

Different possibilities of fixing the keys in the reversible vices

- Side 1 Fixing of the keys at the base. For keys with a cutting depth of up to .5mm.
Standard cross keys up to a length of 120 mm.
- Side 2 Fixing the keys at the base. For keys with a cutting depth less than 3.6 mm.
Cross keys with ring.
- Side 3 Fixing of the keys at the base. For keys with a cutting depth less than 2.0 mm.
- Side 4 Fixing of the keys in the profile (top side or bottom side of the keys).

Working instructions

Make sure, that both vices (for the pattern and the key blank) always indicate the same position (side number).
For changing the position (side number) loosen knurled-nut (15) (pict.3) first and lift the complete vice in order to turn to the required position (side number).

Keep vices always clean.

After turning of the vices push vices downwards and re-tighten knurled nut.

Semi automatic key cutting machine

Börkey 396 euroline

for cutting cylinder-,car- and cross keys up to 100 mm length

Main characteristics

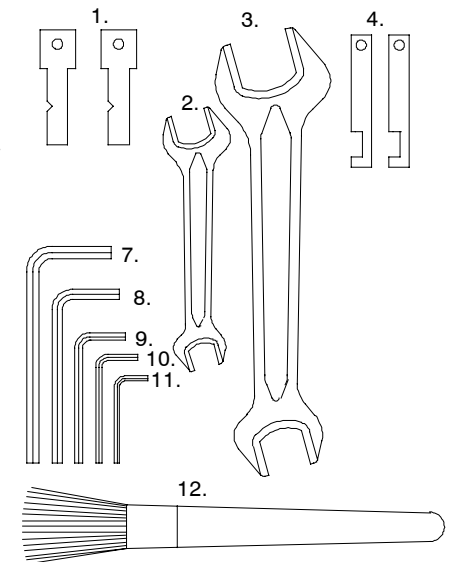
- Copying every cutting angle without changing the cutter
- abraision parts are interchangeable
- maintenance-low cutting spindle fitted in a ball-bearing
- feeler fine adjustment
- when operating the carriage the cutter will start- and stop running automatically

Technical Data

Input:	134 w
Voltage:	230v
Frequency:	50 cycles
Weight:	29 kgs.
Dimensions:	35 x 33 x 25 cms.
Sound level:	77 dB (A)
Protection fuse:	6 A

Standard tool kit equipment	order no.	<u>Pict. 1</u>
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1. 2 check up keys	9954-204-008
2. 1 O.E. spanner SW13/10	9000-204-002
3. 1 O.E. spanner SW22/19	9000-204-001
4. 2 flat bars with cut-out section	9994-W10-007
7. 1 allen key SW5	9000-022-005
8. 1 allen key SW4	9000-022-004
9. 1 allen key SW3	9000-022-003
10. 1 allen key SW2,5	9000-022-002
11. 1 allen key SW2	9000-022-001
12. 1 brush	9000-021-001



Notes to the instructions of use

Read the instructions for use very carefully and pay attention to their notes.

The instructions of use section contains important information on how to operate the key machine safely and accurately.

In addition to the operating instructions the respective national rules + regulations for Accident prevention and environmental protection must also be observed.

The instructions must always be at hand at the place of use of the machine !

Dully use of the machine

Only use the key machine for cutting cylinder-, car- and cross keys.

Using the machine for purpose other than those mentioned above is considered

Contrary to its designated use.

The manufacturer cannot be liable for any damage or injury resulting from misuse.

The risk is entirely with the user.

Operating the machine within the limits of its designated use also involves observing the Instructions set out in the operating manual and complying with the maintenance directives.

Fundamental safety instructions

Any work on or with the machine must be executed by competent personnel.

Statutory minimum age limits must be observed!

Mount the machine to a dry rigid surface offering the correct working height for the operator.

The machine must not be used outdoors or in areas with the danger of explosive or inflammable material.

Before using the machine check that it complies (see sticker on machine) with the mains voltage.

Mains connection must only take place through a fixed, approved and protected socket.

Operate the machine only when all protective and safety-oriented devices are in place and fully functional.

Always stop the machine motor after use or leaving the machine.

Always disconnect machine from mains supply when repairing or doing routine maintenance.

Repairing of the machine must only be performed by trained and instructed staff (only use genuine replacement parts).

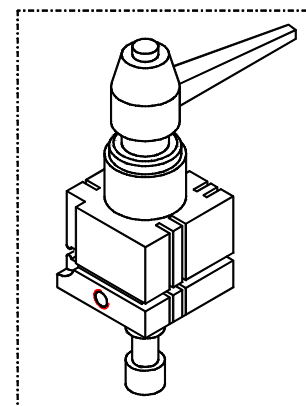
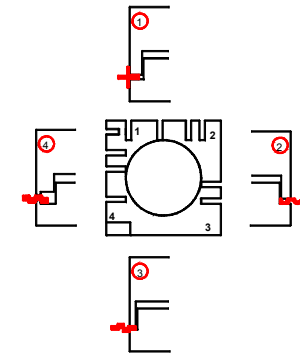
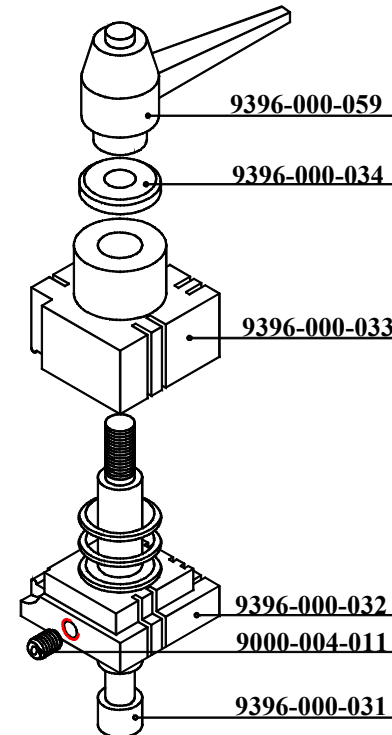
Work on electrical equipment on the machine must only be performed by a skilled electrician.

Connecting cables

- Check regularly for obvious damage, defects or ageing
- Keep away from squeezing- and shearing places
- Never use machine with defective cables

4 - way reversible vices

4 possibilities of fixing the key at the vice



Reversible vice complete

Checking and adjusting

Cutting depth (Pict. 9)

Fasten check-up-keys (12) in the left- and right-hand vice. Release carriage so that cutter and feeler are touching the edges of the check-up-keys.

Readjustment of the cutting depth with knurled nut (2) (see page 5).

Lateral distance (see page 10)

Feeler - cutter

Fasten check-up-keys (12) in the left- and right-hand vice. For location push check-up-keys firmly against left hand side of the vices.

Release carriage so that cutter and feeler are exactly in the cuts of both check-up-keys.

Readjustments: Loosen the screw (13) of the feeler base (3).

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Move the feeler base until cutter and feeler are exactly in the cuts of both check-up-keys. Tighten screw (13) again.

- the alignment gauge lever

Rotate the alignment gauge lever until the flat edges of the levers locates against the shoulders of both check-up-keys.

Proof: Insert a thin piece of paper between shoulder of check-up-keys and alignment gauge levers. Both pieces of the paper should be stuck.

Readjustments: Loosen screw (14) on the alignment gauge levers and push levers against shoulders of the check-up-keys. Tighten screw (14) again.

Pict. 9

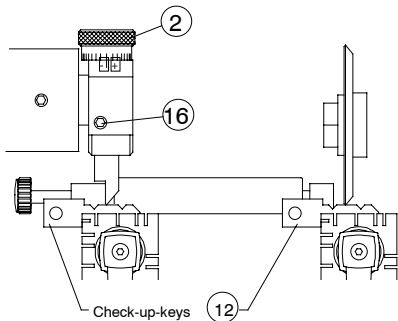
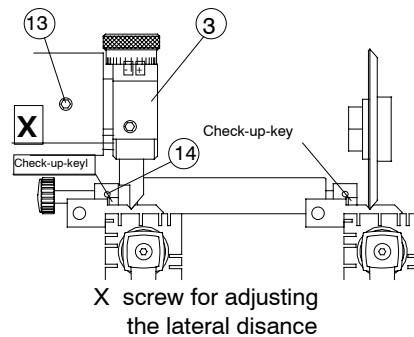


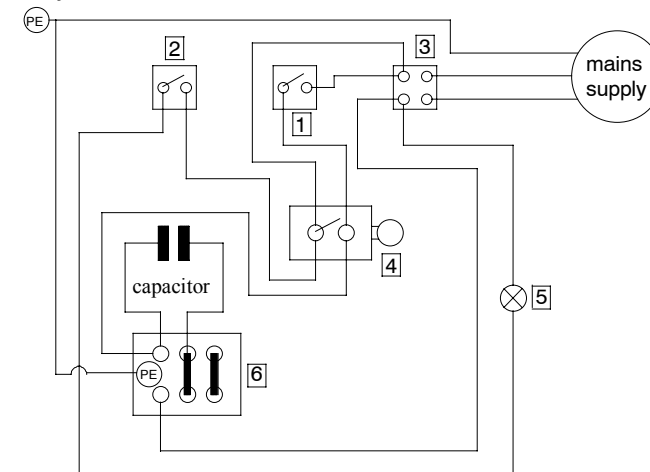
Bild 10



Special warning

- **never try to hold cutter unless machine is disconnected at mains!**
- **never grip- or remove keys with cutter still running !**
- **always wear safety goggles !**
- **make sure long hair is tied back or otherwise secured, never wear neck ties or loose fitting clothes !**
- **if trouble occurs switch off and unplug the machine immediately or disconnect fuse !**

Pict. 2 Wiring diagramm with work-light body



- | | |
|-----------------------------------|--------------|
| 1 = push-button switch wire brush | 9396-000-053 |
| 2 = switch work-light | 9393-000-054 |
| 3 = main switch | 9396-000-052 |
| 4 = stopp switch | 9396-000-065 |
| 5 = work-light | 9396-000-056 |
| 6 = motor | 9396-000-062 |

Maintenance

Clean machine regularly with brush to avoid swarf accumulating.

Do not use compressed air to clean machine !

If after long pressure of main carriage spring becomes weak it is adjustable by turning screw (17) at the front of the main carriage (use allen key SW5).

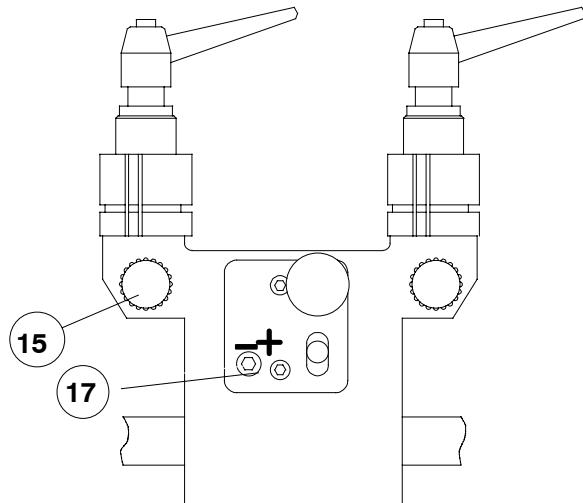
Lubricate with good quality machine oil every 4 months (earlier if required) the following parts:

- carriage shaft
 - start lever for slide carriage
- (see parts shown marked on page 5)

Do not grease the cutter-spindle !

Keep pulley wheel and drive belt always free of grease !

Pict. 3 Tension of carriage spring



Cutting cross type keys up to 100mm (Pict.7)

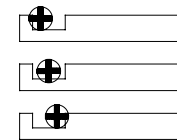
Depending of the length of the cross keys use the flat bars as a shoulder stop to locate the keys. Place the flat bars in the slot-cuts of the left hand side of the vices.

After gripping of the keys push the flat bars backwards.

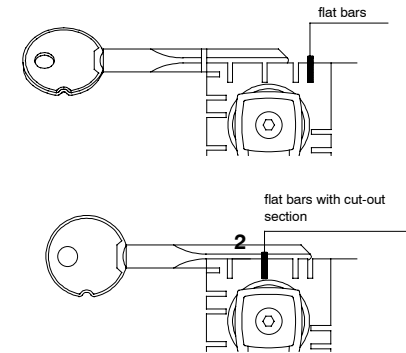
For location of cross keys with a ring push pattern and key blank with the ring firmly against the left hand face of the vices.

Place a flat bar into one of the slots of the right hand side of the vices to prevent the top-part of the vices from moving sideways.

Pict. 7



Pict. 8



Starting operation key cutting

Switch machine on a rocker-switch (11), position front part of the switch pushed (light is on).

To release the carriage to the feeler and cutter push carriage little further down and pull trigger release below the carriage-handle.

Be aware of the spring tension and hold slide carriage carefully at carriage know and gently engage the feeler to the first cut of the pattern at the key bow.

The cutter will start running automatically.

By using the carriage start-lever (10) copy the key from the shoulder to the tip of the key.

After cutting push slide carriage back to „park-position”.

The cutter will start automatically.

Use wire brush for deburring the key.

For using the wire brush please keep switch (1) pushed.

Setting up machine for cutting a key

Cutting keys with a shoulder for location (Pict. 5)

Fasten the pattern of the key to be reproduced firmly in the left hand vice with the shoulder of the key appr. 2 mm away from the left hand side of the vice. Rotate the alignment lever until the flat edge of the left hand alignment guide locates against the shoulder of the pattern key. Fasten the key blank in the right hand vice with the shoulder of the key blank pushed firmly up to the right hand alignment gauge lever.

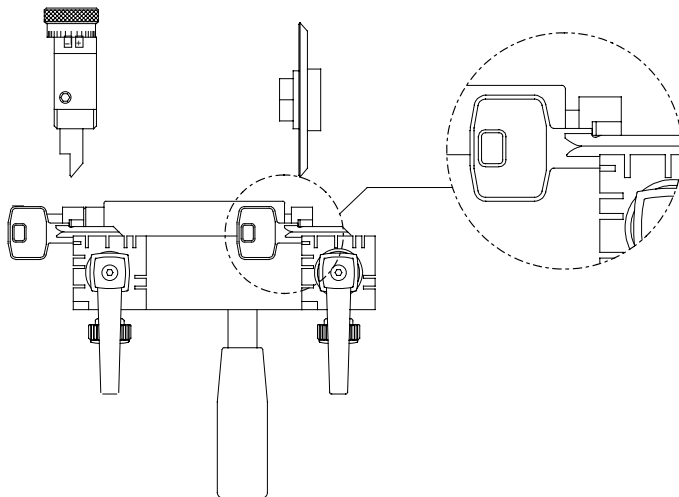
When both key and key blank are correct located in the two vices rotate the alignment lever back out of the way. For location of keys with shoulder on both sides, push pattern and key blank firmly against the right hand side of the vices.

In order to prevent cutting into the vices when copying small keys or keys with deep-cuts (below 3.60 mm) use small round pins.

Place the pins in the vices behind the back of the pattern and key blank.

Clean the vices and the key support regularly with the brush to avoid swarf accumulating.

Pict. 5

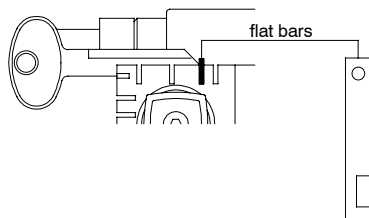


Cutting keys without shoulders for location (Pict. 6)

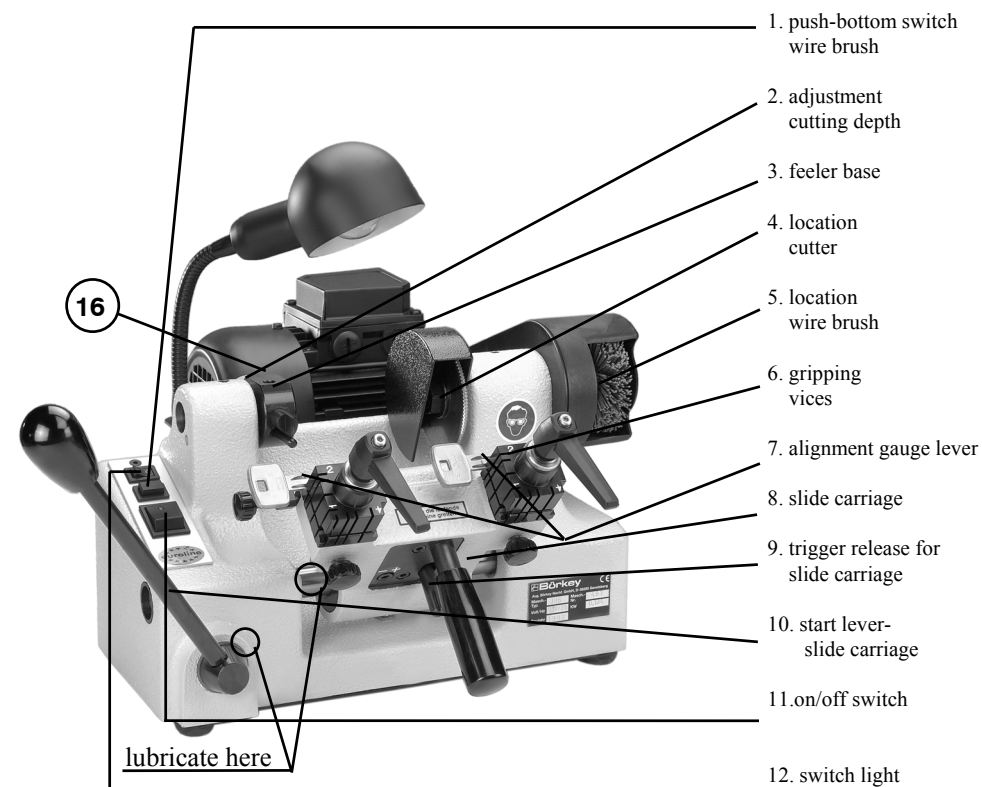
The correct positioning of this type of key is made possible by using the flat bars of the tool kit as tip-stops. Place these bars in the left or right hand slot-cut in both vice-faces (both pattern and key blank should be in the same slot position).

Push pattern and key blank up to each bar and tighten the keys in the vices.

Pict. 6



Pict. 4 Main functional parts



Description of main functional parts

1. Push-bottom switch for wire-brush

For using the wire-brush push switch (1).

2. Adjustment cutting-depth

to decrease cutting depth:

Right turn (+) = loosen set screw (16). Turn the knurled nut (2) to the right (the feeler will move forwards).

Left turn (-) = loosen set screw (16). Turn the knurled nut (2) to the right (the feeler will move backwards).

One stroke on the knurled nut means 0.05mm. Retighten the set screw when the required depth is reached.

3. Feeler base

The feeler base (3) holds the adjustable feeler. Adjustment please see page 10.

4. Changing cutter

Switch machine off at mains. Remove cutter guard. Loosen cutter nut by pulling spanner towards you, to stop the spindle turning, put the 5 mm bar from tool kit in the hole of the cutter axle. Fit the new cutter and tighten cutter nut by pushing the spanner to the left. Check the adjustment of the machine (see page 10).

Attention! Remove all tools from cutter spindle before turning the machine back on at mains.

5. Changing wire brush

Switch machine off at mains.
Disconnect belt cover.
Loosen nut of the brush with spanner (SW 19).
Stop the spindle turning by using the (5mm) bar.
Pull the brush out of the cutter axle and install new wire brush.
Retighten the nut.

Attention! Remove all tools from cutter spindle before turning the machine back on at mains.

6. Gripping vices

Gripping vices/jaws to hold keys and the special gripping devices.
Left vice to hold the sample- and right vice to hold the key blank.

7. Alignment gauge lever

The levers are used to correctly position key and key blank.
Preparing and checking see pages 8 and 10.

8. Slide carriage

Slide carriage for holding the vices – with spring tensions. trigger release (9) and alignment pages 8 and 10.

9. Trigger release for slide carriage

Safety device to hold the slide carriage (8) in “park-position” for working on the vices (gripping of keys etc.)
Sie kann nur betätigt werden, wenn die Anschlaghebel (7) in der Grundstellung anliegen.

10. Start lever slide carriage

Movement of the slide carriage to the left and/or to the right by using the start-lever (10).

11. On/Off rocker-switch machine

Position: back part of the switch pushed - light is off - machine is off
Position: front part of the switch pushed – light is on - machine is on

12. On/Off switch work-light

Position 0 -work light is off
Position 1 -work light is on

9396-000-022	alignment gauge lever
9396-000-030	feeler
9396-000-032	lower part of the vice
9396-000-033	upper part of the vice
9396-000-034	brass-ring
9396-000-052	rocker-switch (main switch machine)
9396-000-053	push-switch (wire brush)
9396-000-054	switch (work light)
9396-000-055	black-knob at start-lever slide carriage
9396-000-056	work light
9396-000-057	spare bulb - 25 w.
9396-000-058	cutter guard
9396-000-059	clamping lever (gripping vice)
9396-000-060	knurled screw (gripping vice)
9396-000-061	handle (for slide carriage)
9396-000-062	motor
9396-000-063	belt
9396-000-092	belt (new from M.-No.1088)
9396-000-064	wire brush
9396-000-065	stop switch (slide carriage)

fault finding

Machine does not work

- Check mains plug is in socket and mains supply is on.
- Machine is not switched on at rocker-switch (11).
- Stop-switch at the slide carriage is defective.

Attention :Work on electrical equipment on the machine must only be performed by a skilled electrician.

Power is on but cutter will not rotate (machine is connected to power supply)

- Disconnect belt cover and brush.
Check belt is connected or defective.
Check if pulley wheel will turn.
Check if motor axle will turn.

Belt is defective

- Change belt. Use only genuine belts.
Loosen 4 nuts under body of machine and reposition motor until belt fits on both pulley wheels. Push motor back to old position and retighten nuts.

Not possible to turn the motor- and/or cutter-axle

- Please contact our technical-service.

Work-light does not work

- Check if plug is in socket and turned on.
Check lamp balast.

Work-light is defective

Change the bulb only when machine is switched off.

Cutter is noisy, bad cutting quality or machine is out of adjustment

- Change cutter (see page 6) Check adjustment of machine (see page 10).

Impossible to release the slide-carriage to feeler and cutter

Please check if alignment gauge axle is at „park-position“.

If yes, please contact our technical-service.

In case of any other faults please contact our sales department.

Tele.: 02332/7006-0



EC Conforming-Declaration

according to the EC-regulation machines 89/392/EWG, supplement II A

We

August Börkey Nachf. GmbH
Geerstraße 4-12
D – 58285 Gevelsberg
Telefon 02332/7006-0
Telefax 02332/700522

herewith declare that the construction of the key cutting machine

Modell: key cutting machine

Type: 396 Euroline

Serial-Number: _____

is in accordance with the following rule:
EC-regulation machine version 91/368

Used harmonized standards are especially:

EN 292 T.1 und T.2;
EN 294;
EN 349;
EN 60204

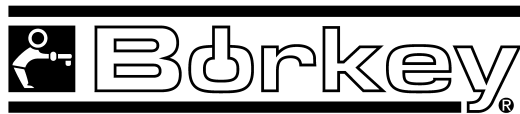
Name: Erlenbach

Surname: Manfred

Position: Managing Factory Director

Gevelsberg, the 215102


signature



SCHLÜSSELFABRIKATION UND MASCHINENBAU SEIT 1851

1/01/100/D

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Börkey 396 euroline INSTRUCTIONS FOR USE

