



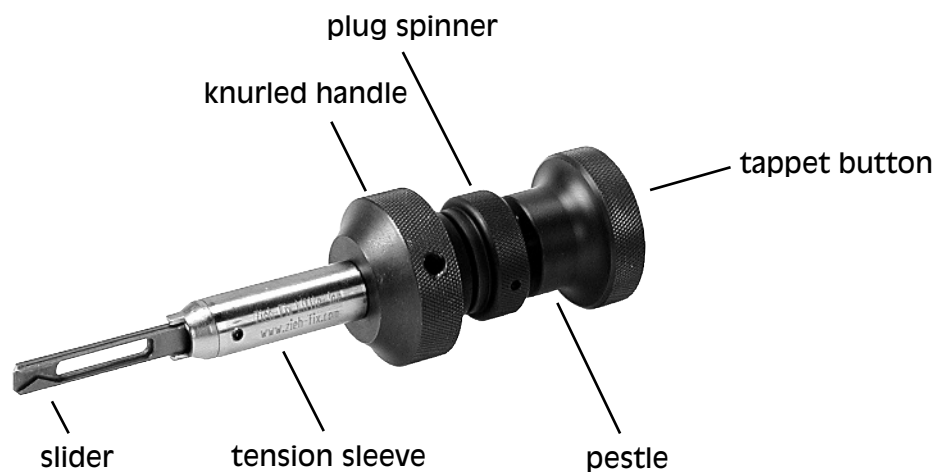
## ZIEH-FIX® „Little Joe“

The "Little Joe" enables a destruction-free opening of inside lane systems over the lock.

For Audi, Ford Galaxy, Porsche, Seat, Skoda and VW.

### Characteristics:

The individual parts of the present tool are named in the following description:



*To avoid later complaints on the basis of damages to the tool or the vehicles the following manual should be read alertly.*

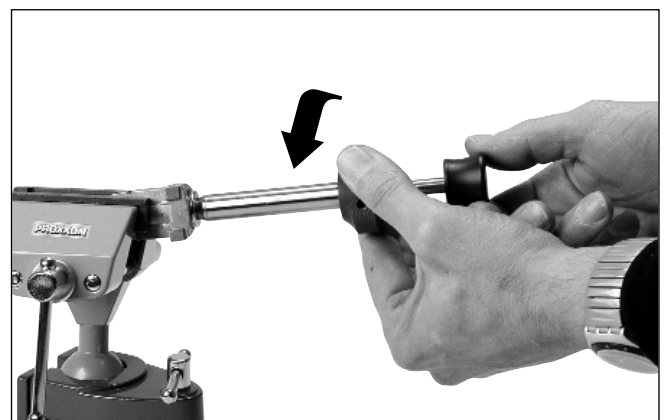
The delivered tool is able to unite two independent work processes:

- **Tension** (rotation in opening direction)
- **Raking** (alignment of discs)

### Tension

Under tension one understand the rotation in opening direction of the vehicle lock cylinder in order to align the single discs as described in the chapter raking.

To this the worked out shackles of the tension sleeve are brought in as far as they go in the chanal and a rotary motion is practised with the help of the knurled handle.



The tension can be chosen by the effort, i.e. from the torque, only so big that a jamming of the discs, an overwinding of the slipping clutch or a damage of the dust tab fortification is excluded.

**As coarse ground is valid here:**

It doesn't use any bigger strength as one requires to lock or unlock a comparable vehicle with the key.

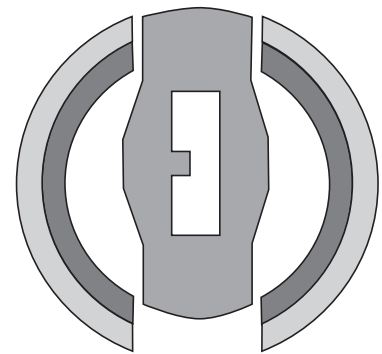
**Attention:**

The tool or the lock could be damaged by using too much strength. In principle, the tension takes place to the later opening of these vehicle types left-turning, therefore contrary to the clock sense at the driver's door and the tailgate.

At the passenger's door the tension takes place right-turning, therefore clockwise.

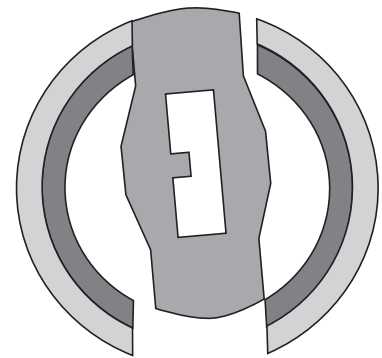
**Raking**

Raking is the alignment of the individual discs for the last unlocking.



**Illustration 1:**  
Lock in initial position,  
all discs in locked position

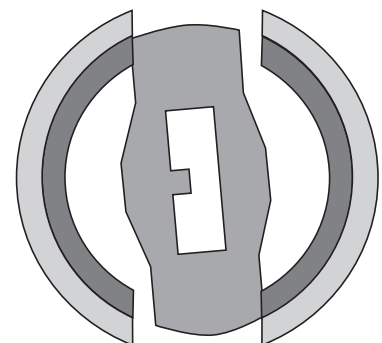
Therefore the discs are pressed against the "catch cage" by the tension and jammed easily.



**Illustration 2:**  
The discs are pressed against the  
"catch cage" by the preload.

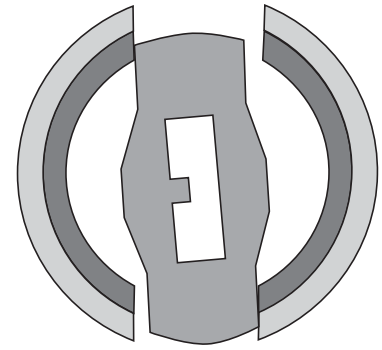
The so uptight discs could now be pushed in the opening position with the help of the slider.

The slider is pushed forward and backwards several times with help of the pestle button under holding tension, in fact over the full reachable way.



**Illustration 3:**  
The discs are pushed in the opening  
position by the motions of the slider.

Since the slider also moves discs over the opening position, it is necessary to give special attention to the chapter "opening".



**Illustration 4:**  
Disc that the slider deferred  
over the opening position.

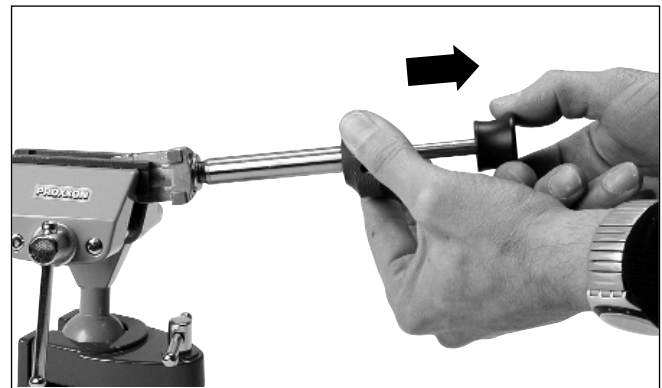
### Opening

After pushing the slider approximately 4-6 times forwards and backwards under retention of the aimed tension, it can be tried to open the lock.

With the last working stroke the slider, not however the tension sleeve, must completely be extracted out of the locking channel.

Afterwards the tension exerted on the lock is slightly decreased.

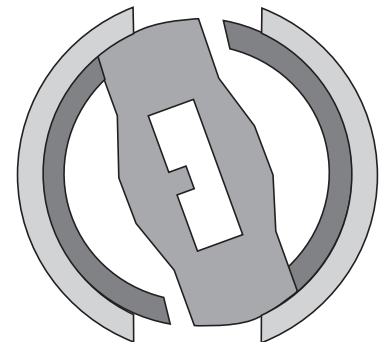
With older vehicles as well as with often used locks, the decreasing of the tension can make a minimal opposite rotation necessary.



On this occasion individual discs, as shown in illustration 4, which had pushed over to the opening position, drop back with an audible click.

After every audible dropping disc we stress the tension sleeve again with the original selected initial stressing in the opening direction of the lock.

In the most favorable case the lock keeps turning approximately 90° and opening after relief, audible click and the renewed turning in the opening direction.



**Illustration 5:**  
Opened lock discs and "catch cage"  
in opening position

### Attention:

The tension is not allowed to be increased excessive. Not even with visible partial success.

A visible partial success is a minimal rotation of the lock in opening direction by approximately 2-4°. It gives the impression as if the lock could now be opened with strength.

The minimal possible rotation only means that some discs already stand in opening direction and other discs however still be in locked position. Carrying on excessive strength into the opening direction leads inevitably to a destruction or damage of the lock.

It should therefore be distinguished already with the reduction of the tension whether one single disc drops back audibly or whether the "click" of a lot of discs can be heard.

With several audible "clicks" it is to be assumed, that a multitude of discs dropped back into the locked position and the above described raking-process has to be repeated. Usually the reason for a relapse of the discs into the locked position is caused by the strong reduction of the tension before the real opening process.

**Important:**

If the opening should fail, the described process is going to be completely repeated!

The time for opening is not calculable and depends on different factors, like ages of the lock, present tolerances in the lock, decided tension, sensitiveness of the user etc.

The initial work movement of the sliders should start alternately to each new attempt once pulling and then pushing.

According to our experience abouts 60 percent of the vehicles opened with a pulling movement of the slider in the beginning.

Absolutely don't try to align jammed discs by force through strongly pulling or pushing the slider in the opening position. You run the risk of breaking the sliders. In this case the tension has to be reduced and the slider has to be pushed under the disc. The tension must be renewed.

Most vehicles of the mentioned manufacturers are equipped with remote controles. Consequently, it is not necessary to open the vehicle's lock with a key.

As a rule the discs in the lock move to heavy at these vehicles due to low use and should be made fingertip easily with a non resinous oil before starting work. This is to be considered also with new vehicles, since the locks are protected against corrosion with highly sticking grease in the factory.

Some vehicles of the mentioned manufacturers are equipped with a slipping clutch, a protection against overwinding. By using too much power for tension this slide clutch can be released. In this case put the slipping clutch back into through turning contrary to the opening direction and start the opening process again.

Is the slipping clutch released repeatedly, it is recommended to open the vehicle over another lock  
- passenger door or tailgate.

**Please note:**

*Opened locks couldn't be closed again with the „Little Joe“.*

*This tool isn't suitable for decoding an ignition lock.*

This tool is only made for opening vehicles with inside lane systems of the mentioned manufacturers.

The opening of other locking systems is not possible. Each attempt inevitably leads to a damage of the tool.

Exluded from efficiency are in principle all damages to the tool, which are caused by too much power, coarse working methods or disregard the manual.