AESCULAP® KERRISON

Bone Punches made by AESCULAP®

B|BRAUN
SHARING EXPERTISE

KERRISON Bone Punches

Made by AESCULAP®

A tradition of high quality.

AESCULAP® has manufactured KERRISON bone punches for over 100 years.
Throughout the world, "Made by AESCULAP®" is synonymous with high quality and durability.

(1) Publication Reference: Maroon JC, El-Kadi M, Bost J. Pneumatic Kerrison rongeur: technical note. Surg Neurol 2009; 71(4):466–8.

ERGONOMIC

SQ.line® KERRISON Bone Punches

...superior comfort in usage and efficient reprocessing.

DETACHABLE

Detachable KERRISON Bone Punch

...can be disassembled without tools in only 3 steps for cleaning.

PROVEN

Non-detachable KERRISON Bone Punch

...considered a classic for over 100 years.

SPECIAL

Special KERRISON Bone Punches

...whether curved, bayonet-shaped, extra long, of intermediate size or with a large jaw opening – we provide the solution.

PNEUMATIC

KAIRison® Pneumatic Bone Punch

...reduces physical effort – technology that makes life easier (1).

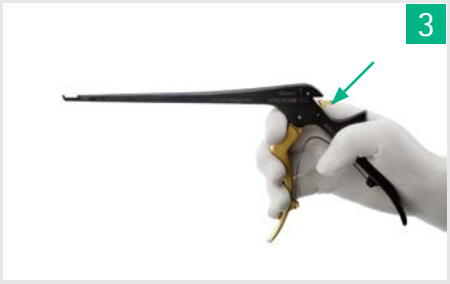
AESCULAP® SQ.line® KERRISON

Coated, detachable bone punches

Assembly

Close the slider.

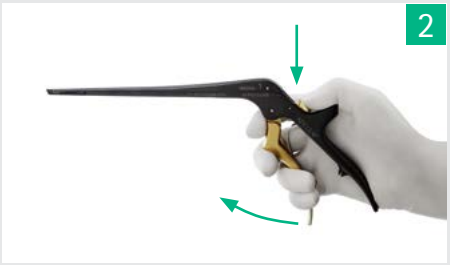
Close and release the front handle.



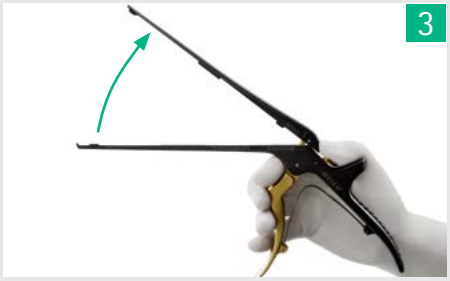
The golden latch will close by itself.

Disassembly

Close the front handle.



Press down the golden latch completely and release the handle.



Open up the slider.

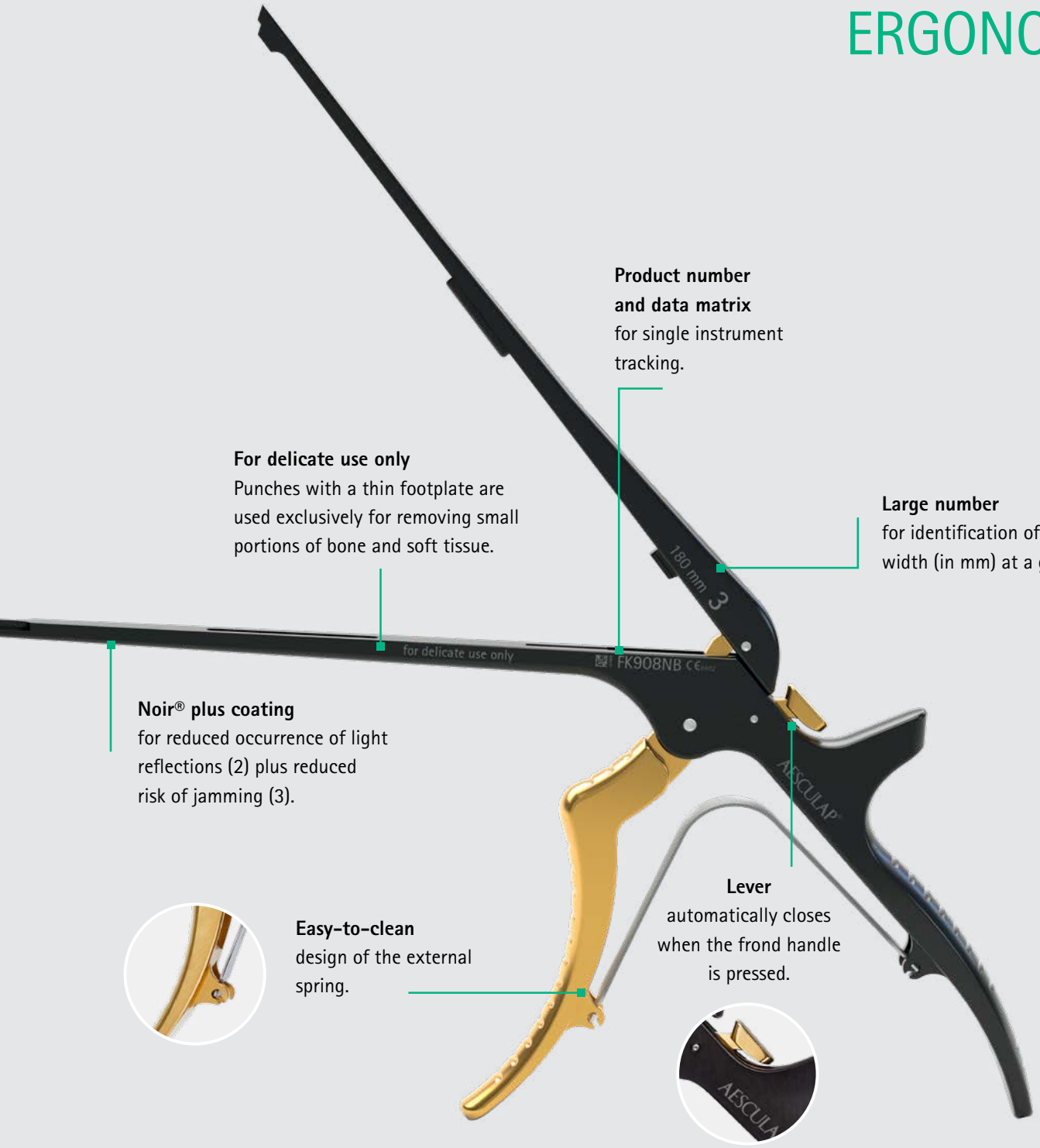
Ejector
for the removal of punched-out material.

- Working lengths: 180, 200, 230, 280 mm
- Jaw widths: 1-6 mm
- Footplates: standard and thin
- Jaw angles: 130° and 90°
- Jaw positions: upward and downward punching
- Jaw openings: 10 mm and 15 mm jaw opening

(2) Gloss value measurement. The gloss values of two new and five aged SQ.line® KERRISONs were measured on three defined areas from two different angles each. The results were compared to the values of uncoated Aesculap KERRISONs. The processing had no significant influence on the reflection behavior. The Noir® plus coating reduced reflections on the slider by 70 % to 86 %, on the main part by 47 % to 63 % and on the handle by 19 % to 76 % depending on the direction of measurement.

(3) Jamming test. Five samples of three different SQ.line® KERRISONs and previous Aesculap KERRISONs were tested on lamb spine with 50 repeated punches. The SQ.line® KERRISON showed no jamming for the duration of the test.

ERGONOMIC



Product number and data matrix
for single instrument tracking.

For delicate use only
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.

Large number
for identification of jaw width (in mm) at a glance.

Noir® plus coating
for reduced occurrence of light reflections (2) plus reduced risk of jamming (3).

Easy-to-clean
design of the external spring.

Lever
automatically closes when the frond handle is pressed.

For further information please visit our website SQ.line® KERRISON bone punches >>

AESCULAP® SQ.line® KERRISON

Coated, detachable bone punches

Jaw position	Working length	Jaw width	KERRISON regular foot	KERRISON thin foot	KERRISON 15 mm jaw
130° upwards	180 mm	1 mm	FK900NB	FK906NB	-
		2 mm	FK901NB	FK907NB	-
		3 mm	FK902NB	FK908NB	-
		4 mm	FK903NB	FK909NB	-
		5 mm	FK904NB	FK910NB	-
	200 mm	1 mm	FK960NB	FK961NB	-
		2 mm	FK913NB	FK962NB	FK970NB
		3 mm	FK914NB	FK963NB	FK982NB
		4 mm	FK915NB	FK964NB	FK983NB
		5 mm	FK916NB	FK965NB	FK984NB
		6 mm	FK917NB	-	-
	230 mm	1 mm	FK918NB	FK929NB	
		2 mm	FK919NB	FK925NB	
		3 mm	FK920NB	FK926NB	
		4 mm	FK921NB	FK927NB	
		5 mm	FK922NB	FK928NB	
	280 mm	1 mm	FK981NB	FK980NB	
		2 mm	FK986NB	FK976NB	
		3 mm	FK987NB	FK977NB	
		4 mm	FK988NB	FK978NB	
		5 mm	FK989NB	FK979NB	
90° upwards	200 mm	1 mm	FK090NB	-	
		2 mm	FK091NB	-	
		3 mm	FK092NB	-	
		4 mm	FK093NB	-	
		5 mm	FK094NB	-	
130° downwards	200 mm	1 mm	FK990NB	FK995NB	
		2 mm	FK991NB	FK996NB	
		3 mm	FK992NB	FK997NB	
		4 mm	FK993NB	FK998NB	
		5 mm	FK994NB	FK999NB	
90° downwards	200 mm	1 mm	FK095NB		
		2 mm	FK096NB		
		3 mm	FK097NB		
		4 mm	FK098NB		
		5 mm	FK099NB		

Ejector	✔	✔	✔	✔	✔	✔
Width (mm)	1 mm	2 mm	3 mm	4 mm	5 mm	6 mm

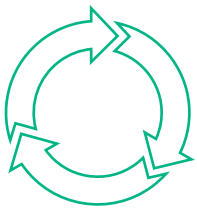
AESCULAP® SQ.line® KERRISON

Racks

Protecting the cutting edges and surfaces of instruments during transport is essential to ensure durability. That's why we've designed the SQ.line® KERRISON racks, which offer increased protection during transport (4), ensuring that the bone punches consistently arrive at the operating room in good condition.

Protective

Reproducible



Efficient

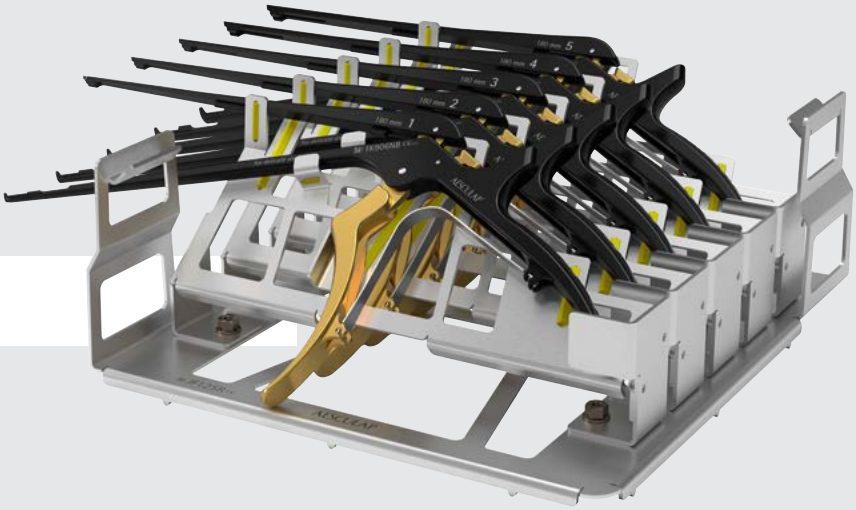
- Increased protection of cutting edges and surfaces against transport damages (compared to transportation w/o rack) (4).
  (SQ.line® KERRISON bone punch shake test)
- Suitable for the entire instrument cycle (mechanical cleaning, sterilisation, instrumentation).
  (SQ.line® KERRISON cleaning and sterilisation validation)
- The racks are designed with cleaning positions and sterilisation positions.
- Suitable for the entire SQ.line® KERRISON portfolio in all lengths and sizes.
- Racks including punches are suitable for standard instrument trays with a inner height of 92 mm, even including a lid.

We recommend AESCULAP® JF/JG trays with an inner length of min. 404 mm and an inner height of 92 mm or JJ trays with an inner length of min. 401 mm and an inner height of 102 mm.

(4) The SQ.line® KERRISON shake test was performed to investigate the resistance of the Noir® plus surface to scratches in comparison with the existing bone punches. For this purpose a sieve basket and a SQ.line® KERRISON rack, both containing bone punches, were fixed on a vibrating plate. It could be demonstrated, that the scratching of surface is strongly reduced with the use of the SQ.line® KERRISON racks.

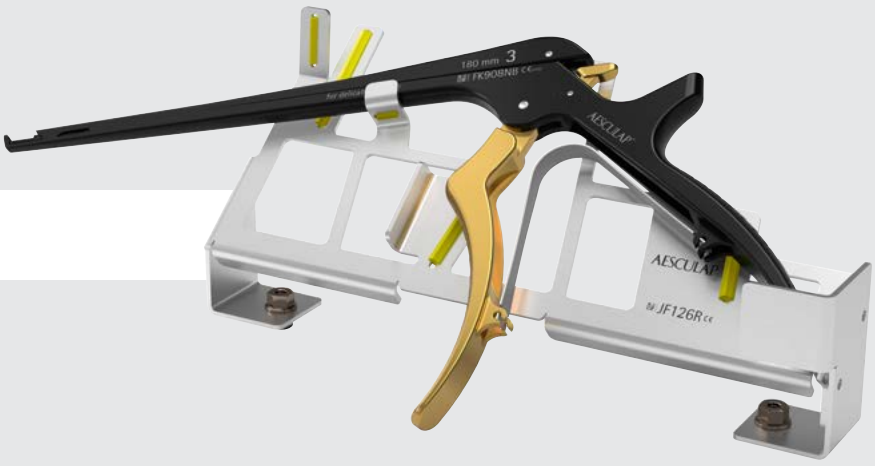
(5) A usability test for the SQ.line® KERRISON racks was performed to validate the realization of multiple user needs and other requirements. Ten Aesculap employees who have knowledge in storage and reprocessing of surgical instruments and are familiar with general OR techniques and OR environment were interviewed. All users rated the usability of the racks positive.

Cleaning position



SQ.line® KERRISON racks for five punches
Removable from the tray for instrumentation in the OR (5).
JF125R (209 mm x 231 mm x 91 mm)

Sterilisation position

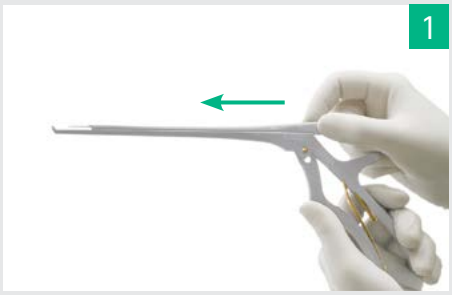


SQ.line® KERRISON racks for one punch
Fixed to the tray with two screws.
JF126R (192 mm x 68 mm x 83 mm)

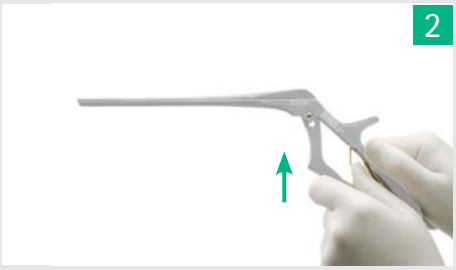
AESCULAP® KERRISON

Detachable bone punches

Assembly



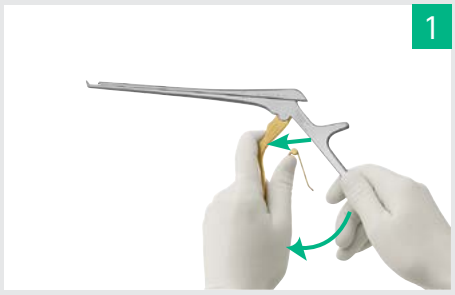
Attach the slider and push it forwards.



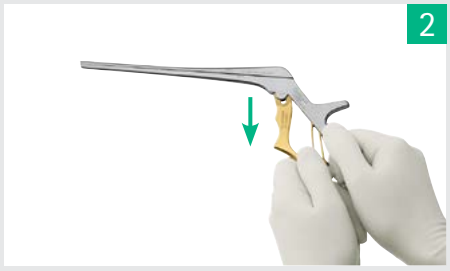
Push the inner handle upwards and open the handle.

Insert the spring in the rear handle.

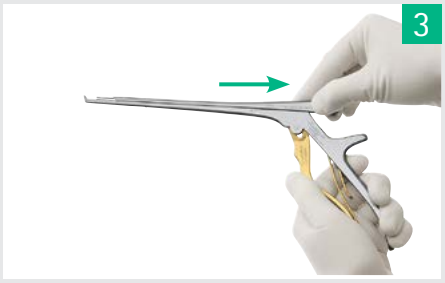
Disassembly



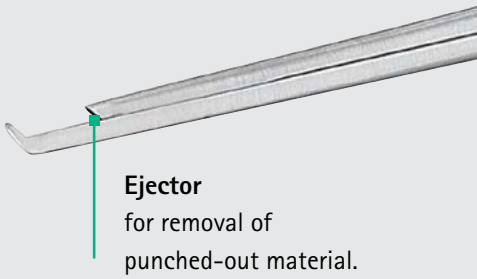
Unhook the spring from the rear handle.



Close the handle completely and pull the inner handle downwards.



Pull back the slider to remove.



Ejector
for removal of punched-out material.

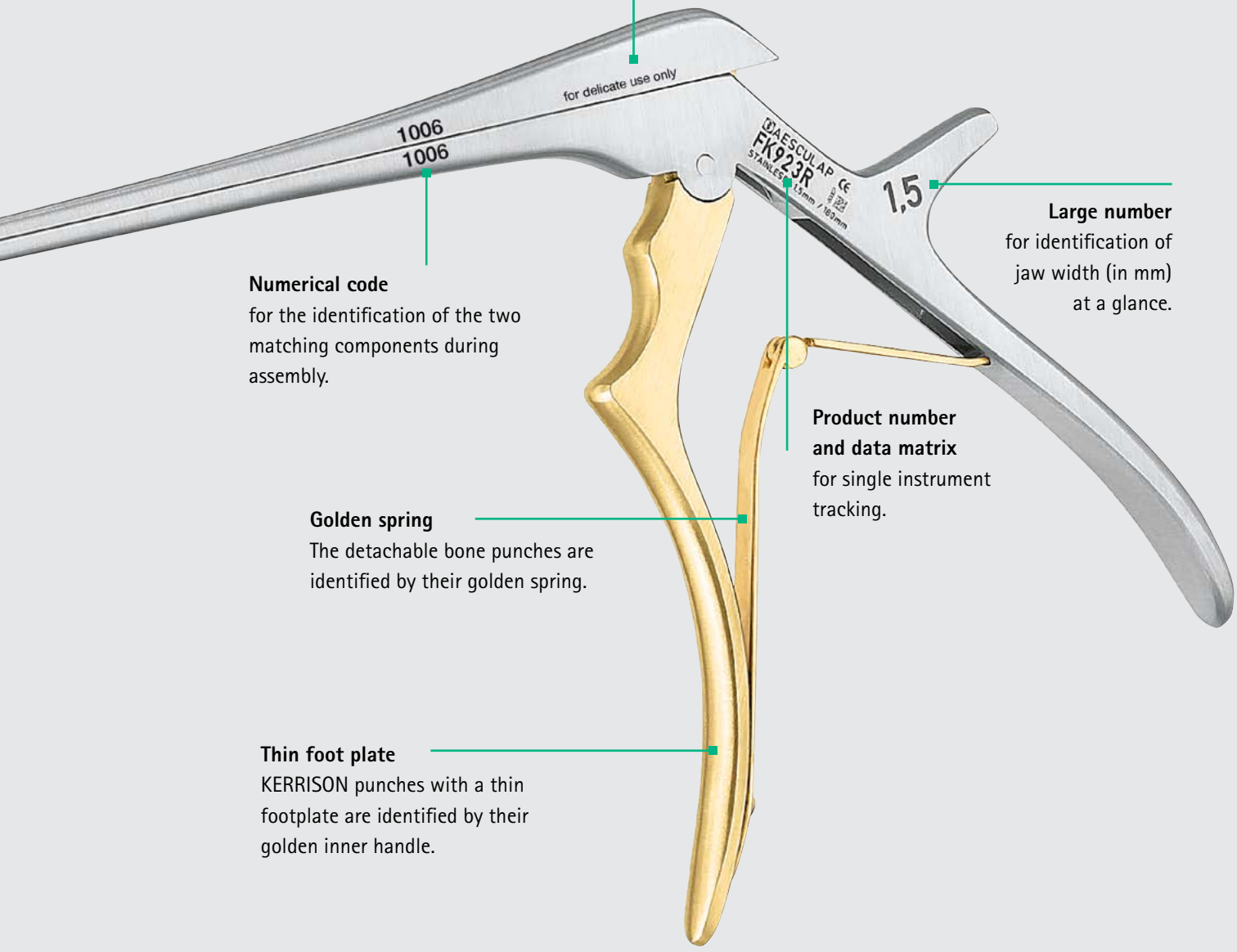
- > 80 detachable KERRISON models
- 130° / 90° upbiting
- With standard / thin footplate
- Standard / large jaw punches

Advantages

- Disassembly and assembly without tools.
- Easier verification of cleaning success due to less overlapping surfaces.

DETACHABLE

For delicate use only
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.



Numerical code
for the identification of the two matching components during assembly.

Large number
for identification of jaw width (in mm) at a glance.

Product number and data matrix
for single instrument tracking.

Golden spring
The detachable bone punches are identified by their golden spring.

Thin foot plate
KERRISON punches with a thin footplate are identified by their golden inner handle.

AESCULAP® KERRISON

Detachable bone punches

Jaw position 130°, upwards

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK900R	(8)	-	-	FK906R	(8)
	1.5 mm	FK911R	(9)	-	-	FK923R	(9)
	2.0 mm	FK901R	(9)	FK971R	(15)	FK907R	(9)
	2.5 mm	FK912R	(10)	-	-	FK924R	(10)
	3.0 mm	FK902R	(10)	FK972R	(15)	FK908R	(10)
	4.0 mm	FK903R	(12)	FK973R	(15)	FK909R	(12)
	5.0 mm	FK904R	(12)	FK974R	(15)	FK910R	(12)
	6.0 mm	FK905R	(12)	-	-	-	-
200 mm	1.0 mm	FK960R	(8)	-	-	FK961R	(8)
	1.5 mm	FK966R	(9)	-	-	FK968R	(9)
	2.0 mm	FK913R	(9)	FK970R	(15)	FK962R	(9)
	2.5 mm	FK967R	(10)	-	-	FK969R	(10)
	3.0 mm	FK914R	(10)	FK982R	(15)	FK963R	(10)
	4.0 mm	FK915R	(12)	FK983R	(15)	FK964R	(12)
	5.0 mm	FK916R	(12)	FK984R	(15)	FK965R	(12)
	6.0 mm	FK917R	(12)	FK985R	(15)	-	-
230 mm	1.0 mm	FK918R	(8)	-	-	FK929R	(8)
	2.0 mm	FK919R	(9)	-	-	FK925R	(9)
	3.0 mm	FK920R	(10)	-	-	FK926R	(10)
	4.0 mm	FK921R	(12)	-	-	FK927R	(12)
	5.0 mm	FK922R	(12)	-	-	FK928R	(12)
280 mm	1.0 mm	FK981R	(8)	-	-	FK980R	(8)
	2.0 mm	FK986R	(9)	-	-	FK976R	(9)
	3.0 mm	FK987R	(10)	-	-	FK977R	(10)
	4.0 mm	FK988R	(12)	-	-	FK978R	(12)
	5.0 mm	FK989R	(12)	-	-	FK979R	(12)

Jaw position 130°, downwards

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK930R	(8)	-	-	FK936R	(8)
	2.0 mm	FK931R	(9)	-	-	FK937R	(9)
	3.0 mm	FK932R	(10)	-	-	FK938R	(10)
	4.0 mm	FK933R	(12)	-	-	-	-
	5.0 mm	FK934R	(12)	-	-	-	-

Jaw position 130°, downwards

Length	Width	Footplate Standard Jaw opening Standard (mm)	
230 mm	2.0 mm	FK943R	(9)
	3.0 mm	FK944R	(10)

Jaw position 90°, upwards

Length	Width	Footplate Standard Jaw opening Standard (mm)	
180 mm	1.0 mm	FK948R	(8)
	2.0 mm	FK949R	(9)
	3.0 mm	FK950R	(10)
	4.0 mm	FK951R	(12)
	5.0 mm	FK952R	(12)

Jaw position 90°, downwards

Length	Width	Footplate Standard Jaw opening Standard (mm)	
180 mm	1.0 mm	FK954R	(8)
	2.0 mm	FK955R	(9)
	3.0 mm	FK956R	(10)
	4.0 mm	FK957R	(12)
	5.0 mm	FK958R	(12)

Ejector	✘	✘	✔	✔	✔	✔	✔	✔
Width (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0

AESCULAP® KERRISON

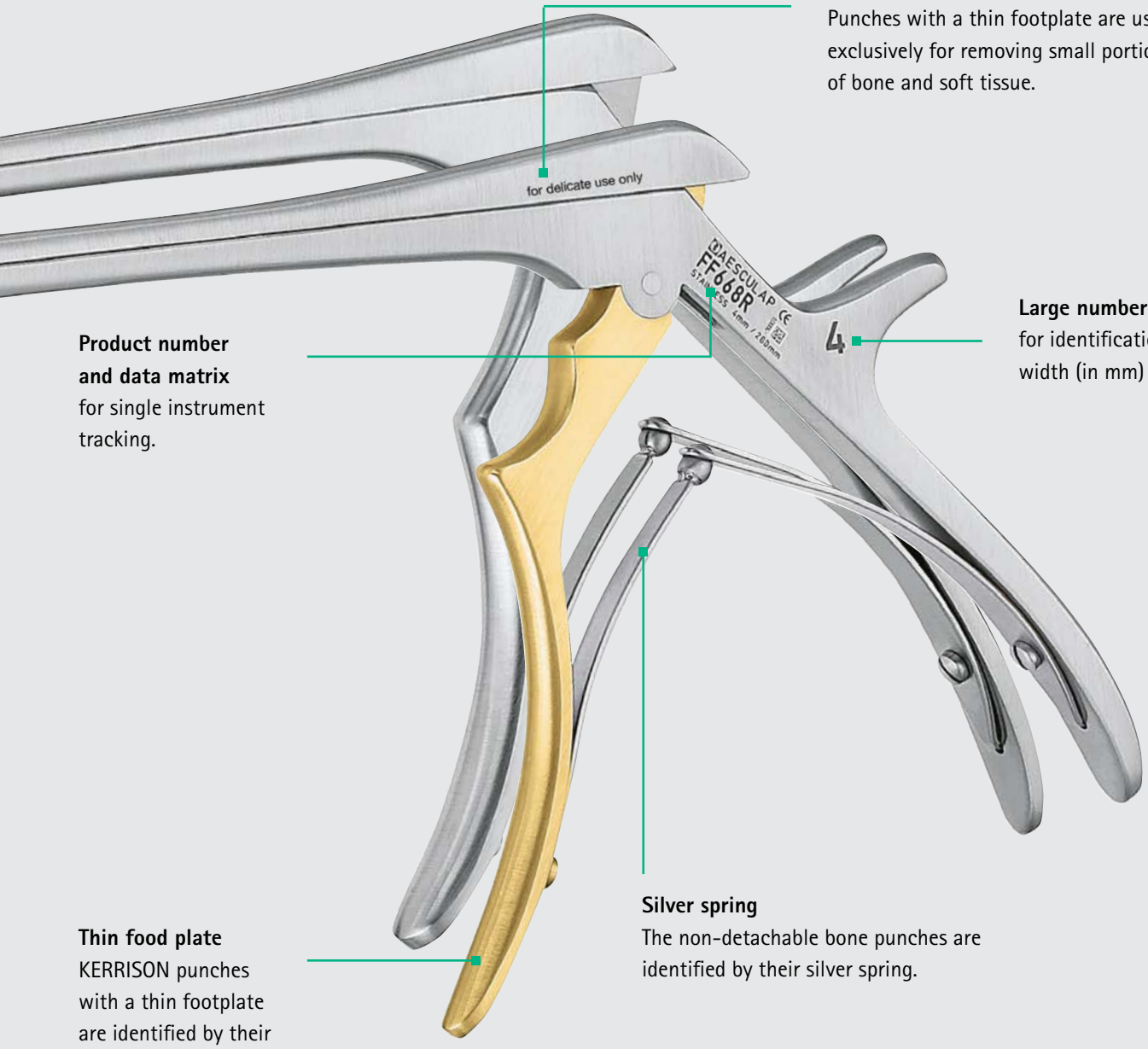
Non-detachable bone punches

PROVEN

Extra-long version
This 280 mm punch completes the portfolio. When the situation requires extra reach, this long punch can offer reserves for bridging the distance.

- > 80 non-detachable KERRISON models
- 130° / 90° upbiting / downbiting
- With standard / thin footplate
- Standard / large jaw punches

For delicate use only
Punches with a thin footplate are used exclusively for removing small portions of bone and soft tissue.



Product number and data matrix
for single instrument tracking.

Large number
for identification of jaw width (in mm) at a glance.

Thin food plate
KERRISON punches with a thin footplate are identified by their golden inner handle.

Silver spring
The non-detachable bone punches are identified by their silver spring.

AESCULAP® KERRISON

Non-detachable bone punches

Jaw position 130°, upwards

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FF715R	(8)	-	-	FF771R	(8)
	1.5 mm	FF638R	(9)	-	-	FF645R	(9)
	2.0 mm	FF717R	(9)	FF677R	(15)	FF772R	(9)
	2.5 mm	FF639R	(10)	-	-	FF646R	(10)
	3.0 mm	FF720R	(10)	FF678R	(15)	FF773R	(10)
	4.0 mm	FF724R	(12)	FF679R	(15)	FF769R	(12)
	5.0 mm	FF722R	(12)	FF680R	(15)	FF770R	(12)
	6.0 mm	FF726R	(12)	-	-	-	-
200 mm	1.0 mm	FF691R	(8)	-	-	FF661R	(8)
	1.5 mm	FF649R	(9)	-	-	FF658R	(9)
	2.0 mm	FF737R	(9)	FF660R	(15)	FF662R	(9)
	2.5 mm	FF657R	(10)	-	-	FF659R	(10)
	3.0 mm	FF738R	(10)	FF739R	(15)	FF663R	(10)
	4.0 mm	FF727R	(12)	FF745R	(15)	FF664R	(12)
	5.0 mm	FF728R	(12)	FF751R	(15)	FF665R	(12)
	6.0 mm	FF729R	(12)	FF753R	(15)	-	-
230 mm	1.0 mm	FF674R	(8)	-	-	FF734R	(8)
	2.0 mm	FF682R	(9)	-	-	FF746R	(9)
	3.0 mm	FF683R	(10)	-	-	FF747R	(10)
	4.0 mm	FF684R	(12)	-	-	FF748R	(12)
	5.0 mm	FF685R	(12)	-	-	FF749R	(12)
280 mm	1.0 mm	-	-	-	-	FF673R	(8)
	2.0 mm	FF686R	(9)	-	-	FF666R	(9)
	3.0 mm	FF687R	(10)	-	-	FF667R	(10)
	4.0 mm	FF688R	(12)	-	-	FF668R	(12)
	5.0 mm	FF689R	(12)	-	-	FF669R	(12)

Jaw position 130°, downwards

		Footplate					
		Standard		Standard		Thin	
		Jaw opening					
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FF711R	(8)	-	-	FF781R	(8)
	2.0 mm	FF712R	(9)	-	-	FF782R	(9)
	3.0 mm	FF713R	(10)	-	-	FF783R	(10)
	4.0 mm	FF714R	(12)	-	-	-	-
	5.0 mm	FF725R	(12)	-	-	-	-

Jaw position 130°, downwards

Length	Width	Footplate: Standard Jaw opening: Standard (mm)	
230 mm	2.0 mm	FF692R	(9)
	3.0 mm	FF693R	(10)

Jaw position 90°, upwards

Length	Width	Footplate: Standard Jaw opening: Standard (mm)	
180 mm	1.0 mm	FF716R	(8)
	2.0 mm	FF718R	(9)
	3.0 mm	FF750R	(10)
	4.0 mm	FF752R	(12)
	5.0 mm	FF754R	(12)

Jaw position 90°, downwards

Length	Width	Footplate: Standard Jaw opening: Standard (mm)	
180 mm	1.0 mm	FF741R	(8)
	2.0 mm	FF719R	(9)
	3.0 mm	FF721R	(10)
	4.0 mm	FF742R	(12)
	5.0 mm	FF723R	(12)

Non-detachable KERRISON punches don't have an ejector.

Width (mm)	1.0	1.5	2.0	2.5	3.0	4.0	5.0	6.0

AESCULAP® KERRISON

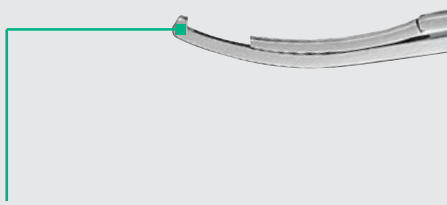
Special bone punches (non-detachable)

In addition to standard punches, AESCULAP® offers a portfolio of special bone punches for various surgical situations.

SPECIAL

Curved KERRISON punch, upbiting

Length	Width	Jaw opening	Art. no.
200 mm	2.0 mm	10 mm	FF466R
	3.0 mm	10 mm	FF467R
	4.0 mm	10 mm	FF468R
	5.0 mm	10 mm	FF469R



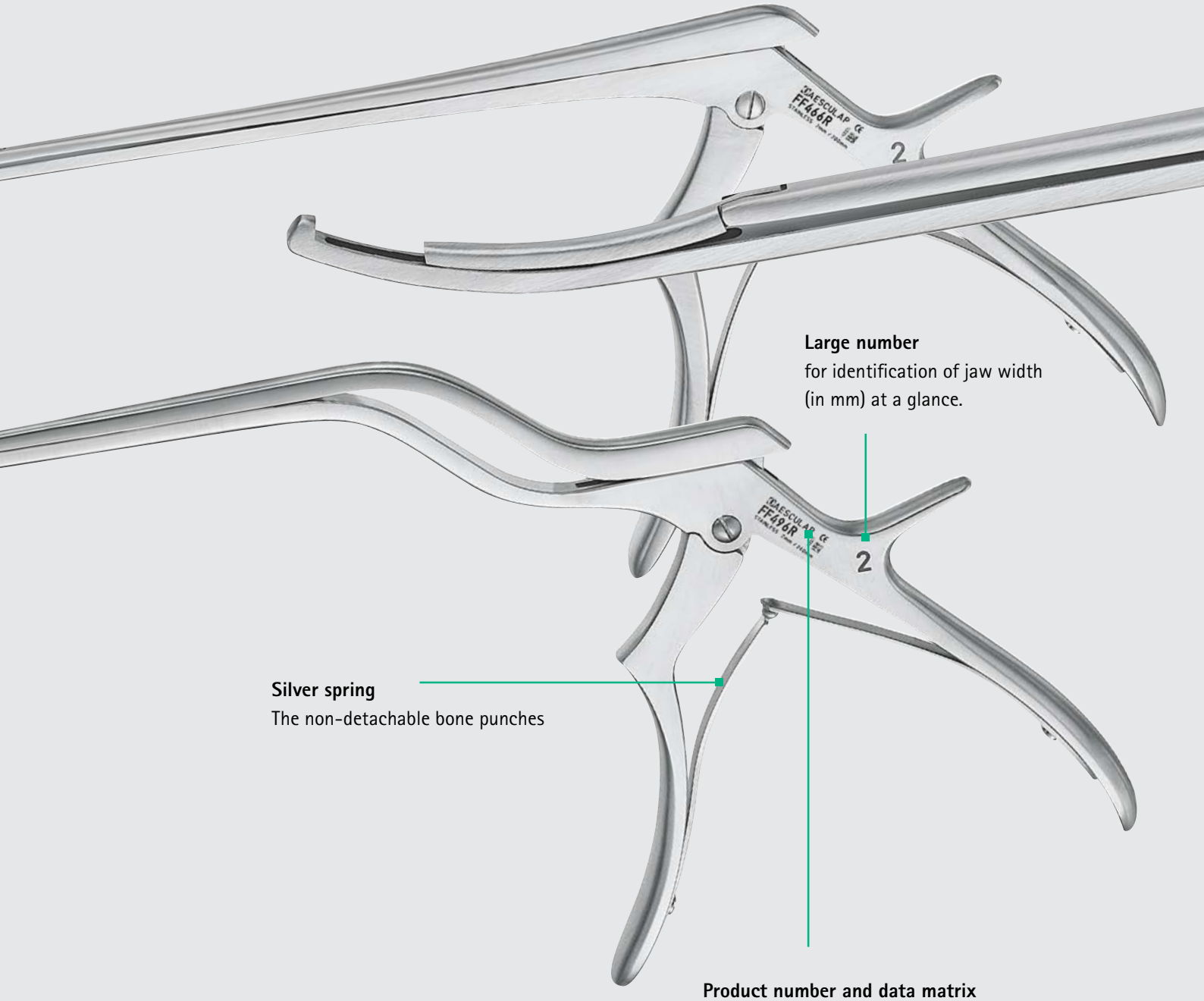
Curved KERRISON punch
Classic non-detachable bone punch with an upbiting curved jaw for the removal of bone material in difficult to access areas (i.e. in-between the vertebral arches).

Bayonet-shaped KERRISON punch, 130°, upbiting

Length	Width	Working length	Jaw opening	Art. no
240 mm	2.0 mm	170 mm	10 mm	FF496R
	3.0 mm	170 mm	10 mm	FF497R
	4.0 mm	170 mm	10 mm	FF498R
	5.0 mm	170 mm	10 mm	FF499R

Bayoned-shaped KERRISON punch
Classic non-detachable bayonet-shaped bone punch for a less obstructed view on the operating area.

- 8 KERRISON special models
- Bayonet-shaped, for an improved overview
- Curved, for areas that are difficult to reach



Large number
for identification of jaw width (in mm) at a glance.

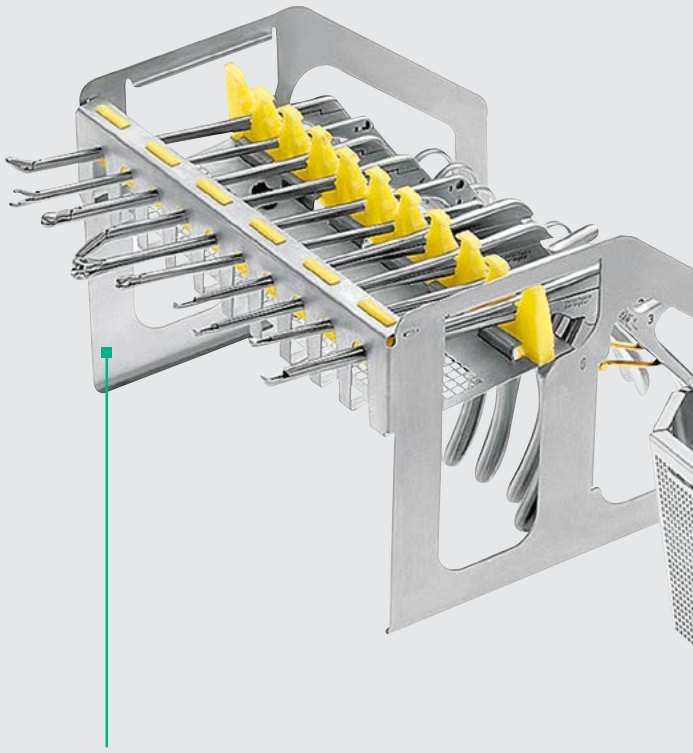
Silver spring
The non-detachable bone punches

Product number and data matrix
for single instrument tracking.

AESCULAP® KERRISON

AESCULAP® instrument organisation system

- Special Storage frame JF120R for bone punches available.
- Fully compatible with the AESCULAP® instrument organisation system.

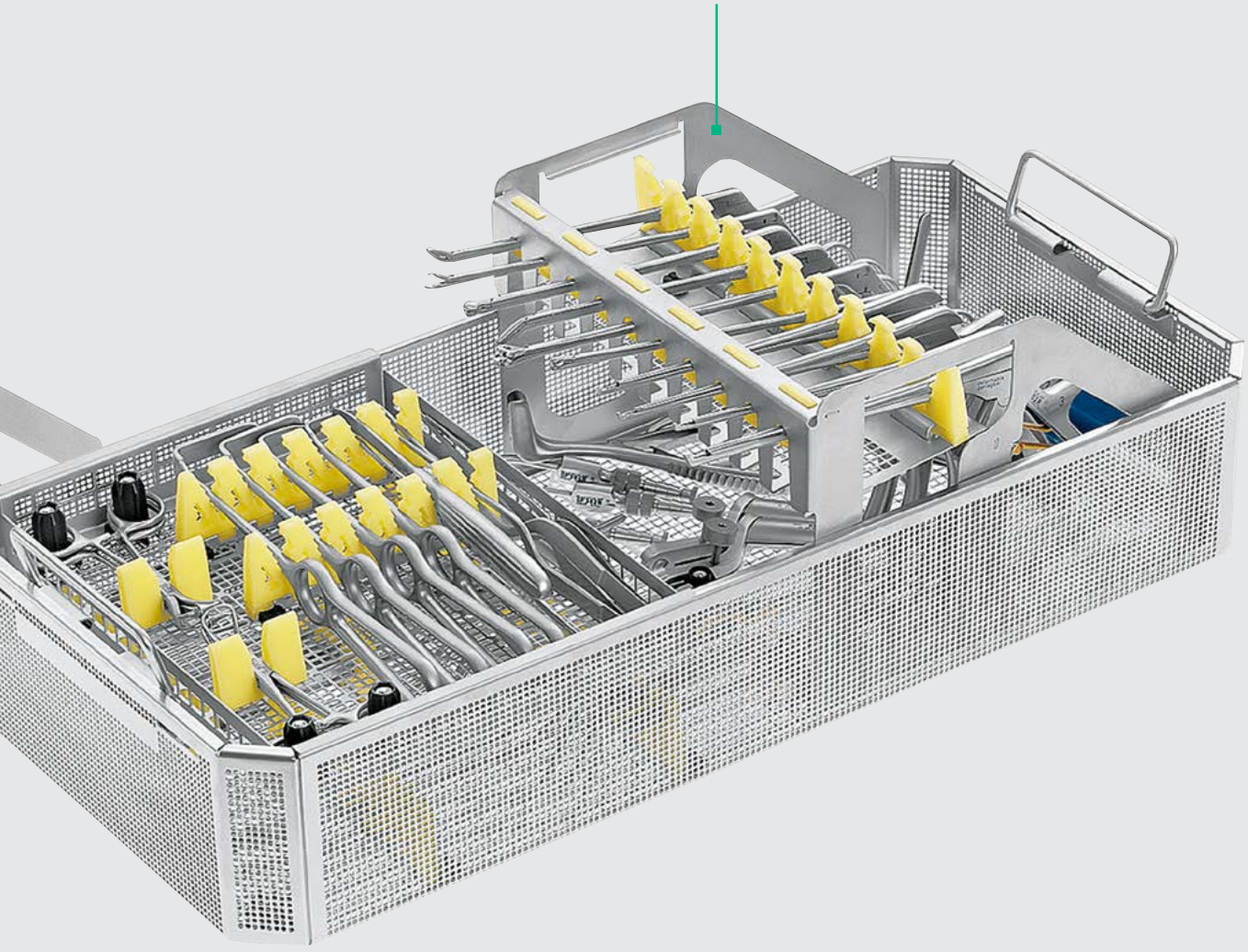


JF120R
Storage frame for bone punches
for storage during and after sterilisation.

Further information

- For further information on the reprocessing of instruments, please refer to the brochure “Proper Maintenance of Instruments”.
- Information on disassembly and reprocessing of the KERRISON bone punch is also available on the poster C22911.

Application example
Transsphenoidal hypophysectomy set.



AESCULAP® KAIRison®

Pneumatic bone punch

PNEUMATIC

Safety
Apply the safety catch to block the trigger mechanism when cleaning the punch.

Benefits

- Reduces physical effort required (1)
- Very good cutting properties (1)
- Disassembly enables efficient reprocessing
- Two-level safety mechanism
- Suitable for right- and left-handed use

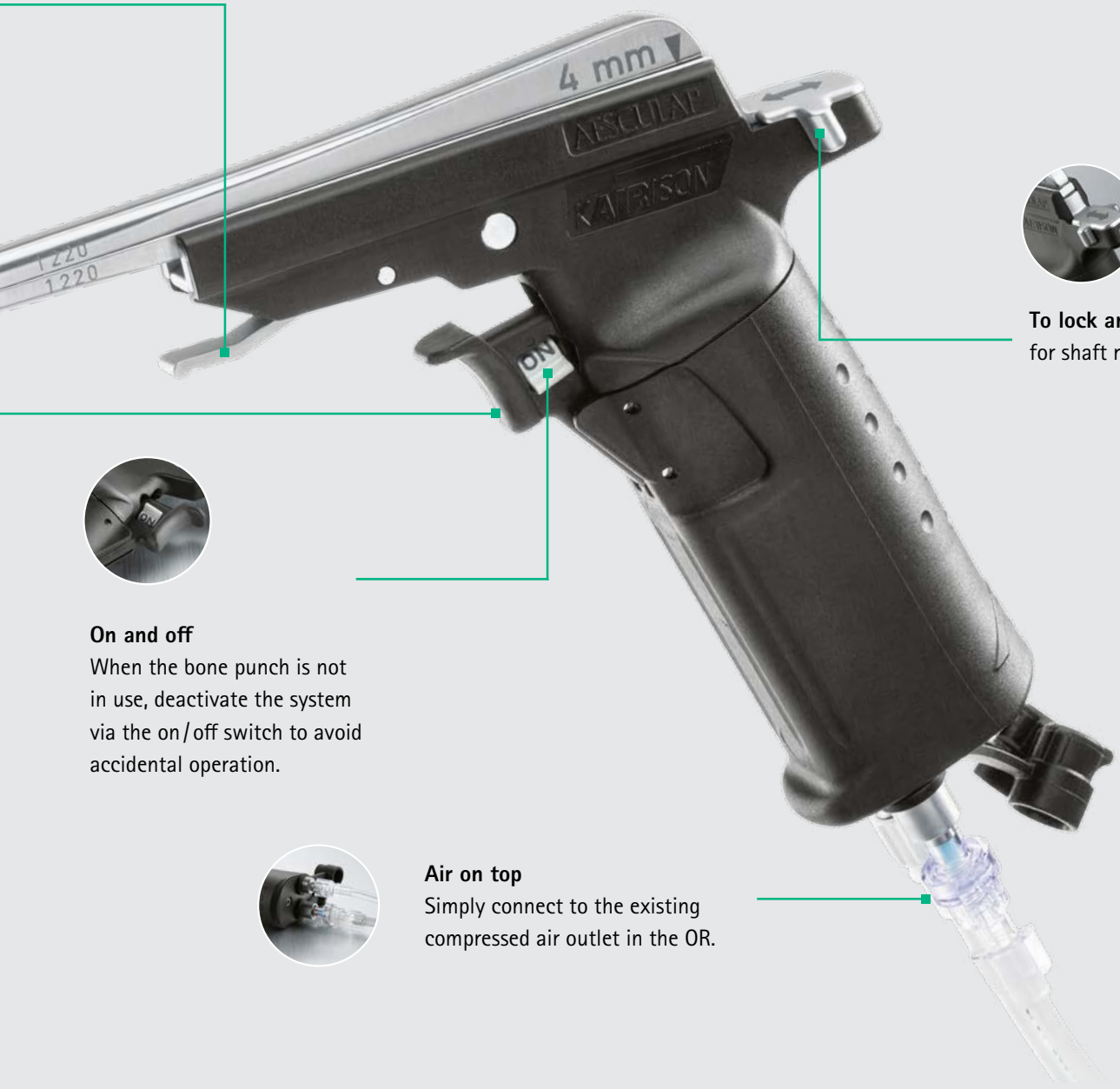
Feedback

"My first reaction after using the KAIRison® was to wonder why this unique tool had not been invented 20 years sooner"

Dr. Joseph Maroon, UPMC, Pittsburgh, PA, USA.

Complete control
There are two power settings. For positioning the bone punch, apply light pressure to the trigger and stop when you meet resistance. Release the trigger to stop the flow of air at any time, and return the bone to its original position – without punching. To cut bone, apply full pressure to the trigger.

(1) Publication Reference: Maroon JC, El-Kadi M, Bost J. Pneumatic Kerrison rongeur: technical note. Surg Neurol 2009; 71(4):466–8.



To lock and open
for shaft replacement.

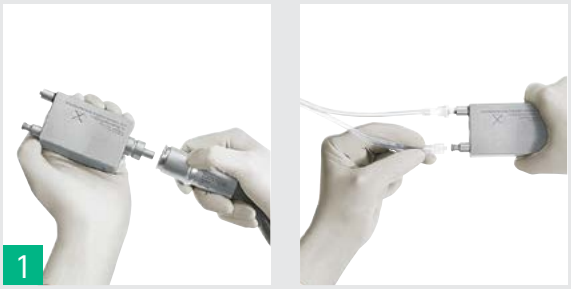
On and off
When the bone punch is not in use, deactivate the system via the on/off switch to avoid accidental operation.

Air on top
Simply connect to the existing compressed air outlet in the OR.

AESCULAP® KAIRison®

Pneumatic bone punch

Setup



Connect the tube to the compressed air outlet in the OR. Then connect the tube to the pressure reducer, and connect the disposable tube to the handle.

Insert the shaft, and turn this toward the handle until you hear it click into place.
Check if the shaft is positioned correctly.

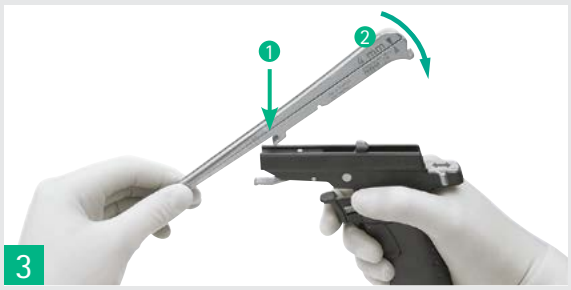
Switch the KAIRison® on. It is now ready to use.
It is that simple.

Further information in the KAIRison®
short guide poster C25511.

Shaft replacement

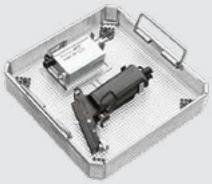
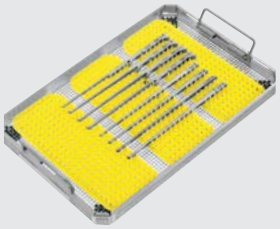
Pull the hook ❶ and turn the shaft ❷.

To detach the shaft just lift it up.



Insert the new shaft ❶ and turn this toward the handle until you hear it click into place ❷
– „click".

	Art no. / Description
	FK899R Pneumatic punch handle
Punch bracket pressure reducer Pressure reducer	**FK898R** Pressure reducer **FK887R** Punch bracket pressure reducer
	FK888SU Disposable tube (3 m) Sales unit: PAK = Package of 10 tubes

	Art no. / Description
	**FK881R** Storage rack for KAIRison® handle and pressure reducer
	**FK891R** Storage rack for KAIRison® shafts
	GA466R Pneumatic hose (5 m) with AESCULAP® – Dräger connection
	GA468R Pneumatic hose (5 m) with AESCULAP® – Schrader connection

Length	Punch shaft	Width	Footplate	Working Length	Jaw opening	Ejector
235 mm	FK882R	2 mm	standard	140 mm	12 mm	✔
	FK883R	3 mm	standard	140 mm	12 mm	✔
	FK884R	4 mm	standard	140 mm	12 mm	✔
	FK885R	5 mm	standard	140 mm	12 mm	✔
	FK886R	6 mm	standard	140 mm	12 mm	✔
285 mm	FK892R	2 mm	standard	190 mm	12 mm	✔
	FK893R	3 mm	standard	190 mm	12 mm	✔
	FK894R	4 mm	standard	190 mm	12 mm	✔
	FK895R	5 mm	standard	190 mm	12 mm	✔
	FK896R	6 mm	standard	190 mm	12 mm	✔

AESCULAP® – a B. Braun brand

Aesculap AG | Am Aesculap-Platz | 78532 Tuttlingen | Germany
Phone +49 7461 95-0 | www.bbraun.com

The main product trademark "AESCULAP" and the product trademarks "SQ.line", "Noir" and "KAIRison" are registered trademarks of Aesculap AG.

Subject to technical changes. All rights reserved. This brochure may only be used for the exclusive purpose of obtaining information about our products. Reproduction in any form partial or otherwise is not permitted.

C84802 0625/PDF/7