

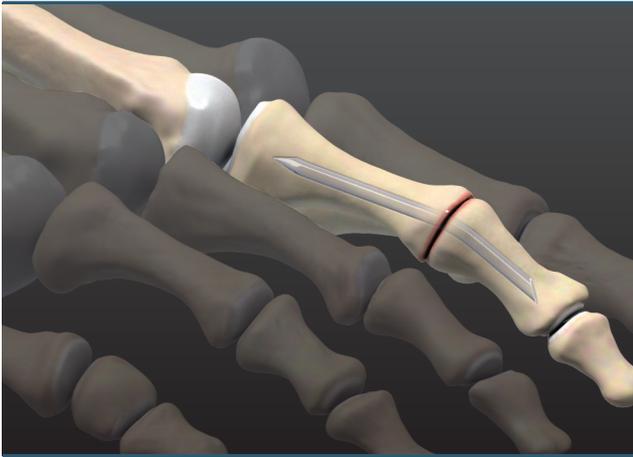
TRIM-It Drill Pin[®] Kit

For Arthrodesis and Osteotomy Fixation



Arthrex[®] 

Introduction



Hammertoe



Osteotomy Fixation



The TRIM-IT Drill Pin® kit makes placement easier. Using a standard quick-connect pin driver, surgeons can drill and place the pin in one step.

The bioabsorbable portion of the pin is seated in the pin driver during the drilling phase. The metal tip (2 mm) is drilled past the far cortex and cut off with the bone-cutting forceps.

In cases of extra hard bone stock, or if using the 1.5 mm TRIM-IT Drill Pin, a metal “predrill” K-wire is used to create a pilot hole. The bone tamp in the disposables kit is used to countersink the pin below the skin surface. It’s that simple!

The 1.5 mm TRIM-IT Drill Pin kit is recommended for hammertoe use only.

Advantages of the TRIM-IT Drill Pin Kit:

- Enables anatomic positioning of toe after implantation for a “flexed toe fusion”
- Pin seats in any standard pin driver
- Quick and easy placement techniques

Bioabsorbable Experience:

- Over 1,000,000 bioabsorbable implants sold since 1994
- Surgeons worldwide trust Arthrex for their bioabsorbable implants

Formula:

- 100% PLLA, [(poly)-L-lactide] acid
- Leading the way in strength and biocompatibility

Bioabsorbable Advantages:

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



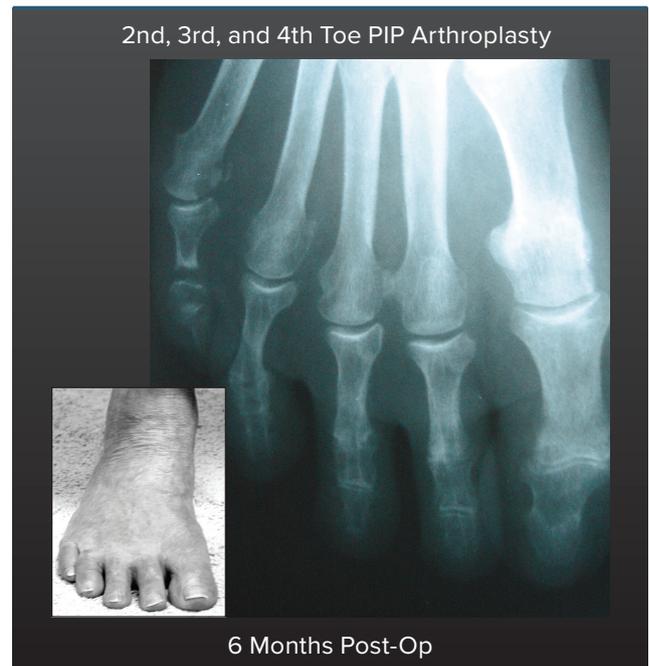
Indications

Foot and Ankle:

- 1st metatarsal osteotomy fixation
- Proximal Interphalangeal fixation for arthroplasty or fusion
- Ankle fractures

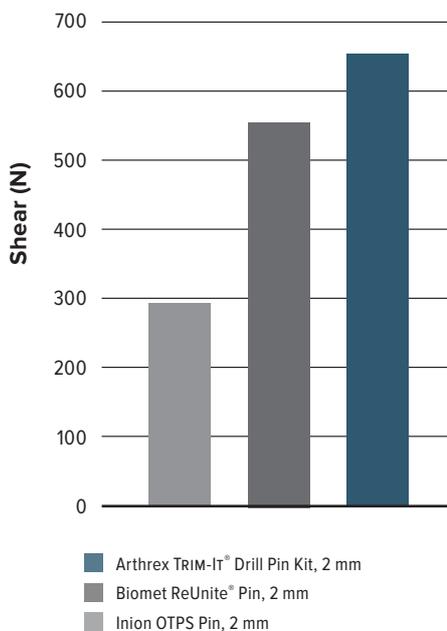
Hand and Wrist and Upper Extremities:

- Phalangeal, carpal, and metacarpal fusions and fractures

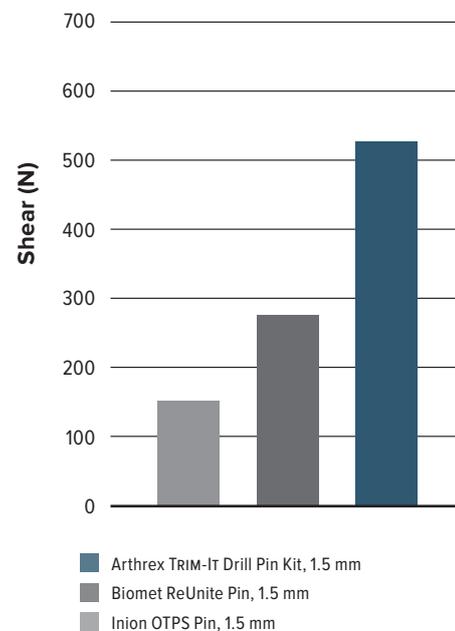


Superior Strength

Shear Strength Comparison: 2 mm^{1,2}

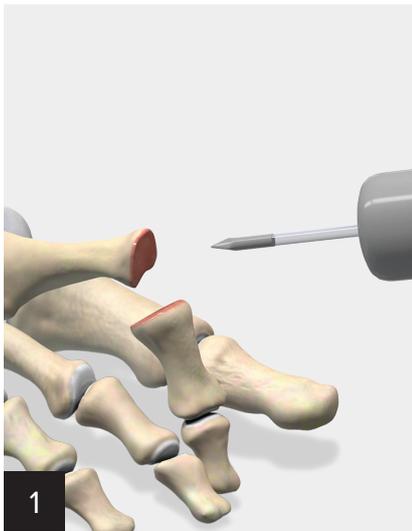


Shear Strength Comparison: 1.5 mm^{3,4}

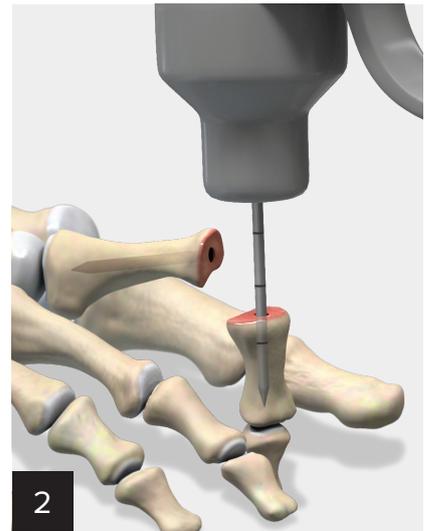
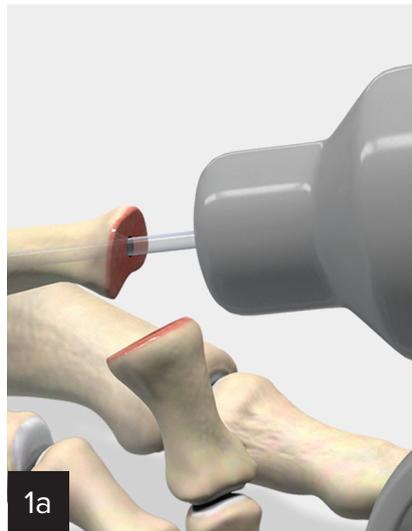


References

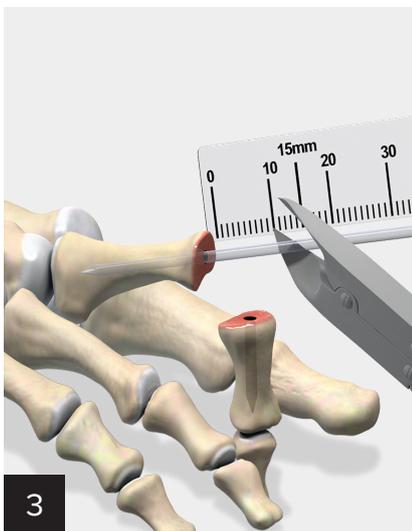
1. Arthrex, Inc. APT 744. Naples, FL; 2007.
2. Arthrex, Inc. APT 445. Naples, FL; 2004.
3. Arthrex, Inc. APT 369. Naples, FL; 2005.
4. Arthrex, Inc. APT 447. Naples, FL; 2004.



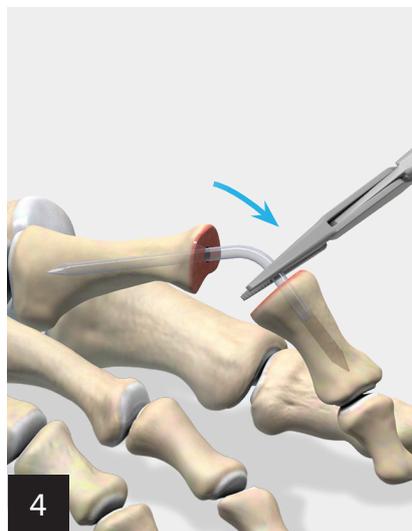
1 Use the metal pin to drill the depth of the proximal phalanx.



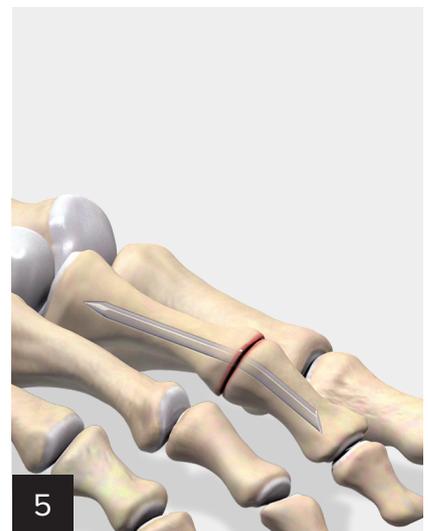
2 Using the laser lines on the guide pin, drill and measure the depth of the middle phalanx. Laser lines are every 10 mm.



3 Insert the drill pin into the proximal phalanx, measure, and cut the pin obliquely the depth of the middle phalanx.

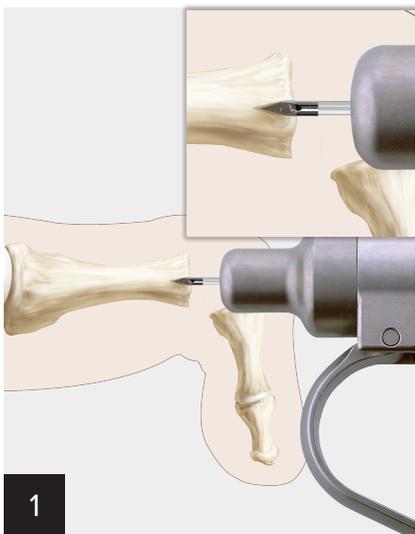


4 Use mosquito forceps to insert the drill pin into the middle phalanx.

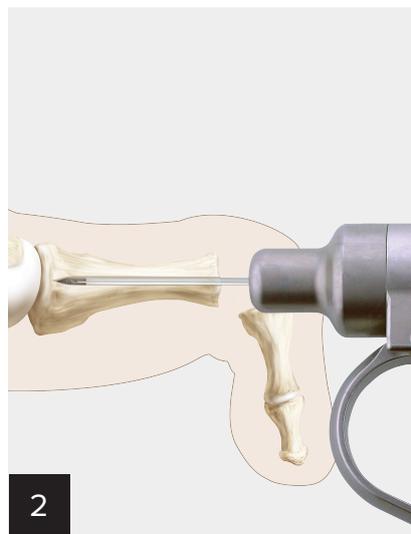


5 Final repair.

Hammertoe/Clawtoe – Proximal Interphalangeal Joint Resection Surgical Technique



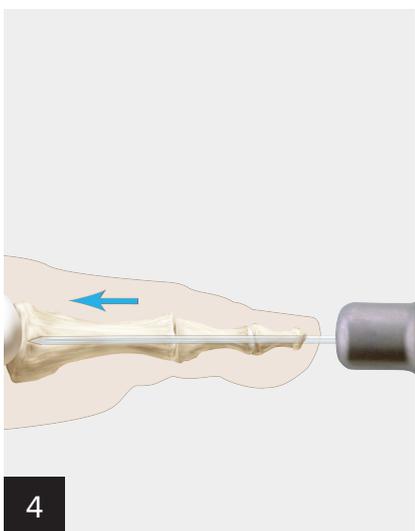
1 Resect the joint with an oscillating saw or rongeur. Seat the drill pin in the pin driver no further than 1 cm past the back of the metal tip as shown. Note: For a 1.5 mm pin, use the metal predrill pin in the kit to create a pilot hole prior to insertion.



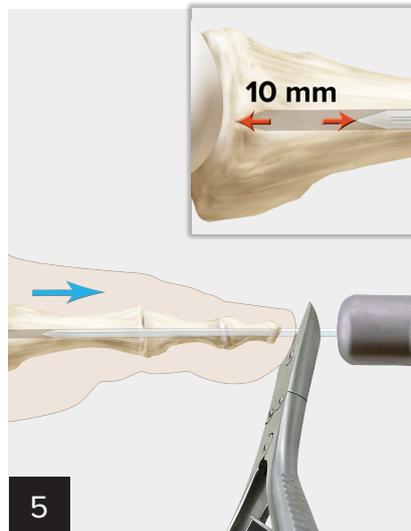
2 Gradually advance the pin through the proximal phalanx and stop just prior to the proximal cortical wall. Remove the pin after creating the pilot hole. Tip: Advance the drill slowly, reseating the pin every 10 mm to 15 mm.



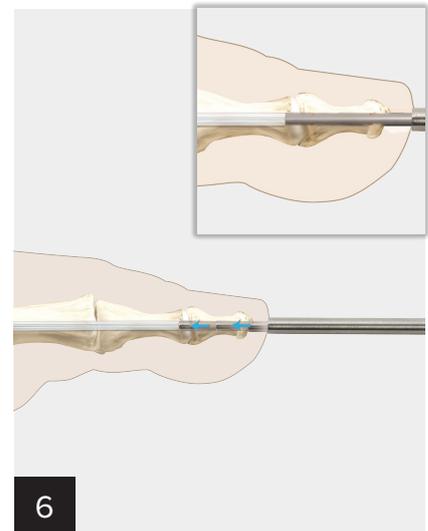
3 With the pin still seated in the driver, advance distally through the middle and distal phalanges. The PLLA tip of the pin should be exposed by at least 15 mm to allow for reseating and final placement.



4 Seat the pin in the pin driver and gradually drill retrograde with the bio end of the pin traversing the distal, middle, and proximal phalanges. Insert until the pin meets resistance at the base of the proximal phalanx.

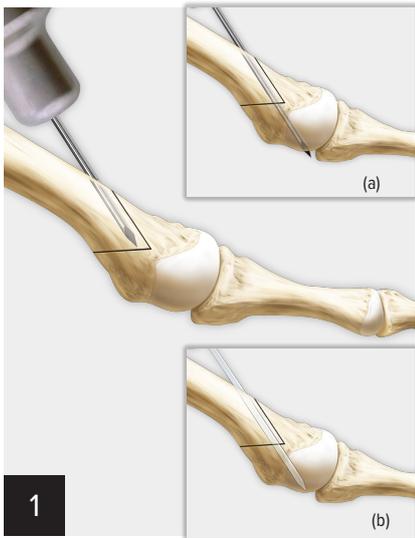


5 Prior to countersinking the pin, retract the pin distally at least 10 mm (see red arrows). Cut the pin flush at the skin using the bone-cutting forceps.

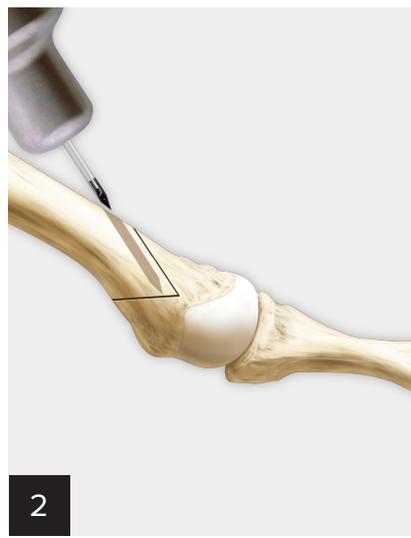


6 Use the tamp provided in the kit to countersink the drill pin 10 mm below the distal cortex of the distal phalanx. Suture the exit wound. Bend the toe to its normal anatomic shape. The repair is complete.

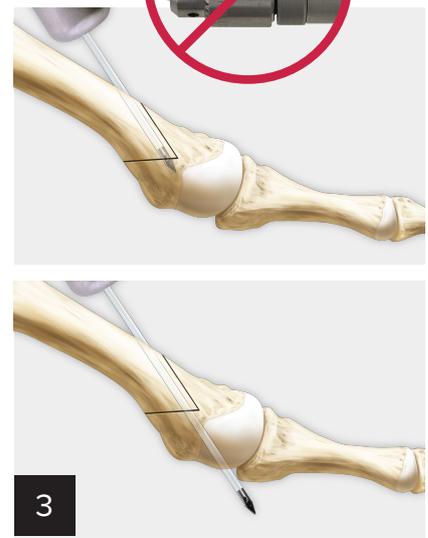
Standard Chevron Osteotomy Surgical Technique



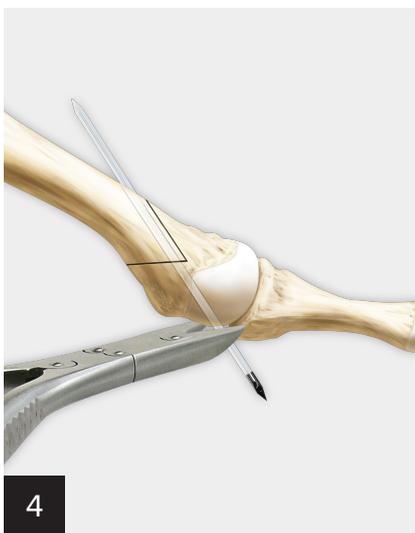
1 Create a pilot hole with the metal “predrill” pin included in the kit. Drilling option (inset): Drill completely through osteotomy with metal pin (a), visualizing the tip to confirm placement. Insert the drill pin with the bioabsorbable tip first (b).



2 Seat the drill pin in the pin driver no further than 1 cm past the back of the metal tip as shown. A “Jacob’s chuck handle” connection should not be used. Pin driver should accept a 2 mm pin.



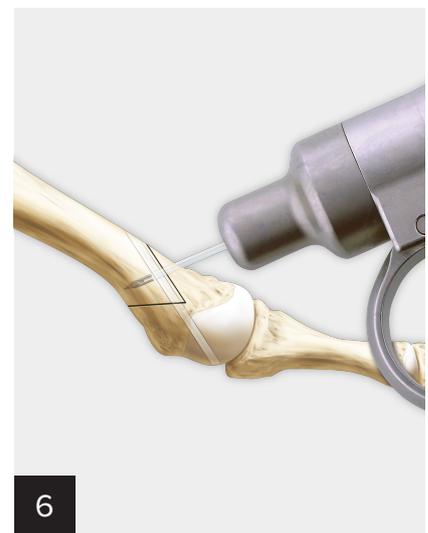
3 Advance the pin gradually, carefully reseating the pin in the driver as the drill pin advances through the bone. Tip: Allow the weight of the drill and the surgeon’s hand to slowly advance the pin through both cortices.



4 Advance the pin through the plantar soft tissues and use the bone-cutting forceps to cut flush to the bone.

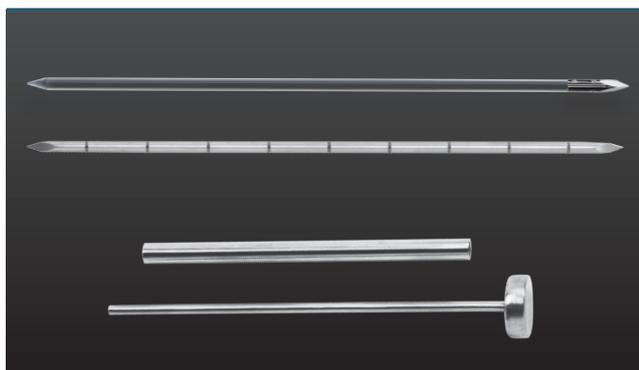


5 Drill the pin retrograde until it rests flush with the plantar cortex of the metatarsal head. Cut the proximal portion of the pin flush using the bone-cutting forceps.



6 To improve the stability of the construct, place a second pin perpendicular to the first pin as shown above.

Ordering Information



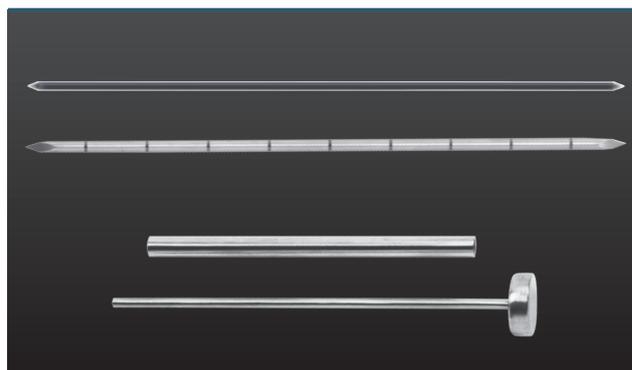
Product Description	Item Number
2 mm TRIM-IT Drill Pin® Disposables Kit	AR-4152DS
2 mm × 100 mm Absorbable TRIM-IT Drill Pin w/ Metal Tip K-wire Bone Tamp Guide Sleeve	

Accessories

Product Description	Item Number
Bone-Cutting Forceps (reusable)	AR-1367F

Literature

Product Description	Item Number
All-Inside TRIM-IT Drill Pin Product and Technique Highlights	LS1-0443-EN



Product Description	Item Number
1.5 mm TRIM-IT Drill Pin Disposables Kit	AR-4151DS
1.5 mm × 100 mm Absorbable Trim-It Drill Pin w/ Metal Tip K-wire Bone Tamp Guide Sleeve	

Multimedia

Product Description	Item Number
All-Inside PIP Arthrodesis With a 2 mm TRIM-IT Pin, presented by Luke Cicchinelli, DPM, video	VID1-0443-EN
TRIM-IT Drill Pin All-Inside Technique, animation	AN1-0443-EN

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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.

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