

# USER MANUAL

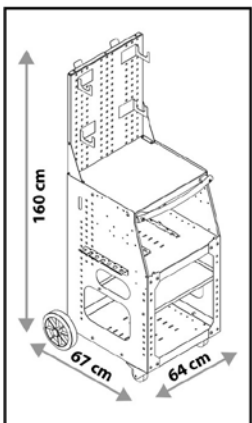
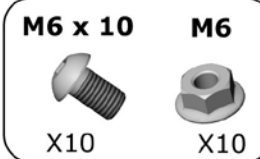
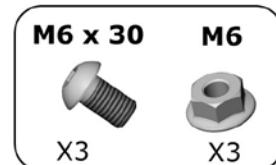
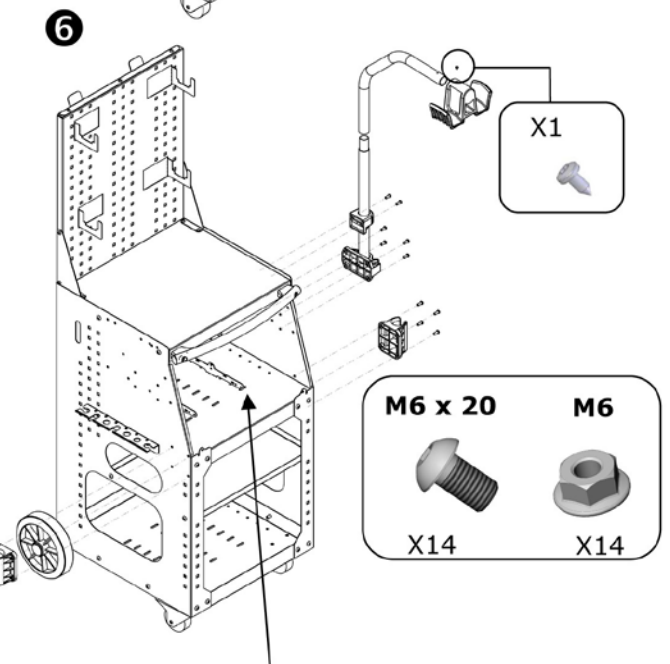
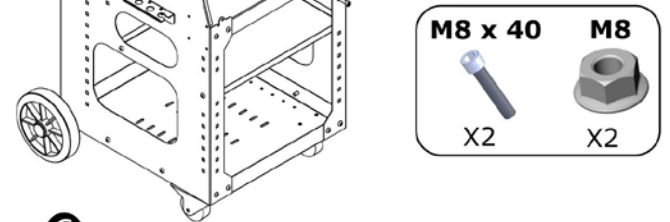
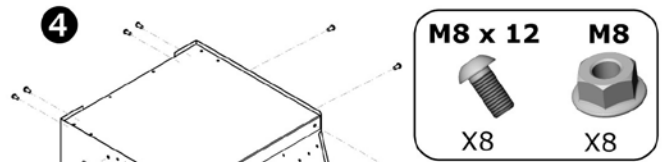
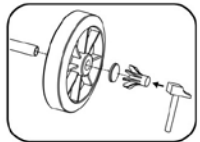
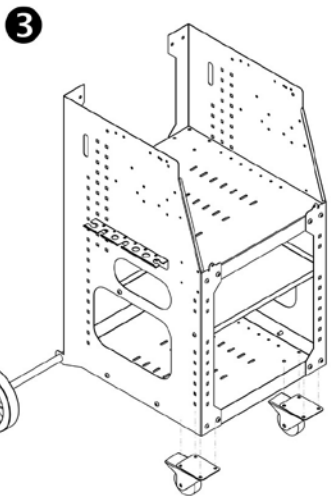
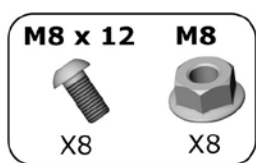
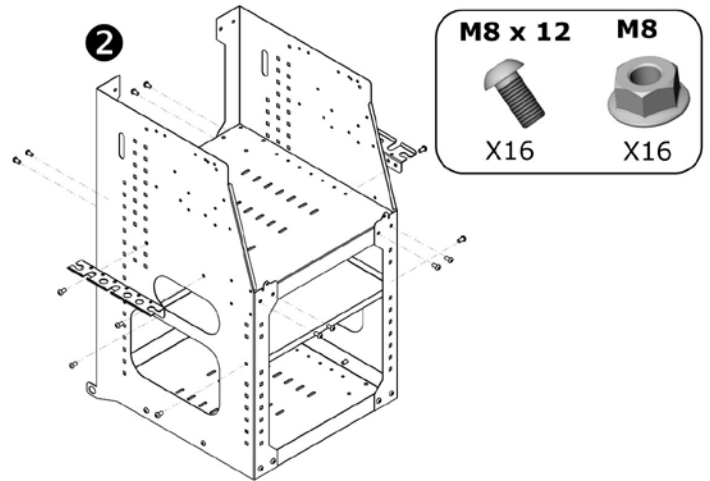
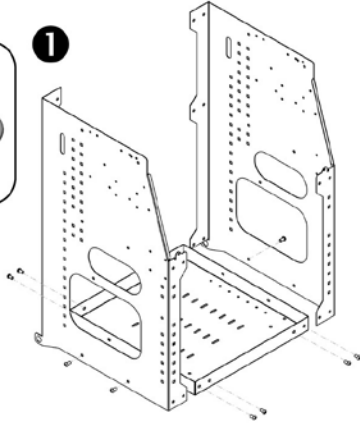
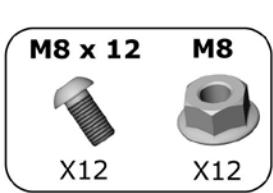


## **SPEEDLINER • SPEEDLINER 39.02 / 39.04 SPEEDLINER PRO 230 / PRO 400 SPEEDLINER COMBI 230 E.PRO**

### **SUMMARY**

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# ASSEMBLY



## COMPOSITION



### 39.02 / 39.04 / PRO 230 / PRO 400 / COMBI 230 E.PRO

XXXXX	Generator	1
051348	Spot PRO 1600	1
050679	Manuspot (with Easy gun)	1
050686	Levelling lever	1
050693	Levelling bar	1
050792	3 pulling rods	1
049758	4 hooks claw	1
049734	6 hooks claw	1
049666	Magnetic earth	1
051515	Steel consumables	1
052451	Extension joints 55 mm	2

### + PRO 230 / PRO 400 ONLY

052154	Ringmatic	1
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### + COMBI 230 E.PRO ONLY

052284	Cable hanger	1
050921	Alu Puller	1
050945	Additive kit for Alu dent pulling	1
052154	Ringmatic	1

## STRAIGHTENING LEVER AND BAR

### CHOOSE YOUR BAR OR YOUR LEVER

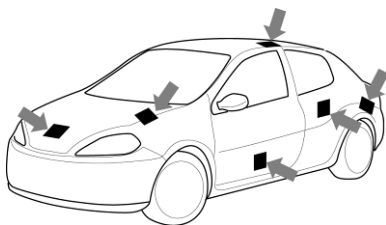
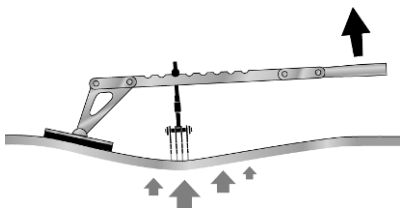


#### Straightening lever

ref.050686



For areas when the sheets are thin. Ex: door, fender...

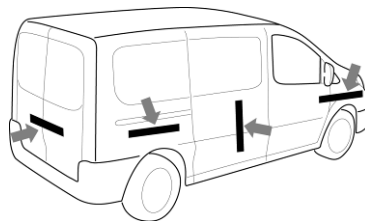
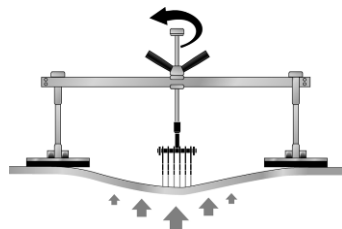


#### Straightening bar

ref.050693



To straighten or maintain a sheet under stress after using the pulling bar

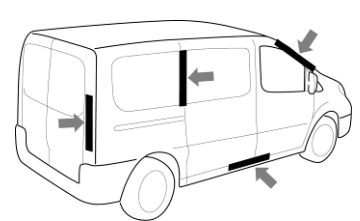
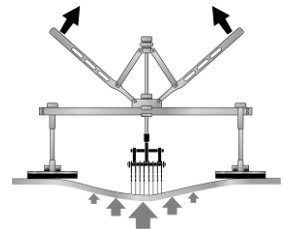


#### OPTION: Pulling bar

ref.050716



To straighten or maintain a sheet under stress after using the pulling bar



## For angles and rounded corners (OPTION)

Change the original pads for the double ones (ref.050723)



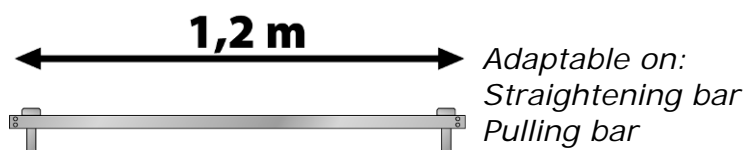
Adaptable on:

- Straightening bar
- Pulling bar

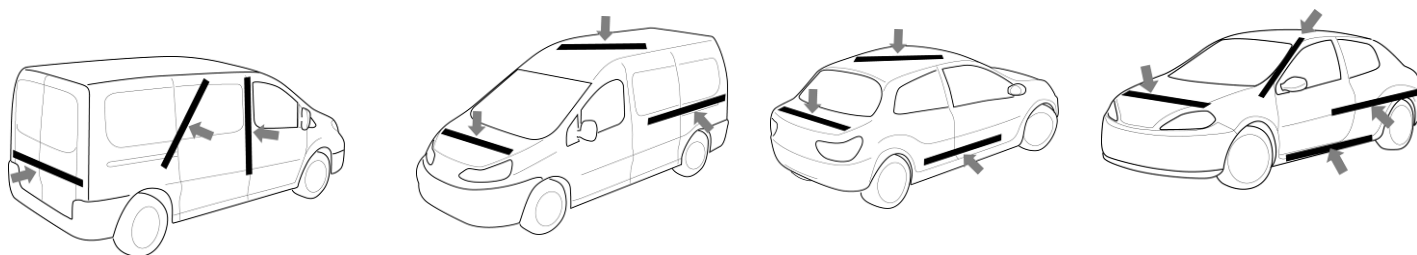


## For wide areas (ex. utility vehicle side panel) (OPTION)

Replace the original traction bar (0,8m) by the 1,2 m bar (ref.050730)

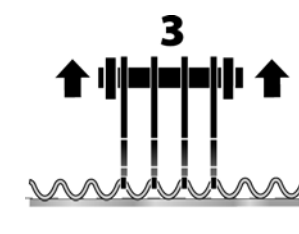
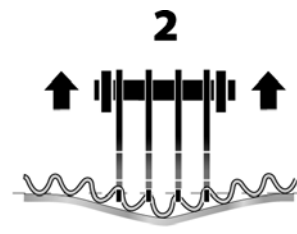
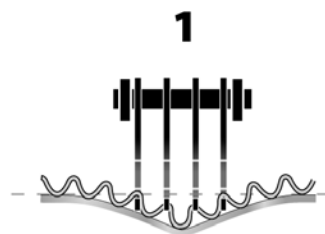
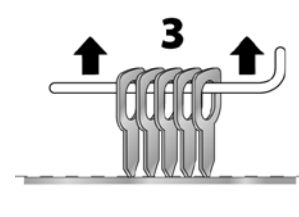
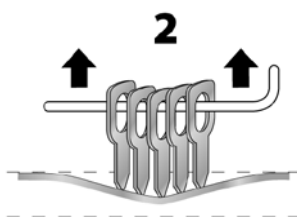
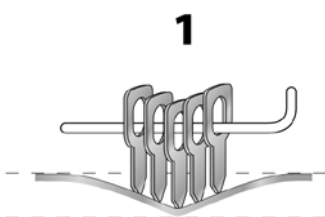


Exemple of application:





## CHOOSE THE RIGHT STRAIGHTENING PROCESS

### Principles



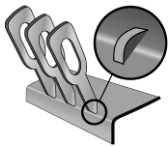
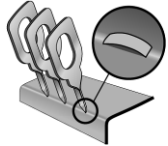


## Comparison

### Rings or wavy wire?

	 <b>Rings</b>	 <b>Wavy wire</b> <i>x50 ref.049727</i>
<b>Use</b>	To straighten all the bumps, middle to big bumps	To straighten light and middle bumps
<b>Advantages</b>	<ul style="list-style-type: none"> <li>- Versatility</li> <li>- Pulling strength</li> <li>- Ideal for sills</li> </ul>	<ul style="list-style-type: none"> <li>- Fast set-up</li> <li>- Ideal for rounded areas (example : wheel arch ...)</li> </ul>
<b>Disadvantages</b>	Long set-up	Standard space between welded points
<b>To be used with</b>	Traction rod + hooks ( 4 – 6 - 8 claws)	Hooks (4 - 6 - 8 claws)
<b>Possible tools</b>	<ul style="list-style-type: none"> <li>- Lever</li> <li>- Straightening bar</li> <li>- Pulling bar</li> </ul>	<ul style="list-style-type: none"> <li>- Lever</li> <li>- Straightening bar</li> <li>- Pulling bar</li> </ul>

### Straight or twisted rings?

	 <b>Straight rings</b> <i>X100 ref.050648</i>	 <b>Twisted rings</b> <i>X50 ref.050631</i>
<b>Use</b>	To straighten a flat or rounded surface	To pull in the plane of the edge  <b>NO</b>  <b>OK</b>

### Set up:

#### Rings

To weld the rings, use the ring « accessory welder » of the Manuspot (page 6)



#### *Advice*

It is possible to weld the rings at a slight angle and to manually position them vertically afterwards.

When the straightening is finished, twisting the rings will enable to easily remove them.

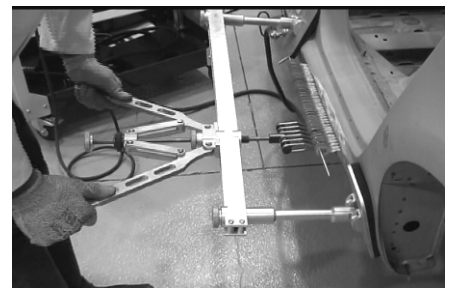
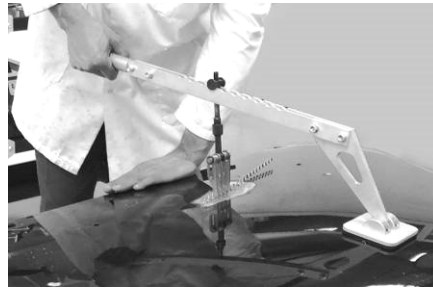
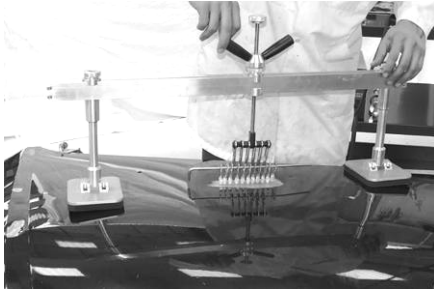
#### Wavy wire

To weld the wavy wire, use wavy wire « accessory welder » for Manuspot (page 6)

To unweld the wavy wire, use pliers to move the wire sideways until the weld breaks off.

Note: the rings or wavy wires can be reused, and should only be replaced if worn out.

## APPLICATION EXAMPLES

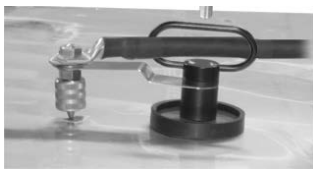


## MAGNETIC EARTH

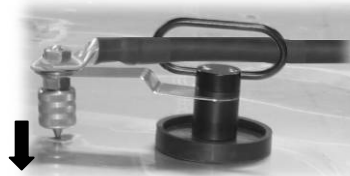
### Principle and Application

This system « welded earth » system allows to fix an earth on a small stripped part (less than 2mm against 20mm with a standard earth).

Its magnets allows you to use it in every position (horizontal or vertical)



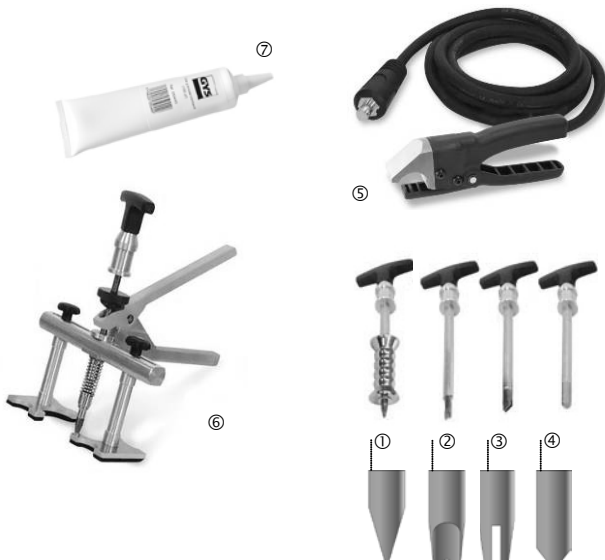
① Weld the earth thanks to contact shrinking tool (p8)



② Screw the earth to the metal sheet

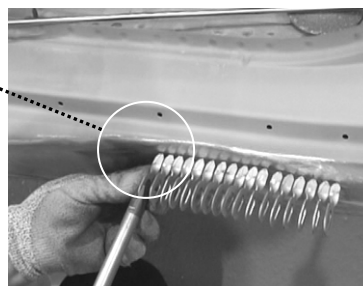
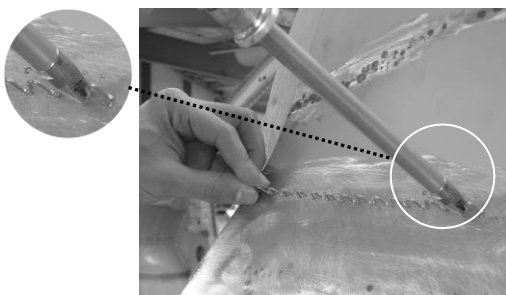


## MANSPOT ref.050679



Manuspot: Complete concept including:

- 1 universal dent pulling clamp ⑥
- 1 pulling handle ①
- 2 « accessory welder » tools: wavy ② + rings ③
- 1 contact shrinking tool ④
- contact clamp with 3m cable ⑤
- copper grease tube ⑦ ref.050440
- 1 Easy Gun



## CONNECTION OF DIFERENT TOOLS

Connect the contact clamp as follows:



❶ Connect to the generator



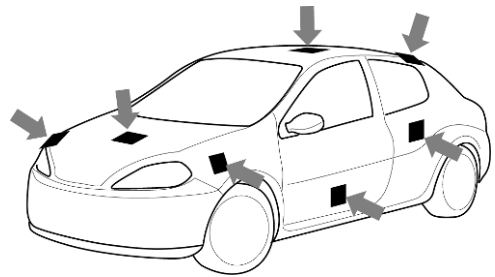
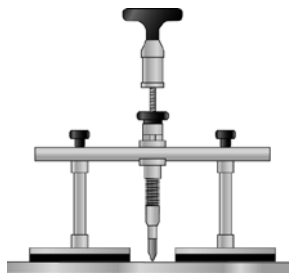
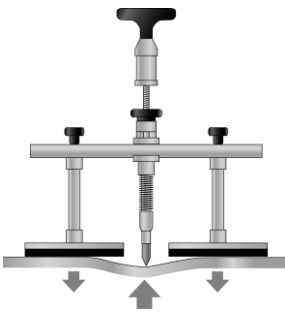
❷ Add copper grease on the inside of the clamp and on the axis of the tool.



❸ Fit the clamp on the tool

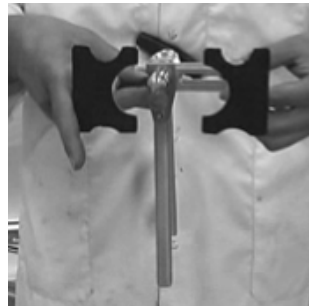
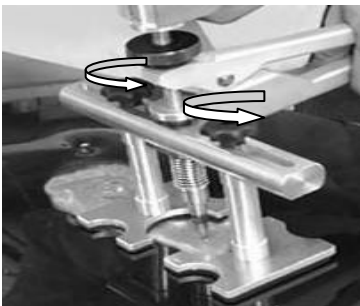
## II- UNIVERSAL DENT PULLING CLAMP

### Principle

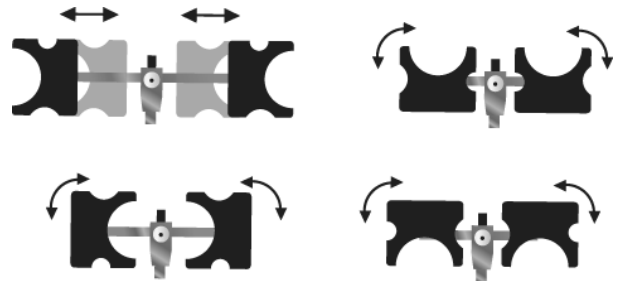


### Adjustment and positioning of the pads

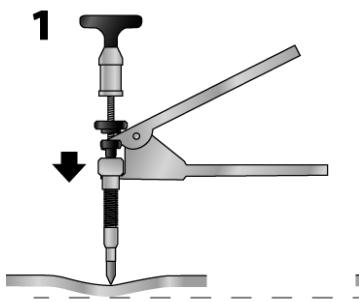
❶ Unscrew the nuts on both sides



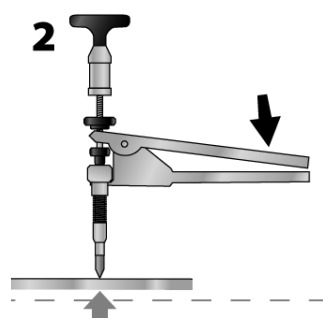
❷ Then choose the position of the pads depending on the area to work on



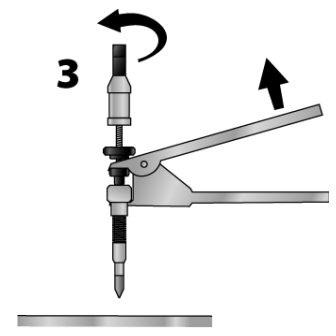
### Use




❶ Weld the tip



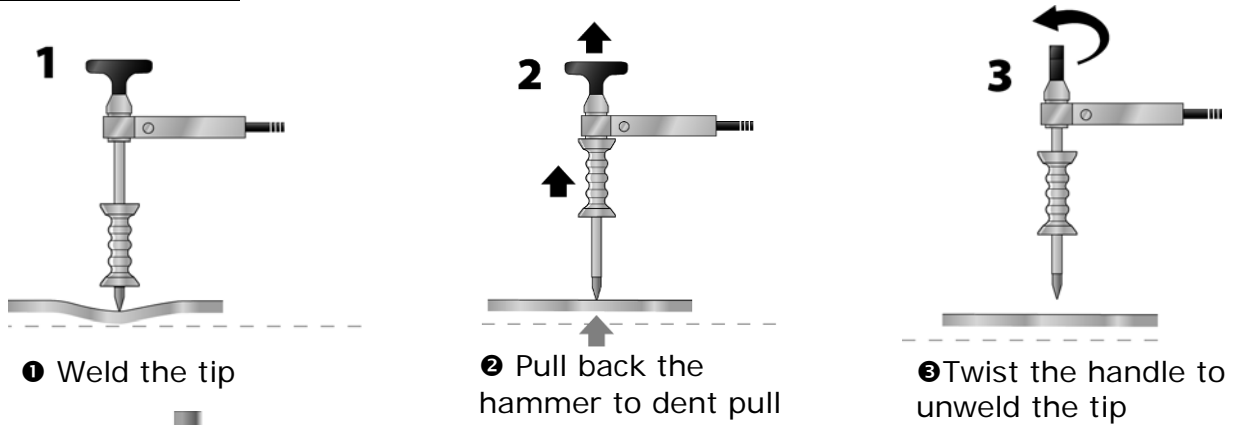
❷ Tighten the handle to dent pull




❸ Twist the handle to unwind the tip

Consumables:  3 electrodes for Manuspot handles ref.050822

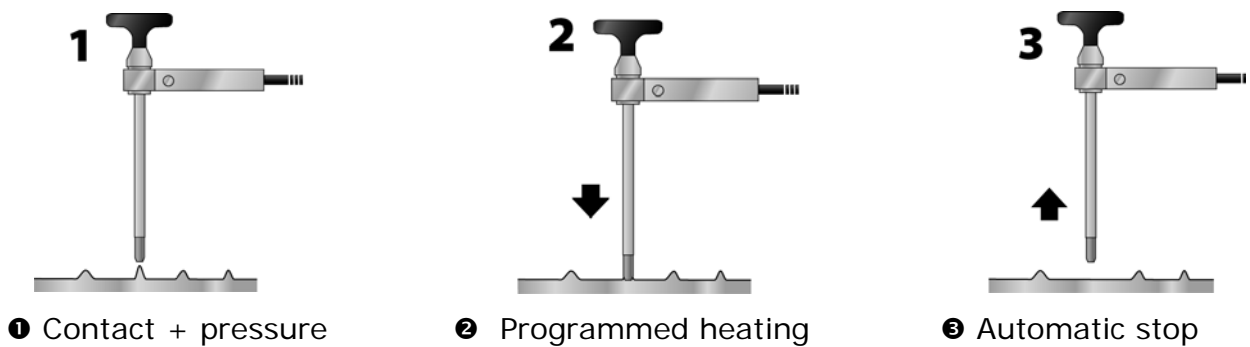
## PULLING HANDLES



Consommable :  5 électrodes de tirage ref.050839

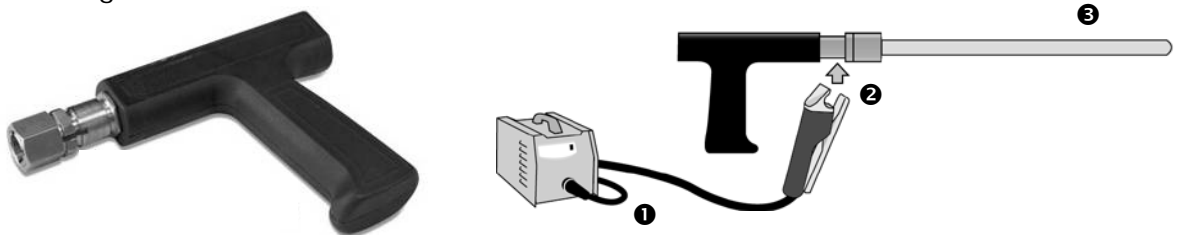
## CONTACT SHRINKING TOOL

Essential tool for the finishing enables to eliminate the spikes created by the dent pulling operations.



## EASY GUN

- 1 Connect the Manuliner contact clamp to the unit.
- 2 Install the tool at the end of the Easy gun then connect the Manuliner contact clamp to the Easy Gun.
- 3 Weld: The welding point is made automatically by a simple contact between the tool and the metal piece to straighten.



**ALU PULLER** ref 051003  
(+alu hook 1 ref 050938 + alu hook 2 ref 050945)

- 1- Weld the studs to the aluminium sheet with the Combi 230 E.Pro.
- 2- Fix the hooks on the studs.
- 3- Pull on the hooks with the Mini Puller (diagram)

