

Kronos Electric Pick Gun - Instruction Manual

7.1 Safety warnings and accident prevention

- Kronos must be used only for cylinder lock opening. Any other use is not permitted. The producer/distributor declines any responsibility for any damage resulting from inappropriate uses (See 7.2).
- Before using Kronos beyond the described range of application, please consult the manufacturer/distributor as not doing it may invalidate your warranty.
- Use according to regulations includes consulting the instruction manual of Kronos Pick Gun.
- Kronos is to be used, serviced and repaired by trained personnel only.
- The use of Kronos is authorised exclusively for commercial and legal applications.
- Store the Kronos pick gun securely and keep it away from children's reach.
- NEVER remove or modify the safety devices.
- Using Kronos with known technical malfunctions may cause further damage to your gun and invalidate your warranty.
- Always use original parts. Only original parts comply with the defined technical requirements.
- Use only protected LI-ion (Lithium-ion) batteries.

7.2 Inappropriate use

- Using Kronos Pick Gun without consulting the instruction manual provided.
- Using it beyond the range of applications permitted (legal use etc.).
- Opening Kronos.
- Deliberate lack of care or reckless use of the product.
- Causing damage to third parties.

7.3 CE-mark

Kronos is built in accordance with the currently valid EC Directives and is branded with the CE-mark. The included conformity declaration loses validity if the Kronos Pick Gun is modified without approval.

8. How to safely store your Kronos pick gun

- Keep the device in a dry area. Rain, humidity and liquids may contain minerals which may cause corrosion of the electronic components of the gun.
- If the device gets wet, remove the battery

and leave the device to dry completely before reinserting it.

- Do not use or store the device in dusty or dirty environments. Mobile parts and electronic components may get damaged.
- Never expose Kronos to extremely high or low temperatures.
- Sudden changes of temperature may cause condensation inside the device. This may corrode the electronic components of the pick gun.
- Avoid dropping the device. Impacts may damage the electronic and mechanical components of the pick gun.
- Clean Kronos only with a clean, dry and soft cloth.
- Using a cleanser may cause damage to the surface of Kronos.

9. Disposal

- This product is not to be disposed of with the normal household garbage.
- Ensure safe and environmentally friendly disposal of batteries, accumulators and other auxiliary material.



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Contents:

- 1x Electric pick gun Kronos
- 1x Li-Ion battery 3.7 V / 2900 mAh
- 1x Charging cradle including charger cable for USB ports (without power supply unit)
- 5x Pick needles 0.5 mm
- 2x Tension tools
- 1x Allen key for changing pick needles
- 1x Instruction Manual

Technical Specifications:

- Li-ion battery: 3.7 V / 2900 mAh
- Adjustable needle swing: 1 to 4 mm
- Idle speed: 13,000 rev/min
- Weight with battery: approx. 350g
- Dimensions: D=34 mm L=205 mm
- Battery life: approx. 2.5 hours
- Charge time: approx. 3 hours
- Warranty: 2 years

1. How to insert the battery



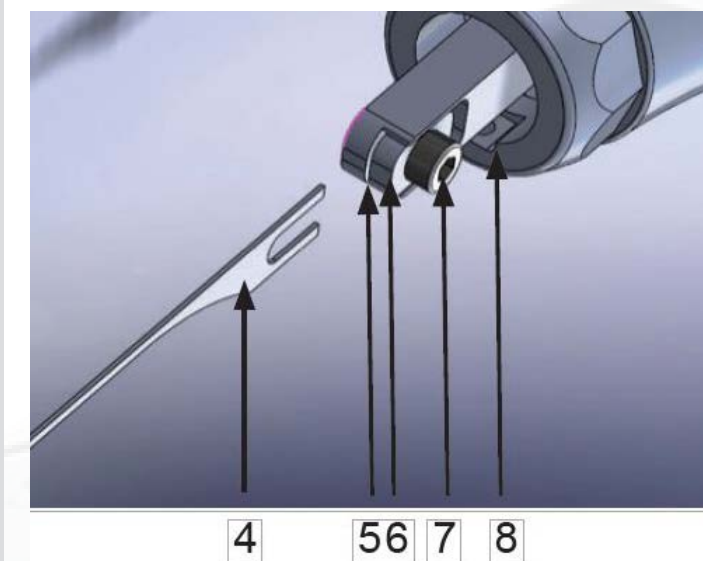
To insert the battery, unscrew the screw cap first. Please note that:

- The **positive pole** is inside the device.
- The screw cap is the **negative pole**.

To insert the battery, proceed as follows:

- Unscrew the screw cap with the battery contact.
- Insert the Li-ion battery.
- Screw the cap back in.

2. How to insert the pick needle



Open the clamp screw (7) with the included Allen key. Place the pick needle (4) into the resulting gap (5) between the holder (8) and the clamp (6). Push the pick needle all the way to the stop.

Tighten the clamp screw (7) with the Allen key so that a firm hold of the needle is ensured.

2. Warranty

Warranty for the Kronos Pick Gun is two years from purchase date.

Inappropriate use (see page 4) of the Kronos Pick Gun may invalidate your warranty.

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3.1 How to operate the Kronos Pick Gun



To switch on and activate the Kronos Pick Gun, press the activation button (10) on the device. As soon as you release the activation button, Kronos will turn off.

3.2 How to adjust the needle swing

With the adjustment screw (9) on the collar of the device you can adjust the needle swing in a range of between 1 – 4 mm. Thanks to the pressure spring, the adjustment screw is held in the adjusted position.

- **To increase the swing**, turn the adjustment screw to the left (anti-clockwise).
- **To decrease the swing**, turn the adjustment screw to the right (clockwise).

3.3 Operation

The maximal continuous running time should not exceed 10 minutes. Overheating of the motor and the housing may otherwise occur. If the pick needle gets stuck inside the cylinder, the operation must be stopped.

In case of overheating, the motor and electronic parts may get damaged. Although batteries are equipped with a protective shroud, they may get damaged too. The motor will stop and the device will not be operational for about 2 to 4 seconds.

To ensure a safe operation, only original pick needles should be used. Only protected batteries should be used for operating the electric pick gun.

The pick needles must be replaced only while the device is switched off. The battery should be removed to avoid accidental switch ons.

3.4 Behaviour in emergency situations

Release the activation button and the pick gun will turn off.

4. Noise emission

The equivalent A-weighted continuous sound level is under 70 dB (A).

5. Tension

One of the main reasons for unsuccessful opening with picking tools is the ignorance of how important proper tension is. Tension is used to break the alignment of the cylinder plug with the cylinder housing and create small landings (steps) to achieve a shear line between the plug and the housing. In picking the pins or discs of the lock, it should be applied under as well as above these landings so that the shear line is created and the plug can be turned. This way, the pins or discs can be brought into the right position with a picking tool, they must be able to move despite this tension. If the tension is too light, the pins won't stay picked, too heavy and the pins will bind. The correct tensioning, selection of the necessary tension tool and positioning in the key way are basic prerequisites for a successful opening. The tension tool should be selected according to the size of the key way. It should be placed in the key way so that it doesn't block the first pin/disc of the lock and doesn't hinder the movement of the pick needle.

6. Electric Picking

As a rule of thumb, a straight needle should be inserted into the clamp of the electric pick gun if you are working on unfamiliar locks. In order to prevent shearing of the adjustment screw, gently nip it tight.

Now apply tension to the plug and insert the needle of the pick gun into the key way of the plug. The picking needle must be axial over or under the pins or discs depending on the lock. The pins or discs should not touch the picking needle yet in this position.

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Therefore, the picking needle must be located within minimal distance over or under the pins or discs depending on the lock type.

The picking needle is inserted into the key way and should sit over all the pins or discs so that the needle can move them simultaneously.

However, don't insert the picking needle too far into the back of the key way, otherwise solid prefabricated parts of the lock can block the needle and its movement.

Turn the electric pick in a way that the needle can strike in the profile of the key way as far as possible and that the needle knocks against the profile as little as possible when striking. Most profiles are not cut straight; they have curvatures to the right or to the left, use these angles to coordinate movement of the picking needle. i.e.: rotate/twist the gun appropriately.

Let the pick needle strike only in short intervals. This considerably raises the chance of opening the lock. A permanent striking of the pick needle against the pins or discs raises only the wear and tear of the lock and the pick gun without leading to an opening.

Short pulses of 5 seconds maximum are best. Prolonged use will overheat the motor and discharge the battery quicker. After a period, the plug should rotate in the chosen direction. i.e. all pins or discs will separate. The shear line is consequently achieved and the lock will open.

If the lock hasn't opened after several attempts, try another tension tool with either reduced or increased pressure. Also try tensioning in the opposite direction and then plug spinning to unlock.

The choice of the next pick needle is dependant on the profile of the key way and on the pins or discs in the lock. They can have different forms, heights and tolerances.

As general rule of thumb about which pick needle to use doesn't exist because of different structural qualities in every lock. In the most unfavourable case all pick needles have to be tried.

Top tips for successful picking and prolonged life of your Kronos Pick Gun

- If possible, insert the tension wrench into the cylinder plug near the shear line. This position is normally at the bottom of the key way.
- Apply only as much tension so that the tension wrench won't fall out of the key way.
- If you can't pick the lock open, tilt the gun from side to side striking the pins from different angles.
- 2-5 seconds max. cycling of the gun (pulse picking).
- Don't push the pins down with the pick, let the pick gun do the work.
- Ensure there is space for the needle to move up & down otherwise adjust the swing.
- Feather the tension tool. (small on-off light bending action).
- Change for lighter or heavier gauges of tension tools.
- Change the pick needle to suit the type of lock and pins.
- Rotate the gun to match the key way profile.
- Pick to locked instead of open and then use a plug spinner.
- Lubricate the lock.

