



FEATURING PERSPECTIVES FROM:Craig Breslauer, DPMDavid Oji, MDMurray Butler, DPMPatrick Briggs, DPM

Michael Campbell, MD Scott Shawen, MD



Lapidus Should Be4D Stress Free[™]

Instead of manually holding the bones in multiple plane alignment, dynaBunion[®] instrumentation secures each plane individually. This allows for fine-tuning of alignment in each plane and a lessstressful surgery.





dynaBunion[®] Instruments Hold Position

The 4 Dimensions







"The 4th Dimension" **Compression That Doesn't Quit**

Compression is addressed by utilizing a unique RAC (re-alignment and compression) block and DynaForce® Staple Compression Plate[™] (SCP). SCPs[™] have a patented design that utilizes a powerful nitinol staple to provide compression.

This provides these primary advantages:

Gap Recovery

Continuous staple compression overcomes space between the fusing bones (i.e. gapping) caused by natural osteoclast resorption or patient non-compliance.

Apposition

Staple compression allows for increased bony apposition and surface area to optimize fusion compared to a transarticular lag screw.

Speed

Staple insertion is fast and simple compared to conventional independent lag screw techniques.





dynaBunion[®] addresses compression, a critical but commonly forgotten dimension of Lapidus. The RAC block features convergent holes to help generate strong initial compression and bony apposition. The joint can then be fixated with Staple Compression Plate[™] technology.

Rotation

The dynaBunion[®] Frontal Plane Joystick allows two-point control proximally at the joint which generates strong leverage to correct rotation. A wire can be placed into the distal reducer to secure rotation.

Reduction



The dynaBunion® reducer provides distal IMA reduction directly at the metatarsal head. Unlike competitive reducers, the medial arm of the dynaBunion® reducer can be placed directly over the skin. Once tightened, it will hold the IM reduction in place.



Alignment

The radiolucent dynaBunion® RAC Block finalizes and secures the correction. In addition, the RAC block provides a platform to optimize sagittal alignment and avoid transfer metatarsalgia.



Compression

DynaBunion[™] Lapidus System

Key Instrumentation



2.0mm Long Wires



Anti-Drift Wire Guide /Depth Gauge

Anti-Drift Depth Wire



Hintermann Distractor

DynaForce[®] Staple Compression Plate[™] Options

PAR
SLOT LENGTH/ST
OVERAL
т
PLATE CURVATURE (DISTAL/P
COMPATIB
ANTI-DRIFT BOLT™ CO

HiMax[®] Implant HiMax[®] Implant (18x18x18mm) (18x14x14mm)

A 2.7mm

D 18mm

Nitinol Options







PART NUMBER

BRIDGE WIDTH

LEG LENGTH

BRIDGE THICKNESS

INTERAXIS LENGTH





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

	3.0mm POLYAXIAL LOCKING
PART NUMBER	15PL-3010 thru 15PL-3030
SIZE RANGE*	10mm-30mm
DRIVER	H10 (Hexalobe)
DRILL SIZE	2.0mm

*2mm increments



GraterBlade™

DynaBunion™

OsteoPrecise[™] Cut Guide

0 0 2 0 0

0 030 0

RAC Block 2

RAC Block 3

DynaBunion ReCut Guide





MER SIZE	3.2mm
PRESSION	27lbs.
VATURE WHEN 5 ARE STRAIGHT	0°

В

C



	P 18mm 42mr	2 m		18mm)	18m 32r	ım –		
	dynaBun	ion° SCP [™]		LCS	SCP [™]		LZ	SCF	D ¹¹⁰	
TYPE	Right	Left		Alpha	Beta		Alpha		Beta	
T NUMBER	7100-LP18-R	7100-LP18-L	71(0-LC18-A	7100-LC18-B	71	100-LZ18-A	71	00-LZ18-B	
TAPLE SIZE	18mm	18mm		18mm	18mm		18mm		18mm	•••
LL LENGTH	42mm	42mm		44mm	44mm		32mm		32mm	
THICKNESS	1.7mm	1.7mm		1.7mm	1.7mm		1.7mm		1.7mm	
PROXIMAL)	0 Degrees	0 Degrees	10	Degrees	10 Degrees	1	0 Degrees	1() Degrees	
BLE STAPLE	HiMax®	HiMax®	Н	iMax®-C	HiMax®-C	I	HiMax [∞] -C	Н	liMax®-C	
OMPATIBLE	YES	YES		NO	NO		NO		NO	

For use with dynaBunion [°] Plate		For use v	vith LC [™] and				
		T		Tur	T		TO
iMax® Implant 8x18x18mm)	HiMax® Implant (18x14x14mm)	HiMax [®] Implant (18x18x14mm)	HiMax [®] C Implant (18x18x18mm)	HiMax [®] C Implant (18x14x14mm)	HiMax® C Implant (18x18x14mm)	HiMax® Plus Implant	Keel-Lock [®] Implant
7118-1818	7118-1414	7118-1814	7118-1818-C	7118-1414-C	7118-1814-C	7415-1515 thru 7425-2222	7318-1818,7320-2020
2.7mm	2.7mm	2.7mm	2.7mm	2.7mm	2.7mm	5mm	5mm
1.8mm	1.8mm	1.8mm	1.8mm	1.8mm	1.8mm	1.3-1.6mm	1.3-1.6mm
18mm	18mm	18mm	18mm	18mm	18mm	15,18, 20, 25mm	18 or 20mm
18mm	14mm	18x14mm	18mm	18mm	18x14mm	15,18, 20,22 mm	18 or 20mm
3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm
27lbs.	27lbs.	27lbs.	27lbs.	27lbs.	27lbs.	28lbs.	28lbs.
0°	0°	0°	10°	10°	10°	10°	10º





3.5mm POLYAXIAL LOCKING 15PL-3510 thru 15PL-3530 10mm-30mm

H10 (Hexalobe)

2.5mm



3.0mm NON-LOCKING

15NL-3010 thru 15NL-30 10mm-30mm H10 (Hexalobe) 2.0mm



3.5mm NON-LOCKING

)30	1500-3510 thru 1500-3550
	10mm-50mm
	H10 (Hexalobe)
	2.5mm



The dorsomedial incision for DynaBunion was chosen to allow for excellent access to the entire first tarsometatarsal joint in addition to the interspace between the bases of the first and second metatarsals and distal portion of the medial intercuneiform joint. This incision allows for work to be done in the interval between the tibialis anterior tendon insertion and the extensor hallicus longus tendon. A common structure encountered with this exposure is the terminal sensory branch to the great toe and often a traversing vein branch - both easily mobilized or, in the case of the vein, ligated or coagulated.

CrossRoads Staple Compression Plates are designed with the biomechanical goal of achieving a tension band type construct away from the plate. By design, the DynaBunion medial plate placement creates a dynamic construct which not only resists plantar gapping, but also resists widening of the intermetatarsal angle, with an intent of providing the ideal Lapidus construct.

Cut Guide

INSTRUMENTS REQUIRED

2.0 Long Wire

40mm Saw Blade

2.0 Short Wire

6

SURGICAL TECHNIQUE **C**ut Metatarsal



thickness of the metatarsal bone sliver is 1.6mm.



Once the metatarsal cut is complete, remove the cut guide from the two k-wires in order to remove the bone sliver.



Flip the cut guide 180 degrees and place it back into the joint and over the existing wires. The cutting slot and circle should now be facing the medial cuneiform.

WHY IS THE DYNABUNION INCISION DORSOMEDIAL? IS THERE ANY SPECIFIC ANATOMY TO BE WARY OF DUE TO THE DORSOMEDIAL INCISION? Surgeon Perspective from Michael Campbell, MD

SURGICAL TECHNIQUE





Utilize the frontal plane joystick to attempt rotation of the metatarsal. If complete rotation and ideal sesamoid position cannot be achieved, then a lateral soft-tissue release may be performed at this time.

Perform a small stab incision for placement of the lateral reducer hook. The stab incision should be located between the 2nd and 3rd metatarsal necks or may be created slightly more medial to be also used for a lateral release if needed. Place the lateral hook of the reducer between the 2nd and 3rd metatarsal necks. Place the medial hook over the skin onto the head of the 1st metatarsal.



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While holding the reducer in place, tighten the reducer knob clockwise until it is snug but do not close down all of the intermetatarsal (IM) angle.

With one hand, utilize the joystick to generate frontal plane correction by rotating the sesamoids into proper placement directly under the head of the metatarsal

INSTRUMENTS REQUIRED



Jovstick

Radiolucent Reducer

2.0 Short Wire



With a second hand, place a 2.0mm short wire through one of the holes in the medial hook into the metatarsal to lock frontal plane correction and hold the reducer in place.



My main consideration on whether to do open or percutaneous lateral release is the flexibility of the patient's great toe MTP joint. In older patients with hallux rigidus, the bunion deformity is typically more rigid, and a lateral release may be needed to make the joint congruent. In those patients, I may also consider an akin osteotomy to provide a better clinical result. Regardless of age and/or arthritis, or reduced ROM, I perform the DynaBunion Lapidus arthrodesis to get 4D correction.

In 60% of patients, I do not have to do a lateral release. DynaBunion's unique ability to fully correct the IMA and frontal plane deformity, minimize shortening, and compress in a simplified step wise approach reduces the need for lateral soft tissue release, modified McBride, or Akin osteotomies. In the 40% of patients that need a lateral release, I notice that the great toe is still in valgus after correction of the IMA and frontal plane even though the distal 1st MT is directly over the sesamoids. These patients tend to be older (>50 years old), long standing moderate to severe hallux valgus deformity, there's evidence of hallux rigidus, and tend to have reduced flexibility to varus.

I typically start with a percutaneous release rather than an open release. If the joint is still rigid and tight, then I do an open release and release the adductor hallucis off the lateral sesamoid. I find that in 30% of patients, the great toe needs additional correction and I have a very low threshold to include an akin osteotomy. Finally, if a last bit of correction is needed, then I do an excision of the medial eminence and plication of the medial capsule. I find that with the ability to have such a precise correction system like DynaBunion where all deformities can be corrected to a normal position/ value, there is less of a need to do a McBride.

WHEN SHOULD I PERFORM A LATERAL RELEASE?

Surgeon Perspective From David Oji, MD

SURGICAL TECHNIQUE **C**ut Cuneiform

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Dorsiflex the hallux to engage the windlass mechanism of the plantar fascia, which will compress the first TMT joint and provide apposition of the cut guide paddle to the medial cuneiform joint surface.

Be careful to not lose any frontal plane correction, while dorsiflexing the hallux and engaging the windlass mechanism. TIP: Have an assistant hold the frontal plane joystick to help ensure sesamoid position is maintained while performing this portion of the procedure.

Ensure both wires are bicortical.

While still performing windlass, place a short 2.0mm wire into the 2nd most proximal hole. Place the long 2.0mm wire into the most proximal hole.





Remove the cuneiform resection. If needed, utilize an osteotome or rongeur to remove any remaining plantar bone.



The maximum theoretical thickness of the cuneiform bone sliver is 1.6mm. The cuneiform bone sliver may be thicker on the lateral side.



If an additional cut is needed, see the optional ReCut technique below.

Preparation of the metatarsal and cuneiform joint surfaces should be completed at this time per the surgeon's preferred technique. If desired, preparation of the articulation between the proximal 1st and 2nd metatarsals or distal portion of the intercuneiform joint can be completed.



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A hintermann distractor is provided and can be placed over the two inner wires to distract the joint in order to access the joint surfaces.

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Utilize one of the provided 40mm saw blades to complete the cuneiform cut. Making sure that the surrounding soft tissue has been retracted from under the cut guide.

40mm Saw Blade

2

Optional: Recut

Before the Re-Cut guide is used, ensure both metatarsal and cuneiform cuts have been made using the standard cut guide. A re-cut prior to making both cuts will cause misalignment of the wire pattern for proper instrument placement.

The ReCut Guide should be placed over the existing two wires until in contact with the bony surface.

Next, the cut can be taken with the provided blades. 8

> The maximum theoretical thickness of each re-cut bone sliver is 1.1mm.



WHEN IS A "RECUT" TYPICALLY REQUIRED? Surgeon Perspective From Michael Campbell, MD

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.

INSTRUMENTS REQUIRED

2.0 Long Wire

2.0 Short Wire

10

SURGICAL TECHNIQUE Cut Cuneiform



INSTRUMENTS REQUIRED





SURGICAL TECHNIQUE Compress

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Starting with RAC Block 0, align the 4 dorsal holes of the block over the four dorsal wires with the two angled holes facing distally.

Apply plantar counter-pressure to ensure the force from the block does not plantar shift the metatarsal.

When the RAC block is approximately half way down the wires, any sagittal plane alignment adjustments can be made. Confirm with palpation and fluroscopy that the weight bearing surface under the sesamoids is not dorsally or plantarly translated in relation to the lesser metatarsal heads.

The RAC Block should be flush against the dorsal surface of the cuneiform but may be hanging above the surface of the metatarsal.

Visually confirm bony apposition of the first TMT joint and confirm under lateral fluoroscopy if desired. The RAC Block is PEEK and radiolucent to aid in visualization of the correction and bony apposition.

If additional bony apposition is needed, remove RAC Block 0 and place one of the additionally provided blocks. Increasing number corresponds with increased compression.



INSTRUMENTS REQUIRED













GraterBlade

Optional: Removal of RAC Block



The blunt side of the universal handle can be slid into the large

compressor block down

to bone.

hole on the RAC Block to push the

2

Due to it's final dorsal position, he RAC Block can be left in place while placing the DynaBunion medial Staple Compression Plate. However, if the block is in the way of desired plate placement, it can be removed by following the steps listed below.



The lateral hole is recommended to avoid the plate.

If the user is not confident in the bone quality or bony purchase, a second wire can be placed in the remaining hole or freehand to ensure correction and apposition will be maintained.



cross joint wire(s) has purchase in the metatarsal and cuneiform.

> 7 joint wire.



IF THERE IS A LATERAL FLARE OF THE METATARSAL BASE, SHOULD I BEND MY PLATE OR SHAVE THE BONE? Surgeon Perspective From Michael Campbell, MD

When performing the Lapidus procedure, especially one with significant metatarsal rotational correction, the plantar-medial flare of the first metatarsal often becomes very prominent. Personally, I'm a major proponent shaving this medial surface of the proximal first metatarsal and if necessary medial aspect of the cuneiform to become flat surface. This, in my experience, not only decreases prominence and improves cosmesis, but has completely obviated the need for hardware removal. Additionally, it allows for the plate to be applied without any contouring. By avoiding the need to contour the plate, staple and screw interaction with the plate is optimized. It is also far easier and quicker to make the bone fit the plate then make the plate fit the bone. The GraterBlade is the most optimal instrument for safely feathering the bone to create a flat surface.

Remove all 4 dorsal wires and slide the RAC block off of the cross-

Optional: GraterBlade[™] Preparation

Any medial flare of the metatarsal present can be shaved down with the GraterBlade to ensure there is a flat surface present for plate placement.



The GraterBlade can be oriented in a dorsalto-plantar trajectory and moved distal-toproximal to precisely shave the bone.

SURGICAL TECHNIQUE

Compress

The GraterBlade is dull on all edges and has only one cutting side to ensure safety of surrounding sensitive anatomy. The cutting side is noted with the text "Cut Side" and other symbols.

WHAT IS THE MOST SECURE FREEHAND WIRE TRAJECTORY? Surgeon Perspective From Patrick Briggs, DPM

If a second wire is needed to cross the 1st TMT to stabilize prior to fusion, the easiest and most reproducible throw is from plantar/distal to dorsal proximal. This allows the surgeon to take advantage of plantar curvature of the 1st metatarsal and can facilitate direct aiming into the medial cuneiform. This temporary fixation also has the advantage with being on the tension side of the joint and will prevent any gapping plantarly while counterbalancing the 1st point of fixation through the RAC block. This technique also prevents any temporary fixation to be well out of the way of the permanent fixation.

SURGICAL TECHNIQUE Staple Compression Plate[™] Placement

CrossRoads fixation options such as Staple Compression Plates (SCP)™ or staples can be utilized to fixate the 1st TMT joint. If using a SCPTM, select between the DynaBunion, LC, or LZ plate. See page 5 for details on plate options.





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Additionally, if desired, the provided depth gauge can be inserted into the reamed hole to determine screw length.



WHY AND WHEN SHOULD I USE THE 18x18x14 STAPLE? Surgeon Perspective From Michael Campbell, MD

The 18 by 18 x 14 staple is a fantastic option for the average size patient. Unless the patient has a relatively large or small foot, the size option fits the base of the metatarsal and the cuneiform nicely. The 18 mm leg provides stable fixation over the vast majority of the metatarsal base without crossing through the lateral cortex or impeding close down of the intermetatarsal angle. The 14 mm leq which is typically placed in the cuneiform provides excellent coverage across the cuneiform typically without crossing into the intercuneiform joint.

14

Inserter

Olive Wire

Tamp

Staple Drill Guide 3.2 Reamer

Fixation Pin

18mm Staple

SURGICAL TECHNIQUE Staple Compression Plate[™] Placement

If needed, a tamp can be used to ensure the staple is flush to plate. The end of the tamp features a cut out that fits the staple bridge.

- Determine if locking or non-locking or locking screws will be utilized. The use of non-locking screws is recommended to allow maximum continuous compression for gap recovery.
- Place the drill guide onto the most distal hole first. Use the appropriate reamer to prepare a hole for the screw.



12

Attach the provided H10 self retaining driver to the handle. Load the selected screw onto the self-retaining driver and insert into hole.



Once the screw is placed, it is critical to toggle the driver side to side to remove it from the placed screw. DO NOT PULL THE DRIVER STRAIGHT OFF THE SCREW WITHOUT TOGGLING.

Repeat the previously described screw preparation and placement steps for the two proximal screw holes.

IF I WANT TO PLACE SOME LOCKING SCREWS, WHICH SIDE SHOULD THEY BE PLACED?

Surgeon Perspective From Murray Butler, DPM

If I ever have a need to use locking screws, I use them on the proximal holes of the plate into the medial cuneiform. The non-locking distal screw is always bicortical and provides good apposition of the plate to the metatarsal. The proximal screws are often only in the medial cuneiform and are unicortical so, in patients with compromised bone density, locking screws can be placed unicortically with confidence.

SURGICAL TECHNIQUE Anti-Drift Bolt[®] Placement

THE FOLLOWING STEPS ARE FOR DYNABUNION PLATES ONLY.



Use the Anti-Drift Bolt[®] cannulated reamer to drill over the wire. At a minimum, ensure the medial cortex of the 2nd metatarsal is penetrated.



Remove the depth wire and attach the selected ADB[®] to the provided H10 driver and place it through the plate and into the prepared hole.



4

The most common lengths of the ADB® are 34-40mm.

An internal obligue c-arm image visualizing the interspace between the proximal 2nd and 3rd metatarsals, parallel to the 2nd TMT joint, is critical to accurately determine wire position and appropriate screw length.



WHAT ARE THE BENEFITS OF USING AN ANTI-DRIFT BOLT? Surgeon Perspective From Patrick Briggs, DPM

We know from the literature that upwards of 30% of Lapidus can reoccur. Aligning the 1st ray parallel to the second ray with arthrodesis at the 1st TMT, does not quarantee prevention of medial deviation of the 1st ray even if the surgeon elects to "wedge" the medial cuneiform on the lateral side. As we have seen with our "Anti-Drift Bolt[®], the intercuneiform and intermetarsal *gapping or "diastasis" is eliminated. Prior to throwing our Anti-Drift Bolt*[®], we can demonstrate this on fluoroscopy by applying pressure in the first intermetarsal space (after our fixation is in place at the 1st TMT). This most often leads to medial deviation of the entire 1st ray. From anecdotal evidence, the most stable and tolerated direction is from mid shaft (from dorsal to plantar on metatarsal) aiming toward the base of the second. I have found placing the Anti-Drift Bolt[®] into the intermediate cuneiform will not always prevent diastasis occurring between the intermetatarsals. Furthermore, if you angle the bolt perpendicular to the 1st and 2nd metatarsals, this at times will not be tolerated by the patient and will require removal.

2

SURGICAL TECHNIQUE Anti-Drift Bolt[®] Placement



Verify the final construct placement with both AP and ML imaging; confirming both anatomic correction as well as proper screw trajectory of ADB®



DO NOT OVERTIGHTEN THE ADB. THE ADB IS A POSITIONAL SCREW AND NOT INTENDED TO BE USED FOR REDUCTION **OR COMPRESSION**



WHAT PATIENTS ARE A CANIDATE FOR AN ANTI-DRIFT BOLT? Surgeon Perspective From Scott Shawen, MD

The Anti-Drift Bolt[®], in my opinion, provides increased stability to the construct, which clinically increases the chance for a successful arthrodesis, but also decreases the possibility of late deformity recurrence. I think that all patients undergoing a Lapidus or first tarsometatarsal fusion procedure are candidates for the Anti-Drift Bolt[®]. It provides increased stability to the fusion *construct which cannot be ignored.*

SURGICAL TECHNIQUE Freehand / Curettage Technique

This portion of the technique is only for users who use a curettage technique or wish to complete their cuts freehand without a cut guide.

> Complete the metatarsal and cuneiform cuts freehand or perform the curettage technique.

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Pin a short 2.0mm wire into the second most proximal hole of the wire guide Place a long 2.0mm wire into the most proximal hole of the wire guide.

5

Perform the remaining steps as previously described in the standard technique: Starting with Step "COMPRESS". Perform Step "Staple Compression Plate[™] Placement"



The freehand technique can be utilized at the surgeon's discretion and personal preferences. Prior to the DynaBunion, I greatly favored a freehand joint resection on all of my Lapidus bunionectomies. There are still some occasions when freehand joint resection might be chosen. The first indication for the freehand technique involves the presence of an atavistic medial cuneiform. In this scenario, joint resection can require a significant wedge resection of the distal cuneiform in order to create two parallel surfaces for fusion. I prefer to approach the medial cuneiform from a dorsal approach to allow proper visualization of the intended wedge to be removed. A minimum sliver of cartilage is taken medially with the base of the wedge laterally. One caveat to keep in mind. Caution should be used to not take too much bone laterally as this can create unnecessary shortening. Instead, I prefer to fish scale the lateral aspect of the cueniform with a 1/4" curved osteotome as this allows compression of the cancellous bone and additional correction.

Another situation where the freehand technique may be utilized involves a surgeon who prefers this method over the others. This boils down to what the individual physician is the most comfortable with. When performing this type of joint preparation, one can use a Hintermann type distractor to access and visualize the joint more readily. The same distal pin hole from the distractor may then be used to apply the freehand pin guide from the DynaBunion set. At this point, the wires in the distal holes of the pin guide can used used to distract the 1st metatarsal distally while resecting the medial cuneiform.

A final circumstance that can lead one to use the freehand technique is in the case of an atypicalo0 small foot. Here, the cut guide might be too large to sit inside the 1st TMTJ. Although this is infrequent, surgeons should be prepared to abandon the cut guide and move on to the freehand approach when encountered.

Place the freehand wire guide into the joint at a dorsomedial position. While ensuring the paddle is flush with the metatarsal surface, pin a short 2.0mm wire into the second most distal hole of the wire guide. Place a long 2.0mm wire into the most distal hole of the wire guide.



INSTRUMENTS REQUIRED



Freehand Wire Guide

2

SURGICAL TECHNIQUE Freehand / Curettage Technique





WHEN WOULD A FREEHAND TECHNIQUE BE NECESSARY?

Surgeon Perspective From Craig Breslauer, DPM



EcoSmart[®] Surgery

All Instrument and Implants Sterile Packaged What sets do I need to bring to the case?



DynaBunion[™] Sterile Surgical Set – FULL

Part Number	Name	Quantity
1500-4800	DynaBunion Sterile Kit	1
1500-48RC	DynaBunion Recut Kit	1
1500-4700	Plate Instrument Kit	1
7000-BEND	Universal Plate Benders	1
7100-1800	18MM Staple Prep Kit	2
1500-4850	Anti-Drift Instrument Kit	2
PC5023.140 STE or 7001-40SB	40MM Saw Blade - Conmed/Hall	2
7000-40SB	40MM Saw Blade - Stryker	2
7100-LP18-L	DynaBunion Plate Left	2
7100-LP18-R	DynaBunion Plate Right	2
7100-LZ18-A	Lapidus LZ Alpha	1
7100-LZ18-B	Lapidus LZ Beta	1
7100-LC18-A	Lapidus LC Alpha	1
7100-LC18-B	Lapidus LC Beta	1
7118-1414	18x14 HiMax	2
7118-1818	18x18 HiMax	2
7118-1814	18x18x14 HiMax	1
7118-1414-C	18x14 HiMax-C	1
7118-1818-C	18x18 HiMax-C	1
7118-1814-C	18x18x14 HiMax-C	1
15LP-3528	Anti-Drift Bolt® Fully Threaded 3.5x28	1
15LP-3530	Anti-Drift Bolt® Fully Threaded 3.5x30	2
15LP-3532	Anti-Drift Bolt® Fully Threaded 3.5x32	2
15LP-3534	Anti-Drift Bolt® Fully Threaded 3.5x34	2
15LP-3536	Anti-Drift Bolt® Fully Threaded 3.5x36	2
15LP-3538	Anti-Drift Bolt® Fully Threaded 3.5x38	2
15LP-3540	Anti-Drift Bolt® Fully Threaded 3.5x40	2
15LP-3542	Anti-Drift Bolt® Fully Threaded 3.5x42	1
15LP-3544	Anti-Drift Bolt [®] Fully Threaded 3.5x44	1
15LP-3546	Anti-Drift Bolt® Fully Threaded 3.5x46	1
7000-20K4	2.0 Short Wire 4 Pack	1
7000-20K6	2.0 Long Wire 4 Pack	1
7000-ADK6	Anti-Drift Depth Wire Single Pack	1
7000-LVWR	Olive Wire	1
7000-0032	3.2 Reamer	1
1500-5025	2.5 Reamer	1
1500-5050	H10 Driver	1
7001-40GB	GraterBlade - Conmed/Hall	1
7000-40GB	40MM GraterBlade - Stryker	1



Universal Plate Screw Set

Existing screw set inventory should be utilized in conjunction with the DynaBunion Set. Screw loaner sets are available by request.

Part Number	Name	Quantity
5PL-3010	Polyaxial Locking Screw 3.0 x 10mm	2
5PL-3012	Polyaxial Locking Screw 3.0 x 12mm	3
5PL-3014	Polyaxial Locking Screw 3.0 x 14mm	3
5PL-3016	Polyaxial Locking Screw 3.0 x 16mm	4
5PL-3018	Polyaxial Locking Screw 3.0 x 18mm	4
5PL-3020	Polyaxial Locking Screw 3.0 x 20mm	4
5PL-3022	Polyaxial Locking Screw 3.0 x 22mm	4
5PL-3024	Polyaxial Locking Screw 3.0 x 24mm	3
5PL-3026	Polyaxial Locking Screw 3.0 x 26mm	3
5PL-3028	Polyaxial Locking Screw 3.0 x 28mm	2
5PL-3030	Polyaxial Locking Screw 3.0 x 30mm	2
5PL-3510	Polyaxial Locking Screw 3.5 x 10mm	2
5PL-3512	Polyaxial Locking Screw 3.5 x 12mm	3
5PL-3514	Polyaxial Locking Screw 3.5 x 14mm	3
5PL-3516	Polyaxial Locking Screw 3.5 x 16mm	4
5PL-3518	Polyaxial Locking Screw 3.5 x 18mm	4
5PL-3520	Polyaxial Locking Screw 3.5 x 20mm	4
5PL-3522	Polyaxial Locking Screw 3.5 x 22mm	4
5PL-3524	Polyaxial Locking Screw 3.5 x 24mm	3
5PL-3526	Polyaxial Locking Screw 3.5 x 26mm	3
5PL-3528	Polyaxial Locking Screw 3.5 x 28mm	2
5PL-3530	Polyaxial Locking Screw 3.5 x 30mm	2
5NL-3010	Non-Locking Screw 3.0 x 10mm	2
5NL-3012	Non-Locking Screw 3.0 x 12mm	3
5NL-3014	Non-Locking Screw 3.0 x 14mm	3
5NL-3016	Non-Locking Screw 3.0 x 16mm	4
5NL-3018	Non-Locking Screw 3.0 x 18mm	4
5NL-3020	Non-Locking Screw 3.0 x 20mm	4
5NL-3022	Non-Locking Screw 3.0 x 22mm	4
5NL-3024	Non-Locking Screw 3.0 x 24mm	3
5NL-3026	Non-Locking Screw 3.0 x 26mm	3
5NL-3028	Non-Locking Screw 3.0 x 28mm	2
5NL-3030	Non-Locking Screw 3.0 x 30mm	2
500-3510	Non-Locking Screw 3.5 x 10mm	2
500-3512	Non-Locking Screw 3.5 x 12mm	3
500-3514	Non-Locking Screw 3.5 x 14mm	3
500-3516	Non-Locking Screw 3.5 x 16mm	4
500-3518	Non-Locking Screw 3.5 x 18mm	4
500-3520	Non-Locking Screw 3.5 x 20mm	4
500-3522	Non-Locking Screw 3.5 x 22mm	4
500-3524	Non-Locking Screw 3.5 x 24mm	3
500-3526	Non-Locking Screw 3.5 x 26mm	3
500-3528	Non-Locking Screw 3.5 x 28mm	2
500-3530	Non-Locking Screw 3.5 x 30mm	2
500-3532	Non-Locking Screw 3.5 x 32mm	2
500-3534	Non-Locking Screw 3.5 x 34mm	2
500-3536	Non-Locking Screw 3.5 X 36mm	2
500-3538	Non-Locking Screw 2.5 x 38mm	2
500-3540	Non-Locking Screw 2.5 x 40mm	2
500-3545	Non-Locking Screw 2.5 x 45mm	2
500-3550	NUI-LUCKING SCIEW 5.5 X SUMM	2
200-2022	Dynaroice Ø2.5 Keamer, Long - Sterne	Z

EcoSmart[®] Surgery All Instrument and Implants Sterile Packaged What do I need to open?



 Long 2.0mm Wire x 4 1500-4800 Universal Handle



• AO Handle • Olive Wire x 2 • H10 Driver Locking Drill Guide Non-Locking Drill Guide Depth Gauge • 2.5 Reamer • 2.0 Reamer

Plate Instrument Kit 1500-4700



• 18mm Staple Drill Guide • 18mm Staple Inserter • Tamp • Fixation Pins x 2 • 3.2 Reamer

18mm Staple Prep Kit (implant not included) 7100-1800



TWO OPTIONS For Stryker/MicroAir Connection Use: 7000-40SB For Conmed/Hall Connection Use:

PC5023.140 STE or 7001-40SB

40mm Saw Blade

Kit Back-Ups

We know things don't always go as planned, so we provide backups of all key instruments and sharps to ensure you are covered!

7000-20K4	2.0 Short Wire 4 Pack 1
7000-20K6	2.0 Long Wire 4 Pack 1
7000-ADK6	Anti-Drift Depth Wire Single Pack 1
7000-LVWR	Olive Wire 1
7000-0032	3.2 Reamer 1
1500-5025	2.5 Reamer 1
1500-5050	H10 Driver 1

Sterile ratchet handles are available by request.





2-4 Screws 3.0 or 3.5 NL or PAL

For Use With DynaBunion Plate Only

NON-EcoSmart[®] Surgery

ONLY Sharps and Implants Are Sterile Packaged What sets do I need to bring to the case?



DynaBunion™ Sterile Surgical Set – PARTIAL

Davt Number	Name	Quantity
1500 5060	Name DunaRunian Charne Vit	Quantity
1500-5000	Dylidbulloli Sildips Ni	1
1000-4000	Anti-Dinit Instrument Kit	2
or 7001-40SB	40mm Sam Biade - Contried/Hall	2
7000-40SB	40MM Saw Blade - Stryker	3
7100-LP18-L	DynaBunion Plate Left	2
7100-LP18-R	DynaBunion Plate Right	2
7100-LZ18-A	Lapidus LZ Alpha	1
7100-LZ18-B	Lapidus LZ Beta	1
7100-LC18-A	Lapidus LC Alpha	1
7100-LC18-B	Lapidus LC Beta	1
7118-1414	18x14 HiMax	2
7118-1818	18x18 HiMax	2
7118-1814	18x18x14 HiMax	2
7118-1414-C	18x14 HiMax-C	1
7118-1818-C	18x18 HiMax-C	1
7118-1814-C	18x18x14 HiMax-C	2
15LP-3528	Anti-Drift Bolt [®] Fully Threaded 3.5x28	1
15LP-3530	Anti-Drift Bolt [®] Fully Threaded 3.5x30	2
15LP-3532	Anti-Drift Bolt [®] Fully Threaded 3.5x32	2
15LP-3534	Anti-Drift Bolt [®] Fully Threaded 3.5x34	2
15LP-3536	Anti-Drift Bolt [®] Fully Threaded 3.5x36	2
15LP-3538	Anti-Drift Bolt [®] Fully Threaded 3.5x38	2
15LP-3540	Anti-Drift Bolt [®] Fully Threaded 3.5x40	2
15LP-3542	Anti-Drift Bolt [®] Fully Threaded 3.5x42	1
15LP-3544	Anti-Drift Bolt [®] Fully Threaded 3.5x44	1
15LP-3546	Anti-Drift Bolt [®] Fully Threaded 3.5x46	1
7000-20K4	2.0 Short Wire 4 Pack	1
7000-20K6	2.0 Long Wire 4 Pack	1
7000-ADK6	Anti-Drift Wire	1
7000-LVWR	Olive Wire	1
7000-0032	3.2 Reamer	1
1500-5025	2.5 Reamer	1
1500-5050	H10 Driver	1
7001-40GB	GraterBlade - Conmed/Hall	1
7000-40GB	40MM GraterBlade - Stryker	1



DynaBunion[™] Non-Sterile Surgical Tray



Universal Plate Screw Set

Existing screw set inventory should be utilized in conjunction with the DynaBunion Set. Screw loaner sets are available by request.

out Number	Nomo	Quantity
	Name	Quantity
	Polyaxial Locking Screw 3.0 x 10mm	2
5PL-3012	Polyaxial Locking Screw 3.0 x 12mm	3
5PL-3014	Polyaxial Locking Screw 3.0 x 14mm	5
5PL-3016	Polyaxial Locking Screw 3.0 x 16mm	4
5PL-3018	Polyaxial Locking Screw 3.0 x 18mm	4
5PL-3020	Polyaxial Locking Screw 3.0 x 20mm	4
5PL-3022	Polyaxial Locking Screw 3.0 x 22mm	4
5PL-3024	Polyaxial Locking Screw 3.0 x 24mm	3
5PL-3026	Polyaxial Locking Screw 3.0 x 26mm	3
5PL-3028	Polyaxial Locking Screw 3.0 x 28mm	2
5PL-3030	Polyaxial Locking Screw 3.0 x 30mm	2
5PL-3510	Polyaxial Locking Screw 3.5 x 10mm	2
5PL-3512	Polyaxial Locking Screw 3.5 x 12mm	3
5PL-3514	Polyaxial Locking Screw 3.5 x 14mm	3
5PL-3516	Polyaxial Locking Screw 3.5 x 16mm	4
5PL-3518	Polyaxial Locking Screw 3.5 x 18mm	4
5PL-3520	Polyaxial Locking Screw 3.5 x 20mm	4
5PL-3522	Polyaxial Locking Screw 3.5 x 22mm	4
5PL-3524	Polyaxial Locking Screw 3.5 x 24mm	3
5PL-3526	Polyaxial Locking Screw 3.5 x 26mm	3
5PL-3528	Polyaxial Locking Screw 3.5 x 28mm	2
5PL-3530	Polyaxial Locking Screw 3.5 x 30mm	2
5NL-3010	Non-Locking Screw 3.0 x 10mm	2
5NL-3012	Non-Locking Screw 3.0 x 12mm	3
5NL-3014	Non-Locking Screw 3.0 x 14mm	3
5NL-3016	Non-Locking Screw 3.0 x 16mm	4
5NL-3018	Non-Locking Screw 3.0 x 18mm	4
5NL-3020	Non-Locking Screw 3.0 x 20mm	4
5NL-3022	Non-Locking Screw 3.0 x 22mm	4
5NL-3024	Non-Locking Screw 3.0 x 24mm	3
5NL-3026	Non-Locking Screw 3.0 x 26mm	3
5NL-3028	Non-Locking Screw 3.0 x 28mm	2
5NL-3030	Non-Locking Screw 3.0 x 30mm	2
500-3510	Non-Locking Screw 3.5 x 10mm	2
500-3512	Non-Locking Screw 3.5 x 12mm	3
500-3514	Non-Locking Screw 3.5 x 14mm	3
500-3516	Non-Locking Screw 3.5 x 16mm	4
500-3518	Non-Locking Screw 3.5 x 18mm	4
500-3520	Non-Locking Screw 3.5 x 20mm	4
500-3522	Non-Locking Screw 3.5 x 22mm	4
500-3524	Non-Locking Screw 3.5 x 24mm	3
500-3526	Non-Locking Screw 3.5 x 26mm	3
500-3528	Non-Locking Screw 3.5 x 28mm	2
500-3530	Non-Locking Screw 3.5 x 30mm	2
500-3532	Non-Locking Screw 3.5 x 32mm	2
500-3534	Non-Locking Screw 3.5 x 34mm	2
500-3536	Non-Locking Screw 3.5 x 36mm	2
500-3538	Non-Locking Screw 3.5 x 38mm	2
500-3540	Non-Locking Screw 3.5 x 40mm	2
500-3545	Non-Locking Screw 3.5 x 45mm	2
500-3550	Non-Locking Screw 3.5 x 50mm	2
500-5025	DynaForce Ø2,5 Reamer, Long – Sterile	2
	, the second second	

NON-EcoSmart[®] Surgery





• Short 2.0 Wire x 4 • Long 2.0 Wire x 4 • Olive Wire x 2 • H10 Driver • 2.0 Reamer • 2.5 Reamer • 3.2 Reamer

DynaBunion[™] Sharps Kit 1500-5060



TWO OPTIONS For Stryker/MicroAir Connection Use: 7000-40SB For Conmed/Hall Connection Use: PC5023.140 STE or 7001-40SB

40mm Saw Blade

Ki	it Back-Ups
xnow things don't always g ey instruments and sharps	go as planned, so we provide backups of a s to ensure you have your case covered!
7000-20K4	2.0 Short Wire 4 Pack 1
7000-20K6	2.0 Long Wire 4 Pack 1
7000-ADK6	Anti-Drift Depth Wire Single Pack 1
7000-LVWR	Olive Wire 1
7000-0032	3.2 Reamer 1
1500-5025	2.5 Reamer 1
1500-5050	H10 Driver 1
Sterile ratchet har	ndles are available by request.

DynaBunion[™] Non-Sterile Surgical Tray



ONLY Sharps and Implants Are Sterile Packaged

What do I need to open?



Name	Quantity	Name	Quantity
Radiolucent Reducer	1	Anti-Drift Bolt Wire Guide	1
OsteoPrecise [™] Cut Guide	1	18mm Staple Inserter	1
ReCut Guide	1	18mm Staple Drill Guide	1
Frontal Plane Joystick	1	Tamp	1
RAC Block 0	1	Fixation Pins	2
RAC Block 1	1	H10 Driver	1
RAC Block 2	1	New Plate Bender	2
RAC Block 3	1	Depth Gauge	1
Freehand Wire Template	1	Non-Locking Drill Guide	1
Universal Handle	1	Ratchet Handle	1
Hintermann Distractor	1		

DynaForce[®] Staple Compression Plate[™] Options







	dynaBunion° SCP [™]		LC S	LC SCP [™]		LZ SCP [™]	
ТҮРЕ	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	

Nitinol Options



For	use v	vith dyı	naBu	nion° F	Plate
1		1.		1.	

For use with LC[™] and LZ[™] Plate



		V	V	V	t V V	~	V	: V	: V
	Hi (1	Max® Implant 8x18x18mm)	HiMax [®] Implant (18x14x14mm)	HiMax° Implant (18x18x14mm)	HiMax [®] C Implant (18x18x18mm)	HiMax [®] C Implant (18x14x14mm)	HiMax® C Implant (18x18x14mm)	HiMax® Plus Implant	Keel-Lock® Implant
PART NUMBER		7118-1818	7118-1414	7118-1814	7118-1818-C	7118-1414-C	7118-1814-C	7415-1515 thru 7425-2222	7318-1818,7320-2020
BRIDGE WIDTH	A	2.7mm	2.7mm	2.7mm	2.7mm	2.7mm	2.7mm	5mm	5mm
BRIDGE THICKNESS	В	1.8mm	1.8mm	1.8mm	1.8mm	1.8mm	1.8mm	1.3-1.6mm	1.3-1.6mm
INTERAXIS LENGTH	С	18mm	18mm	18mm	18mm	18mm	18mm	15,18, 20, 25mm	18 or 20mm
LEG LENGTH	D	18mm	14mm	18x14mm	18mm	18mm	18x14mm	15,18, 20,22 mm	18 or 20mm
REAMER SIZE		3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm	3.2mm
COMPRESSION		27lbs.	27lbs.	27lbs.	27lbs.	27lbs.	27lbs.	28lbs.	28lbs.
CURVATURE WHEN LEGS ARE STRAIGHT		0°	00	00	10º	10°	10°	10°	10°

Anti-Drift Bolt (For use with dynaBunion[®] Plate only)



3.5mm, Non-Locking, Solid **Fully Threaded** 28-46mm Lengths, 2mm Increments

Plate Screws

*2mm increments



Indications & Risks

The MoteBAND® 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

