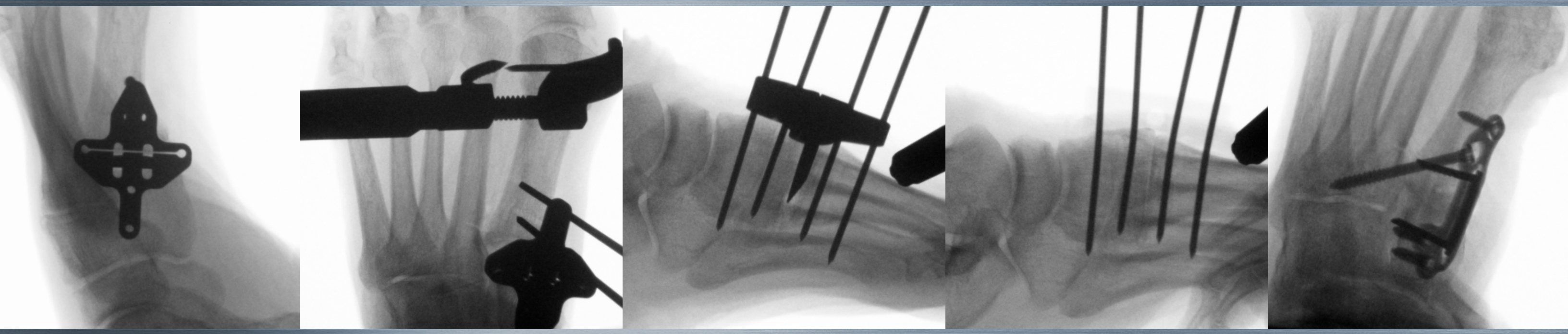
dynaBunion™
4D Minimal-Incision Lapidus System

# Advanced Technique Guide



Your Guide To Becoming A Master of DynaBunion™

C4 C4

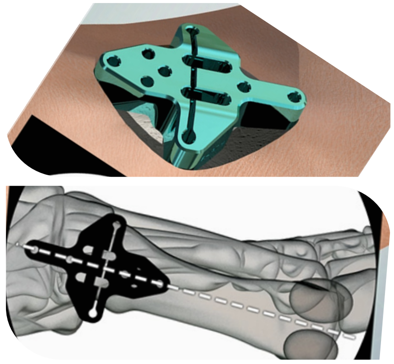
CrossRoads® Extremity Systems
*Breakthroughs for Faster Healing™*

# Cut Metatarsal

## Key Images

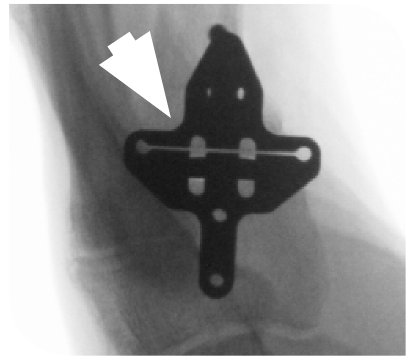
**DORSOMEDIAL INCISION REQUIRED FOR THE DYNABUNION™ PROCEDURE**

The incision is made at approximately 45 degrees from the sagittal and transverse planes. The incision should be made well medial of the extensor hallucis longus(EHL) and great care should be taken during cutting steps that the EHL is retracted laterally out of the way.



**IDEAL INITIAL DORSOMEDIAL PLACEMENT OF THE CUT GUIDE**

It is critical to utilize a slim osteotome to insert deeply into the joint and detach plantar soft tissues. The ideal placement of the cut guide at a 45-degree location from the transverse and sagittal planes. More specifically, the center axis of the cut guide should be aligned with the center axis of the metatarsal that runs between each sesamoid position. Ensure the paddle of the cut guide is flush against the metatarsal joint surface.



**STRAIGHT ON AP XRAY OF THE CUT GUIDE PLACEMENT INCLUDING THE TWO INITIAL WIRES**

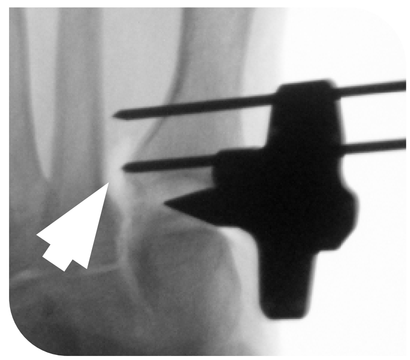
The axis of the cut guide should be parallel to the axis of the metatarsal. This "gun barrel view" can be utilized to visualize how much bone will be removed during resection.

**CUT GUIDE AND TWO DISTAL WIRES PLACED**

Two distal wires are placed into the cut guide prior to metatarsal resection. A short wire is placed into the more proximal hole and a long wire is placed into the most distal hole. The difference in wire lengths is to aid in future steps of the procedure.

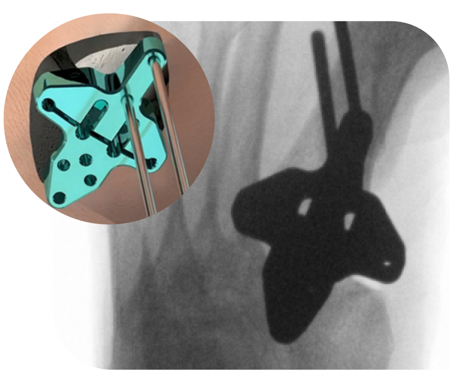
**SAWBLADE TRAJECTORY**

The saw should pass through the cut guide at angled trajectories to reduce the likelihood of cutting the 2nd metatarsal. Additionally ,this will help the user avoid interference with the wires.



**TRUE AP XRAY OF THE CUT GUIDE PLACEMENT INCLUDING THE TWO INITIAL WIRES**

It is important to note that the two wires are placed bi-cortical but not placed into the 2nd metatarsal. Firmly press down on the center of cut guide to seat it closely to bone with the keel parallel to the proximal joint surface of the metatarsal. Do NOT apply pressure to the distal end of the cut guide. it is not critical that the distal end of the cut guide is touching bone.



**CUT GUIDE PLACEMENT AFTER THE METATARSAL BONE RESECTION**

The cut guide is removed, the bone sliver is taken out of the joint, and then the cut guide is flipped 180 degrees facing the cuneiform.

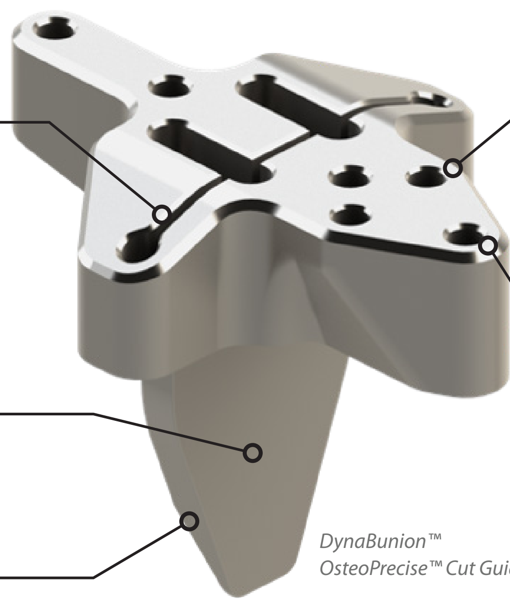
# Cut Metatarsal

## Design Rationale

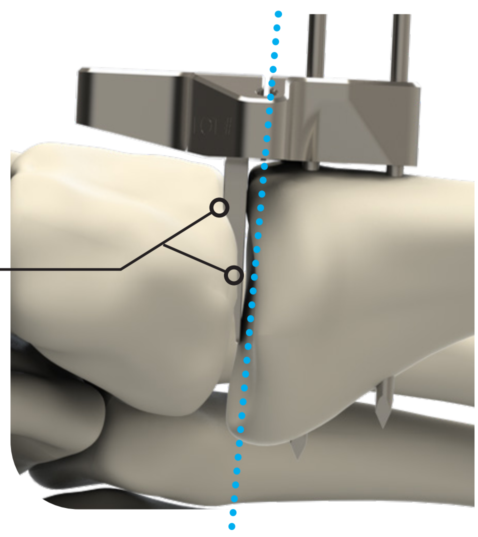
## *Thin, Precise, Relative Metatarsal Cuts*

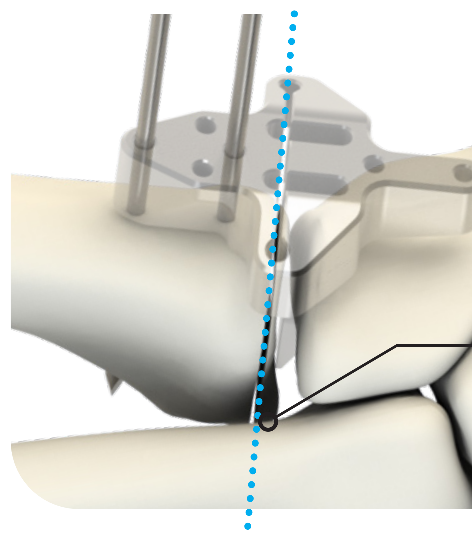
The DynaBunion ™ OsteoPrecise™ Cut Guide is designed to minimize shortening by ensuring relative anatomic resections. This is possible due to two factors:

- A wide paddle to allow for many contact points on the joint
- A thick paddle to ensure a snug fit in the joint to help maintain a parallel position to the joint surface




*DynaBunion™ OsteoPrecise™ Cut Guide*




**Why is the metatarsal resection performed PRIOR to correction?**
The metatarsal resection removes a thin sliver of bone to mobilize the joint and establish a flat base to simplify correction. It is a flat resection without slope and therefore can be performed prior to correction.

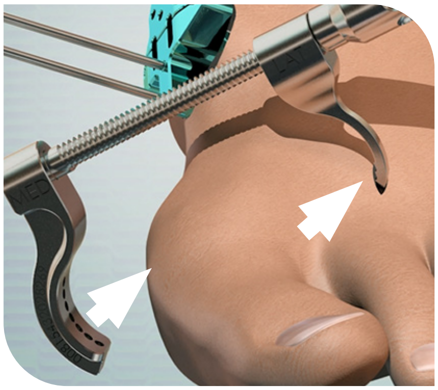
**Why is the cut guide placed at a 45-degree dorsomedial position?**
After metatarsal resection, the cut guide will rotate with the metatarsal bone during frontal plane correction. Due to this, the cut guide must be placed initially at a dorsomedial position to allow dorsolateral movement of the guide during rotation.

**KEY TIPS!**

- **45 Dorsomedial Incision & Cut Guide Placement Critical, DO NOT GO STRAIGHT DORSAL**
- **Utilize osteotome to mobilize joint prior to cut guide placement**
- **Place wires bicortical being careful not to penetrate the 2nd metatarsal**

# Correct

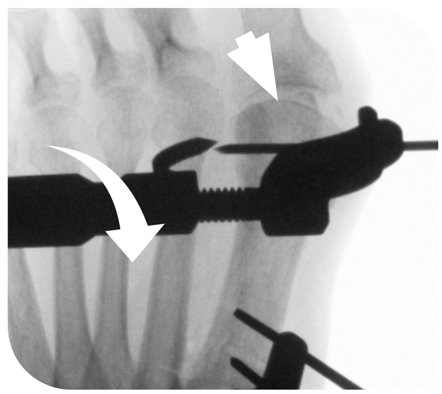
## Key Images



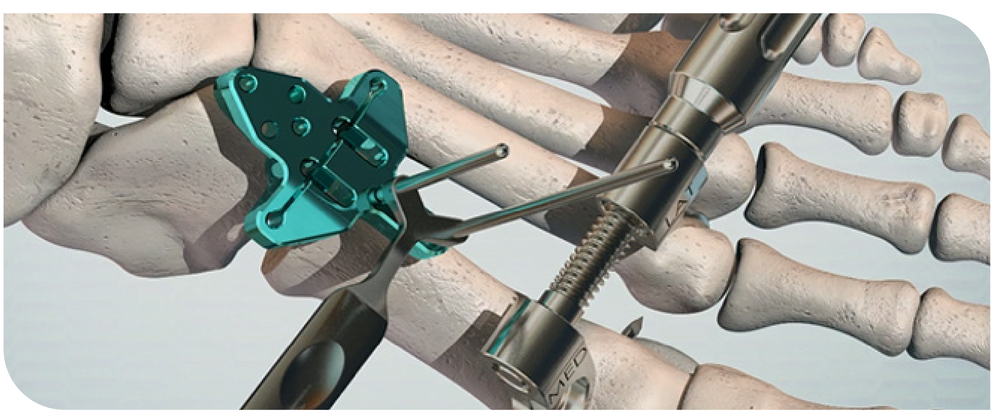
**INITIAL PLACEMENT OF THE IMA REDUCER DISTALLY ON THE METATARSAL**
A small stab incision is created between the 2nd and 3rd metatarsal necks. The reducer should be placed in the expanded state to make it easy to "snake" the lateral hook of the reducer underneath the 2nd metatarsal. The large medial hook is placed OVER the skin at the head of the 2nd metatarsal.

**SMALL STAB INCISION BETWEEN THE 2ND AND 3RD METATARSAL NECKS**

**FRONTAL PLANE ROTATION AT THE CORA**
The frontal plane joystick is placed over the two distal wires to provide strong two-point control of frontal plane rotation right at the CORA. The joystick handle can be placed medially for direct control of the surgeon or can be placed laterally to be held by the first assistant.



**FINAL PLACEMENT OF THE IMA REDUCER AND DISTAL WIRE. REDUCER CAN BE ROLLED FOR SESAMOID VISUALIZATION**
After desired frontal plane correction is achieved, a 2.0mm wire is placed through the reducer and into the 1st metatarsal head (not into the 2nd). If needed, the reducer can be rolled distal or proximal to provide better visualization of the sesamoids.



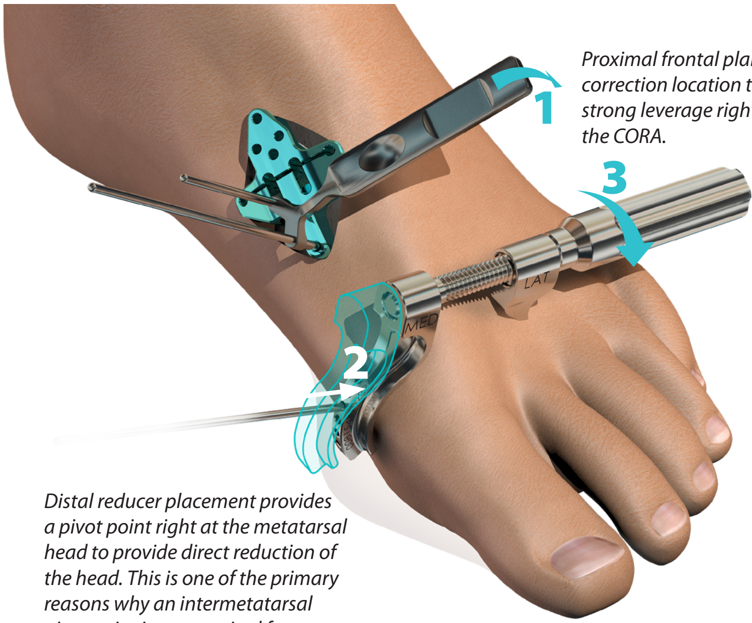
# Correct

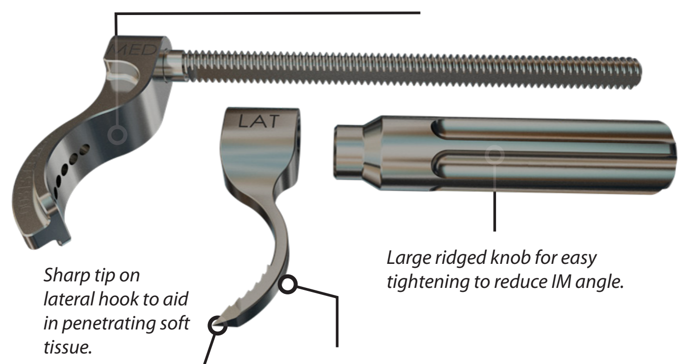
## Design Rationale

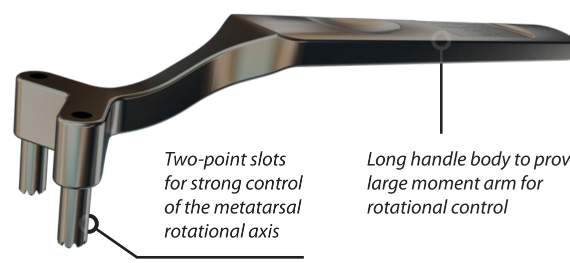
## *Distal Reduction. Proximal Two-Point Frontal Plane Control*
## *No Intermetatarsal Pivot Points Required*

The DynaBunion™ correction tools are designed to provide simplified 3D control by minimizing the amount of instrumentation and additional incisions required.

- Proximal two-point frontal plane control for strong leverage located at the CORA
- Distal reducer placed over the skin to remove unnecessary instruments and minimize the incisions




## FREQUENTLY ASKED QUESTIONS

**What is independent control of 3 planes? Why does it matter?**
There is not a linear relationship between IM angle and frontal plane correction needed in a bunion procedure. The DynaBunion system allows independent control of all 3 planes.

- The joystick is able to control frontal plane pronation to correct the sesamoids
- the reducer aids in closing the intermetatarsal angle, and sagittal plane can be adjusted while the RAC block is placed.

This is helpful when you may need to correct one plane more than others (i.e. more intermetatarsal reduction is needed than frontal plane correction).

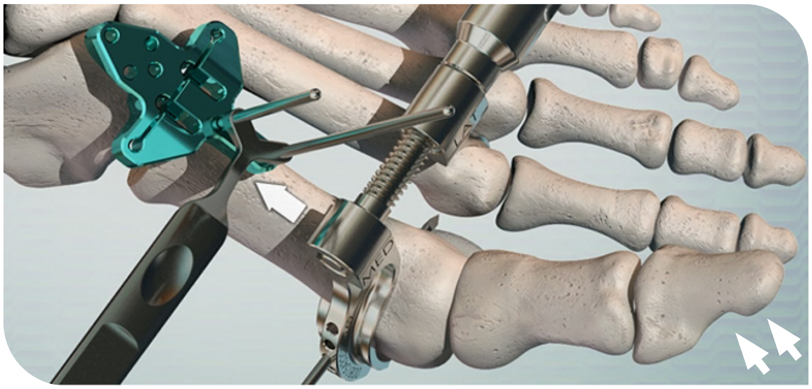
**Will the medial hook on the distal reducer irritate soft tissue?**
NO. The medial hook has a large surface area, smooth finish, and dull edges. It should not have a notable impact on soft tissue. Frontal plane rotation is corrected prior to reducing the IM angle and closing the reducer. Therefore, there should not be significant force and motion on the skin at the same time. Through over 100 cases during an alpha phase, no patient complaints were reported relating to the distal reducer.

**KEY TIPS!**

- **Remember to flip cut guide around 180 degrees to face the cuneiform**
- **Ensure reducer is assembled prior to case**
- **Ensure that the reducer  is snug prior to frontal plane rotation**
- **The distal wire in the reducer should not penetrate the 2nd metatarsal**

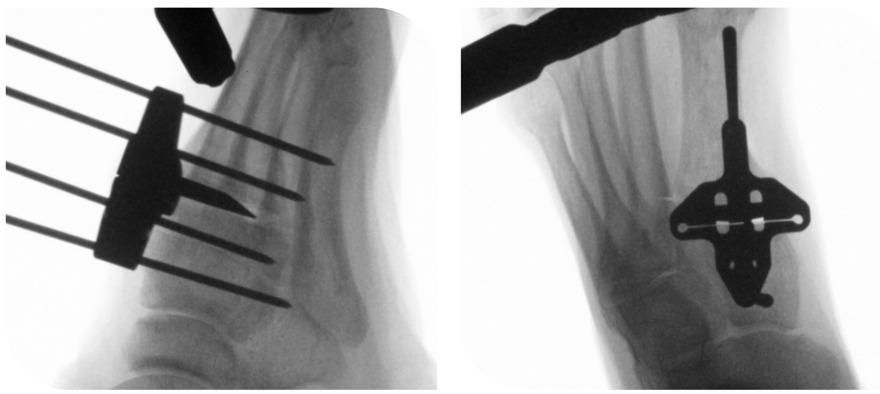
# Cut Cuneiform

## Key Images

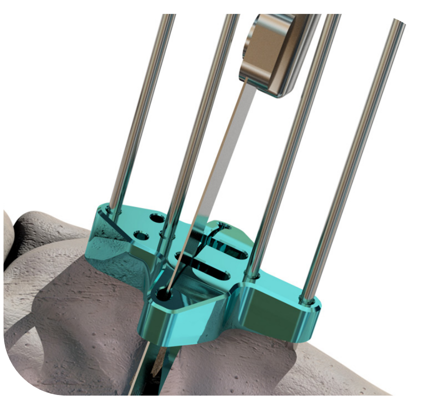


**DORSIFLEXION OF THE HALLUX TO ACTIVATE THE WINDLASS MECHANISM**
In order to create good apposition of the cut guide paddle and the cuneiform surface, the hallux is dorsiflexed to engage the windlass mechanism. This will ensure the metatarsal resection is thick enough.

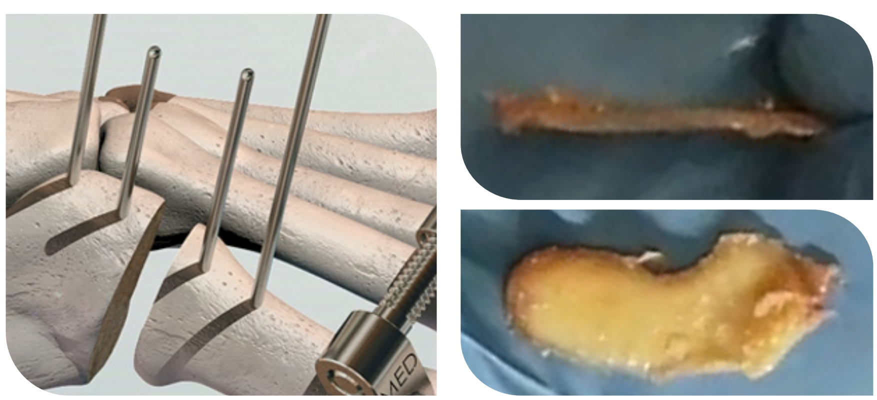
**WINDLASS MECHANISM IN ACTION**
It is critical to dorsiflex the hallux and apply axial pressure to ensure sufficient apposition of the cut guide paddle and cuneiform. If desired, the frontal plane joystick can be held, and additional rotational pressure can be applied to ensure frontal plane correction is maintained during this step.



**AP AND LATERAL XRAY OF FINAL CUT GUIDE PLACEMENT**
The lateral view shows the apposition of the cut guide paddle with the cuneiform joint surface and the bicortical placement of the wires. Similar to the metatarsal resection, an AP view can be taken for a "gun barrel view" to visualize the amount of bone that will be removed.



**SAW BLADE TRAJECTORY**
Similar to the metatarsal resection step, the saw blade should enter the cut guide on either side of the wires at an angle. Great care should be taken to avoid cutting the 2nd metatarsal.



**CUT GUIDE IS REMOVED AFTER CUNEIFORM RESECTION**
The cut guide is removed after the cuneiform resection. At this point, the bone sliver can be removed, and any desired joint prep can be performed.

# Cut Cuneiform

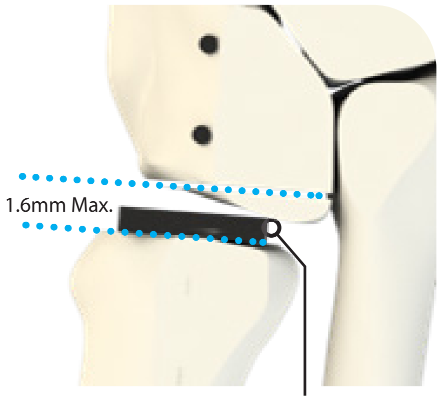
## Design Rationale

## *Relative Cuneiform Cuts for Minimal Wedging Cuts Are Dependent On Correction and Patient Anatomy*

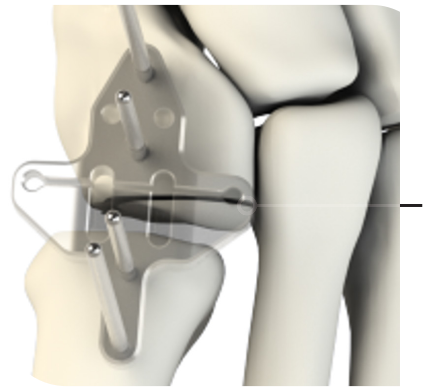
The DynaBunion ™ OsteoPrecise™™ Cut Guide and technique is designed to minimize shortening by ensuring relative anatomic resections.
For the cuneiform resection this is possible due to two factors:

- After correction, the cut guide paddle interfaces with the cuneiform at an angle. Even though the cut slot is straight, this will take a slightly wedged cut that is only as large as needed for this patient/correction.
- During the cuneiform resection, the cut slot is still parallel to the initial metatarsal cut due to the position of all of the wires. This ensures the cut surfaces are parallel and can align properly.

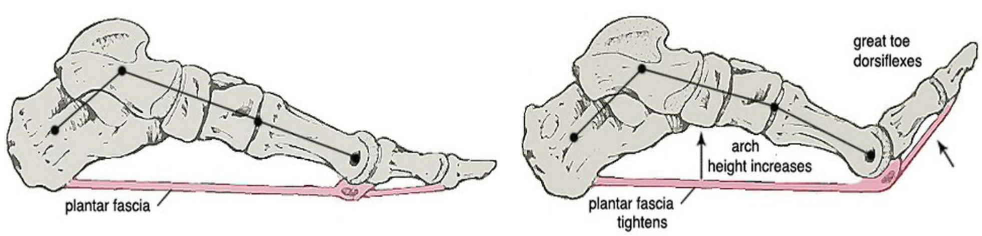
*Single slot cut guide and alignment of 4 wires ensures both cuts are parallel to provide congruent bony surfaces in order to aid in bony apposition*




*Cut guide paddle interfaces with cuneiform surface to create angle for slight wedging*



*Cuneiform resection will have slight wedge shape dependent on the amount of correction created and the patient's cuneiform anatomy. This will ensure a minimal amount of bone is removed versus a cut guide that has a pre-designed wedged slot.*




**WINDLASS MECHANISM EXPLAINED**
When dorsiflexing the hallux, the plantar fascia tightens which increases arch height by pulling the proximal and distal foot anatomy together. In the context of this procedure, this helps push the metatarsal and the cut guide paddle into the cuneiform joint surface. This ensures apposition of the cut guide paddle and cuneiform joint surface to  create a sufficient cuneiform resection.

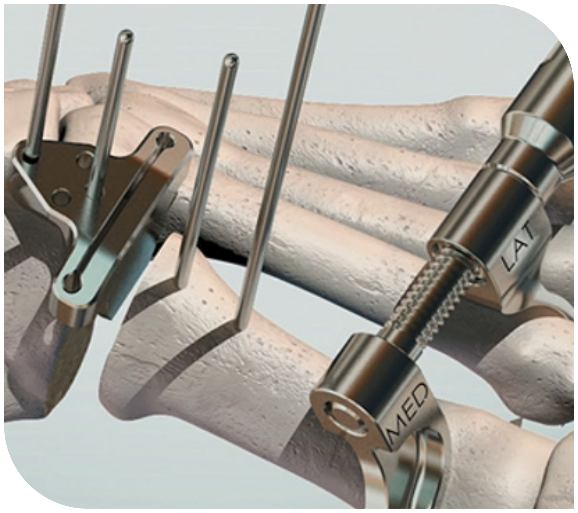
## FREQUENTLY ASKED QUESTIONS

**What type of cuts does the OsteoPrecise™ cut guide allow, straight or wedged?**
The OsteoPrecise™ Cut Guide utilizes a single cut slot to skim off a layer of bone. The paddle in the cut guide will be positioned relative to each bone surface during each cutting step and a cut will be taken. The metatarsal cut is a straight cut and will be generally consistent thickness across the resection. The cuneiform cut is taken after correction is completed. This will result is a bone sliver that is typically thinner on the medial side. The straight cut slot allows the user to take the smallest possible wedge since correction occurrs prior to cutting the cuneiform.

**KEY TIPS!**
- **It is critical to engage the windlass mechanism**
- **Frontal plane joystick can be held during the windlass to help provide additional rotation correction**
- **Wires should be placed bicortical**

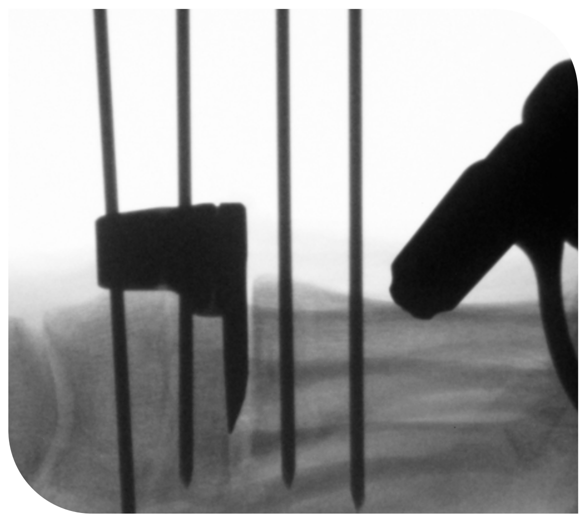
# OPTIONAL: Recut

## Key Images




**RECUT GUIDE PLACEMENT**
After both resections of the cuneiform and metatarsal are attempted, it can be assessed if a re-cut of either surface if needed. If so, the re-cut guide can be placed other either pairs of wires to take an additional cut. The maximum thickness of a re-cut bone sliver will be 1.1mm.

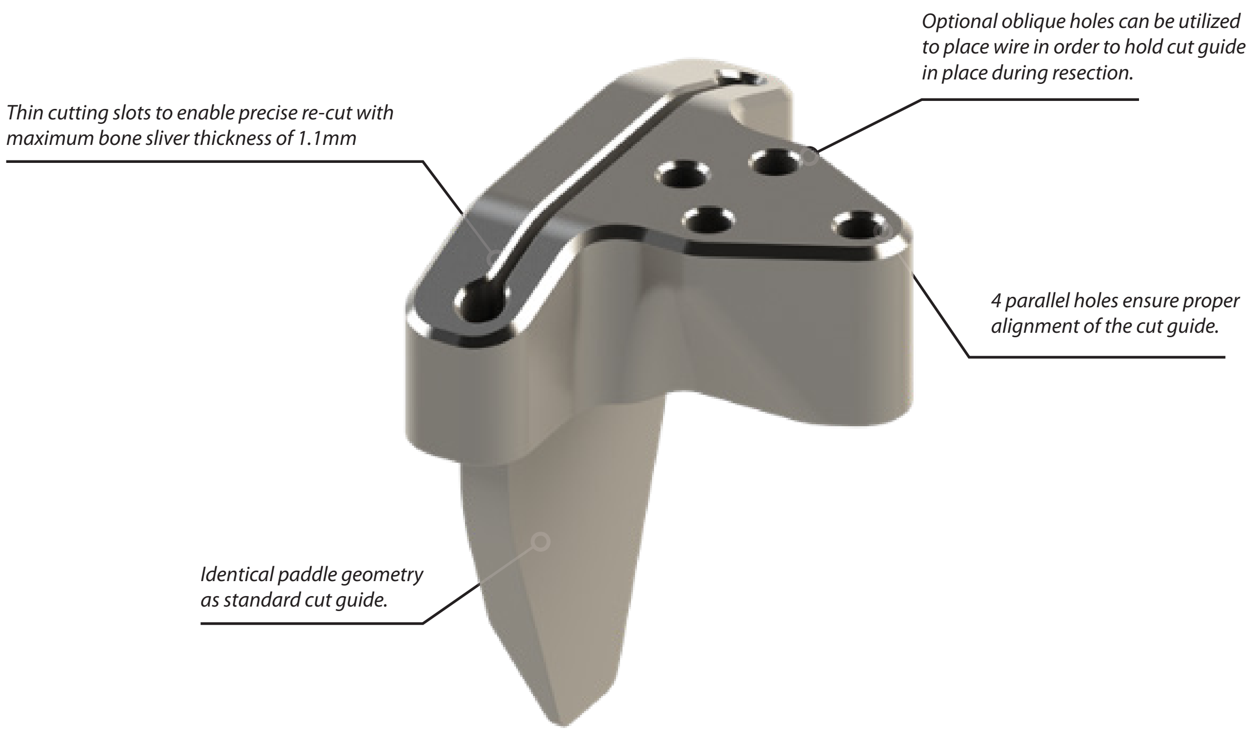
**AP VIEW OF RECUT GUIDE**



**LATERAL VIEW OF RECUT GUIDE**
This lateral xray shows how the paddle of the ReCut guide will be in apposition with the cuneiform joint surface to provide an additional cut.

# OPTIONAL: Recut

## Design Rationale





**ANATOMY THAT MAY REQUIRE A RECUT: ATAVISTIC CUNEIFORM OR CUP/CONE JOINT SURFACES**
An atavistic cuneiform will have a hyper angulated surface that is higher on the lateral side in comparison with the medial side. It is possible that the standard cut guide will not cut far medial enough on a atavistic cuneiform and a re-cut may be required for sufficient resection.

Additionally, in very rare cases the 1st TMT joint will have a cup-cone geometry more similar to the 1st MTP joint. The standard cut guide resection may not provide a sufficient cut at the center of the joint on the concave metatarsal surface or on the edges of the convex cuneiform surface.

## FREQUENTLY ASKED QUESTIONS

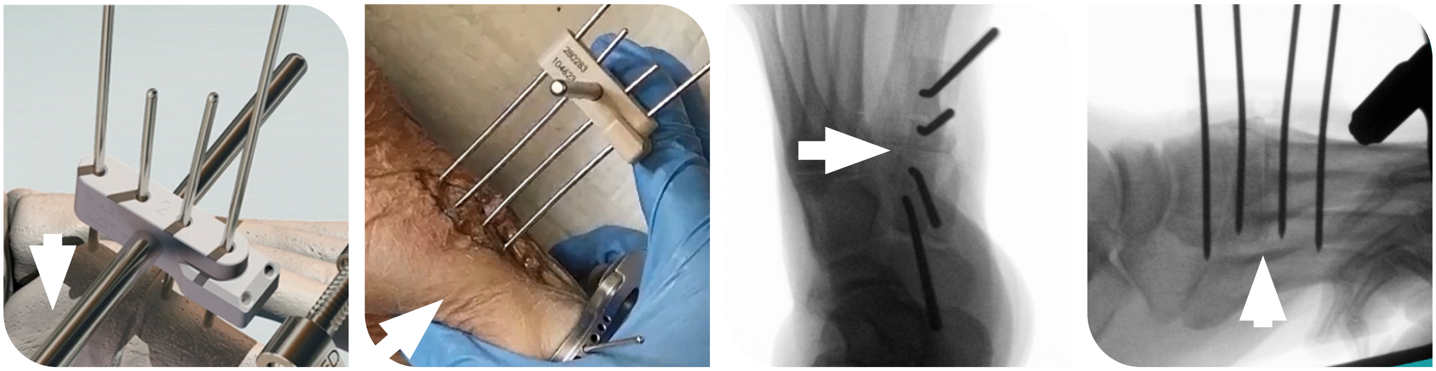
**When is a "re-cut" typically needed?**
A re-cut is often necessary in cases with significantly convex/concave joint surfaces or for a significantly atavistic cuneiform. Typically, only one joint surface would require a re-cut and minimizing bony resection will maximize the maintenance of metatarsal length. There may be a small amount of cartilage on the medial side of the cuneiform that did not get removed from the initial cut. It is NOT necessary to re-cut that portion of the joint surface as it should not be part of the fusion surface.

### KEY TIPS!

- **Do NOT use the re-cut guide until both resections have been made. It will remove the bone required for the primary resection guide to accurately place the wires.**
- **The ReCut Guide has additional oblique holes for wire placement to aid in maintaining placement of cut guide during the resection**

# Compress

## Key Images



**PLACING RAC BLOCK OVER FOUR DORSAL WIRES**

The RAC Block should be placed by hand over the 4 dorsal wires. Different length wires were used in previous steps to allow for easier placement of block onto the wires. The blunt side of the universal handle can be slid into the hole in the RAC block to provide additional leverage in pushing RAC block down to bone. It is CRITICAL to provide a plantar counter pressure (as seen in cadaveric image) to ensure the metatarsal does not plantar shift. An AP xray should be taken to confirm final correction and alignment of the first ray. A lateral xray should be taken to confirm bony apposition is sufficient. If not, the higher number RAC block should be placed.

**PLACING CROSSJOINT WIRE**

A crossjoint wire is placed through one of the distal holes of the RAC block. The lateral hole is recommended to be utilized to place the first wire to avoid interfering with plate placement. Typically, one wire is satisfactory in maintaining alignment and bony apposition. If bone purchase does not feel satisfactory during initial wire placement, a 2nd wire can be placed in the medial hole or a freehand wire can be placed. The wire can be driven past the cuneiform and into the navicular for additional stability of the wire.

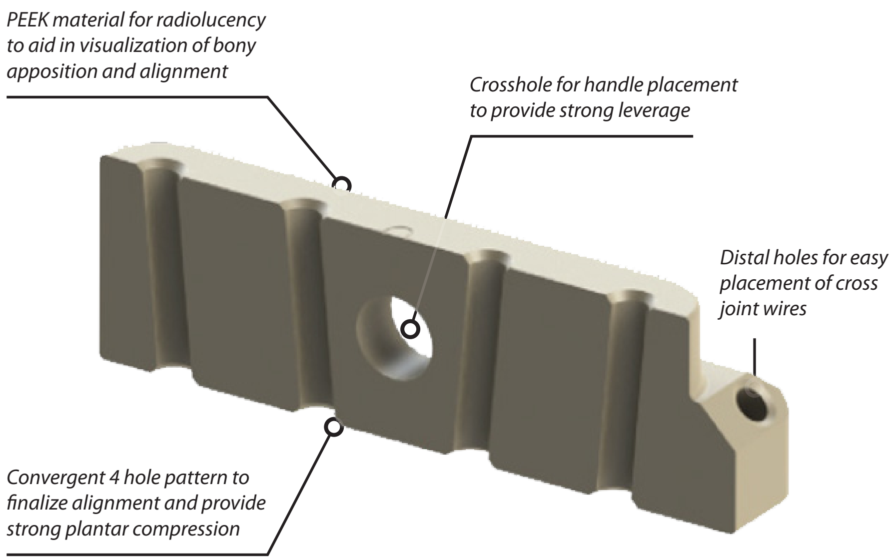
**FINAL CROSSJOINT WIRE PLACEMENT**

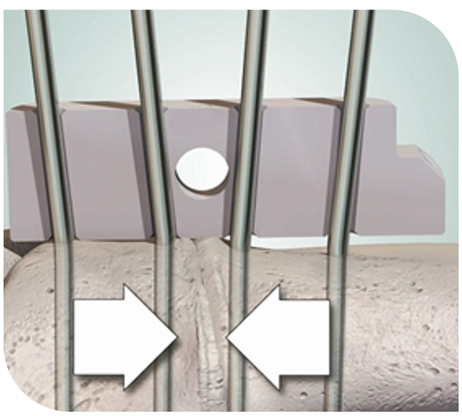
The four dorsal wires can be removed and then the RAC block can be slid off the crossjoint wire. If this wire is in the way of placing fixation, a new freehand wire can be placed and then previous wire can be removed. **Once the staple is placed, it is safe to remove the crossjoint wire.**

# Compress

## Design Rationale

## *Finalize Alignment and Generate Strong Initial Compression*
## *R.A.C.: Re-Align & Compress*



**LOW TECH DESIGN FOR SIMPLE PLACEMENT AND STRONG COMPRESSION**
If desired, the frontal plane joystick can be held, and additional rotational pressure can be applied to ensure frontal plane correction is maintained during this step.


**4 RAC BLOCKS TO PROVIDE OPTIMAL COMPRESSION**
There are four RAC blocks (0,1,2,3) to ensure optimal compression can be achieved. If an additional compression is needed, the next RAC block can be placed. Each block has the holes inset to bring the wires closer together.

### FREQUENTLY ASKED QUESTIONS

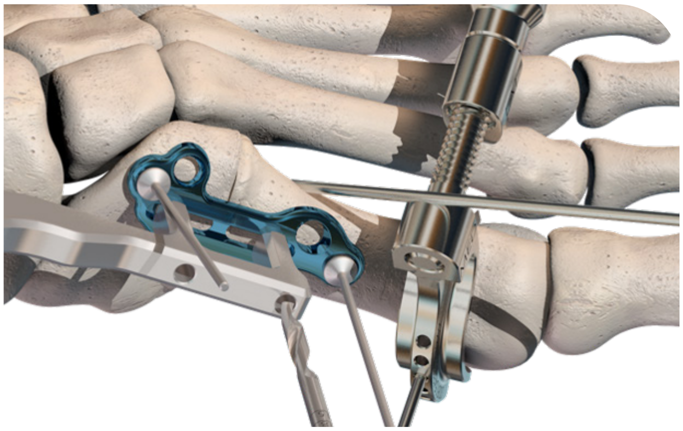
**How does the RAC Compressor Block work?**
The RAC compressor block has four holes set at a converging angle. Once this is placed over the 4 dorsal wires, it realigns your correction and compresses to create consistent bony apposition. There are a total of four RAC blocks (0,1,2,3) each with increasing compression due to additional inset of the hole pattern.

**Can one wire be enough to hold my fixation prior to placement of fixation?**
YES. Throughout iterative product development and now over 100 alpha cases, it was found that one cross joint wire can be satisfactory for fixating the joint while placing implantation. If there is not sufficient tactile feedback indicating that the initial wire has good bone purchase, a second wire can be placed through extra hole in the RAC block or freehand. These wires are a large 2.0mm diameter and robust enough to not bend while holding the joint.

**KEY TIPS!**
- **Adjust sagittal plane alignment if needed during RAC block placement**
- **Start with 0 block, increase if more compression is needed**
- **Use lateral hole first, if not confident in bone purchase then throw medial wire or freehand**
- **Pass wire deep into Navicular**
- **TAKE FINAL AP AND LATERAL TO CONFIRM!**

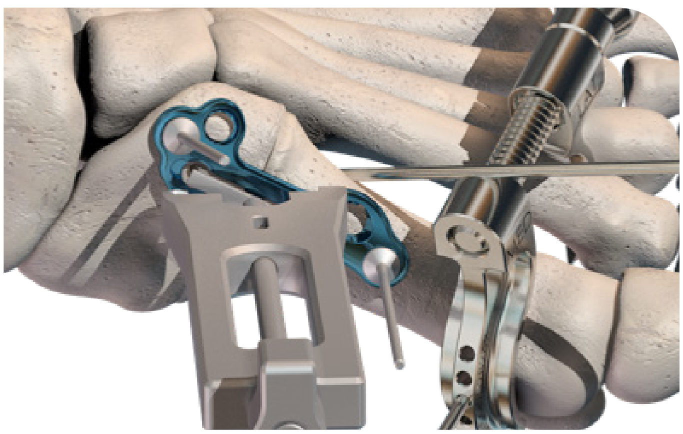
# Staple Compression Plate™ Placement

## Key Images



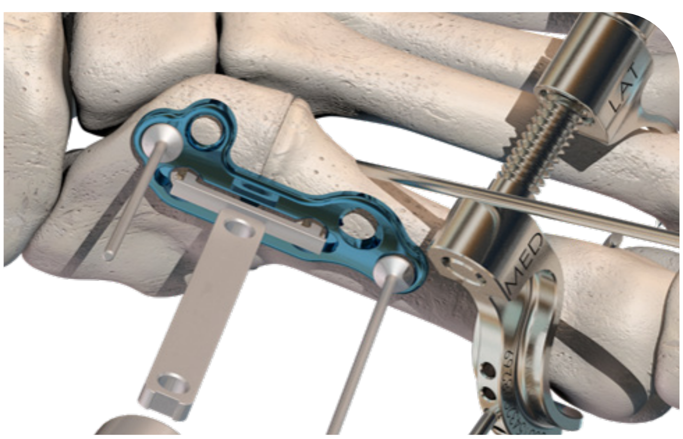
**STAPLE PREPARATION**

**DYNABUNION MEDIAL PLATE PLACEMENT**

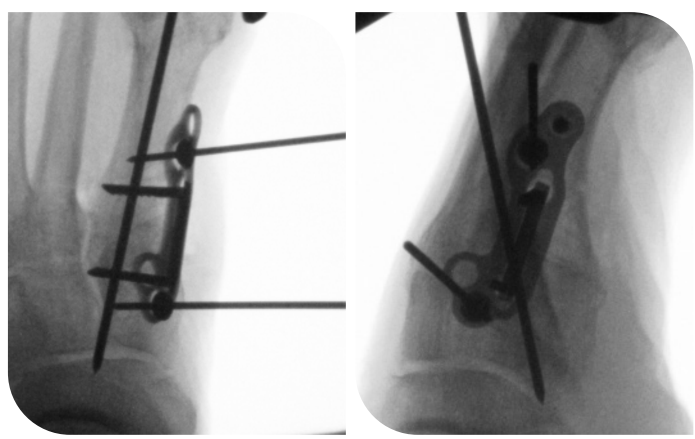


**STAPLE INSERTER REMOVAL**
**ONCE THE STAPLE IS PLACED, IT IS SAFE TO REMOVE THE CROSSJOINT WIRE.**

**DYNABUNION PLATE WITH STAPLE AND DISTAL SCREW PLACED**




**STAPLE TAMPING**

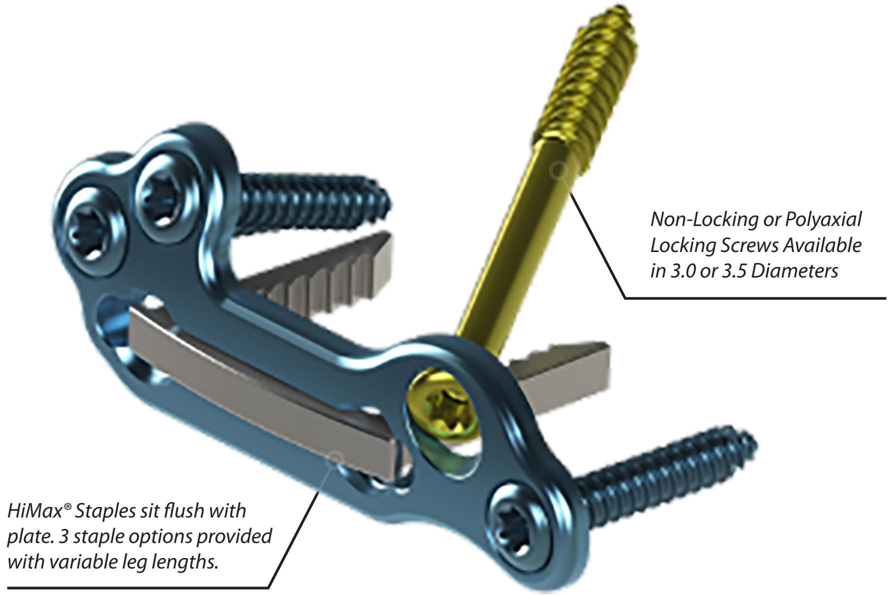


**AP AND LATERAL XRAY OF DYNABUNION PLATE AND STAPLE PLACED**

# Staple Compression Plate™ Placement

## Design Rationale

### *Finalize Alignment and Generate Strong Initial Compression*
### *R.A.C.: Re-Align & Compress*




*Implant options for use with the DynaBunion™ system.*

## FREQUENTLY ASKED QUESTIONS

**Am I required to place the Anti-Drift Bolt when using this system?**
NO. Once the temporary cross joint wire is placed, any form of CrossRoads fixation can be placed. The DynaBunion SCP provides maximum stability with incorporation of the Anti-Drift Bolt. The LC SCP provides a robust 4 screw construct if the ADB™ is not desired. The LC SCP provides the smallest footprint for a smaller incision. In addition, other nitinol implants can be utilized such as staples or Keel-Lock.

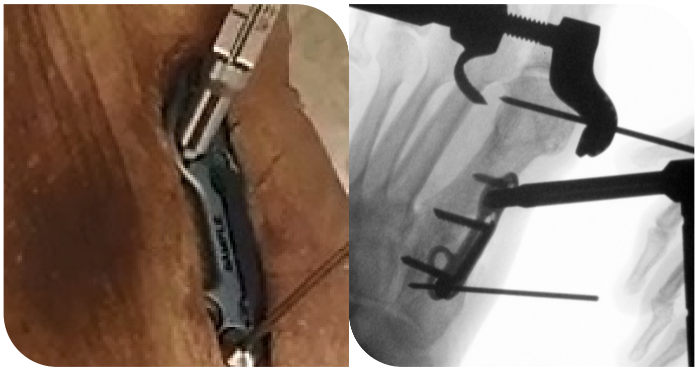
**Non-Locking Screws on Both Sides of the Plate** (recommended construct)
The screw holes in Staple Compression Plates™ allow .75mm of screw micro-movement per side when used with non-locking screws. This allows Staple Compression Plates™ to close an approximately 1.5mm fusion gap

**Non-Locking Screws on One Side of the Plate; Locking Screws on the Other**
The non-locking screws will allow .75mm of screw micro-movement on one side of the Staple Compression Plate™ while the locking screws will prevent all movement on the other. This construct can be expected to slightly reduce the gap-closure ability of the Staple Compression Plate™ and allow the closure of a .75mm gap along the entire medial to lateral surface.
**IF USE OF LOCKING SCREWS ARE DESIRED, UTILIZE THEM FOR THE TWO PROXIMAL SCREW HOLES.**

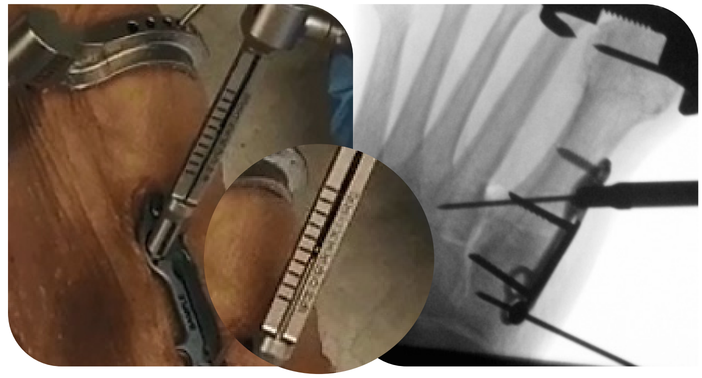
**Locking Screws on Both Sides of the Plate**
The use of locking screws on both sides of a Staple Compression Plate™ creates a rigid construct which allows no micro-movement between the screws and plate. However, the high compression provided by HiMax® staples can flex the plate and create a dynamic force for fusion gap closure; however, the force will be more laterally focused.

# Anti-Drift Bolt Placement

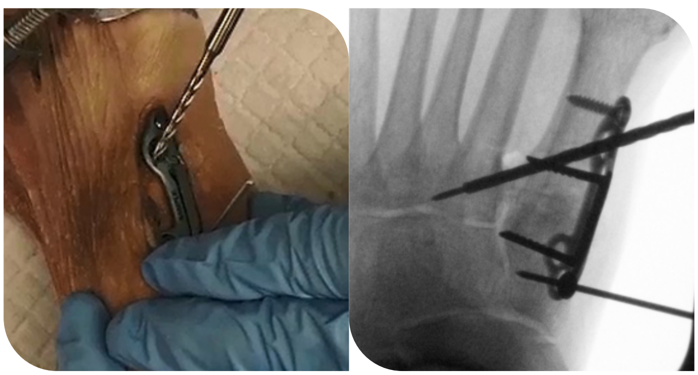
## Key Images



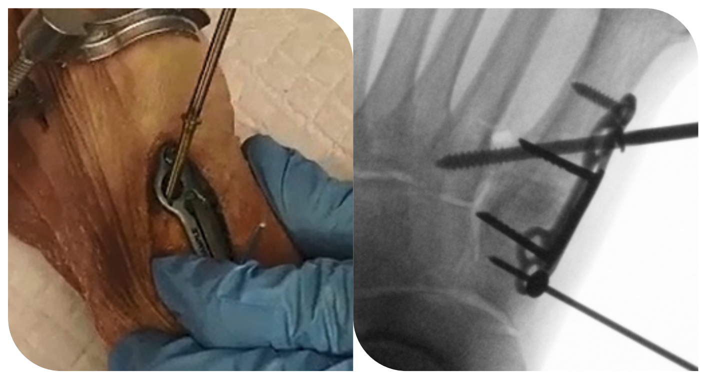
**DOCKING ANTI-DRIFT WIRE GUIDE INTO THE PLATE**
The universal handle is threaded into the anti-drift wire guide. The guide is docked into the plate by aligning the laser mark on the guide with the laser mark on the plate. The guide can be toggled to take a more distal trajectory if desired.



**TARGETING ANTI-DRIFT WIRE INTO BASE OF 2nd MET**
The anti-drift wire is then targeted into the base of the 2nd metatarsal through the guide. Care should be taken to avoid the 2nd TMT joint space. The required screw length can be read off of the window in the guide.



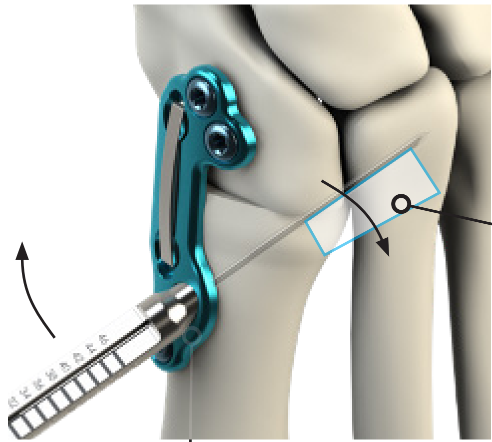
**DRILLING OVER ANTI-DRIFT WIRE INTO THE 2nd METATARSAL**
The cannulated reamer is used to drill over the anti-drift wire into the base of the 2nd metatarsal.

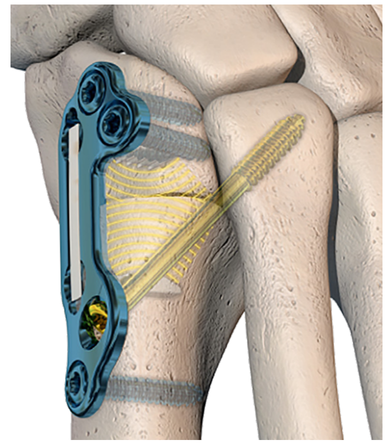


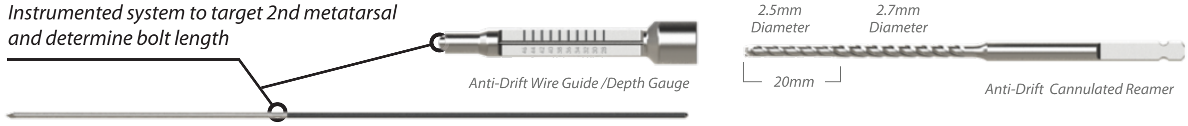
**PLACEMENT OF ANTI-DRIFT BOLT™**
The Anti-Drift Bolt is placed into the plate using an H10 driver. The bolt should be placed by freehand to start but can be finished by using power if desired. The bolt will sit sub-flush after placement.

# Anti-Drift Bolt Placement

## Design Rationale

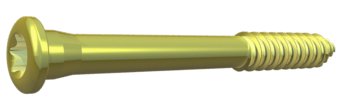


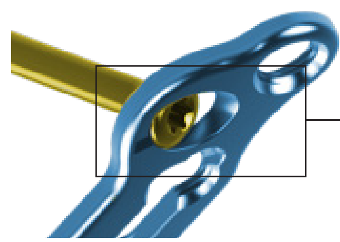



## Anti-Drift Bolt

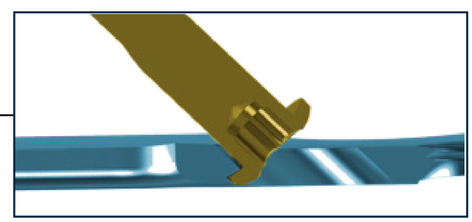
(For Use with DynaBunion™ Plate Only)



3.5mm, Non-Locking, Solid
Partially Threaded, 14mm
28-46mm Lengths, 2mm Increments



*Bolt will sit sub-flush once placed*



*Custom plate hole and screw head design to enable sub-flush placement*

### FREQUENTLY ASKED QUESTIONS

**Does the Anti-Drift Bolt™ negate the dynamic nature of staple compression plates?**
NO. The Anti-Drift Bolt is non-locking and behaves similarly to traditional non-locking screws used in Staple Compression Plates. Additionally, the anti-drift bolt does not cross first TMT joint and allows the staple to compress and aid in gap recovery.

**Am I required to place the Anti-Drift Bolt when using this system?**
NO. Once the temporary cross joint wire is placed, any form of CrossRoads fixation can be placed. The DynaBunion SCP provides maximum stability with incorporation of the Anti-Drift Bolt. The LC SCP provides a robust 4 screw construct if the ADB™ is not desired. The LC SCP provides the smallest footprint for a smaller incision. In addition, other nitinol implants can be utilized such as staples or Keel-Lock.

**Why is the ADB™ targeted towards the 2nd metatarsal VS. the intermediate cuneiform?**
One challenge when placing the ADB™ is avoiding the 2nd TMT joint. The base of the 2nd metatarsal was chosen to be the primary target for the ADB since there is less likelihood of crossing into the 2nd TMT joint space. Targeting the intermediate cuneiform would require a much more precise trajectory in order to avoid the joint space. In addition, biomechanical testing has shown that either placement has comparable biomechanical performance[1].

In addition, biomechanical cadaveric testing[1] showed that the 1st to 2nd metatarsal trajectory has the best mechanical performance: "Of the screw positions tested, the first metatarsal to second metatarsal screw was the only orientation that reduced instability with both transverse and coronal force application."

## Review the Biomechanical White Paper on the Anti-Drift Bolt™ for more information on performance.

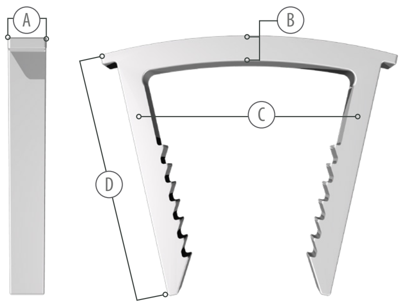
*1. Internal Biomechanical Testing*

## Plate Options

**DynaFORCE®**
Staple Compression Plates™

| |  DynaBunion™ SCP™ | |  LC SCP™ | |  LZ SCP™ | |
|---|---|---|---|---|---|---|
| TYPE | Right | Left | Alpha | Beta | Alpha | Beta |
| PART NUMBER | 7100-LP18-R | 7100-LP18-L | 7100-LC18-A | 7100-LC18-B | 7100-LZ18-A | 7100-LZ18-B |
| SLOT LENGTH/STAPLE SIZE | 18mm | 18mm | 18mm | 18mm | 18mm | 18mm |
| OVERALL LENGTH | 42mm | 42mm | 44mm | 44mm | 32mm | 32mm |
| THICKNESS | 1.7mm | 1.7mm | 1.7mm | 1.7mm | 1.7mm | 1.7mm |
| PLATE CURVATURE (DISTAL/PROXIMAL) | 0 Degrees | 0 Degrees | 10 Degrees | 10 Degrees | 10 Degrees | 10 Degrees |
| COMPATIBLE STAPLE | HiMax® | HiMax® | HiMax®-C | HiMax®-C | HiMax®-C | HiMax®-C |
| ANTI-DRIFT BOLT™ COMPATIBLE | YES | YES | NO | NO | NO | NO |

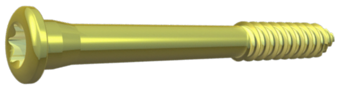
## Staple Options




| | | For Use with DynaBunion™ Plate | | | For Use with LC™ and LZ™ Plate | | |
|---|---|---|---|---|---|---|---|
| | |  |  |  |  |  |  |
| PART NUMBER | | HiMax® Staple (18x18x18mm) | HiMax® Staple (18x14x14mm) | HiMax® Staple (18x18x14mm) | HiMax® C Staple (18x18x18mm) | HiMax® C Staple (18x14x14mm) | HiMax® C Staple (18x18x14mm) |
| PART NUMBER | | 7118-1818 | 7118-1414 | 7118-1814 | 7118-1818-C | 7118-1414-C | 7118-1814-C |
| BRIDGE WIDTH | A | 2.7mm | 2.7mm | 2.7mm | 2.7mm | 2.7mm | 2.7mm |
| BRIDGE THICKNESS | B | 1.8mm | 1.8mm | 1.8mm | 1.8mm | 1.8mm | 1.8mm |
| INTERAXIS LENGTH | C | 18mm | 18mm | 18mm | 18mm | 18mm | 18mm |
| LEG LENGTH | D | 18mm | 14mm | 18x14mm | 18mm | 18mm | 18x14mm |
| REAMER SIZE | | 3.2mm | 3.2mm | 3.2mm | 3.2mm | 3.2mm | 3.2mm |
| COMPRESSION | | 27lbs. | 27lbs. | 27lbs. | 27lbs. | 27lbs. | 27lbs. |
| BRIDGE CURVATURE WHEN EXPANDED | | 0º | 0º | 0º | 10º | 10º | 10º |

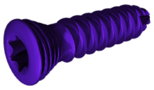
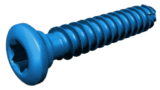
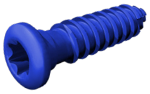
## Anti-Drift Bolt

(For Use with DynaBunion™ Plate Only)



3.5mm, Non-Locking, Solid
Partially Threaded, 14mm
28-46mm Lengths, 2mm Increments

## Plate Screws

| |  3.0mm POLYAXIAL LOCKING |  3.5mm POLYAXIAL LOCKING |  3.0mm NON-LOCKING |  3.5mm NON-LOCKING |
|---|---|---|---|---|
| PART NUMBER | 15PL-3010 thru 15PL-3030 | 15PL-3510 thru 15PL-3530 | 15NL-3010 thru 15NL-3030 | 1500-3510 thru 1500-3550 |
| SIZE RANGE* | 10mm-30mm | 10mm-30mm | 10mm-30mm | 10mm-50mm |
| DRIVER | H10 (Hexalobe) | H10 (Hexalobe) | H10 (Hexalobe) | H10 (Hexalobe) |
| DRILL SIZE | 2.0mm | 2.5mm | 2.0mm | 2.5mm |

**2mm increments*

### Indications & Risks

The MotoClip®/HiMAX® Implant System is indicated for hand and foot bone fragment osteotomy fixation and joint arthrodesis.
The MotoBAND® CP Implant System is indicated for stabilization and fixation of fresh fractures, revision procedures, joint fusion and reconstruction of small bones of the hand, feet, wrist, ankles, fingers and toes. When used for these indications, the MotoBAND® CP Implant System with the exception of the 2-hole plate may be used with the MotoCLIP®/HiMAX® Implant System.
There are potential risks associated with the use of these devices some of which include: allergic reaction to the implant material, fracture of the implant, soft-tissue complication (e.g., infection at the implant site, prolonged healing), and revision surgery. Refer to IFU for all contraindications, warnings, and risks.
US Patents: D870,284 & 10,492,841
Data on File for All Information & Data Listed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