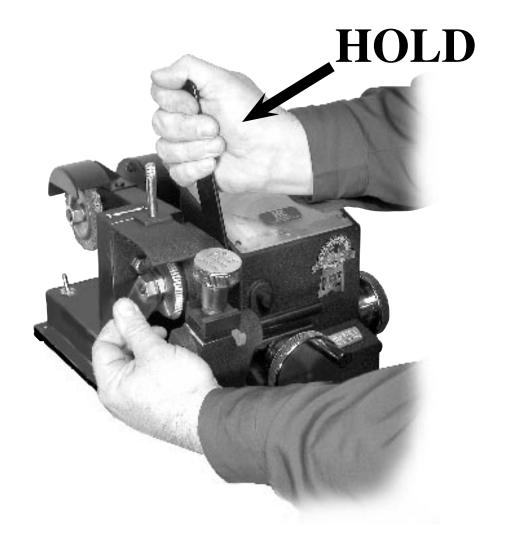


Hold the cutter shaft fast with a 1/2" open end wrench. (No. WRENCH-1 supplied)





Loosen the cutter shaft nut, with a 3/4" open end wrench (No. WRENCH-3 supplied) by turning it clockwise (left hand thread). Remove the cutter.



- Slide the replacement cutter wheel onto the shaft. **IMPORTANT:** Be sure cutter is installed for a clockwise rotation!
- Hold the shaft with the 1/2" wrench.
- Install the nut, turning it counter-clockwise onto the shaft with the 3/4" wrench. **Do not overtighten the nut.**

3.0 GAUGING AND HOLDING KEYS



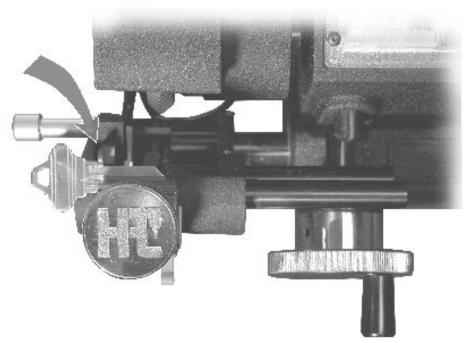
KEY GAUGES



Red (Plastic) Tip Gauge No. CM-1054MA



Black (Horseshoe) Tip Gauge No. CM-1054R



Shoulder Gauge No. CMB-FG

SHOULDER GAUGE SAFETY SWITCH

This machine is equipped with a Shoulder Gauge Safety Switch to protect the shoulder gauge from being accidentally damaged by the cutter. This type of accident occurs if the shoulder gauge is left up at the key after gauging rather than being lowered to its rest position before cutting the key.

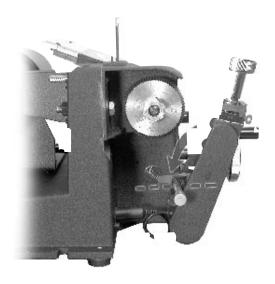
Cutting A Key

To cut a key you must lower the gauge to its rest position before turning on the cutter motor. Turning on the cutter motor is accomplished with the switch at the rear of the machine. Turning on the machine's cutter motor with the shoulder gauge not in the rest position will result in the safety switch relay disengaging the cutter motor's power. This will also happen if the gauge is moved from its rest position while the cutter motor is already on.

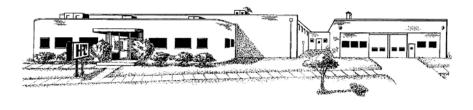
Resetting the Machine

To reset the machine, lower the shoulder gauge to its rest position, then turn off the machine with the regular switch located at the rear of the machine. The machine should now be turned back on to cut the key. Resetting the machine prevents the Shoulder Gauge Safety Switch from being used as a power switch to turn the machine on and off.

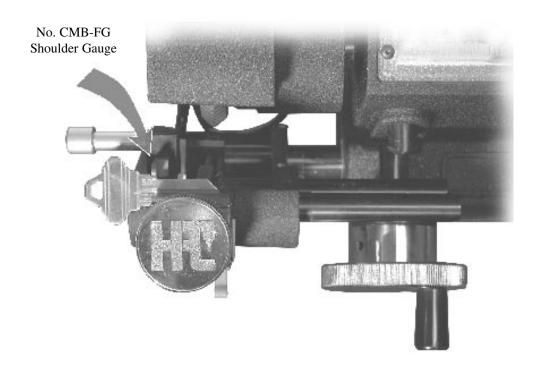




Expect Quality... Demand HPC.



SECTION 3.1

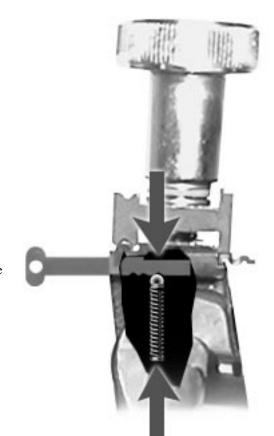


STANDARD CYLINDER KEY WITH SHOULDER GAUGING USING JAW A.

(Example: Schlage, Card No. C45)

Place key blank in the jaw with the shoulder touching the left hand edge of shoulder gauge. Flip the shoulder gauge down before turning on the motor. The space dimension can be significantly affected by any damage incurred to the shoulder gauge.

Damage to the shoulder gauge can occur when it comes in contact with the cutter, or when undue pressure is used when gauging against the key's shoulder.



No. CM-1054MA Key Vise Tip Gauge

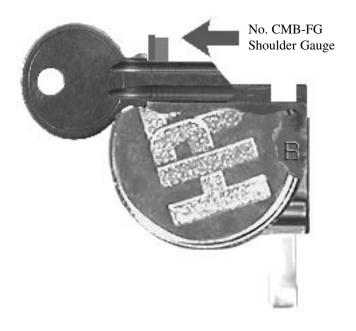
Key vise tip gauge pulled to rear and into Position No. 1.



Wing nut and top jaw of vise removed to show a top view of the bottom jaw only, for key positioning.

Make sure the key is laying flat against ledge before tightening wing nut.

SECTION 3.2



STANDARD CYLINDER KEY WITH SHOULDER GAUGING USING JAW B.

(Example: Master, Card No. C34)

Key shoulder touches left hand edge of shoulder gauge. Flip gauge down before turning on motor.

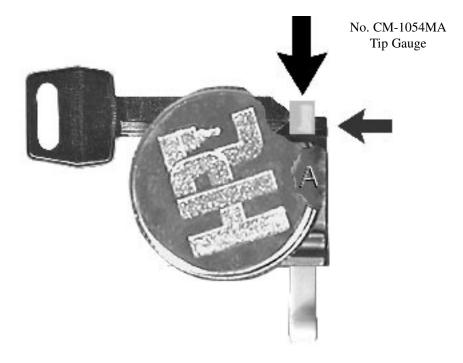


Key lays in front of lip. Key vise tip gauge pulled to rear. (Position No. 1)



Make sure the key is laying flat against ledge, before tightening the wing nut.

SECTION 3.3



RED FULL SHORT TIP STOP GAUGING USING JAW A.

(Example: Ford, Card No. C24)

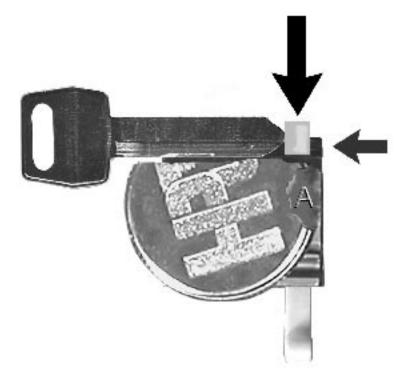
Key is gauged from tip.



Key vise tip gauge, pushed inward to the third groove position. Tip gauge is pulled to rear while cutting.

No. CM-1054MA Gauge in 3rd groove.

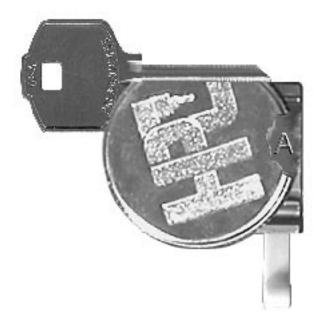
Wing nut and top jaw of vise removed to show a top view of the bottom jaw only, for key positioning and stop bar settings.



Key blank grooving edge lays directly on face of key vise or key vise base, for ignition and trunk keyway. No riser blocks used.



SECTION 3.4

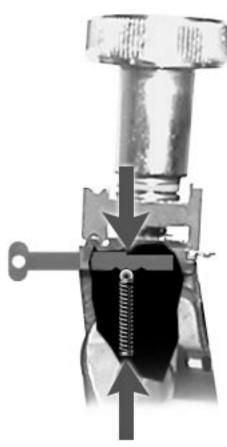


No. CM-1054MA Tip Gauge

RED MIDDLE SHORT TIP STOP GAUGING USING JAW A.

(Example: KABA-PEAKS 6-Pin, Card No. CPKS1)

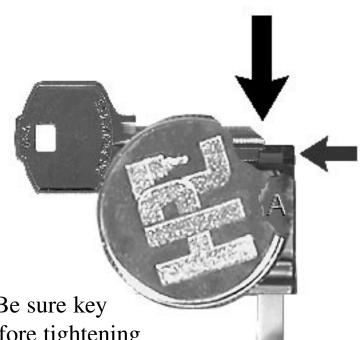
Key is gauged from bottom stop, not tip.



Key vise tip gauge, pushed inward to the second groove position. Tip gauge is pulled to rear while cutting.

No. CM-1054MA Key Vise in 2nd Position.

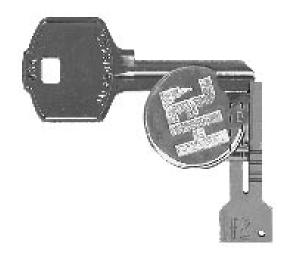
Top jaw of vise removed to show a top view of the lower jaw only, for key positioning and stop bar settings.



Gauge against tip stop. Be sure key lays flat against ledge before tightening wing nut.

*For BEST type blanks see section 3.5

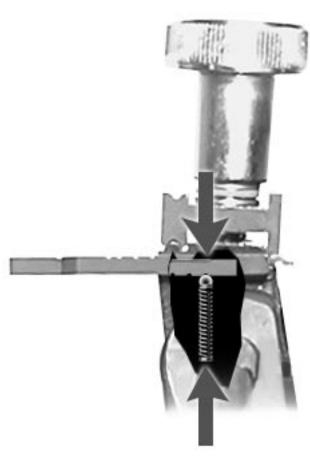
SECTION 3.5



BLACK HORSESHOE SHORT TIP STOP GAUGING USING JAW B.

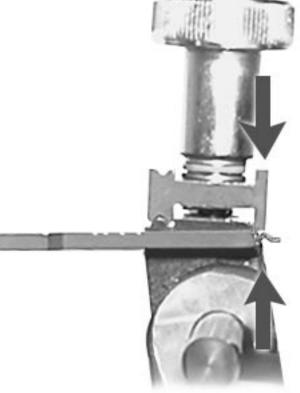
(Example: Best Card No. C3)

Key is gauged from bottom stop, not tip. (Note: Use black tip gauge, <u>NOT</u> red.)



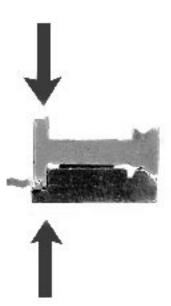
Gauge pushed inward to first groove position.

Note special holding on key milling using jaw "B" side. (Key <u>must</u> lay flat against back ledge of bottom jaw as shown.)



SECTION 3.6





MEDECO® - STANDARD COMMERCIAL USING JAW C. (OPTIONAL EQUIPMENT)

(Example: Medeco® Card No. C36)

*Medeco® is a registered trademark of Medeco Security Locks, Inc.

Key shoulder touches left hand edge of shoulder gauge. Flip gauge down before turning on motor.



Jaw and grooves "nest" into each other. Key vise tip gauge is pulled back to rear. Open jaw "C" only enough to slide key into position. Be sure key groove and jaw milling mate before tightening wing nut.



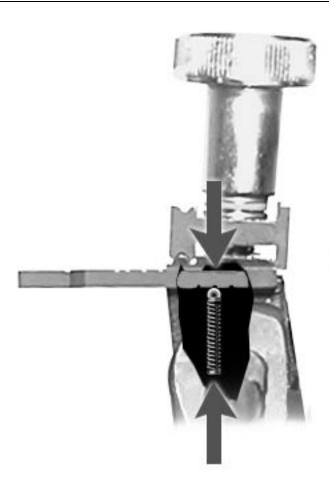
SECTION 3.7



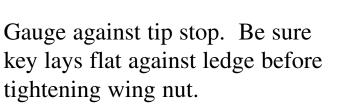
BLACK HORSESHOE FULL END TIP STOP GAUGING USING JAW A OR B.

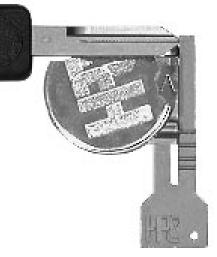
(Example: GM Modular 94+, Card No. CF215)

Key is gauged from tip as shown. (Note: Black tip gauge <u>NOT</u> Red.)



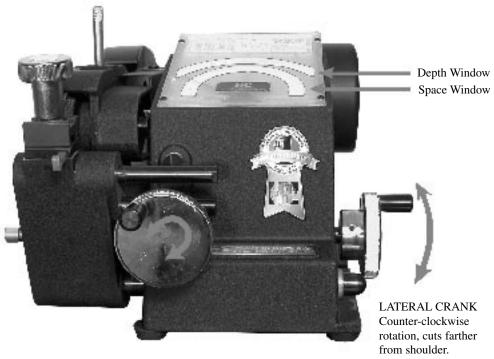
Detent in second groove position.





4.0 DEPTH AND SPACE CRANK CONTROLS





DEPTH CRANK Clockwise rotation, cuts deeper.

DEPTH CRANK

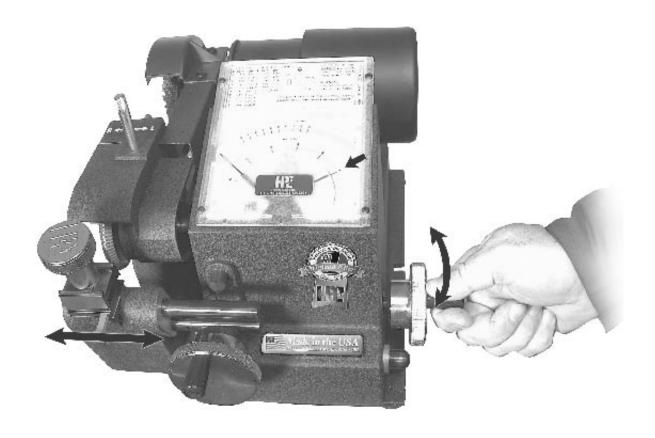
THE DEPTH OF A CUT is controlled by rotating the No. CM-1026X Depth Crank, located at the front of the machine. Clockwise rotation, as indicated above, moves the key inward towards the cutter. Counter-clockwise rotation moves the key outward and away from the cutter.

LATERAL CRANK

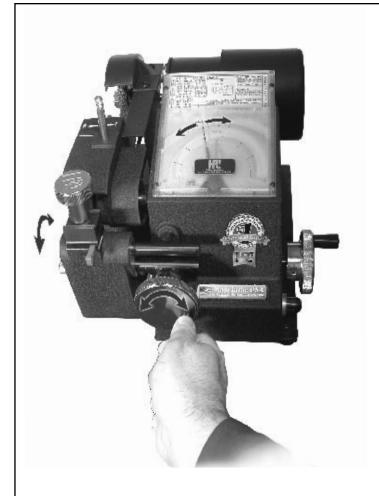
THE LATERAL MOVEMENT of the key is controlled by rotating the No. CM-1044X lateral crank located on the right hand side of the machine. Counter-clockwise rotation moves the key to the left and causes the cutter to cut farther from the shoulder.







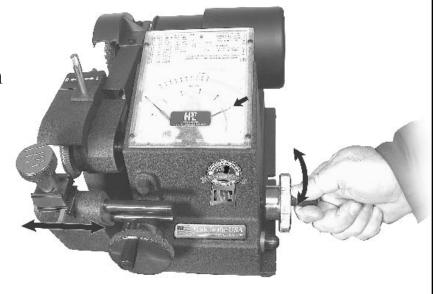
Rotating the lateral crank clockwise moves the pivot arm to the right, and rotating counter-clockwise moves it to the left.



Rotating the depth crank clockwise, the pivot arm will move inward towards the cutter, rotating counter-clockwise will move it outward away from the cutter.

The depth indicator needle sweeps across the face of the arc, from left to right as the knob is advanced. With this indicator needle centered over the mark on the card, the key is cut to the corresponding depth.

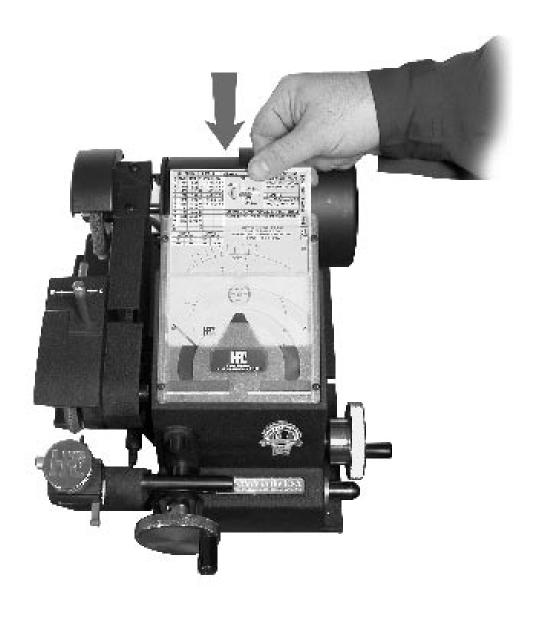
The key in the pivot arm is correctly positioned for the first space when the space indicator needle is centered over the numeral 1 in the space indicator arc.



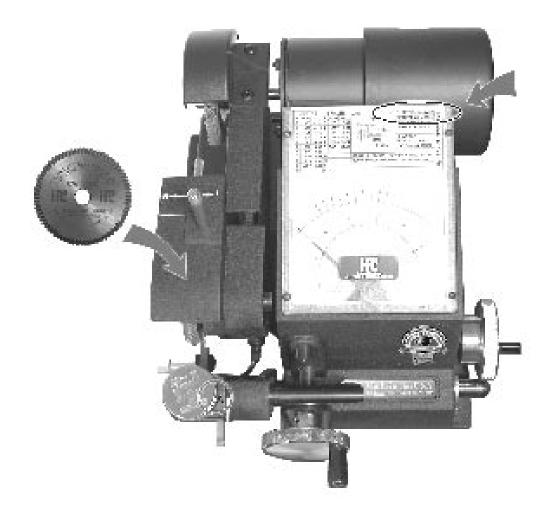


5.0 CUTTING THE KEY





Select the correct Code Card and insert it beneath the lens as shown above.



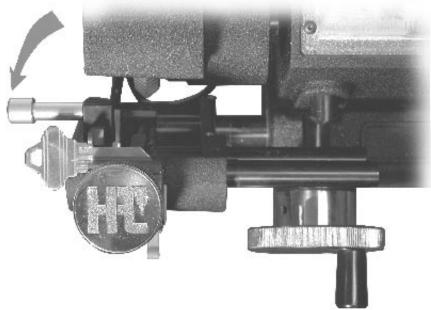
Change the cutter and jaw (if necessary) to those indicated on the Code Card.





For maximum clearance, and easy accessibility when inserting the key blank, rotate both of the crank knobs counter-clockwise.

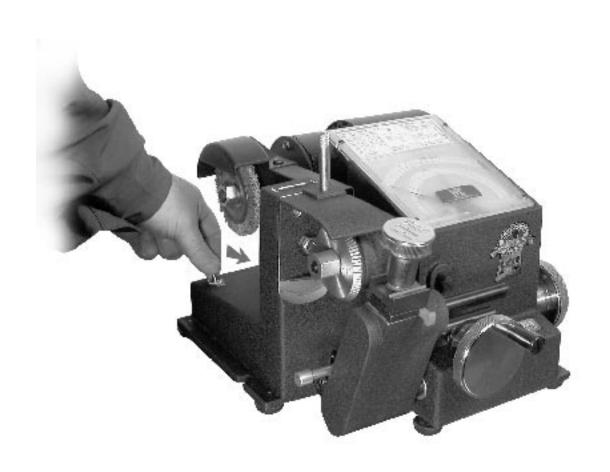




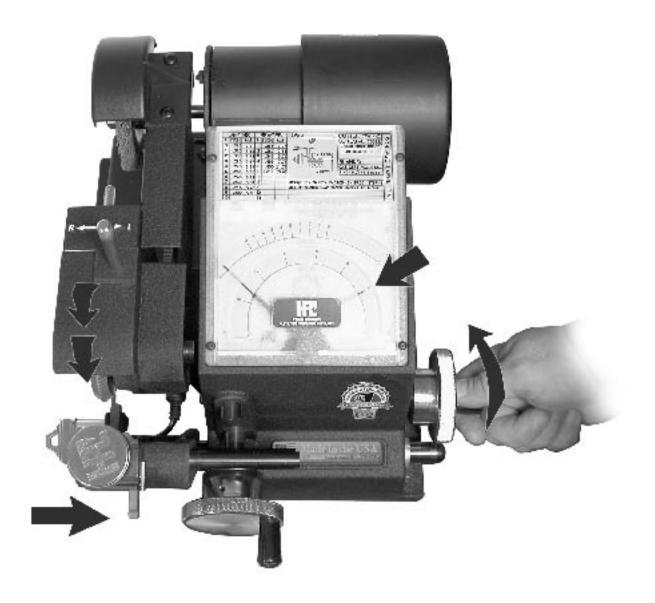
Gauge the key...



...and tighten the wing nut when the key is level. Then flip gauge down before starting to cut.

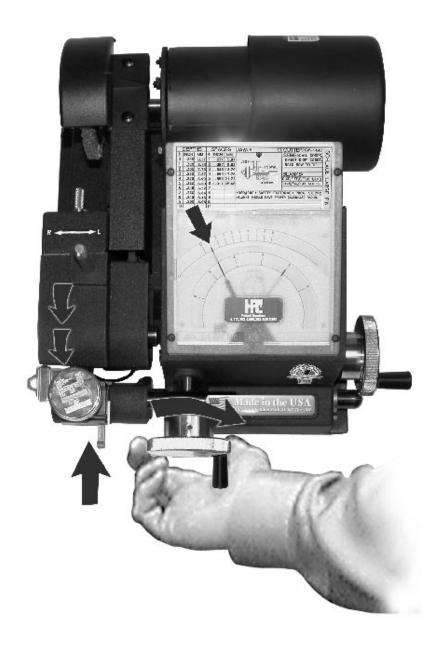


Turn machine "ON."



Rotate the lateral crank clockwise until the indicator lines up with the No. 1 space mark in the space window as indicated above.



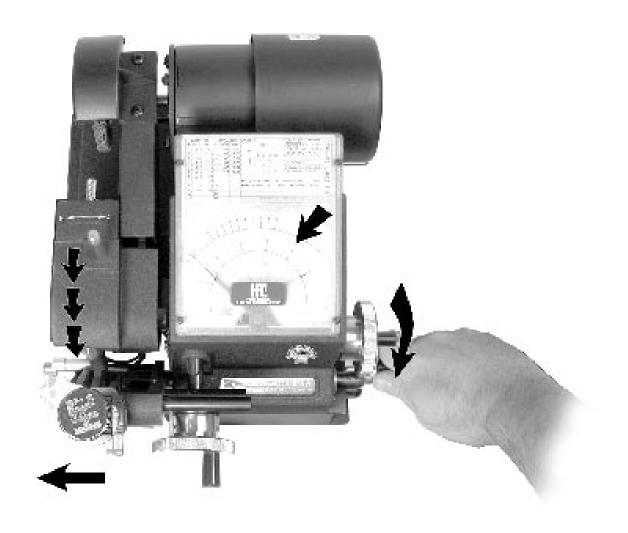


Slowly rotate the depth crank clockwise until the depth indicator is centered over the depth mark you wish to cut as shown in the upper depth window.

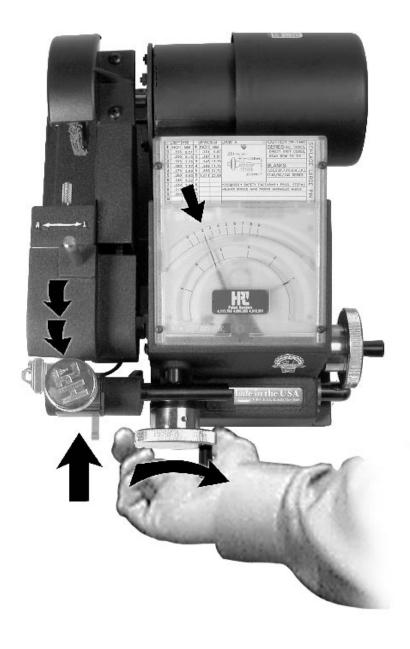
Do **NOT** pass the mark!



Now rotate the depth crank counter-clockwise (outward) until the spinning cutter is clear of the key blank.



Rotate the lateral crank to the second space indicator.



Slowly rotate the depth crank clockwise until the depth indicator is centered once more over the depth you wish to cut in this space position.



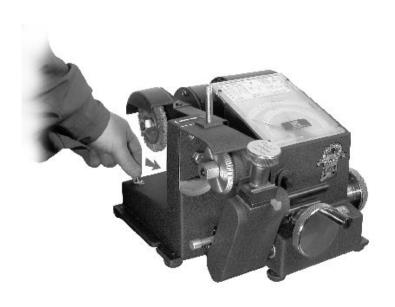
Continue the correct space and depth movements until all cuts are made from the head to the tip of the key.



Upon completion of the last cut rotate both of the cranks counter-clockwise for maximum clearance and easy accessibility to the cut key.

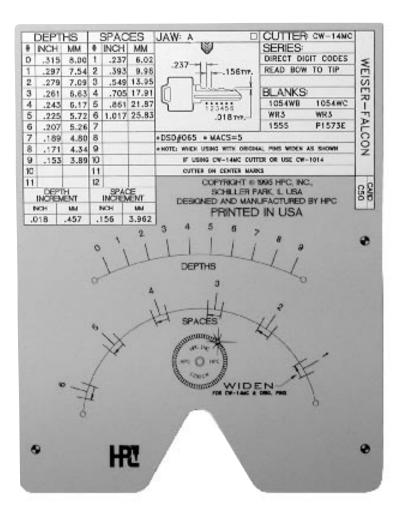
Then turn off machine and remove key.







Turn motor back on to deburr key.



The following is only for keys that require widening as indicated on the code card.

When widening, start at the first small mark for each space and, while holding the depth crank, turn the lateral crank counter-clockwise from the first small widening mark through the center mark and stopping at the second small widening mark.

Do NOT move back clockwise!



6.0 ANGLE CUT KEYS



CUTTING KEYS FOR MEDECO® STANDARD COMMERCIAL - CODE CARD NO. C36 BIAXIAL - CODE CARD No. CSP3



ONE OF THE UNIQUE FEATURES OF THIS MACHINE - is the ability to make cuts on an angle. By pulling outward on the spring loaded angle index pin the cutter head can be swiveled left or right. Be sure the index pin is re-locked into the cutter head before operating machine.

•REQUIRED OPTIONAL EQUIPMENT

An optional cutter and Jaw "C" are required to cut keys for commercial level Medeco[®]. This cutter Part No. CW-1012 and No. MJ-1 "Jaw C" may be added at a later date. Both parts are readily available from your HPC distributor.

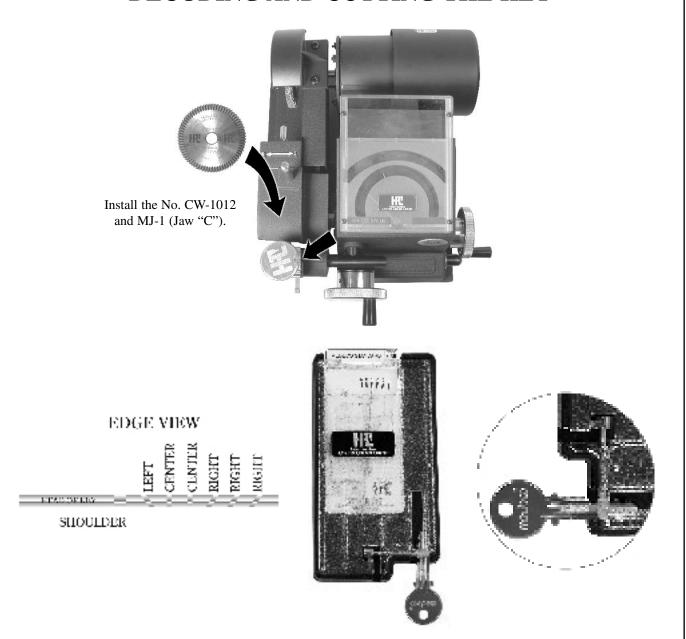
Biaxial keys only require the CW-1012 cutter, not the MJ-1 "Jaw C".

*Medeco® is a registered trademark of Medeco Security Locks, Inc.





CUTTING KEYS FOR MEDECO® DECODING AND CUTTING THE KEY



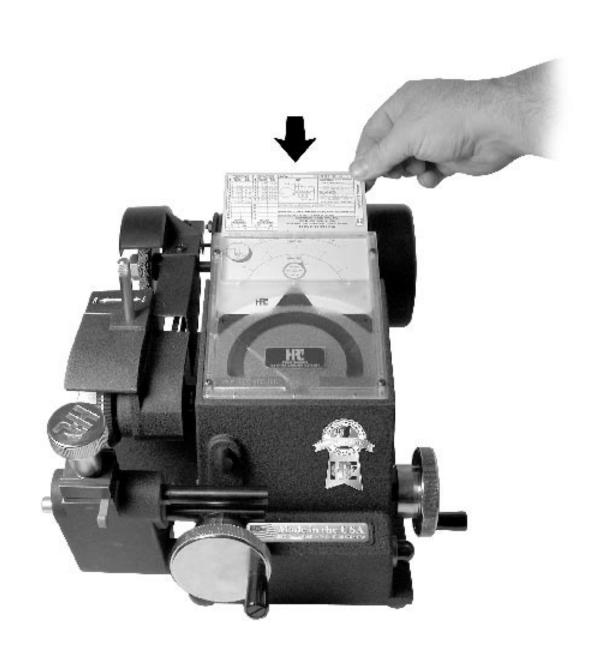
The depths and angles must be decoded prior to cutting the key. Depths can be measured with a knife-edge caliper, a key micrometer or with one of the special decoders commercially available. The HPC Pocket Sized Decoder, No. HKD-75 (pictured above), in addition to decoding depths and angles for Medeco[®] also contains an assortment of cards for other locks. Remember decoding devices are not designed to replace micrometers or calipers.

*Medeco® is a registered trademark of Medeco Security Locks, Inc.



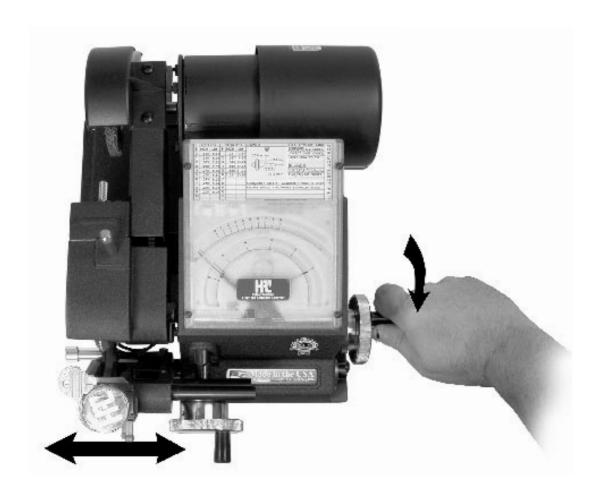


Gauge the key from the shoulder, making sure the key grooving and special jaw milling are nested together.



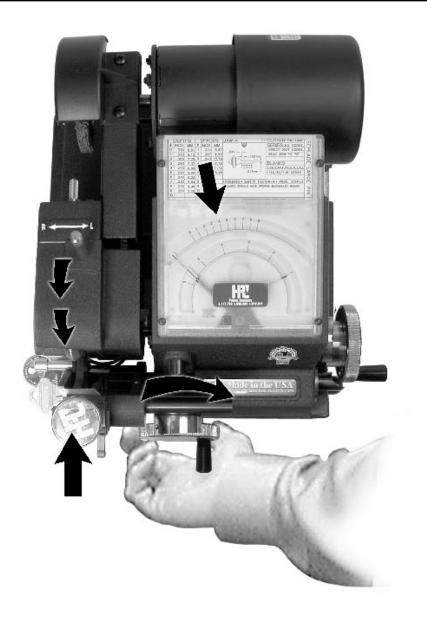
Insert Code Card No. C36 for Medeco[®].

* $Medeco^{\ensuremath{(\!\!R \!\!)}}$ is a registered trademark of Medeco Security Locks, Inc.



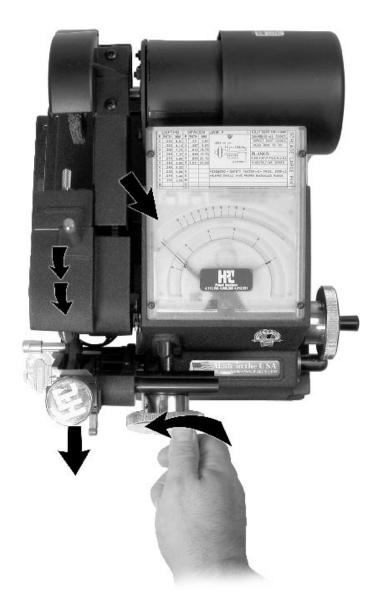


Turn the lateral crank as required to move key into the correct space positions for cuts with center angles. Cutter head is not swiveled for center cuts. Make all center angle cuts first.



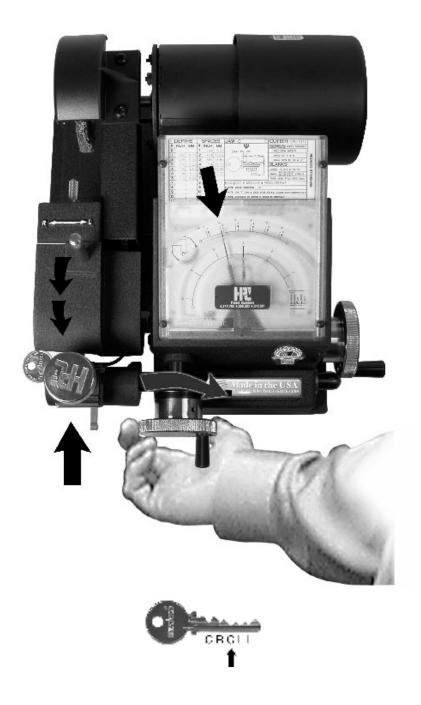


Cut first center cut.

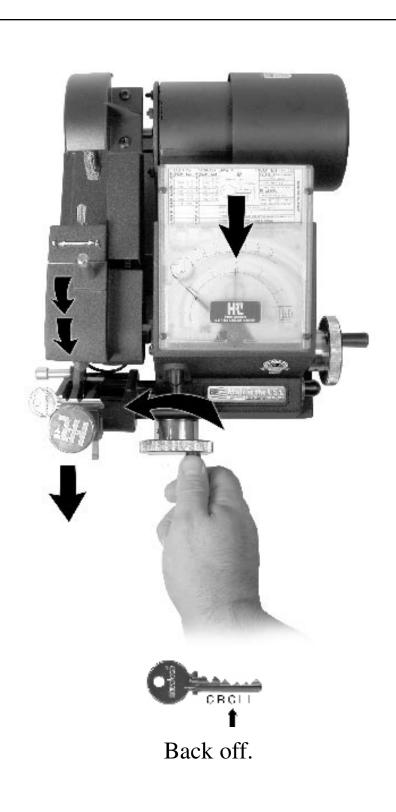


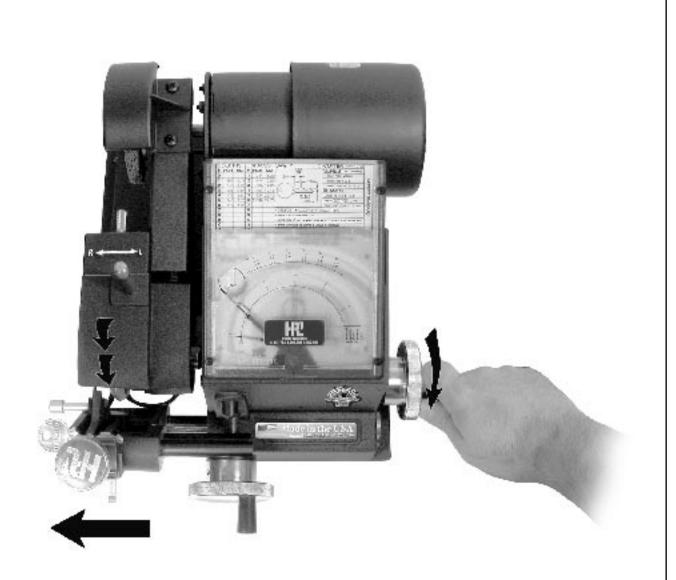


Back off.



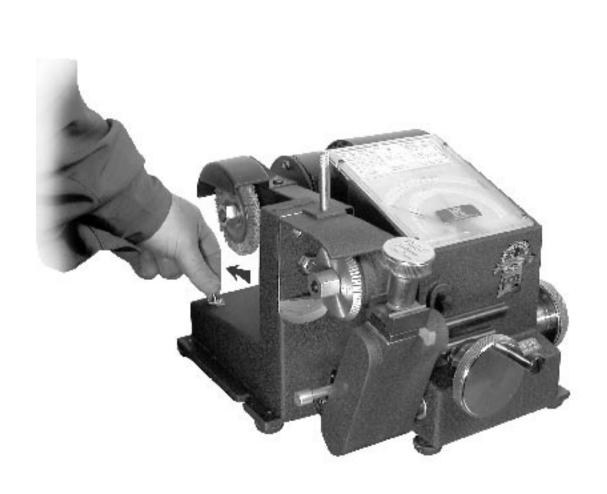
Move to next center angle cut and plunge.





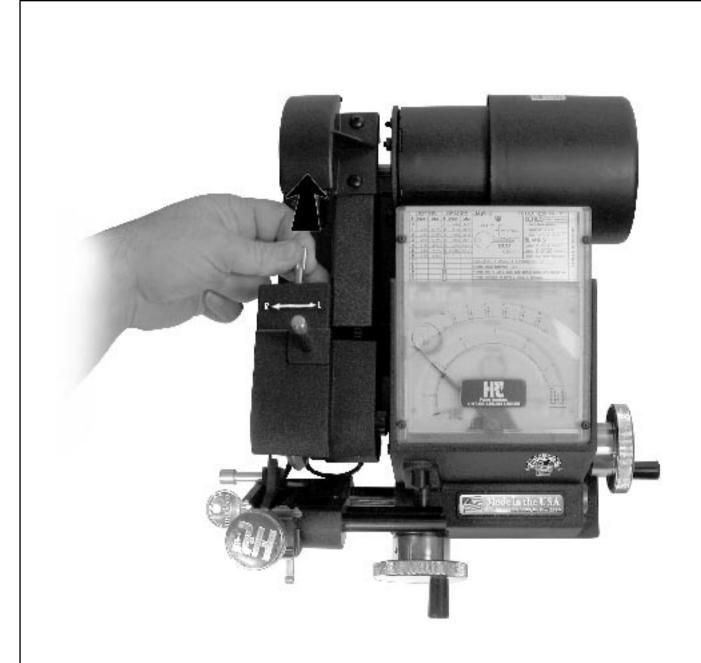


Move away from cutter.

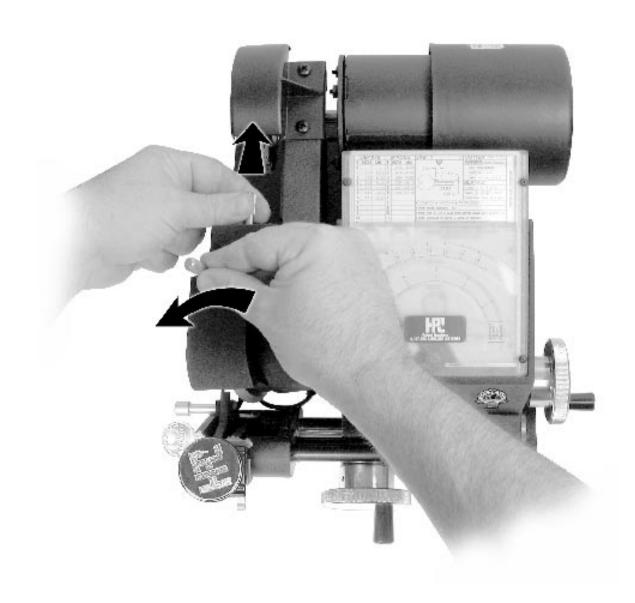


Turn off the machine.



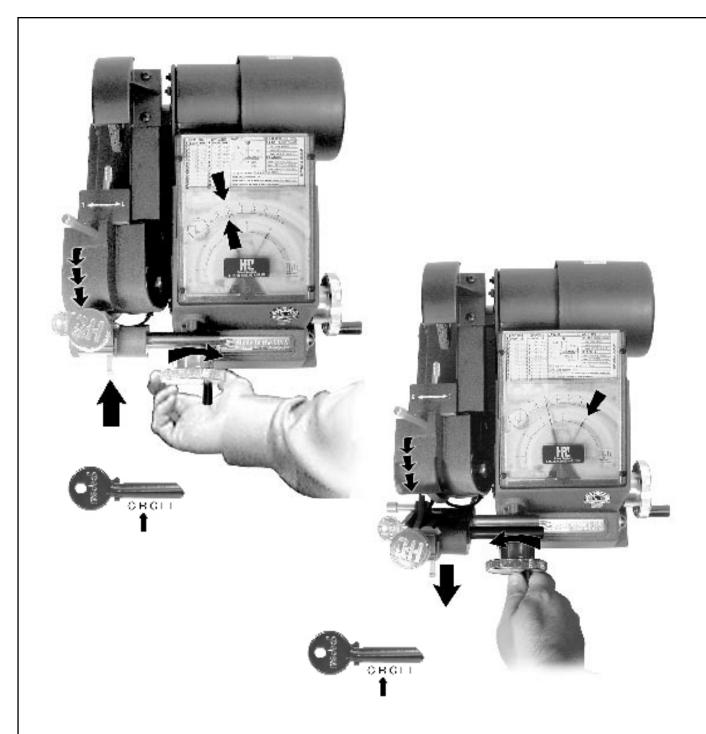


Pull outward on angle index pin.

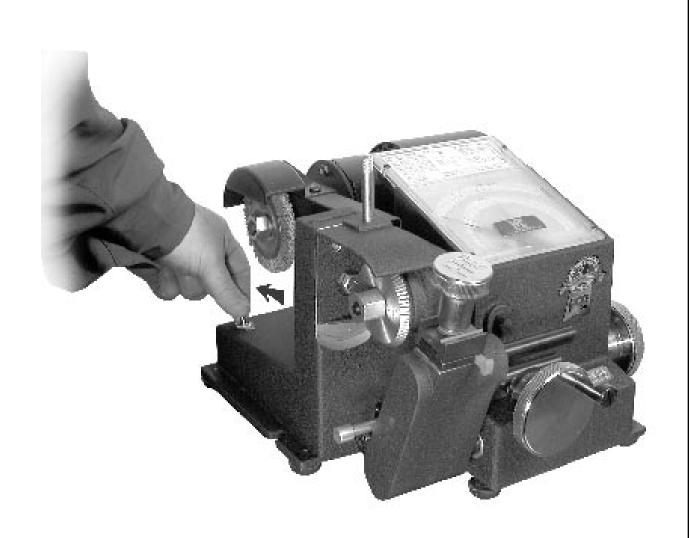


Swivel cutter head by the angle pivot pin, as indicated by the arrows.

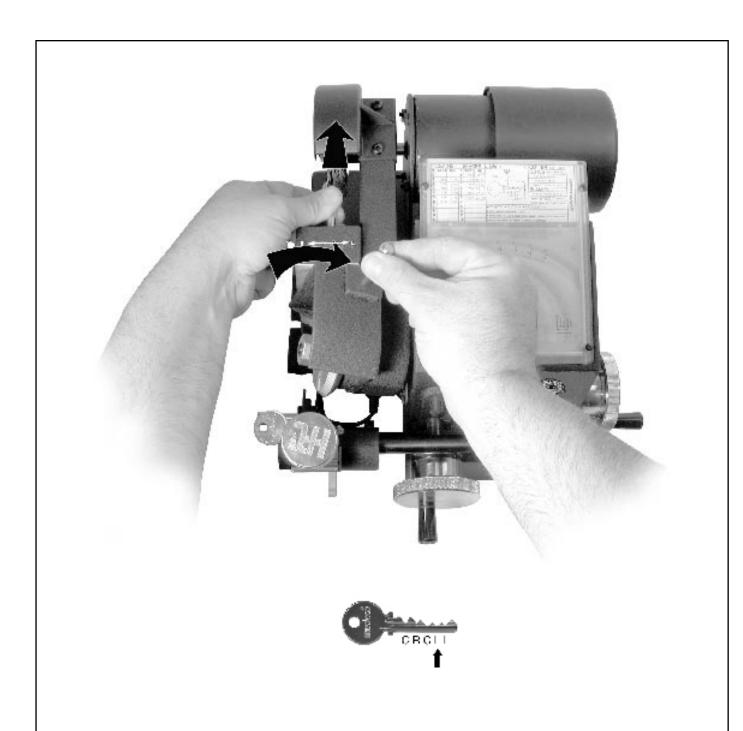




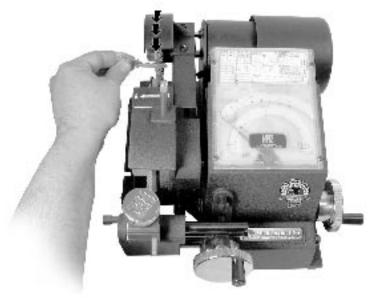
Be sure the index pin is relocked into the cutter head before operating. Make all right angle cuts at this time.



Then turn off the machine.



Repeat the same procedure for left angle cuts.





Be sure to brush Medeco[®] keys exceptionally clean and free of all burrs. Hold the cut key so that the rotation of the deburring brush sweeps the burrs out and away from the cut.

 ${}^*{\rm Medeco}^{\circledR}$ is a registered trademark of Medeco Security Locks, Inc.



7.0 RE-CALIBRATION OF DEPTH



ATTENTION: PLEASE READ BEFORE PROCEEDING.

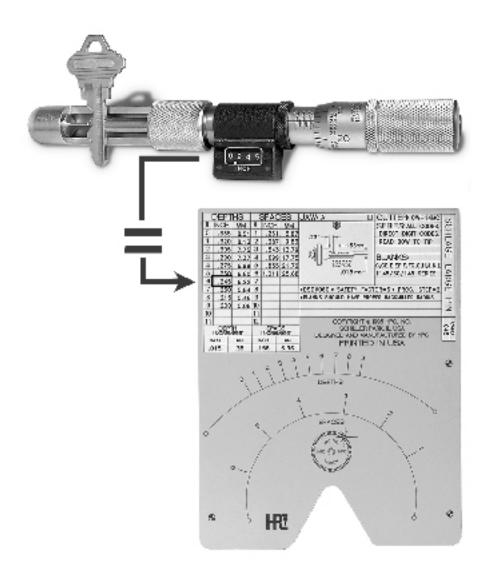
RE-CALIBRATION OF DEPTH

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

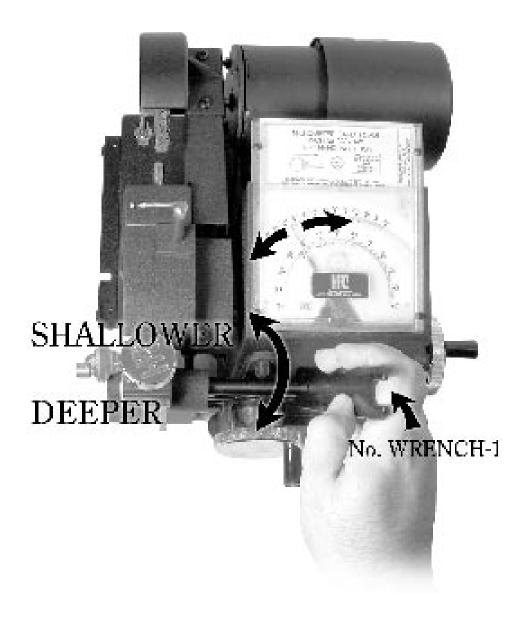
The need to re-adjust the depth is rare and should be done only after the more common causes for mis-cut keys are eliminated.

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 calibration - then proceed.





Cut a key by code and compare carefully measured depths against a code card.



The two flats on the end of the eccentric shaft allow a 3/8" open end wrench (such as No. WRENCH-1) to rotate the eccentric shaft either towards you, making the depths deeper, or away, making the depths shallower. **There should be no need to loosen the two set screws.** The maximum range of the eccentric shaft is 90° when pulling towards you (a maximum of -.015" in depth change) and 90° when pushing away (a maximum of +.015" in depth change). Therefore only a small turn is used to change depths.

• Very rapid minor depth adjustments are made by comparing the depth of a cut against the code card and then rotating the eccentric shaft slightly as required.



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 miscut keys and checking for correct depth calibration - then proceed.

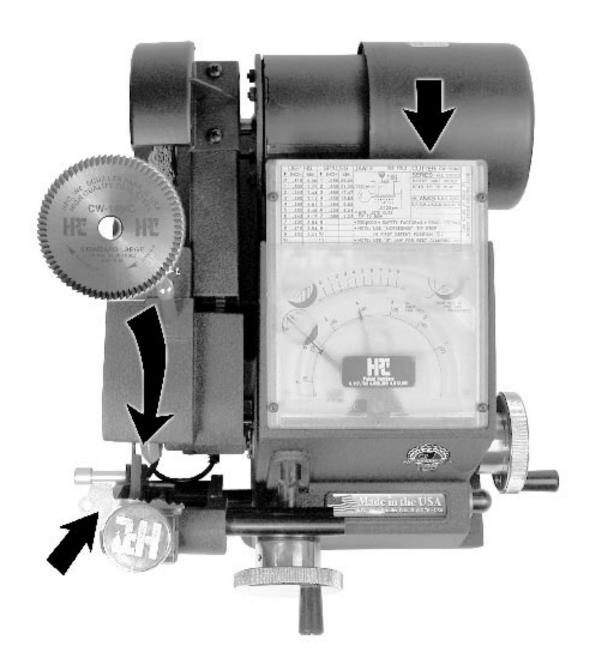
If re-adjustment of space is needed, follow the instructions for tip-gauged space adjustments first. Then proceed with shoulder-gauged space adjustments. Because the tip gauges are built into the bottom jaw and the shoulder gauge is mounted on its own pivot, re-adjusting the shoulder gauge may not properly re-calibrate your 1200CMB.



CUTTING TOO CLOSE OR TOO FAR FROM THE TIP ON KEYS GAUGED FROM THE TIP.

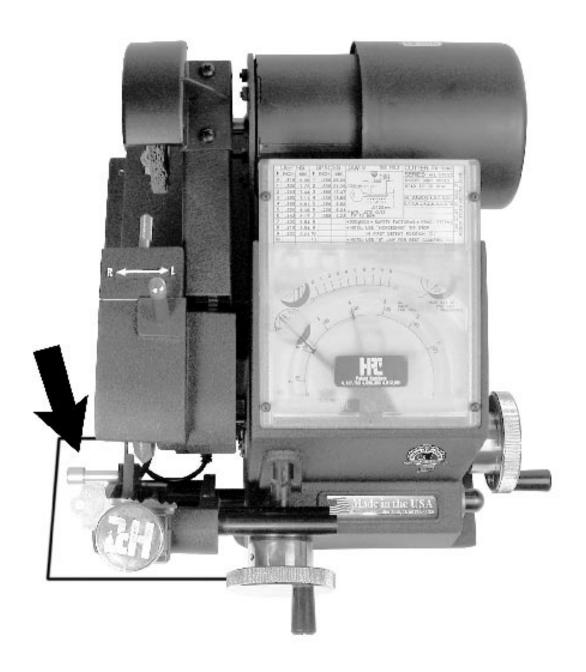


Select an original large cylinder type tip-gauged cut key such as Best or Falcon.



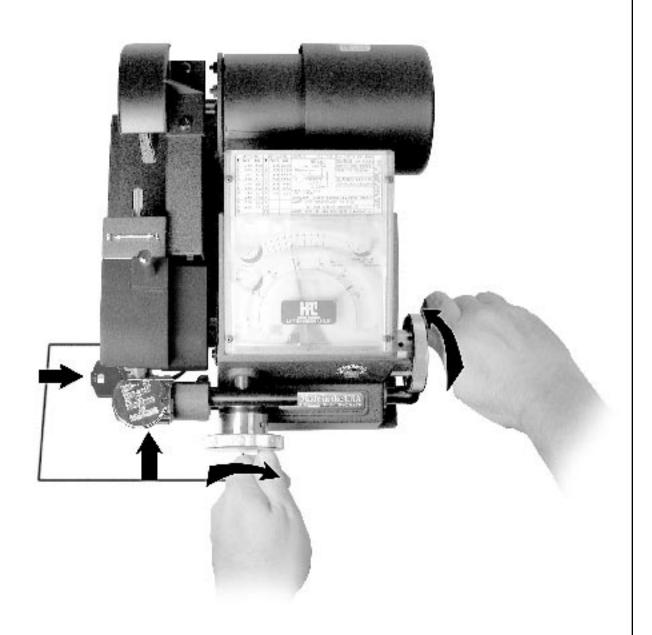
Put on the correct cutter and insert the correct card. Then, gauge and clamp the key.



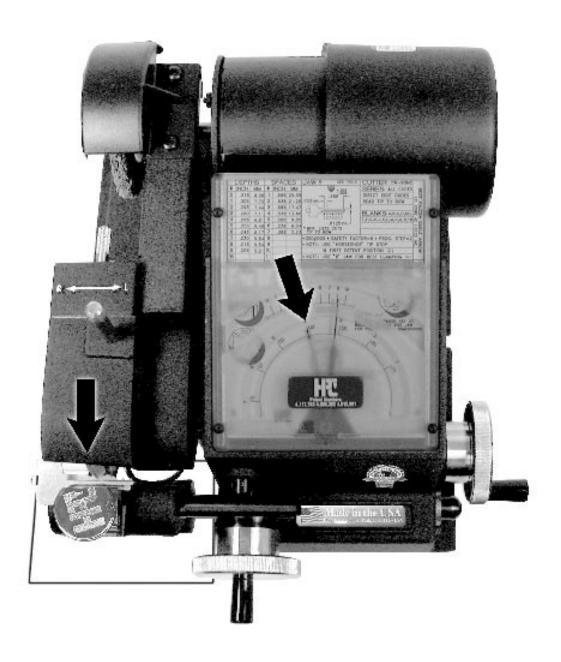


Place a white piece of paper beneath the cutter for improved vision of alignment.

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.)



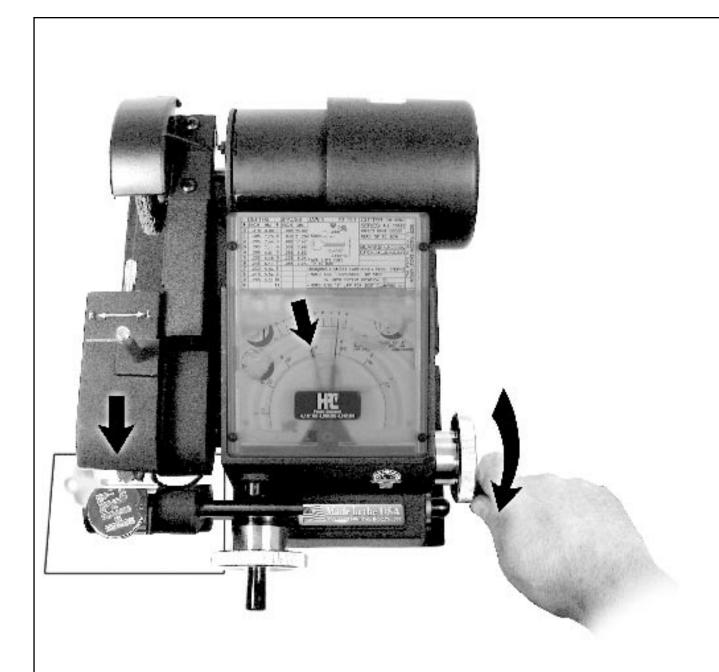
If space indicator needle is centered over the corresponding space mark, the tip stop space adjustment is correct. Go no further.



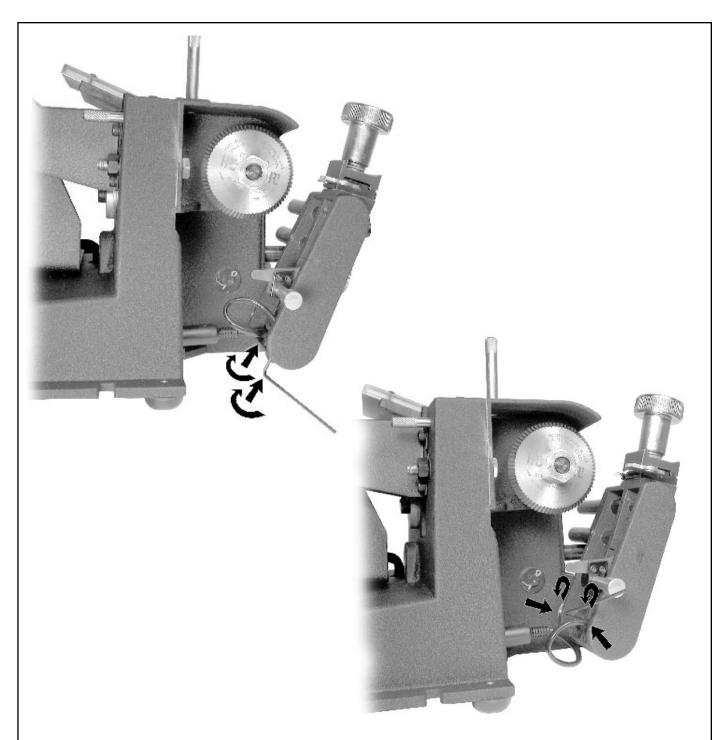
If the space indicator needle is offset to the right, the machine is cutting too close to the tip.

If the space indicator is offset to left, the machine is cutting to far from tip.

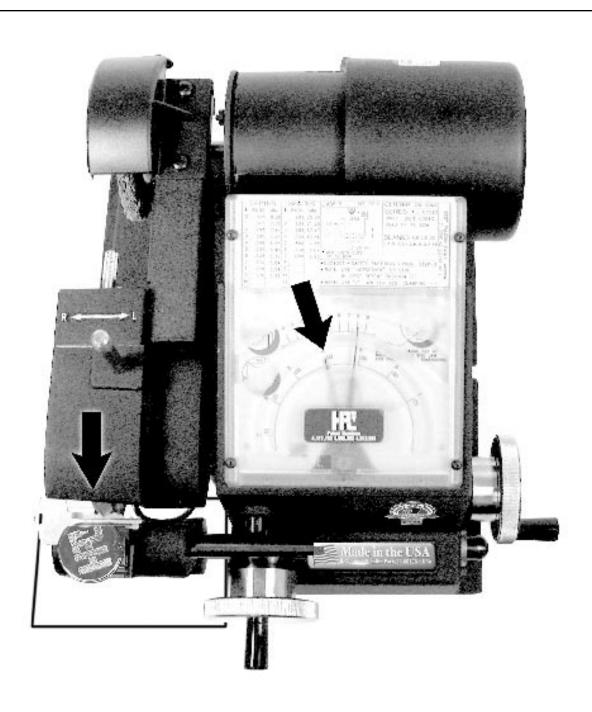
(Note: Re-calibration of tip **does necessitate** re-calibration of shoulder space. See next section.)



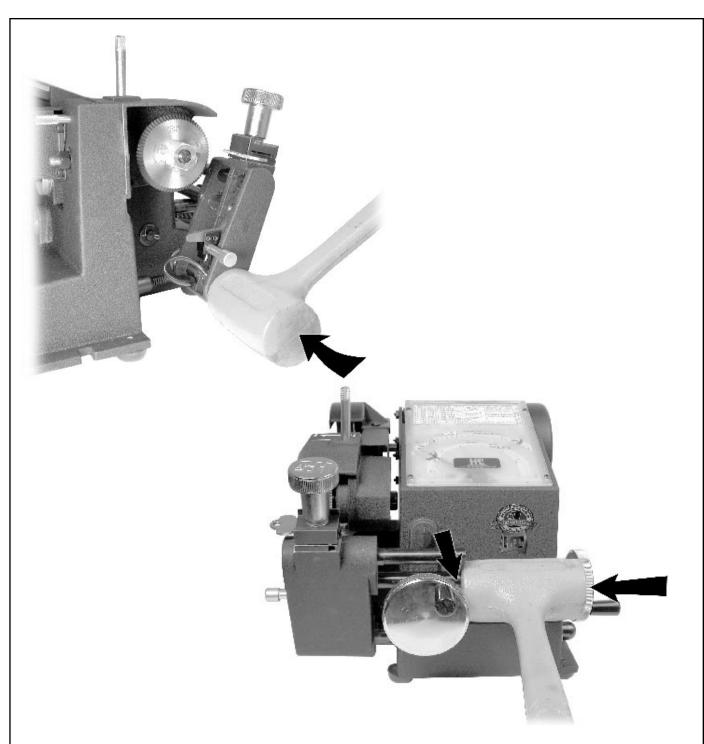
Rotate the lateral crank until the indicator needle is centered over the corresponding space mark as shown. Rotate the Depth crank until the cutter is fairly deep within the cut.



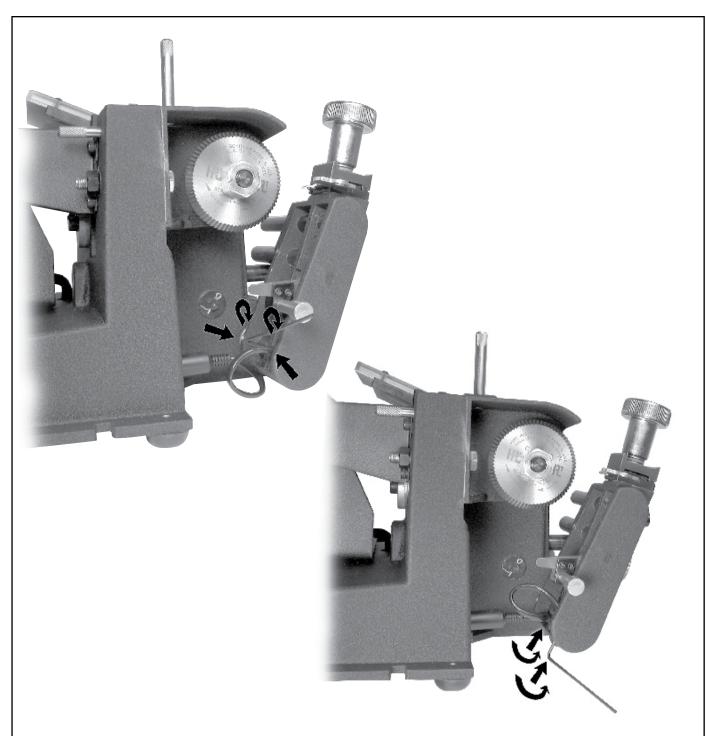
Loosen the four set screws that hold the pivot arm onto the pivot arm shaft. DO NOT REMOVE PIVOT ARM.



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.)



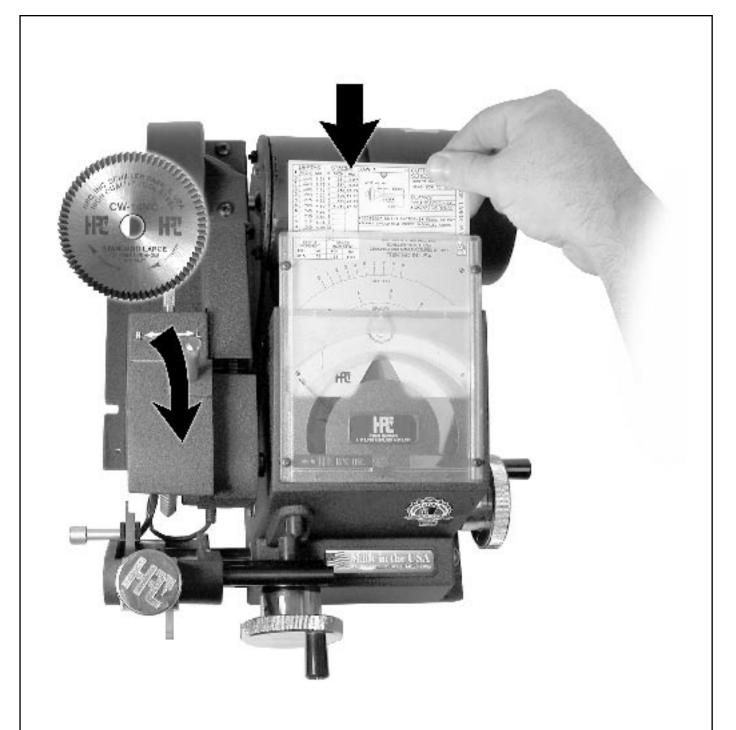
With the cutter aligned opposite the cut and the space indicator needle centered over the corresponding space mark, tilt the machine up, if necessary, (without disturbing the setting) and re-tighten the set screws.

CUTTING TOO CLOSE OR TOO FAR FROM THE SHOULDER ON KEYS GAUGED FROM THE SHOULDER.

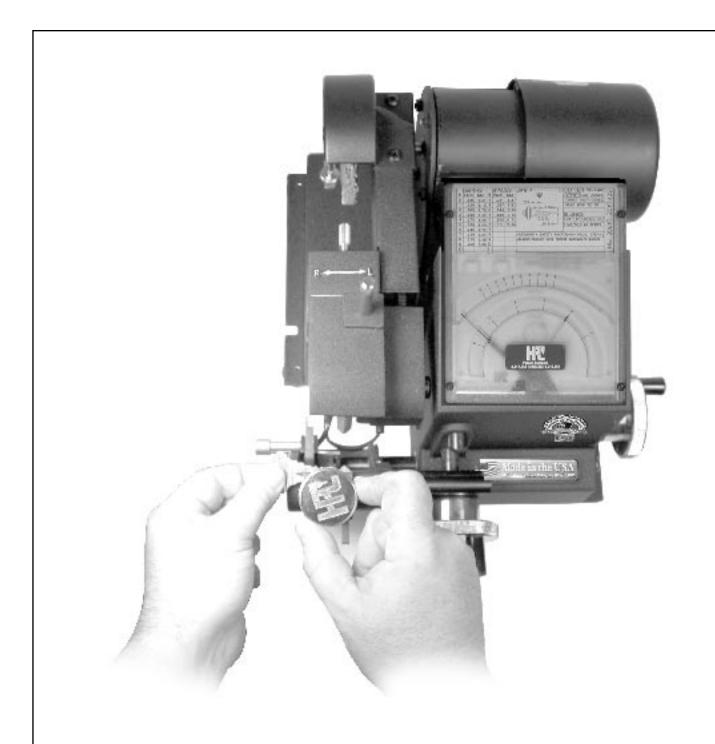


Select an original large cylinder type shoulder-gauged cut key, such as Schlage.

*Always check spacing on a tip stop key first, before adjusting for shoulder-gauged keys.

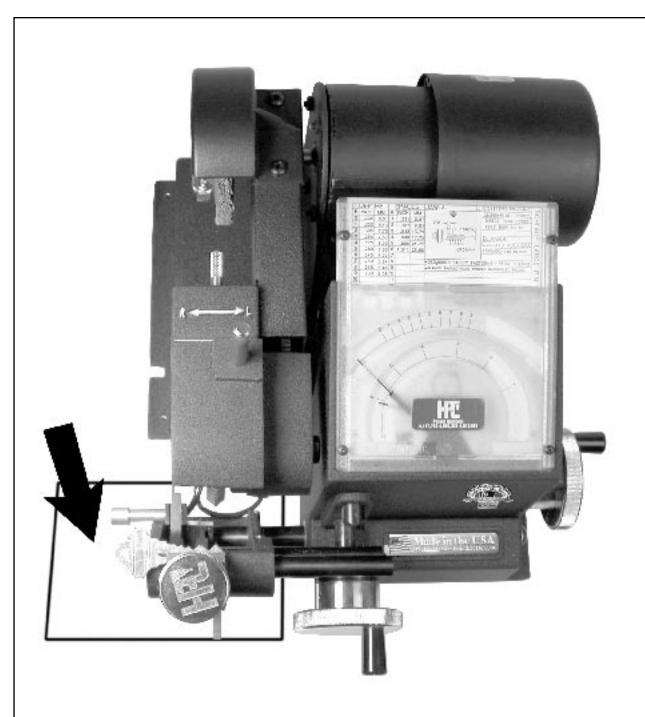


Insert the correct Code Card. Put on the correct cutter.

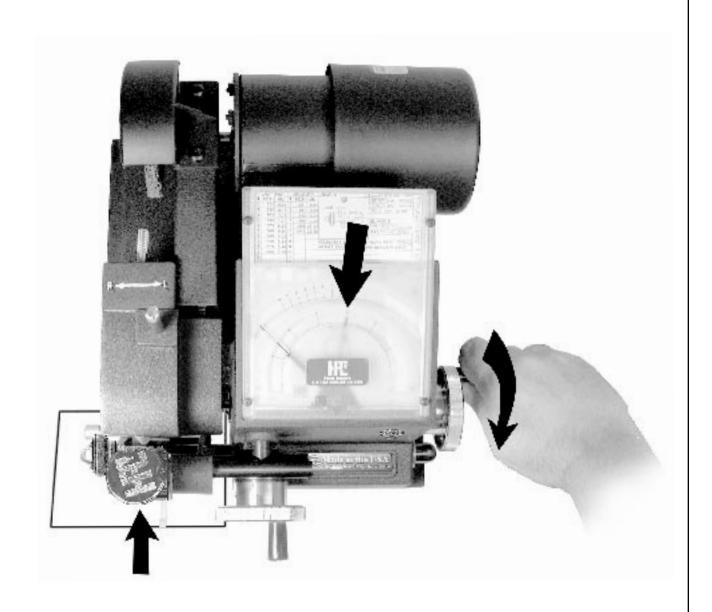


Gauge and clamp the key.



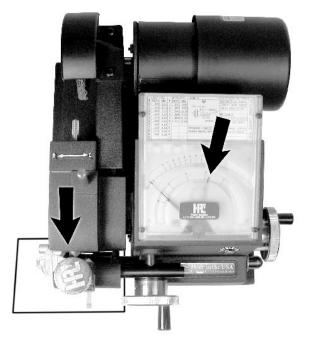


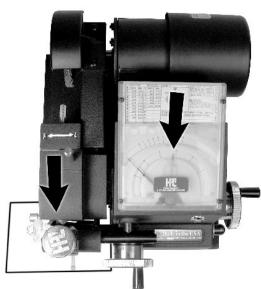
Place a white piece of paper beneath the cutter for improved vision alignment.



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. <u>Go no further.</u>





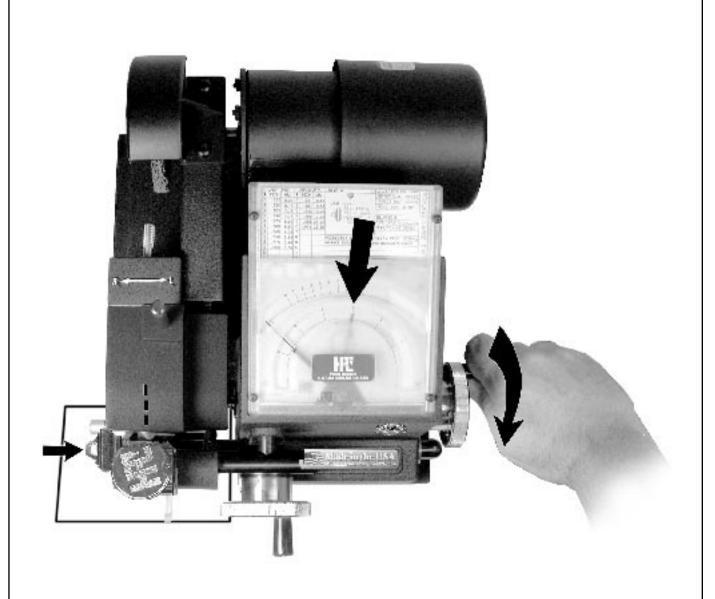


If the space indicator needle is offset to the right, the machine is cutting too far from the shoulder.

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.)

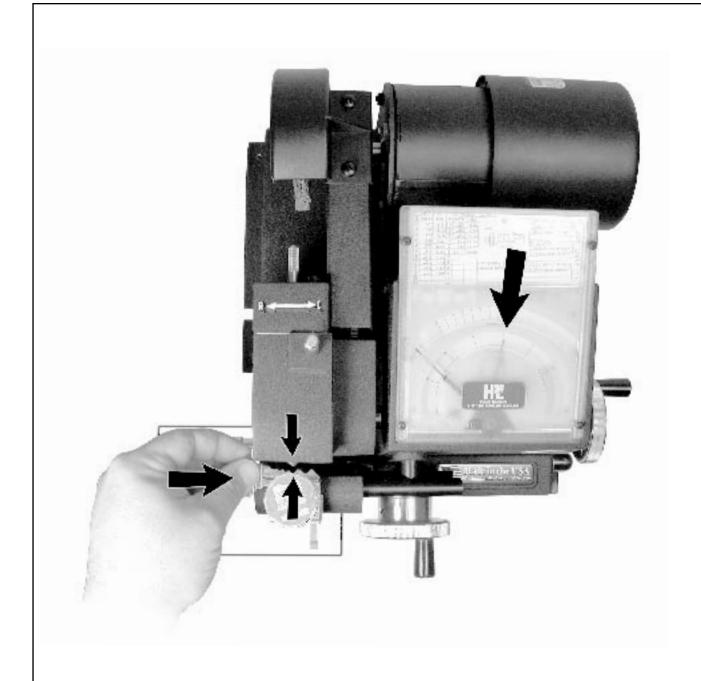




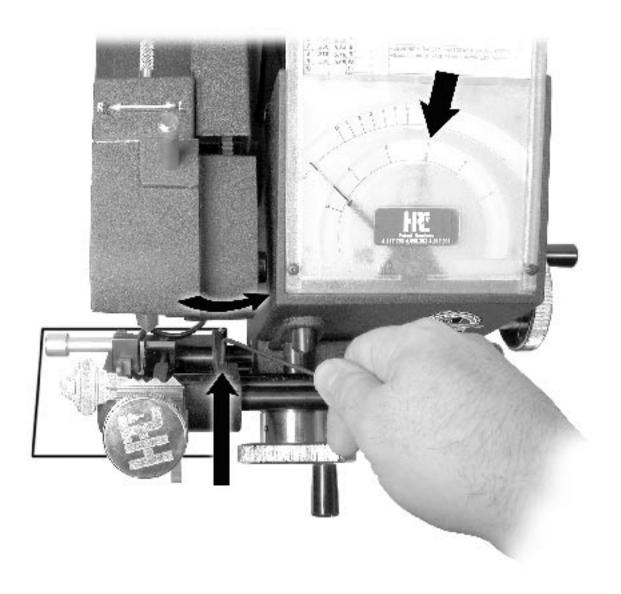
NOTE: Unplug the machine for these and the following operations.

Rotate the lateral crank towards you until the space indicator needle is centered over the corresponding space mark as shown.



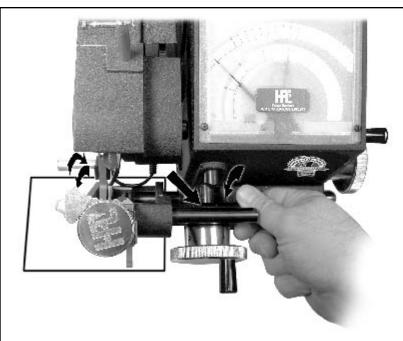


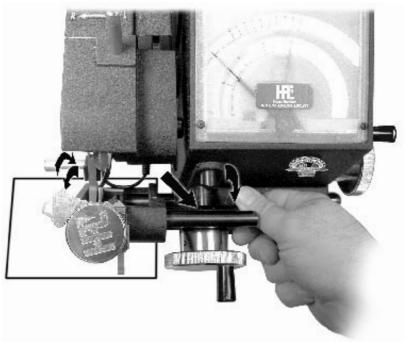
Loosen the key on the vise. Slide the key until the pin seat of the cut is directly opposite the flat of the cutter as shown. Tighten the key on the vise.



Loosen the set screw that holds the shoulder gauge turn bar onto the pivot arm (CM-1024X).







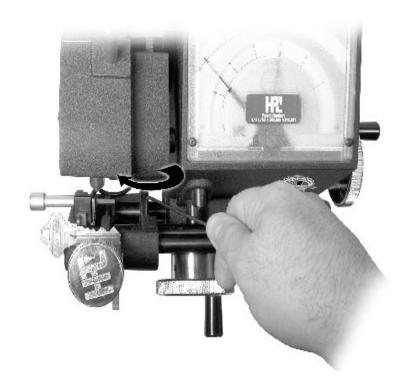
After loosening the set screw, swing the shoulder gauge upward and rotate the turn bar. If there is resistance, squirt some WD-40 or equivalent on the threaded end of the turn bar.

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.

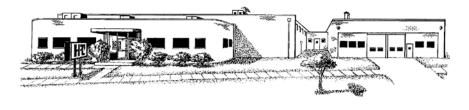
Tighten the set screw that holds the turn bar onto the pivot arm.



9.0 PREVENTIVE MAINTENANCE, LUBRICATION, REPAIRS AND GUARANTEE



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LUBRICATION PREVENTIVE MAINTENANCE, REPAIRS and GUARANTEE

- 1. MOTOR The motor is equipped with sealed bearings that require no lubrication.
- 2. CUTTER HEAD The cutter head is equipped with precision ball bearings for years of trouble free service and requires no lubrication. The cutter head swivel surface and plunger angle holes should be given a light coat of LPS#3 or equivalent, once every 4 to 6 months.
- 3. DEPTH FEED CRANK BEARING The black Delrin bearing (No. CM-1045) should be cleaned and a light coat of heavy grease applied when required, in order to maintain it's smooth feel.
- 4. BEARINGS AND SLIDING SURFACES These are to be given a light coat of a light grease at least every six months.
- 5. EXPOSED STEEL SURFACES All remaining exposed steel shafts, cutter, etc., should be sprayed with WD-40 or equivalent light oil at least every 6 months. Wipe off any excess.
- 6. CLEANING Remove all brass chips, dirt and grit from the surface of your machine daily, with a soft bristle brush. Take particular care in keeping the key vise jaw area clean and free of all residue build-up.
- 7. CODE CARDS The Code Cards are made of credit card stock and die cut to extremely close tolerances. Dirt is easily washed off with a mild non-abrasive liquid detergent, such as dishwashing soap and lukewarm water. Dab lightly with a soft coat until dry. Never use an abrasive or solvent-based cleaner to wash these Code Cards!
- 8. CALIBRATING DEPTH FOR RE-SHARPENED CUTTERS The diameter of a resharpened cutter is, smaller and therefore will make cuts shallower-if no depth adjustment is made. This is easily accomplished by rotating the eccentric shaft with a 3/8" open end wrench.
 - *See depth adjustment section (Section 6.0) for full explanation of the eccentric shaft adjusting process.
 - As cutters become worn, the alternative to purchasing a new set, would be to resharpen them. (HPC does not resharpen cutters.)
 - In order to maintain matched cutter diameters, all cutters for this machine must be sharpened at the same time, and all diameters must be sharpened proportionately.
- 9. DRIVE BELT The drive belt (No. CM-1083MA) was selected especially for this machine and should give years of good service. If it becomes worn or broken and requires replacement, be sure to install the new belt with the teeth outward. Note: The drive belt is somewhat more noisy when it is made to "cross-over" as the cutter head is swiveled to either the left or right angle when cutting *Medeco® keys.
- 10. GUARANTEE The 1200CMB Code Machine is fully guaranteed for one year from the date of purchase, against factory defects in material and workmanship. Mail the Warranty Card to us immediately, to validate your guarantee. Should your machine require factory repairs, it should be packed securely, along with a letter stating clearly what you feel the problem is and returned to the factory.

During the one year warranty period, you will be billed for handling and shipping only. Neither HPC, Inc. nor our distributors have "loaner machines" available.

*Medeco® is a registered trademark of Medeco Security Locks, Inc.



HPC SERVICE CENTER

If the need should arise, please note the following in order to assure you, our customer, of prompt service on your key machine repair:

- 1. The HPC Service Center answers questions involving key machines and related parts Monday through Friday from 8:00am to 4:30pm Central time.
- 2. REPAIRS The preventive maintenance and recalibration of space and depth are the only repairs or adjustments suggested. Every effort has been made to thoroughly field test every machine for both permanent shop and/or service truck installations. Internal operating mechanisms, while extremely simple in function and design, are factory repairable only. Additional repair charges may be incurred by attempting to fix these type of repairs yourself.
- 3. Parts for repairing any HPC key machine can be purchased directly through the Service Center by calling our toll-free phone number: 1-800-323-3295. When ordering any parts over the phone, please have a list of the part numbers and descriptions ready to expedite the ordering process. If the parts are needed in a hurry, they can be sent out UPS Next Day Air or 2nd Day Air. There is an extra cost incurred when parts are shipped this way.
- 4. If you need to send an HPC key machine in for repair, pack the machine securely in a box strong enough to prevent damage during shipping. Also be sure that your machine is equipped with an HPC cutter when it is sent in for repairs. Include a letter explaining exactly what type of problem you are having and any other work you may want done on the machine. Make sure your address and phone number are on the letter as well as the name of someone we can contact if the need arises while repairing your machine. Our shipping address is:

HPC, Inc. Attn. Service Center 3999 N. 25th Avenue Schiller Park, IL 60176

- 5. The usual method of payment for key machine parts is C.O.D. Other methods of payment include Visa, Mastercard or pre-paying your order with a check. If you wish to have your HPC distributor billed for the cost of repairs, they will have to call in with approval of the billing and a purchase order for the work being done, before the machine is repaired. Unless otherwise specified, key machines that are not under warranty will be shipped C.O.D. via UPS after the repairs have been made.
- 6. If you wish for the service department to call you with an estimate for repair of your machine, please specify this request in writing.
- 7. If while inspecting your machine our service department discovers additional problems not listed in your note, a service technician will call you with this information and the estimated charges to repair.
- 8. If no request is made for HPC to call with a repair estimate, but the cost is expected to exceed \$250.00 or 25% of the cost of a new machine, you will be contacted with this information.
- 9. You will be called if the C.O.D. amount will exceed \$250.00.
- 10. If after informing you of the repair estimate it becomes apparent that the cost will be higher, you will receive a call informing you of the additional charges before any additional work is done.
- 11. We are sorry, but neither HPC, Inc. nor our distributors have "loaner machines" available.





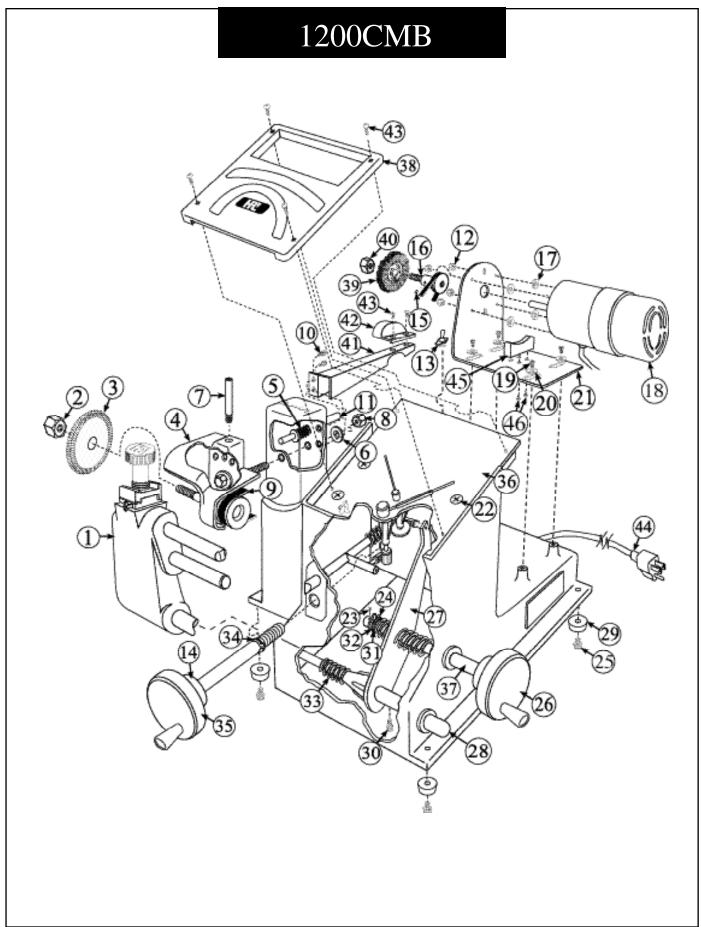
10.0 EXPLODED VIEWS & PART LISTINGS



1200CMB PARTS LISTING

<u>#</u>	Description	Stock #	#	Description	Stock #
1.	Pivot Arm Complete	CM-1024X	24.	Left Side E-Clip	CM-50183
2.	Cutter Nut	CM-1039MA	25.	Screw	CM-50134
3.	Cutter	Sold Separately	26.	Lateral Crank Complete	CM-1044X
4.	Cutter Head Assembly	CM-1053X	27.	Lateral Rack Bracket	CM-1030
5.	Spring	CM-1079	28.	Pivot Arm Shaft	CM-1034
6.	Washer	CM-50100	29.	Rubber Foot	CM-50133MA
7.	Pivot Pin	CM-1043	30.	Dogging Screw	CM-1016
8.	Hex Nut	CM-50157	31.	Teflon Washer	CM-1086
9.	Belt	CM-1083MA	32.	Washer	CM-50100
10.	Cap Screw	CM-50158	33.	Spring	CM-1098
11.	Angle Index Pin	CM-1042	34.	Retaining Ring	CM-50126
12.	Hex Nut	CM-50148	35.	Depth Crank Complete	CM-1026X
13.	Toggle Switch	CM-1099MA	36.	Dial Plate Complete	CM-1050
14.	Crank Bearing	CM-1045	37.	Lateral Feed Shaft	CM-1047B
15.	Set Screw	9100-11	38.	Lens	CM-1012
16.	Motor Pulley	CM-1060B	39.	Brush	TYX-3
17.	Washer	CM-50149	40.	Brush Nut	9150-29
18.	Motor (110 V)	CM-1080MA	41.	Belt Guard	CM-1014B
19.	Cap Screw	CM-50167	42.	Brush Guard	CM-1096B
20.	Washer	CM-50167-1	43.	Screw	CM-50154
21.	Motor Mounting Bracket	CM-1040MA	44.	AC-Cord	CM-1294MAO
22.	Set Screw	CM-50165	45.	Motor Support	CM-50186
23.	Cotter Pin	CM-62CP	46.	Motor Support Screws (2)	CM-50188



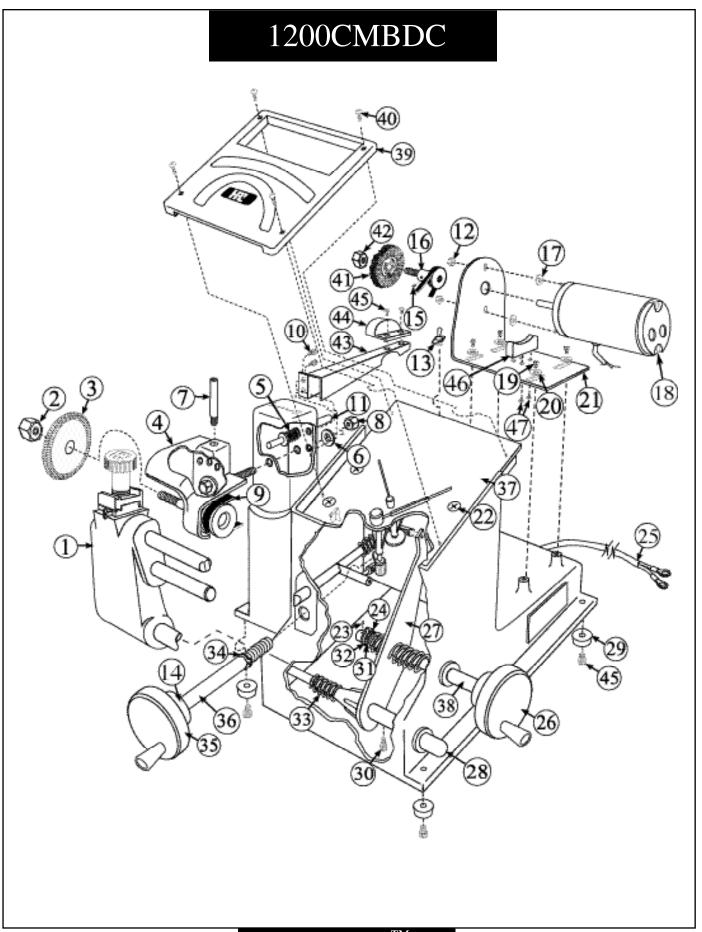


1200CMBDC PARTS LISTING

<u>#</u>	<u>Description</u>	Stock #	#	Description	Stock #
1.	Pivot Arm Complete	CM-1024X	24.	Retaining Ring	CM-50112
2.	Cutter Nut	CM-1039MA	25.	DC-Cord	DC-CABLE
3.	Cutter	Sold Separately	26.	Lateral Crank Complete	CM-1044X
4.	Cutter Head Assy. Complete	CM-1053X	27.	Lateral Rack Bracket	CM-1030
5.	Spring	CM-1079	28.	Pivot Arm Shaft	CM-1034
6.	Washer	CM-50100	29.	Rubber Foot	CM-50133MA
7.	Pivot Pin	CM-1043	30.	Dogging Screw	CM-1016
8.	Hex Nut	CM-50157	31.	Teflon Washer	CM-1086
9.	Belt	CM-1083MA	32.	Washer	CM-50100
10.	Cap Screw	CM-50158	33.	Spring	CM-1098
11.	Angle Index Pin	CM-1042	34.	Retaining Ring	CM-50126
12.	Hex Nut	CM-50148	35.	Depth Crank Complete	CM-1026X
13.	Toggle Switch	CM-1099MA	36.	Depth Crank Shaft	CM-1031B
14.	Crank Bearing	CM-1045	37.	Dial Plate Complete	CM-1050
15.	Set Screw	9100-11	38.	Lateral Feed Shaft	CM-1047B
16.	Motor Pulley	CM-1060B	39.	Lens	CM-1012
17.	Washer	CM-50149	40.	Screw	CM-50154
18.	Motor (12 V DC)	DC-MOTOR	41.	Brush	TYX-3
19.	Cap Screw	CM-50167	42.	Brush Nut	9150-29
20.	Washer	CM-50167-1	43.	Belt Guard	CM-1014B
21.	Motor Mounting Bracket	CM-1040MA	44.	Brush Guard	CM-1096B
22.	Set Screw	CM-50165	45.	Screw	CM-50134
23.	Cutter Pin	CM-62CP	46.	Motor Support	CM-50186
			47.	Motor Support Screws (2)	CM-50188



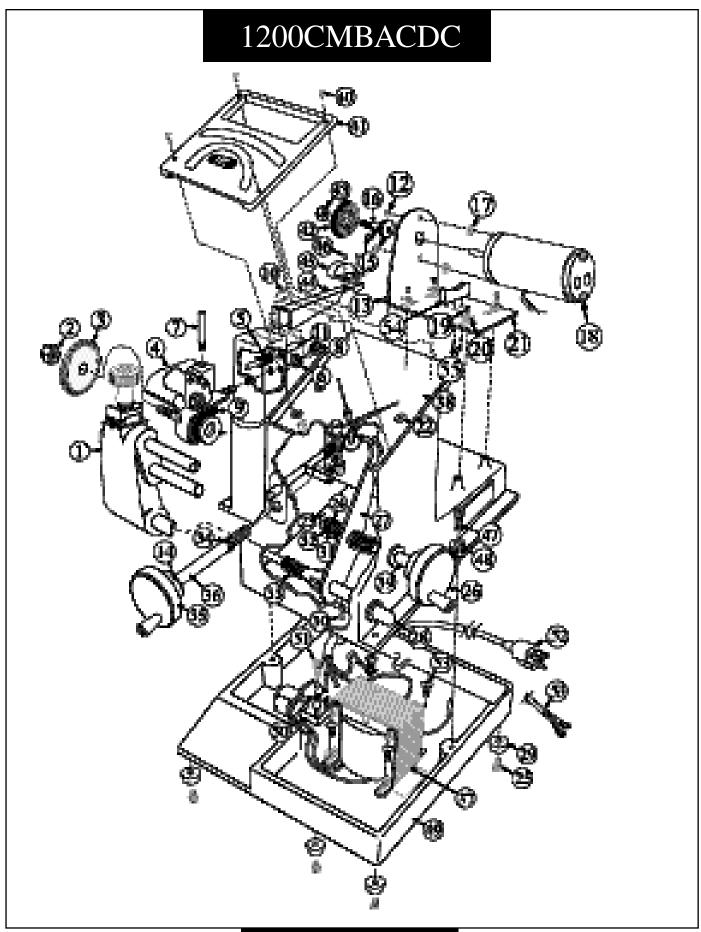




1200CMBACDC PARTS LISTING

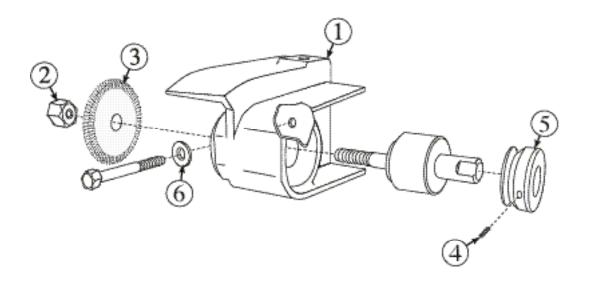
<u>#</u>	Description	Stock #	<u>#</u>	Description	Stock #
1.	Pivot Arm Complete	CM-1024X	28.	Pivot Arm Shaft	CM-1034
2.	Cutter Nut	CM-1039MA	29.	Rubber Foot	CM-50133
3.	Cutter	Sold Separately	30.	Dogging Screw	CM-1016
4.	Cutter Head		31.	Teflon Washer	CM-1086
	Assembly Complete	CM-1053X	32.	Washer	CM-50100
5.	Spring	CM-1079	33.	Spring	CM-1098
6.	Washer	CM-50100	34.	Retaining Ring	CM-50126
7.	Pivot Pin	CM-1043	35.	Depth Crank Complete	CM-1026X
8.	Hex Nut	CM-50157	36.	Depth Crank Shaft	CM-1031B
9.	Belt	CM-1083MA	37.	Transformer for ACDC	ACDC-TRANS
10.	Cap Screw	CM-50158	39.	Set Screw	CM-50112
11.	Angle Index Pin	CM-1042	38.	Dial Plate Complete	CM-1050
12.	Hex Nut	CM-50148	39.	Lateral Feed Shaft	CM-1047B
13.	Toggle Switch	ACDC-SW	40.	Screw	CM-50154
14.	Crank Bearing	CM-1045	41.	Lens	CM-1012
15.	Set Screw	9100-11	42.	Brush	TYX-3
16.	Motor Pulley	CM-1060B	43.	Screw	CM-50134
17.	Washer	CM-50149	44.	Belt Guard	CM-1014B
18.	Motor (12 V DC)	DC-MOTOR	45.	Brush Guard	CM-1096B
19.	Cap Screw	CM-50167	46.	Screw	CM-50177
20.	Washer	CM-50167-1	47.	Cap Screw	9100-28
21.	Motor Mounting Bracket	CM-1040MA	48.	Washer	CM-50130
22.	Set Screw	CM-50165	49.	Base	CM-1255MAO
23.	Cotter Pin	CM-62CP	50.	Rectifier	ACDC-RECT
24.	Retaining Ring	CM-50112	51.	Cap Screw	CM-50167
25.	Cap Screw	CM-50134	52.	AC Cord	CM-1294MAO
26.	Lateral Crank Complete	CM-1044X	53.	DC-Cord	DC-CABLE
27.	Lateral Rack Bracket	CM-1030	54.	Motor Support	CM-50186
			55.	Motor Support Screws (2)	CM-50188





B L I T Z TM 1200CMB

1200CM/1200CMB CUTTER HEAD ASSEMBLY



Description

- 1. Cutter Head
- 2. Cutter Nut
- 3. Cutter
- 4. Set Screw
- 5. Cutter Head Pulley
- 6. Washer

Stock

CM-1053X (available complete only)

CM-1039MA

Wide Selection Available

9100-11

CM-1059

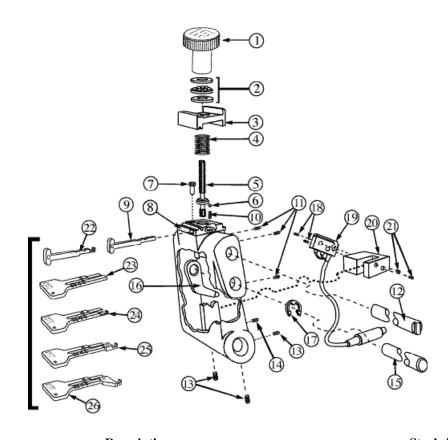
CM-50100







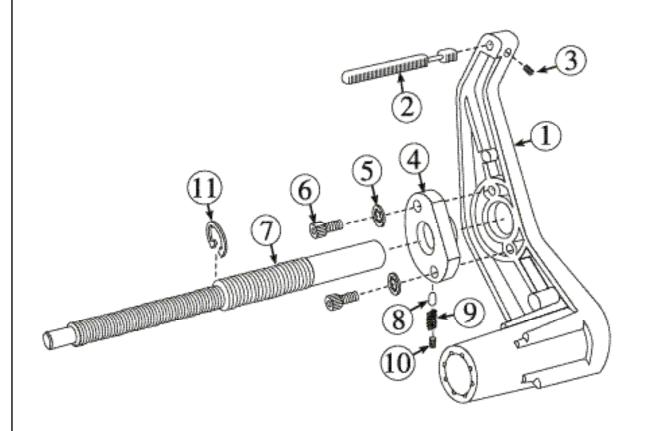
1200CM/1200CMB PIVOT ARM ASSEMBLY



#	Description	Stock #	
_ 1.	Easy Grip Wing Nut	EGN-1	
2.	Ball Bearing Washer	BBW-2	
3.	Top Jaw	CM-1056M	
4.	Spring	CM-1293M	
5.	Stud	CM-1019M	
6.	Ball Bearing	CM-50108	
7.	Set Screw	CM-50110	
8.	Bottom Jaw (factory installation recommended)	CM-1055M	
9.	Tip Stop	CM-1054M	
10.	Spring	CM-1090M	
11.	Set Screw	CM-50139	
12.	Eccentric Shaft	CM-1041	
13.	Set Screw	CM-50109	
14.	Set Screw	CM-50112	
15. & 16	Turn Bar & Shoulder Gauge	CMB-FG	
17.	Retaining Ring	CM-50105	
18.	2-56 Screw	MAX-92	
19.	Shoulder Gauge Wire Assembly	MAX-90	
20.	Shoulder Gauge Micro Switch Bracket	MAX-91	
21.	6-32 Set Screw	MAX-89	
22.	Specialty Tip Stop - Safe Deposit Keys	RT-SD	
23.	Horseshoe Tip Stop	CM-1054R	
24.	Specialty Tip Stop - Safe Deposit Keys	HT-SD	
25.	Specialty Tip Stop - L & F Safe Deposit Box Keys	HT-125	
26.	Specialty Tip Stop - L & F Safe Deposit Box Keys	HT-625	



1200CMB RACK BRACKET ASSEMBLY



<u>#</u>	Description	Stock #
1.	Rack Bracket	CM-1030B
2.	Lateral Rack	CM-1021
3.	Screw	CM-50112
4.	Feed Thread	CM-1037B
5.	Washer	CM-10150
6.	Screw	CM-50116
7.	Lateral Feed Shaft	CM-1047B
8.	Brake Pellet	CM-50180
9.	Spring	CM-50181
10.	Set Screw	CM-50182
11.	Ring	CM-50183

