



NEUROSURGERY

### AESCULAP<sup>®</sup> KERRISON BONE PUNCHES MADE BY AESCULAP<sup>®</sup>

## KERRISON BONE PUNCHES MADE BY AESCULAP®

### A TRADITION OF HIGH QUALITY!

AESCULAP<sup>®</sup> has manufactured KERRISON bone punches for over 100 years.

Throughout the world, "Made by AESCULAP<sup>®</sup>" is synonymous with high quality and durability.



- (1) The gloss level of the Noir<sup>®</sup> coated KERRISON Bone Punch (FK902B) was compared to the gloss level of the uncoated KERRISON bone punch (FK902R) by means of a glossmeter. The reflections (gloss levels were determined at 6 different measure points) were reduced by 60% (crosswise), and 80% (lengthwise) on average.
- (2) Publication Reference: Maroon JC, El-Kadi M, Bost J. Pneumatic Kerrison rongeur: technical note. Surg Neurol 2009; 71(4):466–8.



#### AESTHETIC KERRISON Noir<sup>®</sup> Bone Punch

...detachable, with a special black coating for reduced light reflection in the operating area (1).

#### DETACHABLE Detachable KERRISON Bone Punch

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...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<sup>®</sup> Pneumatic Bone Punch

...reduces physical effort – technology that makes life easier (2).





AESCULAP® Noir® - COATED, DETACHABLE BONE PUNCHES

#### ASSEMBLY IN 3 STEPS:



1. Attach the slider and push it forwards



2. Push the inner handle upwards and open the handle.



3. Insert the spring in the rear handle.

(Disassembly see page 8)

- >60 KERRISON Noir<sup>®</sup> models
- 130°/90° upbiting
- With standard / thin footplate
- Standard/large jaw punches

# AESTHETIC



#### BLACK SURFACE COATING reduces distracting light reflections.

#### STANDARD JAW PUNCHES

8 - 12 mm jaw opening.

#### LARGE JAW PUNCHES

offer an up to 66% wider jaw opening (15 mm) compared to standard punches.

#### ADVANTAGES

- Disassembly and assembly without tools.
- Easier verification of cleaning success due to less overlapping surfaces.
- Black Noir<sup>®</sup> coating reduces light reflections (1).

#### 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.

#### NUMERICAL CODE

for the identification of the two matching components during assembly.

001

for delicate use only

#### **GOLDEN SPRING**

The detachable bone punches are identified by their golden spring.

#### THIN FOOT PLATE

KERRISON Noir<sup>®</sup> punches with a thin footplate are identified by their golden inner handle.

AESCULAP (C FK908B STAINLESS 3 mm / 180 mm

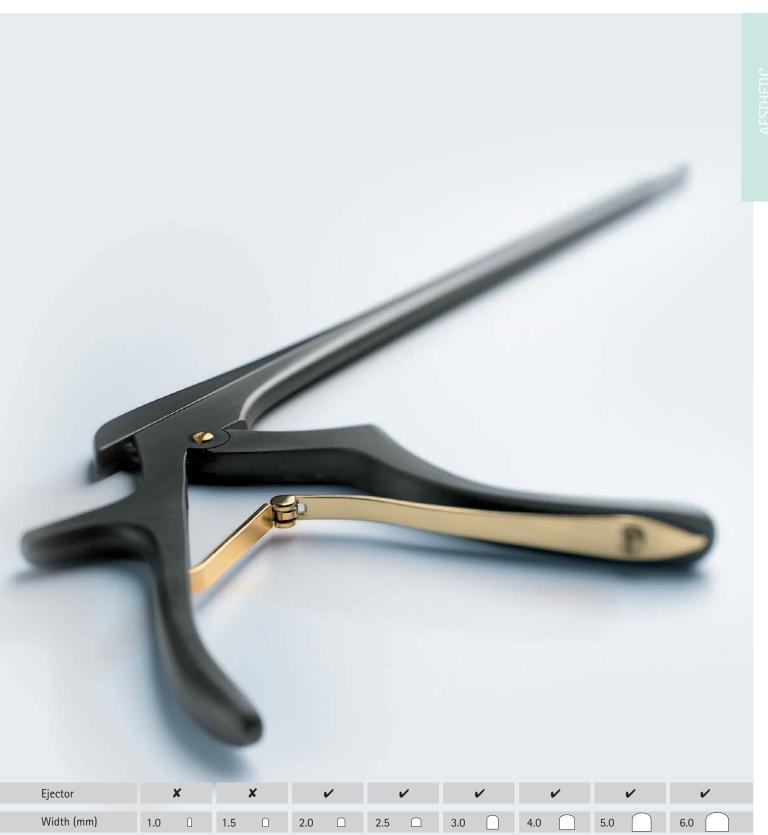
PRODUCT NUMBER AND DATA MATRIX for single instrument tracking.

AESCULAP® Noir® - COATED. DETACHABLE BONE PUNCHES

JAW POSITIC	)N 130°,						
UPWARDS				Footpl	ate		
		Standa	ard	Stand		Thir	1
				Jaw ope			
		Standard	(mm)	Large	(mm)	Standard	(mm)
		·					
Length	Width					-	
180 mm	1.0 mm	FK900B	(8)	-	-	FK906B	(8)
	1.5 mm	FK911B	(9)	-	-	FK923B	(9)
	2.0 mm	FK901B	(9)	FK971B	(15)	FK907B	(9)
	2.5 mm	FK912B	(10)	-	-	FK924B	(10)
	3.0 mm	FK902B	(10)	FK972B	(15)	FK908B	(10)
	4.0 mm	FK903B	(12)	FK973B	(15)	FK909B	(12)
	5.0 mm	FK904B	(12)	FK974B	(15)	FK910B	(12)
	6.0 mm	FK905B	(12)	-	-	-	-
200 mm	1.0 mm	FK960B	(8)	-	-	FK961B	(8)
	1.5 mm	FK966B	(9)	-	-	FK968B	(9)
	2.0 mm	FK913B	(9)	FK970B	(15)	FK962B	(9)
	2.5 mm	FK967B	(10)	-	-	FK969B	(10)
	3.0 mm	FK914B	(10)	FK982B	(15)	FK963B	(10)
	4.0 mm	FK915B	(12)	FK983B	(15)	FK964B	(12)
	5.0 mm	FK916B	(12)	FK984B	(15)	FK965B	(12)
	6.0 mm	FK917B	(12)	FK985B	(15)	-	-
230 mm	1.0 mm	FK918B	(8)	-	-	FK929B	(8)
	2.0 mm	FK919B	(9)	-	-	FK925B	(9)
	3.0 mm	FK920B	(10)	-	-	FK926B	(10)
	4.0 mm	FK921B	(12)	-	-	FK927B	(12)
	5.0 mm	FK922B	(12)	-	-	FK928B	(12)
280 mm	1.0 mm	FK981B	(8)	-	-	-	-
	2.0 mm	FK986B	(9)	-	-	FK976B	(9)
	3.0 mm	FK987B	(10)	_	-	FK977B	(10)
	4.0 mm	FK988B	(12)	-	-	FK978B	(12)
	5.0 mm	FK989B	(12)	-	-	FK979B	(12)

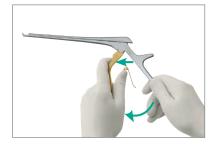
### JAW POSITION 90°, UPWARDS

				Footp	late		
		Standard Standard		Thin			
			Jaw opening				
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width						
180 mm	1.0 mm	FK948B	(8)	-	-	-	-
	2.0 mm	FK949B	(9)	-	-	-	-
	3.0 mm	FK950B	(10)	-	-	-	-
	4.0 mm	FK951B	(12)	-	-	-	-
	5.0 mm	FK952B	(12)	-	-	-	-



DETACHABLE BONE PUNCHES

#### DISASSEMBLY IN 3 STEPS:



1. Unhook the spring from the rear handle.



2. Close the handle completely and pull the inner handle downwards.



**3.** Pull back the slider to remove.

(Assemply see page 4)

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

# DETACHABLE



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EJECTOR for removal of punched-out material.

### ADVANTAGES:

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

#### NUMERICAL CODE

for the identification of the two matching components during assembly.

1006

#### **GOLDEN SPRING**

The detachable bone punches are identified by their golden spring.

#### THIN FOOT PLATE

KERRISON Noir<sup>®</sup> punches with a thin footplate are identified by their golden inner handle.

#### FOR DELICATE USE ONLY

1,5

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.



PRODUCT NUMBER AND DATA MATRIX for single instrument tracking.

DETACHABLE BONE PUNCHES

### JAW POSITION 130°, UPWARDS

UPWARDS				Footp	ate		
		Stand	ard	Stand	ard	Thir	1
				Jaw ope	enina		
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width	<u></u>		<u> </u>		<u> </u>	
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

DUVVINVARD	15			Footp	late		
		Stand	ard	Stand	lard	Thir	1 I
				Jaw op	ening		
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width	<b>F</b>				<u></u>	
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 DOWNWARDS	130°,	Footpl Standa Jaw ope Standard	ard
Length	Width		
230 mm	2.0 mm 3.0 mm	FK943R FK944R	(9) (10)

JAW POSITION UPWARDS	Footpla Standa Jaw ope Standard	ard	
Length	Width	<u> </u>	
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	Footpl Standa		
		Jaw ope Standard	ning (mm)
Length	Width		
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	×	×	~	~	~	<b>v</b>	<b>v</b>	<b>v</b>
Width (mm)	1.0	] 1.5	2.0	2.5	3.0	4.0	5.0	6.0

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.

#### LARGE NUMBER

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



PRODUCT NUMBER AND DATA MATRIX for single instrument tracking.

#### SILVER SPRING

for delicate use only

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

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#### THIN FOOT PLATE

KERRISON Noir<sup>®</sup> punches with a thin footplate are identified by their golden inner handle.

NON-DETACHABLE BONE PUNCHES

### JAW POSITION 130°, UPWARDS

UPWARDS				Footpl	late		
		Stand	ard	Stand	ard	Thir	ı
				Jaw ope	enina		
		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

DUVVINVARD	12			Footp	late		
		Stand	ard	Stand	lard	Thir	1
				Jaw op	ening		
		Standard	(mm)	Large	(mm)	Standard	(mm)
Length	Width					<u> </u>	
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 DOWNWARDS	130°,	Footpl: Standa	
		Jaw ope	ning
		Standard	(mm)
Length	Width		
230 mm	2.0 mm 3.0 mm	FF692R FF693R	(9) (10)

### JAW POSITION 90°, UPWARDS

or writes	Standard			
		Jaw opening		
		Standard	(mm)	
Length	Width			
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		Footplate Standard			
	Jaw opening		ning		
			(mm)		
Length	Width				
180 mm	1.0 mm	FF741R	(8)		
	2.0 mm	FF719R	(9)		
	2.0 11111	1171011	(-)		
	3.0 mm	FF721R	(10)		
			. ,		

				_	5.0 mm			FF723R (12)						
Non-detachable KEF	RRISON I	punches	don't ha	ave an ej	ector.									
Width (mm)	1.0		1.5		2.0		2.5		3.0		4.0	5.0	6.0	

SPECIAL BONE PUNCHES (NON-DETACHABLE)

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

#### 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

### 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

# SPECIAL

#### **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

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



Extra long – 12 KERRISON models

#### LARGE NUMBER

10 9.9

2

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

#### SILVER SPRING

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

### AESCULAP (¢ FF496R )

PRODUCT NUMBER AND DATA MATRIX for single instrument tracking.



Intermediate sizes – 30 KERRISON models



# AESCULAP<sup>®</sup> KERRISON

AESCULAP® INSTRUMENT ORGANISATION SYSTEM

- Special Storage frame JF120R for bone punches available
- Fully compatible with the AESCULAP<sup>®</sup> Instrument Organisation System

# AESCULAP® InOS

JF120R STORAGE FRAME FOR BONE PUNCHES for storage during and after sterilization.



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 KERRISON poster C22911.

# AESCULAP® KAIRison®

PNEUMATIC BONE PUNCH

### **»** THE BENEFITS

- Reduces physical effort required (2)
- Very good cutting properties (2)
- Disassembly enables efficient reprocessing
- Two-level safety mechanism
- Suitable for right- and left-handed use

### **»** THE FEEDBACK

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

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

# PNEUMATIC

#### SAFETY

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

-



#### 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 cute bone, apply full pressure to the trigger.



### TECHNOLOGY THAT MAKES LIFE EASIER.



#### 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 TAP

Simply connect to the existing compressed air outlet in the OR.



# AESCULAP® KAIRison®

### PNEUMATIC BONE PUNCH

#### SETUP IN JUST THREE STEPS



1. 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.

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



3. Switch the KAIRison<sup>®</sup> on. It is now ready to use. It is that simple.

Further information in the KAIRison<sup>®</sup> short guide poster C25511.

#### SHAFT REPLACEMENT



1. Pull the hook (1) and turn the shaft (2).



2. To detach the shaft just lift it up.



Insert the new shaft (1) and turn this toward the handle until you hear it click into place (2) – "click".

	Art no. / Descripti	on		Art no.	/ Description
	FK899R Pneumatic punch ha	andle		FK881R Storage KAIRison pressur	rack for 1 <sup>®</sup> handle and
Punch bracket pressure reducer	FK898R Pressure reducer FK887R Punch bracket press reducer	ure		FK891R Storage KAIRisor	rack for
	FK888SU			GA466	)
	Disposable tube (3 n Sales unit: PAK = Package	n)		Pneuma with AE	tic hose (5 m) SCULAP <sup>®</sup> – connection
	of 10 tubes			GA468 Pneuma with AE	
		4 mm ¥			
Length Punch shaft	Width	Footplate	Working Length	Jaw opening	Ejector
	2 mm	standard	140 mm	12 mm	~
235 mm FK882R	2				
235 mm FK882R FK883R	3 mm	standard	140 mm	12 mm	v

standard

standard

standard

standard

standard

standard

standard

140 mm

140 mm

190 mm

190 mm

190 mm

190 mm

190 mm

12 mm

V

~

~

~

~

~

~

FK885R

FK886R

FK892R

FK893R

FK894R

FK895R

FK896R

285 mm

5 mm

6 mm

2 mm

3 mm

4 mm

5 mm

6 mm

 $\Box$ 

PNEUMATIC

### AESCULAP<sup>®</sup> – a B. Braun brand

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