

enCompass

Metatarsal Resurfacing Implant

Surgical Technique Guide



OSTEOMED
SMALL BONE ORTHOPEDICS

Rethinking Possibilities, Reshaping Lives

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Lessers Drill Guides



386-1010 EnCompass™ 10mm Drill Guide



386-1012 EnCompass™ 12mm Drill Guide

Lessers Reamers



386-1210 EnCompass™ 10mm Reamer



386-1212 EnCompass™ 12mm Reamer

Drill Guides



386-1015 EnCompass™ 15mm Drill Guide



386-1016 EnCompass™ 16mm Drill Guide



386-1017 EnCompass™ 17mm Drill Guide



386-1018 EnCompass™ 18mm Drill Guide



386-1019 EnCompass™ 19mm Drill Guide

Reamers



386-1215 EnCompass™ 15mm Reamer



386-1216 EnCompass™ 16mm Reamer



386-1217 EnCompass™ 17mm Reamer



386-1218 EnCompass™ 18mm Reamer



386-1219 EnCompass™ 19mm Reamer

Lessers Trials



386-1310
EnCompass™
10mm Trial



386-1312
EnCompass™
12mm Trial

Trials



386-1315
EnCompass™
15mm Trial



386-1316
EnCompass™
16mm Trial



386-1317
EnCompass™
17mm Trial



386-1318
EnCompass™
18mm Trial



386-1319
EnCompass™
19mm Trial

Lesser Instruments



386-1102 EnCompass™ Lesser .071" Guide Pin



386-1551 EnCompass™ Shaft

386-1502 EnCompass™ Lesser Broach



386-1602 EnCompass™ Lesser Impactor

Instruments



386-1100 EnCompass™ .101" Guide Pin



386-1551 EnCompass™ Shaft

386-1500 EnCompass™ Broach



386-1600 EnCompass™ Impactor

Additional Instruments



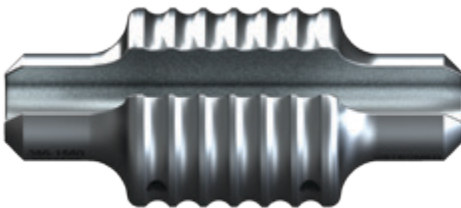
320-0417 Quick Release Adapter



316-0043 11mm Tissue Elevator



316-0044 13mm Tissue Elevator



386-1560-01 EnCompass™ Slaphammer



316-0047 15mm Tissue Elevator

Surgical Technique Guide

1 Incision and Exposure

A dorsal incision is made from the distal third of the metatarsal shaft to a point midway along the shaft of the proximal phalanx.



Expose the extensor tendon and retract medially or laterally. The incision is deepened to expose the capsule of the metatarsophalangeal joint. The capsular tissues are carefully dissected from the metatarsal head and the base of the proximal phalanx. A McGlamry or tissue elevator can be used to elevate and expose the metatarsal head.



Remove any bony eminence or osteophytes from the metatarsal head using a saw, rasp, bur, or rongeur. Irrigate thoroughly and check motion of the joint for any impingement.

1st MTP

Avoid impingement of the sesamoids. If the sesamoids are immobile, the surgeon may elect to release them.



2 Sizing

Care should be taken to select the size which approximates the dimensions of the metatarsal head from medial to lateral and dorsal to plantar. The drill guide should not extend beyond the margins of the bone. Drill guides are sized to match the corresponding implant (Figure 1).

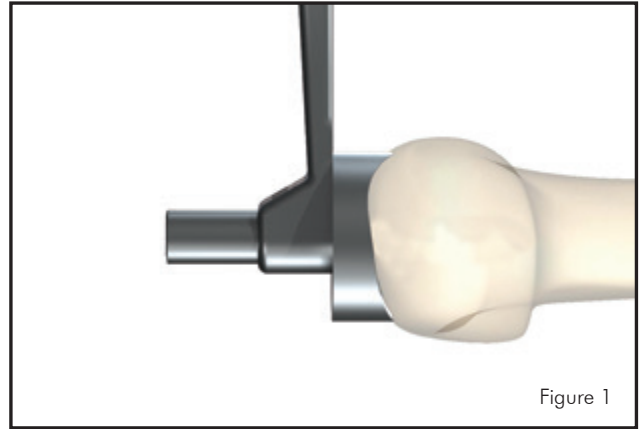
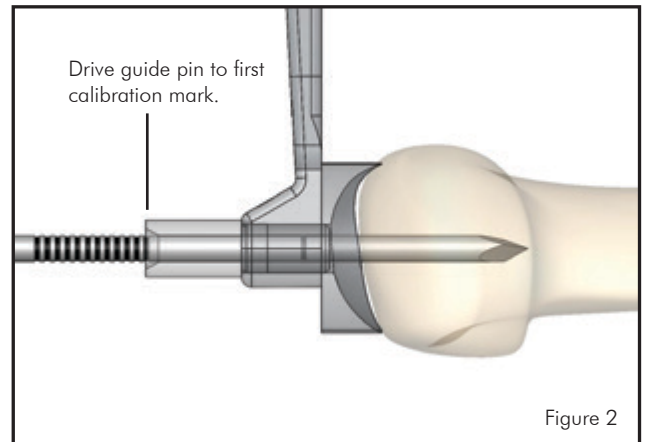


Figure 1

3 Guide Pin Placement

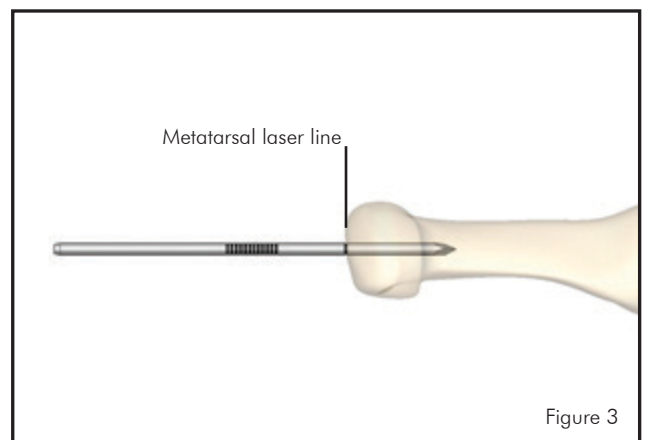
Drive the appropriate size guide pin into the center axis of the metatarsal head and parallel to the cortical surfaces until the first calibration mark is flush with the post of the drill guide (Figure 2).

Important: Placement of the guide pin will determine placement of the implant.



Remove the drill guide and drive the guide pin until the metatarsal laser line is flush with the metatarsal head (Figure 3).

Intraoperative fluoroscopy should be used to confirm positioning of the guide pin.



4 Reaming

Select the reamer which matches the corresponding drill guide size.

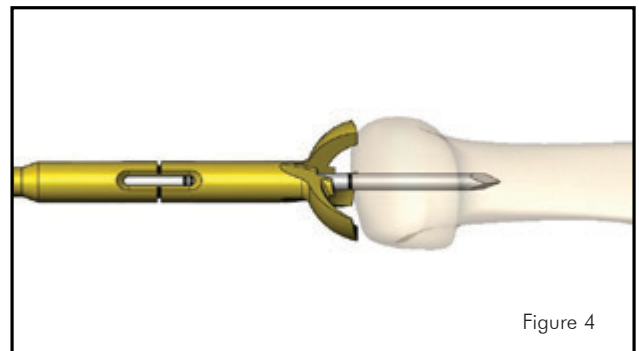


Figure 4

Ream the metatarsal head until the zero calibration mark on the guide pin aligns with the reamer window guide line (Figure 5).

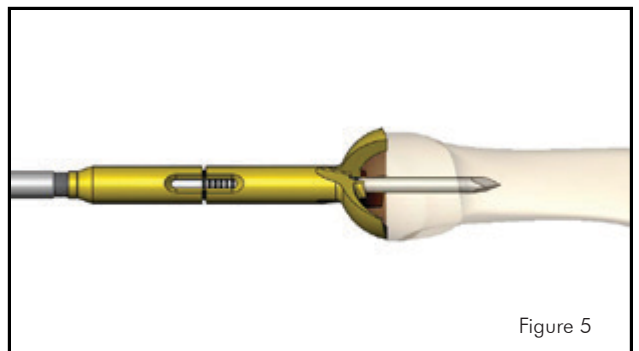


Figure 5

Ream the metatarsal head an additional 2-6mm until all articular cartilage is removed and bleeding bone is present (Figure 6).

1st MTP
Avoid impingement of the sesamoid bones.

Remove the spherical reamer and guide pin.

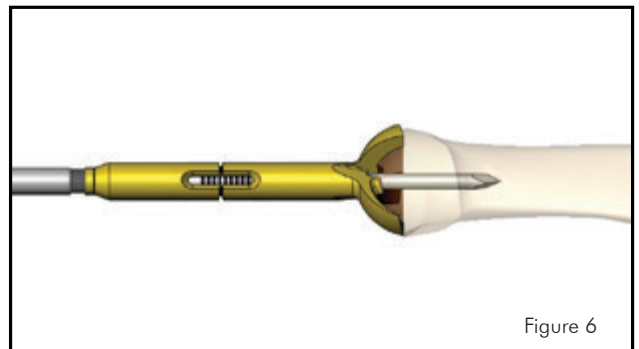


Figure 6

5 Trial

Place the corresponding size trial. Assess the amount of reamed bone and trial placement. The trial should sit flush on the reamed surface. Confirm metatarsal length and check range of motion and stability.

If trial size is not desired, insert the guide pin back into the metatarsal and repeat steps 5 and 6 using the next smaller sized spherical reamer and trial. If desired, greater decompression may be accomplished by reaming more of the metatarsal bone.

With the trial in place, remove all excess bone around the trial using a saw, rasp, bur or rongeur.

After confirming trial size and orientation, mark the location of the trial alignment groove on the dorsal aspect of the metatarsal head with a marking pen.

Remove the trial.



6 Broaching

When broaching the bone, align the dorsal groove on the broach with the dorsal pen mark line made on the metatarsal. Insert the broach into the reamed canal using a mallet until the broach bottoms out on the metatarsal head.

Ensure the broach remains in the same plane as the guide channel and in line with the dorsal aspect of the metatarsal while inserting to ensure a correct fit for the implant.

Remove the broach using the slaphammer.



7 Implant

The final EnCompass™ implant is selected. The underside of the implant is marked “DOR” to indicate the dorsal side. Partially insert the implant into the metatarsal and rotate to align the dorsal side of the implant with the dorsal pen mark on the metatarsal. Use the impactor to fully seat the implant against the metatarsal bone.

NOTE: DOR (Dorsal)



8

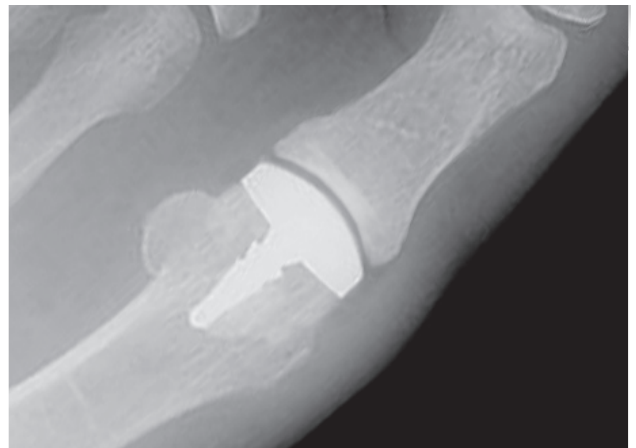
Close

Once fully implanted, check alignment, range of motion and soft tissue balance. Perform any adjustments if necessary.

Intraoperative fluoroscopy should be used to visualize the metatarsal shaft and confirm positioning of the final implant.



Remove any debris from the joint space or implant, irrigate, and then close using standard closure techniques.





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OSTEOMED

3885 Arapaho Rd.
Addison, TX 75001

Customer Service: 800.456.7779

Outside the U.S.: 001.972.677.4600

Fax: 800.390.2620

Fax Outside the U.S.: 001.972.677.4709

E-mail: customer.service@osteomed.com

www.osteomed.com

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