Cartiva Revision With an MTP Fusion

Surgical Technique





Cartiva Revision Technique

Introduction

The following technique combines biologic and plating solutions to revise a failed Cartiva®* procedure. The Arthrex cannulated revision bone dowels offer surgeons a quick and effective solution for filling bone voids left from Cartiva implants, providing structural architecture for stability and a biologic component for healing and incorporation. One of Arthrex's multiple plating options can be paired with the bone dowel to help achieve a successful fusion.

The appropriate-sized bone dowel is selected based on the size of the removed Cartiva implant. Arthrex recommends using a bone dowel that is one size larger than the removed implant to allow for the reamer and cannulated graft to have a pressed fit within the canal of the metatarsal.

Cartiva Implant Size	Corresponding Cannula	Corresponding Cannulated Revision Bone Dowel	
8 mm	9 mm	PCD9	ABS- 2850-09
10 mm	11 mm	PCD11	ABS- 2850-11
12 mm	13 mm	PCD13	ABS- 2850-13



Cartiva Revision Surgical Technique



Initially, remove the Cartiva implant from the metatarsal by placing a K-wire centrally in the implant to assist in removal.



Insert a 1.6 mm guidewire centrally through the original bone tunnel and into the central axis of the metatarsal canal.



Next, drill with the appropriate-sized cannulated headed reamer, at least 1 mm larger than the removed Cartiva implant that also coincides with the appropriate-diameter bone dowel. Drill at least 5 mm proximal to the original depth of the Cartiva implant.

Cartiva Revision Surgical Technique



Leaving the wire in place, insert the cannulated bone dowel over the 1.6 mm wire and tamp the implant into place with the tamp and cannula. The optional graft delivery tube may be used to facilitate delivery of the bone dowel.

Note: It is typical for the bone dowel to be proud upon insertion.



Finally, use the cannulated metatarsal reamer to shape the bone dowel and simultaneously debride the remaining cartilage from the metatarsal to properly prepare the joint for fusion.



Insert a 1.6 mm K-wire into the center of the proximal phalanx.

Cartiva Revision Surgical Technique



Use the convex phalangeal reamer over the K-wire to shape the base of the proximal phalanx.



Anatomically reduce and pin the toe in the proper position.



Final fixation.

Bone Dowel Revision Kits

Product Description	Item Number	
Kits contain a cannulated bone tamp, 2.4 mm guide pin, delivery tube, and cannulated reamer		
Bone Dowel Revision Kit, 9 mm	ABS- 2850-09	
Bone Dowel Revision Kit, 10 mm	ABS- 2850-10	
Bone Dowel Revision Kit, 11 mm	ABS- 2850-11	
Bone Dowel Revision Kit, 12 mm	ABS- 2850-12	
Bone Dowel Revision Kit, 13 mm	ABS- 2850-13	

Cannulated Revision Bone Dowels

Bone Dowel Diameter	Standard Length (25-29 mm)
Cannulated Revision Bone Dowel, 9 mm	PCD 9
Cannulated Revision Bone Dowel, 10 mm	PCD 10
Cannulated Revision Bone Dowel, 11 mm	PCD 11
Cannulated Revision Bone Dowel, 12 mm	PCD 12
Cannulated Revision Bone Dowel, 13 mm	PCD 13

 ${\sf FlexiGRAFT}^{\otimes}$ cannulated revision dowels must be ordered through LifeNet Health Customer Service at 888-847-7831.

Low Profile MTP Plates

Product Description	Item Number
Low Profile MTP Plate, contoured, standard, left	AR- 8944CL-S
Low Profile MTP Plate, contoured, standard, right	AR- 8944CR-S
Low Profile MTP Plate, contoured, long, left	AR- 8944CL-L
Low Profile MTP Plate, contoured, long, right	AR- 8944CR-L
Low Profile MTP Plate, contoured, short, left	AR- 8944CL-P
Low Profile MTP Plate, contoured, short, right	AR- 8944CR-P
Low Profile MTP Plate, straight, standard	AR- 8944-S
Low Profile MTP Plate, straight, long	AR- 8944-L
Low Profile MTP Plate, straight, short	AR- 8944-P

MaxForce[™] MTP Compression Plate Caddy (AR-8950C-37)

Product Description	Item Number
Plates – Straight	
MaxForce MTP Compression Plate, Petite, 0° valgus, 0° dorsiflex, left	AR- 9944P-0L
MaxForce MTP Compression Plate, Petite, 0° valgus, 0° dorsiflex, right	AR- 9944P-0R
MaxForce MTP Compression Plate, Std, 0° valgus, 0° dorsiflex, left	AR- 9944S-0L
MaxForce MTP Compression Plate, Std, 0° valgus, 0° dorsiflex, right	AR- 9944S-OR
MaxForce MTP Compression Plate, Long, 0° valgus, 0° dorsiflex, left	AR- 9944L-0L
MaxForce MTP Compression Plate, Long, 0° valgus, 0° dorsiflex, right	AR- 9944L-OR
MaxForce MTP Compression Plate, Revision, 0° valgus, 0° dorsiflex, left	AR- 9944X-0L
MaxForce MTP Compression Plate, Revision, 0° valgus, 0° dorsiflex, right	AR- 9944X-0R
Plates – Dorsiflex and Valgus	
MaxForce MTP Compression Plate, Petite, 5° valgus, 5° dorsiflex, left	AR- 9944P-5L
MaxForce MTP Compression Plate, Petite, 5° valgus, 5° dorsiflex, right	AR- 9944P-5R
MaxForce MTP Compression Plate, Std, 5° valgus, 5° dorsiflex, left	AR- 9944S-5L
MaxForce MTP Compression Plate, Std, 5° valgus, 5° dorsiflex, right	AR- 9944S-5R
MaxForce MTP Compression Plate, Long, 5° valgus, 5° dorsiflex, left	AR- 9944L-5L
MaxForce MTP Compression Plate, Long, 5° valgus, 5° dorsiflex, right	AR- 9944L-5R
MaxForce MTP Compression Plate, X-Long, 5° valgus, 5° dorsiflex, left	AR- 9944X-5L
MaxForce MTP Compression Plate, X-Long, 5° valgus, 5° dorsiflex, right	AR- 9944X-5R
Plates – Revision	
MaxForce MTP Compression Plate, Revision, straight	AR- 9944X-LS
MaxForce MTP Compression Plate, Revision, straight 5° dorsiflex	AR- 9944X-LD
Screws, 3.0 mm, Titanium	
Flathead, cortical, MTP, 3.0 mm × 10 mm – 26 mm (2 mm increments)	AR- 9933-10 – 26
Flathead, cortical, MTP, hybrid, 3.0 mm × 10 mm – 26 mm (2 mm increments)	AR- 9933HY-10-26
Disposables	
BB-Tak, MTP	AR- 13227
BB-Tak, MTP, threaded	AR- 13227T
Drill Bit, 2.0 mm, qty. 2	AR- 8944-22
Drill Bit, 2.5 mm, qty. 2	AR- 8933HD
Guidewire w/ Trocar Tip, 1.1 mm, qty. 6	AR- 8737-41



This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.

View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking

© 2021 Arthrex, Inc. All rights reserved. | www.arthrex.com | LT1-000165-en-US_B