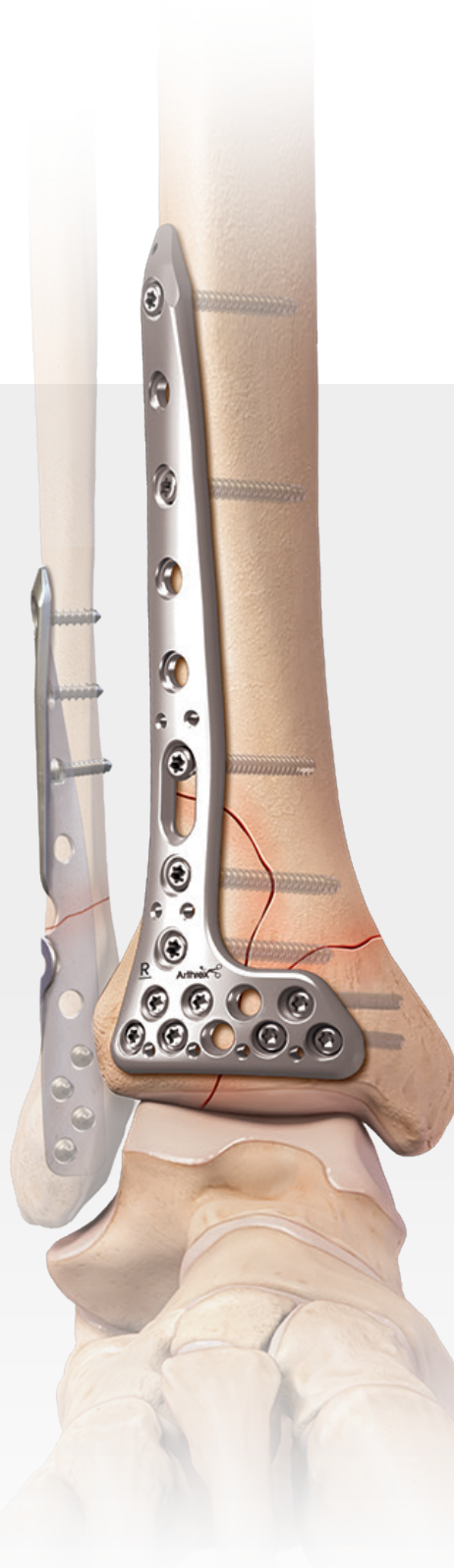


# Distal Tibia Plating System

Surgical Technique





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# Distal Tibia Plating System

## Introduction

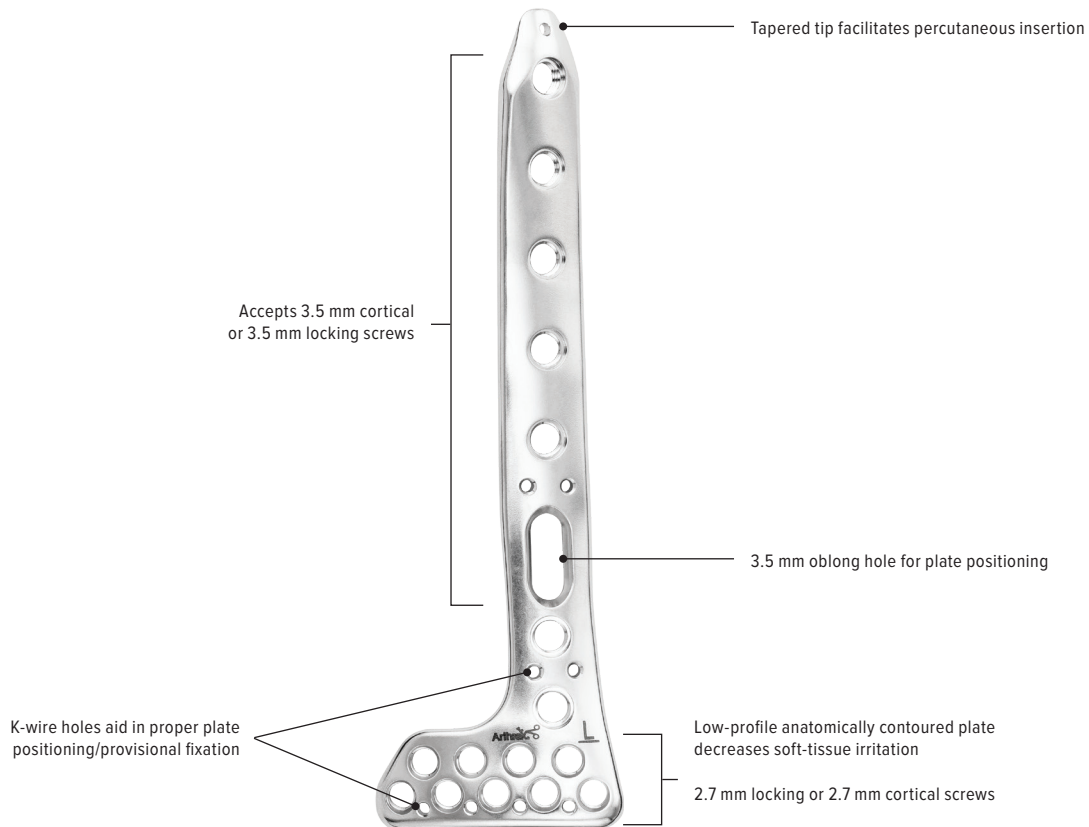
The Arthrex Distal Tibia Plating System was designed for the versatile treatment of distal tibia fractures. It includes anterolateral, medial, anterior, and posterior tibia plates and two designs of posterolateral fibula plates. The implants optimize periarticular fixation with 2.7 mm locking screws distally while also providing appropriate rigidity to address comminution and bone loss. Particular attention was placed on maintaining a low-profile design by optimizing contour and fit to minimize soft-tissue

irritation. The color-coded instrumentation facilitates minimally invasive or open techniques.

Arthrex offers comprehensive solutions to treat patients with distal tibia fractures, including the ArthroFX® Large External Fixation System, Ankle Fracture Management System, FibuLock fibular nail, Trim-It Drill Pin® System, and BoneSync™ fast-setting, drillable calcium phosphate cement.

## Anterolateral Distal Tibia Plate

The anterolateral plate has two rows of distal 2.7 mm locking or nonlocking screws to address complex, high-energy pilon fractures. The use of 2.7 mm screws distally allows for a high density of screw fixation and low-profile, periarticular fit; 3.5/4.0 mm fixation in the rest of the plate provides strength. An oblong hole and K-wire/BB-Tak holes facilitate proper plate placement and provisional fixation.



# Anterolateral Distal Tibia Plate Surgical Technique

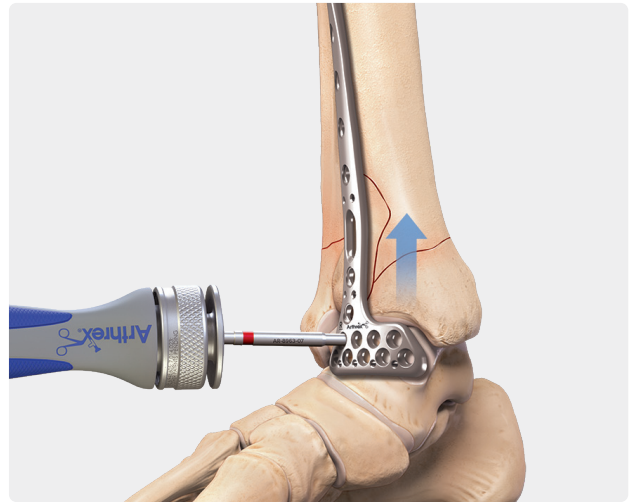


1

Perform an anterior or anterolateral approach to ensure neurovascular structures are protected in the usual fashion. Use the submuscular elevator to help create a path for plate insertion.

Submuscular Tissue Elevator, QC

AR-8963-10

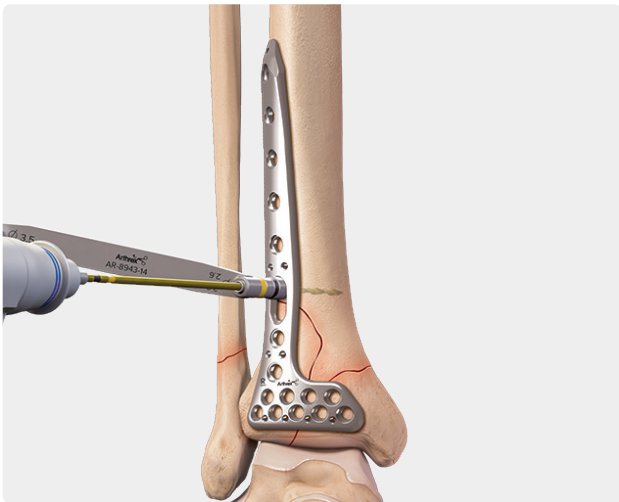


2

Attach the 2.7 mm insertion handle in the most lateral hole of the second distal row of screws. Slide the plate up the previously created submuscular pocket. It is recommended to slide the plate up first and then back distally into the appropriate position.

Insertion Handle, QC, 2.7 mm

AR-8963-07



3

Once the plate is positioned, drill with the 2.5 mm long drill bit through the 2.5 mm drill guide, measure with the depth gauge, and implant a 3.5 mm cortical screw in the oblong hole; conversely, a BB-Tak can be used for provisional fixation.

Drill Bit, calibrated, 2.5 mm

AR-8943-42

Drill Guide, 2.5 mm

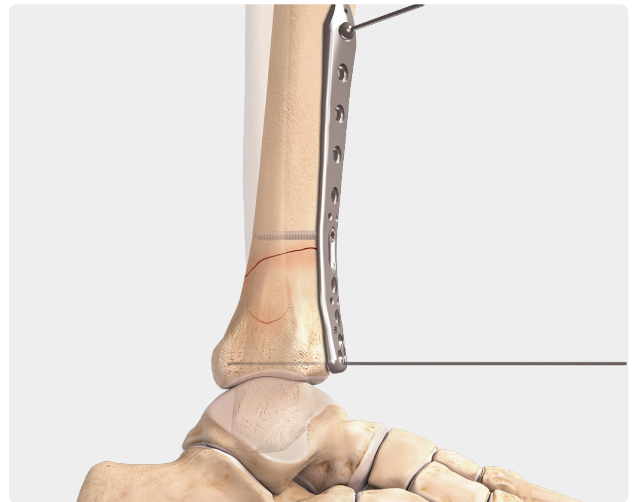
AR-8943-14

Depth Device, 2.7 mm/3.5 mm/4.0 mm

AR-8943-15

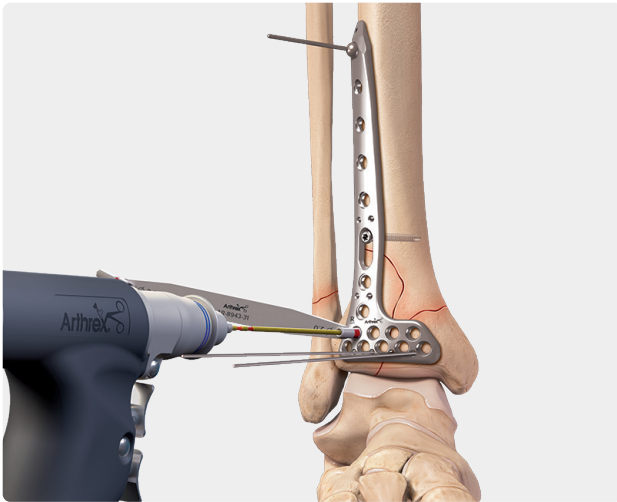
BB-Tak

AR-13226 or  
AR-13226T



4

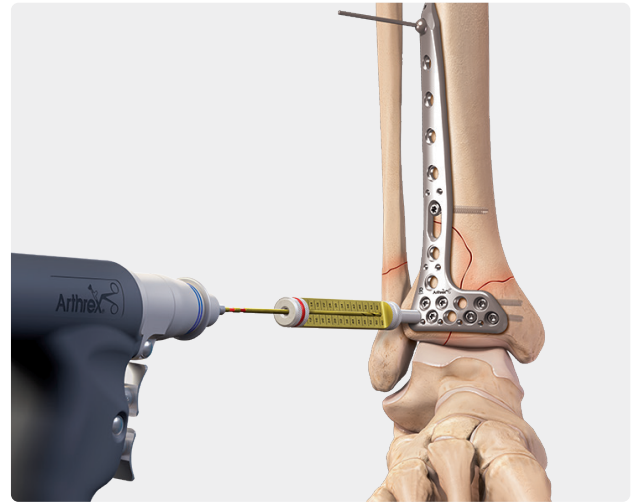
Place 1.6 mm K-wires in the K-wire holes in the most distal row to secure the plate and to check the distal screw trajectory. On the lateral fluoroscopy image, the K-wires should be above the central portion of the plafond and parallel to the joint line. The plate can be adjusted by loosening the 3.5 mm cortical screw (or BB-Tak) in the oblong hole. Once the desired plate position is confirmed, place a BB-Tak in the most proximal plate hole to secure the plate to the bone.



5

Use a 2.7 mm cortical screw distally to bring the plate to the bone. Drill with the 2 mm long drill bit through the 2.0 mm drill guide, measure with the long depth gauge, and implant a 2.7 mm cortical screw.

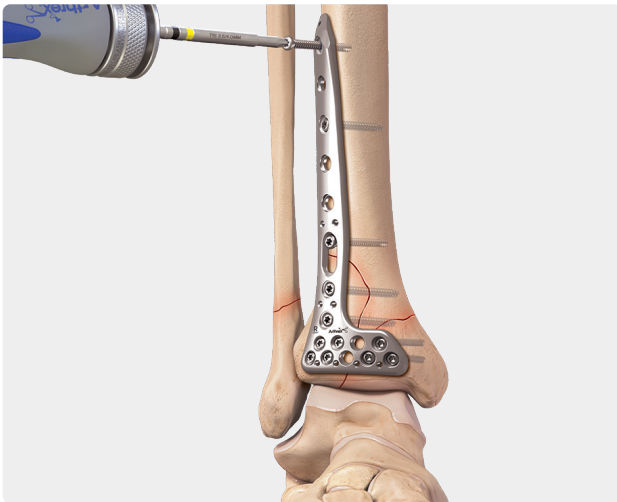
Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Drill Guide, 3 mm/2 mm	AR-8943-31
Depth Device, 2.7 mm/3.0 mm/3.5 mm/4.0 mm	AR-8963-01



6

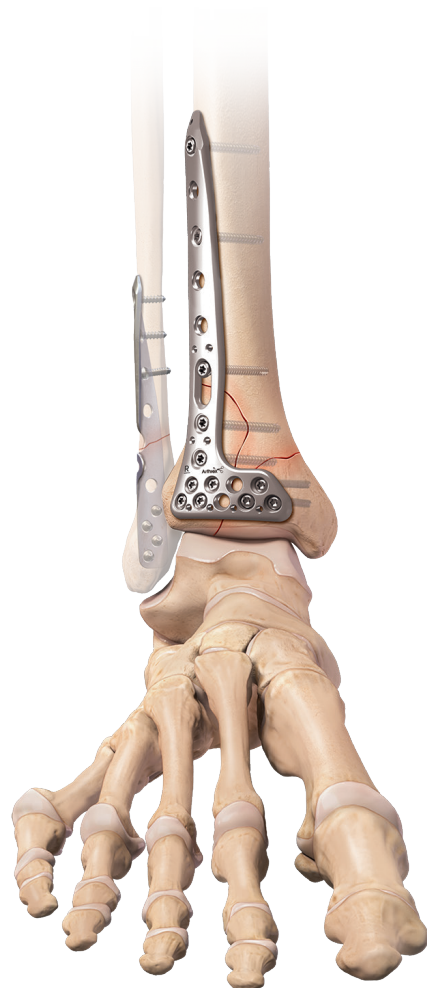
Add 2.7 mm locking screws in the bottom two rows as needed. Drill with the 2 mm long drill bit through the 2.7 mm threaded drill guide. Lengths can be read off the calibrated drill guide or with the long depth gauge.

Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Drill Guide, threaded, 2.7 mm	AR-8963-08
Depth Device, 2.7 mm/3.0 mm/3.5 mm/4.0 mm	AR-8963-01



7

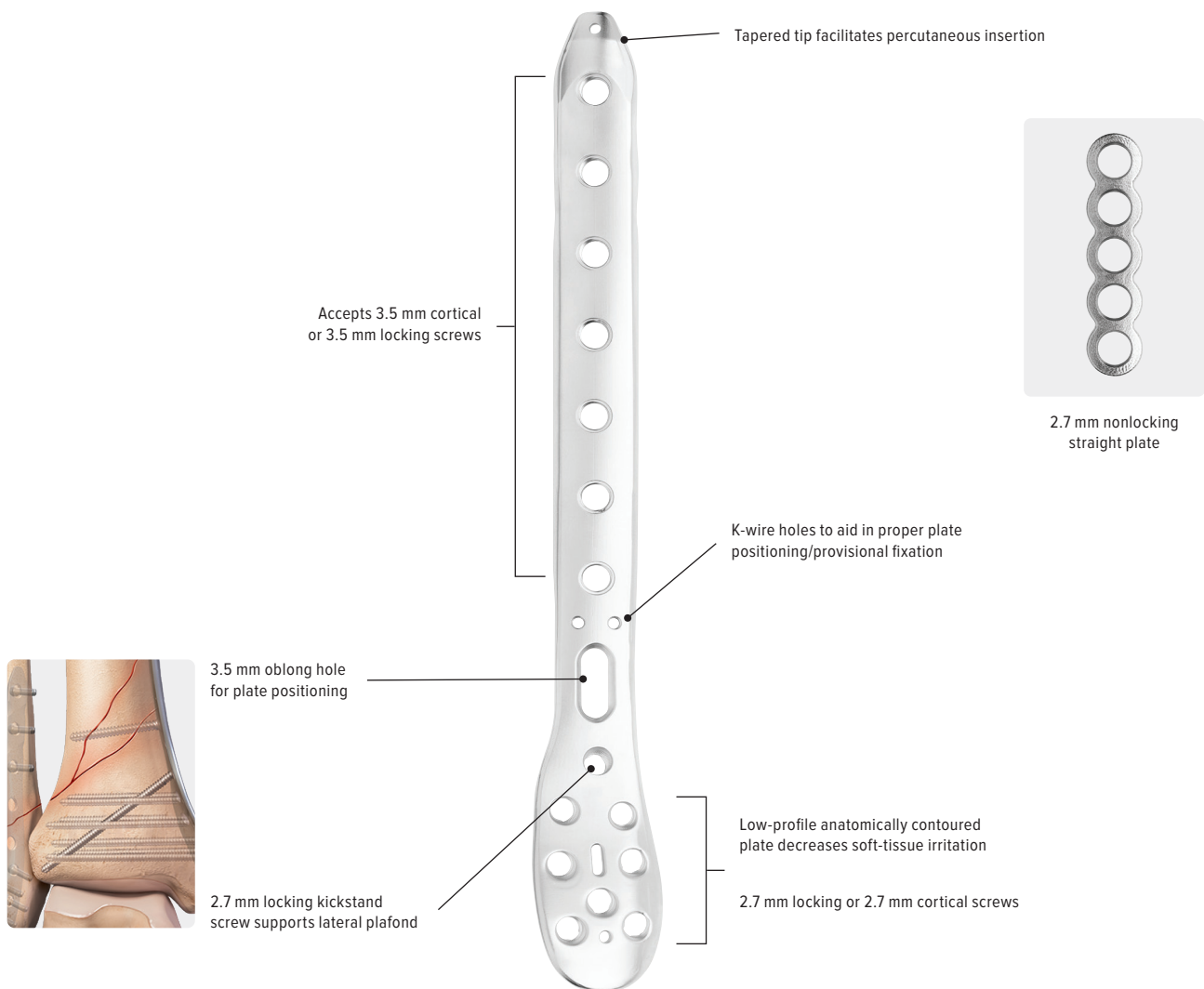
Once distal fixation is completed, add 3.5 mm cortical or locking screws proximally as needed.



## Medial Distal Tibia Plate and Straight Plate

The medial distal tibia plate is designed with 2.7 mm locking or cortical screws distally to significantly reduce the plate profile where management of the soft tissues can be extremely difficult. The shaft of the plate accepts 3.5 mm cortical screws or 3.5 mm locking screws. An oblong hole in the shaft and K-wire holes allows for proper placement.

Low-profile 2.7 mm nonlocking straight plates are also standard in each set to help stabilize an anterior cortical or Chaput fragment. Plates come in 2- to 5-hole lengths and can be placed on the distal rim of the tibia.



## Medial Distal Tibia Plate and Straight Plate Surgical Technique

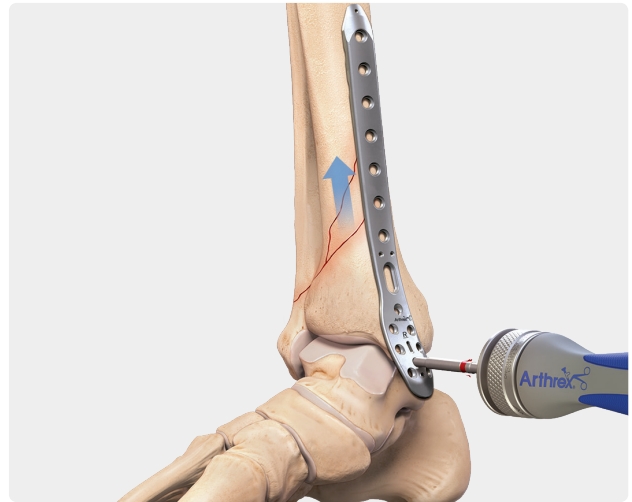


**1**

Make a direct medial incision starting at the tip of the medial malleolus and extending proximally. Ensure the saphenous vein and nerve are protected. Use the submuscular elevator to help create a path for plate insertion.

Submuscular Tissue Elevator, QC

AR-8963-10

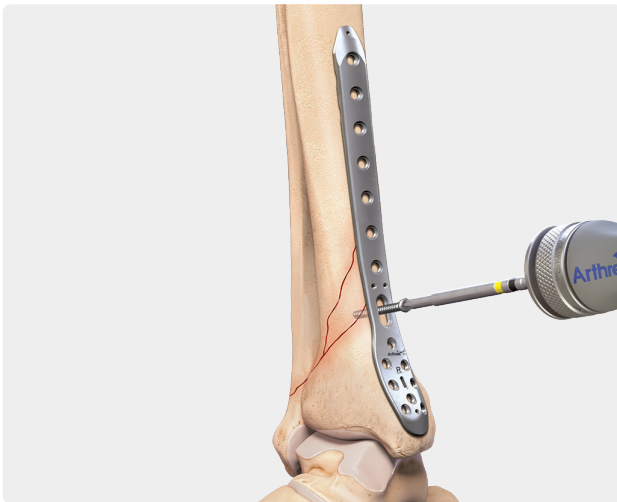


**2**

Thread the plate-holding guide into the central distal hole and slide the plate up the medial tibia in the previously created plane.

Insertion Handle, QC, 2.7 mm

AR-8963-07



**3**

Once the plate is positioned, drill with the 2.5 mm long drill bit through the 2.5 mm drill guide, measure with the depth gauge, and implant a 3.5 mm cortical screw in the oblong hole; conversely, a BB-Tak can be used.

Drill Bit, calibrated, 2.5 mm

AR-8943-42

Drill Guide, 2.5 mm

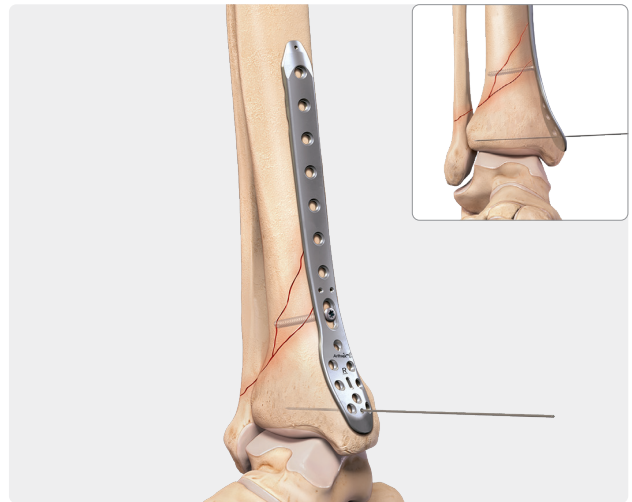
AR-8943-14

Depth Device, 2.7 mm/3.5 mm/4.0 mm

AR-8943-15

BB-Tak

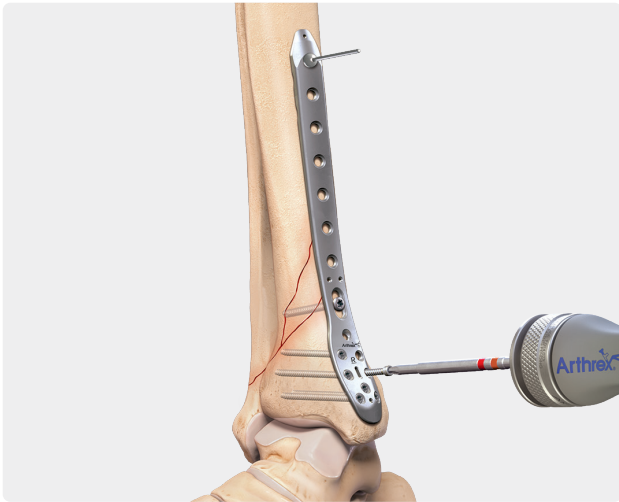
AR-13226 or  
AR-13226T



**4**

Place a 1.6 mm K-wire in the most distal K-wire hole. This wire should be parallel to the joint surface and 1 cm proximal to the articular surface. If needed, the plate can be adjusted by removing the 1.6 mm K-wire and loosening the 3.5 mm screw in the oblong hole. Once plate position is confirmed, a BB-Tak can be placed in the most proximal hole to secure it.





5

Add 2.7 mm cortical and locking screws as needed.

**Cortical Screws:** Drill with the 2 mm long drill bit through the 2.0 mm drill guide and measure with the long depth gauge.

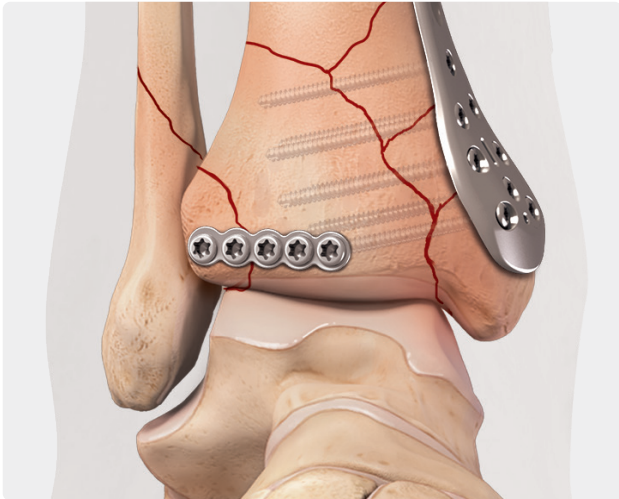
**Locking Screws:** Drill with the 2 mm long drill bit through the 2.7 mm threaded drill guide. Lengths can be read off the calibrated tower or with the long depth gauge.

Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Drill Guide, 3 mm/2 mm	AR-8943-31
Depth Device, 2.7 mm/3.0 mm/3.5 mm/4.0 mm	AR-8963-01
Drill Guide, threaded, 2.7 mm	AR-8963-08



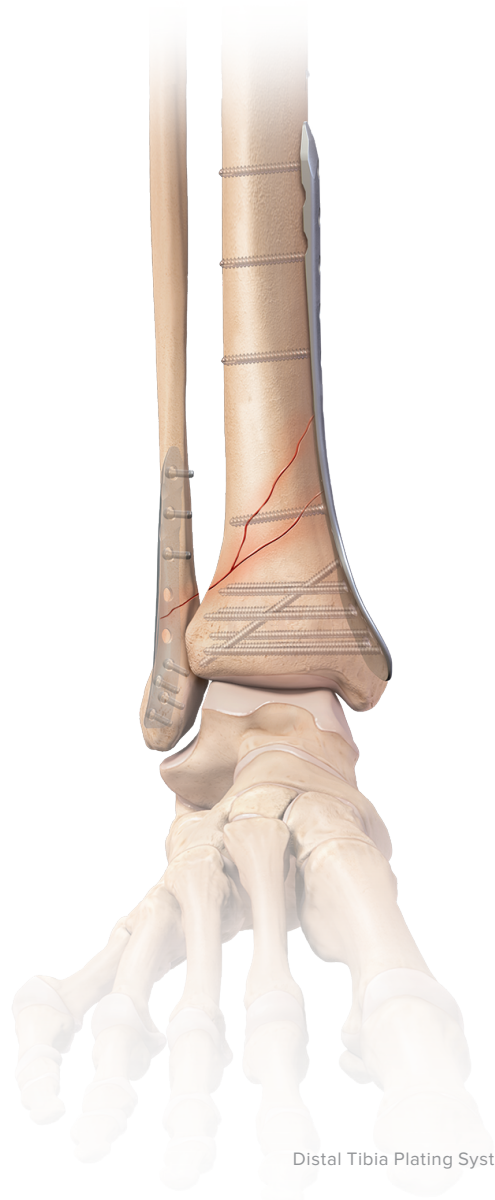
6

Place 3.5 mm cortical or locking screws proximal to the fracture. It is recommended to place a total of 3 or 4 screws proximal to the fracture.



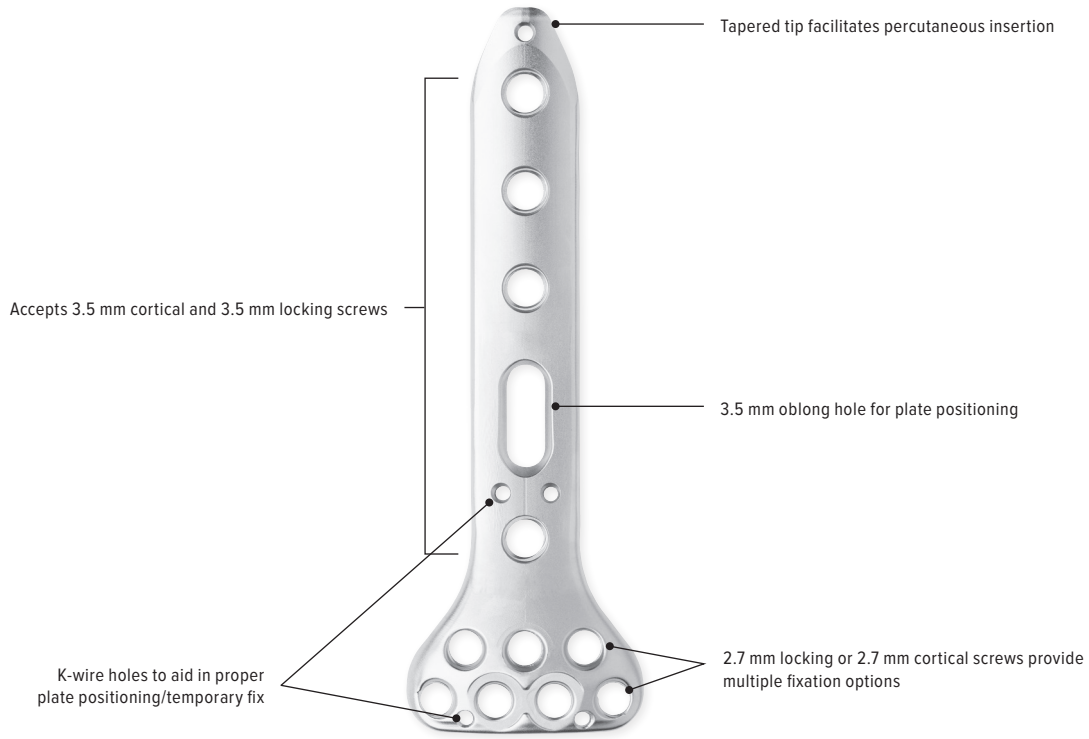
7

If needed, a 2.7 mm straight plate can be applied. Place the plate on the distal rim and use lateral fluoroscopy to make sure the screws do not violate the articular surface. This can be done before or after the medial plate is applied.



## Anterior Distal Tibia Plate

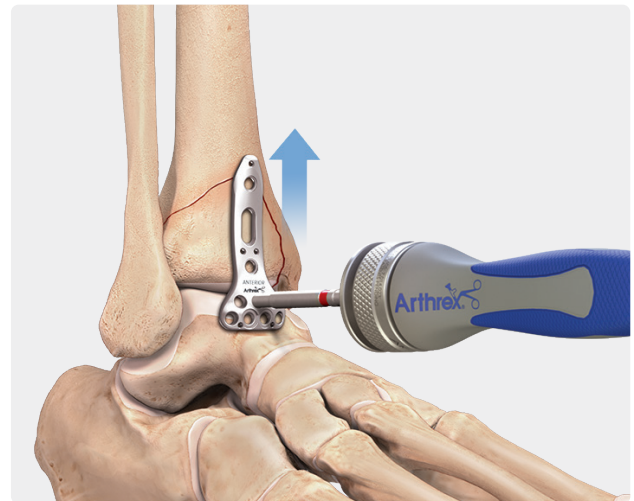
The anterior plate features seven 2.7 mm locking or nonlocking rafting screws parallel to the joint surface to support the articular surface of the plafond. The oblong hole aids in plate positioning and K-wire/BB-Tak holes allow for provisional fixation. The shaft of the plate accepts 3.5 mm locking and cortical screws.



## Anterior Distal Tibia Plate Surgical Technique



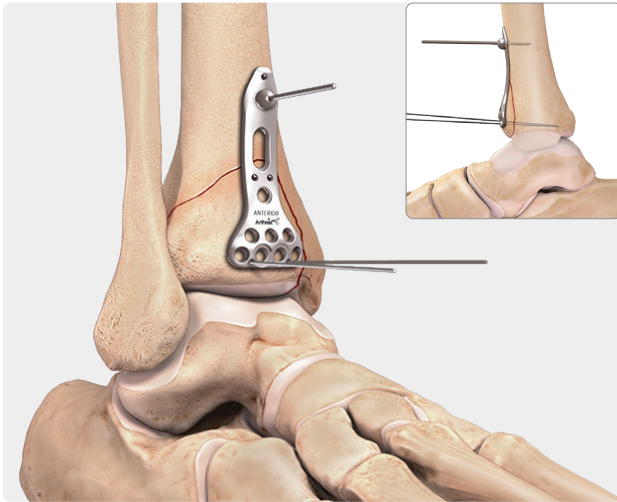
Perform an anterior approach, protecting neurovascular structures in the usual fashion. Dissect medially and laterally to expose the anterior tibia and fracture as needed.



Screw in the 2.7 mm insertion handle to the central hole in the second most distal row. Slide the plate from distal to proximal along the anterior tibia. Slide it past the ideal position and then bring it back down until the plate settles on the distal portion of the anterior tibia.

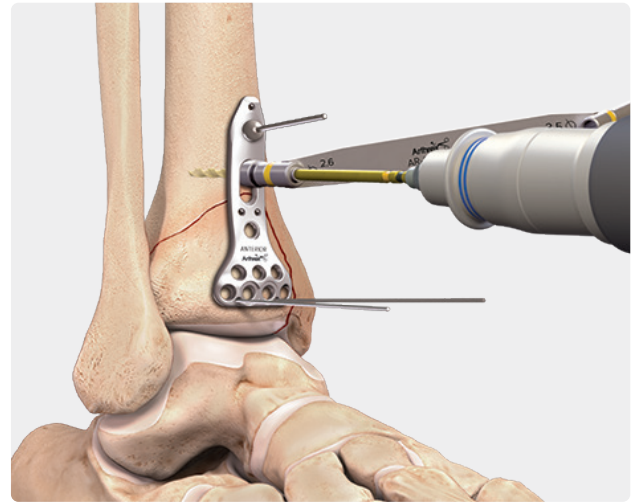
Insertion Handle, QC, 2.7 mm

AR-8963-07



3

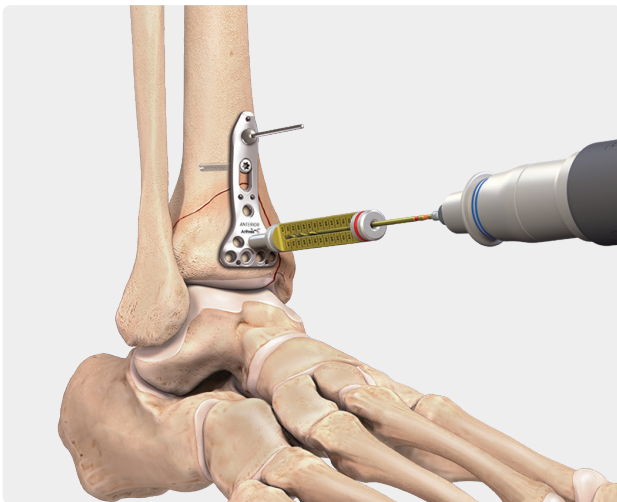
Secure the plate in position with 1.6 mm K-wires through the most distal portion of the plate and a BB-Tak in the most proximal hole. On lateral fluoroscopy, the K-wires should be above the central portion of the plafond and parallel to the joint line.



4

Start fixation in the oblong hole proximally with a 3.5 mm cortical screw. The plate position can be adjusted if needed by taking out the K-wires and moving the plate proximally or distally prior to final tightening of the cortical screw.

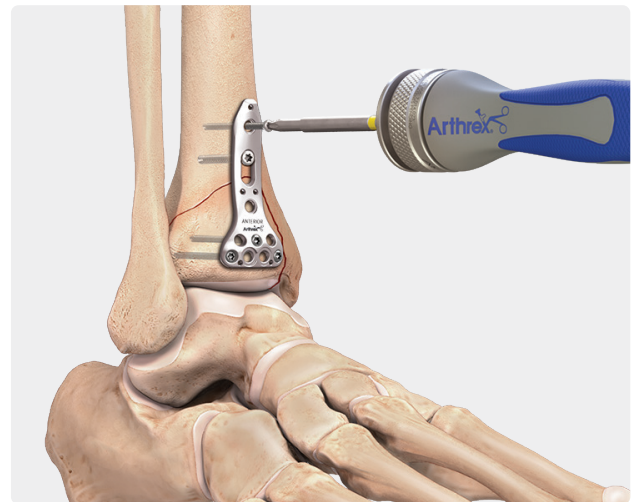
**TightRope® implant option:** If needed to help reduce a posterior malleolus fracture, a TightRope implant can be placed from anterior to posterior. Use lateral fluoroscopy to ensure the TightRope implant is positioned properly and that the fracture reduces with tightening.



5

For 2.7 mm locking or cortical screws, screw the red 2.7 mm long threaded drill guide into the distal row of screws and drill with the 2 mm calibrated drill bit. Use the T10 screwdriver shaft with quick-connect ratcheting handle or the T10 fixed driver.

Drill Guide, threaded, 2.7 mm	AR-8963-08
Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Screwdriver, T10 hexalobe	AR-8943-08



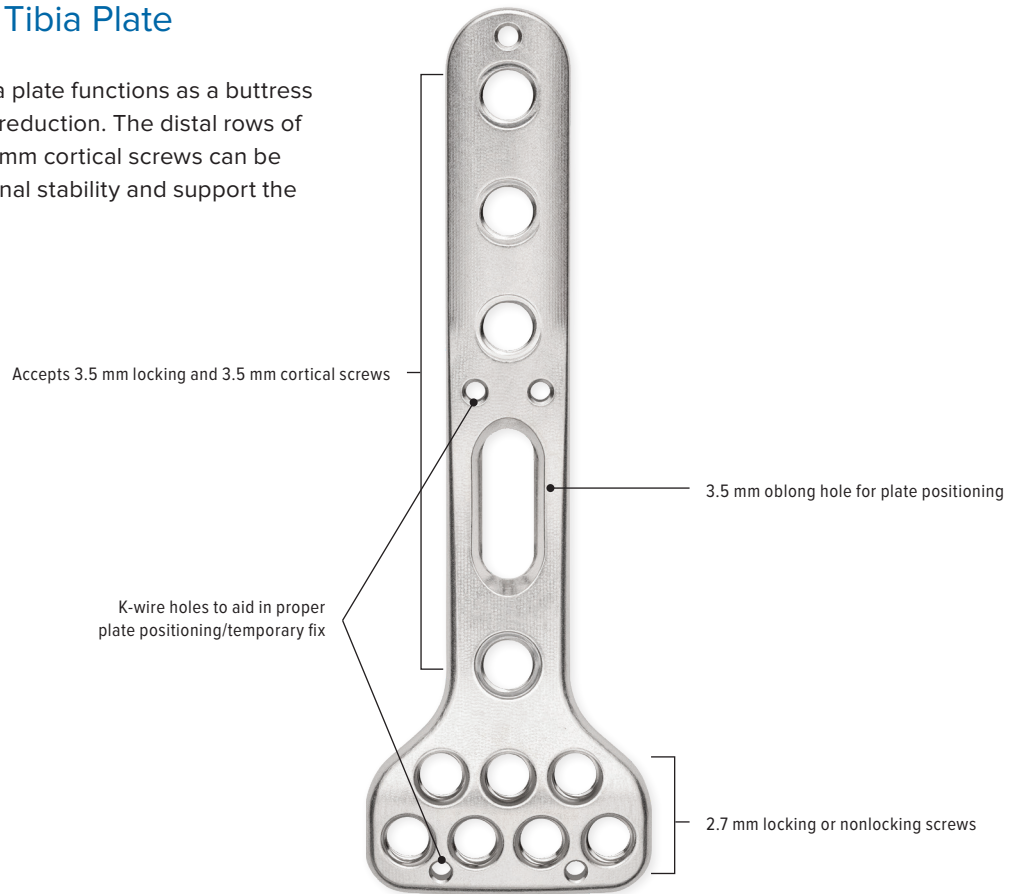
6

Complete fixation by adding additional 2.7 mm screws distally and 3.5 mm screws proximally.

Handle, QC, ratcheting, cannulated	AR-8950RH
Driver, T10 hexalobe	AR-8944DH

## Posterior Distal Tibia Plate

The posterior distal tibia plate functions as a buttress plate, aiding in fracture reduction. The distal rows of 2.7 mm locking and 2.7 mm cortical screws can be used to maintain rotational stability and support the joint surface.



## Posterior Distal Tibia Plate Surgical Technique



**1**

Perform a posterolateral or posteromedial approach as appropriate, protecting tendons and neurovascular structures in the usual fashion. Obtain provisional fracture reduction.



**2**

Use the 2.7 mm insertion handle in one of the distal holes and slide the plate from distal to proximal. Slide it past the ideal insertion point and then move it distally until it rests in the appropriate position on the distal tibia. Place a BB-Tak in the oblong hole.

Insertion Handle, QC, 2.7 mm

AR-8963-07

BB-Tak

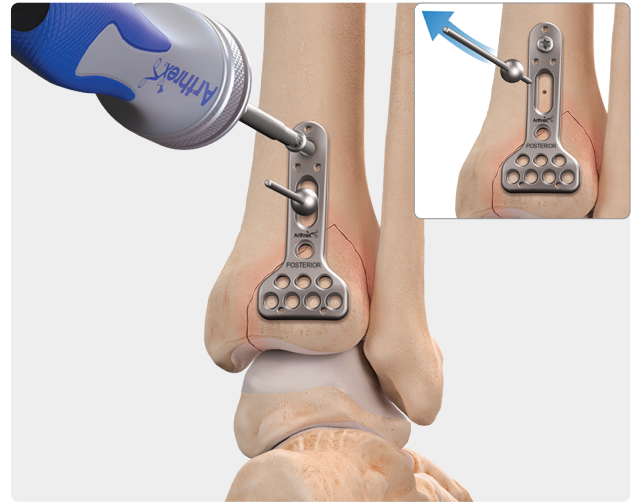
AR-13226 or  
AR-13226T



**3**

Begin fixation with 3.5 mm nonlocking screws. Drill with the 2.5 mm drill and drill guide.

Drill Bit, 2.5 mm or Drill Bit, calibrated, 2.5 mm	AR-8943-30 or AR-8943-42
Drill Guide, 3.5 mm/2.5 mm	AR-8943-14



**4**

Measure the length with the depth gauge and implant the desired 3.5 mm screw. Remove the BB-Tak.

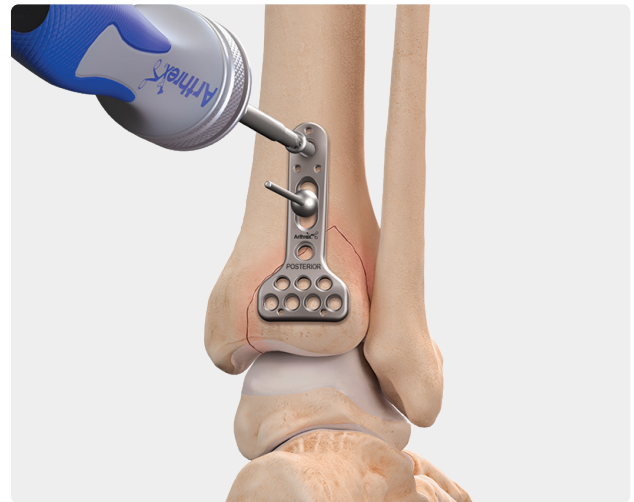
Depth Device, 2.7 mm/3.5 mm/4.0 mm screws	AR-8943-15
-------------------------------------------	------------



**5**

Add additional 3.5 mm screws as needed. Locking screws can be prepared with the 3.5 mm threaded drill guide and calibrated 2.5 mm drill bit.

Drill Guide, 3.5 mm locking	AR-8943-43
Drill Bit, calibrated, 2.5 mm	AR-8943-42



**6**

A 3.5 mm nonlocking screw placed at the apex of the fracture will help to indirectly reduce the fracture.



7

On lateral fluoroscopy, the K-wire should be above the central portion of the plafond and parallel to the joint line.



8

For 2.7 mm locking or cortical screws, screw the red 2.7 mm long threaded drill guide into the distal row of screws and drill with the 2 mm calibrated drill bit. Use the T10 screwdriver shaft with quick-connect ratcheting handle or the T10 fixed driver.

Drill Guide, threaded, 2.7 mm	AR-8963-08
Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Screwdriver, T10 hexalobe	AR-8943-08
Handle, QC, ratcheting, cannulated	AR-8950RH
Driver, T10 hexalobe	AR-8944DH

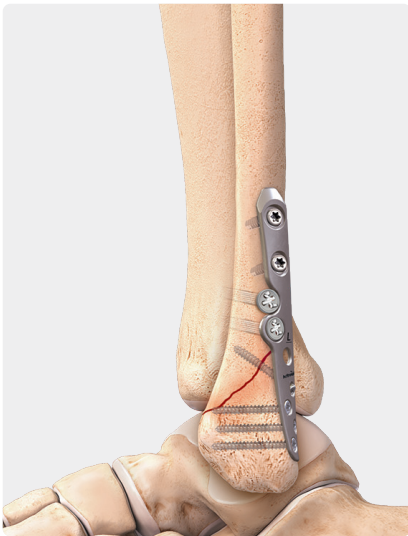


## Posterolateral Fibula Plating

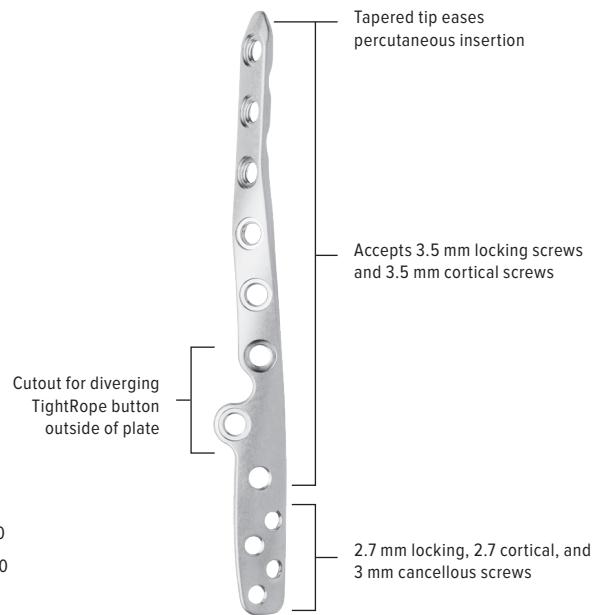
Fibular fixation in pilon fractures may facilitate reduction of the distal tibia. Posterolateral plating can protect approach corridors necessary for tibial reduction and fixation. Additionally, posterolateral plating may offer biomechanical advantages over lateral plating for some fracture patterns.

Two different designs of posterolateral fibula plates are included, straight and anatomic. Both are designed to be extremely low profile to minimize potential peroneal tendon irritation. Using 2.7 mm screws distally allows for increased density of fixation in that fragment. The anatomic design has a unique curve that wraps laterally and also includes features in the plate to accommodate the Syndesmosis TightRope® button.

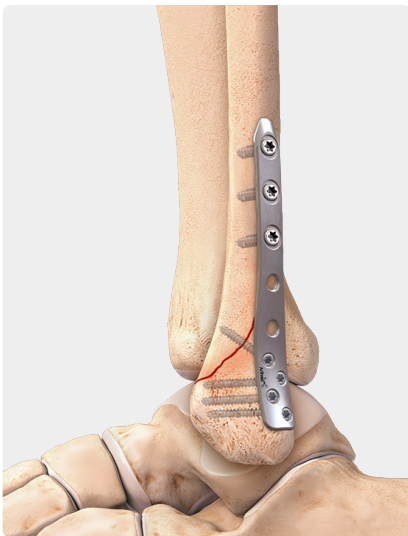
Posterolateral Anatomic Distal Fibula Plate



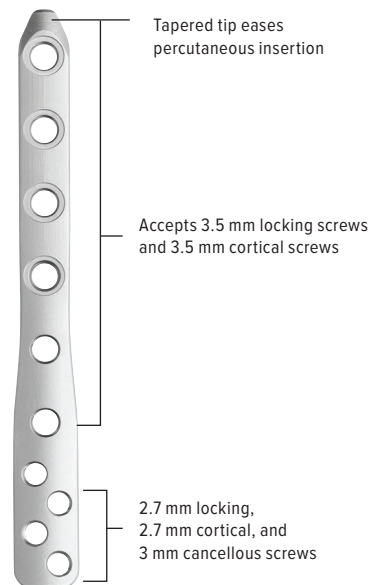
AR-8963APLL-04, -06, -08, -10  
AR-8963APLR-04, -06, -08, -10



Posterolateral Distal Fibula Plate



AR-8963PLL-04, -05, -06, -08

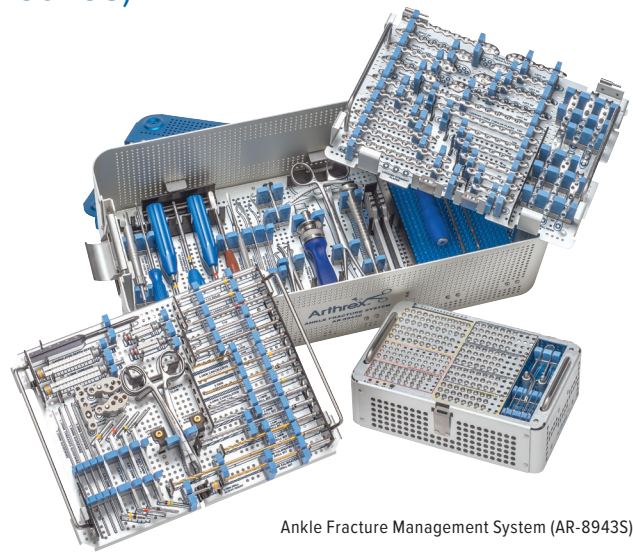


# Additional Sets Required for Distal Tibia Fractures

## Ankle Fracture Management System (AR-8943S)

The Ankle Fracture Management System was developed to be the most comprehensive set available for the treatment of ankle fractures. All fibula plates are engineered to work seamlessly with our proven Syndesmosis TightRope® implants. The set includes 3.5 mm locking one-third tubular plates, 3.5 mm locking straight plates (reconstruction plates), and fracture-specific plates: locking medial hook plates, locking lateral hook plates, and anatomic distal fibular plates.

This set is required for the instruments and any additional plates needed to treat a distal tibia fracture.



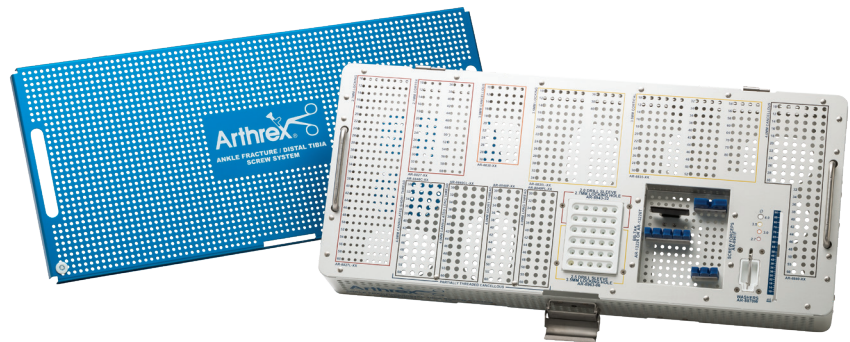
Ankle Fracture Management System (AR-8943S)

## Ankle Fracture/Distal Tibia Screw System (AR-8943C-31)

The Ankle Fracture/Distal Tibia Screw System provides additional lengths and quantities to supplement the screw caddy within the Ankle Fracture Management System.

**The AR-8943C-31 houses the following screws:**

- > 2.7 mm Cortical
- > 2.7 mm Locking
- > 3.0 mm Cancellous
- > 3.5 mm Cortical
- > 3.5 mm Locking
- > 4.0 mm Cancellous
- > 4.0 mm Cannulated, short thread
- > 4.0 mm Cannulated, long thread



Ankle Fracture/Distal Tibia Screw System (AR-8943C-31)

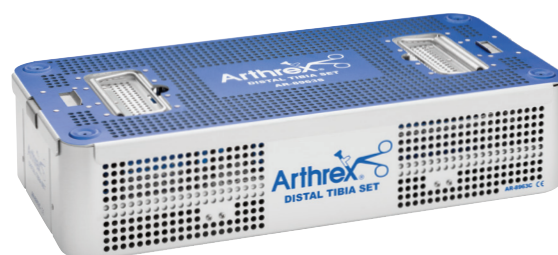


# Ordering Information

## Distal Tibia Plating System (AR-8963S)


Instruments	
Drill Bit, calibrated, long, 2.0 mm	AR-8963-05
Wire Sleeve Insert, 1.35 mm	AR-8963-03
Drill Guide, threaded, 2.7 mm	AR-8963-08
Depth Device, for 1.35 mm wire sleeve	AR-8963-09
Depth Device, 2.7 mm/3.0 mm/3.5 mm/4.0 mm	AR-8963-01
Bone Tap, 3.5 mm × 100 mm	AR-8963-02
Torque Limiting Attachment	AR-8963TL-01
Insertion Handle, QC, 2.7 mm	AR-8963-07
Submuscular Tissue Elevator, QC	AR-8963-10
Medial Distal Tibia Plate Template	AR-8963-11
Anterolateral Distal Tibia Plate Template	AR-8963-12
Distal Tibia Set Case	AR-8963C
Straight Plate Caddy With Lid	AR-8963C-02
Plates	
Medial Distal Tibia Plate, 4H, left	AR-8963ML-04
Medial Distal Tibia Plate, 6H, left	AR-8963ML-06
Medial Distal Tibia Plate, 8H, left	AR-8963ML-08
Medial Distal Tibia Plate, 10H, left	AR-8963ML-10
Medial Distal Tibia Plate, 12H, left	AR-8963ML-12
Medial Distal Tibia Plate, 14H, left	AR-8963ML-14
Medial Distal Tibia Plate, 16H, left	AR-8963ML-16
Medial Distal Tibia Plate, 4H, right	AR-8963MR-04
Medial Distal Tibia Plate, 6H, right	AR-8963MR-06
Medial Distal Tibia Plate, 8H, right	AR-8963MR-08
Medial Distal Tibia Plate, 10H, right	AR-8963MR-10
Medial Distal Tibia Plate, 12H, right	AR-8963MR-12
Medial Distal Tibia Plate, 14H, right	AR-8963MR-14
Medial Distal Tibia Plate, 16H, right	AR-8963MR-16
Anterolateral Distal Tibia Plate, 4H, left	AR-8963AL-04
Anterolateral Distal Tibia Plate, 6H, left	AR-8963AL-06
Anterolateral Distal Tibia Plate, 8H, left	AR-8963AL-08
Anterolateral Distal Tibia Plate, 10H, left	AR-8963AL-10
Anterolateral Distal Tibia Plate, 12H, left	AR-8963AL-12
Anterolateral Distal Tibia Plate, 14H, left	AR-8963AL-14
Anterolateral Distal Tibia Plate, 16H, left	AR-8963AL-16
Anterolateral Distal Tibia Plate, 18H, left	AR-8963AL-18
Anterolateral Distal Tibia Plate, 4H, right	AR-8963AR-04
Anterolateral Distal Tibia Plate, 6H, right	AR-8963AR-06
Anterolateral Distal Tibia Plate, 8H, right	AR-8963AR-08
Anterolateral Distal Tibia Plate, 10H, right	AR-8963AR-10
Anterolateral Distal Tibia Plate, 12H, right	AR-8963AR-12
Anterolateral Distal Tibia Plate, 14H, right	AR-8963AR-14
Anterolateral Distal Tibia Plate, 16H, right	AR-8963AR-16
Anterolateral Distal Tibia Plate, 18H, right	AR-8963AR-18

Posterior Distal Tibia Plate, 3H	AR-8963P-03
Posterior Distal Tibia Plate, 5H	AR-8963P-05
Posterior Distal Tibia Plate, 7H	AR-8963P-07
Posterior Distal Tibia Plate, 9H	AR-8963P-09
Anterior Distal Tibia Plate, 3H	AR-8963A-03
Anterior Distal Tibia Plate, 5H <b>(d)</b>	AR-8963A-05
Anterior Distal Tibia Plate, 7H	AR-8963A-07
Anterior Distal Tibia Plate, 9H	AR-8963A-09
Posterolateral Distal Fibula Plate, 4H	AR-8963PLL-04
Posterolateral Distal Fibula Plate, 5H	AR-8963PLL-05
Posterolateral Distal Fibula Plate, 6H	AR-8963PLL-06
Posterolateral Distal Fibula Plate, 8H	AR-8963PLL-08
Posterolateral Anatomic Distal Fibula Plate, 4H, left	AR-8963APLL-04
Posterolateral Anatomic Distal Fibula Plate, 6H, left	AR-8963APLL-06
Posterolateral Anatomic Distal Fibula Plate, 8H, left	AR-8963APLL-08
Posterolateral Anatomic Distal Fibula Plate, 10H, left	AR-8963APLL-10
Posterolateral Anatomic Distal Fibula Plate, 4H, right	AR-8963APLR-04
Posterolateral Anatomic Distal Fibula Plate, 6H, right	AR-8963APLR-06
Posterolateral Anatomic Distal Fibula Plate, 8H, right	AR-8963APLR-08
Posterolateral Anatomic Distal Fibula Plate, 10H, right	AR-8963APLR-10
Straight Plate, 2H, 2.7 mm	AR-8963RM-02
Straight Plate, 3H, 2.7 mm	AR-8963RM-03
Straight Plate, 4H, 2.7 mm	AR-8963RM-04
Straight Plate, 5H, 2.7 mm	AR-8963RM-05
Screws	
Use screws in the Ankle Fracture/Distal Tibia Screw System – AR-8943C-31	
Disposables	
Guidewire w/ Trocar Tip, 1.35 mm	AR-8963-04

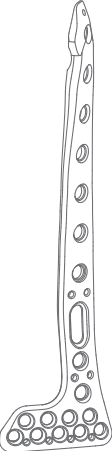


## Plate Sizes

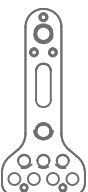
### Medial Distal Tibia Plates

Product Image	# of Holes	Length	Item Number
	4H	103 mm	AR-8963ML-04
	6H	128 mm	AR-8963ML-06
	8H	154 mm	AR-8963ML-08
	10H	179 mm	AR-8963ML-10
	12H	204 mm	AR-8963ML-12
	14H	230 mm	AR-8963ML-14
	16H	278 mm	AR-8963ML-16
	4H	103 mm	AR-8963MR-04
	6H	128 mm	AR-8963MR-06
	8H	154 mm	AR-8963MR-08
	10H	179 mm	AR-8963MR-10
	12H	204 mm	AR-8963MR-12
	14H	230 mm	AR-8963MR-14
	16H	278 mm	AR-8963MR-16

### Anterolateral Distal Tibia Plates

Product Image	# of Holes	Length	Item Number
	4H	66 mm	AR-8963AL-04
	6H	91 mm	AR-8963AL-06
	8H	117 mm	AR-8963AL-08
	10H	142 mm	AR-8963AL-10
	12H	168 mm	AR-8963AL-12
	14H	193 mm	AR-8963AL-14
	16H	218 mm	AR-8963AL-16
	18H	244 mm	AR-8963AL-18
	4H	66 mm	AR-8963AR-04
	6H	91 mm	AR-8963AR-06
	8H	117 mm	AR-8963AR-08
	10H	142 mm	AR-8963AR-10
	12H	168 mm	AR-8963AR-12
	14H	193 mm	AR-8963AR-14
	16H	218 mm	AR-8963AR-16
	18H	244 mm	AR-8963AR-18

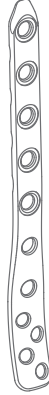
### Posterior Distal Tibia Plates

Product Image	# of Holes	Length	Item Number
	3H	57 mm	AR-8963P-03
	5H	77 mm	AR-8963P-05
	7H	98 mm	AR-8963P-07
	9H	118 mm	AR-8963P-09


### Anterior Distal Tibia Plates

Product Image	# of Holes	Length	Item Number
	3H	62 mm	AR-8963A-03
	5H	84 mm	AR-8963A-05
	7H	107 mm	AR-8963A-07
	9H	130 mm	AR-8963A-09


### Posterolateral Distal Fibula Plates

Product Image	# of Holes	Length	Item Number
	4H	75 mm	AR-8963PLL-04
	5H	88 mm	AR-8963PLL-05
	6H	107 mm	AR-8963PLL-06
	8H	126 mm	AR-8963PLL-08

### Posterolateral Anatomic Distal Fibula Plates


Product Image	# of Holes	Length	Item Number
	4H	75 mm	AR-8963APLL-04
	6H	100 mm	AR-8963APLL-06
	8H	126 mm	AR-8963APLL-08
	10H	151 mm	AR-8963APLL-10
	4H	75 mm	AR-8963APLR-04
	6H	100 mm	AR-8963APLR-06
	8H	126 mm	AR-8963APLR-08
	10H	151 mm	AR-8963APLR-10

### Straight Plates


Product Image	# of Holes	Length	Item Number
	2H	16 mm	AR-8963RM-02
	3H	24 mm	AR-8963RM-03
	4H	32 mm	AR-8963RM-04
	5H	40 mm	AR-8963RM-05

## Low Profile Screws


### 2.7 mm Low Profile Screws, Locking

Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8827L-10	4	4
	12 mm	AR-8827L-12	4	4
	14 mm	AR-8827L-14	4	4
	16 mm	AR-8827L-16	4	4
	18 mm	AR-8827L-18	4	4
	20 mm	AR-8827L-20	4	4
	22 mm	AR-8827L-22	4	4
	24 mm	AR-8827L-24	4	4
	26 mm	AR-8827L-26	4	4
	28 mm	AR-8827L-28	*	4
	30 mm	AR-8827L-30	*	4
	32 mm	AR-8827L-32	*	4
	34 mm	AR-8827L-34	*	4
	36 mm	AR-8827L-36	*	4
	38 mm	AR-8827L-38	*	4
	40 mm	AR-8827L-40	*	4
	42 mm	AR-8827L-42	*	4
	44 mm	AR-8827L-44	*	4
	46 mm	AR-8827L-46	*	4
	48 mm	AR-8827L-48	*	4
50 mm	AR-8827L-50	*	4	
52 mm	AR-8827L-52	*	4	
54 mm	AR-8827L-54	*	4	
56 mm	AR-8827L-56	*	4	
58 mm	AR-8827L-58	*	4	
60 mm	AR-8827L-60	*	4	

### 2.7 mm Low Profile Screws, Cortical


Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8827-10	*	3
	12 mm	AR-8827-12	*	3
	14 mm	AR-8827-14	*	3
	16 mm	AR-8827-16	*	3
	18 mm	AR-8827-18	*	3
	20 mm	AR-8827-20	*	3
	22 mm	AR-8827-22	*	3
	24 mm	AR-8827-24	*	3
	26 mm	AR-8827-26	*	3
	28 mm	AR-8827-28	*	3
	30 mm	AR-8827-30	*	3
	32 mm	AR-8827-32	*	3
	34 mm	AR-8827-34	*	3
	36 mm	AR-8827-36	*	3
	38 mm	AR-8827-38	*	3
	40 mm	AR-8827-40	*	3
	42 mm	AR-8827-42	*	3
	44 mm	AR-8827-44	*	3
	46 mm	AR-8827-46	*	3
	48 mm	AR-8827-48	*	3
50 mm	AR-8827-50	*	3	
52 mm	AR-8827-52	*	3	
54 mm	AR-8827-54	*	3	
56 mm	AR-8827-56	*	3	
58 mm	AR-8827-58	*	3	
60 mm	AR-8827-60	*	3	

### 3 mm Low Profile Screws, Cancellous


Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8830-10	3	3
	12 mm	AR-8830-12	3	3
	14 mm	AR-8830-14	3	3
	16 mm	AR-8830-16	3	3
	18 mm	AR-8830-18	3	3
	20 mm	AR-8830-20	3	3
	22 mm	AR-8830-22	3	3
	24 mm	AR-8830-24	3	3
	26 mm	AR-8830-26	3	3
	28 mm	AR-8830-28	3	3
	30 mm	AR-8830-30	3	3

\*Only in the Ankle Fracture/Distal Tibia Screw System, AR-8943C-31


### 3.5 mm Low Profile Screws, Cortical

Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8835-10	3	6
	12 mm	AR-8835-12	6	6
	14 mm	AR-8835-14	6	6
	16 mm	AR-8835-16	6	6
	18 mm	AR-8835-18	6	6
	20 mm	AR-8835-20	3	6
	22 mm	AR-8835-22	3	6
	24 mm	AR-8835-24	3	6
	26 mm	AR-8835-26	3	6
	28 mm	AR-8835-28	3	6
	30 mm	AR-8835-30	3	6
	32 mm	AR-8835-32	*	4
	34 mm	AR-8835-34	*	4
	35 mm	AR-8835-35	3	N/A
	36 mm	AR-8835-36	*	4
	38 mm	AR-8835-38	*	4
	40 mm	AR-8835-40	3	4
	42 mm	AR-8835-42	*	4
	44 mm	AR-8835-44	*	4
	45 mm	AR-8835-45	3	N/A
46 mm	AR-8835-46	*	4	
48 mm	AR-8835-48	*	4	
50 mm	AR-8835-50	3	4	
52 mm	AR-8835-52	*	4	
54 mm	AR-8835-54	*	4	
55 mm	AR-8835-55	3	N/A	
56 mm	AR-8835-56	*	4	
58 mm	AR-8835-58	*	4	
60 mm	AR-8835-60	3	4	
65 mm	AR-8835-65	*	4	
70 mm	AR-8835-70	*	4	
75 mm	AR-8835-75	*	4	
80 mm	AR-8835-80	*	4	

### 3.5 mm Low Profile Screws, Locking


Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8835L-10	6	6
	12 mm	AR-8835L-12	6	6
	14 mm	AR-8835L-14	6	6
	16 mm	AR-8835L-16	6	6
	18 mm	AR-8835L-18	3	6
	20 mm	AR-8835L-20	3	6
	22 mm	AR-8835L-22	*	6
	24 mm	AR-8835L-24	*	6
	26 mm	AR-8835L-26	*	6
	28 mm	AR-8835L-28	*	6
	30 mm	AR-8835L-30	*	6
	32 mm	AR-8835L-32	*	6
	34 mm	AR-8835L-34	*	6
	36 mm	AR-8835L-36	*	6
	38 mm	AR-8835L-38	*	6
	40 mm	AR-8835L-40	*	6
	42 mm	AR-8835L-42	*	6
	44 mm	AR-8835L-44	*	6
	46 mm	AR-8835L-46	*	6
	48 mm	AR-8835L-48	*	6
50 mm	AR-8835L-50	*	6	

### 4 mm Low Profile Screws, Cancellous

Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	10 mm	AR-8840-10	3	6
	12 mm	AR-8840-12	3	6
	14 mm	AR-8840-14	3	6
	16 mm	AR-8840-16	3	6
	18 mm	AR-8840-18	3	6
	20 mm	AR-8840-20	3	6
	22 mm	AR-8840-22	3	6
	24 mm	AR-8840-24	3	6
	26 mm	AR-8840-26	*	6
	28 mm	AR-8840-28	*	6
	30 mm	AR-8840-30	*	6
	32 mm	AR-8840-32	*	3
	34 mm	AR-8840-34	*	3
	36 mm	AR-8840-36	*	3
	38 mm	AR-8840-38	*	3
	40 mm	AR-8840-40	*	3
	42 mm	AR-8840-42	*	3
	44 mm	AR-8840-44	*	3
	46 mm	AR-8840-46	*	3
	48 mm	AR-8840-48	*	3
50 mm	AR-8840-50	*	3	
55 mm	AR-8840-55	*	3	
60 mm	AR-8840-60	*	3	

\*Only in the Ankle Fracture/Distal Tibia Screw System, AR-8943C-31


#### 4 mm Low Profile Screws, Short Thread, Cannulated

Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	30 mm	AR-8840C-30	4	3
	32 mm	AR-8840C-32	*	3
	34 mm	AR-8840C-34	*	3
	35 mm	AR-8840C-35	4	N/A
	36 mm	AR-8840C-36	*	3
	38 mm	AR-8840C-38	*	3
	40 mm	AR-8840C-40	4	4
	42 mm	AR-8840C-42	*	3
	44 mm	AR-8840C-44	*	3
	45 mm	AR-8840C-45	4	N/A
	46 mm	AR-8840C-46	*	3
	48 mm	AR-8840C-48	*	3
	50 mm	AR-8840C-50	4	4
	55 mm	AR-8840C-55	4	4
	60 mm	AR-8840C-60	4	3

#### Other Implants and Instruments

Product Description	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
Washer, 7 mm	AR-8870W	6	6
BB-Tak, smooth	AR-13226	2	4
BB-Tak, threaded	AR-13226T	2	4
Drill Sleeve for 2.7 mm Locking Screws	AR-8943-32	-	-
Drill Sleeve for 3.5 mm Locking Screws	AR-8963-06	-	-

#### 4 mm Low Profile Screws, Long Thread, Cannulated

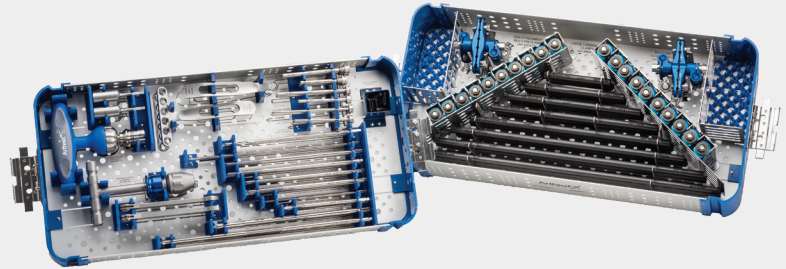
Product Image	Length	Item Number	Recommended Set Content, AR-8943C	Recommended Set Content, AR-8943C-31
	30 mm	AR-8840CL-30	4	4
	32 mm	AR-8840CL-32	*	4
	34 mm	AR-8840CL-34	*	4
	35 mm	AR-8840CL-35	4	N/A
	36 mm	AR-8840CL-36	*	4
	38 mm	AR-8840CL-38	*	4
	40 mm	AR-8840CL-40	4	4
	42 mm	AR-8840CL-42	*	4
	44 mm	AR-8840CL-44	*	4
	45 mm	AR-8840CL-45	4	N/A
	46 mm	AR-8840CL-46	*	4
	48 mm	AR-8840CL-48	*	4
	50 mm	AR-8840CL-50	4	4
	55 mm	AR-8840CL-55	4	4
	60 mm	AR-8840CL-60	4	4

\*Only in the Ankle Fracture/Distal Tibia Screw System, AR-8943C-31

# Supporting Products

## ArthroFX™ Large External Fixation System

**ArthroFX™**  
external fixation system large



The ArthroFX™ Large External Fixation System is designed to give surgeons a simple, efficient, and versatile solution for temporary or definitive fixation.

**The system consists of:**

- > 11 mm carbon fiber rods
- > 4 mm and 5 mm Schanz pins
- > 6 mm transfixation pins
- > Large combination clamps and multi-pin clamps with rod attachments or straight arm attachments



In conjunction with the intuitive instrumentation, the one-tray system provides an easy-to-use and cost-effective solution for physicians and hospitals to manage fractures with severe soft-tissue injuries, infections, or other conditions amenable for external fixation.

**Carbon Fiber Rod**

- > Radiolucent and lightweight
- > 11 mm diameter
- > 100 mm-500 mm lengths



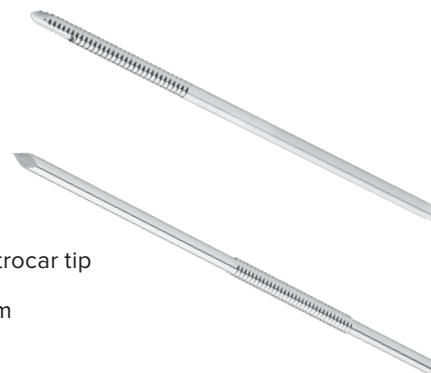
**Large Combination Clamps and Multi-Pin Clamps With Rod Attachments or Straight Arm Attachments**

- > Designed for ease of use and rapid locking



**Self-Tapping Schanz Screw**

- > Stainless steel
- > 4.0 mm × 125 mm and 150 mm
- > 5.0 mm × 175 mm, 200 mm, and 250 mm



**Transfixation Pin**

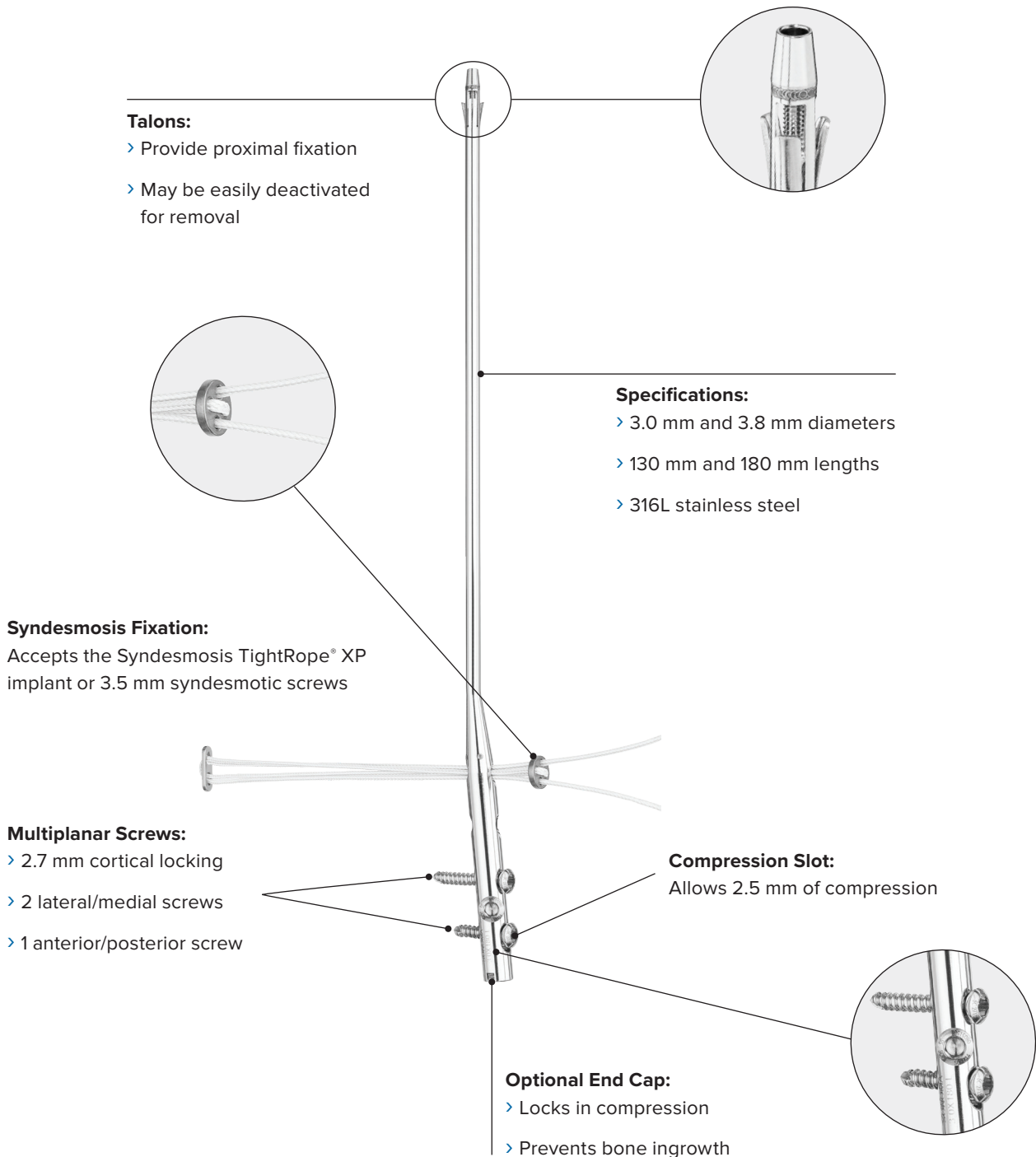
- > Centrally threaded body with trocar tip
- > 6.0 mm × 225 mm and 300 mm

## FibuLock® Fibular Nail

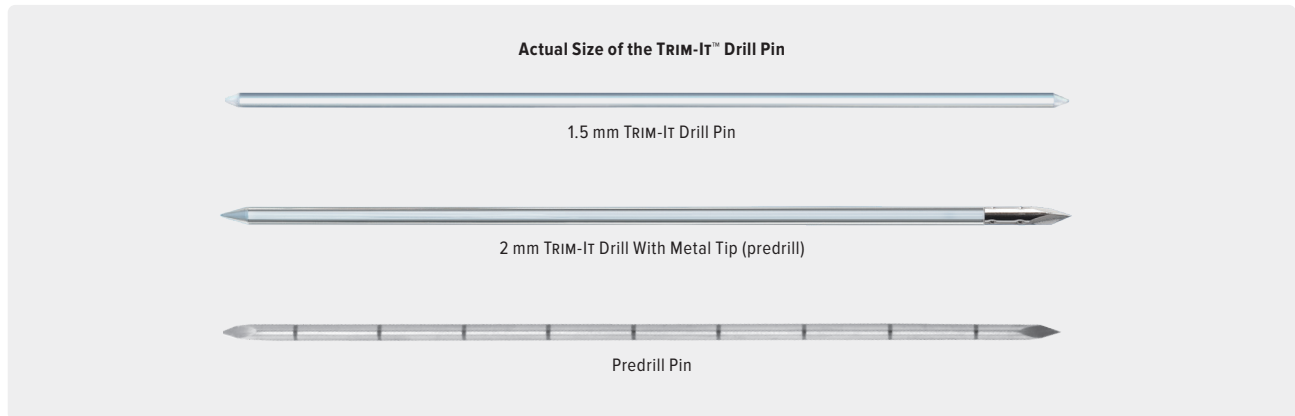
Operative fixation of an ankle fracture requires restoration of appropriate length, alignment, and restoration of a stable ankle mortise. The FibuLock fibular nail system was designed to fulfill those operative objectives, while using a soft-tissue friendly, minimally invasive approach.

The FibuLock fibular nail offers the ability to achieve both proximal and distal fixation along with syndesmotic fixation with our TightRope® implant technology.

The outrigger targeting guide can compress the fracture if needed and ensures syndesmosis fixation is anatomically positioned with either the TightRope implant system or 3.5 mm screws angled posterior to anterior.



## TRIM-IT Drill Pin® System



Used for percutaneous fixation of periarticular fracture fragments, the Trim-It Drill Pin system provides excellent preliminary fixation without the drawbacks of metal K-wires or pins. The radiolucent fixation allows for critical analysis of periarticular joint reduction and easy definitive hardware fixation when applicable. The pins are made from PLLA material that retains full strength throughout 24 weeks.

### TRIM-IT Drill Pin System Advantages:

- › Superior shear strength from enhanced PLLA
- › Inserts quickly with a standard pin driver
- › Radiolucent for accurate healing assessment
- › Eliminates pin trusion and removal for patient comfort
- › Complete sterile kit for convenience

### Bioabsorbable Advantages:

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

TRIM-IT Drill Pin Disposables Kit	AR-4151DS
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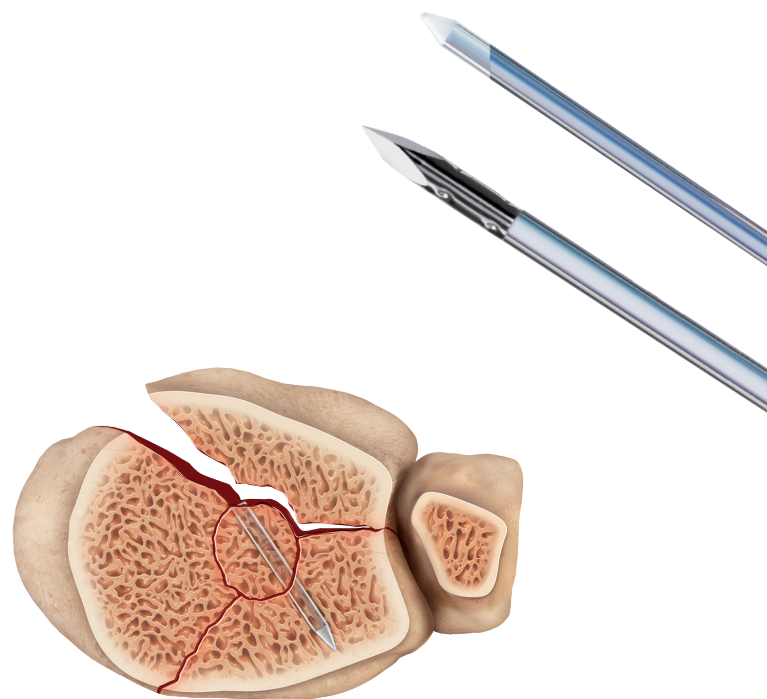
- › Absorbable Pin w/ Metal Tip, 1.5 mm × 100 mm
- › K-wire
- › Manual Insertion Instruments
- › Guide Sleeve and Bone Tap

TRIM-IT Drill Pin Disposables Kit	AR-4152DS
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- › Absorbable Pin w/ Metal Tip, 2 mm × 100 mm
- › K-Wire
- › Manual Insertion Instruments
- › Guide Sleeve and Bone Tap



Graduated Bone Tamp



Axial View



## Biologic Augmentation Options



### Quickset™ Calcium Phosphate Cement

Quickset cement is a macroporous, injectable, hardening, resorbable calcium phosphate cement provided in an easy-to-use, closed mixing system with high compressive strength.

Quickset cement, 5 cc	ABS-3005
Quickset cement, 8 cc	ABS-3008



### BoneSync™ Bone Void Fillers

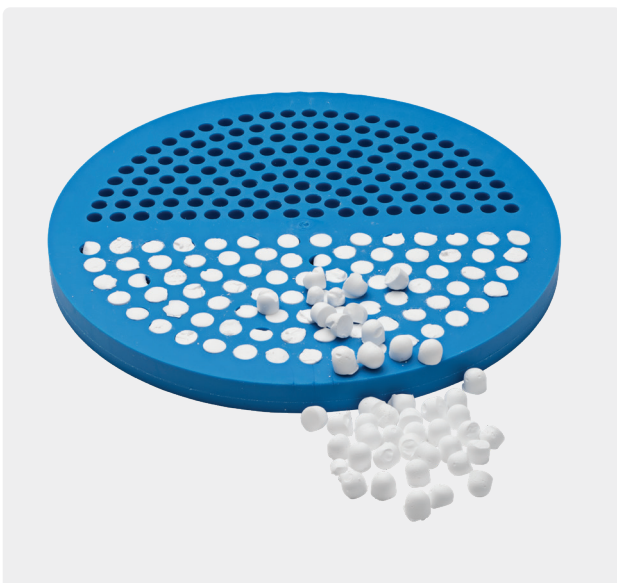
BoneSync bone void fillers provide an osteoconductive scaffold and can be hydrated with biologic fluids such as bone marrow aspirate to optimize bone remodeling potential and flexibility to be used in a variety of bone repair procedures.

#### BoneSync Cement

BoneSync cement, 3 cc	ABS-3103
BoneSync cement, 5 cc	ABS-3105

#### BoneSync Putty

BoneSync putty, 2.5 cc	ABS-3202
BoneSync putty, 5 cc	ABS-3205
BoneSync putty, 10 cc	ABS-3210
BoneSync putty, 15 cc	ABS-3215



### Arthrex Calcium Sulfate BioBeads

Arthrex Calcium Sulfate BioBeads can be used to fill in voids and be used at the site of bony infections and can be delivered in a bead or paste configuration. Bead sizes available include 3 mm, 4.5 mm, or 6 mm, and can be delivered in a bead or paste configuration, providing surgeons a versatile, biodegradable, and biocompatible bone void filler.

Arthrex Calcium Sulfate BioBeads, 5 cc	ABS-3000-05
Arthrex Calcium Sulfate BioBeads, 10 cc	ABS-3000-10
Arthrex Calcium Sulfate BioBeads, 20 cc	ABS-3000-20

## References

1. Kim H, Makin I, Skiba J, Ho A, Housler G, Stojadinovic A, Izadjoo M. Antibacterial efficacy testing of a bioelectric wound dressing against clinical wound pathogens. *Open Microbiol J*. 2014;8:15-21. doi:10.2174/1874285801408010015
2. Banerjee J, Das Ghatak P, Roy S, et al. Silver-zinc redox-coupled electroceutical wound dressing disrupts bacterial biofilm. *PLoS One*. 2015;10(3):e0119531. doi:10.1371/journal.pone.0119531
3. Kim H, Izadjoo MJ. Antibiofilm efficacy evaluation of a bioelectric dressing in mono- and multi-species biofilms. *J Wound Care*. 2015;24(Suppl 2):S10-S14. doi:10.12968/jowc.2015.24.Sup2.S1
4. Park SS, Kim H, Makin IS, Skiba JB, Izadjoo MJ. Measurement of a micro electric potentials in a bioelectrically-active wound care device in the presence of bacteria. *J Wound Care*. 2014;24(1):23-33. doi:10.12968/jowc.2015.24.1.23



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.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eFUs)



US patent information