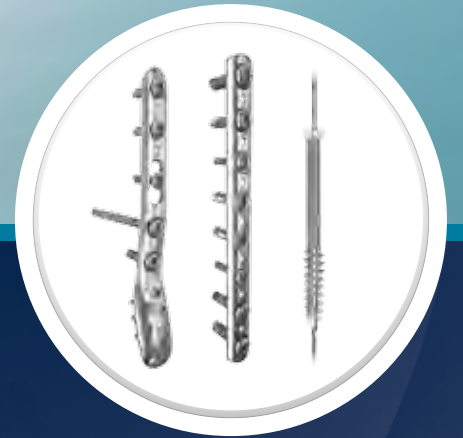




GLOBUS  
MEDICAL



# ANTHEM™

Ankle Fracture System



*Our mission is to deliver cutting-edge technology, research, and innovative solutions to promote healing in patients with musculoskeletal disorders.*

***Life Moves Us***

The Surgical Technique shown is for illustrative purposes only. The technique(s) actually employed in each case always depends on the medical judgment of the surgeon exercised before and during surgery as to the best mode of treatment for each patient. Additionally, as instruments may occasionally be updated, the instruments depicted in this Surgical Technique may not be exactly the same as the instruments currently available. Please consult with your sales representative or contact Globus directly for more information.

# SURGICAL TECHNIQUE GUIDE

## ANTHEM™

### Ankle Fracture System

System Overview .....	4
Implant Overview .....	6
Distal Fibula Plating: Surgical Technique	
1. Preoperative Planning .....	8
2. Patient Positioning .....	8
3. Approach .....	8
4. Fracture Reduction .....	10
5. Plate Selection .....	11
6. Plate Placement .....	11
7. Screw Insertion .....	12
OPTIONAL: Syndesmosis Fixation .....	22
8. Verify Reconstruction .....	23
Final Construct .....	23
OPTIONAL: Removal .....	24
Hook Plating for Medial Malleolus: Surgical Technique	
1. Preoperative Planning .....	25
2. Patient Positioning .....	25
3. Approach .....	25
4. Fracture Reduction .....	26
5. Plate Placement .....	26
6. Screw Insertion .....	27
7. Verify Reconstruction .....	30
Final Construct .....	30
OPTIONAL: Removal .....	30
4.0mm CAPTIVATE™ Cannulated Screws for Medial Malleolus: Surgical Technique	
1. Preoperative Planning .....	31
2. Patient Positioning .....	31
3. Approach .....	31
4. Fracture Reduction .....	32
5. K-Wire Placement .....	32
6. Screw Length Measurement .....	33
7. Screw Insertion .....	35
8. Verify Reconstruction .....	36
Optional: Removal .....	36
Implant and Instrument Sets .....	37
ANTHEM™ SS Ankle Fracture System Implant and Instrument Set 9185.9001 .....	37
ANTHEM™ SS Ankle Fracture System Screw Module 9185.9003 .....	41
ANTHEM™ Ti Ankle Fracture System Implant and Instrument Set 9185.9002 .....	45
ANTHEM™ Ti Ankle Fracture System Screw Module 9185.9004 .....	49
Important Information .....	53

# ANTHEM™

## Ankle Fracture System

The ANTHEM™ Ankle Fracture System provides low profile, anatomically-contoured plates in a comprehensive set to treat a variety of ankle fractures.

The system features the Posterolateral Distal Fibula Plate and two styles of Lateral Distal Fibula Plates to accommodate surgical preference. One Third Tubular Plates, Hook Plates, Reconstruction Plates, and T-Plates are also included.

A specialized set of instruments facilitates the efficient treatment of ankle fractures. Ankle-specific clamps are provided to help with fracture reduction. Radiolucent retractors and Weitlaners aid in visibility of the fracture site during intraoperative imaging.



Lateral Distal Fibula Plate



Universal Distal Fibula Plate



Posterolateral Distal Fibula Plate



Hook Plate



One Third Tubular Plate



Reconstruction Plate



T-Plate

## Anatomic Contour

Three types of distal fibula plates are available with contours that match patient anatomy and minimize the need for intraoperative bending.

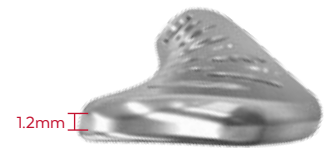


## Low Profile Design

Low profile plates are designed for minimal screw prominence to help reduce soft tissue irritation.



Lateral Distal Fibula Plate



Posterolateral Distal Fibula Plate

## Unique Instruments

Clamps designed specifically for ankle anatomy facilitate fracture reduction. Radiolucent Weitlaners and retractors aid in fracture site visibility.



## Comprehensive System

A comprehensive selection of implants and instruments are provided to treat a variety of ankle fractures.



# IMPLANT OVERVIEW

## Lateral Distal Fibula Plate

- Low profile design to minimize soft tissue irritation
- Robust screw cluster of 2.5mm holes allows up to seven points of distal fixation
- Versatile syndesmotomic holes accept 3.5mm and 4.0mm screws or suture buttons
- 3 to 15 hole plates (75-228mm) in left and right orientations
- Available in stainless steel and titanium



## Universal Distal Fibula Plate

- Accepts 3.5mm or 4.0mm screws throughout entire plate, eliminating the need for multiple drills and drivers
- One plate configuration for left or right fibula
- Versatile syndesmotomic holes accept 3.5mm and 4.0mm screws or suture buttons
- 5 to 7 hole plates (101-126mm)
- Available in stainless steel and titanium



## Posterolateral Distal Fibula Plate

- Low profile distal thickness to minimize peroneal irritation
- Scallops for syndesmotomic fixation adjacent to the plate
- Versatile syndesmotomic holes accept 3.5mm and 4.0mm screws or suture buttons
- 3 to 15 hole plates (70-233mm) in left and right orientations
- Available in stainless steel and titanium





## Hook Plate

- Hooks aid in capturing distal fragments
- Low profile to minimize soft tissue irritation
- Accepts 3.5mm and 4.0mm non-locking and cancellous screws
- Available in stainless steel and titanium



## Small Fragment Locking Plates

- One Third Tubular Plates (2 to 12 hole)
- Reconstruction Plates (6 to 10 hole)
- T-Plates (3 head holes with 3 or 5 shaft holes)
- Available in stainless steel and titanium



## Screws

- Available in stainless steel and titanium

- 1 2.5mm Locking (8-30mm)
- 2 2.5mm Non-Locking (8-30mm)
- 3 3.5mm Locking (8-50mm)
- 4 3.5mm Non-Locking (8-110mm)
- 5 4.0mm Cancellous (8-50mm)
- 6 4.0mm Cannulated (20-80mm)



## SURGICAL TECHNIQUE

# ANTHEM™

## Distal Fibula Plating

Refer to the package insert (also printed in the back of this manual) for important information on the intended use, indications, device description, contraindications, precautions, warnings, and potential risks associated with this system.

### STEP 1 PREOPERATIVE PLANNING

Assess the fracture using preoperative radiographs. Estimate the appropriate length and location of screws for proper plate selection, plate position, and screw placement.

### STEP 2 PATIENT POSITIONING

Position the patient supine. If access to the posterior malleolus is necessary, consider a prone position. If necessary, position a sandbag under the buttock and elevate the operative leg with slight flexing of the knee to facilitate neutral ankle position. Examine the fracture.

### STEP 3 APPROACH

Create a surgical incision over the lateral aspect of the distal fibula in the interval between the sural and superficial peroneal nerves. Avoid disruption of these nerves. Retract and mobilize the peroneal tendons. Verifying the incision allows visualization of the distal fibula and fracture site. Alternatively, a posterolateral approach may be used if access to the posterior malleolus is necessary.



Lateral approach



## **RADIOLUCENT RETRACTION**

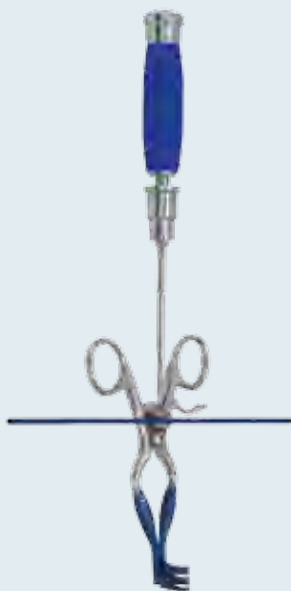
The **Stabilizing Radiolucent Weitlaner** and **Radiolucent Hohmann Retractors** help to improve visibility of the fracture site.

The **Malleable Band** secures the Stabilizing Radiolucent Weitlaner to the patient.

To assemble the Malleable Band, use the **T8 Driver** to loosen the set screw. Place the Malleable Band in the slot to center and tighten the screw.



Loosening the set screw

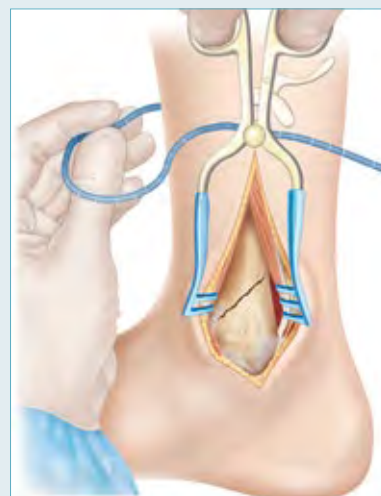


Placing the Malleable Band



Tightening the set screw

Once assembled, position the Stabilizing Radiolucent Weitlaner and retract the incision. Wrap the band around the patient's lower leg to secure the retractor.



## STEP

## 4

# FRACTURE REDUCTION

Reduce the fracture and confirm that fibular length, alignment, and rotation are properly restored. In cases of fibular shortening, distraction may be necessary to regain length.

Once anatomic reduction is achieved, **Point-to-Point Reduction Forceps** and/or K-wires may be used to provisionally hold the reduction. A lag screw may be placed across the fracture site to maintain reduction and fracture compression. Confirm reduction under fluoroscopy.



Point-to-Point Reduction Forceps

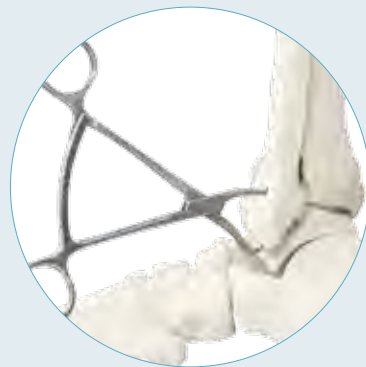
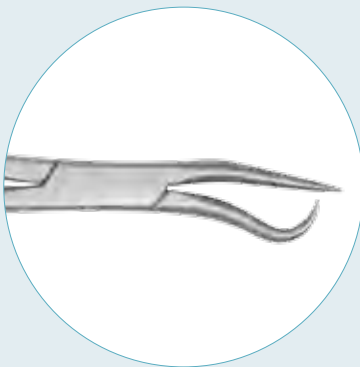


Lag screw



### MALLEOLAR CLAMP

The **Malleolar Clamp** is used to reduce distal fractures. To use the clamp, drill a hole in the distal fibula proximal to the fracture using the **2.5mm Drill Bit**. Place the straight tine of the Malleolar Clamp into the drill hole. Use the curved tine to manipulate and reduce the distal bone fragment.



## STEP

## 5

# PLATE SELECTION

Select the distal fibula plate type and length that best accommodates patient anatomy and fracture pattern.



**Lateral Distal Fibula Plate**  
Left or right orientation



**Universal Distal Fibula Plate**  
Single orientation



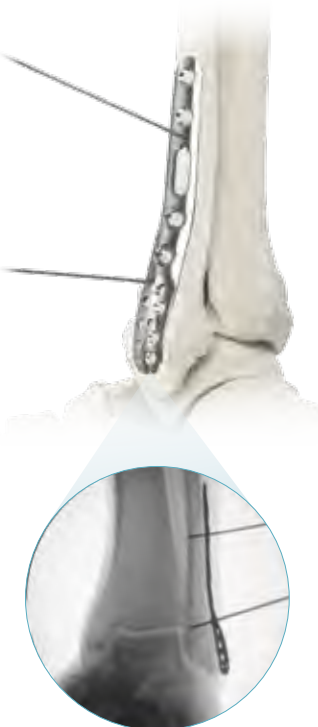
**Posterolateral Distal Fibula Plate**  
Left or right orientation

## STEP

## 6

# PLATE PLACEMENT

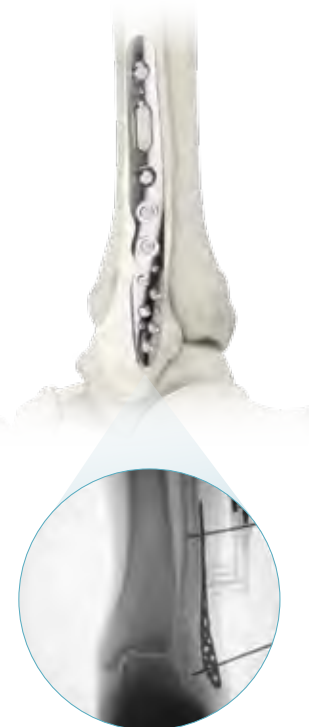
Position the selected plate on the fibula. For optimal placement, position the plate where the implant contour best matches the distal fibula. The plate may be provisionally held using **1.6mm K-Wires**, **1.6mm Plate Holding K-Wires**, or Point-to-Point Reduction Forceps. 1.6mm Plate Holding K-Wires may be used in K-wire holes or screw holes to provisionally secure the plate to the bone. Confirm plate placement using fluoroscopy and direct visualization.



**Lateral Distal Fibula Plate**



**Universal Distal Fibula Plate**

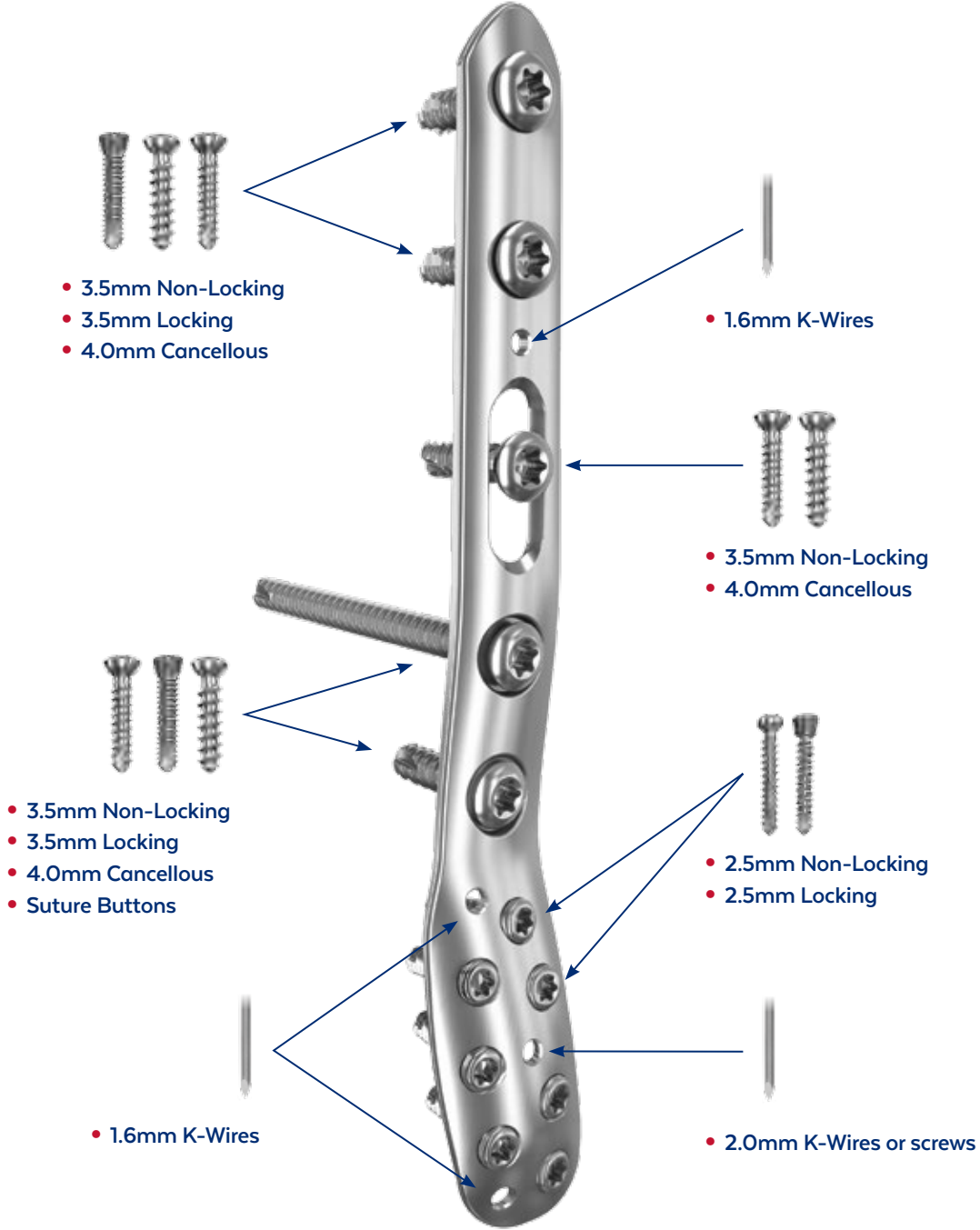


**Posterolateral Distal Fibula Plate**

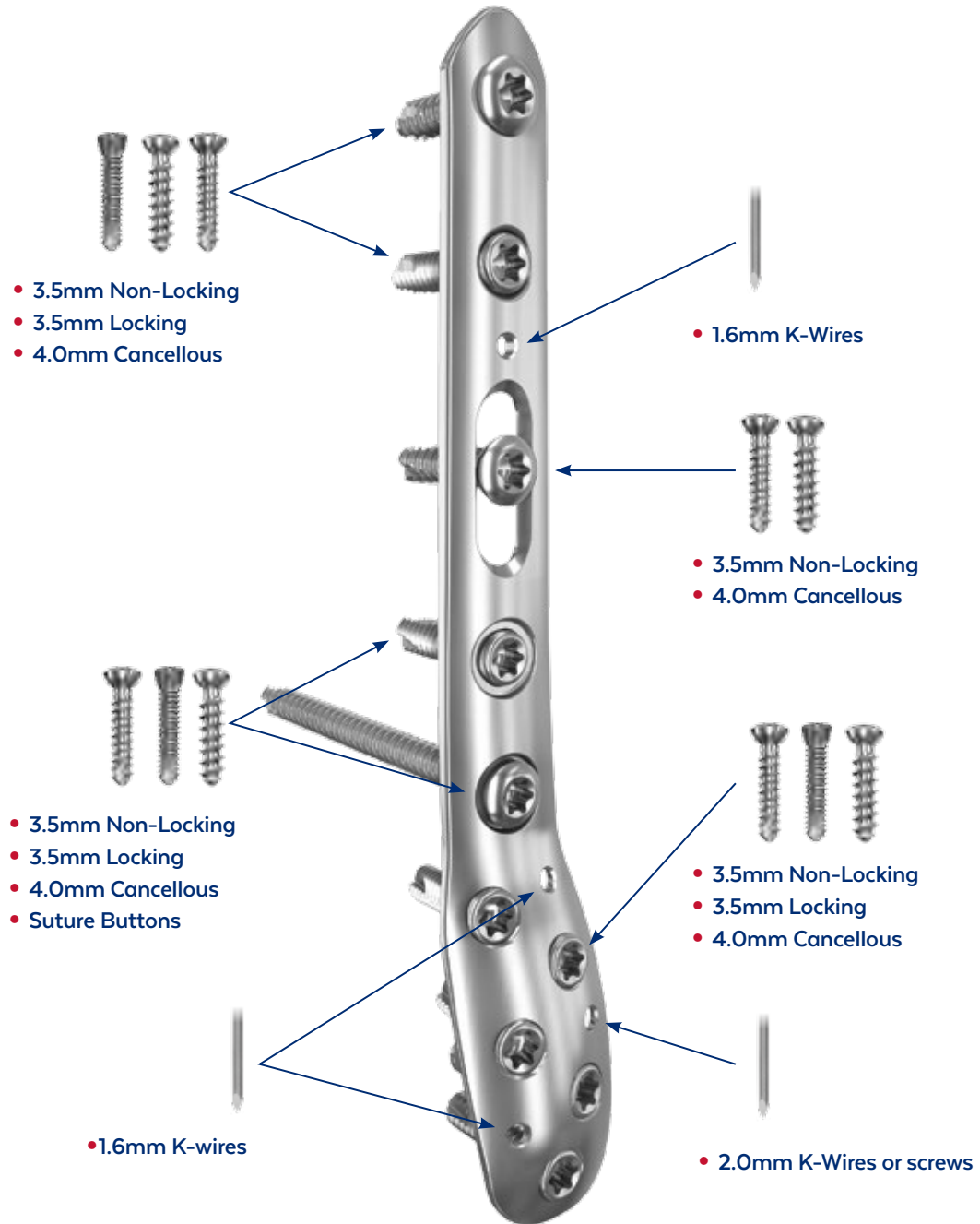
# STEP 7 SCREW INSERTION

Screw compatibility is shown for each plate style.

## Lateral Distal Fibula Plate

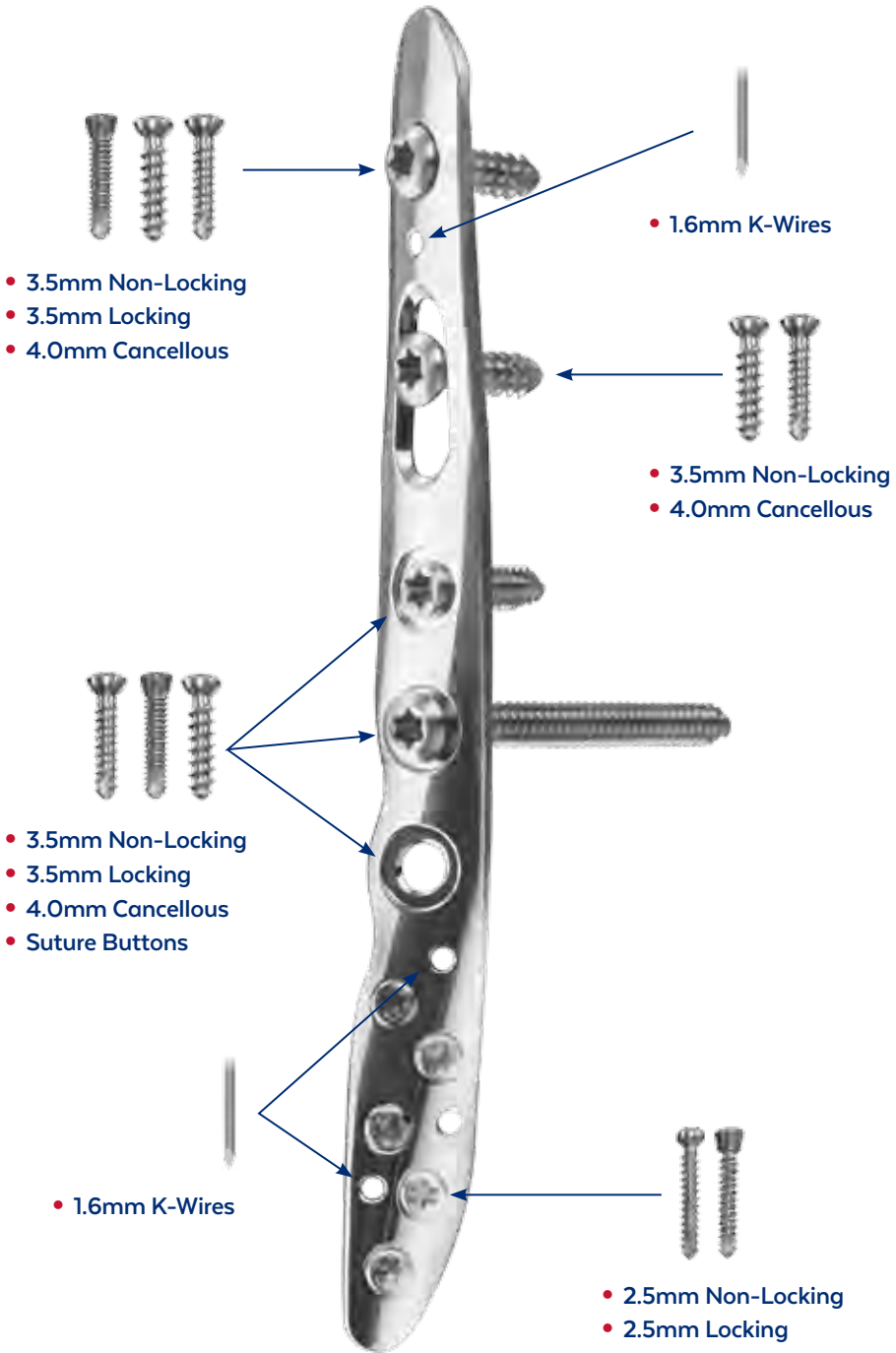


## Universal Distal Fibula Plate



# SCREW INSERTION (CONT'D)

## Posterolateral Distal Fibula Plate





## Slot Screw

Using the **2.7mm Drill Bit** and the **3.5mm Soft Tissue Protector**, drill to the desired depth. Measure screw length using the **Depth Gauge**. Use the **Self-Retaining T15 Driver** or **Screw Holding Forceps** to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Using the T15 Driver and the **Quick Connect Handle**, insert the 3.5mm Non-Locking or 4.0mm Cancellous Screw into the elongated slot. The slot allows for repositioning of the plate if necessary.



Lateral Distal Fibula Plate



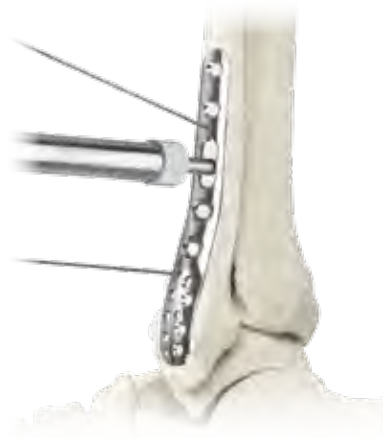
Universal Distal Fibula Plate



Posterolateral Distal Fibula Plate



- 3.5mm Non-Locking ●
- 4.0mm Cancellous ●



### COLOR-CODED INSTRUMENTS

Drills and drill guides are color-coded to the screw size.

Color	Screw Diameter	Drill Diameter
Blue	2.5mm	1.8mm
Fuschia	3.5mm	2.7mm
Light Green	4.0mm (Solid)	2.7mm
Gray	4.0mm (Cannulated)	2.85mm



# SCREW INSERTION (CONT'D)

## Distal Screws in Lateral and Posterolateral Plates

Determine the appropriate combination of locking, non-locking, and cancellous screws for proper fixation. Insert a minimum of three 2.5mm Locking or Non-Locking Screws in the distal portion of the plate. Ensure screws are placed unicortically to avoid entering the joint space. For the lowest profile construct, use locking screws in each of the distal screw holes.



Lateral Distal Fibula Plate



Posterolateral Distal Fibula Plate



- 2.5mm Non-Locking ●
- 2.5mm Locking ●

### 2.5mm Non-Locking Screws

Pre-drill to the desired depth using the **1.8mm Drill Bit** and the **2.5mm Soft Tissue Protector**. Measure hole depth using the Depth Gauge. Use the **Self-Retaining T8 Driver** or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 2.5mm Non-Locking Screws using the T8 Driver with the Quick Connect Handle.



### 2.5mm Locking Screws

Verify the plate is in secure contact with the bone before placing any locking screws. Thread the **1.8mm Threaded Drill Guide** into the selected screw hole. Pre-drill to the desired depth using the 1.8mm Drill Bit. Remove the drill guide and measure hole depth using the Depth Gauge. Use the T8 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 2.5mm Locking Screws using the T8 Driver with the Quick Connect Handle.



## Distal Screws in Universal Plate

Insert a minimum of three 3.5mm Locking Screws, 3.5 Non-Locking Screws, or 4.0mm Cancellous Screws in the distal portion of the plate. Ensure screws are placed unicortically to avoid entering the joint space.



- 3.5mm Non-Locking ●
- 3.5mm Locking ●
- 4.0mm Cancellous ●

Universal Distal Fibula Plate

### 3.5mm Non-Locking and 4.0mm Cancellous Screws

Pre-drill to the desired depth using the 2.7mm Drill Bit and the 3.5mm Soft Tissue Protector. Measure hole depth using the Depth Gauge. Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 3.5mm Non-Locking or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle.



### 3.5mm Locking Screws

Verify the plate is in secure contact with the bone before placing any locking screws. Thread the **2.7mm Threaded Drill Guide** into the selected screw hole. Pre-drill to the desired depth using the 2.7mm Drill Bit. Remove the drill guide and measure hole depth using the Depth Gauge. Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 3.5mm Locking Screws using the T15 Driver with the Quick Connect Handle.



# SCREW INSERTION (CONT'D)

## **THREADED DRILL GUIDE**

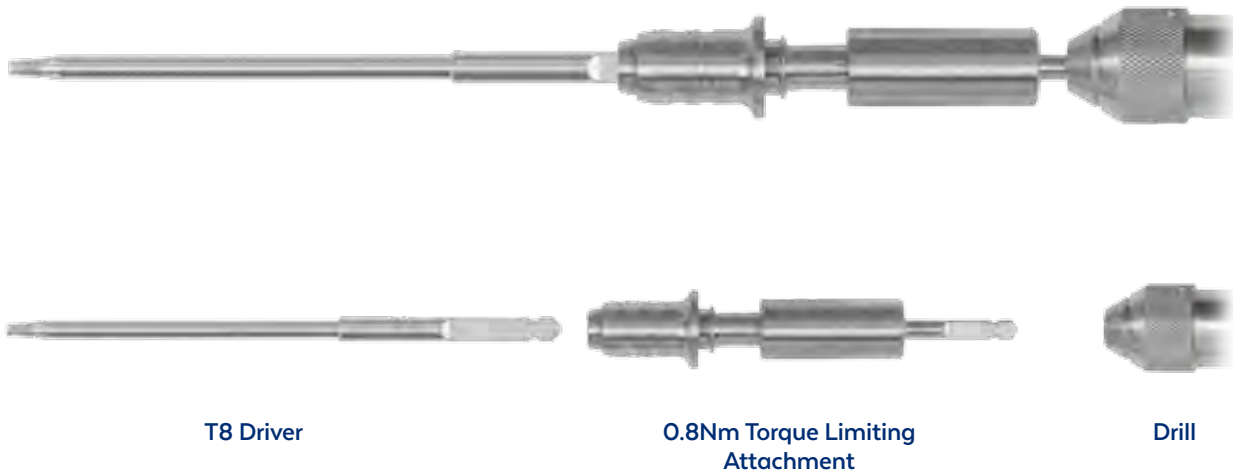
The T8 Driver is used to insert and remove the 1.8mm Threaded Drill Guide.

The T15 Driver is used to insert and remove the 2.7mm Threaded Drill Guide.



## **Optional: Locking Screw Insertion with 0.8Nm Torque Limiter**

The **0.8Nm Torque Limiter** may be used to insert locking screws under power or in dense bone to help ensure proper tightening torque is not exceeded. Attach the T8 or T15 Driver to the 0.8Nm Torque Limiter under power. Insert the locking screw until the maximum torque has been reached and an audible click is heard. Perform final tightening manually.





## Proximal Shaft Screws

Insert a minimum of three screws above the fracture in the plate shaft. Locking, non-locking, or cancellous screws may be placed in any shaft hole.



Lateral Distal Fibula Plate



Universal Distal Fibula Plate



Posterolateral Distal Fibula Plate



- 3.5mm Non-Locking ●
- 3.5mm Locking ●
- 4.0mm Cancellous ●

### 3.5mm Non-Locking and 4.0mm Cancellous Screws

Pre-drill to the desired depth using the 2.7mm Drill Bit and the 3.5mm Soft Tissue Protector. Measure hole depth using the Depth Gauge.

Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 3.5mm Non-Locking or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle.



### 3.5mm Locking Screws

Verify the plate is in secure contact with the bone before placing any locking screws. Thread the 2.7mm Threaded Drill Guide into the selected screw hole. Pre-drill to the desired depth using the 2.7mm Drill Bit. Remove the drill guide and measure hole depth using the Depth Gauge.

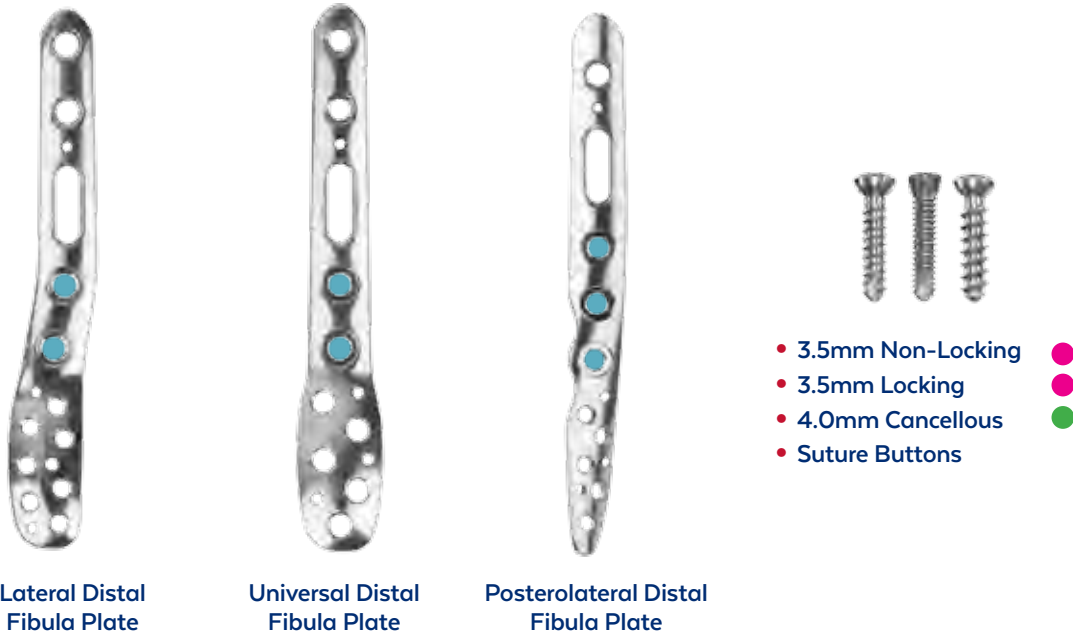
Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert 3.5mm Locking Screws using the T15 Driver with the Quick Connect Handle.



# SCREW INSERTION (CONT'D)

## Optional: Syndesmosis Fixation

To assess the integrity of the syndesmosis, perform a stability test such as the Cotton test. If instability is detected, stabilization may be achieved using 3.5mm Non-Locking or 4.0mm Cancellous Screws through any hole on the plate shaft. Syndesmotic screw holes feature a recess that accepts suture buttons.



Reduction of the syndesmosis can be achieved using the **Syndesmotic Clamp**. Verify reduction using fluoroscopy and confirm the joint is not over compressed. Select the appropriate location for the syndesmotic screws. Screws may be inserted through a syndesmotic screw hole or placed externally to the plate.

Pre-drill using the 2.7mm Calibrated Drill Bit and the 3.5mm Soft Tissue Protector. Ensure the drill is parallel to the tibial plafond and the ankle is in a neutral position. Measure the hole depth. Select and place 3.5mm Non-Locking or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle.



Syndesmotic Clamp reduction



Axial view of syndesmotic screw trajectory



Syndesmotic screws should be placed parallel to the joint and angled posterior to anterior approximately 25-30°.

**STEP 8**

# VERIFY RECONSTRUCTION

Confirm screw placement, screw trajectories, and joint reconstruction using fluoroscopy.



Lateral Distal Fibula Plate



Universal Distal Fibula Plate



Posterolateral Fibula Plate

## FINAL CONSTRUCT



Lateral Distal Fibula Plate



Universal Distal Fibula Plate



Posterolateral Fibula Plate

# OPTIONAL: REMOVAL

Unlock all screws from the plate with a non-self-retaining driver but do not remove the locking screws. For 2.5mm screws, use the **Non-Self-Retaining T8 Driver**. For 3.5mm and 4.0mm screws, use the **Non-Self-Retaining T15 Driver**. This prevents simultaneous rotation of the plate during removal. Remove all locking, non-locking, and cancellous screws using the T8 or T15 Non-Self-Retaining Driver. Once all screws are removed, the plate may be removed.

## NON-SELF-RETAINING DRIVERS

Non-Self-Retaining Drivers help to maximize torque applied to the screw head during removal. These drivers are designed to prevent stripping the screw head in challenging clinical scenarios, and are color-coded with a black band.



## SURGICAL TECHNIQUE

# ANTHEM™

## Hook Plating for Medial Malleolus

Refer to the package insert (also printed in the back of this guide) for important information on the intended use, indications, device description, contraindications, precautions, warnings, and potential risks associated with this system.

### STEP 1 PREOPERATIVE PLANNING

Assess the fracture using preoperative radiographs. Estimate the appropriate length and location of screws for proper plate selection, plate position, and screw placement.

### STEP 2 PATIENT POSITIONING

Place the patient supine and externally rotate the operative leg. If access to the posterior malleolus is necessary, consider a prone patient position.

### STEP 3 APPROACH

Create a surgical incision beginning approximately 2cm distal to the anterior tip of the medial malleolus and continuing the incision proximally until adequate access to the fracture site is achieved. Carefully retract and mobilize soft tissue structures to gain further exposure.



Medial approach

STEP

4

## FRACTURE REDUCTION

Reduce the fracture and confirm that length, alignment, and rotation are properly restored. The Malleolar Clamp is available to reduce distal fragments. Confirm reduction using fluoroscopy.

Once reduction is achieved, Point-to-Point Reduction Forceps or K-wires may be used to provisionally hold the bone fragments.



Fracture reduction with Malleolar Clamp

STEP

5

## PLATE PLACEMENT

Position the Hook Plate on the tibia, engaging the hooks in the distal fragment. A bone tamp may be used to impact the hooks.

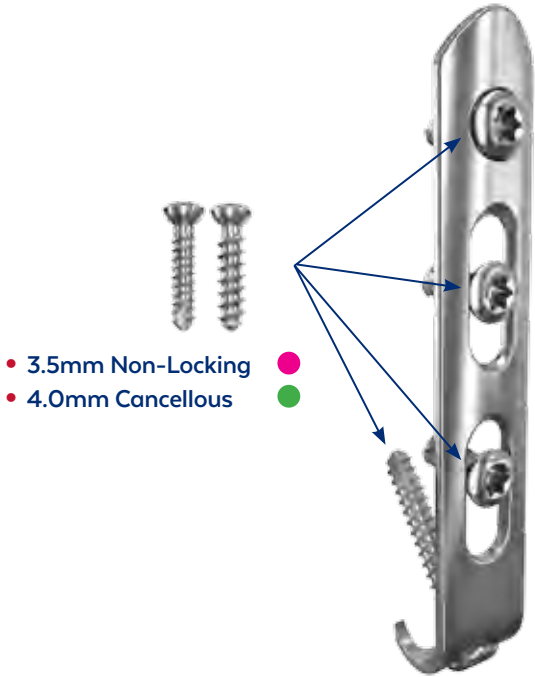




**STEP 6**

# SCREW INSERTION

The Hook Plate accepts 3.5mm Non-Locking and 4.0mm Cancellous Screws. The oblong slots may be used for dynamic compression.



### Distal Screw

Pre-drill to the desired depth using the 2.7mm Drill Bit and the 3.5mm Soft Tissue Protector. Insert the Depth Gauge into the screw hole and measure depth. Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Insert a 3.5mm Non-Locking or 4.0mm Cancellous Screw using the T15 Driver with the Quick Connect Handle.



## Shaft Screws

Insert screws sequentially along the shaft, moving proximally to help contour the plate. Screws may be placed eccentrically in the slotted holes to provide fracture compression.

Drill to the desired depth using the 2.7mm Drill Bit and the 3.5mm Soft Tissue Protector. Measure hole depth using the Depth Gauge. Select and place 3.5mm Non-Locking or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle.



- 3.5mm Non-Locking ●
- 4.0mm Cancellous ●



## DYNAMIC COMPRESSION

Dynamic compression of the fracture may be achieved by eccentrically placing a non-locking or cancellous screw through a slotted hole. All 2.5mm Non-Locking, 3.5mm Non-Locking, and 4.0mm Cancellous Screws may be used for dynamic compression. If compression is not desired, place the screw in a neutral position.

Place a non-locking or cancellous screw distal to the fracture. Select a slotted hole on the proximal side of the fracture line. Insert the 2.5mm or 3.5mm Soft Tissue Protector into the oblong hole with no downward pressure. Place the Soft Tissue Protector eccentrically in the slotted hole.

Drill to the desired depth with the selected drill. Measure hole depth using the Depth Gauge or **Calibrated Drill Bit**. Use the T15 Driver or Screw Holding Forceps to select the desired screw. Verify screw length and diameter using the gauges within the screw module. Using the T15 Driver, insert the screw into the desired hole. Verify screw length and diameter using the gauges within the screw module. Using the T15 Driver with the Quick Connect Handle, insert the screw into the desired hole. A power drill with a torque limiting adapter may be used if desired.



Neutral position

Eccentric position



Dynamic compression

STEP

7

## VERIFY RECONSTRUCTION

Using fluoroscopy, confirm implant position, screw trajectories, and joint reconstruction.



## FINAL CONSTRUCT



## OPTIONAL: REMOVAL

Remove all non-locking and cancellous screws using the Non-Self-Retaining T15 Driver. Once all screws are removed, the plate may be removed.

## SURGICAL TECHNIQUE

# CAPTIVATE™

## 4.0mm Cannulated Screws for Medial Malleolus

Refer to the package insert (also printed in the back of this manual) for important information on the intended use, indications, device description, contraindications, precautions, warnings, and potential risks associated with this system.

### STEP 1 PREOPERATIVE PLANNING

Assess the fracture using preoperative radiographs. Estimate the appropriate length and location of screws for proper screw placement.

### STEP 2 PATIENT POSITIONING

Place the patient supine and externally rotate the operative leg. If access to the posterior malleolus is necessary, consider a prone patient position.

### STEP 3 APPROACH

Create a surgical incision beginning approximately 2cm distal to the anterior tip of the medial malleolus and continuing the incision proximally until adequate access to the fracture site is achieved. Carefully retract and mobilize soft tissue structures to gain further exposure.



Medial approach

## STEP

4

## FRACTURE REDUCTION

Reduce the fracture using the Malleolar Clamp and confirm that length, alignment, and rotation are restored. Confirm reduction using fluoroscopy.

Once reduction is achieved, Point-to-Point Reduction Forceps or K-wires may be used to provisionally hold the bone fragments.



Fracture reduction with the Malleolar Clamp

## STEP

5

## K-WIRE PLACEMENT

Place **1.4mm K-Wires** (threaded or non-threaded) perpendicular to the fracture line. Verify that the final K-wire positions represent the desired placement of the cannulated screws.





**STEP****6****SCREW LENGTH MEASUREMENT**

Slide the **Cannulated Measuring Device** over the K-wire until it reaches bone. Read the length measurement at the end of the K-wire to determine the appropriate screw length.

**Optional: Pre-Drilling**

CAPTIVATE™ Cannulated Screws are self-drilling and self-tapping; however, pre-drilling of the near cortex may be necessary in patients with dense cortical bone.

Place the 3.5mm Soft Tissue Protector over the K-wire. Slide the **2.85mm Cannulated Drill Bit** over the K-wire and through the Soft Tissue Protector. Drill to the desired depth.



## SCREW LENGTH MEASUREMENT (CONT'D)

### Optional: Countersinking

Attach the **Cannulated Countersink** to the medium Quick Connect Handle and slide over the K-wire. Countersink to the desired depth.



### Optional: Tapping

Attach the **4.0mm Cannulated Tap** to the Quick Connect Handle and slide over the K-wire. Tap to the desired depth.



STEP

7

## SCREW INSERTION

Select the appropriate screw corresponding to the measured length. If desired, place a **CAPTIVATE™ Washer** on the cannulated screw. Assemble the Quick Connect Handle, the **Self-Retaining Cannulated T15 Driver**, and the cannulated screw. Slide the assembly over the K-wire and insert the screw. Verify that the bone threads of the screw completely pass the fracture line. Remove the K-wire. A second screw may be implanted if additional fixation or rotational stability is desired.



STEP

8

## VERIFY RECONSTRUCTION

Using fluoroscopy, confirm screw placement, screw trajectories, and reduction.



## OPTIONAL: REMOVAL

Use the T15 Driver with the Quick Connect Handle to remove all 4.0mm Cannulated Screws.

# ANTHEM™ SS Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9001

### Implants

PART NO.	DESCRIPTION	QTY
2185.2104	ANTHEM™ Lateral Distal Fibula Plate, Right, 4 Hole, 88mm, SS	2
2185.2105	ANTHEM™ Lateral Distal Fibula Plate, Right, 5 Hole, 101mm, SS	2
2185.2107	ANTHEM™ Lateral Distal Fibula Plate, Right, 7 Hole, 126mm, SS	2
2185.2109	ANTHEM™ Lateral Distal Fibula Plate, Right, 9 Hole, 152mm, SS	2
2185.1104	ANTHEM™ Lateral Distal Fibula Plate, Left, 4 Hole, 88mm, SS	2
2185.1105	ANTHEM™ Lateral Distal Fibula Plate, Left, 5 Hole, 101mm, SS	2
2185.1107	ANTHEM™ Lateral Distal Fibula Plate, Left, 7 Hole, 126mm, SS	2
2185.1109	ANTHEM™ Lateral Distal Fibula Plate, Left, 9 Hole, 152mm, SS	2
2185.2204	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 4 Hole, 80mm, SS	2
2185.2205	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 5 Hole, 96mm, SS	2
2185.2207	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 7 Hole, 121mm, SS	2
2185.2209	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 9 Hole, 147mm, SS	2
2185.1204	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 4 Hole, 80mm, SS	2
2185.1205	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 5 Hole, 96mm, SS	2
2185.1207	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 7 Hole, 121mm, SS	2
2185.1209	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 9 Hole, 147mm, SS	2
2185.0405	ANTHEM™ Universal Distal Fibula Plate, 5 Hole, 101mm, SS	2
2185.0407	ANTHEM™ Universal Distal Fibula Plate, 7 Hole, 126mm, SS	2
2185.0304	ANTHEM™ Hook Plate, 4 Hole, 66mm, SS	2
2179.1302	ANTHEM™ One Third Tubular Plate, 2 Hole, 24mm, SS	2
2179.1304	ANTHEM™ One Third Tubular Plate, 4 Hole, 48mm, SS	2
2179.1306	ANTHEM™ One Third Tubular Plate, 6 Hole, 72mm, SS	2
2179.1307	ANTHEM™ One Third Tubular Plate, 7 Hole, 84mm, SS	2
2179.1308	ANTHEM™ One Third Tubular Plate, 8 Hole, 96mm, SS	2
2179.1310	ANTHEM™ One Third Tubular Plate, 10 Hole, 120mm, SS	2
2179.1312	ANTHEM™ One Third Tubular Plate, 12 Hole, 144mm, SS	2
2179.0303	ANTHEM™ T-Plate, 3 Hole Head, 3 Hole Shaft, 47mm, SS	2
2179.0305	ANTHEM™ T-Plate, 3 Hole Head, 5 Hole Shaft, 67mm, SS	2
2179.0006	ANTHEM™ Reconstruction Plate, 6 Hole, 70mm, SS	2
2179.0008	ANTHEM™ Reconstruction Plate, 8 Hole, 94mm, SS	2
2179.0010	ANTHEM™ Reconstruction Plate, 10 Hole, 118mm, SS	2

# ANTHEM™ SS Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9001 (CONT'D)

### ADDITIONALLY AVAILABLE

2185.2103	ANTHEM™ Lateral Distal Fibula Plate, Right, 3 hole, 75mm, SS
2185.2111	ANTHEM™ Lateral Distal Fibula Plate, Right, 11 Hole, 177mm, SS
2185.2113	ANTHEM™ Lateral Distal Fibula Plate, Right, 13 Hole, 203mm, SS
2185.2115	ANTHEM™ Lateral Distal Fibula Plate, Right, 15 Hole, 228mm, SS
2185.1103	ANTHEM™ Lateral Distal Fibula Plate, Left, 3 Hole, 75mm, SS
2185.1111	ANTHEM™ Lateral Distal Fibula Plate, Left, 11 Hole, 177mm, SS
2185.1113	ANTHEM™ Lateral Distal Fibula Plate, Left, 13 Hole, 203mm, SS
2185.1115	ANTHEM™ Lateral Distal Fibula Plate, Left, 15 Hole, 228mm, SS
2185.2203	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 3 Hole, 70mm, SS
2185.2211	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 11 Hole, 172mm, SS
2185.2213	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 13 Hole, 198mm, SS
2185.2215	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 15 Hole, 233mm, SS
2185.1203	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 3 Hole, 70mm, SS
2185.1211	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 11 Hole, 172mm, SS
2185.1213	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 13 Hole, 198mm, SS
2185.1215	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 15 Hole, 233mm, SS



# ANTHEM™ SS Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9001 (CONT'D)

### Instruments

PART NO.	DESCRIPTION	QTY
6179.1116	1.6mm K-Wire, Trocar Tip, 150mm	10
6179.1120	2.0mm K-Wire, Trocar Tip, 150mm	10
6179.1216	1.6mm Plate Holding K-Wire, Threaded Trocar Tip, 75mm	5
6179.2000	Screw Holding Forceps	1
6179.2001	Lobster Claw Reduction Forceps, Ratcheting	2
6179.2003	Point-to-Point Reduction Forceps, Narrow, Ratcheting	1
6179.2004	Point-to-Point Reduction Forceps, Wide, Ratcheting	1
6179.2007	Wire Bending Pliers	1
6179.3135	3.5mm Soft Tissue Protector	1
6179.3125	2.5mm Soft Tissue Protector	1
6179.3227	2.7mm Threaded Drill Guide	4
6185.3218	1.8mm Threaded Drill Guide	4
6185.5018	1.8mm Drill Bit, 137mm, AO Quick Connect	4
6179.5025	2.5mm Drill Bit, 110mm, AO Quick Connect	4
6179.5027	2.7mm Drill Bit, 125mm, AO Quick Connect	4
6179.5035	3.5mm Drill Bit, 110mm, AO Quick Connect	4
6179.6008	T8 Driver, SR, 60mm, AO Quick Connect	4
6179.6015	T15 Driver, SR, 100mm, AO Quick Connect	4
6179.7000	Countersink, AO Quick Connect	1
6179.7013	Quick Connect Handle, Ratcheting, Cannulated, AO Quick Connect	2
6179.7002	Bending Iron	1
6179.7003	Bending Iron, Inverted	1
6179.7025	Dental Pick, Curved Tip, Large Handle	1
6179.7014	Radiolucent Hohmann Retractor, 8mm	1
6179.7015	Radiolucent Hohmann Retractor, 16mm	1
6179.7016	Hohmann Retractor, 8mm	2
6179.7017	Hohmann Retractor, 15mm	2
6185.0008	Torque Limiting Attachment, 0.8Nm, AO Quick Connect	1
6179.7019	Periosteal Elevator, Curved Round Tip, 6mm	1
6179.7020	Depth Gauge, 60mm	1
6179.7031	Depth Gauge, 110mm	1
6178.5329	2.85mm Drill Bit, Cannulated, 190mm, AO Quick Connect	4
6178.5140	4.0mm Tap, Cannulated, AO Quick Connect	1
6168.5215	T15 Driver, SR, Cannulated, 150mm, AO Quick Connect	2
6178.1314	1.4mm K-Wire, Threaded Trocar Tip, 150mm	10
6178.1114	1.4mm K-Wire, Trocar Tip, 150mm	10
6178.7040	Countersink, Cannulated, AO Quick Connect	1
6178.7000	Cleaning Brush, 1.4mm Cannulation	1

# ANTHEM™ SS Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9001 (CONT'D)

PART NO.	DESCRIPTION	QTY
6178.3640	Measuring Device, Cannulated	1
6185.0000	Malleolar Clamp, Ratcheting	1
6185.0002	Syndesmosis Clamp, Weber, Spin-Down	1
6185.0005	Freer Elevator	2
6185.0006	Cup Curette	1
6179.7012	Dental Pick, Curved Tip, Small Handle	1
6179.6115	T15 Driver, Non-Self Retaining, 100mm, AO Quick Connect	2
6179.6108	T8 Driver, Non-Self Retaining, 100mm, AO Quick Connect	2
6179.5028	2.7mm Calibrated Drill Bit, 180mm, AO Quick Connect	2
6171.0001	Stabilizing Radiolucent Weitlaner 2x3, 5", Sharp Tip	1
6171.7008	Malleable Band	5
6179.3137	3.5/2.7mm Drill Sleeve	1
6179.3128	2.5/1.8mm Drill Sleeve	1
9185.0001	ANTHEM™ SS Ankle Fracture System Graphic Case	

### ADDITIONALLY AVAILABLE

6179.7001	Quick Connect Handle, Cannulated, AO Quick Connect
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# ANTHEM™ SS Ankle Fracture System

## SCREW MODULE 9185.9003

PART NO.	DESCRIPTION	QTY
2171.5508	Locking Screw, 2.5x8mm, SS	6
2171.5510	Locking Screw, 2.5x10mm, SS	6
2171.5512	Locking Screw, 2.5x12mm, SS	6
2171.5514	Locking Screw, 2.5x14mm, SS	6
2171.5516	Locking Screw, 2.5x16mm, SS	6
2171.5518	Locking Screw, 2.5x18mm, SS	6
2171.5520	Locking Screw, 2.5x20mm, SS	6
2171.5522	Locking Screw, 2.5x22mm, SS	4
2171.5524	Locking Screw, 2.5x24mm, SS	4
2171.5526	Locking Screw, 2.5x26mm, SS	4
2171.5528	Locking Screw, 2.5x28mm, SS	4
2171.5530	Locking Screw, 2.5x30mm, SS	4
2171.6508	Non-Locking Screw, 2.5x8mm, SS	4
2171.6510	Non-Locking Screw, 2.5x10mm, SS	4
2171.6512	Non-Locking Screw, 2.5x12mm, SS	4
2171.6514	Non-Locking Screw, 2.5x14mm, SS	4
2171.6516	Non-Locking Screw, 2.5x16mm, SS	4
2171.6518	Non-Locking Screw, 2.5x18mm, SS	4
2171.6520	Non-Locking Screw, 2.5x20mm, SS	4
2171.6522	Non-Locking Screw, 2.5x22mm, SS	4
2171.6524	Non-Locking Screw, 2.5x24mm, SS	4
2171.6526	Non-Locking Screw, 2.5x26mm, SS	4
2171.6528	Non-Locking Screw, 2.5x28mm, SS	4
2171.6530	Non-Locking Screw, 2.5x30mm, SS	4
2179.3008	Non-Locking Screw, 3.5x8mm, SS	6
2179.3010	Non-Locking Screw, 3.5x10mm, SS	6
2179.3012	Non-Locking Screw, 3.5x12mm, SS	6
2179.3014	Non-Locking Screw, 3.5x14mm, SS	6
2179.3016	Non-Locking Screw, 3.5x16mm, SS	6
2179.3018	Non-Locking Screw, 3.5x18mm, SS	6
2179.3020	Non-Locking Screw, 3.5x20mm, SS	6
2179.3022	Non-Locking Screw, 3.5x22mm, SS	4
2179.3024	Non-Locking Screw, 3.5x24mm, SS	4
2179.3026	Non-Locking Screw, 3.5x26mm, SS	4
2179.3028	Non-Locking Screw, 3.5x28mm, SS	4
2179.3030	Non-Locking Screw, 3.5x30mm, SS	4
2179.3032	Non-Locking Screw, 3.5x32mm, SS	4
2179.3034	Non-Locking Screw, 3.5x34mm, SS	4
2179.3036	Non-Locking Screw, 3.5x36mm, SS	4

# ANTHEM™ SS Ankle Fracture System

## SCREW MODULE 9185.9003 (CONT'D)

PART NO.	DESCRIPTION	QTY
2179.3038	Non-Locking Screw, 3.5x38mm, SS	4
2179.3040	Non-Locking Screw, 3.5x40mm, SS	4
2179.3042	Non-Locking Screw, 3.5x42mm, SS	4
2179.3044	Non-Locking Screw, 3.5x44mm, SS	4
2179.3046	Non-Locking Screw, 3.5x46mm, SS	4
2179.3048	Non-Locking Screw, 3.5x48mm, SS	4
2179.3050	Non-Locking Screw, 3.5x50mm, SS	4
2179.3052	Non-Locking Screw, 3.5x52mm, SS	4
2179.3054	Non-Locking Screw, 3.5x54mm, SS	4
2179.3056	Non-Locking Screw, 3.5x56mm, SS	4
2179.3058	Non-Locking Screw, 3.5x58mm, SS	4
2179.3060	Non-Locking Screw, 3.5x60mm, SS	4
2179.3065	Non-Locking Screw, 3.5x65mm, SS	2
2179.3070	Non-Locking Screw, 3.5x70mm, SS	2
2179.3075	Non-Locking Screw, 3.5x75mm, SS	2
2179.3080	Non-Locking Screw, 3.5x80mm, SS	2
2179.3090	Non-Locking Screw, 3.5x90mm, SS	2
2179.3100	Non-Locking Screw, 3.5x100mm, SS	2
2179.3110	Non-Locking Screw, 3.5x110mm, SS	2
2179.5008	Locking Screw, 3.5x8mm, SS	6
2179.5010	Locking Screw, 3.5x10mm, SS	6
2179.5012	Locking Screw, 3.5x12mm, SS	6
2179.5014	Locking Screw, 3.5x14mm, SS	6
2179.5016	Locking Screw, 3.5x16mm, SS	6
2179.5018	Locking Screw, 3.5x18mm, SS	6
2179.5020	Locking Screw, 3.5x20mm, SS	6
2179.5022	Locking Screw, 3.5x22mm, SS	4
2179.5024	Locking Screw, 3.5x24mm, SS	4
2179.5026	Locking Screw, 3.5x26mm, SS	4
2179.5028	Locking Screw, 3.5x28mm, SS	4
2179.5030	Locking Screw, 3.5x30mm, SS	4
2179.5035	Locking Screw, 3.5x35mm, SS	4
2179.5040	Locking Screw, 3.5x40mm, SS	4
2179.5045	Locking Screw, 3.5x45mm, SS	4
2179.5050	Locking Screw, 3.5x50mm, SS	4
2179.4008	Cancellous Screw, 4.0x8mm, Fully Threaded, SS	6
2179.4010	Cancellous Screw, 4.0x10mm, Fully Threaded, SS	6
2179.4012	Cancellous Screw, 4.0x12mm, Fully Threaded, SS	6
2179.4014	Cancellous Screw, 4.0x14mm, Fully Threaded, SS	6

# ANTHEM™ SS Ankle Fracture System

## SCREW MODULE 9185.9003 (CONT'D)

PART NO.	DESCRIPTION	QTY
2179.4016	Cancellous Screw, 4.0x16mm, Fully Threaded, SS	6
2179.4018	Cancellous Screw, 4.0x18mm, Fully Threaded, SS	6
2179.4020	Cancellous Screw, 4.0x20mm, Fully Threaded, SS	6
2179.4022	Cancellous Screw, 4.0x22mm, Fully Threaded, SS	4
2179.4024	Cancellous Screw, 4.0x24mm, Fully Threaded, SS	4
2179.4026	Cancellous Screw, 4.0x26mm, Fully Threaded, SS	4
2179.4028	Cancellous Screw, 4.0x28mm, Fully Threaded, SS	4
2179.4030	Cancellous Screw, 4.0x30mm, Fully Threaded, SS	4
2179.4035	Cancellous Screw, 4.0x35mm, Fully Threaded, SS	4
2179.4040	Cancellous Screw, 4.0x40mm, Fully Threaded, SS	4
2179.4045	Cancellous Screw, 4.0x45mm, Fully Threaded, SS	4
2179.4050	Cancellous Screw, 4.0x50mm, Fully Threaded, SS	4
2178.4420	CAPTIVATE™ 4.0x20mm Cannulated Screw, Long Thread, SS	3
2178.4422	CAPTIVATE™ 4.0x22mm Cannulated Screw, Long Thread, SS	3
2178.4424	CAPTIVATE™ 4.0x24mm Cannulated Screw, Long Thread, SS	3
2178.4426	CAPTIVATE™ 4.0x26mm Cannulated Screw, Long Thread, SS	3
2178.4428	CAPTIVATE™ 4.0x28mm Cannulated Screw, Long Thread, SS	3
2178.4430	CAPTIVATE™ 4.0x30mm Cannulated Screw, Long Thread, SS	3
2178.4432	CAPTIVATE™ 4.0x32mm Cannulated Screw, Long Thread, SS	3
2178.4434	CAPTIVATE™ 4.0x34mm Cannulated Screw, Long Thread, SS	3
2178.4436	CAPTIVATE™ 4.0x36mm Cannulated Screw, Long Thread, SS	3
2178.4438	CAPTIVATE™ 4.0x38mm Cannulated Screw, Long Thread, SS	3
2178.4440	CAPTIVATE™ 4.0x40mm Cannulated Screw, Long Thread, SS	3
2178.4442	CAPTIVATE™ 4.0x42mm Cannulated Screw, Long Thread, SS	3
2178.4444	CAPTIVATE™ 4.0x44mm Cannulated Screw, Long Thread, SS	3
2178.4446	CAPTIVATE™ 4.0x46mm Cannulated Screw, Long Thread, SS	3
2178.4448	CAPTIVATE™ 4.0x48mm Cannulated Screw, Long Thread, SS	3
2178.4450	CAPTIVATE™ 4.0x50mm Cannulated Screw, Long Thread, SS	3
2178.4455	CAPTIVATE™ 4.0x55mm Cannulated Screw, Long Thread, SS	3
2178.4460	CAPTIVATE™ 4.0x60mm Cannulated Screw, Long Thread, SS	3
2178.4465	CAPTIVATE™ 4.0x65mm Cannulated Screw, Long Thread, SS	3
2178.4470	CAPTIVATE™ 4.0x70mm Cannulated Screw, Long Thread, SS	3
2178.4475	CAPTIVATE™ 4.0x75mm Cannulated Screw, Long Thread, SS	3
2178.4480	CAPTIVATE™ 4.0x80mm Cannulated Screw, Long Thread, SS	3
2179.0002	9.0mm Washer, SS	6
2178.0140	CAPTIVATE™ Washer for 4.0mm Cannulated Screw, SS	6



# ANTHEM™ SS Ankle Fracture System

## SCREW MODULE 9185.9003 (CONT'D)

### ADDITIONALLY AVAILABLE

2171.6532	Non-Locking Screw, 2.5x32mm, SS Ti
2171.6534	Non-Locking Screw, 2.5x34mm, SS
2171.6536	Non-Locking Screw, 2.5x36mm, SS
2171.6538	Non-Locking Screw, 2.5x38mm, SS
2171.6540	Non-Locking Screw, 2.5x40mm, SS
2171.6542	Non-Locking Screw, 2.5x42mm, SS
2171.6544	Non-Locking Screw, 2.5x44mm, SS
2171.6546	Non-Locking Screw, 2.5x46mm, SS
2171.6548	Non-Locking Screw, 2.5x48mm, SS
2171.6550	Non-Locking Screw, 2.5x50mm, SS
2171.6552	Non-Locking Screw, 2.5x52mm, SS
2171.6554	Non-Locking Screw, 2.5x54mm, SS
2171.6556	Non-Locking Screw, 2.5x56mm, SS
2171.6558	Non-Locking Screw, 2.5x58mm, SS
2171.6560	Non-Locking Screw, 2.5x60mm, SS

# ANTHEM™ Ti Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9002

### Implants

PART NO.	DESCRIPTION	QTY
1185.2104	ANTHEM™ Lateral Distal Fibula Plate, Right, 4 Hole, 88mm, Ti	2
1185.2105	ANTHEM™ Lateral Distal Fibula Plate, Right, 5 Hole, 101mm, Ti	2
1185.2107	ANTHEM™ Lateral Distal Fibula Plate, Right, 7 Hole, 126mm, Ti	2
1185.2109	ANTHEM™ Lateral Distal Fibula Plate, Right, 9 Hole, 152mm, Ti	2
1185.1104	ANTHEM™ Lateral Distal Fibula Plate, Left, 4 Hole, 88mm, Ti	2
1185.1105	ANTHEM™ Lateral Distal Fibula Plate, Left, 5 Hole, 101mm, Ti	2
1185.1107	ANTHEM™ Lateral Distal Fibula Plate, Left, 7 Hole, 126mm, Ti	2
1185.1109	ANTHEM™ Lateral Distal Fibula Plate, Left, 9 Hole, 152mm, Ti	2
1185.2204	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 4 Hole, 80mm, Ti	2
1185.2205	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 5 Hole, 96mm, Ti	2
1185.2207	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 7 Hole, 121mm, Ti	2
1185.2209	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 9 Hole, 147mm, Ti	2
1185.1204	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 4 Hole, 80mm, Ti	2
1185.1205	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 5 Hole, 96mm, Ti	2
1185.1207	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 7 Hole, 121mm, Ti	2
1185.1209	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 9 Hole, 147mm, Ti	2
1185.0405	ANTHEM™ Universal Distal Fibula Plate, 5 Hole, 101mm, Ti	2
1185.0407	ANTHEM™ Universal Distal Fibula Plate, 7 Hole, 126mm, Ti	2
1185.0304	ANTHEM™ Hook Plate, 4 Hole, 66mm, Ti	2
1179.1302	ANTHEM™ One Third Tubular Plate, 2 Hole, 24mm, Ti	2
1179.1304	ANTHEM™ One Third Tubular Plate, 4 Hole, 48mm, Ti	2
1179.1306	ANTHEM™ One Third Tubular Plate, 6 Hole, 72mm, Ti	2
1179.1307	ANTHEM™ One Third Tubular Plate, 7 Hole, 84mm, Ti	2
1179.1308	ANTHEM™ One Third Tubular Plate, 8 Hole, 96mm, Ti	2
1179.1310	ANTHEM™ One Third Tubular Plate, 10 Hole, 120mm, Ti	2
1179.1312	ANTHEM™ One Third Tubular Plate, 12 Hole, 144mm, Ti	2
1179.0303	ANTHEM™ T-Plate, 3 Hole Head, 3 Hole Shaft, 47mm, Ti	2
1179.0305	ANTHEM™ T-Plate, 3 Hole Head, 5 Hole Shaft, 67mm, Ti	2
1179.0006	ANTHEM™ Reconstruction Plate, 6 Hole, 70mm, Ti	2
1179.0008	ANTHEM™ Reconstruction Plate, 8 Hole, 94mm, Ti	2
1179.0010	ANTHEM™ Reconstruction Plate, 10 Hole, 118mm, Ti	2

# ANTHEM™ Ti Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9002 (CONT'D)

### ADDITIONALLY AVAILABLE

1185.2103	ANTHEM™ Lateral Distal Fibula Plate, Right, 3 Hole, 75mm, Ti
1185.2111	ANTHEM™ Lateral Distal Fibula Plate, Right, 11 Hole, 177mm, Ti
1185.2113	ANTHEM™ Lateral Distal Fibula Plate, Right, 13 Hole, 203mm, Ti
1185.2115	ANTHEM™ Lateral Distal Fibula Plate, Right, 15 Hole, 228mm, Ti
1185.1103	ANTHEM™ Lateral Distal Fibula Plate, Left, 3 Hole, 75mm, Ti
1185.1111	ANTHEM™ Lateral Distal Fibula Plate, Left, 11 Hole, 177mm, Ti
1185.1113	ANTHEM™ Lateral Distal Fibula Plate, Left, 13 Hole, 203mm, Ti
1185.2215	ANTHEM™ Posterolateral Distal Fibula Plate, Left, 15 Hole, 233mm, Ti
1185.1203	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 3 Hole, 70mm, Ti
1185.1211	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 11 Hole, 172mm, Ti
1185.1213	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 13 Hole, 198mm, Ti
1185.1215	ANTHEM™ Posterolateral Distal Fibula Plate, Right, 15 Hole, 233mm, Ti

# ANTHEM™ Ti Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9002 (CONT'D)

### Instruments

PART NO.	DESCRIPTION	QTY
6179.1116	1.6mm K-Wire, Trocar Tip, 150mm	10
6179.1120	2.0mm K-Wire, Trocar Tip, 150mm	10
6179.1216	1.6mm Plate Holding K-Wire, Threaded Trocar Tip, 75mm	5
6179.2000	Screw Holding Forceps	1
6179.2001	Lobster Claw Reduction Forceps, Ratcheting	2
6179.2003	Point-to-Point Reduction Forceps, Narrow, Ratcheting	1
6179.2004	Point-to-Point Reduction Forceps, Wide, Ratcheting	1
6179.2007	Wire Bending Pliers	1
6179.3135	3.5mm Soft Tissue Protector	1
6179.3125	2.5mm Soft Tissue Protector	1
6179.3227	2.7mm Threaded Drill Guide	4
6185.3218	1.8mm Threaded Drill Guide	4
6185.5018	1.8mm Drill Bit, 137mm, AO Quick Connect	4
6179.5025	2.5mm Drill Bit, 110mm, AO Quick Connect	4
6179.5027	2.7mm Drill Bit, 125mm, AO Quick Connect	4
6179.5035	3.5mm Drill Bit, 110mm, AO Quick Connect	4
6179.6008	T8 Driver, SR, 60mm, AO Quick Connect	4
6179.6015	T15 Driver, SR, 100mm, AO Quick Connect	4
6179.7000	Countersink, AO Quick Connect	1
6179.7013	Quick Connect Handle, Ratcheting, Cannulated, AO Quick Connect	2
6179.7002	Bending Iron	1
6179.7003	Bending Iron, Inverted	1
6179.7025	Dental Pick, Curved Tip, Large Handle	1
6179.7014	Radiolucent Hohmann Retractor, 8mm	1
6179.7015	Radiolucent Hohmann Retractor, 16mm	1
6179.7016	Hohmann Retractor, 8mm	2
6179.7017	Hohmann Retractor, 15mm	2
6185.0008	Torque Limiting Attachment, 0.8Nm, AO Quick Connect	1
6179.7019	Periosteal Elevator, Curved Round Tip, 6mm	1
6179.7020	Depth Gauge, 60mm	1
6179.7031	Depth Gauge, 110mm	1
6178.5329	2.85mm Drill Bit, Cannulated, 190mm, AO Quick Connect	4
6178.5140	4.0mm Tap, Cannulated, AO Quick Connect	1
6168.5215	T15 Driver, SR, Cannulated, 150mm, AO Quick Connect	2
6178.1314	1.4mm K-Wire, Threaded Trocar Tip, 150mm	10
6178.1114	1.4mm K-Wire, Trocar Tip, 150mm	10
6178.7040	Countersink, Cannulated, AO Quick Connect	1



# ANTHEM™ Ti Ankle Fracture System

## IMPLANT AND INSTRUMENT SET 9185.9002 (CONT'D)

PART NO.	DESCRIPTION	QTY
6178.7000	Cleaning Brush, 1.4mm Cannulation	1
6178.3640	Measuring Device, Cannulated	1
6185.0000	Malleolar Clamp, Ratcheting	1
6185.0002	Syndesmosis Clamp, Weber, Spin-Down	1
6185.0005	Freer Elevator	2
6185.0006	Cup Curette	1
6179.7012	Dental Pick, Curved Tip, Small Handle	1
6179.6115	T15 Driver, Non-Self Retaining, 100mm, AO Quick Connect	2
6179.6108	T8 Driver, Non-Self Retaining, 100mm, AO Quick Connect	2
6179.5028	2.7mm Calibrated Drill Bit, 180mm, AO Quick Connect	2
6171.0001	Stabilizing Radiolucent Weitlaner 2x3, 5", Sharp Tip	1
6171.7008	Malleable Replacement Band	5
6179.3137	3.5/2.7mm Drill Sleeve	1
6179.3128	2.5/1.8mm Drill Sleeve	1
9185.0002	ANTHEM™ Ti Ankle Fracture System Graphic Case	

### ADDITIONALLY AVAILABLE

6179.7001	Quick Connect Handle, Cannulated, AO Quick Connect
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# ANTHEM™ Ti Ankle Fracture System

## SCREW MODULE 9185.9004

PART NO.	DESCRIPTION	QTY
2171.5508	Locking Screw, 2.5x8mm, Ti	6
2171.5510	Locking Screw, 2.5x10mm, Ti	6
2171.5512	Locking Screw, 2.5x12mm, Ti	6
2171.5514	Locking Screw, 2.5x14mm, Ti	6
2171.5516	Locking Screw, 2.5x16mm, Ti	6
2171.5518	Locking Screw, 2.5x18mm, Ti	6
2171.5520	Locking Screw, 2.5x20mm, Ti	6
2171.5522	Locking Screw, 2.5x22mm, Ti	4
2171.5524	Locking Screw, 2.5x24mm, Ti	4
2171.5526	Locking Screw, 2.5x26mm, Ti	4
2171.5528	Locking Screw, 2.5x28mm, Ti	4
2171.5530	Locking Screw, 2.5x30mm, Ti	4
2171.6508	Non-Locking Screw, 2.5x8mm, Ti	4
2171.6510	Non-Locking Screw, 2.5x10mm, Ti	4
2171.6512	Non-Locking Screw, 2.5x12mm, Ti	4
2171.6514	Non-Locking Screw, 2.5x14mm, Ti	4
2171.6516	Non-Locking Screw, 2.5x16mm, Ti	4
2171.6518	Non-Locking Screw, 2.5x18mm, Ti	4
2171.6520	Non-Locking Screw, 2.5x20mm, Ti	4
2171.6522	Non-Locking Screw, 2.5x22mm, Ti	4
2171.6524	Non-Locking Screw, 2.5x24mm, Ti	4
2171.6526	Non-Locking Screw, 2.5x26mm, Ti	4
2171.6528	Non-Locking Screw, 2.5x28mm, Ti	4
2171.6530	Non-Locking Screw, 2.5x30mm, Ti	4
1179.3008	Non-Locking Screw, 3.5x8mm, Ti	6
1179.3010	Non-Locking Screw, 3.5x10mm, Ti	6
1179.3012	Non-Locking Screw, 3.5x12mm, Ti	6
1179.3014	Non-Locking Screw, 3.5x14mm, Ti	6
1179.3016	Non-Locking Screw, 3.5x16mm, Ti	6
1179.3018	Non-Locking Screw, 3.5x18mm, Ti	6
1179.3020	Non-Locking Screw, 3.5x20mm, Ti	6
1179.3022	Non-Locking Screw, 3.5x22mm, Ti	4
1179.3024	Non-Locking Screw, 3.5x24mm, Ti	4
1179.3026	Non-Locking Screw, 3.5x26mm, Ti	4
1179.3028	Non-Locking Screw, 3.5x28mm, Ti	4
1179.3030	Non-Locking Screw, 3.5x30mm, Ti	4
1179.3032	Non-Locking Screw, 3.5x32mm, Ti	4
1179.3034	Non-Locking Screw, 3.5x34mm, Ti	4

# ANTHEM™ Ti Ankle Fracture System

## SCREW MODULE 9185.9004 (CONT'D)

PART NO.	DESCRIPTION	QTY
1179.3036	Non-Locking Screw, 3.5x36mm, Ti	4
1179.3038	Non-Locking Screw, 3.5x38mm, Ti	4
1179.3040	Non-Locking Screw, 3.5x40mm, Ti	4
1179.3042	Non-Locking Screw, 3.5x42mm, Ti	4
1179.3044	Non-Locking Screw, 3.5x44mm, Ti	4
1179.3046	Non-Locking Screw, 3.5x46mm, Ti	4
1179.3048	Non-Locking Screw, 3.5x48mm, Ti	4
1179.3050	Non-Locking Screw, 3.5x50mm, Ti	4
1179.3052	Non-Locking Screw, 3.5x52mm, Ti	4
1179.3054	Non-Locking Screw, 3.5x54mm, Ti	4
1179.3056	Non-Locking Screw, 3.5x56mm, Ti	4
1179.3058	Non-Locking Screw, 3.5x58mm, Ti	4
1179.3060	Non-Locking Screw, 3.5x60mm, Ti	4
1179.3065	Non-Locking Screw, 3.5x65mm, Ti	2
1179.3070	Non-Locking Screw, 3.5x70mm, Ti	2
1179.3075	Non-Locking Screw, 3.5x75mm, Ti	2
1179.3080	Non-Locking Screw, 3.5x80mm, Ti	2
1179.3090	Non-Locking Screw, 3.5x90mm, Ti	2
1179.3100	Non-Locking Screw, 3.5x100mm, Ti	2
1179.3110	Non-Locking Screw, 3.5x110mm, Ti	2
1179.5008	Locking Screw, 3.5x8mm, Ti	6
1179.5010	Locking Screw, 3.5x10mm, Ti	6
1179.5012	Locking Screw, 3.5x12mm, Ti	6
1179.5014	Locking Screw, 3.5x14mm, Ti	6
1179.5016	Locking Screw, 3.5x16mm, Ti	6
1179.5018	Locking Screw, 3.5x18mm, Ti	6
1179.5020	Locking Screw, 3.5x20mm, Ti	6
1179.5022	Locking Screw, 3.5x22mm, Ti	4
1179.5024	Locking Screw, 3.5x24mm, Ti	4
1179.5026	Locking Screw, 3.5x26mm, Ti	4
1179.5028	Locking Screw, 3.5x28mm, Ti	4
1179.5030	Locking Screw, 3.5x30mm, Ti	4
1179.5035	Locking Screw, 3.5x35mm, Ti	4
1179.5040	Locking Screw, 3.5x40mm, Ti	4
1179.5045	Locking Screw, 3.5x45mm, Ti	4
1179.5050	Locking Screw, 3.5x50mm, Ti	4
1179.4008	Cancellous Screw, 4.0x8mm, Fully Threaded, Ti	6
1179.4010	Cancellous Screw, 4.0x10mm, Fully Threaded, Ti	6
1179.4012	Cancellous Screw, 4.0x12mm, Fully Threaded, Ti	6

# ANTHEM™ Ti Ankle Fracture System

## SCREW MODULE 9185.9004 (CONT'D)

PART NO.	DESCRIPTION	QTY
1179.4014	Cancellous Screw, 4.0x14mm, Fully Threaded, Ti	6
1179.4016	Cancellous Screw, 4.0x16mm, Fully Threaded, Ti	6
1179.4018	Cancellous Screw, 4.0x18mm, Fully Threaded, Ti	6
1179.4020	Cancellous Screw, 4.0x20mm, Fully Threaded, Ti	6
1179.4022	Cancellous Screw, 4.0x22mm, Fully Threaded, Ti	4
1179.4024	Cancellous Screw, 4.0x24mm, Fully Threaded, Ti	4
1179.4026	Cancellous Screw, 4.0x26mm, Fully Threaded, Ti	4
1179.4028	Cancellous Screw, 4.0x28mm, Fully Threaded, Ti	4
1179.4030	Cancellous Screw, 4.0x30mm, Fully Threaded, Ti	4
1179.4035	Cancellous Screw, 4.0x35mm, Fully Threaded, Ti	4
1179.4040	Cancellous Screw, 4.0x40mm, Fully Threaded, Ti	4
1179.4045	Cancellous Screw, 4.0x45mm, Fully Threaded, Ti	4
1179.4050	Cancellous Screw, 4.0x50mm, Fully Threaded, Ti	4
1178.4420	CAPTIVATE™ 4.0x20mm Cannulated Screw, Long Thread, Ti	3
1178.4422	CAPTIVATE™ 4.0x22mm Cannulated Screw, Long Thread, Ti	3
1178.4424	CAPTIVATE™ 4.0x24mm Cannulated Screw, Long Thread, Ti	3
1178.4426	CAPTIVATE™ 4.0x26mm Cannulated Screw, Long Thread, Ti	3
1178.4428	CAPTIVATE™ 4.0x28mm Cannulated Screw, Long Thread, Ti	3
1178.4430	CAPTIVATE™ 4.0x30mm Cannulated Screw, Long Thread, Ti	3
1178.4432	CAPTIVATE™ 4.0x32mm Cannulated Screw, Long Thread, Ti	3
1178.4434	CAPTIVATE™ 4.0x34mm Cannulated Screw, Long Thread, Ti	3
1178.4436	CAPTIVATE™ 4.0x36mm Cannulated Screw, Long Thread, Ti	3
1178.4438	CAPTIVATE™ 4.0x38mm Cannulated Screw, Long Thread, Ti	3
1178.4440	CAPTIVATE™ 4.0x40mm Cannulated Screw, Long Thread, Ti	3
1178.4442	CAPTIVATE™ 4.0x42mm Cannulated Screw, Long Thread, Ti	3
1178.4444	CAPTIVATE™ 4.0x44mm Cannulated Screw, Long Thread, Ti	3
1178.4446	CAPTIVATE™ 4.0x46mm Cannulated Screw, Long Thread, Ti	3
1178.4448	CAPTIVATE™ 4.0x48mm Cannulated Screw, Long Thread, Ti	3
1178.4450	CAPTIVATE™ 4.0x50mm Cannulated Screw, Long Thread, Ti	3
1178.4455	CAPTIVATE™ 4.0x55mm Cannulated Screw, Long Thread, Ti	3
1178.4460	CAPTIVATE™ 4.0x60mm Cannulated Screw, Long Thread, Ti	3
1178.4465	CAPTIVATE™ 4.0x65mm Cannulated Screw, Long Thread, Ti	3
1178.4470	CAPTIVATE™ 4.0x70mm Cannulated Screw, Long Thread, Ti	3
1178.4475	CAPTIVATE™ 4.0x75mm Cannulated Screw, Long Thread, Ti	3
1178.4480	CAPTIVATE™ 4.0x80mm Cannulated Screw, Long Thread, Ti	3
1179.0002	9.0mm Washer, Ti	6
1178.0140	CAPTIVATE™ Washer for 4.0mm Cannulated Screw, Ti	6
9185.0004	ANTHEM™ Ti Ankle Fracture System Screw Module	



# ANTHEM™ Ti Ankle Fracture System

## SCREW MODULE 9185.9004 (CONT'D)

### ADDITIONALLY AVAILABLE

1171.6532	Non-Locking Screw, 2.5x32mm, Ti
1171.6534	Non-Locking Screw, 2.5x34mm, Ti
1171.6536	Non-Locking Screw, 2.5x36mm, Ti
1171.6538	Non-Locking Screw, 2.5x38mm, Ti
1171.6540	Non-Locking Screw, 2.5x40mm, Ti
1171.6542	Non-Locking Screw, 2.5x42mm, Ti
1171.6544	Non-Locking Screw, 2.5x44mm, Ti
1171.6546	Non-Locking Screw, 2.5x46mm, Ti
1171.6548	Non-Locking Screw, 2.5x48mm, Ti
1171.6550	Non-Locking Screw, 2.5x50mm, Ti
1171.6552	Non-Locking Screw, 2.5x52mm, Ti
1171.6554	Non-Locking Screw, 2.5x54mm, Ti
1171.6556	Non-Locking Screw, 2.5x56mm, Ti
1171.6558	Non-Locking Screw, 2.5x58mm, Ti
1171.6560	Non-Locking Screw, 2.5x60mm, Ti

# IMPORTANT INFORMATION ON ANTHEM™ FRACTURE SYSTEM

## DESCRIPTION

The ANTHEM™ Fracture System is a family of plates and screws designed to be used for internal bone fixation. The implants are available in various sizes and shapes to accommodate patient anatomy, and may be contoured or straight, with locking and non-locking screws. ANTHEM™ implants are manufactured from titanium alloy, cobalt chromium molybdenum alloy, or stainless steel. All implants are for single use only.

## INDICATIONS

The ANTHEM™ Fracture System is indicated for fixation of fractures, osteotomies, arthrodesis and reconstruction of bones for the appropriate size of the device to be used in adult patients, including the clavicle, scapula, humerus, radius, ulna, small bones (metacarpals, metatarsals, phalanges), wrist, pelvis, femur, tibia, fibula, ankle, and foot. Small fragment and distal fibula plates may be used in all pediatric subgroups (except neonates) and small stature adults. Distal radius plates may be used in adolescents (12-21 years of age).

## WARNINGS

The correct implant selection is extremely important. Failure to use the appropriate implant for the fracture condition may accelerate clinical failure. Failure to use the proper component to maintain adequate blood supply and provide rigid fixation may result in loosening, bending, cracking or fracture of the implant and/or bone. The correct implant size for a given patient can be determined by evaluating the patient's height, weight, functional demands and anatomy. Every implant must be used in the correct anatomic location, consistent with accepted standards of internal fixation.

## PRECAUTION

The implantation of fixation devices should be performed only by experienced surgeons with specific training in the use of this system because this is a technically demanding procedure presenting a risk of serious injury to the patient. Preoperative planning and patient anatomy should be considered when selecting implant size.

Surgical implants must never be reused. Even though the device appears undamaged, it may have small defects and internal stress patterns which could lead to breakage.

## MR SAFETY INFORMATION

The ANTHEM™ Fracture implants have not been evaluated for safety and compatibility in the MR environment. They have not been tested for heating, migration, or image artifact in the MR environment. The safety of these devices in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

## CONTRAINDICATIONS

Use of these implants is contraindicated in patients in the following cases:

- Any active or suspended latent infection or marked local inflammation in or about the affected area.
- Compromised vascularity that would inhibit adequate blood supply to the fracture or the operative site.
- Bone stock compromised by disease, infection or prior implantation that cannot provide adequate support and/or fixation of the devices.
- Use of plating on or around growth plates in pediatric patients.
- Material sensitivity, documented or suspected.
- Obesity. An overweight or obese patient can produce loads on the implant that can lead to failure of the device itself.
- Patients having inadequate tissue coverage over the operative site.
- Implant utilization that would interfere with anatomical structures or physiological performance.
- Any mental or neuromuscular disorder which would create an unacceptable risk of fixation failure or complications in postoperative care.
- Other medical or surgical conditions which would preclude the potential benefit of surgery.

## CAUTIONS

### Pre-operative

- These implants are single use only.
- Implants that came in contact with body fluids should never be reused.
- Ensure that all components needed for surgery are available in the surgical suite.
- Inspection is recommended prior to surgery to determine if implants have been damaged during storage.
- While rare, intra-operative fracture or breakage of instruments can occur.

Instruments which have experienced excessive use or excessive force are susceptible to fracture. Instruments should be examined for wear or damage prior to surgery.

### Intra-operative

- Avoid surface damage of implants.
- Discard all damaged or mishandled implants.
- Contouring or bending of an implant should be avoided where possible, because it may reduce its fatigue strength and can cause failure under load.
- Implants are available in different versions, varying for example in length, diameter, material and number of drilled holes. Select the required version carefully.
- During the course of the operation, repeatedly check to ensure that the connection between the implant and the instrument, or between the instruments, is secure.
- Implants which consist of several components must only be used in the prescribed combination (refer to the ANTHEM™ Surgical Technique Guide).
- After the procedure check the proper positioning of all implants using the image intensifier.
- Do not use components from this system in conjunction with components from any other manufacturer's system unless otherwise specified (refer to the ANTHEM™ Surgical Technique Guide).

### Post-operative

- Post-operative patient activity: These implants are neither intended to carry the full load of the patient acutely, nor intended to carry a significant portion of the load for extended periods of time. For this reason post-operative instructions and warnings to patients are extremely important. External immobilization (e.g. bracing or casting) may be employed until X-rays or other procedures confirm adequate bone consolidation.
- The implant is a short-term implant. In the event of a delay in bone consolidation, or if such consolidation does not take place, or if explantation is not carried out, complications may occur, for example fracture or loosening of the implant or instability of the implant system. Regular post-operative examinations (e.g., X-ray checks) are advisable.
- The risk of post-operative complication (e.g. failure of an implant) is higher if patients are obese and/or cannot follow the recommendations of the physician because of any mental or neuromuscular disorder. For this reason those patients must have additional post-operative follow-up.
- Implant removal should be followed by adequate postoperative management to avoid fracture or refracture of the bone.

### Informing the Patient

The implant affects the patient's ability to carry loads and her/his mobility and general living circumstances. The surgeon must counsel each patient individually on correct behavior and activity after the implantation.

The surgeon must warn each patient that the device cannot and does not replicate a normally healthy bone, that the device can break or become damaged as a result of strenuous activity, trauma, mal-union or non-union and that the device has a finite expected service life and may need to be removed at some time in the future.

## ADVERSE EFFECTS

In many instances, adverse results may be clinically related rather than device related. The following are the most frequent adverse effects involving the use of internal fracture fixation devices:

- Delayed union or non-union of the fracture site.
- These devices can break when subjected to the increased loading associated with delayed unions and/or non-unions. Internal fixation devices are load sharing devices which are intended to hold fracture bone surface in a position to facilitate healing. If healing is delayed or does not occur, the appliance may eventually break due to metal fatigue. Loads on the device produced by load bearing and the patient's activity level will dictate the longevity of the device.
- Conditions attributable to non-union, osteoporosis, osteomalacia, diabetes, inhibited revascularization and poor bone formation can cause loosening, bending, cracking, fracture of the device or premature loss of rigid fixation with the bone.
- Improper alignment can cause a malunion of the bone and/or bending, cracking or even breakage of the device.
- Increased fibrous tissue response around the fracture site due to unstable comminuted fractures.

# IMPORTANT INFORMATION ON ANTHEM™ FRACTURE SYSTEM

- Early or late infection, deep or superficial.
- Deep venous thrombosis.
- Avascular necrosis.
- Shortening of the effected bone/fracture site.
- Subclinical nerve damage may possibly occur as a result of the surgical trauma.
- Material sensitivity reactions in patients following surgical implantation have rarely been reported, however their significance awaits further clinical evaluation.

## PACKAGING

These implants may be supplied pre-packaged and sterile, using gamma irradiation. The integrity of the sterile packaging should be checked to ensure that sterility of the contents is not compromised. Packaging should be carefully checked for completeness and all components should be carefully checked to ensure that there is no damage prior to use. Damaged packages or products should not be used, and should be returned to Globus Medical. During surgery, after the correct size has been determined, remove the products from the packaging using aseptic technique.

The instruments are provided nonsterile and are steam sterilized prior to use, as described in the STERILIZATION section below. Following use or exposure to soil, instruments and instrument trays and cases must be cleaned, as described in the CLEANING section below.

## HANDLING

All instruments and implants should be treated with care. Improper use or handling may lead to damage and/or possible malfunction. Instruments should be checked to ensure that they are in working order prior to surgery.

Implants are single use devices and should not be cleaned. Re-cleaning of single use implants might lead to mechanical failure and/or material degradation. Discard any implants that may have been accidentally contaminated.

## CLEANING

Instruments should be cleaned separately from instrument trays and cases. Lids should be removed from cases for the cleaning process, if applicable. All instruments that can be disassembled must be disassembled for cleaning. All handles must be detached. Instruments may be reassembled following sterilization. The products should be cleaned using neutral cleaners before sterilization and introduction into a sterile surgical field or (if applicable) return of the product to Globus Medical.

Cleaning and disinfecting can be performed with aldehyde-free solvents at higher temperatures. Cleaning and decontamination must include the use of neutral cleaners followed by a deionized water rinse. Note: certain cleaning solutions such as those containing formalin, glutaraldehyde, bleach and/or other alkaline cleaners may damage some devices, particularly instruments; these solutions should not be used.

The following cleaning methods should be observed when cleaning instruments after use or exposure to soil, and prior to sterilization:

1. Immediately following use, ensure that the instruments are wiped down to remove all visible soil and kept from drying by submerging or covering with a wet towel.
2. Disassemble all instruments that can be disassembled.
3. Rinse the instruments under running tap water to remove all visible soil. Flush the lumens a minimum of 3 times, until the lumens flush clean.
4. Prepare Enzo<sup>®</sup> (or a similar enzymatic detergent) per manufacturer's recommendations.
5. Immerse the instruments in the detergent and allow them to soak for a minimum of 2 minutes.
6. Use a soft bristled brush to thoroughly clean the instruments. Use a pipe cleaner for any lumens. Pay close attention to hard to reach areas.
7. Using a sterile syringe, draw up the enzymatic detergent solution. Flush any lumens and hard to reach areas until no soil is seen exiting the area.
8. Remove the instruments from the detergent and rinse them in running warm tap water.
9. Prepare Enzo<sup>®</sup> (or a similar enzymatic detergent) per manufacturer's recommendations in an ultrasonic cleaner.
10. Completely immerse the instruments in the ultrasonic cleaner and ensure detergent is in lumens by flushing the lumens. Sonicate for a minimum of 3 minutes.
11. Remove the instruments from the detergent and rinse them in running deionized water or reverse osmosis water for a minimum of 2 minutes.

12. Dry instruments using a clean soft cloth and filtered pressurized air.
13. Visually inspect each instrument for visible soil. If visible soil is present, then repeat cleaning process starting with Step 3.

## CONTACT INFORMATION

Globus Medical may be contacted at 1-866-GLOBUS1 (456-2871). A surgical technique manual may be obtained by contacting Globus Medical.

## STERILIZATION

These implants may be available sterile or nonsterile. Instruments are available nonsterile.

Sterile implants are sterilized by gamma radiation, validated to ensure a Sterility Assurance Level (SAL) of 10<sup>-6</sup>. Sterile products are packaged in a heat sealed, Tyvek pouch. The expiration date is provided in the package label. These products are considered sterile unless the packaging has been opened or damaged. Sterile implants meet pyrogen limit specifications.

Nonsterile implants and instruments have been validated following ANSI/AAMI/ISO 17665-1:2006 Guidelines for Steam Sterility Validation to assure a Sterility Assurance Level (SAL) of 10<sup>-6</sup>. The use of an FDA-cleared wrap is recommended, per the Association for the Advancement of Medical Instrumentation (AAMI) ST79, Comprehensive Guide to Steam Sterilization and Sterility Assurance in Health Care Facilities. It is the end user's responsibility to use only sterilizers and accessories (such as sterilization wraps, sterilization pouches, chemical indicators, biological indicators, and sterilization cassettes) that have been cleared by the FDA for the selected sterilization cycle specifications (time and temperature).

When using a rigid sterilization container, the following must be taken into consideration for proper sterilization of Globus devices and loaded graphic cases:










- Recommended sterilization parameters are listed in the table below.
- Only FDA-cleared rigid sterilization containers for use with pre-vacuum steam sterilization may be used.
- When selecting a rigid sterilization container, it must have a minimum filter area of 176 in<sup>2</sup> total, or a minimum of four (4) 7.5 in diameter filters.
- No more than one (1) loaded graphic case or its contents can be placed directly into a rigid sterilization container.
- Stand-alone modules/racks or single devices must be placed, without stacking, in a container basket to ensure optimal ventilation.
- The rigid sterilization container manufacturer's instructions for use are to be followed; if questions arise, contact the manufacturer of the specific container for guidance.
- Refer to AAMI ST79 for additional information concerning the use of rigid sterilization containers.

For implants and instruments provided NONSTERILE, sterilization is recommended (wrapped or containerized) as follows:

Method	Cycle Type	Temperature	Exposure Time	Drying Time
Steam	Pre-vacuum	132°C (270°F)	4 Minutes	30 Minutes

*These parameters are validated to sterilize only this device. If other products are added to the sterilizer, the recommended parameters are not valid and new cycle parameters must be established by the user. The sterilizer must be properly installed, maintained, and calibrated. Ongoing testing must be performed to confirm inactivation of all forms of viable microorganisms.*

**CAUTION:** Federal Law (USA) Restricts this Device to Sale by or on the order of a Physician.

SYMBOL TRANSLATION			
	CATALOGUE NUMBER		STERILIZED BY IRRADIATION
	LOT NUMBER		AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY
	CAUTION		MANUFACTURER
	SINGLE USE ONLY		USE BY (YYYY-MM-DD)
	QUANTITY		

DI201 REV A

# IMPORTANT INFORMATION ON CAPTIVATE™ COMPRESSION SCREWS

## DESCRIPTION

CAPTIVATE™ Compression Screws consist of bone screws designed to compact juxtaposed bone for reconstruction and enhanced arthrodesis. The implants are available in various diameters and lengths to accommodate patient anatomy, with headless, partially or fully threaded, solid or cannulated, and variable length (VL) options. CAPTIVATE™ implants are manufactured from titanium alloy, cobalt chromium molybdenum alloy, or stainless steel, as specified in ASTM F136, F1295, F1472, F1537 and F138.

## INDICATIONS

CAPTIVATE™ Compression Screws are indicated for use in adult and pediatric patients, for fracture repair and fixation, osteotomy, joint fusion, reconstruction and arthrodesis of bones appropriate for the size of the device.

CAPTIVATE™ VL Compression Screws are indicated for use in adult and pediatric patients, for fracture repair and fixation, osteotomy, joint fusion, reconstruction and arthrodesis of the phalanges, metacarpals, carpals, metatarsals, midfoot, hind foot, ankle, fibula, distal tibia, proximal tibia, radius, ulna, humerus, and clavicle.

## WARNINGS

The correct implant selection is extremely important. Failure to use the appropriate implant for the fracture condition may accelerate clinical failure. Failure to use the proper component to maintain adequate blood supply and provide rigid fixation may result in loosening, bending, cracking or fracture of the implant and/or bone. The correct implant size for a given patient can be determined by evaluating the patient's height, weight, functional demands and anatomy. Every implant must be used in the correct anatomic location, consistent with accepted standards of internal fixation.

## PRECAUTION

The implantation of compression screw devices should be performed only by experienced surgeons with specific training in the use of this system because this is a technically demanding procedure presenting a risk of serious injury to the patient. Preoperative planning and patient anatomy should be considered when selecting implant size.

Surgical implants must never be reused. An explanted implant must never be reimplanted. Even though the device appears undamaged, it may have small defects and internal stress patterns which could lead to breakage.

## MRI SAFETY INFORMATION

These devices have not been evaluated for safety and compatibility in the MR environment. It has not been tested for heating, migration, or image artifact in the MR environment. The safety of these devices in the MR environment is unknown. Scanning a patient who has this device may result in patient injury.

## CONTRAINDICATIONS

Use of these implants is contraindicated in patients in the following cases:

- Any active or suspended latent infection or marked local inflammation in or about the affected area.
- Compromised vascularity that would inhibit adequate blood supply to the fracture or the operative site.
- Bone stock compromised by disease, infection or prior implantation that cannot provide adequate support and/or fixation of the devices.
- Material sensitivity, documented or suspected.
- Obesity. An overweight or obese patient can produce loads on the implant that can lead to failure of the device itself.
- Patients having inadequate tissue coverage over the operative site.
- Implant utilization that would interfere with anatomical structures or physiological performance.
- Any mental or neuromuscular disorder which would create an unacceptable risk of fixation failure or complications in postoperative care.
- Other medical or surgical conditions which would preclude the potential benefit of surgery.

## CAUTIONS

### Pre-operative

- These implants are single use only.
- Implants that came in contact with body fluids should never be reused.
- Ensure that all components needed for surgery are available in the surgical suite.
- Inspection is recommended prior to surgery to determine if implants have been damaged during storage.
- While rare, intra-operative fracture or breakage of instruments can occur. Instruments which have experienced excessive use or excessive force are susceptible to fracture. Instruments should be examined for wear or damage prior to surgery.

### Intra-operative

- Avoid surface damage of implants.
- Discard all damaged or mishandled implants.
- Contouring or bending of an implant should be avoided where possible, because it may reduce its fatigue strength and can cause failure under load.
- Implants are available in different versions, varying for example in length, diameter, material and number of drilled holes. Select the required version carefully.
- During the course of the operation, repeatedly check to ensure that the connection between the implant and the instrument, or between the instruments, is secure.
- Implants which consist of several components must only be used in the prescribed combination (refer to the ANTHEM™ Surgical Technique Guide).
- After the procedure check the proper positioning of all implants using the image intensifier.
- Do not use components from this system in conjunction with components from any other manufacturer's system unless otherwise specified (refer to the ANTHEM™ Surgical Technique Guide).

### Post-operative

- Post-operative patient activity: These implants are neither intended to carry the full load of the patient acutely, nor intended to carry a significant portion of the load for extended periods of time. For this reason post-operative instructions and warnings to patients are extremely important. External immobilization (e.g. bracing or casting) may be employed until X-rays or other procedures confirm adequate bone consolidation.
- The implant is a short-term implant. In the event of a delay in bone consolidation, or if such consolidation does not take place, or if explantation is not carried out, complications may occur, for example fracture or loosening of the implant or instability of the implant system. Regular post-operative examinations (e.g., X-ray checks) are advisable.
- The risk of post-operative complication (e.g. failure of an implant) is higher if patients are obese and/or cannot follow the recommendations of the physician because of any mental or neuromuscular disorder. For this reason those patients must have additional post-operative follow-up.
- Implant removal should be followed by adequate postoperative management to avoid fracture or refracture of the bone.

## INFORMING THE PATIENT

The implant affects the patient's ability to carry loads and her/his mobility and general living circumstances. The surgeon must counsel each patient individually on correct behavior and activity after the implantation.

The surgeon must warn each patient that the device cannot and does not replicate a normally healthy bone, that the device can break or become damaged as a result of strenuous activity, trauma, mal-union or non-union and that the device has a finite expected service life and may need to be removed at some time in the future.

## ADVERSE EFFECTS

In many instances, adverse results may be clinically related rather than device related. The following are the most frequent adverse effects involving the use of internal fracture fixation devices:

- Delayed union or non-union of the fracture site.
- These devices can break when subjected to the increased loading associated with delayed unions and/or non-unions. Internal fixation devices are load sharing devices which are intended to hold fracture bone surface in a position to facilitate healing. If healing is delayed or does not occur, the appliance may eventually break due to metal fatigue. Loads on the device produced by load bearing and the patient's activity level will dictate the longevity of the device.
- Conditions attributable to non-union, osteoporosis, osteomalacia, diabetes, inhibited revascularization and poor bone formation can cause loosening, bending, cracking, fracture of the device or premature loss of rigid fixation with the bone.
- Improper alignment can cause a malunion of the bone and/or bending, cracking or even breakage of the device.
- Increased fibrous tissue response around the fracture site due to unstable comminuted fractures.
- Early or late infection, deep or superficial.
- Deep venous thrombosis.
- Avascular necrosis.
- Shortening of the effected bone/fracture site.



# IMPORTANT INFORMATION ON CAPTIVATE™ COMPRESSION SCREWS

- Subclinical nerve damage may possibly occur as a result of the surgical trauma.
- Material sensitivity reactions in patients following surgical implantation have rarely been reported, however their significance awaits further clinical evaluation.

## PACKAGING

These implants may be supplied pre-packaged and sterile, using gamma irradiation. The integrity of the sterile packaging should be checked to ensure that sterility of the contents is not compromised. Packaging should be carefully checked for completeness and all components should be carefully checked to ensure that there is no damage prior to use. Damaged packages or products should not be used, and should be returned to Globus Medical. During surgery, after the correct size has been determined, remove the products from the packaging using aseptic technique.

The instruments are provided nonsterile and are steam sterilized prior to use, as described in the STERILIZATION section below. Following use or exposure to soil, instruments and instrument trays and cases must be cleaned, as described in the CLEANING section below.

## HANDLING

All instruments and implants should be treated with care. Improper use or handling may lead to damage and/or possible malfunction. Instruments should be checked to ensure that they are in working order prior to surgery.

Implants are single use devices and should not be cleaned. Re-cleaning of single use implants might lead to mechanical failure and/or material degradation. Discard any implants that may have been accidentally contaminated.

## CLEANING

Instruments should be cleaned separately from instrument trays and cases. Lids should be removed from cases for the cleaning process, if applicable. All instruments that can be disassembled must be disassembled for cleaning. All handles must be detached. Instruments may be reassembled following sterilization. The products should be cleaned using neutral cleaners before sterilization and introduction into a sterile surgical field or (if applicable) return of the product to Globus Medical.

Cleaning and disinfecting can be performed with aldehyde-free solvents at higher temperatures. Cleaning and decontamination must include the use of neutral cleaners followed by a deionized water rinse. Note: certain cleaning solutions such as those containing formalin, glutaraldehyde, bleach and/or other alkaline cleaners may damage some devices, particularly instruments; these solutions should not be used.

The following cleaning methods should be observed when cleaning instruments and instrument trays and cases after use or exposure to soil, and prior to sterilization:

1. Immediately following use, ensure that the instruments are wiped down to remove all visible soil and kept from drying by submerging or covering with a wet towel.
2. Disassemble all instruments that can be disassembled.
3. Rinse the instruments under running tap water to remove all visible soil. Flush the lumens a minimum of 3 times, until the lumens flush clean.
4. Prepare Enzo<sup>®</sup> (or a similar enzymatic detergent) per manufacturer's recommendations.
5. Immerse the instruments in the detergent and allow them to soak for a minimum of 2 minutes.
6. Use a soft bristled brush to thoroughly clean the instruments. Use a pipe cleaner for any lumens. Pay close attention to hard to reach areas.
7. Using a sterile syringe, draw up the enzymatic detergent solution. Flush any lumens and hard to reach areas until no soil is seen exiting the area.
8. Remove the instruments from the detergent and rinse them in running warm tap water.
9. Prepare Enzo<sup>®</sup> (or a similar enzymatic detergent) per manufacturer's recommendations in an ultrasonic cleaner.
10. Completely immerse the instruments in the ultrasonic cleaner and ensure detergent is in lumens by flushing the lumens. Sonicate for a minimum of 3 minutes.
11. Remove the instruments from the detergent and rinse them in running deionized water or reverse osmosis water for a minimum of 2 minutes.
12. Dry instruments using a clean soft cloth and filtered pressurized air.
13. Visually inspect each instrument for visible soil. If visible soil is present, then repeat cleaning process starting with Step 3.

## CONTACT INFORMATION

Globus Medical may be contacted at 1-866-GLOBUS1 (456-2871). A surgical technique manual may be obtained by contacting Globus Medical.

## STERILIZATION

These implants may be available sterile or nonsterile. Instruments are available nonsterile.

Sterile implants are sterilized by gamma radiation, validated to ensure a Sterility Assurance Level (SAL) of 10<sup>-6</sup>. Sterile products are packaged in a heat sealed, Tyvek pouch. The expiration date is provided in the package label. These products are considered sterile unless the packaging has been opened or damaged. Sterile implants meet pyrogen limit specifications.

Nonsterile implants and instruments have been validated following ANSI/AAMI/ISO 17665-1:2006 Guidelines for Steam Sterility Validation to assure a Sterility Assurance Level (SAL) of 10<sup>-6</sup>. The use of an FDA-cleared wrap is recommended, per the Association for the Advancement of Medical Instrumentation (AAMI) ST79, Comprehensive Guide to Steam Sterilization and Sterility Assurance in Health Care Facilities. It is the end user's responsibility to use only sterilizers and accessories (such as sterilization wraps, sterilization pouches, chemical indicators, biological indicators, and sterilization cassettes) that have been cleared by the FDA for the selected sterilization cycle specifications (time and temperature).

When using a rigid sterilization container, the following must be taken into consideration for proper sterilization of Globus devices and loaded graphic cases:

- Recommended sterilization parameters are listed in the table below.
- Only FDA-cleared rigid sterilization containers for use with pre-vacuum steam sterilization may be used.
- When selecting a rigid sterilization container, it must have a minimum filter area of 176 in<sup>2</sup> total, or a minimum of four (4) 7.5 in diameter filters.
- No more than one (1) loaded graphic case or its contents can be placed directly into a rigid sterilization container.
- Stand-alone modules/racks or single devices must be placed, without stacking, in a container basket to ensure optimal ventilation.
- The rigid sterilization container manufacturer's instructions for use are to be followed; if questions arise, contact the manufacturer of the specific container for guidance.
- Refer to AAMI ST79 for additional information concerning the use of rigid sterilization containers.

For implants and instruments provided NONSTERILE, sterilization is recommended (wrapped or containerized) as follows:

Method	Cycle Type	Temperature	Exposure Time	Drying Time
Steam	Pre-vacuum	132°C (270°F)	4 Minutes	30 Minutes

*These parameters are validated to sterilize only this device. If other products are added to the sterilizer, the recommended parameters are not valid and new cycle parameters must be established by the user. The sterilizer must be properly installed, maintained, and calibrated. Ongoing testing must be performed to confirm inactivation of all forms of viable microorganisms.*

**CAUTION:** Federal Law (USA) Restricts this Device to Sale by or on the order of a Physician.

## DI200 REV A












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