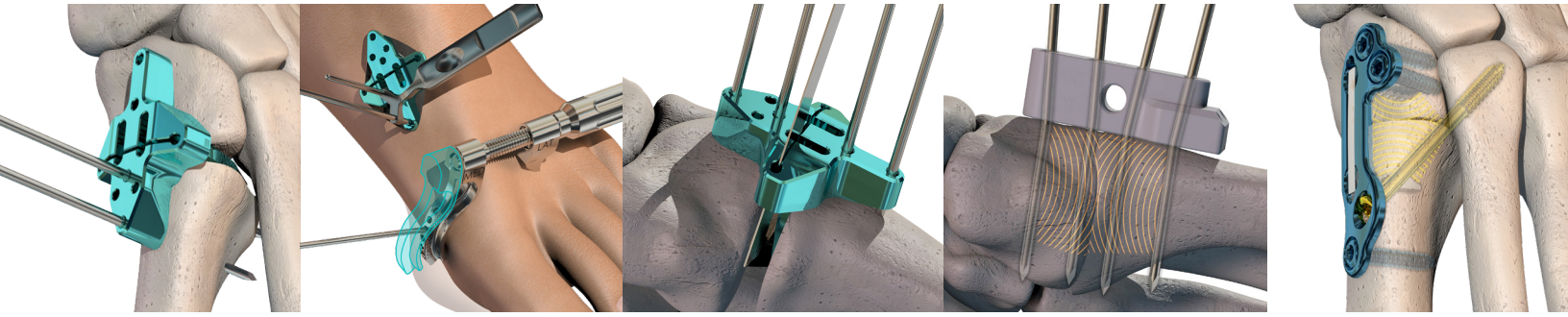
dynaBunion™

4D Minimal-Incision Lapidus System

SURGICAL TECHNIQUE



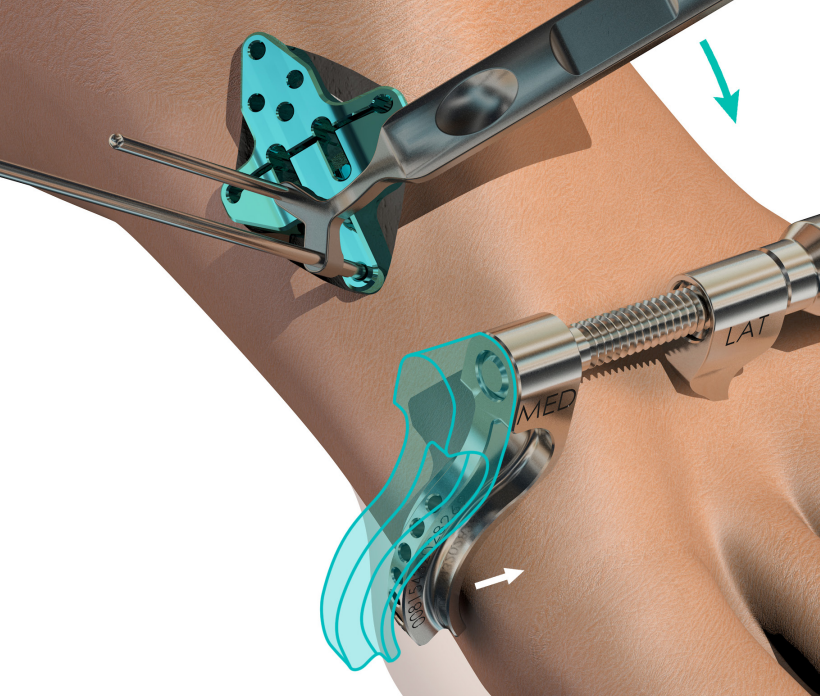
CUT. CORRECT.
CUT. COMPRESS.

C4 COMPRESSION 4EVER

CrossRoads® Extremity Systems

Breakthroughs for Faster Healing™

For more details on surgical technique steps, additional images, and xrays please review the Advanced Technique Guide.



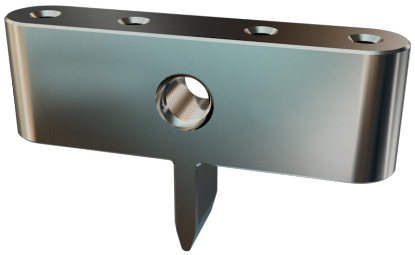
SIMPLIFY 3D Correction

CONTROL AND CORRECT 3 PLANES independently with a simple, efficient workflow

By performing the metatarsal resection first, the first metatarsal is mobilized without the need of additional instruments. The DynaBunion™ Joystick and Reducer allow the surgeon to independently dial-in frontal plane rotation and IM reduction. Sagittal plane can be adjusted during the final align-and-compress step.

MINIMIZE SHORTENING with a patented OSTEOPRECISE™ Cut Guide

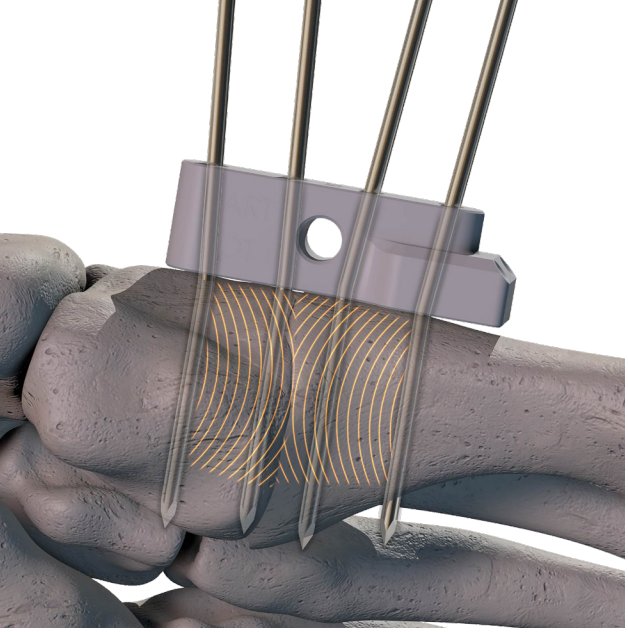
DynaBunion™ features a patented cut guide that resects a skim layer off of each bone. The "cut-correct-cut" technique facilitates this thin cut that is made "relative" to each bony surface in order to expose bleeding bone.



Freehand Wire Guide

CUT GUIDES, CURRETAGE, OR FREEHAND Your Procedure, Your Choice.

DynaBunion™ allows flexibility based on your surgical preferences. This system can be used in conjunction with freehand cut or curettage technique, the cut guides are not required. This is possible due to the freehand wire guide that allows placement of wires necessary to use correction tools and RAC blocks.



ACTIVATE the 4th Dimension

INITIATE STRONG Compression and MAINTAIN CONTINUOUS Compression

4D RAC (Re-Alignment Compression) BLOCK

Once simple 3D correction has been achieved, the patent pending 4D RAC block can be placed to finish alignment of the metatarsal and generate strong initial compression.

DynaForce® Staple Compression Plates™(SCP)

have a patented design that allows the insertion of a powerful nitinol staple to provide compression. This provides these primary advantages:

Gap Recovery

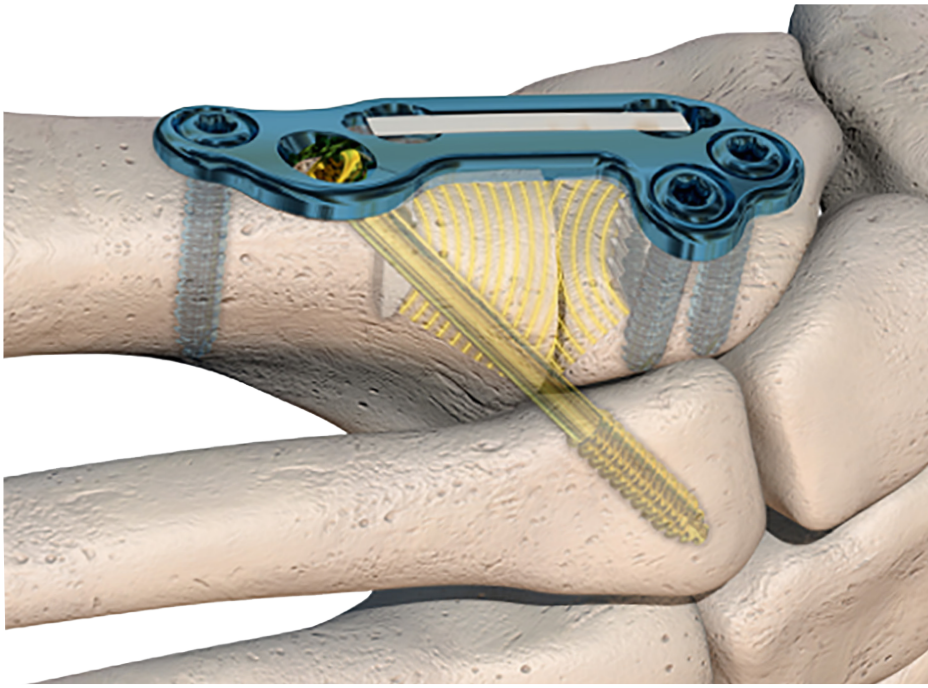
Continuous staple compression helps overcome space between the fusing bones (i.e. gapping) caused by natural osteoclast resorption or patient non-compliance.

Apposition

By replacing a transarticular lag screw with staple compression, bony apposition and surface area is maximized to optimize fusion.

Speed

Intraoperative time efficiency is an important goal in surgery. The speed and simplicity of staple insertion supports this, especially when compared with conventional independent lag screw techniques.



SCP™ Constructs

to meet your patient's needs

The DynaBunion™ system offers 3 distinct Staple Compression Plate™ constructs to help meet varying patient and procedural needs. Additionally, any of CrossRoads nitinol products can be utilized in conjunction with the DynaBunion system.

LZ SCP™ -Smallest Footprint

The LZ Staple Compression Plate™ is a low-profile dorsomedial plate consisting of an 18mm staple and two holes for screw fixation. This is used when the smallest fixation footprint and incision is desired.

LC SCP™ -More Fixation

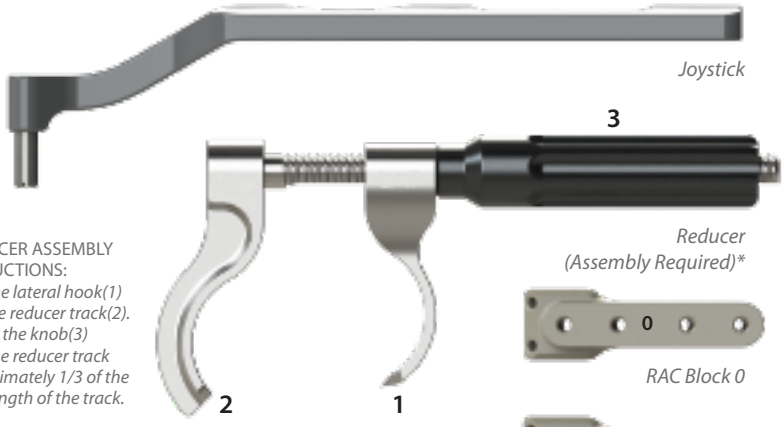
The LC Staple Compression Plate™ is a more robust dorsomedial plate consisting of an 18mm staple and four holes for screw fixation. This should be used when additional screws are desired.

DynaBunion™ Construct with Anti-Drift Bolt

The DynaBunion construct is the most robust Staple Compression Plate™ construct for the Lapidus procedure. This medial plate consists of an 18mm staple with three holes for traditional screw fixation. In addition, the plate is designed to engage with an Anti-Drift Bolt™.

DynaBunion™ Lapidus System

Key Instrumentation



Joystick

*Reducer (Assembly Required)**

*REDUCER ASSEMBLY INSTRUCTIONS:
Slide the lateral hook(1) over the reducer track(2). Thread the knob(3) onto the reducer track approximately 1/3 of the total length of the track.*

RAC Block 0

RAC Block 1

DynaBunion™ OsteoPrecise™ Cut Guide

RAC Block 2

RAC Block 3

Universal Handle

2.0mm Short Wires

2.0mm Long Wires

DynaBunion ReCut Guide

Anti-Drift Wire Guide /Depth Gauge

GraterBlade

Anti-Drift Depth Wire

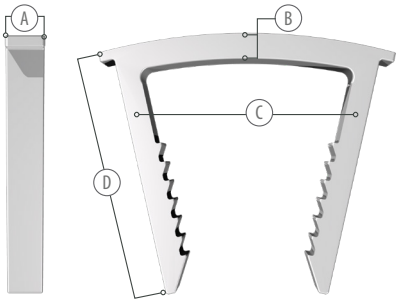
Anti-Drift Cannulated Reamer

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



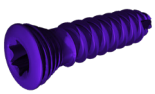
		For Use with DynaBunion™ Plate			For Use with LC™ and LZ™ Plate		
PART NUMBER		HiMax® Staple (18x18x18mm)	HiMax® Staple (18x14x14mm)	HiMax® Staple (18x18x14mm)	HiMax® C Staple (18x18x18mm)	HiMax® C Staple (18x14x14mm)	HiMax® C Staple (18x18x14mm)
PART NUMBER		7118-1818	7118-1414	7118-1814	7118-1818-C	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		0°	0°	0°	10°	10°	10°

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*

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
1500-4701	DynaForce Kit - Modified	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 3.5x28	1
15LP-3530	Anti-Drift Bolt 3.5x30	2
15LP-3532	Anti-Drift Bolt 3.5x32	2
15LP-3534	Anti-Drift Bolt 3.5x34	2
15LP-3536	Anti-Drift Bolt 3.5x36	2
15LP-3538	Anti-Drift Bolt 3.5x38	2
15LP-3540	Anti-Drift Bolt 3.5x40	2
15LP-3542	Anti-Drift Bolt 3.5x42	1
15LP-3544	Anti-Drift Bolt 3.5x44	1
15LP-3546	Anti-Drift Bolt 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

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
15PL-3010	Polyaxial Locking Screw 3.0 x 10mm	2
15PL-3012	Polyaxial Locking Screw 3.0 x 12mm	3
15PL-3014	Polyaxial Locking Screw 3.0 x 14mm	3
15PL-3016	Polyaxial Locking Screw 3.0 x 16mm	4
15PL-3018	Polyaxial Locking Screw 3.0 x 18mm	4
15PL-3020	Polyaxial Locking Screw 3.0 x 20mm	4
15PL-3022	Polyaxial Locking Screw 3.0 x 22mm	4
15PL-3024	Polyaxial Locking Screw 3.0 x 24mm	3
15PL-3026	Polyaxial Locking Screw 3.0 x 26mm	3
15PL-3028	Polyaxial Locking Screw 3.0 x 28mm	2
15PL-3030	Polyaxial Locking Screw 3.0 x 30mm	2
15PL-3510	Polyaxial Locking Screw 3.5 x 10mm	2
15PL-3512	Polyaxial Locking Screw 3.5 x 12mm	3
15PL-3514	Polyaxial Locking Screw 3.5 x 14mm	3
15PL-3516	Polyaxial Locking Screw 3.5 x 16mm	4
15PL-3518	Polyaxial Locking Screw 3.5 x 18mm	4
15PL-3520	Polyaxial Locking Screw 3.5 x 20mm	4
15PL-3522	Polyaxial Locking Screw 3.5 x 22mm	4
15PL-3524	Polyaxial Locking Screw 3.5 x 24mm	3
15PL-3526	Polyaxial Locking Screw 3.5 x 26mm	3
15PL-3528	Polyaxial Locking Screw 3.5 x 28mm	2
15PL-3530	Polyaxial Locking Screw 3.5 x 30mm	2
15NL-3010	Non-Locking Screw 3.0 x 10mm	2
15NL-3012	Non-Locking Screw 3.0 x 12mm	3
15NL-3014	Non-Locking Screw 3.0 x 14mm	3
15NL-3016	Non-Locking Screw 3.0 x 16mm	4
15NL-3018	Non-Locking Screw 3.0 x 18mm	4
15NL-3020	Non-Locking Screw 3.0 x 20mm	4
15NL-3022	Non-Locking Screw 3.0 x 22mm	4
15NL-3024	Non-Locking Screw 3.0 x 24mm	3
15NL-3026	Non-Locking Screw 3.0 x 26mm	3
15NL-3028	Non-Locking Screw 3.0 x 28mm	2
15NL-3030	Non-Locking Screw 3.0 x 30mm	2
1500-3510	Non-Locking Screw 3.5 x 10mm	2
1500-3512	Non-Locking Screw 3.5 x 12mm	3
1500-3514	Non-Locking Screw 3.5 x 14mm	3
1500-3516	Non-Locking Screw 3.5 x 16mm	4
1500-3518	Non-Locking Screw 3.5 x 18mm	4
1500-3520	Non-Locking Screw 3.5 x 20mm	4
1500-3522	Non-Locking Screw 3.5 x 22mm	4
1500-3524	Non-Locking Screw 3.5 x 24mm	3
1500-3526	Non-Locking Screw 3.5 x 26mm	3
1500-3528	Non-Locking Screw 3.5 x 28mm	2
1500-3530	Non-Locking Screw 3.5 x 30mm	2
1500-3532	Non-Locking Screw 3.5 x 32mm	2
1500-3534	Non-Locking Screw 3.5 x 34mm	2
1500-3536	Non-Locking Screw 3.5 x 36mm	2
1500-3538	Non-Locking Screw 3.5 x 38mm	2
1500-3540	Non-Locking Screw 3.5 x 40mm	2
1500-3545	Non-Locking Screw 3.5 x 45mm	2
1500-3550	Non-Locking Screw 3.5 x 50mm	2
1500-5025	DynaForce Ø2.5 Reamer, Long - Sterile	2

EcoSmart® Surgery

All Instrument and Implants Sterile Packaged

What do I need to open?

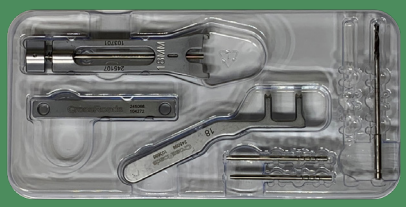
REQUIRED

DynaBunion™ Kit
1500-4800

- OsteoPrecise™ Cut Guide
- IM Reducer
- Frontal Plane Joystick
- RAC Block 0
- RAC Block 1
- Freehand Wire Template
- Short 2.0mm Wire x 4
- Long 2.0mm Wire x 4
- Universal Handle

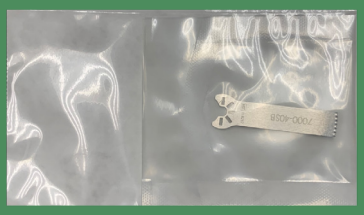
DynaForce™ Plate Kit Gen II
1500-4701

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



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

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



40mm Saw Blade

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

For Conmed/Hall
Connection Use:
PC5023.140 STE or
7001-40SB

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 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 handles are available by request.

OPTIONAL

Using An Anti-Drift Bolt? Open This:

Anti-Drift Instrument Kit
1500-4850

- Anti-Drift Wire Guide
- 2.5 Cannulated Reamer
- Anti-Drift Depth Wire

Need To Re-Cut? Open This:

DynaBunion™ ReCut Kit
1500-48RC

- ReCut Guide
- RAC Block 2
- RAC Block 3

Need To Bend A Plate? Open This:

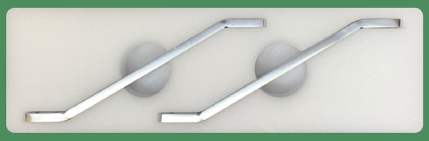
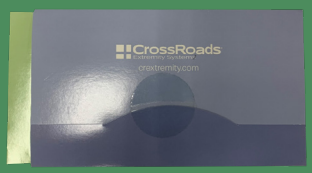


Plate Bender Kit
7000-BEND

- Plate Bender x 2



GraterBlade™

TWO OPTIONS
For Stryker/MicroAir
Connection Use:
7000-40GB

For Conmed/Hall
Connection Use:
7001-40GB

Sterile Packed Implants

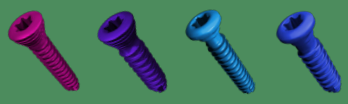
DynaBunion™ Plate

LC SCP™

LZ SCP™

18mm Staple
HiMax ® for DynaBunion Plate
HiMax® C for LC & LZ Plate
18x18,14x14, or 18x14
Leg Lengths Available

Anti-Drift Bolt™
For Use With DynaBunion Plate Only



2- 4 Screws
3.0 or 3.5 NL or PAL

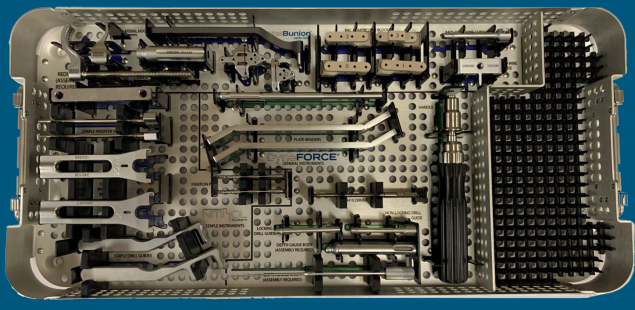
NON-EcoSmart® Surgery

ONLY Sharps and Implants Are Sterile Packaged

What sets do I need to bring to the case?

DynaBunion
Sterile Surgical Set – PARTIAL

Part Number	Name	Quantity
1500-5060	DynaBunion Sharps Kit	1
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	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 3.5x28	1
15LP-3530	Anti-Drift Bolt 3.5x30	2
15LP-3532	Anti-Drift Bolt 3.5x32	2
15LP-3534	Anti-Drift Bolt 3.5x34	2
15LP-3536	Anti-Drift Bolt 3.5x36	2
15LP-3538	Anti-Drift Bolt 3.5x38	2
15LP-3540	Anti-Drift Bolt 3.5x40	2
15LP-3542	Anti-Drift Bolt 3.5x42	1
15LP-3544	Anti-Drift Bolt 3.5x44	1
15LP-3546	Anti-Drift Bolt 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



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.

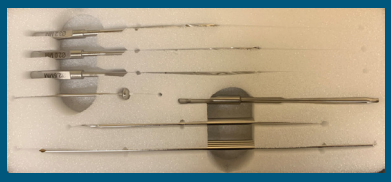
Part Number	Name	Quantity
15PL-3010	Polyaxial Locking Screw 3.0 x 10mm	2
15PL-3012	Polyaxial Locking Screw 3.0 x 12mm	3
15PL-3014	Polyaxial Locking Screw 3.0 x 14mm	3
15PL-3016	Polyaxial Locking Screw 3.0 x 16mm	4
15PL-3018	Polyaxial Locking Screw 3.0 x 18mm	4
15PL-3020	Polyaxial Locking Screw 3.0 x 20mm	4
15PL-3022	Polyaxial Locking Screw 3.0 x 22mm	4
15PL-3024	Polyaxial Locking Screw 3.0 x 24mm	3
15PL-3026	Polyaxial Locking Screw 3.0 x 26mm	3
15PL-3028	Polyaxial Locking Screw 3.0 x 28mm	2
15PL-3030	Polyaxial Locking Screw 3.0 x 30mm	2
15PL-3510	Polyaxial Locking Screw 3.5 x 10mm	2
15PL-3512	Polyaxial Locking Screw 3.5 x 12mm	3
15PL-3514	Polyaxial Locking Screw 3.5 x 14mm	3
15PL-3516	Polyaxial Locking Screw 3.5 x 16mm	4
15PL-3518	Polyaxial Locking Screw 3.5 x 18mm	4
15PL-3520	Polyaxial Locking Screw 3.5 x 20mm	4
15PL-3522	Polyaxial Locking Screw 3.5 x 22mm	4
15PL-3524	Polyaxial Locking Screw 3.5 x 24mm	3
15PL-3526	Polyaxial Locking Screw 3.5 x 26mm	3
15PL-3528	Polyaxial Locking Screw 3.5 x 28mm	2
15PL-3530	Polyaxial Locking Screw 3.5 x 30mm	2
15NL-3010	Non-Locking Screw 3.0 x 10mm	2
15NL-3012	Non-Locking Screw 3.0 x 12mm	3
15NL-3014	Non-Locking Screw 3.0 x 14mm	3
15NL-3016	Non-Locking Screw 3.0 x 16mm	4
15NL-3018	Non-Locking Screw 3.0 x 18mm	4
15NL-3020	Non-Locking Screw 3.0 x 20mm	4
15NL-3022	Non-Locking Screw 3.0 x 22mm	4
15NL-3024	Non-Locking Screw 3.0 x 24mm	3
15NL-3026	Non-Locking Screw 3.0 x 26mm	3
15NL-3028	Non-Locking Screw 3.0 x 28mm	2
15NL-3030	Non-Locking Screw 3.0 x 30mm	2
1500-3510	Non-Locking Screw 3.5 x 10mm	2
1500-3512	Non-Locking Screw 3.5 x 12mm	3
1500-3514	Non-Locking Screw 3.5 x 14mm	3
1500-3516	Non-Locking Screw 3.5 x 16mm	4
1500-3518	Non-Locking Screw 3.5 x 18mm	4
1500-3520	Non-Locking Screw 3.5 x 20mm	4
1500-3522	Non-Locking Screw 3.5 x 22mm	4
1500-3524	Non-Locking Screw 3.5 x 24mm	3
1500-3526	Non-Locking Screw 3.5 x 26mm	3
1500-3528	Non-Locking Screw 3.5 x 28mm	2
1500-3530	Non-Locking Screw 3.5 x 30mm	2
1500-3532	Non-Locking Screw 3.5 x 32mm	2
1500-3534	Non-Locking Screw 3.5 x 34mm	2
1500-3536	Non-Locking Screw 3.5 x 36mm	2
1500-3538	Non-Locking Screw 3.5 x 38mm	2
1500-3540	Non-Locking Screw 3.5 x 40mm	2
1500-3545	Non-Locking Screw 3.5 x 45mm	2
1500-3550	Non-Locking Screw 3.5 x 50mm	2
1500-5025	DynaForce Ø2.5 Reamer, Long - Sterile	2

NON-EcoSmart® Surgery

ONLY Sharps and Implants Are Sterile Packaged

What do I need to open?

REQUIRED



- 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

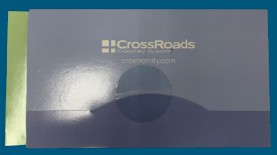
40mm Saw Blade

OPTIONAL

Using An Anti-Drift Bolt? Open This:

- Anti-Drift Wire Guide
- 2.5 Cannulated Reamer
- Anti-Drift Depth Wire

Anti-Drift Instrument Kit
1500-4850



TWO OPTIONS
For Stryker/MicroAir Connection Use:
7000-40GB

For Conmed/Hall Connection Use:
7001-40GB

GraterBlade™

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 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 handles are available by request.

Sterile Packed Implants

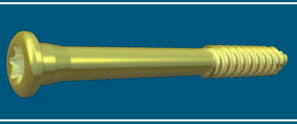
DynaBunion™ Plate

LC SCP™

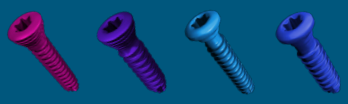
LZ SCP™

18mm Staple
HiMax ® for DynaBunion Plate
HiMax® C for LC & LZ Plate

18x18,14x14, or 18x14
Leg Lengths Available

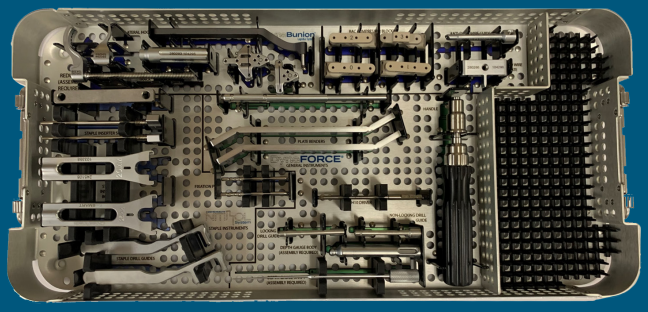


Anti-Drift Bolt™
For Use With DynaBunion Plate Only



2- 4 Screws
3.0 or 3.5 NL or PAL

DynaBunion™ Non-Sterile Surgical Tray



Name	Quantity
Reducer (Assembly Required)	1
OsteoPrecise™ Cut Guide	1
ReCut Guide	1
Frontal Plane Joystick	1
RAC Block 0	1
RAC Block 1	1
RAC Block 2	1
RAC Block 3	1
Freehand Wire Template	1
Universal Handle	1

Name	Quantity
Anti-Drift Bolt Wire Guide	1
18mm Staple Inserter (Assembly Required)	1
18mm Staple Drill Guide	1
Tamp	1
Fixation Pins	2
H10 Driver	1
New Plate Bender	2
Depth Gauge	1
Non-Locking Drill Guide	1
Ratchet Handle	1

Slots for additional staple inserter and drill guide sizes are available.

SURGICAL TECHNIQUE

Cut Metatarsal

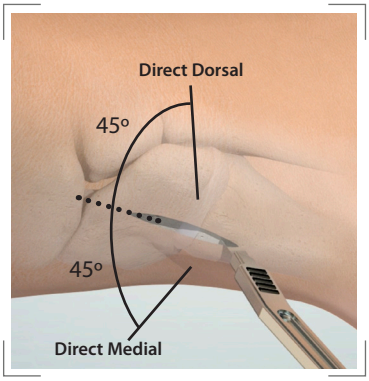


Figure 1

Figure 2

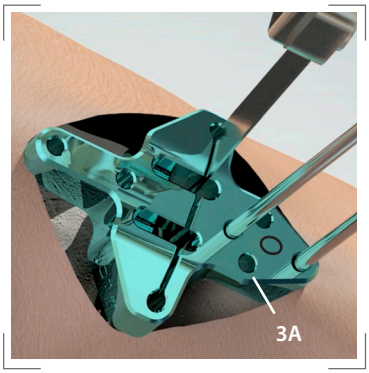


Figure 3

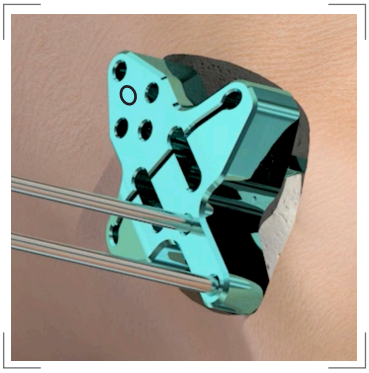


Figure 4

Create a dorsomedial incision that is approximately 45 degrees from the plantar plane and well medial to the extensor hallucis longus. **(Figure 1)**

The incision length should be approximately the length of the cut guide which is just under 3.5cm long. Dissect soft-tissue as far dorsally as possible to aid in ease of cut guide placement.

It is critical to utilize a slim osteotome to mobilize the joint and release any plantar soft tissue attachments. Make sure the metatarsal is free to rotate which will ease reduction.

Place the paddle of the cut guide into the joint with the cutting side (marked with a circle) facing the 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.

The cut guide should be oriented approximately at 45 degrees relative to the plantar plane. The cut guide should be aligned so that it's center axis is splitting the two sesamoids. **(Figure 2)** For a more severe bunion, the cut guide will be positioned slightly closer to true medial than to true dorsal.

Ensuring the cut guide paddle is flush with the metatarsal joint surface, place the short 2.0mm wire into the second most distal hole. Place a long 2.0mm wire into the most distal hole. **(Figure 3)** Ensure both wires are bicortical but not into the 2nd metatarsal.

Utilize one of the provided extra long 40mm saw blades to complete the metatarsal cut. There are two blade options designed to fit different types of power systems. Listed on pages 7 and 9. Care should be taken not to cut into the second metatarsal base.

The maximum theoretical thickness of the metatarsal bone sliver is 1.6mm.

To prevent the cut guide from being displaced during resection, a 2.0mm wire can be placed into one of the two convergent distal holes to hold the guide in place **(Figure 3A)** or a hemostat can placed on the distal wire to prevent the guide from migrating dorsally.

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. **(Figure 4)**

INSTRUMENTS REQUIRED

Cut Guide

2.0 Short Wire

2.0 Long Wire

40mm Saw Blade

SURGICAL TECHNIQUE

Correct

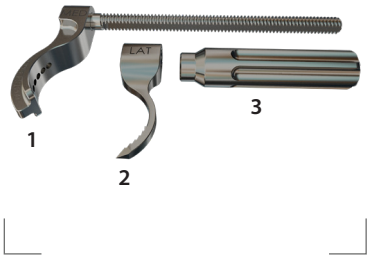


Figure 5

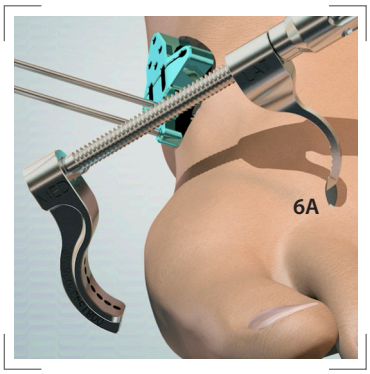


Figure 6

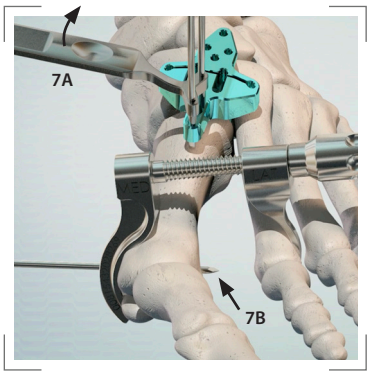


Figure 7

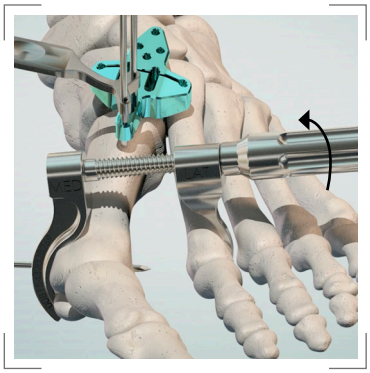


Figure 8

Ensure the reducer is assembled prior to the start of the case by sliding the lateral hook (2) over the reducer track(1) and then threading the knob (3) over the threads of the reducer track (1). (Figure 5)

Check to ensure the metatarsal has good mobility to enable rotation by using fluoroscopy to assess the distal metatarsal and sesamoids. If needed, a lateral soft-tissue release may be performed at this time. Make a small stab incision just lateral to the head of the second metatarsal. **(Figure 6A)**

Place the lateral hook of the reducer around the neck of the 2nd metatarsal between the 2nd and 3rd metatarsal. The tip of the lateral hook is sharp to aid in penetrating soft tissue. Place the medial hook over the skin onto the head of the 1st metatarsal.

Place the frontal plane joystick over the two distal wires with the handle facing in either direction.

While holding the reducer in place, tighten the reducer knob clockwise until it is snug but do not close down all of your inter metatarsal(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. **(Figure 7A) It may be necessary to take a more distally angled AP fluoroscopy shot to fully visualize the sesamoids.**

With a second hand, place a 2.0mm short wire through one of the holes in the medial hook into the the metatarsal to lock frontal plane correction and hold the reducer in place. This wire should be placed bi-cortical but not penetrate the 2nd metatarsal. **(Figure 7B)**

Dial-in the intermetatarsal (IM) angle by turning the reducer knob clockwise until desired reduction is achieved. **(Figure 8)**

Utilizing AP fluoroscopy, confirm the desired IM angle and sesamoid position is achieved.

INSTRUMENTS REQUIRED

Reducer

Joystick

2.0 Short Wire

SURGICAL TECHNIQUE

Cut Cuneiform

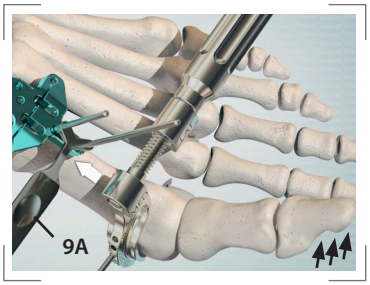


Figure 9

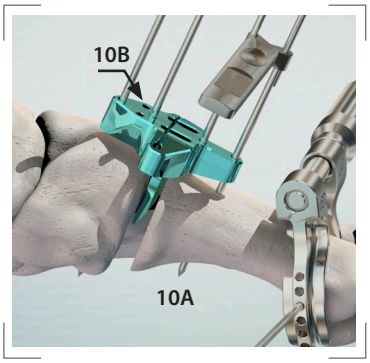


Figure 10

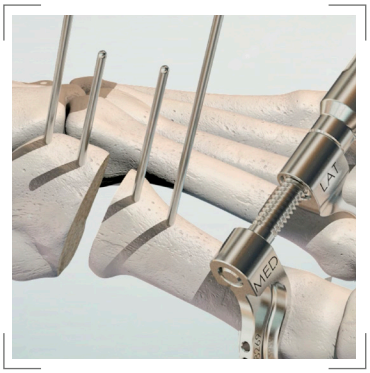


Figure 11

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. (Figure 9)

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. **(Figure 9A)**

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. (Figure 9) Ensure both wires are bicortical. **(Figure 10A)**

Utilize one of the provided 40mm saw blades to complete the cuneiform cut. Making sure that the surrounding soft tissue has been removed from under the cut guide. There are two blade options designed to fit different types of power systems. Review pages 7 and 9 for saw blade options.

If the cut guide is pushed out of the joint during the cutting step, a 2.0mm wire can be placed into one of the two convergent distal holes to hold the guide in place. **(Figure 10B)**

Once the cut is complete, remove the cut guide while leaving only the four wires and distal reducer in place. Remove the cuneiform resection. **(Figure 11)**

The maximum theoretical thickness of the cuneiform bone sliver is 1.6mm.

If needed, utilize an osteotome or rongeur to remove any remaining plantar bone.

If an additional cut is needed, see the optional ReCut technique on page 13.

All instruments except the 4 dorsal wires, reducer and distal wire should be removed. **(Figure 11)** Preparation of the metatarsal and cuneiform joint surfaces for fusion 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 at this time through the distracted joint. 2.0 and 2.5mm drill bits are available and can be used for drill fenestration if desired.

INSTRUMENTS REQUIRED

2.0 Short Wire

2.0 Long Wire

40mm Saw Blade

SURGICAL TECHNIQUE

OPTIONAL: Recut

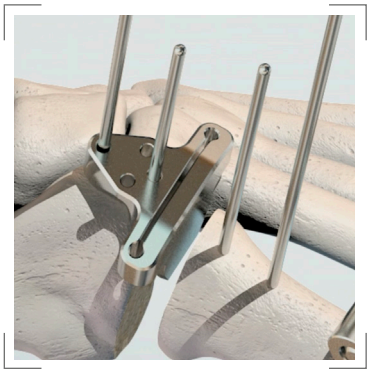


Figure 12

Before Re-Cut guide is used, ensure both metatarsal and cuneiform cuts have been made using the standard cut guide.

The ReCut Kit can be opened to provide the ReCut guide and two additional RAC Blocks (2,3).

The ReCut Guide should be placed over the existing two wires until in contact with the bony surface. **(Figure 12)**

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

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

All instruments except the 4 dorsal wires, distal reducer and distal wire should be removed. Perform any additional desired joint preparation at this time.

Surgeon Perspective:

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

RAC Compressor Block 2 and 3

ReCut Guide

SURGICAL TECHNIQUE

Compress

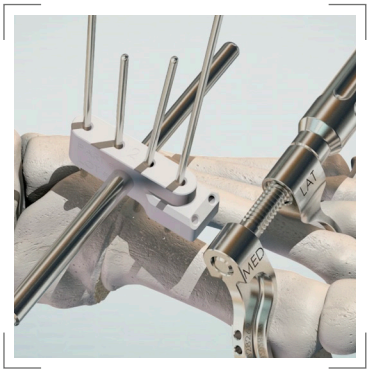


Figure 13

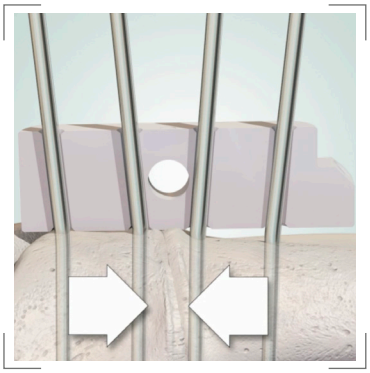


Figure 14

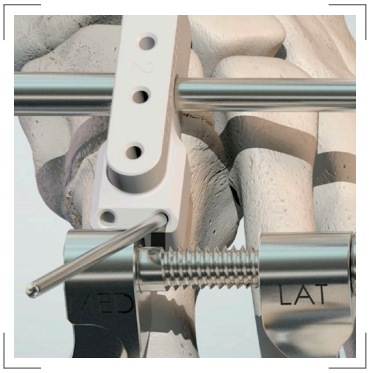


Figure 15

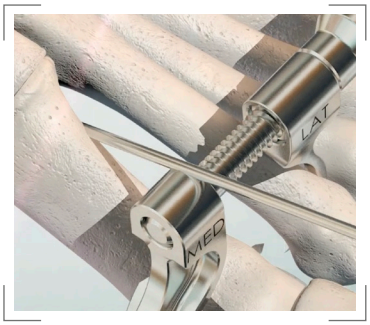


Figure 16

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. Once aligned, the blunt side of the universal handle can be slid into the large hole on the RAC Block to provide more leverage.

Use the handle to push the compressor block down to bone. **(Figure 13)** 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 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 cuneiform surface but may be hanging above the surface of the metatarsal. **(Figure 14)**

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.

Place a cross-joint wire by driving a long 2.0mm wire through one of the holes of the RAC Block. **(Figure 15)** The lateral hole is recommended to be utilized first 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.

In the majority of patients, a single wire is satisfactory in maintaining alignment and compression.

Remove all 4 dorsal wires and slide the compressor block off the cross-joint wires. **(Figure 16)**

INSTRUMENTS REQUIRED

RAC Compressor Block

2.0 Long Wire

Universal Handle

SURGICAL TECHNIQUE

Staple Compression Plate™ Placement

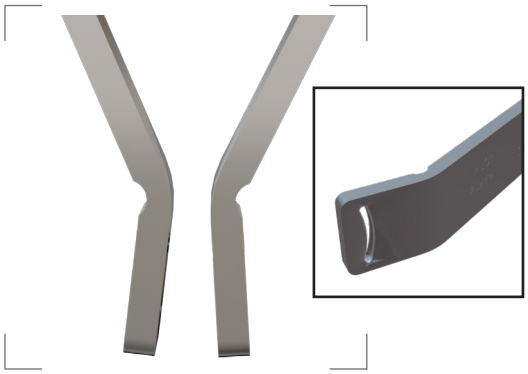


Figure 18

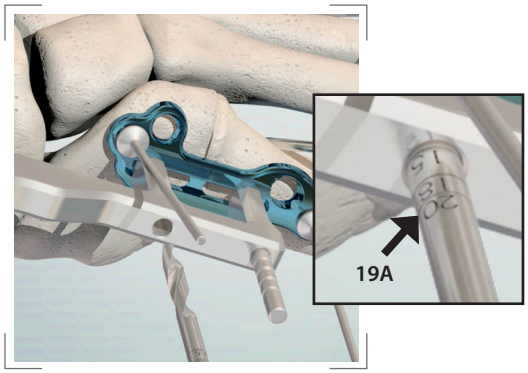


Figure 19

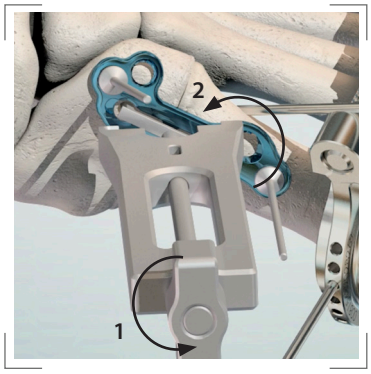


Figure 20

Figure 21

CrossRoads fixation options such as Staple Compression Plates(SCP)™ or staples can be utilized to fixate the 1st TMT joint.

If using a SCP™, select between the DynaBunion, LC, or LZ plate. See page 5 for details on plate options.

If additional plate contour is required, utilize the 2nd most curved slot in the plate bender to add contour. **(Figure 18)** DO NOT REVERSE BEND THE PLATE. An under contoured plate may potentially increase inter-metatarsal angle and negate the correction achieved. Alternatively, some resection of the proximal-medial 1st metatarsal or distal medial portion of the cuneiform can be helpful to minimize plate prominence and avoid the need for plate-contouring. This step is particularly important in cases when a significant IM correction has been performed. The GraterBlade™ is recommended to be used to aid in this bony resection.

Align the plate by centering the staple slot over the joint and positioning the plate medial (DynaBunion) or dorsomedial (LC/LZ). Place one olive wire into the most distal hole and one olive wire into the most proximal hole.

Align the 18mm drill guide to the center slot of the plate and use the 3.2mm reamer to drill for one of the staple legs. Place a temporary fixation pin in the prepared hole. Use the 3.2mm reamer to drill for the second staple leg. **(Figure 19)**

Remove the temporary fixation pin. During reaming, ensure each hole depth matches the desired staple leg length by reading the depth markings on the 3.2mm reamer. **(Figure 19A)** If desired, use AP fluoroscopy to verify reamer depth. Additionally, the provided depth gauge can be used to verify the hole depth.

Reminder: The DynaBunion plate should be used with the standard HiMax® staple. The standard Lapidus plates (LZ/LC) should be used with the HiMax®-C staple. If a notable bend is added to the DynaBunion plate, a HiMax®-C staple can be used. See page 5 for staple options.

Ensuring the legs are parallel, utilize the inserter to implant the HiMax® staple through the plate until the staple is almost flush with the plate surface. Rotate the inserter knob counter-clockwise until pressure is released, then rotate the inserter counter-clockwise until the staple releases. **(Figure 20)**

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. Place the tamp onto the staple and gently mallet until staple is flush to plate. **(Figure 21)**

Once the staple is placed, the olive wires and crossjoint wires can be removed.

IMPLANTS & INSTRUMENTS REQUIRED

Plate

18mm Staple

Non-Locking Drill Guide

2.0 or 2.5 Reamer

Depth Gauge

Driver

Handle for Drill Guide

Screw

Inserter

Olive Wire

Tamp

Staple Drill Guide

3.2 Reamer

Fixation Pin

SURGICAL TECHNIQUE

Staple Compression Plate™ Placement (continued)

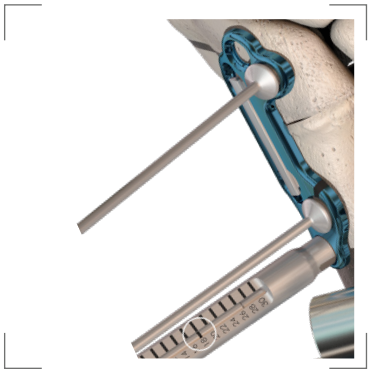


Figure 23

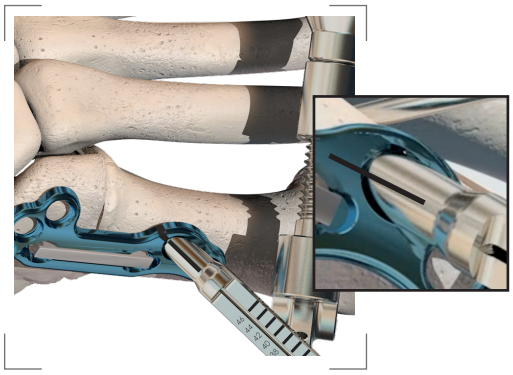


Figure 24

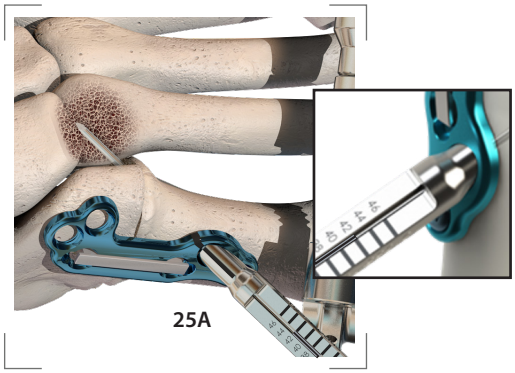


Figure 25

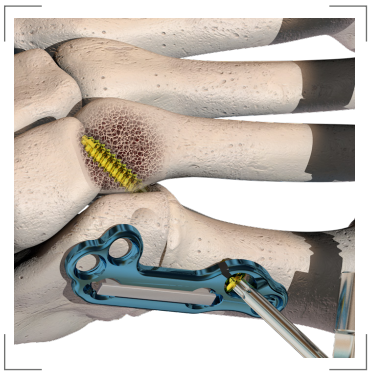


Figure 26

Determine if locking or non-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 a reamer to prepare a hole for the screw.

The 2.0mm reamers should be used for 3.0mm diameter screws.
The 2.5mm reamers should be used for 3.5mm diameter screws.
If using any of the extra long 3.5mm non-locking screws (Lengths: 30-50mm), the extra long 2.5mm reamer that is provided in your plate screw case will need to be used.

The depth of the reamed hole can be read by examining the line on the reamer within the window of the drill guide. Additionally, if desired, the provided depth gauge can be inserted into the reamed hole to determine screw length. **(Figure 23)**

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.**

FOR DYNABUNION PLATE USERS ONLY:
If it is decided at this time that the Anti-Drift BoltTM will NOT be placed, a 3.5mm non-locking screw may be placed into that hole. A locking screw is not able to be placed into this hole.

If the Anti-Drift Bolt is going to be used, attach the universal handle to the anti-drift wire guide by threading the handle tip into the top of the guide. Dock the guide into the plate and ensure the laser mark line on both parts is aligned. **(Figure 24)**

Under fluoroscopy, place the Anti-Drift Bolt™ depth wire through the guide until the tip of wire is in the base of the second metatarsal. **(Figure 25)**

Be careful to not penetrate the 1st or 2nd TMT joints when placing this wire.

If a more distal trajectory is desired, the handle can be rocked proximally to aim the guide more distally. Examine the window of the wire guide to determine which bolt size will be needed. **(Figure 25A)**

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. An internal oblique 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.

Remove depth wire and attach the selected anti-drift bolt to the provided H10 driver and place it through the plate and into the prepared hole. **(Figure 26)** Verify the final construct placement with fluoroscopy. The intermetarasal angle can be decreased slightly with compression of this screw and should be evaluated as the screw is placed.

Follow the previously noted screw preparation steps to place screws into any remaining holes in the chosen plate.

IMPLANTS & INSTRUMENTS REQUIRED

Anti-Drift Bolt

Anti-Drift Depth Wire

Anti-Drift Wire Guide

Universal Handle

Anti-Drift Cannulated Reamer

ALTERNATIVE SURGICAL TECHNIQUE

Freehand/Curettage Technique

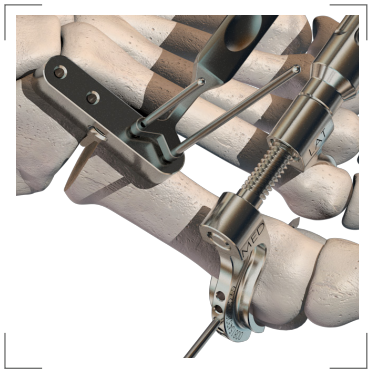


Figure 28

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

TECHNIQUE 1: COMPLETE FREEHAND CUT OR CURRETAGE
Complete the metatarsal and cuneiform cut freehand or perform the curettage technique.

Place the freehand wire template into the joint at a dorsomedial position. While ensuring the paddle is flush with the metatarsal joint 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.

Complete Step : "CORRECT" with the only difference being the wire guide is used in place of the cut guide. **(Figure 28)**

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.

SKIP Step: "CUT CUNEIFORM".
Perform Step 4: "COMPRESS".
Perform Step 5: "Staple Compression Plate™ Placement"

TECHNIQUE 2: FREEHAND CUT OF CUNEIFORM ONLY
Complete Step 1: "CUT METATARSAL" PRIOR to this step.

Remove the cut guide from the two distal wires.

Complete your cuneiform cut freehand.

Place the freehand wire template into the joint over the two distal wires.

Complete Step : "CORRECT" with the only difference being the wire guide is used in place of the cut guide.

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.

SKIP Step: "CUT CUNEIFORM".
Perform Step 4: "COMPRESS".
Perform Step 5: "Staple Compression PlateTM Placement"

IMPLANTS & INSTRUMENTS REQUIRED

Freehand Wire Guide

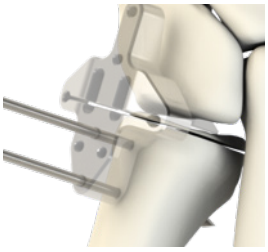
FREQUENTLY ASKED QUESTIONS

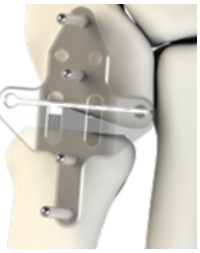
WHAT ARE THE TOP 5 THINGS TO REMEMBER BEFORE A FIRST CASE?

- Dorsomedial Incision & Cut Guide Placement
- Dorsiflex the Hallux to Engage the Windlass Mechanism
- Apply plantar counter pressure during RAC block placement.
- Ensure initial cross joint wire has good bone purchase, if not throw an additional wire.
- Leave the reducer on the entire case!

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 us to take the smallest possible wedge since correction occurred prior to cutting the cuneiform. The graphics to the right illustrate how each cut may appear.





WHAT IS THE MAXIMUM THICKNESS OF EACH BONE RESECTION?

The maximum thickness of a bone sliver created by the standard OsteoPrecise™ Cut Guide is 1.6mm. Many regions of the resection may be notably thinner than 1.6mm. The ReCut Guide will create a maximum thickness of 1.1mm per bone sliver

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.

WHAT IS INDEPENDENT CONTROL OF 3 PLANES? WHY DOES IT MATTER?

There is not a linear relationship between IM angle & 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.

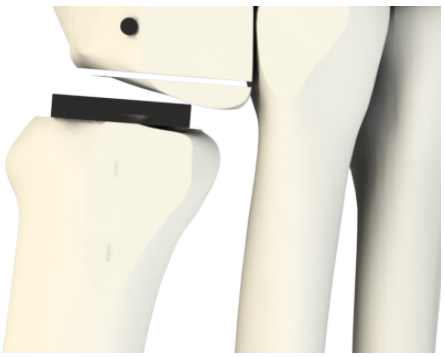
WHY IS AN INTERMETATARSAL PIVOT POINT INSTRUMENT NOT REQUIRED?

THREE REASONS.

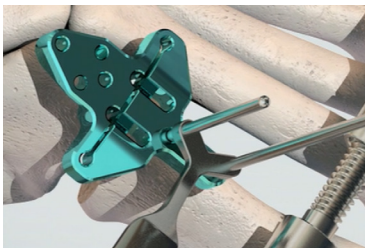
1. The distal placement of the IM reducer allows the reduction force location be at the head of the metatarsal to directly to move it laterally without significant fear of shifting the base.

2. The cut guide paddle is wide and the lateral edge of the paddle may appose the cuneiform, allowing the metatarsal to pivot without shifting.

3. The initial metatarsal resection prior to correction helps mobilize the metatarsal to allow reduction.



FREQUENTLY ASKED QUESTIONS



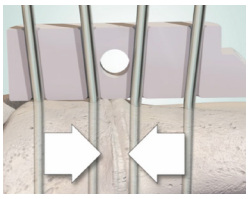
DISTAL IM REDUCTION. PROXIMAL 2-POINT FRONTAL PLANE CONTROL. Why is that key?

Each instrument is placed closest to the location is trying to correct. The frontal plane joystick is located at the CORA to minimize force needed for rotation. In addition, the two points of control allows the joystick to generate optimal leverage.

The distal placement of the IM reducer allows the reduction force location be at the head of the metatarsal to directly to move it laterally

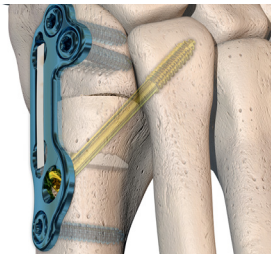
HOW DOES THE RAC COMPRESSOR BLOCK WORK?

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 an 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 2.0 diameter and robust enough to not bend while holding the joint.



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.

"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."

WHY IS THE ADB™ TARGETED TOWARDS THE 2ND METATRSAL 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."

LESS THAN 3.5cm Incision

WHAT MAKES DYNABUNION A "MINIMAL INCISION" SYSTEM?

The DynaBunion incision length is dictated by the length of the cut guide which is just under 3.5 cm. The distal placement of the reducer over the skin allows this incision to stay minimal. This is in comparison to competitors that require multiple additional distal incisions or an extended incision for their reducer. CrossRoads® offers the MINIBunion™: MIS Bunion System for a completely minimally invasive procedure for mild to moderate bunions.

1. Feilmeier DPM, Dayton DPM MS, Kauwe DPM, Cifaldi BS, Roberts BS, Johnk DPM, & Reimer PhD. (2017). Comparison of Transverse and Coronal Plane Stability at the First Tarsal-Metatarsal Joint With Multiple Screw Orientations. Foot & Ankle Specialist, 10(2), 104–108. https://doi.org/10.1177/1938640016666920.

Plate Options

DynaFORCE Staple Compression Plates™

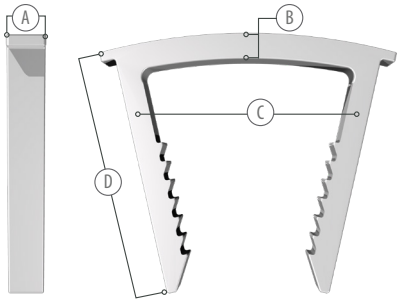

DynaBunion™ SCP™


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

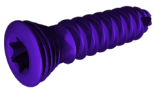
		HiMax® Staple (18x18x18mm)	HiMax® Staple (18x14x14mm)	HiMax® Staple (18x18x14mm)	HiMax® C Staple (18x18x18mm)	HiMax® C Staple (18x14x14mm)	HiMax® C Staple (18x18x14mm)
PART NUMBER		7118-1818	7118-1414	7118-1814	7118-1818-C	7118-1414-C	7118-1814-C
BRIDGE WIDTH	A	2.7mm	2.7mm	2.7mm	2.7mm	2.7mm	2.7mm
BRIDGE 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		0°	0°	0°	10°	10°	10°

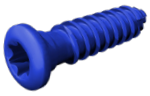
Anti-Drift Bolt

(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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