JMA®
ALEJANDRO ALTUNA S.A.

THE **EXPERIENCE** OF A **MARKET LEADER**

The best solutions
for copying every kind of key existing on the market

KEY CUTTING
MACHINES

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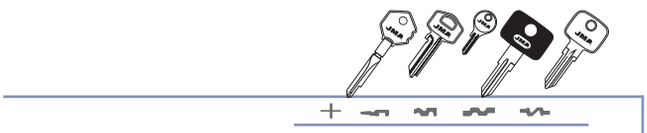

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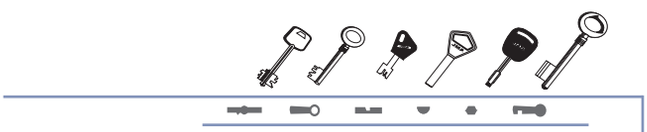

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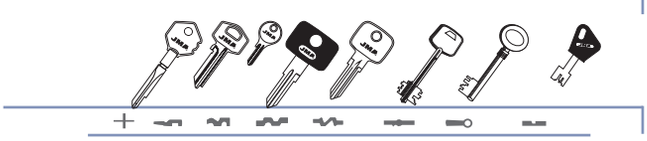

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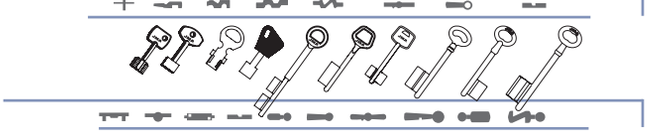

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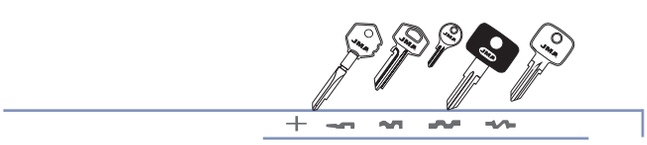

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KEY CUTTING MACHINES

VIENNA

Semi automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.

CODE	MOTOR
VIENNA	*(single phase) 220 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m. 1,7 Amp.* *(optional) 110V. - 60 Hz - 0,18 Kw. - 1700 r.p.m. 3,14 Amp.*

TECHNICAL DATA

Cutter (High speed steel)	HSS, 80 x 16 x 5
Clamps	Steel, with 4 clamping sides.
Width	430 mm.
Height	280 mm.
Depth	420 mm.
Weight	27 Kg.
Cutter speed	612 r.p.m.
Effective travel	Eje X=53 mm.
Lighting	DIODOS.
Transmition	Ribbed belts with self-tightening system.
Displacement	On self-lubricated bearings.

OPTIONAL

4 - Face clamp SF (Portugal).

SAFETY

Start switch on the back.
Slide release button for key cutting.
Automatic stop removal system.
Ample cutter protection.
Brush area protection.
Swarf collection tray.

Height 280 mm.

Depth 420 mm.

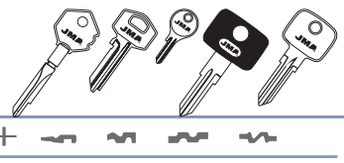
1 *First machine to incorporate a partial and total key counter. You can control the keys cut on the machine during its life. Helps you keep count of the number of keys when making multiple copies.*

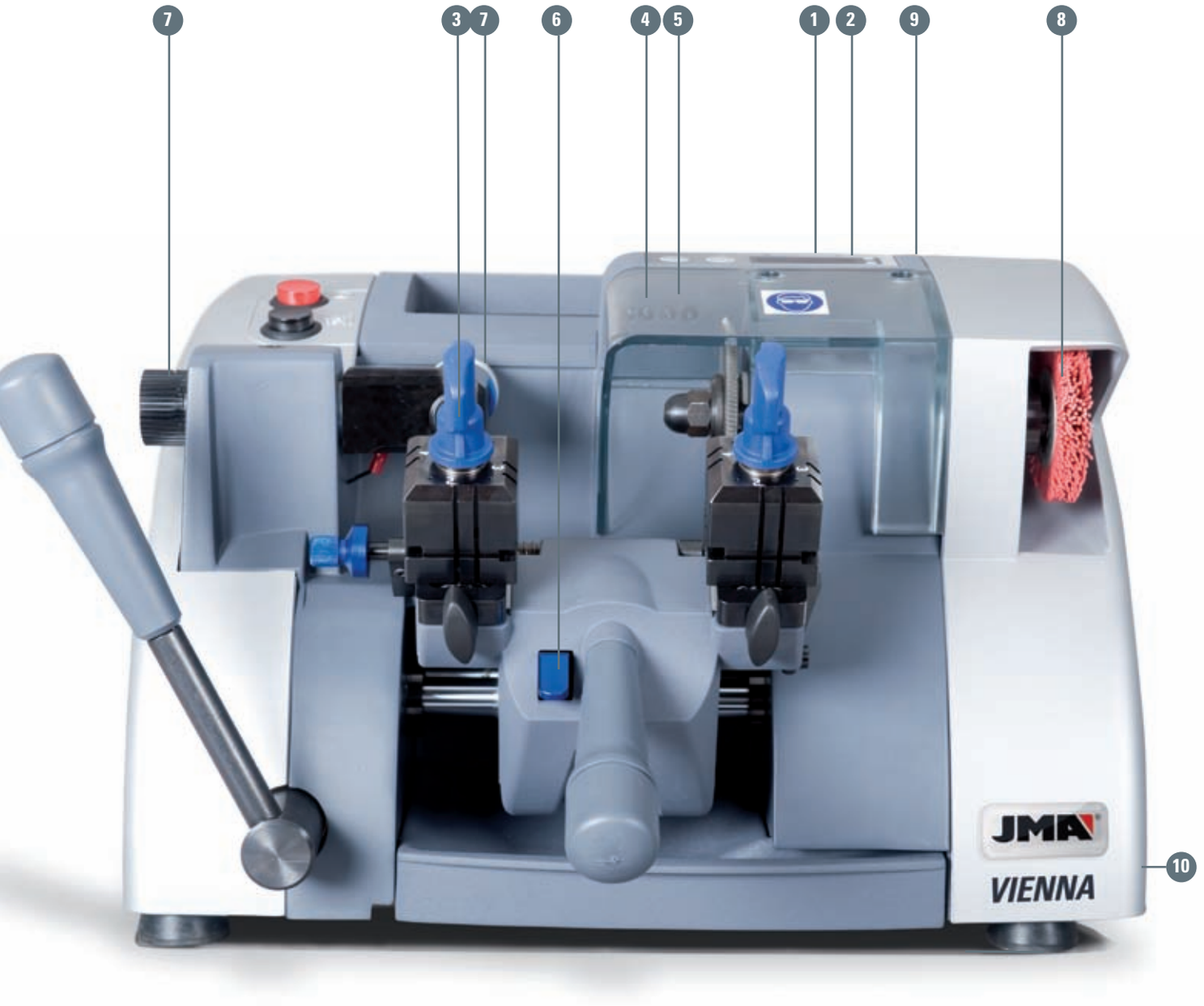
2 *Has an electronic regulation system that indicates the exact machine regulation point. The display shows the rotation direction of the adjustment wheel.*

3 *New clamp turning system. Compatible with earlier key-cutting machines (Dakota, Titan, Saratoga...).*

4 *New lighting based on low consumption LED to light the cutting area.*

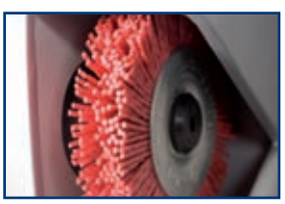
5 *Environmentally friendly machine. Light switches off automatically when it is detected that the machine is not being used.*





6 *Automatic stop removal system, making key cutting quicker.*

7 *Micrometric depth adjustment and first machine on the market to also incorporate micrometric lateral adjustment.*



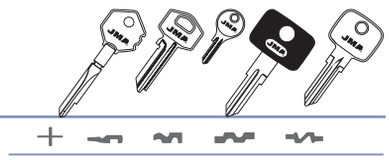
8 *Brush for deburring the keys.*

9 *Tray for accessories, keys, tools, etc... with easy operator access.*

10 *Handles for moving the machine.*

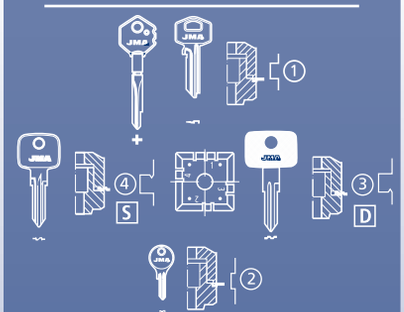
KEY CUTTING MACHINES

DAKOTA EXTRA



Semi automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.

NEW DESIGN
MORE POWER AND RESISTANCE



CODE	MOTOR
DAKOTA extra	(single phase) 230 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m.
DAKOTA extra - 110	(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 r.p.m.

TECHNICAL DATA

Cutter	FP24 (80x5x16-42°)
Width	520 mm.
Height	280 mm.
Depth	245 mm.
Weight	23 Kg.
Speed	530 r.p.m.

OPTIONAL

SOFER jaw

1 *4 way hard steel jaws.*

2 *Tracer point with micrometric adjustment.*

3 *Tray to collect swarf.*

4 *Tool storage tray.*

5 *Brush incorporated.*

6 *Lamp attachment.*

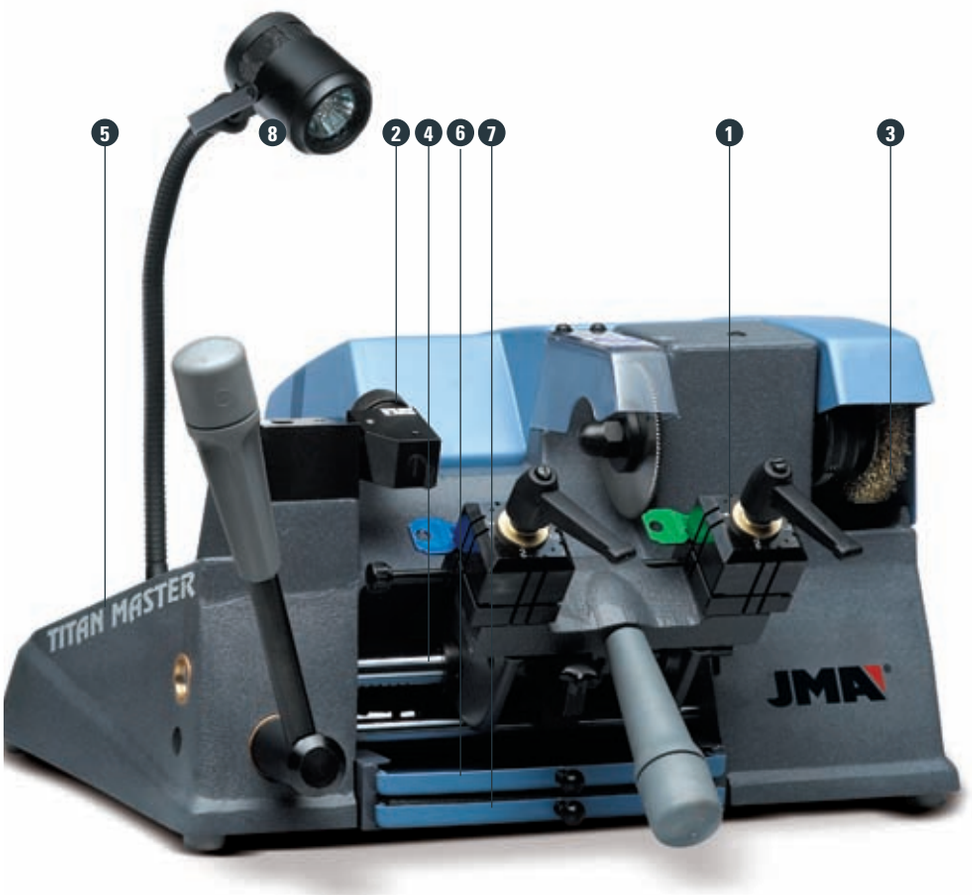
7 *Double shaft movement system.*

8 *Independent brush switch.*

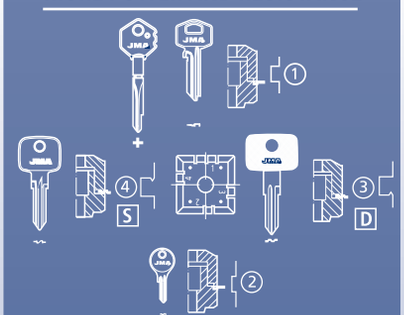
KEY CUTTING MACHINES

TITAN MASTER

Semi automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.



NEW DESIGN
MORE POWER AND RESISTANCE



CODE	MOTOR
TITAN master	*(single phase) 230 V. 50 Hz. - 0,18 Kw. - 1350 rpm*
TITAN master 110	*(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 rpm*

TECHNICAL DATA

Cutter	*FP24 (80x5x16-42°)*
Width	*410 mm.*
Height	*240 mm.*
Depth	*350 mm.*
Weight	*23 Kg.*
Speed	*640 r.p.m.*

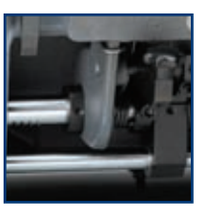
OPTIONAL

SOFER jaw.

1 *4 way hard steel jaws.*

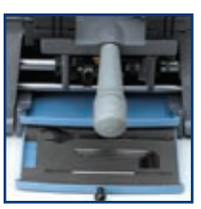
2 *Tracer point with micrometric adjustment.*

3 *Brush incorporated.*



4 *Double shaft movement system.*

5 *Independent brush switch.*



6 *Carriage release lever.*
7 *Tray to collect swarf.*

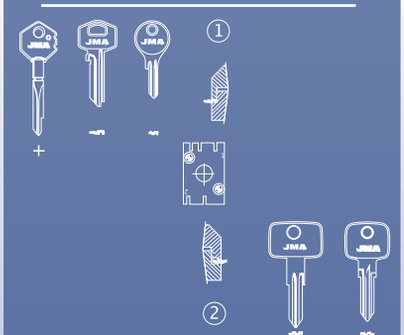
8 *Lamp attachment.*

KEY CUTTING MACHINES

TITAN

Semi automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.

NEW DESIGN
MORE POWER AND RESISTANCE



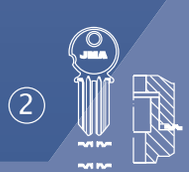
CODE	MOTOR
TITAN	*(single phase) 230 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m.*
TITAN 110	*(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 r.p.m.*

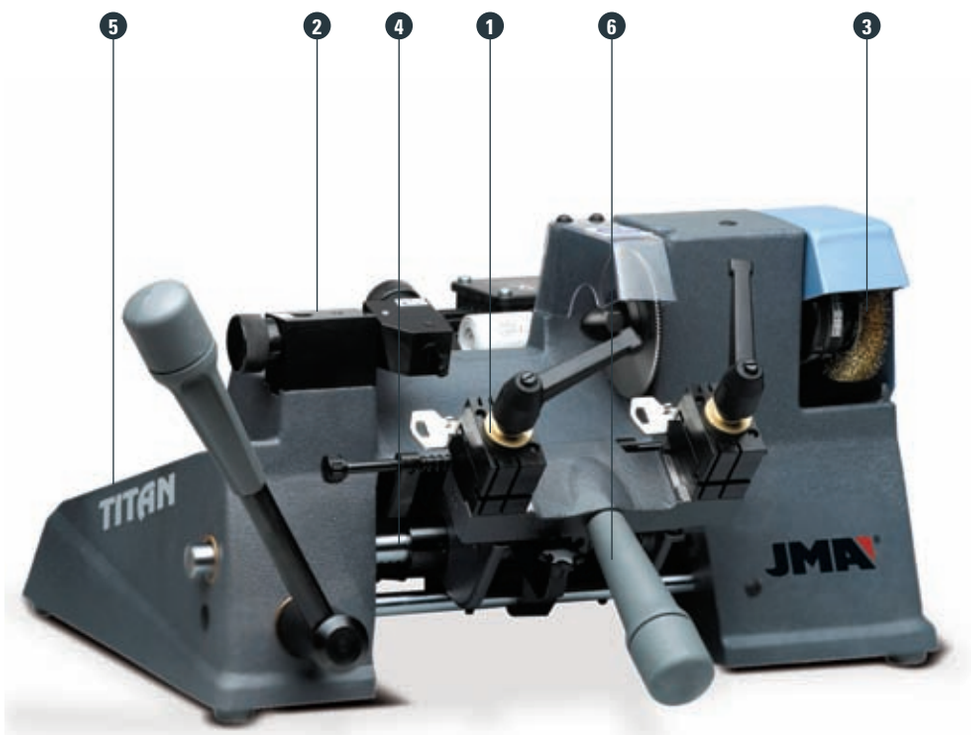
TECHNICAL DATA

Cutter	*FP24 (80x5x16-42°)*
Width	*410 mm.*
Height	*240 mm.*
Depth	*350 mm.*
Weight	*23 Kg.*
Speed	*640 r.p.m.*

OPTIONAL

SOFER jaw.



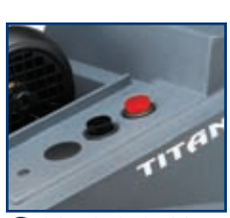


1 *2 way hard steel jaws.*

2 *Tracer point with micrometric adjustment.*

3 *Brush incorporated.*

4 *Double shaft movement system.*



5 *Independent brush switch.*

6 *Carriage release lever.*

KEY CUTTING MACHINES

ECCO/ ECCO PLUS

Semi automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.

TECHNICAL DATA	ECCO	ECCO PLUS
Cutter	FP11 (63x5x16)	
Width	470 mm.	520mm.
Height	280 mm.	280mm.
Depth	245 mm.	245mm.
Weight	15 Kg.	16 kg.

FEATURES	ECCO	ECCO PLUS
2 ways jaws	•	•
Tracer point with minomatic adjustment	•	•
Protection device	•	•
Brush		•
Side lever		•
Micro - switch		•
Safety fuse fitted	•	•

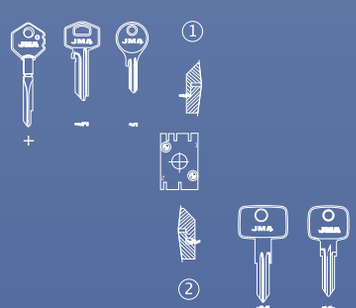


**Photo shows Ecco Plus*

CODE	MOTOR
ECCO	(single phase) 220 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m.
ECCO 110	(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 r.p.m.
ECCO PLUS	(single phase) 220 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m.
ECCO PLUS 110	(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 r.p.m.

OPTIONAL

SOFER Jaw.

1 *2 way hard steel jaws.*

2 *Tracer point with micrometric adjustment.*

3 *Protection device.*

4 *Brush incorporated.*

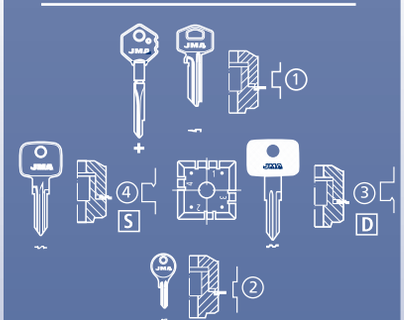
5 *Side lever.*

KEY CUTTING MACHINES

ECCO AUTOMATIC

Automatic duplicating machine for flat keys for cylinder, automobile locks, cruciform and special keys.

NEW DESIGN
MORE POWER AND RESISTANCE



CODE	MOTOR
ECCO AUTOMATIC	(single phase) 230 V. 50 Hz. - 0,18 Kw. - 1350 r.p.m.
ECCO AUTOMATIC 110	(optional single phase) 110 V. - 60 Hz - 0,18 Kw. - 1700 r.p.m.

TECHNICAL DATA

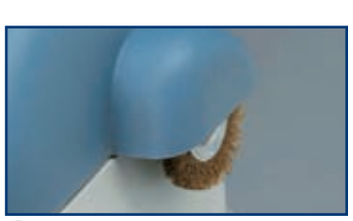
Cutter	FP11 (60X5X16)
Width	520 mm.
Height	280 mm.
Depth	245 mm.
Speed	16 Kg.

OPTIONAL

SOFER Jaw.

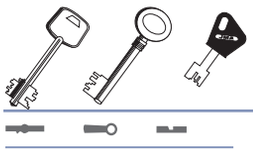
1 *4 way hard steel jaws.*

2 *Tracer point with micrometric adjustment.*



3 *Brush incorporated.*

4 *Independent brush switch.*

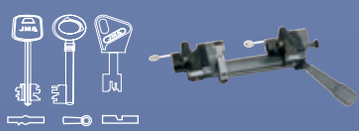


KEY CUTTING MACHINES

TITAN BIT

Versatil semi automatic duplicating machine (depending on the carriages) for ABLOY, FORD and MORTICE KEYS.

BIT CARRIAGE



OPTIONAL CARRIAGES

RG (REGATA)

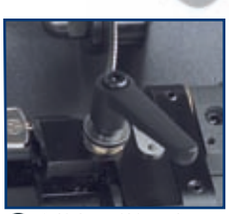
FD (FO - 6P)

ABL (ABLOY)

CODE	MOTOR
TITAN BIT	(single phase) 230 V. 50 Hz. - 0,18/0,24 Kw. - 675/1350r.p.m.
TITAN BIT 110	(optional single phase) 110 V. - 60 Hz - 0,18/0,24 Kw.- 850/1700 r.p.m.

TECHNICAL DATA

Cutter	FP19 (80X1,4X16)
Width	560 mm.
Height	410 mm.
Depth	520 mm.
Weight	28 Kg.
Speed	325 / 650 r.p.m.



1 *2 side jaws which permits: a) duplication of mortice keys b) duplication of front mortice keys.*

2 *Tracer point with micrometric adjustment.*

3 *Lamp attachment.*

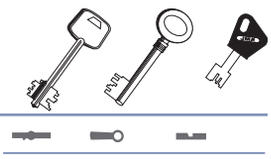
4 *Brush incorporated.*

5 *2 speed.*

6 *Spring system.*

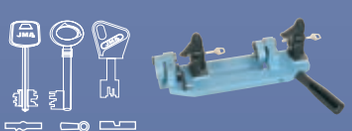
KEY CUTTING MACHINES

YAKARTA



Versatil semi automatic duplicating machine (depending on the carriages) for ABLOY,FORD and MORTICE KEYS.

BIT JAW



OPTIONAL CARRIAGES

RG *(REGATA)*

FD *(FO - 6P)*

ABL *(ABLOY)*

CODE	MOTOR
YAKARTA	*(single phase) 220 V. 50 Hz. - 0,18 Kw. - 1.350 r.p.m.*

TECHNICAL DATA

Cutter	*FP19 (80X1,4X16)*
Width	*260 mm.*
Heigth	*270 mm.*
Depth	*310 mm.*
Weight	*29 Kg.*
Speed	*500 r.p.m.*

1 *2 side jaws which permits:*
a) duplication of mortice keys
b) duplication of front mortice keys.
c) duplication of special key (EO-4P).

2 *Tracer point with micrometric adjustment.*

3 *Microswitch security device.*

4 *Lamp attachment.*

5 *Brush incorporated.*

KEY CUTTING MACHINES

ECCO COMBI

Versatile semi automatic duplicating machine (depending on the carriage) for ABLOY, FORD and MORTICE KEYS.

CODE	MOTOR
ECCO COMBI	(single phase) 220 V. 50 Hz. - 0,18 Kw. - 1.350r.p.m.
ECCO COMBI 110	(optional single phase) 110 V. 60 Hz. - 0,18 Kw. - 1.700 r.p.m.

TECHNICAL DATA

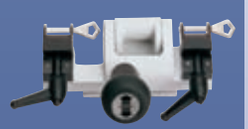
	E.BIT	E.RG	E.ABL	E.FD
Cutter	FP8	FP8	FP8	FP8
		(63x1,4x16)		
Width		520 mm.		
Heigth		280 mm.		
Depth		245 mm.		
Weight		16 Kg.		

OPTIONS

ECCO BIT

ECCO FORD

ECCO ABLOY



ECCO RG

FEATURES	E.BIT	E.RG	E.ABL	E.FB
Tracer point with micrometric adjustment	•	•	•	•
Cutter guard	•	•	•	•
Brush	•	•	•	•
Micro - switch	•	•	•	•
Safety fuse fitted	•	•	•	•
FORD carriage				•
ABLOY carriage			•	
RG carriage		•		
BIT carriage	•			

OPTIONAL

Argentina Jaw.

1 *Tracer point with micrometric adjustment.*

2 *Cutter guard.*

3 *Brush incorporated.*

KEY CUTTING MACHINES

DAKAR

Semi automatic duplicating machine for special security, tubular, cylinder and Fichet type keys.

OPTIONAL ADAPTERS

JIS **KEYS**

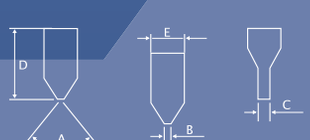
MERCEDES **KEYS**

FORD **KEYS**

CODE	MOTOR
DAKAR	(universal) 230 V. - 50 Hz. - 200 W - 8.000 r.p.m.
DAKAR 110	(optional universal) 110 V. - 60 Hz - 200 W.- 8.000 r.p.m.

TECHNICAL DATA

Cutter	F13, F1
Tracer	P13, P1
Width	310 mm.
Height	420mm.
Depth	275mm.
Functional range	60,60,40
Lamp	25W.
Weight	25 kg.
Speed I	5.500 r.p.m.
Speed II	8.000 r.p.m.



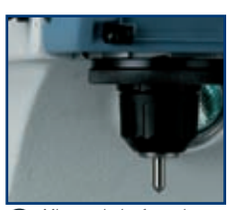
OPTIONAL TRACERS AND CUTTERS

CUTTER	A	B	C	TRACER
F1	90	0,8		P1
F1W	90	0,8		P1
F1A	90	0,8		P1
F3			1,5	P3
F3W			1,5	P3
F4	90	0,4		P4
F5	90	0,9		P5
F5W	90	0,9		P5
F6	106	1		P6
F7	70	0,8		P7
F8			4	P8
F8W			4	P8
F11			2,5	P11
F11W			2,5	P11
F12A	100	0,6		P12A
F12B	100-90	2,1-2,9		P12B
F13	100	0,8		P13
F13W	100	0,8		P13
F14	100	1,45		P14
F15		2	5	P15
F16	130	0,6		P16
F17			3	P17
F17W			3	P17
F19	90	1,2		P19
F21	85	0,72		P21
F22			2,4	P22
F23W	90	0,8	3,3	P23
F24	95	1		P24
F24W	95	1		P24
F25	95	1,1		P25
F25W	95	1,1		P25
F26	90	0,6		P26
F27	90	0,7		P27
F27W	90	0,7		P27
F30	90	3	3	P30
F32	90	0,6	3	P32
F32W	90	0,6	3	P32
F33			2	P33
F33W			2	P33
F34	90	1,4		P34
F43	90	0,7		P43
FB	90-90	2,7-3,3		PB
FC	80-80			PC
F9			5,95	P9
F9W			5,95	P9

1 *Tilting clamps for all types of keys with angles up to 45°.*

2 *Blocking tracer.*

3 *Electronic setting device.*

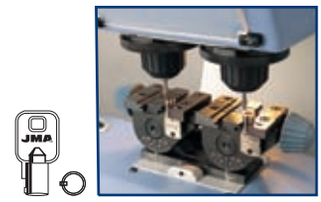
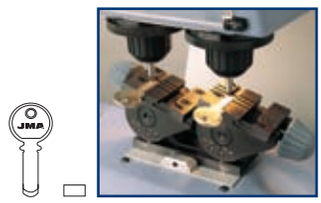
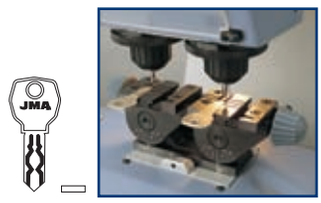


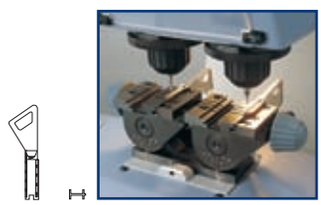
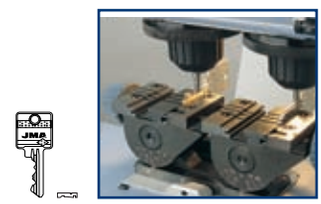
4 *Micrometric ring for setting.*

5 *Safety guard.*

6 *Lamp.*

2
6
4
3
5
1
dakar
ON / OFF
JMA

KEY CUTTING MACHINES

DAKAR EXPRESS

Semi automatic duplicating machine for special security keys.

OPTIONAL ADAPTERS

AD-15º

AD-45º

JIS **KEYS**

MERCEDES **KEYS**

FORD **KEYS**

CODE	MOTOR
DAKAR EXPRESS	(universal) 230V. - 50Hz.- 200 W.- 8000 r.p.m.
DAKAR EXPRESS-110	(optional universal) 110V. - 60Hz.- 200 W.- 8000 r.p.m

TECHNICAL DATA

Cutter	F1
Tracer	P1
Width	310mm.
Height	420mm.
Depth	275mm.
Functional range	60, 60, 40
Lamp	25W.
Weight	25 Kg.
Speed	5,500 r.p.m.

* OPTIONAL

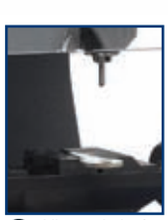
FIC-TUB Clamp.

1 Fixed clamp.

2 Interchageables jaws.

3 Electronic setting device.

4 Blocking tracer.

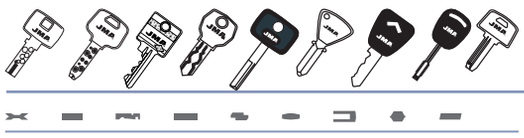


5 Micrometric ring for setting up (0,02").

6 Safety guard.

7 Tool storage tray.

8 Lamp.



KEY CUTTING MACHINES

DAKKI

Duplicating machine for special security keys.

OPTIONAL ADAPTERS

AD-15°

AD-45°

JIS **KEYS**

MERCEDES **KEYS**

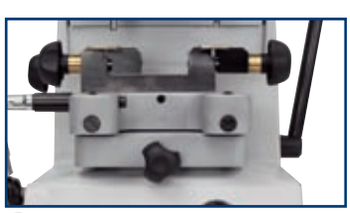
FORD **KEYS**

CODE	MOTOR
DAKKI	*(universal) 200 W., 230V - 50Hz*
DAKKI 110	*(optional universal) 200 W., 110V - 60Hz*

TECHNICAL DATA

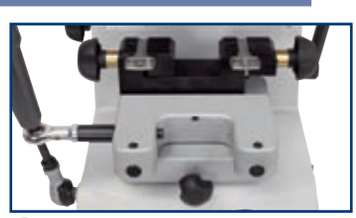
Cutter	*F1 90° (HSS)*
Tracer	*P1*
Width	*270mm.*
Height	*378mm.*
Depth	*340mm.*
Weight	*18Kg.*
Speed	*5.500 r.p.m.*
Functional range	*32, 40, 27*

1 *Semi automatic tracer for setting up.*



2 *Side movement blocking system.*

3 *Upright movement blocking system.*



4 *Fixed 1 side clamps.*

5 *Easy to use.*

6 *Small dimensions.*

KEY CUTTING MACHINES

SARATOGA

Combined duplicating machine for flat keys, for cylinder automobile locks, cruciform keys and special keys in side A and ABLOY, FORD and MORTICE KEYS in side B.

CODE	MOTOR
SARATOGA	(single phase) 230V. - 50Hz.- 0,22 Kw.- 1.350 r.p.m.
SARATOGA 110	(optional single phase) 110V. - 60Hz.- 0,22 Kw.- 1.700 r.p.m.

TECHNICAL DATA

	SIDE A	SIDE B
4 side jaw	•	
Jaw BIT		•
Cutter	FP24(80x5x16-42°)	FP19(80x1,4x16)
Width	590 mm	
Height	260 mm	
Depth	470 mm	
Weight	43 Kg	
Speed	500 r.p.m.	

OPTIONAL

SOFER Jaw.

OPTIONAL ADAPTERS

AD-NEVA

AD-SIX

RG (REGATA)

FD (FORD)

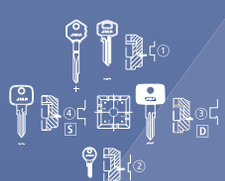
ABL (ABLOY)

FEATURES

SIDE A

Cutter driven by motorised belt transmission.

1. Four side jaws.
2. Trace point with micrometric adjustment.
3. Lamp attachment.
4. Tool storage tray.
5. Brush attachment.
6. Carriage release lever.



SIDE B

Cutter driven by motorised belt transmission.

1. 2 sided jaws which permit:
   a. Duplication of mortice keys.
   b. Duplication of front mortice keys.
   c. Duplication of special key (FO-4P).
2. Tracer point with micrometric adjustment.
3. Switch ON security device.
4. Lamp attachment.
5. Brush.
6. Carriage with central guides for centering.
7. Independent brush switch.

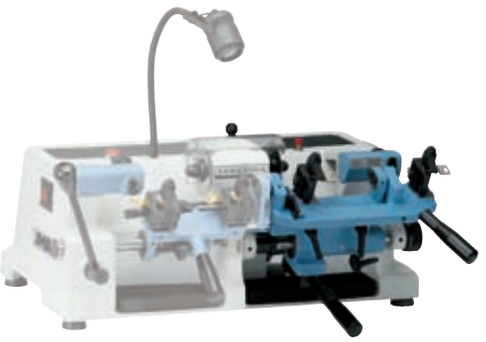
1 4 side hard steel jaws.

2 Trace point with micrometric adjustment.

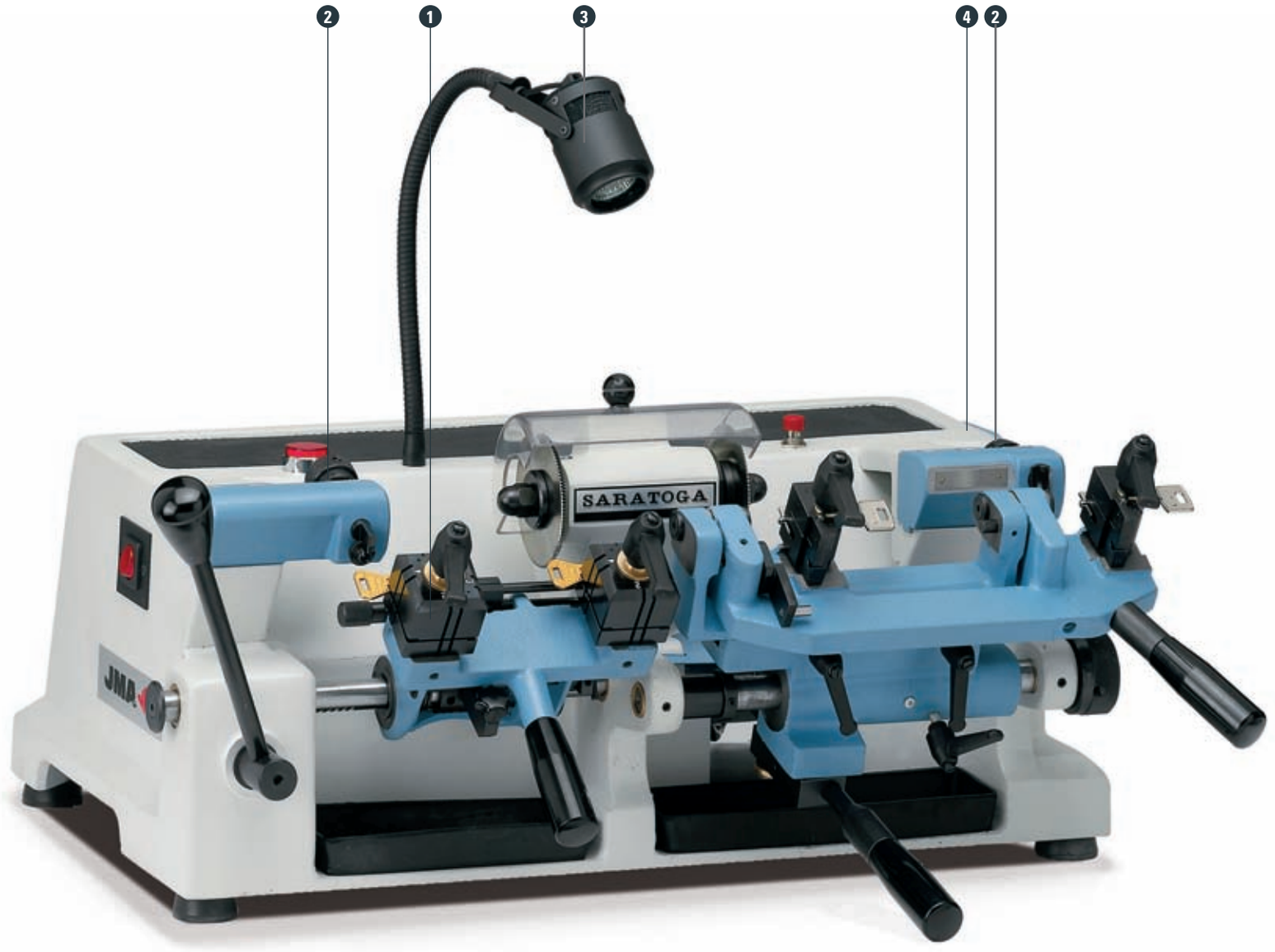
3 Lamp attachment.

4 Brush incorporated.

Side A



Side B



KEY CUTTING MACHINES

SENA

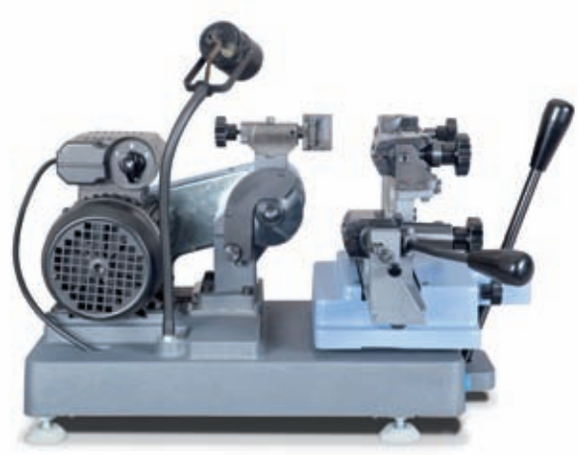
Key-cutting machine for single and double bit keys, pump keys.

CODE	MOTOR
SENA	*(single phase) 2800-1400 r.p.m.220V 50Hz, 00,55 - 0,37 Kw.-*

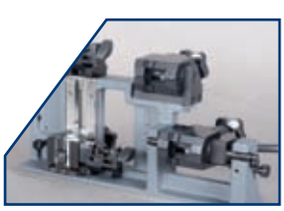
TECHNICAL DATA

Cutter	
- Hard metal	*ø 80 x 16 x 1,5 mm.*
- High speed Steel	*ø 80 x 16 x 1 mm.*
Speed I (steel key)	*700 r.p.m.*
Speed II (Brass key)	*1400 r.p.m.*
Clamps: (3models)	
- Zone 1: Single and doube bladed bit keys.	
- Zone 2: Pump keys with flat or cylindrical stems, Muel type keys.	
- Zone 3: Vertical groove keys, wedge bit mortise keys and ADPLE -1- 2- 3 - 4 keys.	
Displacement: Guide with roller cages.	
Width	*500mm*
Height	*280mm*
Depth	*245mm*
Halogen lamp	*12V 25W*
Weight	*50Kg.*

Height: 280 mm.



Depth: 245 mm.



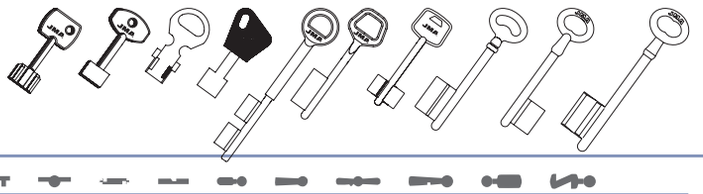
1 *Professional cutting of bit keys, grooved blade, wedge bit mortice keys, pump keys and 45° Muel keys with the same slide.*

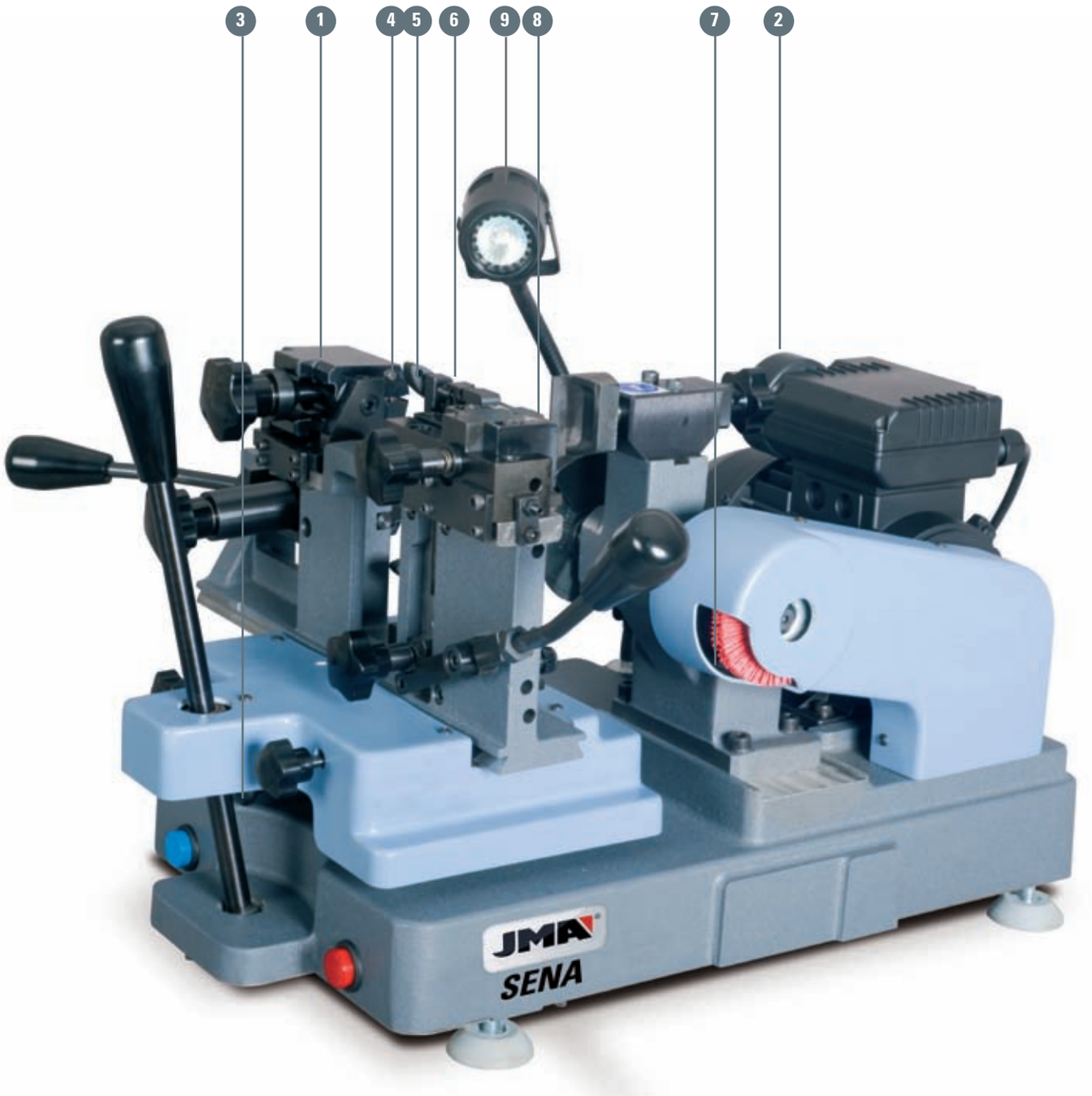
2 *2-speed motor for brass and steel keys.*

3 *Blocking of slides on X and Y axis.*

4 *Clamps with adjustable jaws to correctly secure bit keys of different lengths.*

5 *Innovative tightening system for pump keys.*





6 *Adjustable side clamps for any model of wedge bit mortice keys.*

7 *Brush to deburr the keys.*

8 *Milled clamps to correctly secure keys.*

9 *Lighting in work area.*

KEY CUTTING MACHINES

PROCODE

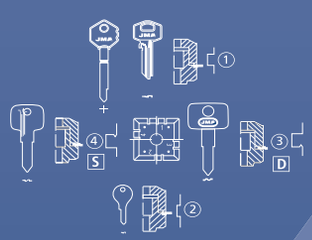
The Procode machine is an electronically-controlled, coded key bitting machine for cylinder locks and automobiles. It can operate autonomously or by connection to a PC.

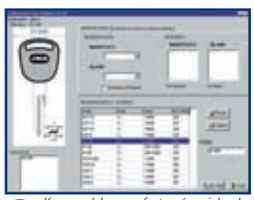
CODE	MOTOR
PROCODE	(single phase) 220V- 50Hz,- 0,18Kw,-1.350 r.p.m. 1,7 Amp.
PROCODE 110	(optional single phase) 110V- 60Hz,- 0,18Kw,-1.700 r.p.m. 1,7 Amp.

TECHNICAL DATA

Cutter	FP16(70 x 5,25 x 16)
Width	420mm.
Height	300mm.
Depth	530mm.
Weight	43Kg.
Lamp	5W.
Speed	530 r.p.m.

NEW DESIGN
MORE POWER AND RESITANCE





1 Key search by manufacturer´s serial code.

2 Search by locksmiths trade name or JMA key model.

3 Search by type, model and brand of vehicle.

4 Serach by equivalent models of different key manufacturers.

PROCODE STAND ALONE

By means of the enclosed car and a known cutting code (code books, code programs, original decoded key, etc) this machine allows the correct reproduction of the key based on a direct code, just by keying in the cutting code.

Thanks to the edit feature of the machine new keys can be cut or technical data can be input as the latest keys come onto the market, without waiting for an update. Thanks to its advanced operating system.

The Procode machine can carry out different key cutting styles.

PROCODE + READER

The Reader can use the Procode machine for:

- *Reproducing any kind of flat key by means of its probe, which is accurate to one hundredth of a milimetre.*
- *Read the code of known key (if you know which card correponds to the key).*
- *Correction of copying errors and reproduce an original key.*

PROCODE CONNECTION TO A PC

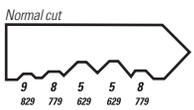
This machine can be connected to a compatible Intel personal computer (PC) in which the Interactive key Software (optional) is installed. This programme is a data base of cylinder codes, automotive, ...

This system allows a completely integrated working model (code search, selection of cutting codes, aditional key data, complete digital catalogue of JMA Keys, …).

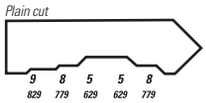
INTERACTIVE KEY SOFTWARE

The fully integrated working system of JMA.

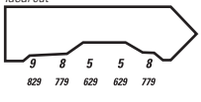
Normal cut

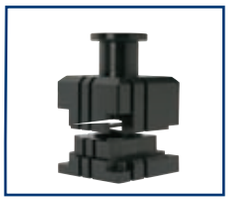


Plain cut



Ideal cut





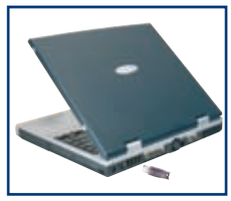
1 *Four side jaws.*

2 *Micro setting by keypad.*

3 *Electromechanical reader.*

4 *Brush.*

5 *PC connection.*



6 *Software pass key.*

KEY CUTTING MACHINES

X - CODE

The X-code is an electronic key cutting machine for duplicating and code cutting both dimple and laser style keys. It can operate Stand Alone or by connection to a PC.

CODE	MOTOR
X - CODE	(single phase) 220V. - 50Hz.- 0,18 Kw.- 1350/2700r.p.m.
X - CODE 110	(optional single phase) 110V. - 60Hz.- 0,18 Kw.- 1700/3400 r.p.m.

TECHNICAL DATA

Universal jaw	M1*
Speed	7.000 r.p.m.
Width	400 mm.
Height	612mm.
Depth	550 mm.
Weight	45 Kg
Halogen Lamp	15W.
Data memory	8 Mb FLASH memory
Display	Dot matriz de 128 x 64

MAIN FEATURES

1. Automatic calibration.
2. Quick and easy tool release.
3. Automatic compensation for worn cuts.
4. Quick and easy updates via serial port.
5. Ability to function stand alone or with PC.
6. Dual speed motor.

X-CODE STAND ALONE

By means of the on-board card, and a known cutting code (code books, code programmes, original decoded key, etc.) this machine allows the correct reproduction of the key based on a direct code, just by keying in the cutting code.

Thanks to the editor supplied with the machine, new keys can be cut or the technical data of the latest keys that have come out on the market introduced without having to wait for an update.

READER
The reader can use the X-Code machine for:
- *Read the code of a known key (if you know which card corresponds to the key).*
- *Correct copying errors and reproduce and original key.*

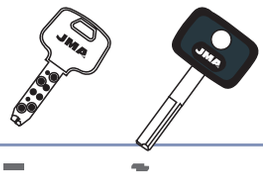
X-CODE WITH CONNECTION TO A PC

This machine can be connected to a compatible Intel personal computer (PC) in which the Interactive Key Software (optional) is installed.

This program is a database of codes for fl at keys, automotive keys, special keys, ...

This system allows a completely integrated working model (code search, selection of cutting combinations, additional key data, complete digital catalogue of JMA keys,...).IKS software can work with other MASTER KEY SYSTEM software.
Software features:
- *Digital catalogue of JMA.*
- *Search codes.*
- *Customer and keyblank historical.*
- *...*

OPTIONS
- *Interactive key software (IKS).*
- *Various jaws and adapters to cut specific keyblanks.*



ADVANTAGES

1. *Maximum reliability in key cutting.*
2. *The machine operator can introduce new cards with ease.*
3. *The code database can be updated on a daily basis (Interactive Key Software).*
4. *Compliance with all standars demanded by the European Comunity.*
5. *Maximum safety for themachine operator.*
6. *The X-code can work in 2different ways: Stand Alone; With interactive key software. IKS.*

KEY CUTTING MACHINES

MULTIMARK

Electronic machine for engraving logos, images and text (in horizontal, arch and angled).

OPTIONS

Jaw for plates MJ1P.

Jaw for cylinders MJ1C.

Jaw for Scandinavian cylinders MJ2C.

Standard jaw for keyblanks MJ1K

CODE	MOTOR
MULTI-MARK	*220V. - 50Hz.-200W*
MULTI-MARK *110*	*110V. - 50Hz.-200W*

TECHNICAL DATA

70mm x 50mm engraving area.

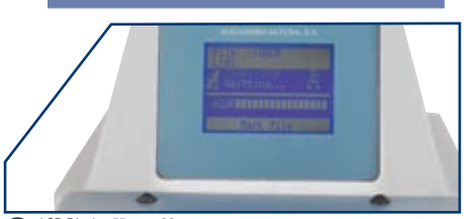
Memory

- *126 text files.*
- *96 logo files.*

Width	*200mm.*
Depth	*480mm.*
Height	*480mm.*
Weight	*20 Kgs.*

Conectors

- *Serial RS-232*
- *PS/2 for keyboards.*



1 *LCD Display 55mm x 38mm.*

2 *Exchangeable JAWS.*

3 *Easy to set up.*

KEY CUTTING MACHINES

CTM - 700

Universal electronic copying device for remote control systems with fixed code using radio-frecuency system.

CODE	MOTOR
CTM - 700	110- 220 V- 50/60 Hz,- 9V 0,45A.
EM-Q	30,87 - 40,685MHz Quartz fix code.
EM2-433	433MHz 2 channels fix code.
EM-UNIV	EM2 - 433 + EM2IR 2 channels fix code.
EM -4C-433	433MHz 4 channels fix code.
EM-MASTER with SWITCHES	Master with SWITCHES 2 channels.
EM-MASTER without SWITCHES	433Mhz master without SWITCHES 2 channels.
EM-ROLL/R2 433	433Mhz Rolling 2 channels.
EM-ROLL/R2 868	868Mhz Rolling 2 channels.
EM-ROLL/R4 433	433Mhz Rolling 4 channels.
EM-ROLL/R4 868	868Mhz Rolling 4 channels.

MAIN SPECIFICATIONS

- Still compatible with existing controls (EM2-IR, EM2-433,EM-Q).
- Better capacity for copying Mastercode controls (with or without personalisation).
- Able to copy evolutive controls.
  - 1st generation: jcm, pujol, forsa, dmil, master ingenieros, nueva castilla, elemat, zibor, hydom, emfa, cubells, alfa torres, electro parking, ep, neo, arf-2, hibrid plus, cyacsa.
  - 2nd generation: erreka, roper, mutancode, bft, nice smilo, dea, gibidi, pujol, norton plus, jcm máquinas tabaco, celinsa, doorma tic.
- Convenient configuration of emitter channels (it is possible to select which channel goes with which button so that the variations in the installers have no effect).
- Monitors battery level.
- Upgrade by connecting to the Internet with no need to return the machine for upgrades.
- Homologated product.
- All in one machine.
- With no credit system and no limit to number of recordings.

The machine includes USB cable, cable to programme fixed code controllers, cable to programme evolutive controllers, cable to measure the battery level and small screwdriver.

EM-ROLL 433 and 868 (2 and 4 channels)

- 433 MHz Control.
- Can make copies of any evolutive control with a unique control.
- The control can be copied as many times as required regardless of whether it has been previously copied with or without personalisation from the manufacturer.
- It has an external connector for function programming so that there is no need to open the control.
- It has a power supply that can be used to incorporate a transponder for access to systems in close proximity.
- Ergonomic, robust design.

EM - UNIV

This control is only used with the EM2IR and EM2-433 controls.

EM-MASTER (with o without Switches)

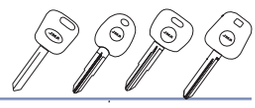
- There are two versions of the Mastercode programmable control. One version has switches and the other does not.
- The version with switches enables the end user to modify the code if the same code is accidentally created in the installation receiver. With this modification there is no need to make a copy as is the case for the version without switches.

EM- 4C 433

With this control up to four controls can be stored on only one and it is possible to record a 443 control or a IR control on any of the buttons.

KEY CUTTING MACHINES

TRS - 5000 + CLONER



Fixed code and Crypto transponder machine. Specially designed for the recognition and duplication of Texas® Fixed and Crypto transponders with TPX1 and TPX2 transponders developed by JMA.

Philips	*TP01*	*TP0S*
-TEXAS FIXED CRYSTAL	***TP02***	***TPX1***
Megamos	*TP03*	*TP05*
Temic	*TP04*	*TP05*
Nova	*TP05*	*TP05*
-TEXAS FIXED CERAMIC	***TP07***	***TPX1***
Texas Crypto CrYstal	*TP06*	*TPX2*
Texas Crypto Ceramic	*TP19*	*TPX2*
Texas Crypto Ceramic	*TP20*	*TPX2*
Texas Crypto	*TP21*	*TPX2*
Texas Crypto	*TP26*	*TPX2*
Texas Crypto	*TP27*	*TPX2*
Texas Crypto	*TP28*	*TPX2*
Texas Crypto	*TP29*	*TPX2*
Texas Crypto	*TP30*	*TPX2*
Texas Crypto	*TP31*	*TPX2*
Texas Crypto	*Texas Crypto*	*TPX2*
Megamos Crypto CrYstal	*TP08*	*TP08*
Philips Crypto	*TP09*	*TP09*
Philips Crypto 1st generation	*TP10*	*TP10*
Megamos Ceramic Crypto	*TP11*	*TP11*
Philips Crypto	*TP12*	*TP12*
Philips Crypto	*TP12CH*	*TP12CH*
Philips Crypto	*TP12GM*	*TP12GM*
Philips Crypto	*TP12HN*	*TP12HN*
Philips Crypto	*TP12MT*	*TP12MT*
Philips Crypto	*TP12NS*	*TP12NS*
Philips Crypto	*TP12RN*	*TP12RN*
Philips Crypto	*TP12SZ*	*TP12SZ*
Philips Crypto	*TP13*	*TP13*
Philips Crypto 2ndgeneration	*TP14*	*TP14*
Philips Crypto 2ndgeneration	*TP15*	*TP15*
Philips Crypto 1stgeneration	*TP16*	*TP16*
Temic Crypto	*TP17*	*TP17*
Motorola Indala	*TP18*	*TP18*
Texas Crypto Ceramic	*TP22*	*TP22*
Megamos Crypto	*TP23*	*TP23*
Megamos Crypto	*TP24*	*TP24*
Megamos Crypto	*TP25*	*TP25*

CODE	***SUPPLY***
TRS -5000	*220V. - 50Hz.A 9V.C.C./ 500MA.*
TRS- 5000 110	*110V. - 60Hz.A- 9V.C.C./ 500MA.*
TPX CLONER	

TECHNICAL DATA

Width	*158 mm.*
Height	*76 mm.*
Depth	*175 mm.*
Weight	*600 gr.*

OPTIONS

Original Transponder

Transponder JMA

1 *Display.*

2 *Antenna.*

3 *Keypad.*

4 *Conection to PC that allows :*
- Upgrade the TRS-5000.
- Code reading.
- Code store.
- Code modifi cation.
- Database creation.

KEY CUTTING MACHINES

TRACK - 7

Capabilities of programming transponder keys in a wide array of vehicles. Transponder key activator.

MAIN FEATURES

1. Upgrading of software via USB.
2. Visual information about models and connectors.
3. Programming of telecontrols.
4. Windows CE graphic interface.
5. 2007 transponder manual integrated.
6. Procedure through a menu of guided programming.
7. Touch Screen.

CODE

TRACK 7

TECHNICAL DATA

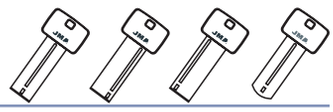
Width	143 mm.
Height	190 mm.
Depth	32 mm.
Weight	500 gr.

CHARACTERISTICS

- Reading of current data.
- Reading of fault codes.
- Deletion of fault codes.
- Identifi cation of the ECU.
- Upgrading of software via USB.
- Technical support.
- Easily upgradable SD type hard disk.
- Operation simulation mode.
- Different languages available.
- Visual information about models and connectors.
- Programming of OEM keys / replacement.
- Deletion of keys.
- Programming of telecontrols.
- Reading of mechanical key codes.
- Windows CE graphic interface.
- Windows functionality and simplicity in adjustment of parameters.
- 2007 transponder manual integrated.
- Graphic indication of upgraded elements.

KEY CUTTING MACHINES

CO 9



Universal magnetic keys encoder with electronic reader incorporated.

CODE	SUPPLY
CO9	230V. - 50Hz.

TECHNICAL DATA

Width	270 mm.
Heigth	120 mm.
Depth	180 mm.
Weight	1,650 gr.

MAGNETIC KEYS

MG - 6S

Standard magnetic key with 6 magnets and central guide.

MG - 6D

Standard magnetic key with 6 magnets and right guide.

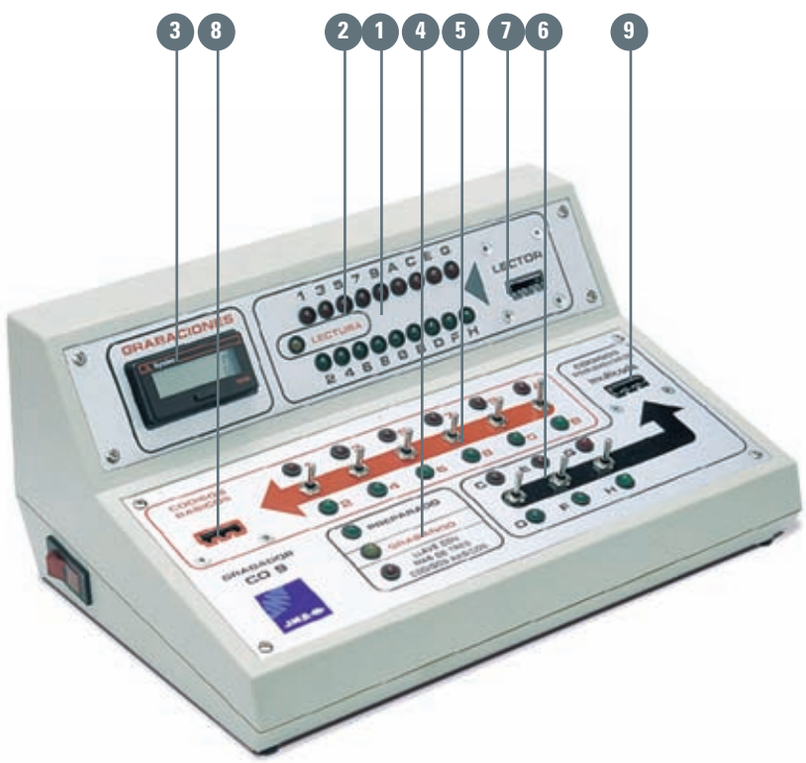
MG-6I

Standard magnetic key with 6 magnets and left guide.

MG-9

Magnetic multicode key with 9 magnets.

Attention:
- ***Do not forget to plug the equipment with ground (GND).***
- ***Inside this device there are huge estresses which could be dangerous.***
- ***Do not strip down the machine.***
- ***Maintenance operations should be carried out by qualifi ed personal.***



1 *Reading display.*

2 *Key code display.*

3 *Counter.*

4 *Ready,copying, more than 3 codes pointers.*

5 *Basic codes selecting switch.*

6 *Complimentary codes selecting switch.*

7 *Key reading entrance.*

8 *Basic codes copying entrance.*

9 *Complimentary codes entrance.*

KEY CUTTING MACHINES

OTHER ACCESSORIES

CODE	DESCRIPTION	DAKAR	DAKAR EXPRESS/ DAYTONA	DAKOTA EXTRA/ECCO-ECCO PLUS/ TITAN/TITAN MASTER/SARATOGA	ECCO BIT	DAKKI
AD-FO24	*FO-24P adapter*					•
AD-LLP	*Llaves Planas adapter*				•	
AD-CI	*Cisa adapter*	•	•			•
AD-5º	*5 gra Ke-1 adapter*		•			•
AD-45º	*45 gra Ka-2 adapter*		•			•
AD-15º	*15 gra Ka-3 adapter*		•			•
ADJAR-1E	*JAR 1-E adapter*		•			•
AD-MJ	*JIS adapter*	•	•			•
AD-MM	*Mercedes adapter*	•	•			•
ADPL-5º	*Plan-5 gra Ke-1 adapter*	•	•			•
AD-FO	*FO-6P adapter*	•	•			•
AD-ABL	*Abloy adapter*	•	•			•
P-MCM	*MCM-10 winkle*	•	•			•
AD-STS	*STS adapter*	•	•			•
AD-MCM	*MCM-10 adapter*		•			•
AD-KA4	*KA-4 adapter*		•			•
AD-HAA	*Audi (HAA) adapter*		•			•
AD-KE	*Llave Keso DK-158 adapter*		•			•
AD-NEVA	*NE-VA adapter*			•		
AD-ALA-1X	*ALA-1X adapter*			•		
AD-BLU-1X	*BLU-1X adapter*			•		
AD-BUR-5X	*BUR-5X adapter*			•		
AD-BRI-3X	*BRI-3X adapter*			•		
AD-CA	*Cavith adapter*			•		
AD-PO	*Porsche adapter*			•		
FIC-TUB	*Fichet adapter*	•	*• (Dakar Express)*			
AD-SIX	*Simplex adapter*			•		
P-WIN	*Winkaus winkles*		•			
AD-OP	*Opel adapter*	•	•		•	
RG-E	*Regata EB adapter*				•	
ABL-E	*Abloy EB adapter*				•	
FD-E	*FO-6P EB adapter*				•	

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