

SURGICAL TECHNIQUE

JOINT SURFACES PREPARATION

1.



1. Dislocate the joint so as to expose the head of the first metatarsal and the base of the proximal phalanx.

2.



2. Insert the Ø1.6 mm pin (33.0216.150) through the head of the first metatarsal into the medullary cavity.

To determine the appropriate reaming size, insert the convex reamers successively along the pin. Progressively, reduce the diameter until the cartilage surfaces have been removed.

Remove the reamer and pin.

3.



3. Expose the base of the phalanx and insert the Ø1.6 mm pin (33.0216.100) so as to achieve proper alignment with the diaphysis.

4.

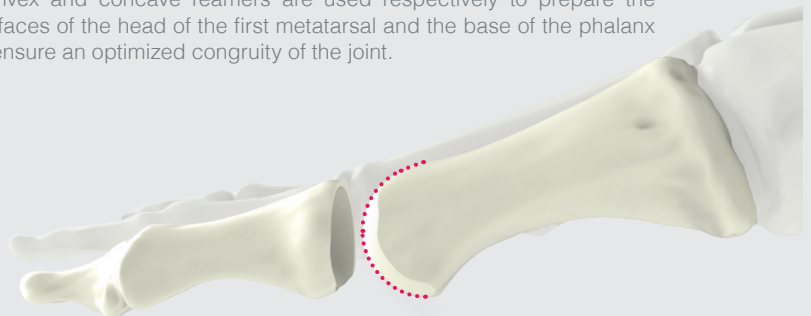


4. Take a concave reamer with the **same diameter** as the convex reamer (determined at step 2). Insert it along the pin and perform reaming until the cartilage surfaces have been removed.

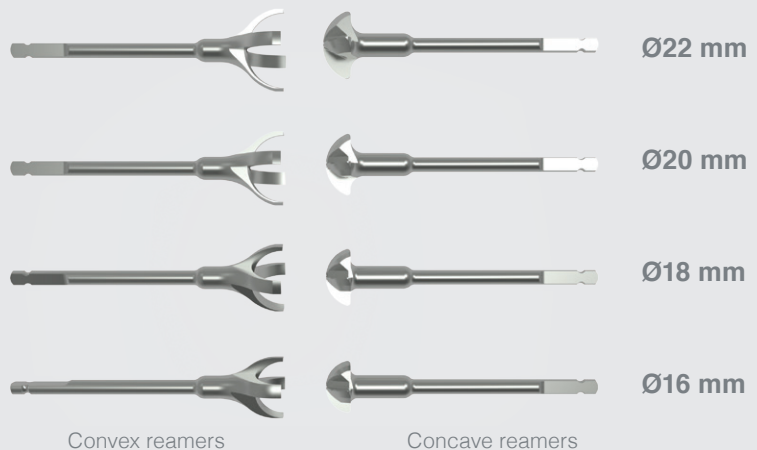
Remove the reamer and the pin.

→ INSTRUMENTATION: CONVEX AND CONCAVE REAMERS

Convex and concave reamers are used respectively to prepare the surfaces of the head of the first metatarsal and the base of the phalanx to ensure an optimized congruity of the joint.



Reamers are available in 4 diameters:



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POSITIONING OF THE PLATE

5.



5. Position the joint in the desired direction and stabilize it using a Ø1.6 mm pin (33.0216.150).

6.



6. Choose the plate corresponding to the desired correction (three sizes available).

NB: The plates of the Footmotion Plating System are precontoured. If necessary, they can be bent to be adapted to the arthrodesis to perform.

→ PLATE BENDING

The plates of the Footmotion Plating System can be bent using the appropriate bending pliers (ANC578) and complying with the following instructions:



- Bending is only possible in the areas intended for this purpose,
- A bendable area must be bent only once and in one direction,
- Bending must not be performed excessively,
- The holes must be protected so as to avoid damaging the fixation.

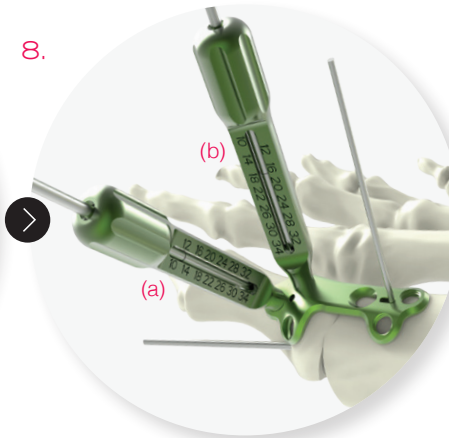
FIXATION OF THE PLATE

7.



7. Position the plate and stabilize it temporarily by inserting a Ø1.2 mm pin (33.0212.070) into the dedicated oblong hole.

8.



8. Lock the two threaded guide gauges (ANC576) in the two distal holes. Insert the drill bit (ANC590) in the first hole (a) in order to stabilize the plate, and keep it in place. Drill (ANC590) through the second hole (b). Determine the appropriate screw length using the threaded guide gauge (ANC576).

9. Insert a locking screw (SLT2.8Lxx) with the screwdriver (ANC575).

10. After determining the screw length required, remove the drill bit and the guide gauge from the first hole and insert a locking screw using the screwdriver (ANC575).



9.

10.



NB: It is also possible to position the plate and stabilize it temporarily using Ø1.2 mm (33.0212.070) pins:

1. Distally, through the dedicated hole,
2. Proximally, through the proximal part of the oblong hole designed for pins.

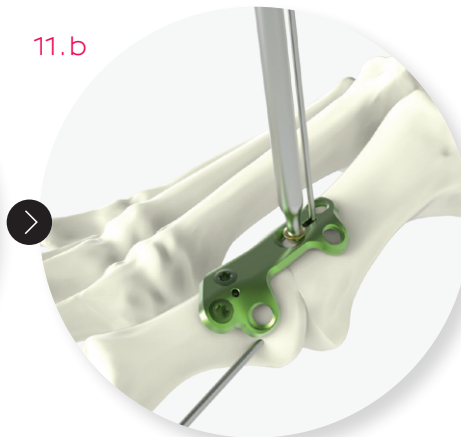
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COMPRESSION OF THE JOINT

→ OPTION 1: COMPRESSION USING THE RAMP OBLONG HOLE



11.a) Drill (ANC590) into the most proximal part of the ramp oblong hole, and directly read the depth on the non-threaded bent guide gauge (ANC586).



11.b) Insert a Ø2.8 mm non locking screw (RLT2.8Lxx) then perform compression using the screwdriver (ANC575) (see § "Ramp oblong hole").



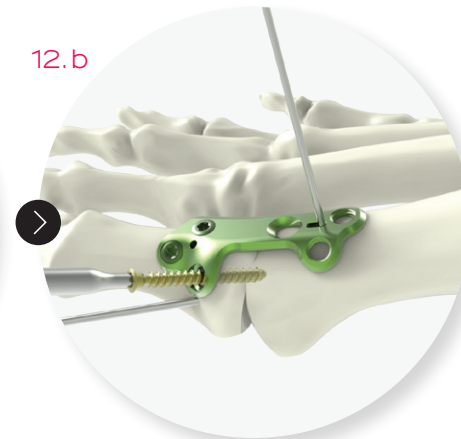
11.c) Insert in the proximal part, the two Ø2.8 mm locking screws (SLT2.8Lxx) into the remaining holes following the steps 8 & 9.

Finalize by inserting a Ø2.8 mm non locking screw (RLT2.8Lxx) into the hole for the transfixation screw in the distal part.

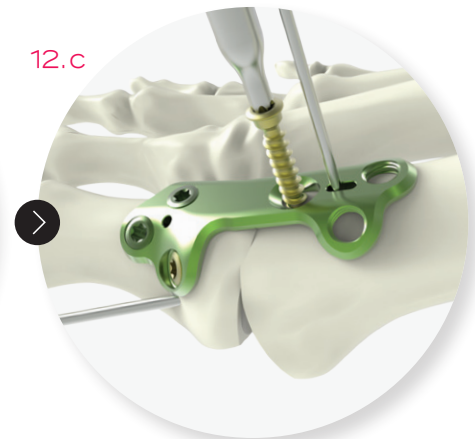
→ OPTION 2: COMPRESSION USING THE TRANSFIXATION SCREW



12.a) Drill through the hole designed for the transfixation screw and through the metatarsophalangeal joint, using a Ø2.0 mm drill bit (ANC590) and the threaded guide gauge (ANC576). To produce the lag effect, drill through the base of the phalanx using a Ø3.0 mm drill bit (ANC611).



12.b) Insert a Ø2.8 mm non locking screw (RLT2.8Lxx) using the screwdriver (ANC575).



12.c) Complete the construct by inserting in the proximal part:

- A Ø2.8 mm non locking screw (RLT2.8Lxx) into the distal part of the ramp oblong hole, so as to avoid additional compression
- Two Ø2.8 mm locking screws (SLT2.8Lxx) into the two remaining proximal holes.

FINAL RESULT

