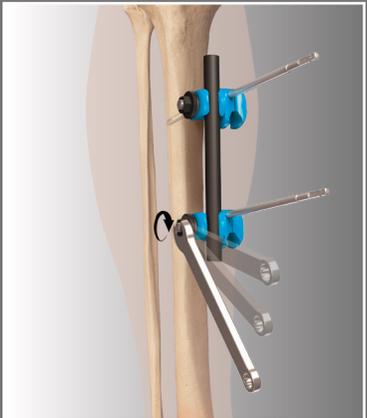
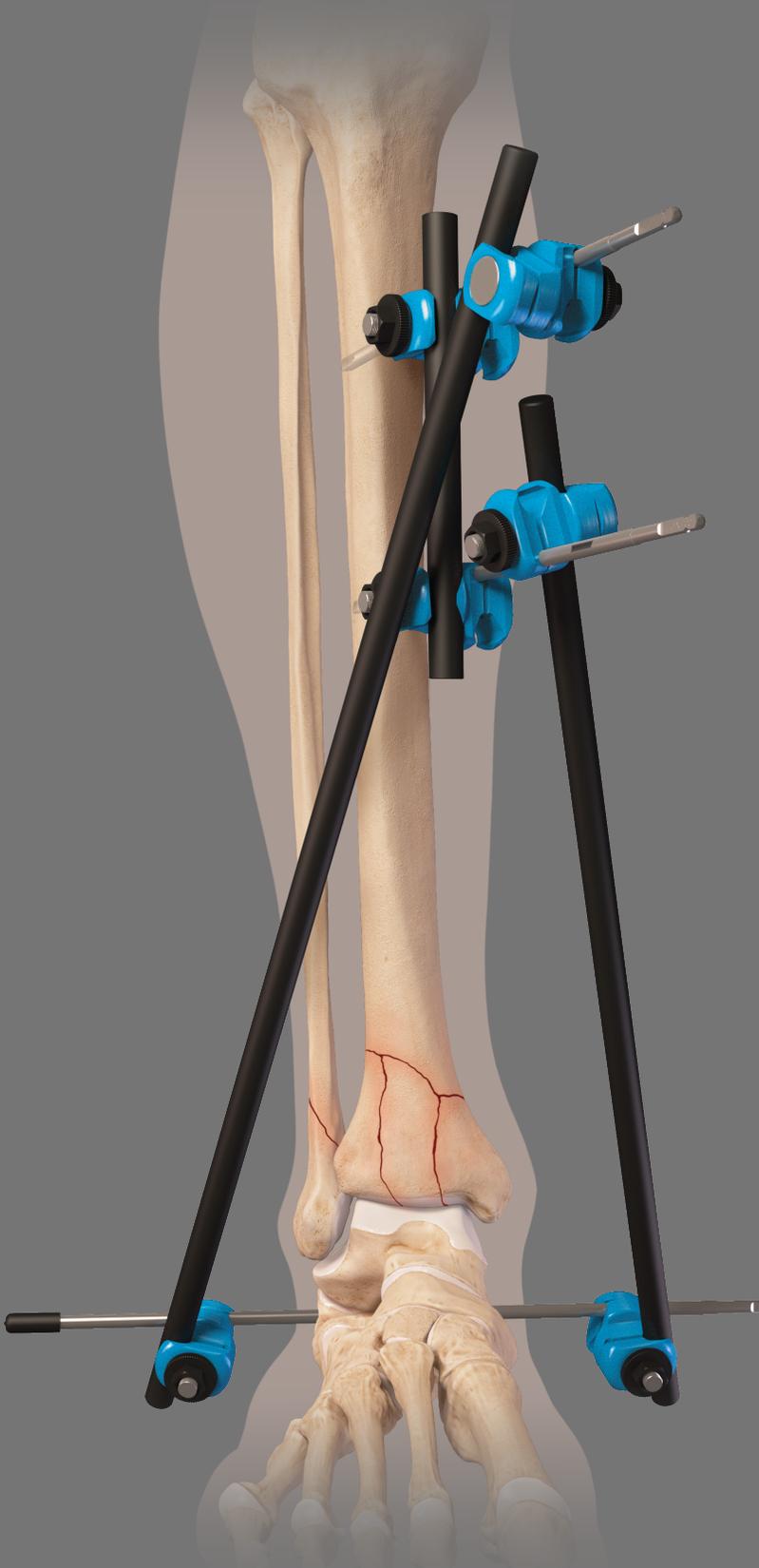


ArthroFX™

external fixation system large



Introduction

The ArthroFX™, large external fixation system was designed to give surgeons a simple, efficient and versatile solution for temporary or definitive fixation. For staged distal tibia fracture repairs, Arthrex® provides surgeons with external fixation (ArthroFX), internal fixation (ankle and distal tibia fracture management systems) as well as biologics (JumpStart™ Antimicrobial Wound Dressing) to streamline operating room efficiency.

The 11 mm Carbon Fiber Rods make ArthroFX suitable for many indications outside the distal tibia as well as the femur, pelvis and humerus.

The simplicity and ease of use make this external fixation system friendly in the operating room for quick applications. For delayed open reconstruction in periarticular fractures, ArthroFX functions as an excellent means of “portable traction”. This allows the patients the benefit of soft tissue healing while having the option of being at home and waiting for their elective procedures. It allows the surgeon the benefits of getting the patient out of the hospital quickly and readmitting for a well-planned surgery or for transfer to the appropriate physician.

Delta Frame Technique

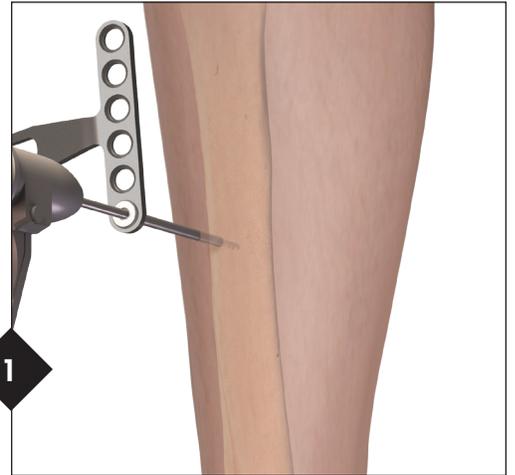


Fig 1 – Insert the first Schanz Pin into the anteromedial tibial shaft. Pins should be placed out of the zone of injury or hardware placement.

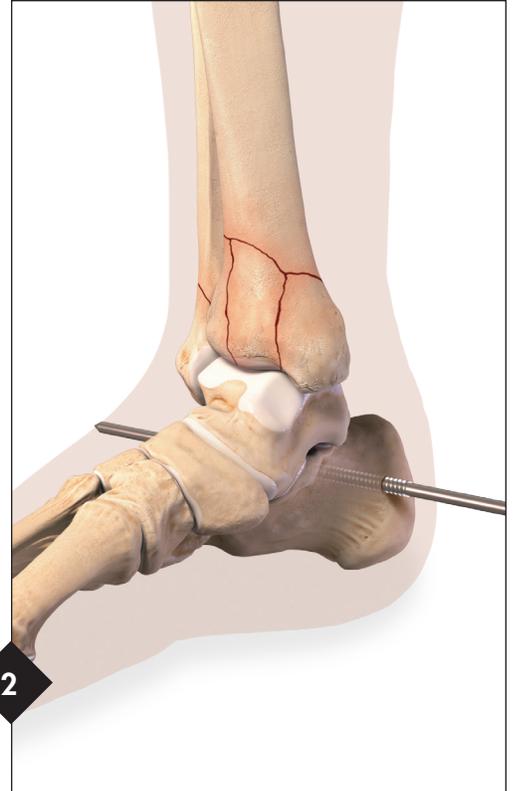


Fig 2 – Insert the second Transfixation Pin through the calcaneus, perpendicular to the long axis of the calcaneus, parallel to the ankle joint.

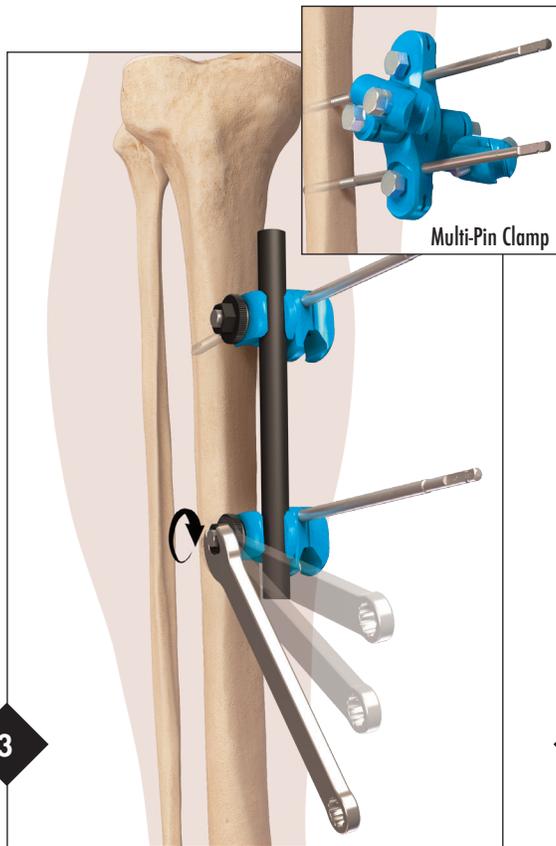


Fig 3 – Attach a small rod between two Schanz pins (Multi-Pin Clamp can also be used) before affixing the rods in the form of a triangle between the first screws and Transfixation Pin.

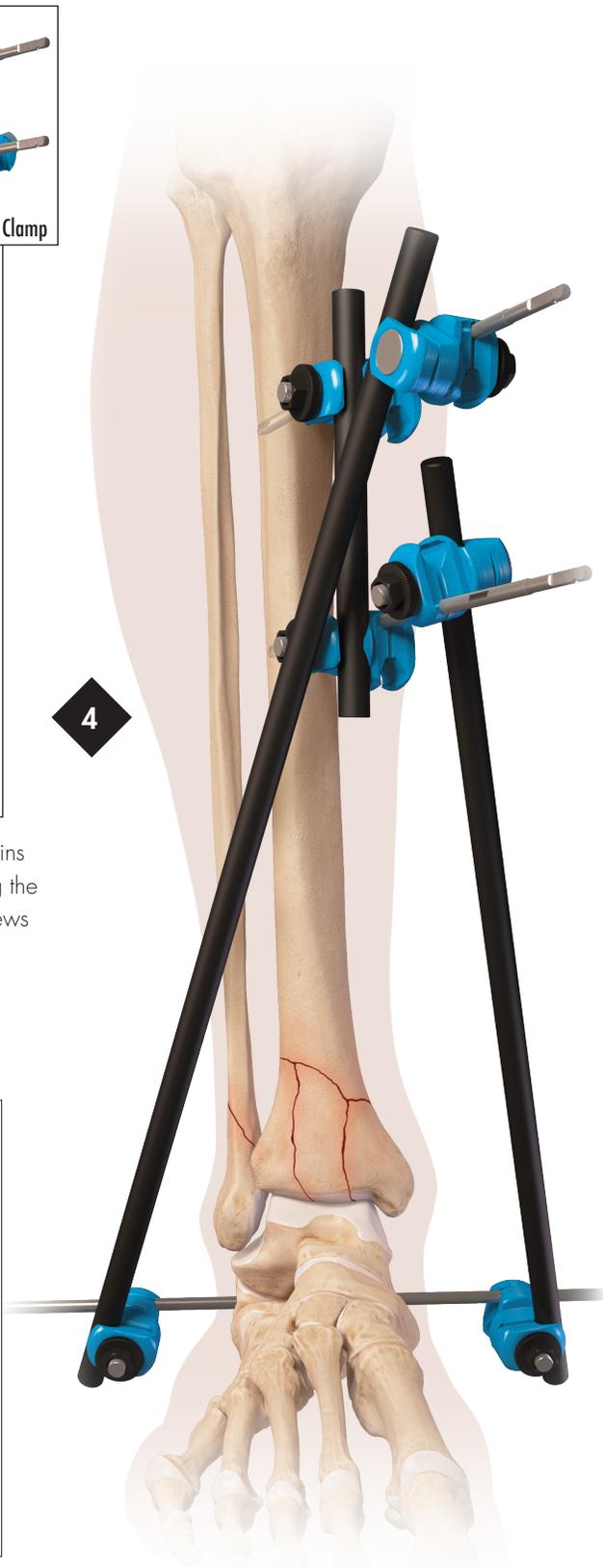


Fig 4 – Reduce the fracture by pulling lengthwise with balanced ligamentotaxis before tightening down the clamps.

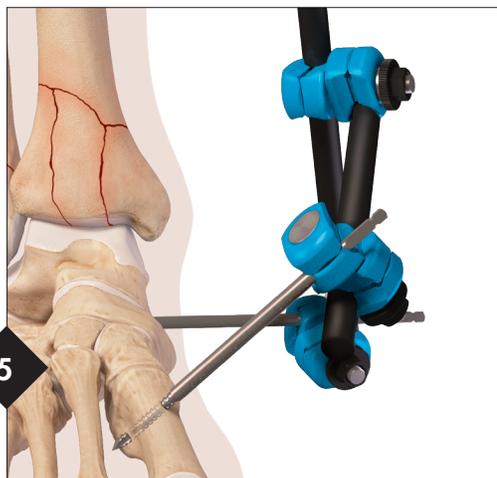


Fig 5 (optional) – An additional 4 mm Schanz pin can be added into the bar of the first metatarsal at a slight angle to incorporate the foot.

Large Combination Clamp and Multi-Pin Clamp

The Large Clamp was designed for ease of use and rapid locking. A single step lock allows for speed of application and secure purchase on rods, 4 mm, 5 mm and 6 mm bone screws and 6 mm Transfixation Pins. The clamp is locked with an 11 mm adapter or 11 mm wrench. The key component and instrument review feature of the Large Clamp is the ability to snap on to both the rod and the shank of the 6 mm Transfixation Pins. The clamp also has the ability to lock to the shank of 4 mm, 5 mm and 6 mm diameter screws.



Large Combination Clamp



Multi-Pin Clamp with Rod Attachments

Schanz Pins

The 4 mm and 5 mm Schanz Pins were designed primarily for temporizing fixation techniques which typically span the joint and zone of the injury. The Schanz Pins are secured to the frame with the Large Clamp. All sizes of Schanz Pins are equipped with a drilling tip.



4 mm x 125, 150 mm



5 mm x 175, 200, 250 mm

Transfixation Pins

The Transfixation Pins have a centrally threaded body with trocar tip.



6 mm x 225 mm



6 mm x 300 mm

Carbon Fiber Rods

The Carbon Fiber Rods are offered in 11 mm diameter and are available in a variety of lengths. Carbon Fiber Rods have the added benefit of being radiolucent and extremely lightweight.



100 mm



150 mm



200 mm



250 mm



300 mm



350 mm



400 mm

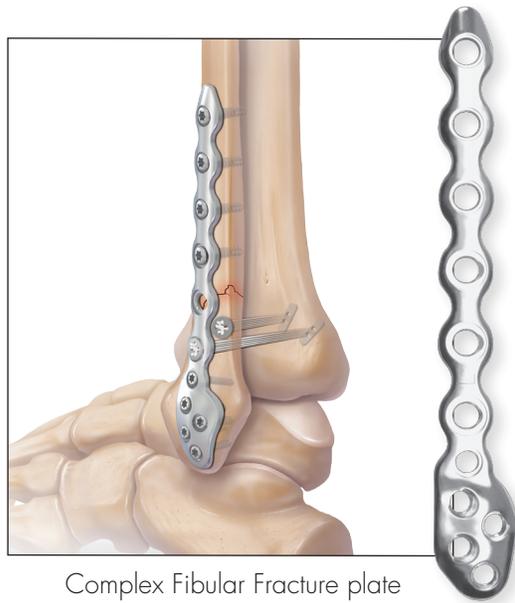


450 mm

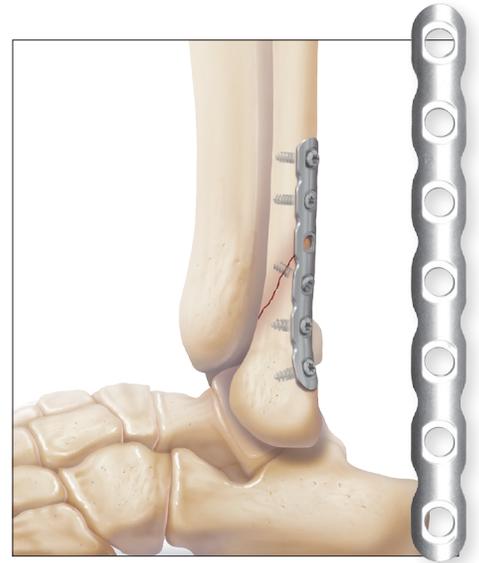


500 mm*

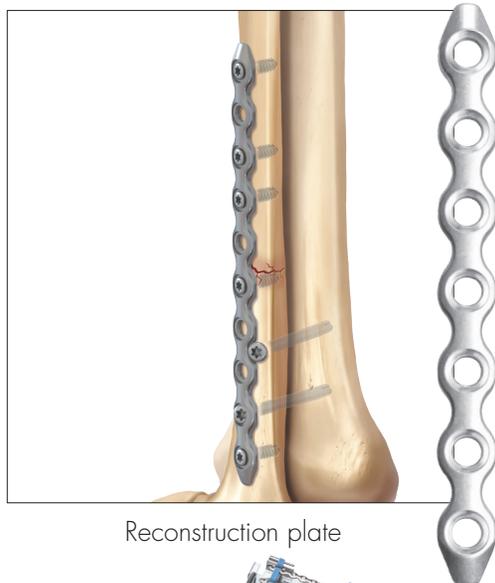
*Only available by special order. Not included in tray.



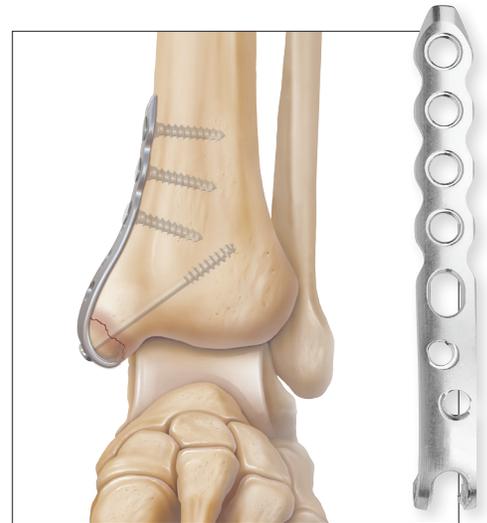
Complex Fibular Fracture plate



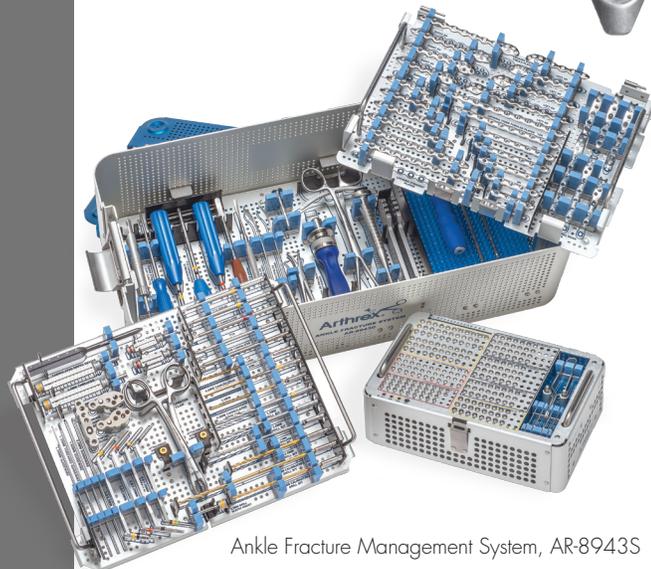
Locking Third Tibial plate



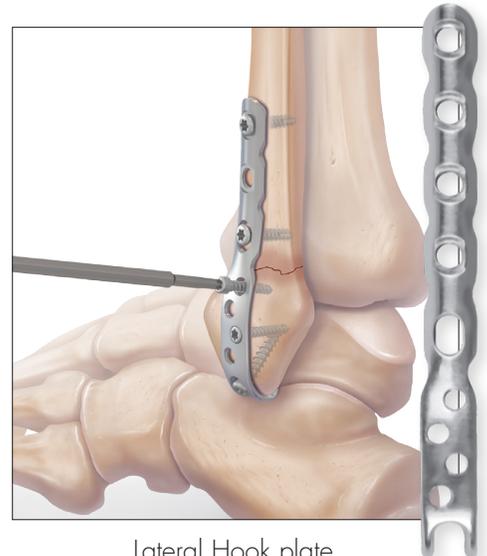
Reconstruction plate



Locking Medial Hook plate

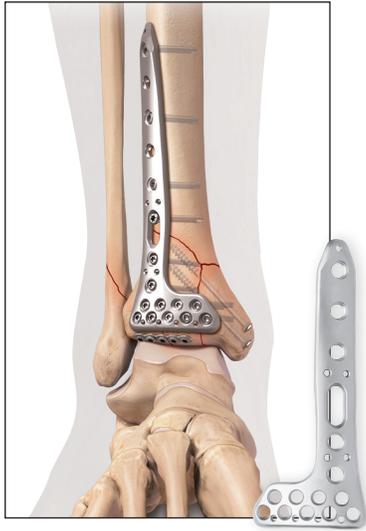


Ankle Fracture Management System, AR-8943S

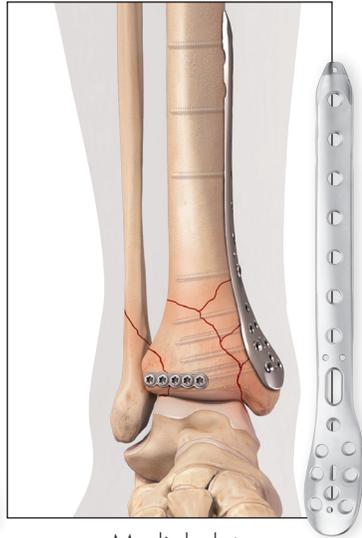


Lateral Hook plate

Supporting Products



Anterolateral plate



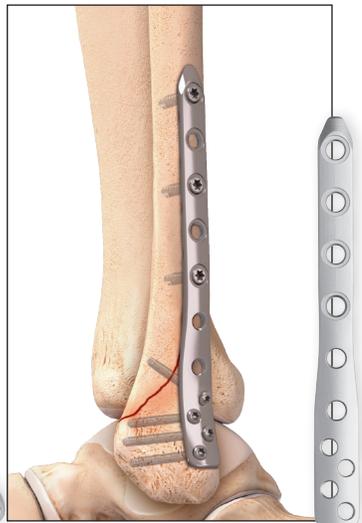
Medial plate



Posterior plate



Anterior plate



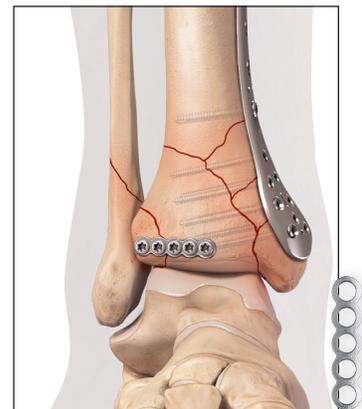
Anatomic Distal Fibula plate



Distal Fibula plate



Distal Tibia Plating System, AR-8963S



Straight/rim plate

Supporting Products



Ankle Fracture Distal Tibia Screw Case, AR-8943C-31

2.7 mm Low Profile Screw™, Locking



2.7 mm Low Profile Screw, Nonlocking, Cortical



3 mm Low Profile Screw, Cancellous



3.5 mm Low Profile Screw, Nonlocking, Cortical



3.5 mm Low Profile Screw, Locking



4 mm Low Profile Screw, Nonlocking, Cancellous



4 mm Low Profile Screw, Short Thread, Cannulated



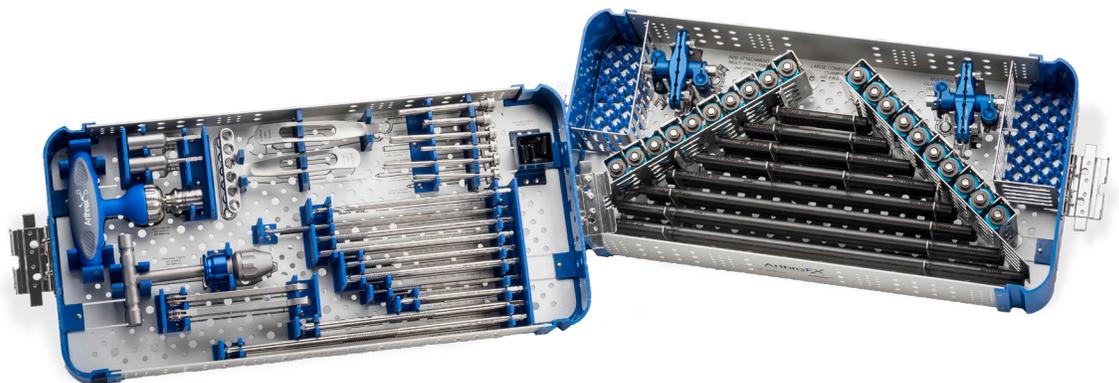
4 mm Low Profile Screw, Long Thread, Cannulated



4 mm Low Profile Screw, Short Thread



4 mm Low Profile Screw, Long Thread



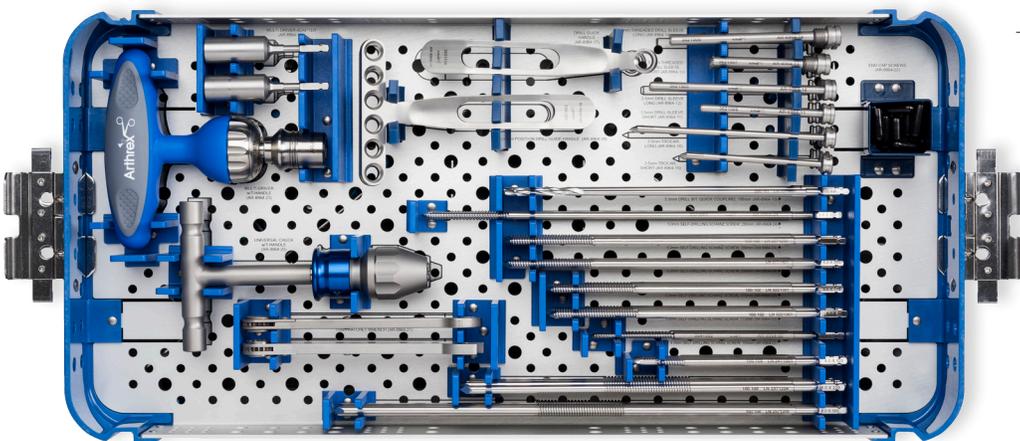
ArthroFX External Fixation System, AR-8964S

Both levels pictured below
are included in AR-8964S



LEVEL 2

Instrument Tray
with Carbon Fiber
Rods and Large
Clamps



LEVEL 1

Instrument Tray
with Transfixation
Pins and Schanz
Screws

ArthroFX™ including JumpStart™ Surgical Dressings

JumpStart surgical dressings are an easy-to-use and protective wound dressing solution for postoperative management of surgical incisions and puncture sites. Featuring Advanced Microcurrent Technology®, JumpStart provides sustained, broad-spectrum antimicrobial efficacy, including protection against multi-drug resistant and biofilm-forming bacteria*

Embedded in the JumpStart dressing are a matrix of elemental silver and zinc islands, which form microcell batteries. These batteries generate microcurrents designed to mimic physiologic electric currents*, creating an optimal environment for wound healing.

Using JumpStart with ArthroFX

1. Remove dressing from sterile package. For best adhesion, ensure that skin is thoroughly dry before dressing application.
2. Using sterile scissors, create a single cut that reaches the center point of the dressing.
3. Remove liner opposite the cut and moisten with sterile saline, taking care not to wet the adhesive. If a highly exuding wound is expected, saline application may not be necessary.
4. Apply dressing to the pin site, adhering the side opposite of the cut first. Remove final liner and carefully wrap dressing around the pin, one side at a time. It is recommended the top of the dressing overlap the bottom to seal the dressing edges. Gently rub the dressing to ensure full skin contact.

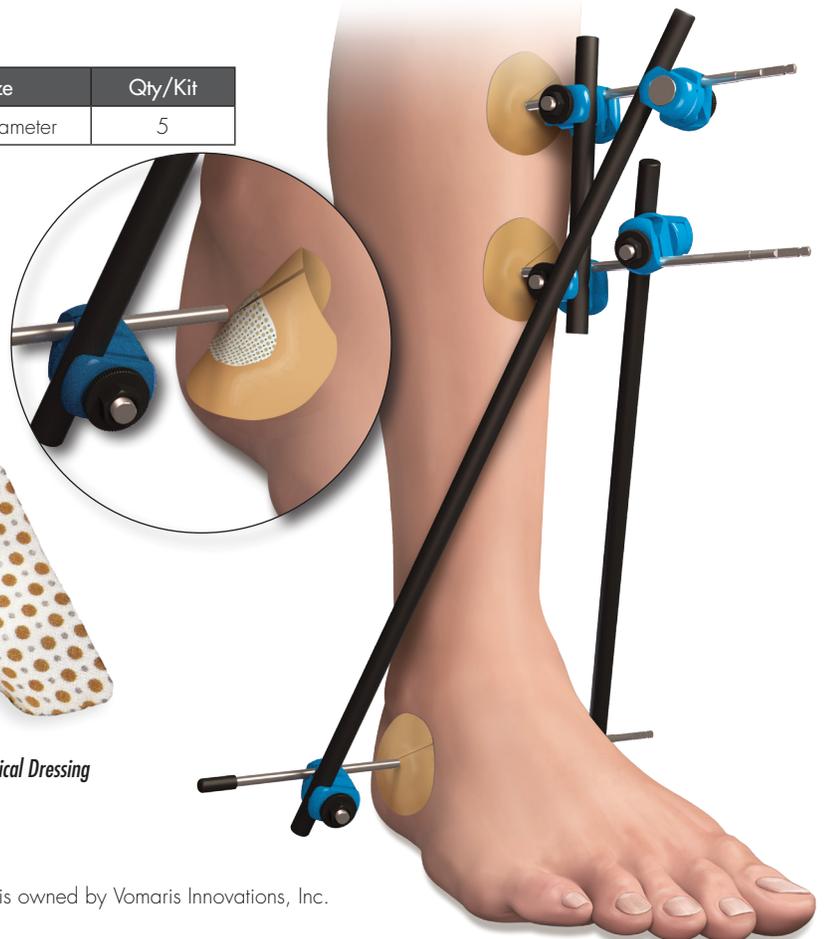
*For activation instructions, warnings, and contraindications, please refer to the Instructions For Use.

Included in this kit:

Product Code	Size	Qty/Kit
ABS-4054	2.5" Diameter	5



JumpStart Surgical Dressing



*data on file

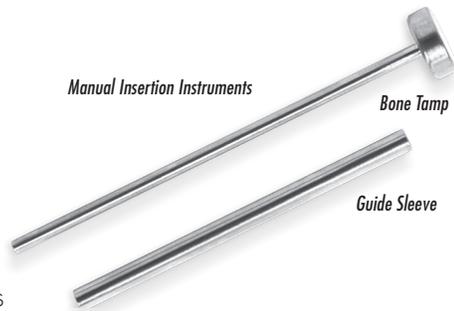
Advanced Microcurrent Technology® is owned by Vomarix Innovations, Inc.

TRIM-It Pins™

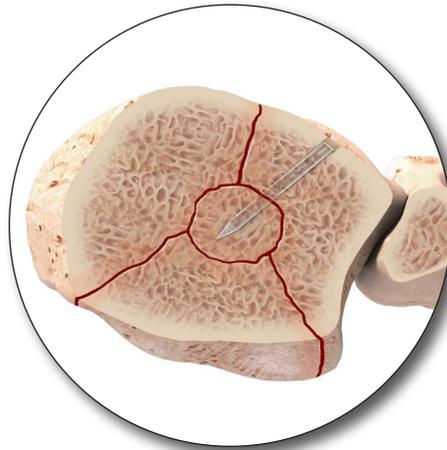
The use of TRIM-It pins can be extremely useful in providing preliminary or definitive stabilization of small fracture fragments, particularly for periarticular injuries where the pins allow the smaller osteochondral fracture fragments to be realigned anatomically. By using a standard pin driver, the surgeon 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. In cases of extra hard bone stock, or if using the 1.5 mm TRIM-It Drill Pin, a metal "predrill" pin K-wire is used to create a pilot hole. Once the pin placement is complete, countersink below the bone surface using the manual insertion instruments. Fractures can then be fixed definitively by whichever fixation construct is needed (plates and screws) without blocking hardware placement, while still maintaining the initial reduction.*

Advantages of TRIM-It Pins for fractures*

1. Allow conversion of smaller fragments into one fragment to simplify reduction
2. It obviates the use of metal K-wires during provisional fixation, where reduction may become lost as the K-wires are removed for final screw placement
3. Minimizes problems associated with "screw traffic"
4. Simplified technique using TRIM-It Pins as metal implants have to be buried below the surface in perfect position



AP View



Axial View



2 mm Pin with Metal Tip



1.5 mm Pin

*Min, William, Mark Munro, and Roy Sanders. "Stabilization of Displaced Articular Fragments in Calcaneal Fractures Using Bioabsorbable Pin Fixation: A Technique Guide." *Journal of Orthopaedic Trauma* 24.12 (2010): 770-74. Web.

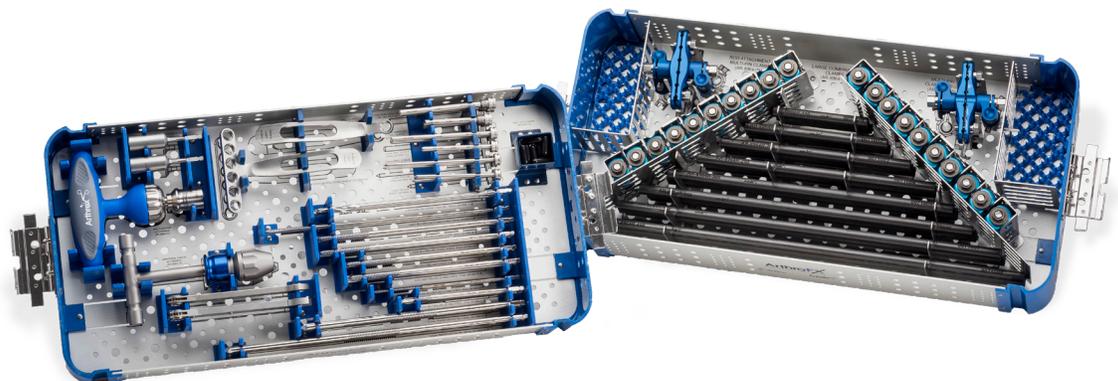
Ordering Information

ArthroFX™ External Fixation System Kit (AR-8964S) Includes:

Drill Bit, 3.5 mm x 195 mm	AR-8964-10
Drill Guide Handle	AR-8964-17
Universal Chuck w/T-Handle	AR-8964-20
Ratchet Wrench, 11 mm	AR-8964-21
Multi-Driver Adapter	AR-8964-19
6-Position Drill Guide Handle	AR-8964-18
Trocar, long	AR-8964-16
Trocar, short	AR-8964-15
Drill Sleeve, long	AR-8964-12
Drill Sleeve, short	AR-8964-11
Threaded Sleeve, long	AR-8964-14
Threaded Sleeve, short	AR-8964-13

Implants (to be ordered separately):

Large Combination Clamps	AR-8964-07
Multi-Pin Clamp, Large	AR-8964-08
Rod Attachment, Large Multi-Pin Clamp	AR-8964-09
Carbon Fiber Rod, 11 mm x 100 mm	AR-8964R-100
Carbon Fiber Rod, 11 mm x 150 mm	AR-8964R-150
Carbon Fiber Rod, 11 mm x 200 mm	AR-8964R-200
Carbon Fiber Rod, 11 mm x 250 mm	AR-8964R-250
Carbon Fiber Rod, 11 mm x 300 mm	AR-8964R-300
Carbon Fiber Rod, 11 mm x 350 mm	AR-8964R-350
Carbon Fiber Rod, 11 mm x 400 mm	AR-8964R-400
Carbon Fiber Rod, 11 mm x 450 mm	AR-8964R-450
Carbon Fiber Rod, 11 mm x 500 mm	AR-8964R-500
Schanz Screw, 4 mm x 125 mm	AR-8964-01
Schanz Screw, 4 mm x 150 mm	AR-8964-02
Schanz Screw, 5 mm x 175 mm	AR-8964-03
Schanz Screw, 5 mm x 200 mm	AR-8964-04
Schanz Screw, 5 mm x 250 mm	AR-8964-24
Transfixation Pin, 6 mm x 225 mm	AR-8964-05
Transfixation Pin, 6 mm x 300 mm	AR-8964-06



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.

