



SAGITTA EVL Revision

Revision femoral stems

SURGICAL
TECHNIQUE



SUMMARY

Sagitta EVL R range presentation	04
Dimensions and references	06
Compatible femoral heads	08
Compatible acetabular cups	09
Surgical technique	10
Instruments sets	16

Macrostructure
(front view)



Sagitta EVL R range presentation

The **Sagitta EVL R** range of implants is comprised of revision femoral stems with indications including fracture cases, necrosis, primary and secondary arthrosis, to be implanted with or without femoral flap.

They can be used for bone losses classifications as SOFCOT II to IV, AAOS type 1a to 1c and Paprosky types II and III.

Biomechanical concept

The anatomically designed **Sagitta EVL R** is manufactured from titanium and is entirely coated with hydroxyapatite (HA). It features two distal holes for optional locking.

Its thinner neck geometry and highly polished surface ensure optimal association with the acetabular cup.

Furthermore, the **Sagitta EVL R** offers the surgeon the option to insert two pins through distal holes using a proven targeting device, thus addressing the needs of most revision cases.



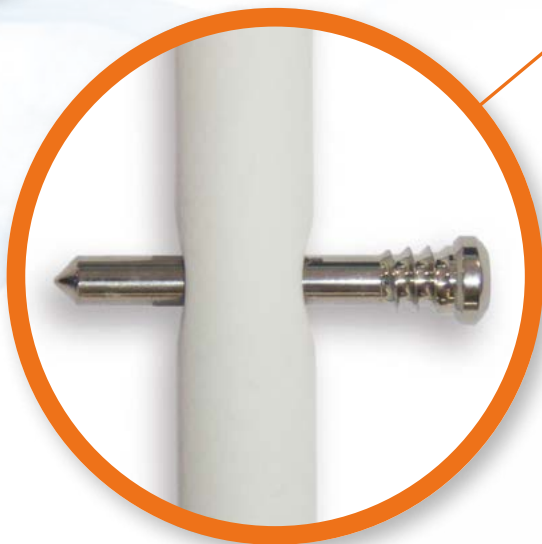
Optional distal locking

Optional distal locking can be achieved using two titanium screws (available in 9 lengths, from 25 mm to 65 mm).

The targeting device is rigidly attached to the upper end of the femoral stem, ensuring reliable and reproducible locking of the implant.



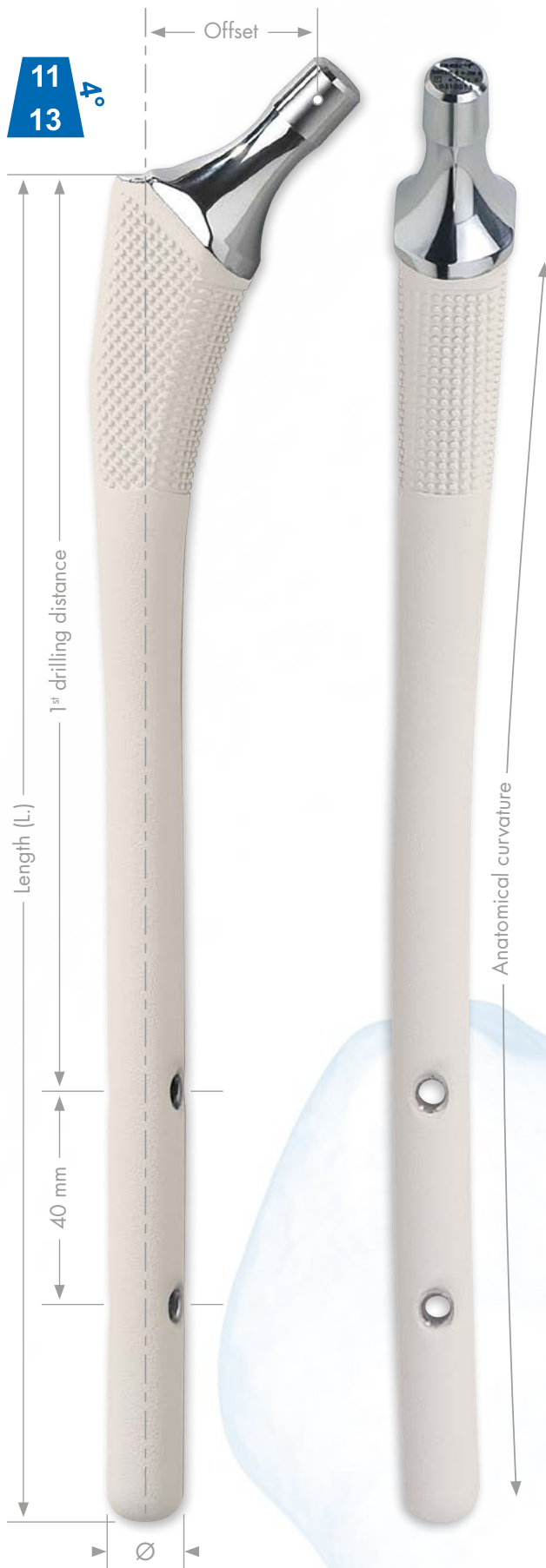
Macrostructure (sagittal view)



Smooth and round extremity



Implant dimensions and references



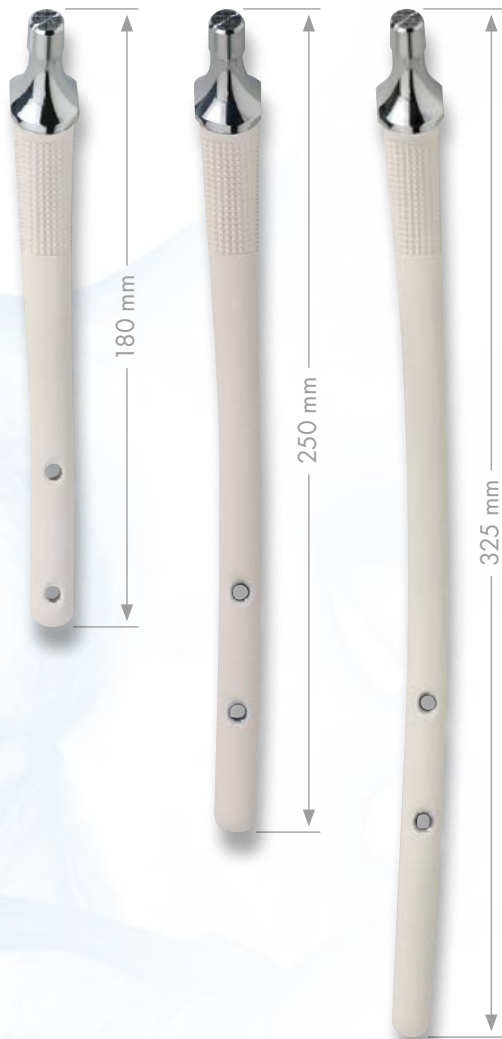
L.	Size	Ø (mm)	Offset (mm)	1 st drilling distance
180 mm	2	Ø12	37	130 mm
	3	Ø13	37,5	
	4	Ø14	38	
	5	Ø15	38,5	
	6	Ø16	39	
	250 mm	2	Ø12	
3		Ø13	37,5	
4		Ø14	38	
5		Ø15	38,5	
6		Ø16	39	
325 mm		3	Ø13	37,5
	4	Ø14	38	
	5	Ø15	38,5	
	6	Ø16	39	

Locking screws

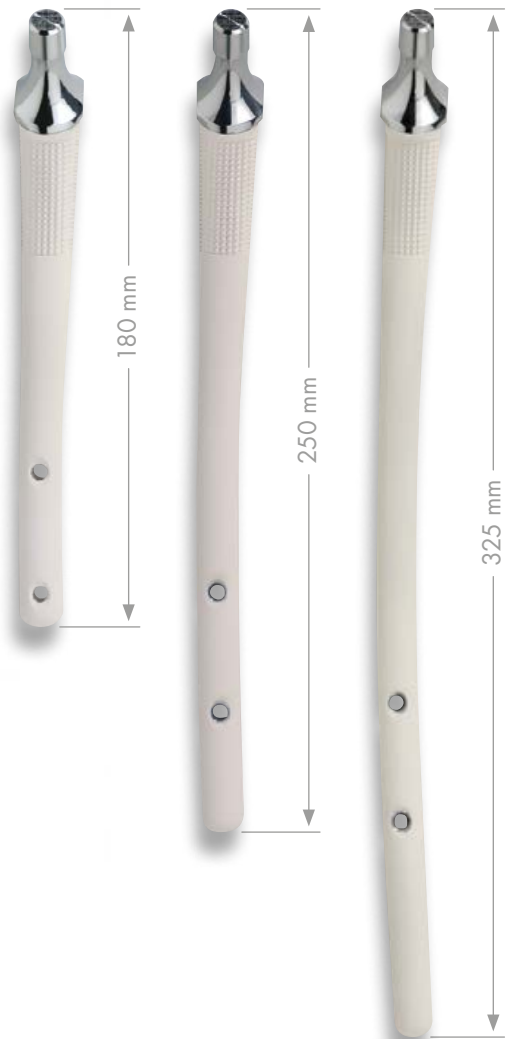


L.	Code	Part number
25 mm	CLAV.EVL 25	RM69020020
30 mm	CLAV.EVL 30	RM69020021
35 mm	CLAV.EVL 35	RM69020022
40 mm	CLAV.EVL 40	RM69020023
45 mm	CLAV.EVL 45	RM69020024
50 mm	CLAV.EVL 50	RM69020025
55 mm	CLAV.EVL 55	RM69020026
60 mm	CLAV.EVL 60	RM69020027
65 mm	CLAV.EVL 65	RM69020028

LEFT STEMS



RIGHT STEMS





L.	Ø (mm)	Code	Part number
180 mm	Ø 12	SAGIT.EVL R 2-180 G	RM10450520
	Ø 13	SAGIT.EVL R 3-180 G	RM10450521
	Ø 14	SAGIT.EVL R 4-180 G	RM10450522
	Ø 15	SAGIT.EVL R 5-180 G	RM10450523
	Ø 16	SAGIT.EVL R 6-180 G	RM10450524
250 mm	Ø 12	SAGIT.EVL R 2-250 G	RM10450525
	Ø 13	SAGIT.EVL R 3-250 G	RM10450526
	Ø 14	SAGIT.EVL R 4-250 G	RM10450527
	Ø 15	SAGIT.EVL R 5-250 G	RM10450528
	Ø 16	SAGIT.EVL R 6-250 G	RM10450529
325 mm	Ø 13	SAGIT.EVL R 3-325 G	RM10450530
	Ø 14	SAGIT.EVL R 4-325 G	RM10450531
	Ø 15	SAGIT.EVL R 5-325 G	RM10450532
	Ø 16	SAGIT.EVL R 6-325 G	RM10450533

L.	Ø (mm)	Code	Part number
180 mm	Ø 12	SAGIT.EVL R 2-180 D	RM10450500
	Ø 13	SAGIT.EVL R 3-180 D	RM10450501
	Ø 14	SAGIT.EVL R 4-180 D	RM10450502
	Ø 15	SAGIT.EVL R 5-180 D	RM10450503
	Ø 16	SAGIT.EVL R 6-180 D	RM10450504
250 mm	Ø 12	SAGIT.EVL R 2-250 D	RM10450505
	Ø 13	SAGIT.EVL R 3-250 D	RM10450506
	Ø 14	SAGIT.EVL R 4-250 D	RM10450507
	Ø 15	SAGIT.EVL R 5-250 D	RM10450508
	Ø 16	SAGIT.EVL R 6-250 D	RM10450509
325 mm	Ø 13	SAGIT.EVL R 3-325 D	RM10450510
	Ø 14	SAGIT.EVL R 4-325 D	RM10450511
	Ø 15	SAGIT.EVL R 5-325 D	RM10450512
	Ø 16	SAGIT.EVL R 6-325 D	RM10450513

Compatible femoral heads

11
13 → The femoral heads compatible with the **Sagitta EVL-R** have a 11/13 taper and are the following:

Materials	Ø (mm)	Code	Part Number
 Stainless steel (ISO 5832-9)	Ø 22,2	SI 22,2/-2,5 (- 2,5 mm)	RM30050009
		SI 22,2/0 (0)	RM30050010
		SI 22,2/+4 (+ 4 mm)	RM30050011
	Ø 28	SI 28/-4 (- 4 mm)	RM30050031
		SI 28/0 (0)	RM30050032
		SI 28/+4 (+ 4 mm)	RM30050033
	Ø 32	SI 32/-4 (- 4 mm)	RM96040020
		SI 32/0 (0)	RM30050050
		SI 32/+4 (+ 4 mm)	RM96040024
	 Cobalt-chromium (ISO 5832-12)	Ø 22,2	SCC 22,2/0 (0)
SCC 22,2/+4 (+ 4 mm)			RM30300015
Ø 28		SCC 28/-4 (- 4 mm)	RM30300051
		SCC 28/0 (0)	RM30300055
		SCC 28/+4 (+ 4 mm)	RM30300059
		SD 28/-4 (- 4 mm)	RM30750001
Ø 28	SD 28/0 (0)	RM30750002	
	SD 28/+4 (+ 4 mm)	RM30750003	
	Ø 32	SD 32/-4 (- 4 mm)	RM30750004
SD 32/0 (0)		RM30750005	
SD 32/+4 (+ 4 mm)		RM30750006	
Ø 36	SD 36/-4 (- 4 mm)	RM30750007	
	SD 36/0 (0)	RM30750008	
	SD 36/+4 (+ 4 mm)	RM30750009	

Compatible acetabular cups

The **Sagitta EVL-R** femoral stems range is compatible with the following acetabular cups:



Surgical technique

Pre-operative planning is essential to check the maximum distal diameter of the implant to be used, and its length.

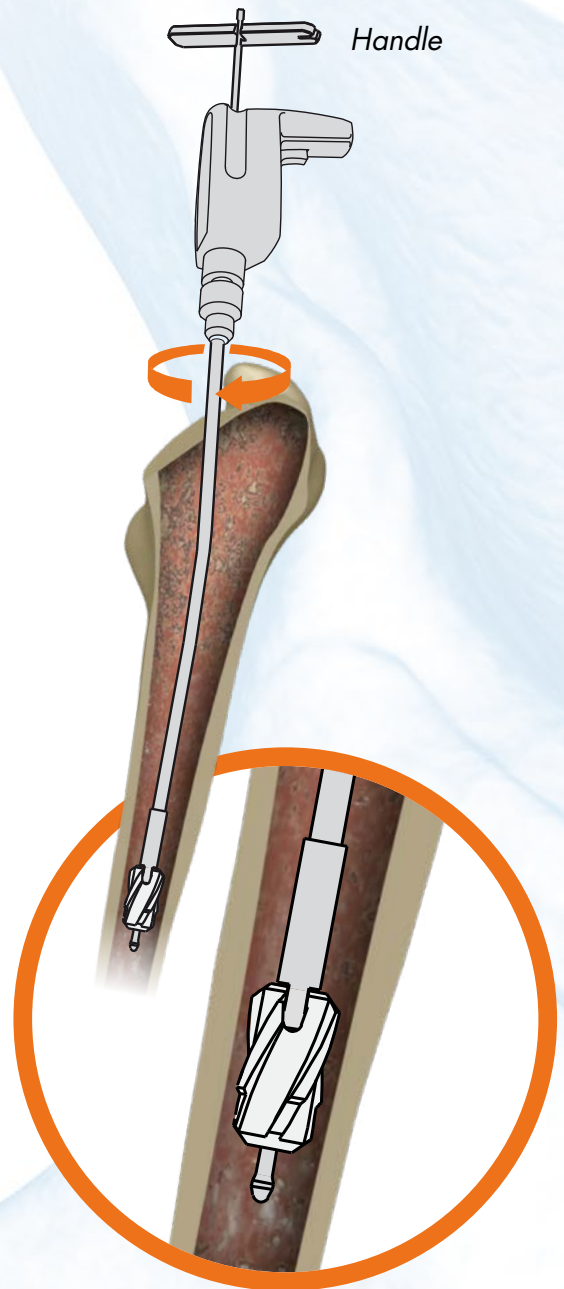
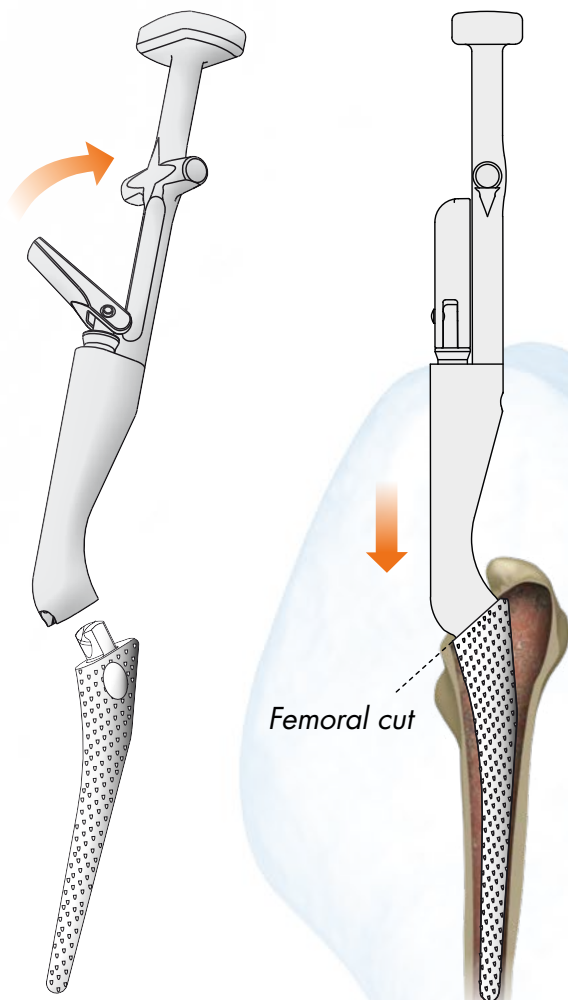
1 Diaphyseal reaming

This stage determines the distal diameter of the implant.

Reaming is performed with the flexible shaft equipped with a reamer head of gradually increasing size ($\text{Ø}9$ to $\text{Ø}18\text{mm}$) until the desired diameter is reached.

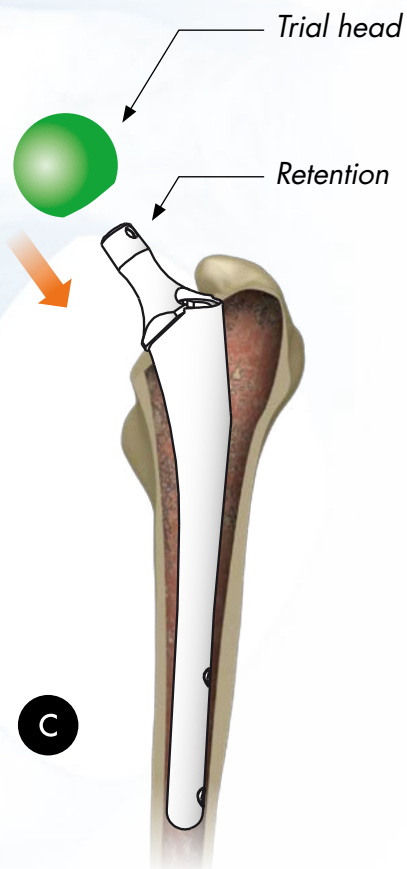
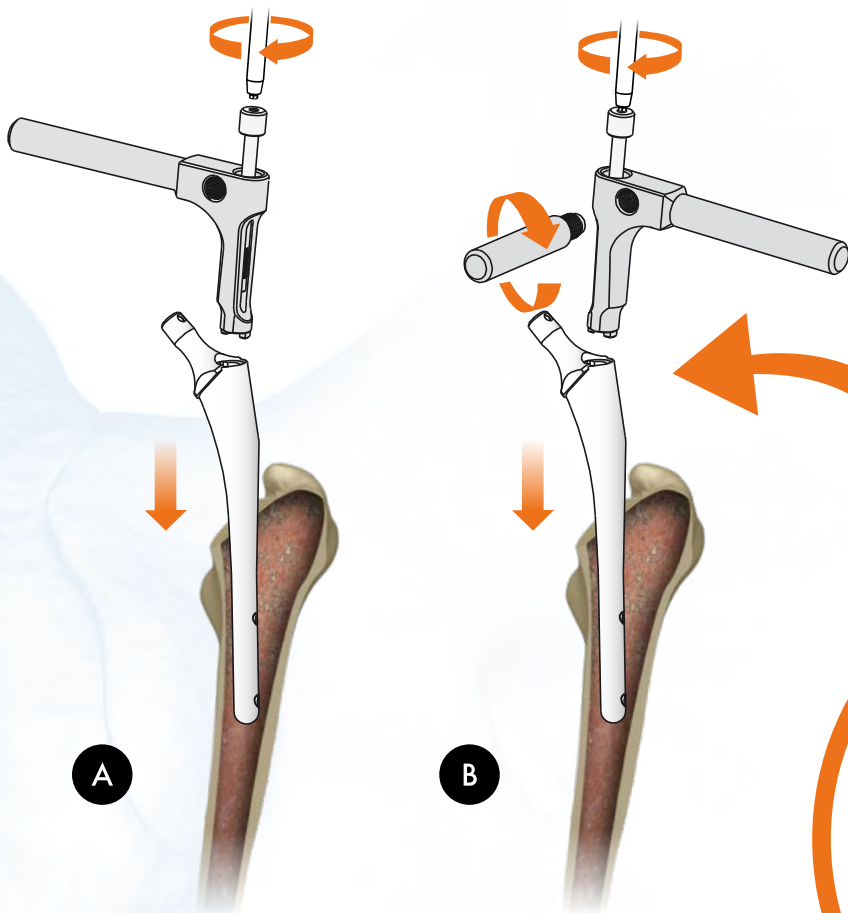
The femur should be reamed up to 1 mm or 2 mm more than the distal diameter of the prosthesis (see column 2 of the chart on page 2).

The longer the prosthesis to be used, the more the reaming diameter must be greater than the diameter of the implant to be used (+2 to 3 mm for 325 mm-long stems).



2 Femur preparation

The trial stem broaches included in the standard instrument set are used to gradually prepare the metaphyseal region of the femur.



3 Trial implant placement

- Ⓐ The trial stem is fitted with the alignment handle facing or opposite the greater trochanter.
- Ⓑ It is recommended that the implant with a distal section of diameter greater than 12 mm be preferred.
- Ⓒ Proceed with limb adjustment using the different trial heads.

4

Targeting device assembly

It is recommended that **the targeting device be assembled prior to final impaction of the stem.**

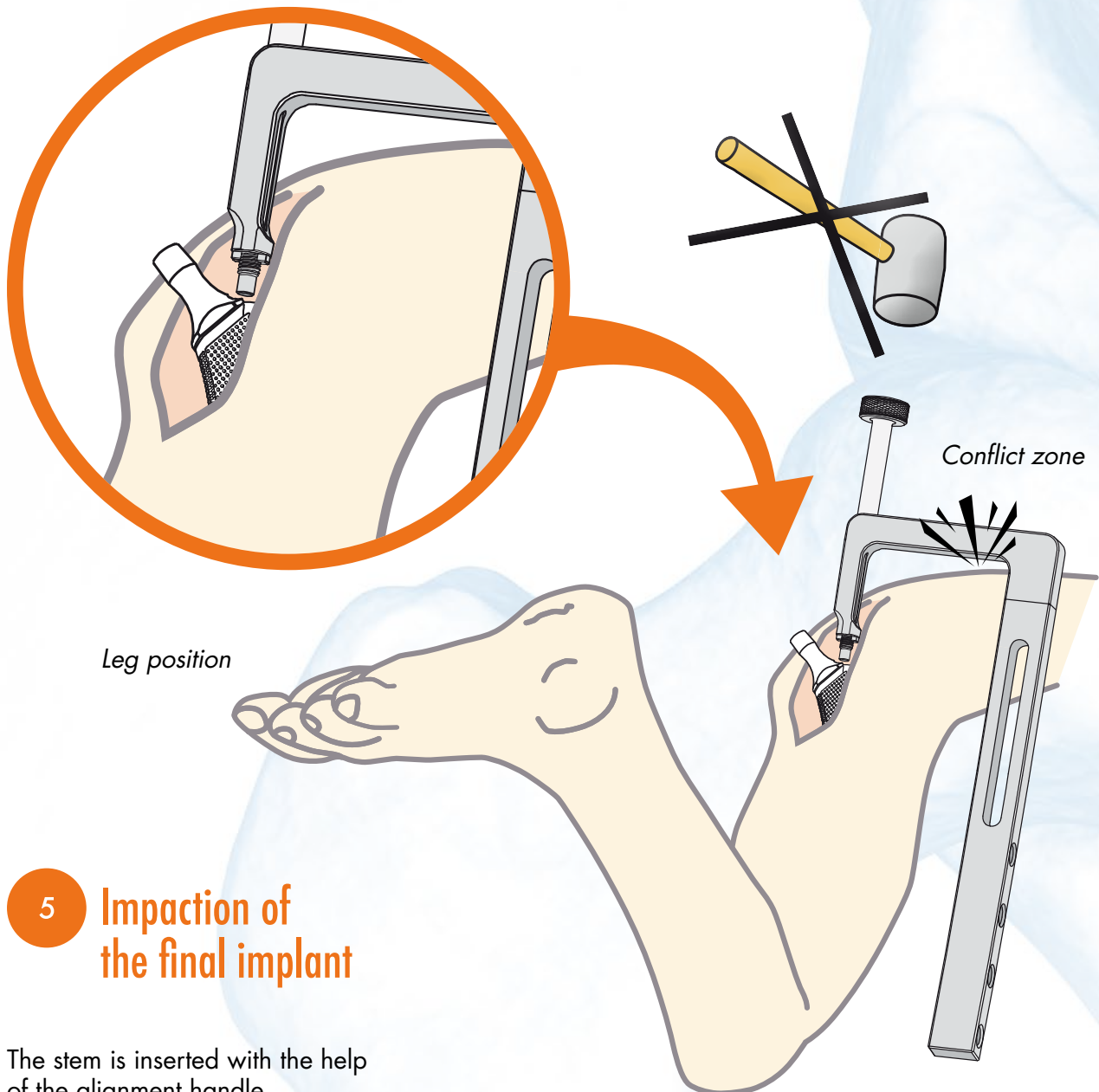
The implant is then inserted gently down into the femur.

On the table, check the thumbwheel torque and slide the centre punch into the two holes. If the centre punch slides easily into the holes, this will confirm that the implant is precisely centred on the targeting device and also enable the requisite locking points to be memorised.

Important:

- do not force or hammer on the targeting device,
- check that the targeting device is properly fitted to the stem,
- check the thumbwheel torque and the stability of the implant.

In the posterior approach, the targeting device may come into conflict with the soft tissues when the leg is dislocated. A slight rotation in the direction of reduction will facilitate the connection.



5

Impaction of the final implant

The stem is inserted with the help of the alignment handle (until it reaches the predetermined position).

6 Insertion guide and pin

Locate the appropriate drilling positions for the implant.

Introduce both insertion guides through the soft tissues until contact bone is reached.

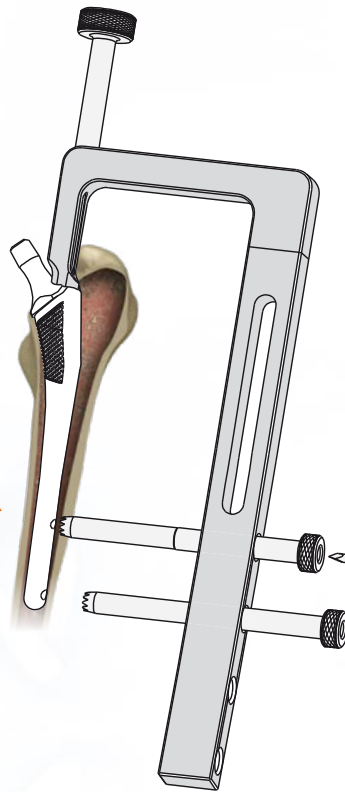
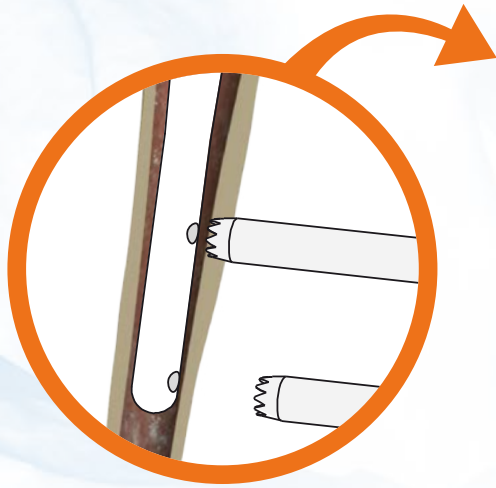
Important:

Mark the femur with the centre punch by turning and gently hammering. The two guides are left in place as the preparatory work continues.

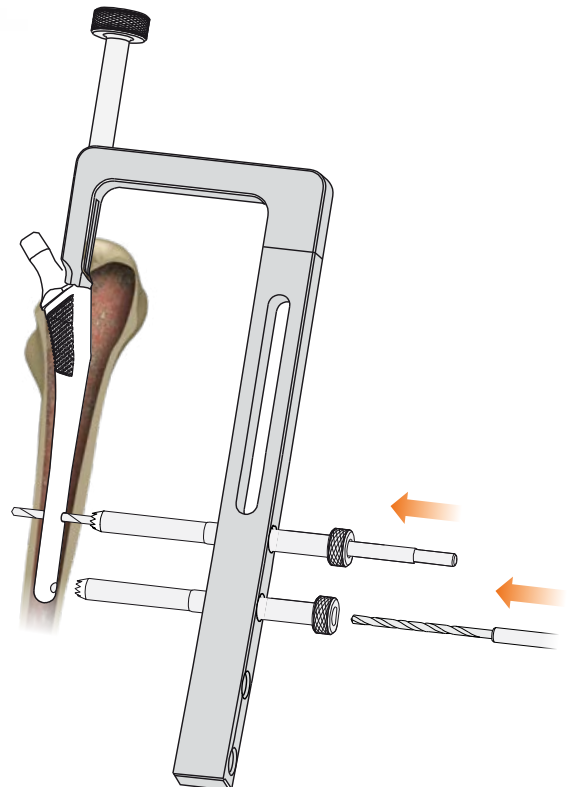


Be careful:
follow the
hole position.

Bone contact



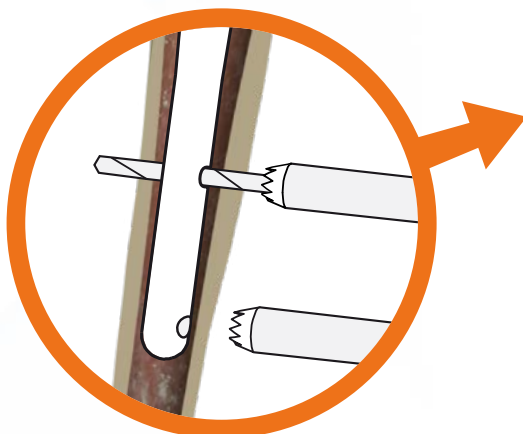
Centre punch



7 Bi-cortical drilling

The proximal hole is made first and the drill bit left in place.

Proceed in the same way for the distal hole.



8

Tapping the cortex

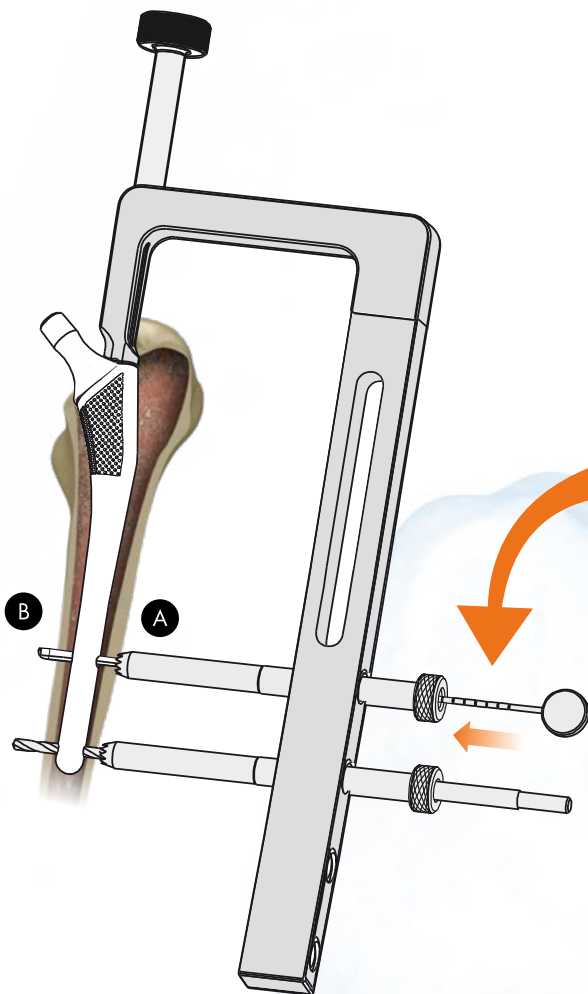
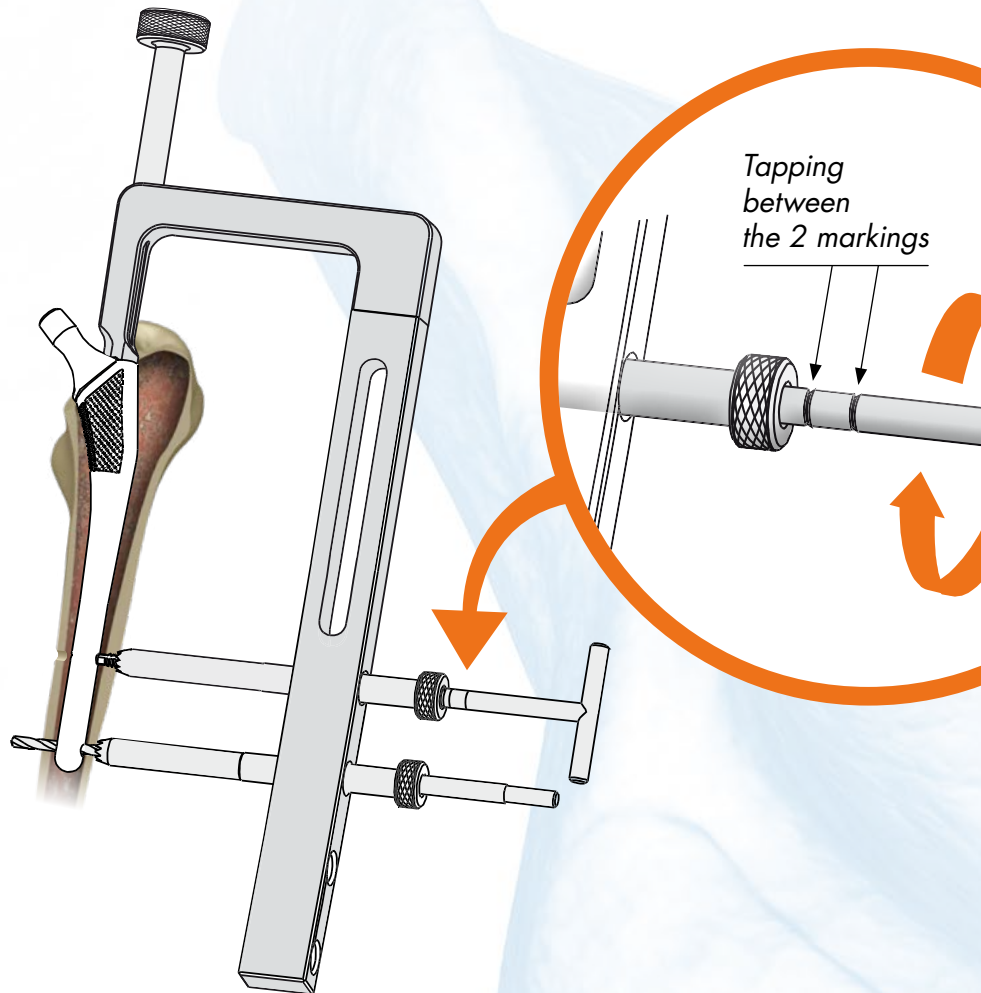
The first cortex only is tapped.

This takes about two revolutions of the tap.

Keep the guide in contact with the bone, and then tap delicately until the second mark only.

It is of utmost importance to keep the guide in steady contact with the bone so that the mark is kept true.

Leave the drill bit in the second hole to maintain overall stability.

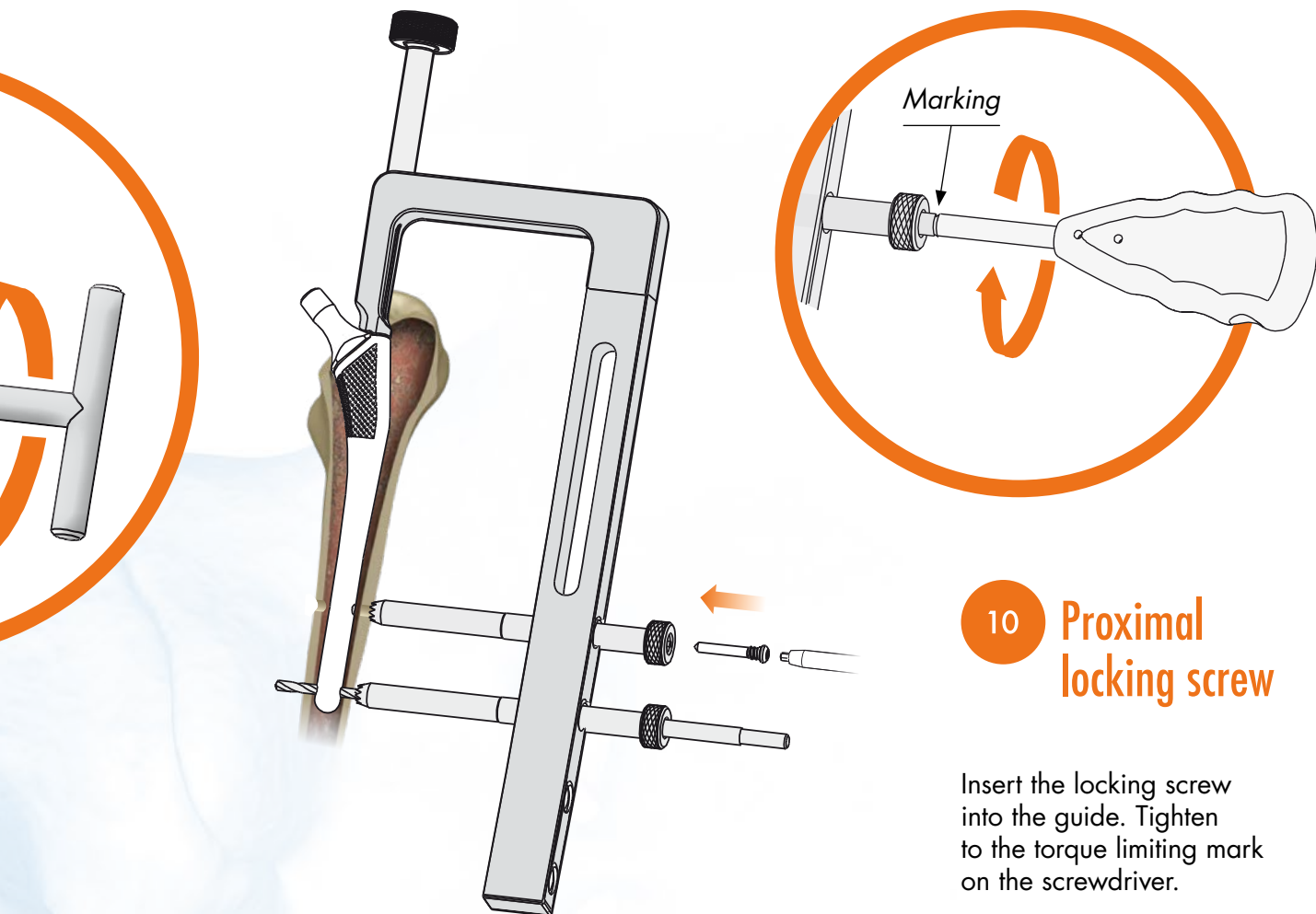


- A** Mandatory contact of the drilling guide.
- B** Contact on the medial cortex.

9

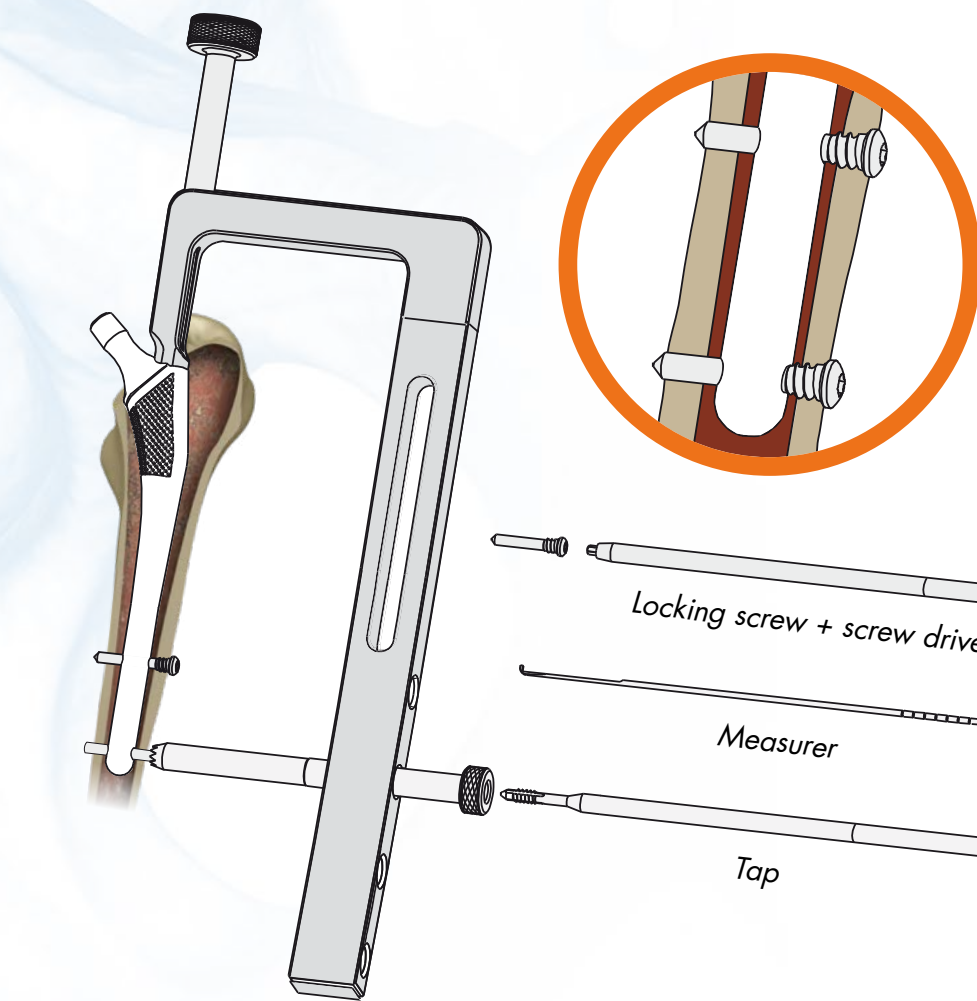
Proximal locking screw length

Keep the guide in contact with the bone. Measure the length of the locking screw through the guide.



10 Proximal locking screw

Insert the locking screw into the guide. Tighten to the torque limiting mark on the screwdriver.



11 Distal locking screw

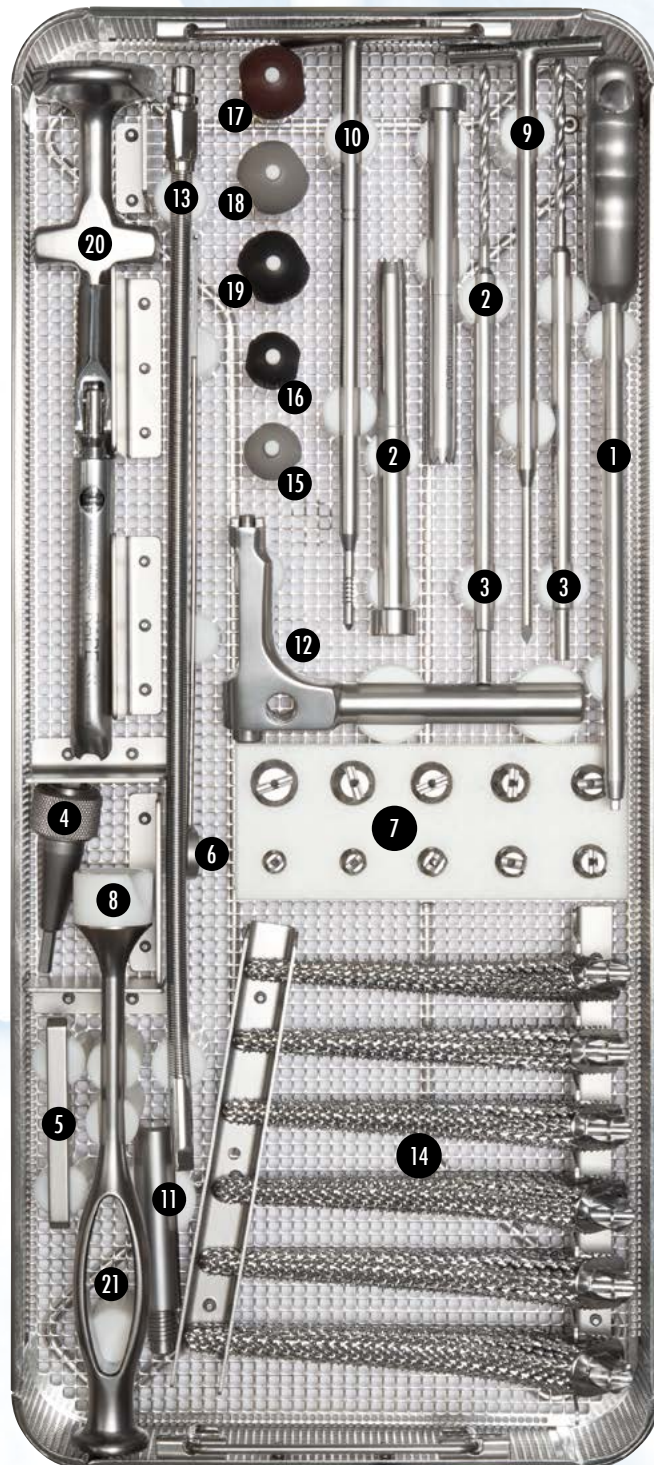
Proceed in the same way for the distal locking screw.

Important: Check locking screw torque using the finger or an appropriate instrument.

Instruments sets

Common base ancillary kit VARASC01

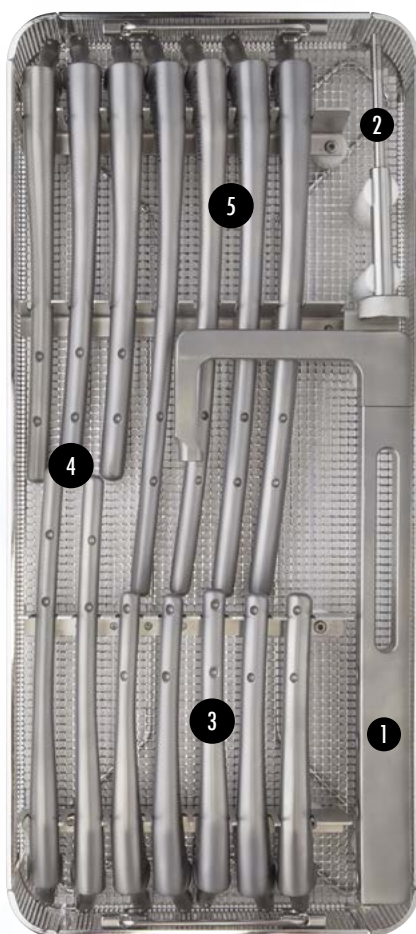
N°	Code	Part number
1	TH600 3.5	Screwdriver 3,5 mm S/P
2	GV600	Targeting guide (2 objects)
3	FH701	Monoblock drill Ø4,5 mm (2 objects)
4	ET	Reamer adaptor
5	PAFCU	Handle for flexible shaft
6	TM600	Measuring shaft
7	AF700 to AF709	Reamer heads for flexible tree Ø9, 10, 11, 12, 13, 14, 15, 16, 17 and 18 mm
8	EI602	End piece for head impaction-reduction
9	BV600	Targeting pin
10	TA600	Tap for Sagitta Revision screw
11	PG600	Extraction handle
12	MP601 + VV601	Sagitta Revision prehension handle M8 screw fixation
13	AFCU	Flexible shaft
14	RS602 1 à RS602 6	Femoral broaches-trial stems sizes 1 to 6
15	TE603-22,2/0	Trial head Ø22,2 medium
16	TE603-22,2/+4	Trial head Ø22,2 long
17	TE603-28/-4	Trial head Ø28 short
18	TE603-28/0	Trial head Ø28 medium
19	TE603-28/+4	Trial head Ø28 long
20	ME605	Reamer handle with front cam
21	MI605	Handle for head impaction-reduction
22	BAFCU	Pin for flexible shaf



22 Separately delivered pin

Left side kit VARASG01

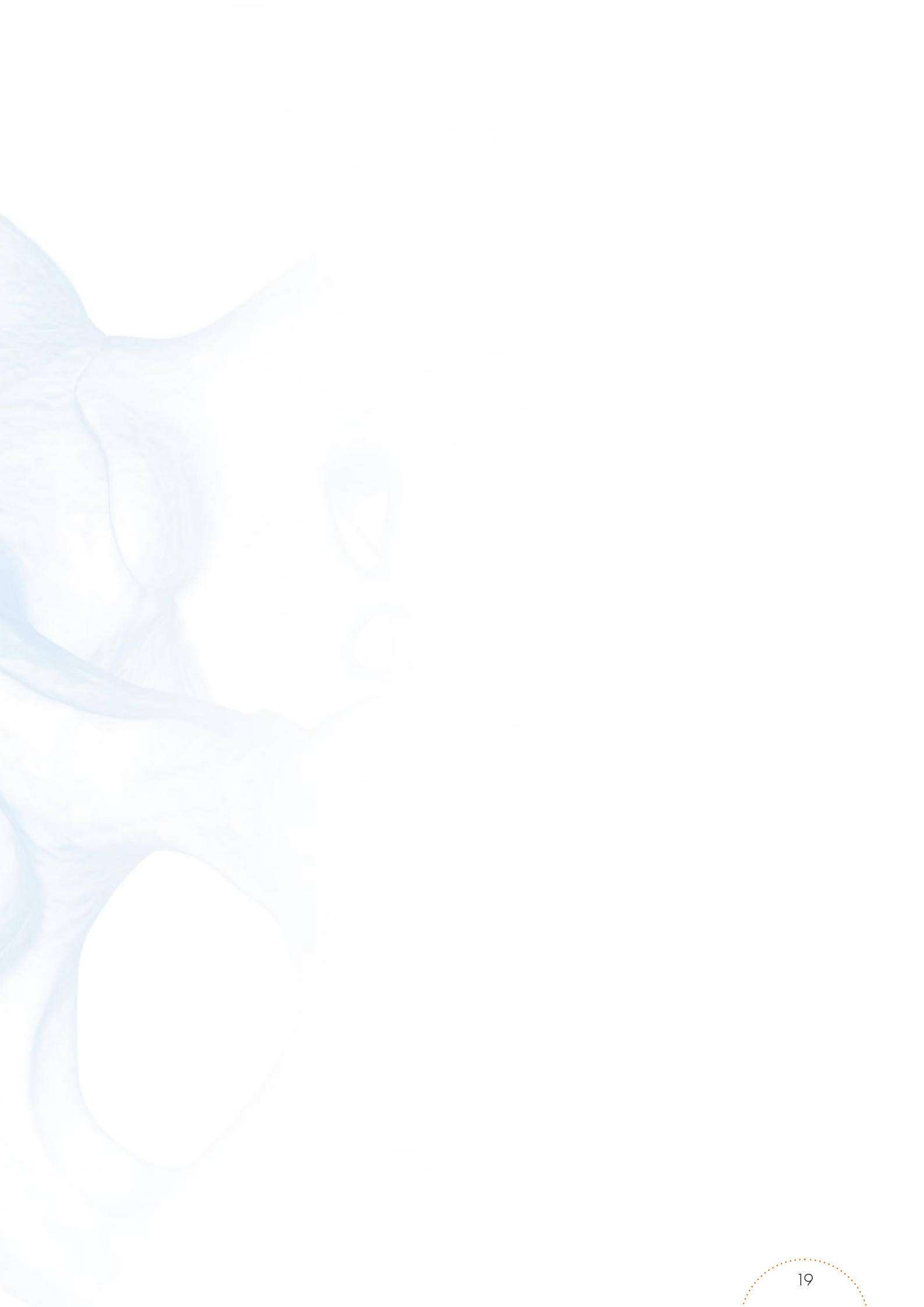
Right side kit VARASD01



The Left and Right kits are available separately.

There is also an ancillary kit, VARASS01, gathering the three opposite baskets.

N°	Left side code	Right side code	Part number
1	VT601 G	VT601 D	Targeting device
2	VV600	VV600	M8 Headed fixation screw
3	TES600 2-180 G TES600 3-180 G TES600 4-180 G TES600 5-180 G TES600 6-180 G	TES600 2-180 D TES600 3-180 D TES600 4-180 D TES600 5-180 D TES600 6-180 D	Trial stem size 2 length 180 mm Trial stem size 3 length 180 mm Trial stem size 4 length 180 mm Trial stem size 5 length 180 mm Trial stem size 6 length 180 mm
4	TES600 2-250 G TES600 3-250 G TES600 4-250 G TES600 5-250 G TES600 6-250 G	TES600 2-250 D TES600 3-250 D TES600 4-250 D TES600 5-250 D TES600 6-250 D	Trial stem size 2 length 250 mm Trial stem size 3 length 250 mm Trial stem size 4 length 250 mm Trial stem size 5 length 250 mm Trial stem size 6 length 250 mm
5	TES600 3-325 G TES600 4-325 G TES600 5-325 G TES600 6-325 G	TES600 3-325 D TES600 4-325 D TES600 5-325 D TES600 6-325 D	Trial stem size 3 length 325 mm Trial stem size 4 length 325 mm Trial stem size 5 length 325 mm Trial stem size 6 length 325 mm





www.serf.fr

85 avenue des Bruyères
69150 Décines-Charpieu
FRANCE

Tel. +33 (0)4 72 05 60 10
Fax +33 (0)4 72 02 19 18
serf@serf.fr

Distributed by

Sagitta EVL Révision® are medical devices labelled CE 0459 with the LNE/G-MED. Instructions must be read before use. In case of doubt, please contact SERF's local distributor.

© 2018 SERF. All rights reserved. **Sagitta EVL Révision®** is a trademark of SERF

CE 0459



Serf / Décines / France 