Digital Repair System





Digital Repair System

The Digital Repair System (DRS) houses all instrumentation for the wide array of Arthrex hammertoe solutions. Now, all hammertoe instrumentation is held in one comprehensive set.

This set further provides several fixation options by including two individual caddies of Micro Compression FT[™] screws and Headless Compression PT screws. Also included are the new phalangeal reamers, which work much like the MTP reamers to create a cup-and-cone shape at the fusion site.

- DynaNite[®] PIP Hammertoe Implant
- <u>TRIM-IT[™] Pins</u>
- <u>RetroFusion[™] PIP Joint Arthrodesis Implant</u>
- Micro Compression FT Screws
- Headless Compression PT Screws
- <u>CPR[™] Complete Plantar Plate Repair Set</u>



Digital Repair System Instrument Set Layout



Top Layer

Item Number	Product Description
AR- 8933KDN	Nitinol Guidewire, double-ended, 1.1 mm
AR- 4158-01	DynaNite [®] PIP Toe Tamp
AR- 4158-02	Drill Bit, Nitinol calibrated, 2.5 mm
AR- 4158-03	Drill Bit, Nitinol calibrated, 3.0 mm
AR- 4158-05	Tap for DynaNite PIP
AR- 4152TB	Tamp for 2.0 mm Bio-Pin
AR- 4156KB	K-Wire for Trim-It Spin Pin™
AR- 4158PR-XXC	Phalangeal Reamers, concave, 6 mm, 8 mm, 10 mm, 12 mm
AR- 4158PR-XXV	Phalangeal Reamers, convex
AR- 4156M	Mosquito Forceps
AR- 1367F	Bone Cutting Forceps
AR- 2001AOT	Handle, small, AO

Middle Layer

Item Number	Product Description
AR- 8725-XXH	2.5 Micro Compression FT [™] Screws,
	8 mm-14 mm
AR- 8625-XX	Headless Compression PT Screws,
	8 mm-14 mm
AR- 4157H	RetroFusion [™] Handle Assembly, reusable
AR- 4157T	RetroFusion Tap, 3 mm
AR- 8737-45	RetroFusion Hex Driver, solid, 1.5 mm
AR- 4157D-17	RetroFusion Drill Bit, 1.7 mm
AR- 4157DHT	RetroFusion Drill Hybrid Tool
AR- 8737-51	Depth Device, Compression FT screws
AR- 4157HK	Spare Knob for RetroFusion Handle



Bottom Layer

Item Number	Product Description
AR- 8999	Mini Scorpion™ DX Suture Passer
AR- 8930MC	QuickFix™ Clamp
AR- 8930M	McGlamry Metatarsal Elevator, 11 mm
AR- 8690SJD	Small Joint Distractor
AR- 8930R	Cutter, QuickFix screw, 2 mm
AR- 8930D	Driver, for QuickFix screws, 2 mm
AR- 8930D-13	Drill Bit for 2.0 QuickFix Screw, 1.3 mm
AR- 8690P	Metatarsal Pusher
AR- 8941KN	Nitinol Guidewire With Trocar Tip, 1.6 mm
AR- 8941KT	Guidewire w/ Trocar Tip, threaded, .062 in
AR- 8930-11	QuickFix Screws, 2 mm × 11 mm
AR- 8930-12	QuickFix Screws, 2 mm × 12 mm
AR- 8930-13	QuickFix Screws, 2 mm × 13 mm



Phalangeal Reamers



The phalangeal reamers are offered in sizes 6 mm, 8 mm, 10 mm, and 12 mm and work just like the first MTP reamers to create a cup-and-cone shape at the fusion site. These are now three-prong reamers to make insertion into the joint space easier. All of these reamers are used over a 1.1 mm K-wire.

The phalangeal reamers can also be used in the hand. The cup-and-cone shape allows for straight or flexed fusions of the DIP and PIP joints.

Phalangeal Reamer Caddy (AR-4158HTC-01)

Product Description	Item Number
Phalangeal Reamer, concave, 6 mm	AR-4158PR-06C
Phalangeal Reamer, convex, 6 mm	AR- 4158PR-06V
Phalangeal Reamer, concave, 8 mm	AR-4158PR-08C
Phalangeal Reamer, convex, 8 mm	AR-4158PR-08V
Phalangeal Reamer, concave, 10 mm	AR-4158PR-10C
Phalangeal Reamer, convex, 10 mm	AR- 4158PR-10V
Phalangeal Reamer, concave, 12 mm	AR-4158PR-12C
Phalangeal Reamer, convex, 12 mm	AR- 4158PR-12V

Nitinol Guidewires

The nitinol guidewires are a simple, but unique advance over standard stainless steel guidewires. These smaller wires can easily bend when used with other instrumentation and will return to their straight shape throughout the entirety of a procedure.

Double Trocar-Tipped
86 mm
L1 mm
.1 mm × 150 mm
.6 mm × 150 mm
2 mm × 150 mm
.6 mm × 235 mm
2 mm × 235 mm
2.35 mm × 235 mm
[rocar-Tipped
86 mm
1.1 mm
l.1 mm × 150 mm
l.6 mm × 150 mm
.6 mm × 235 mm
2 mm × 235 mm
2.35 mm × 235 mm

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DynaNite® PIP Hammertoe Implant



Top Layer Instrumentation

Guidewire, double-ended, 1.1 mm	
DynaNite PIP Toe Tamp	
Drill, 3 mm	
Drill, 2.5 mm	
DynaNite Tap	
Mosquito Forceps	



The PIP DynaNite hammertoe implant is the only threaded, cannulated nitinol implant on the market. The implant barbs are extended by inserting a K-wire; cannulation allows for surgeons to cross the MTP joint with the K-wire if desired. Implants are offered in 12 mm, 14 mm, and 16 mm sizes (lengths and widths increase proportionally with straight and bent sizes).

Cannulation allows for precision of drilling and insertion of the implant. A 2.5 mm drill is used over the K-wire into the middle phalanx, where the threaded portion of the implant is then inserted. A 3.0 mm drill is used over the same K-wire in the proximal phalanx. The prongs are inserted into the proximal phalanx with the assistance of a hemostat if necessary. The K-wire is further pushed through the implant to extend the prongs, and provides surgeons the option of crossing the MTP joint. The material properties of nitinol allow the prongs of the implant to engage into the proximal phalanx.



TRIM-IT[™] Pins



Top Layer Instrumentation

Tamp for 2.0 mm Bio-Pin	
K-Wire for Trim-It Spin Pin™	



TRIM-IT Drill Pin® Advantages:

- Eliminates pin protrusion and removal for patient comfort
- Enhanced PLLA for shear strength
- Inserts quickly with a standard pin driver
- Radiolucent for accurate healing assessment
- Complete sterile kit for convenience

Bioabsorbable Advantages:

- Radiolucency
- No need for removal
- Closer to the elastic modulus of bone





Not just an ordinary headless implant, the RetroFusion implant is designed for PIP arthrodesis and provides compression and strength across the joint. The implant's proximal and distal threads are arranged in opposite directions to pull the joint together when the implant is inserted. The patent-pending technique and instrumentation allow for easy and reproducible insertion without having to leave the implant across the DIP joint. Because the implant provides compression of a hard-to-fuse joint, it can potentially lead to higher fusion rates and less postoperative swelling.

- Opposing threads on implant pull the joint together for maximum compression of the PIP joint
- Better fixation of the joint due to actual compression achieved
- Simple technique that also allows for flexed fusions without violation of the DIP joint

Middle Layer Instrumentation

RetroFusion Handle
RetroFusion Tap
RetroFusion Hex Driver, solid, 1.5 mm
RetroFusion Drill Bit, 1.7 mm
RetroFusion Hybrid Tool

Implant Only

Item Number	Description
AR- 4157-20	RetroFusion Implant, 20 mm
AR- 4157-24	RetroFusion Implant, 24 mm



2.5 Micro Compression FT[™] Screws



Middle Layer Instrumentation

Item Number	Description
2.5 Micro Compress	sion FT Screw Caddy
AR- 8725-08H	Micro Compression FT Screw, 8 mm
AR- 8725-09H	Micro Compression FT Screw, 9 mm
AR-8725-10H	Micro Compression FT Screw, 10 mm
AR- 8725-11H	Micro Compression FT Screw, 11 mm
AR- 8725-12H	Micro Compression FT Screw, 12 mm
AR- 8725-13H	Micro Compression FT Screw, 13 mm
AR- 8725-14H	Micro Compression FT Screw, 14 mm
AR-8725-16H	Micro Compression FT Screw, 16 mm
AR- 8725-18H	Micro Compression FT Screw, 18 mm
AR- 8725-20H	Micro Compression FT Screw, 20 mm
AR- 8725-22H	Micro Compression FT Screw, 22 mm
AR- 8725-24H	Micro Compression FT Screw, 24 mm
AR- 8725-26H	Micro Compression FT Screw, 26 mm
AR- 8725-28H	Micro Compression FT Screw, 28 mm
AR- 8725-30H	Micro Compression FT Screw, 30 mm
AR- 8725-32H	Micro Compression FT Screw, 32 mm
AR- 8725-34H	Micro Compression FT Screw, 34 mm
AR-8725-36H	Micro Compression FT Screw, 36 mm
AR- 8725-38H	Micro Compression FT Screw, 38 mm
AR- 8725-40H	Micro Compression FT Screw, 40 mm
AR- 8725-42H	Micro Compression FT Screw, 42 mm
AR- 8725-44H	Micro Compression FT Screw, 44 mm



The Micro Compression FT screw caddy holds lengths 8 mm to 44 mm and houses the appropriate-sized drills, drivers, and guidewires.

Item Number	Description
AR- 8737-46	Profile Drill
AR- 8737-37	Driver, cannulated, 1.5 mm hex
AR- 8737-34	Drill Bit, straight, cannulated, 2 mm
AR-8737-39KDN	Nitinol Guidewire w/ Double Trocar Tip, 0.86 mm, laser-marked

Note that the AO handle is on the top layer and the depth gauge is on the middle layer outside of the caddy.

The 2.5 mm headless, fully threaded compression screw provides precise fixation across the PIP and/or DIP joint. The use of the 2.5 Micro Compression FT screws allows for a minimally invasive approach to hammertoe correction.



Headless Compression PT Screws



Middle Layer Instrumentation

Item Number	Description
Headless Compre	ssion PT Screw Caddy
AR- 8625-08	Headless Comp Screws, 2.5 mm × 8 mm
AR- 8625-10	Headless Comp Screws, 2.5 mm × 10 mm
AR- 8625-12	Headless Comp Screws, 2.5 mm × 12 mm
AR- 8625-14	Headless Comp Screws, 2.5 mm × 14 mm
AR- 8625-16	Headless Comp Screws, 2.5 mm × 16 mm
AR- 8625-18	Headless Comp Screws, 2.5 mm × 18 mm
AR- 8625-20	Headless Comp Screws, 2.5 mm × 20 mm
AR- 8625-22	Headless Comp Screws, 2.5 mm × 22 mm
AR- 8625-24	Headless Comp Screws, 2.5 mm × 24 mm
AR- 8625-26	Headless Comp Screws, 2.5 mm × 26 mm
AR- 8625-28	Headless Comp Screws, 2.5 mm × 28 mm
AR- 8625-30	Headless Comp Screws, 2.5 mm × 30 mm
AR- 8625-32	Headless Comp Screws, 2.5 mm × 32 mm
AR- 8625-34	Headless Comp Screws, 2.5 mm × 34 mm



The Headless Compression PT screw caddy holds lengths 8 mm to 44 mm and houses the appropriate-sized drills, drivers, and guidewires.

Item Number	Description
AR- 8610BD-25C	Drill Bit, cannulated, 1.7 mm
AR- 8610D-25	Drive Shaft, T7 hexalobe, cannulated
AR- 8610CS-25	Countersink
AR- 8737-39KDN	Nitinol Guidewire w/ Double Trocar Tip, 0.86 mm, laser-marked

Note that the AO handle is on the top layer and the depth gauge is on the middle layer outside of the caddy.



Bottom Layer Instrumentation

Mini Scorpion™ DX Suture Passer	
QuickFix™ Clamp	
McGlamry Metatarsal Elevator, 11 mm	
Small Joint Distractor	
Cutter, QuickFix screw, 2 mm	
Driver, for QuickFix screws, 2 mm	
Drill Bit, 1.3 mm	
Metatarsal Pusher	
Guidewire w/ Trocar Tip, .062 in	
Guidewire, threaded, .062 in	
QuickFix Screws, 2 mm × 11 mm	
QuickFix Screws, 2 mm × 12 mm	
QuickFix Screws, 2 mm × 13 mm	

Now, surgeons have a variety of fixation options available to them, outside of what is typically offered in the CPR kit. Compression FT screws or supplemental screws can be inserted as several screw options are available in the Digital Repair System.





Notes	



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 and/or outcomes.

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

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