ANTHEM®
Proximal Tibia 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*
SURGICAL TECHNIQUE GUIDE

ANTHEM®

Proximal Tibia Fracture System

System Overview .................................................................................................................. 4
Implant Overview .................................................................................................................. 10
Lateral Locking Proximal Tibia Plate
  1. Preoperative Planning ................................................................................................. 12
  2. Patient Positioning ....................................................................................................... 12
  3. Approach ...................................................................................................................... 12
  4. Fracture Reduction ....................................................................................................... 14
  5. Plate Selection ............................................................................................................. 14
  6. Plate Placement
     Aiming Arm Assembly ................................................................................................. 15
  7. Creating a Box Construct ......................................................................................... 18
  8. Screw Insertion
     XR Lateral Locking Plate .............................................................................................. 17
    Lateral Locking Plate .................................................................................................... 17
  9. Verify Placement .......................................................................................................... 27
Final Construct ..................................................................................................................... 27
Optional: Removal .............................................................................................................. 28
Lateral Non-Locking Proximal Tibia Plate
  1. Preoperative Planning ................................................................................................. 29
  2. Patient Positioning ....................................................................................................... 29
  3. Approach ...................................................................................................................... 29
  4. Fracture Reduction ....................................................................................................... 29
  5. Plate Placement ........................................................................................................... 29
  6. Screw Insertion ........................................................................................................... 30
  7. Verify Placement .......................................................................................................... 34
Final Construct ..................................................................................................................... 34
Optional: Removal .............................................................................................................. 34
Medial Locking Proximal Tibia Plate
  1. Preoperative Planning ................................................................................................. 35
  2. Patient Positioning ....................................................................................................... 35
  3. Approach ...................................................................................................................... 35
  4. Fracture Reduction ....................................................................................................... 35
  5. Plate Placement ........................................................................................................... 35
  6. Screw Insertion ........................................................................................................... 36
  7. Verify Placement .......................................................................................................... 39
Final Construct ..................................................................................................................... 39
Optional: Removal .............................................................................................................. 40
Posteromedial Buttress Proximal Tibia Plate
  1. Preoperative Planning ................................................................................................. 41
  2. Patient Positioning ....................................................................................................... 41
  3. Approach ...................................................................................................................... 41
  4. Fracture Reduction ....................................................................................................... 41
  5. Plate Placement ........................................................................................................... 41
  6. Screw Insertion ........................................................................................................... 42
  7. Verify Placement .......................................................................................................... 46
Final Construct ..................................................................................................................... 46
Optional: Removal .............................................................................................................. 47
Instrument Overview .......................................................................................................... 48
Implant Sets ......................................................................................................................... 58
Instrument Set ...................................................................................................................... 66
Important Information .......................................................................................................... 68
The ANTHEM® Proximal Tibia Fracture System provides low profile, anatomically-contoured plates in a comprehensive set to treat a variety of tibial plateau and proximal tibia metaphyseal fractures.

The system features three styles of Lateral Proximal Tibia Plates, a Medial Locking Plate, and a Posteromedial Buttress Plate to address intra-articular and extra-articular fractures of the proximal tibia.

Streamlined and radiolucent instruments are designed to simplify the minimally invasive plating technique.
Lateral Plating Options

- **ANTHEM® XR Lateral Locking Plate** features an additional row of 2.5mm polyaxial locking screw options and a triple kickstand designed to provide additional medial column support
- **ANTHEM® Lateral Plate** features a triple kickstand to provide additional medial column support
- **Non-locking Lateral Plate** features a low profile design for simple lateral fracture patterns

Comprehensive System

- Includes a Medial Locking and Posteromedial Buttress Plate
- Innovative radiolucent instruments for MIS lateral procedures and retraction
- Select Small Fragment Plates included
### SCHATZKER CLASSIFICATION AND SAMPLE CONSTRUCTS

<table>
<thead>
<tr>
<th>TYPE I</th>
<th>LATERAL NON-LOCKING</th>
<th>XR LATERAL LOCKING</th>
<th>LATERAL LOCKING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="type1-lateral-non-locking.png" alt="Image" /></td>
<td><img src="type1-lateral-locking-xr.png" alt="Image" /></td>
<td><img src="type1-lateral-locking.png" alt="Image" /></td>
<td><img src="type1-lateral-locking.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE II</th>
<th>LATERAL NON-LOCKING</th>
<th>XR LATERAL LOCKING</th>
<th>LATERAL LOCKING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="type2-lateral-non-locking.png" alt="Image" /></td>
<td><img src="type2-lateral-locking-xr.png" alt="Image" /></td>
<td><img src="type2-lateral-locking.png" alt="Image" /></td>
<td><img src="type2-lateral-locking.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE III</th>
<th>LATERAL NON-LOCKING</th>
<th>XR LATERAL LOCKING</th>
<th>LATERAL LOCKING</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="type3-lateral-non-locking.png" alt="Image" /></td>
<td><img src="type3-lateral-locking-xr.png" alt="Image" /></td>
<td><img src="type3-lateral-locking.png" alt="Image" /></td>
<td><img src="type3-lateral-locking.png" alt="Image" /></td>
</tr>
<tr>
<td>TYPE IV</td>
<td>MEDIAL</td>
<td>POSTEROMEDIAL</td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------</td>
<td>---------------</td>
<td></td>
</tr>
<tr>
<td>![Image](TYPE IV)</td>
<td><img src="MEDIAL" alt="Image" /></td>
<td><img src="POSTEROMEDIAL" alt="Image" /></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE V</th>
<th>XR LATERAL LOCKING + MEDIAL</th>
<th>XR LATERAL LOCKING + POSTEROMEDIAL</th>
<th>XR LATERAL LOCKING + SMALL FRAGMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](TYPE V)</td>
<td>![Image](XR LATERAL LOCKING + MEDIAL)</td>
<td>![Image](XR LATERAL LOCKING + POSTEROMEDIAL)</td>
<td>![Image](XR LATERAL LOCKING + SMALL FRAGMENT)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TYPE VI</th>
<th>XR LATERAL LOCKING + MEDIAL</th>
<th>XR LATERAL LOCKING + POSTEROMEDIAL</th>
<th>XR LATERAL LOCKING + SMALL FRAGMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](TYPE VI)</td>
<td>![Image](XR LATERAL LOCKING + MEDIAL)</td>
<td>![Image](XR LATERAL LOCKING + POSTEROMEDIAL)</td>
<td>![Image](XR LATERAL LOCKING + SMALL FRAGMENT)</td>
</tr>
</tbody>
</table>
XR LATERAL LOCKING PLATE

Anatomic Plate
- Designed for an optimal fit to minimize intraoperative contouring and hardware prominence
- Proximal anterior contour designed to reduce tissue irritation

Rafting Screw Support
- Two rows of polyaxial rafting screws to support the articular surface
- Polyaxial locking holes (±20° cone of angulation) allow angled screw trajectories around prosthetics and accommodate varying patient anatomies

Triple Kickstand
- Multiple points of fixed angle support of medial column from laterally based plate
- Additional options for unstable bicondylar and proximal tibia metaphyseal fractures
Radiolucent Aiming Arm

- Optimized for lateral imaging using fluoroscopy and minimally invasive screw insertion
- Can be used with lateral locking plates
- Simplified assembly
- Self-retained tissue protection sleeves

Lateral view
**IMPLANT OVERVIEW**

**Lateral Plates**

*Locking Plates*
- XR Lateral Locking Plate
  - Additional row of 2.5mm polyaxial holes supports articular surface for complex articular injuries
- Lateral Locking Plate
  - Triple kickstand provides additional support of the medial column

*Non-Locking Plate*
- Lateral Non-Locking Plate
  - Low profile plate designed for buttressing of simple lateral tibial plateau fractures

**Medial Locking Plate**
- Designed to sit more posteriorly than competitive plates to reduce soft tissue irritation

**Posteromedial Buttress Plate**
- Versatile low profile plate designed to buttress posteromedial articular fragments
Small Fragment Locking Plates
- One Third Tubular and Reconstruction plates are provided for additional fragment-specific fixation options

Screws
1. 2.5mm Locking
2. 2.5mm Non-Locking
3. 3.5mm Locking
4. 3.5mm Non-Locking
5. 4.0 Cancellous
Refer to the package insert (also printed at the back of this manual) for 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 and/or a CT scan. Estimate the appropriate length and location of screws for the desired plate position.

**STEP 2  PATIENT POSITIONING**

Position the patient supine. Examine the fracture using fluoroscopy.

**STEP 3  APPROACH**

Create an anterolateral, lateral curved, or straight incision that allows access to the fracture. Carefully avoid surrounding soft tissue. Dissect through the fascia and split the illiotibial band.

*Lateral curved incision*
**RADIOLUCENT RETRACTION**

The Stabilizing Radiolucent Weitlaners and Radiolucent Hohmann Retractors are designed for fracture site visibility.

The Malleable Band secures the Stabilizing Radiolucent Weitlaners to the patient.

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

Once assembled, position the Stabilizing Radiolucent Weitlaner and retract the incision with the radiolucent arms. Wrap the band around the patient’s leg to secure the retractor.
STEP 4  FRACTURE REDUCTION

Reduce the fracture and verify that the articular surface is anatomically reduced using fluoroscopy. Provisional fixation may be performed using K-wires.

STEP 5  PLATE SELECTION

Select the lateral locking plate type and length that best accommodates the patient anatomy and fracture pattern.
Position the plate the lateral proximal tibia. Confirm placement using fluoroscopy. Alternatively, the plate may be attached to the Aiming Arm for placement.

**AIMING ARM ASSEMBLY**

Thread the **Plate Attachment Bolt** into the hole above the positioning slot in the neck of the plate. Slide the **Attachment Post** (left/right-specific) over the bolt and down to the plate. Align the spherical locators to the indentations on the plate. Use the **Arm Attachment Nut** to secure the post to the plate. The Attachment Post may be used for plate positioning.

The **Aiming Arm** is left/right-specific and allows visualization of plate position.

Attach the Aiming Arm to the Attachment Post assembly by placing it over the post. Secure the Aiming Arm to the post with the Arm Attachment Nut.

Position the plate on the proximal tibia. Confirm placement using lateral fluoroscopy or CT. Verify that the holes of the Aiming Arm align with the plate holes.
STEP 7 CREATING A BOX CONSTRUCT

With the Aiming Arm attached to the plate, use the Tissue Protection Sleeve and Entry Trocar to determine incision location, and make a small incision. Advance the Entry Trocar to break through to soft tissue until the Tissue Protection Sleeve snaps into place.

Remove the Entry Trocar and replace it with the Drill Sleeve and Positioning Pin. Thread the Drill Sleeve into the most distal plate hole and remove the Positioning Pin.

Confirm plate position using lateral fluoroscopy. Place a K-wire through the Drill Sleeve to ensure the plate position is maintained in the sagittal plane. Complete the box construct for diaphyseal targeting.

Plugs may be used with the Aiming Guide to indicate the last hole or holes that have been filled with screws.

K-wires may also be placed through the plate attachment post for preliminary fixation.
Screw Compatibility

Screw compatibility is shown below for the XR Lateral Locking Plate and the Lateral Locking Plate. If screw-plate locking is desired in a polyaxial hole, use locking screws only. MonoAx® Locking Screws may not be used in polyaxial holes.

All non-locking screws should be placed prior to any locking screws. Screw insertion order depends upon fracture type, preliminary reduction, and surgeon preference. Screws may be inserted through the proximal periarticular end of the plate or through the distal diaphyseal section.

XR Lateral Locking Plate

![Diagram of XR Lateral Locking Plate]

- **2.5mm Polyaxial Locking Holes**
- **2.0mm K-wires**
- **3.5mm Positioning Slot**
- **3.5mm Non-Locking Slots**
- **3.5mm Stacked Holes**

**Table of Screw Compatibility**

<table>
<thead>
<tr>
<th>3.5mm Positioning Slot or Non-Locking Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm Non-Locking</td>
</tr>
<tr>
<td>4.0mm Cancellous</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.5mm Polyaxial Locking Holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm Locking</td>
</tr>
<tr>
<td>3.5mm Non-Locking</td>
</tr>
<tr>
<td>2.5mm Non-Locking</td>
</tr>
<tr>
<td>4.0mm Cancellous</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.5mm Polyaxial Locking Holes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm Locking</td>
</tr>
<tr>
<td>3.5mm MonoAx® Locking</td>
</tr>
<tr>
<td>3.5mm Non-Locking</td>
</tr>
<tr>
<td>3.5mm Non-Locking</td>
</tr>
<tr>
<td>4.0mm Cancellous</td>
</tr>
</tbody>
</table>
SCREW INSERTION (CONT’D)

Lateral Locking Plate

2.0mm K-wires

3.5mm Positioning Slot

3.5mm Polyaxial Locking Holes

3.5mm Stacked Holes

3.5mm Non-Locking Slots

3.5mm Non-Locking

4.0mm Cancellous

3.5mm Positioning Slot

3.5mm Locking

3.5mm Non-Locking

4.0mm Cancellous

3.5mm Polyaxial Locking Holes

3.5mm Locking

3.5mm MonoAx® Locking

3.5mm Non-Locking

4.0mm Cancellous

3.5mm Stacked Holes

4.0mm Cancellous
Positioning Slot Screw

3.5mm Non-Locking Screws and 4.0mm Cancellous Screws

The positioning slot is used to adjust plate position.

### 3.5mm Positioning Slot

- 3.5mm Non-Locking
- 4.0mm Cancellous

### COLOR-CODED INSTRUMENTS

Drills and drill guides are color-coded by screw size.

<table>
<thead>
<tr>
<th>Color</th>
<th>Screw Diameter</th>
<th>Drill Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>2.5mm</td>
<td>1.8mm</td>
</tr>
<tr>
<td>Fuschia</td>
<td>3.5mm</td>
<td>2.7mm</td>
</tr>
<tr>
<td>Light Green</td>
<td>4.0mm</td>
<td>2.7mm</td>
</tr>
</tbody>
</table>
SCREW INSERTION (CONT’D)

Placing the positioning slot non-locking screw first allows for minor plate position adjustments. Insertion of the positioning slot screw cannot be performed through the Aiming Arm.

Use the 2.7x190mm Drill or the 2.7x280mm Calibrated Drill to 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 length and diameter using the gauges within the screw module.

Insert a 3.5mm Non-Locking or 4.0mm Cancellous Screw into the elongated slot using the T15 Driver manually or under power. Confirm plate position using fluoroscopy.

Adjust plate position as necessary before final tightening manually. Confirm screw position using fluoroscopy.
Proximal Screws in XR Lateral Locking and Lateral Locking Plates

Determine the appropriate combination of locking, non-locking, and cancellous screws for proper fixation. If screw-plate locking is desired in a polyaxial hole, only use locking screws.

2.5mm Polyaxial Locking Holes

- 2.5mm Locking
- 2.5mm Non-Locking

3.5mm Polyaxial Locking Holes

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

Polyaxial Proximal Rafting

2.5mm Locking and Non-Locking Screws

Pre-drill to the desired depth using the 1.8x190mm Drill Bit and the selected drill guide (see page 22). If desired, insert 1.8mm K-wires in the 2.5mm polyaxial holes of the XR Lateral Locking Plate to pre-drill. 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 screws using the T8 Driver with the Quick Connect Handle manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.

Insert 2.5mm Locking Screws using the 1.2Nm Torque Limiting Attachment.

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

Pre-drill to the desired depth using the 2.7mm Drill Bit and the selected drill guide (see page 22). Measure hole depth 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. Insert 3.5mm Locking and Non-Locking Screws and 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.

Insert 3.5mm Locking Screws using the 2.5Nm Torque Limiting Attachment.
POLYAXIAL DRILL GUIDE OPTIONS

1.8mm Speed Lock Drill Guide (2.5mm Screws) ●
2.7mm Speed Lock Drill Guide (3.5mm Screws) ●●

The Speed Lock Drill Guide may be used to drill nominal trajectories. The thumb lock locks the drill guide to the plate at the nominal screw trajectory.

1.8mm Soft Tissue Protector (2.5mm Screws) ●
2.7mm Soft Tissue Protector (3.5mm Screws) ●●

The Soft Tissue Protector allows for a ±20° cone of angulation on the polyaxial end and the nominal trajectory on the nominal end.
Kickstand Screws in XR Lateral Locking and Lateral Locking Plates

3.5mm Stacked Holes

- 3.5mm Locking
- 3.5mm MonoAx® Locking
- 3.5mm Non-Locking
- 4.0mm Cancellous

Insert the Kickstand Screw Protection Sleeve and the Drill Sleeve into the kickstand holes on the Aiming Arm, targeting the anterior (ANT), medial (MED), or posterior (POST) aspects of the medial condyle. Rotate the drill sleeve clockwise to engage the plate.

Pre-drill to the desired depth using the Calibrated 2.7mm Drill Bit. Measure hole depth using the Depth Gauge and remove the Drill Sleeve.

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

If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
### SCREW INSERTION (CONT’D)

#### Distal Screws in XR Lateral Locking and Lateral Locking Plates

<table>
<thead>
<tr>
<th>3.5mm Stacked Holes</th>
<th>XR Lateral Locking Plate</th>
<th>Lateral Locking Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm Locking</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
<tr>
<td>3.5mm MonoAx® Locking</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
<tr>
<td>3.5mm Non-Locking</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
<tr>
<td>4.0mm Cancellous</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.5mm Non-Locking Slot</th>
<th>XR Lateral Locking Plate</th>
<th>Lateral Locking Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5mm Non-Locking</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
<tr>
<td>4.0mm Cancellous</td>
<td>![Image](XR Lateral Locking Plate)</td>
<td>![Image](Lateral Locking Plate)</td>
</tr>
</tbody>
</table>

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

Confirm distal plate position using fluoroscopy. Insert the assembled Tissue Sleeve and Trocar in the desired hole and create a skin incision. Remove the Trocar and insert the Drill Sleeve and Positioning Pin. Thread the Drill Sleeve into the hole for stability and remove the Positioning Pin.

Pre-drill to the desired depth using the Calibrated 2.7mm Drill Bit. Measure hole depth using the Calibrated Drill Bit or remove the drill and determine screw length with 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. Insert 3.5mm or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power.

If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
Tissue Sleeve and Trocar inserting into Aiming Arm

Distal Screw Insertion

Drill insertion

Screw insertion

Suture Attachment

Sutures may be used to augment fracture fixation or repair soft tissue. The meniscus or other localized injured soft tissue may be optionally repaired with sutures following plate application.
DYNAMIC COMPRESSION THROUGH AIMING ARM

Dynamic compression of the fracture may be achieved by eccentrically placing a non-locking or cancellous screw through a slotted hole. All 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 by using the Drill Sleeve.

Dynamic compression can be facilitated through the Aiming Arm. Only holes indicated by a white line on the Aiming Arm support dynamic compression.

After inserting the Tissue Protection Sleeve, insert the Dynamic Compression Sleeve until the alignment tab fits inside the notch of the Tissue Sleeve. Holes in the Dynamic Compression Sleeve align the drill to the eccentric position in either direction.

Determine the desired direction of compression and drill to the desired depth in the appropriate hole. Remove the Dynamic Compression Sleeve and measure hole depth using the Depth Gauge.

Use the T15 Driver or Screw Holding Forceps to select the desired screw. Using the T15 Driver with the Quick Connect Handle, insert the screw into the desired hole.
STEP 9  VERIFY PLACEMENT

Confirm screw placement, screw trajectories, and joint reconstruction in all planes using fluoroscopy, radiographs, and/or CT. Ensure that screw tips are not intra-articular.

FINAL CONSTRUCT

XR Lateral Locking Plate

Lateral view  AP view

Lateral Locking Plate

Lateral view  AP view
OPTIONAL: REMOVAL

Detach sutures from the construct. Unlock all screws from the plate with a non-self retaining driver but do not remove the locking screws. This prevents simultaneous rotation of the plate and screws during removal. 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. 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 screw insertion and/or removal.

- T8 Non-Self Retaining Driver
- T15 Non-Self Retaining Driver
SURGICAL TECHNIQUE

ANTHEM®
Lateral Non-Locking Proximal Tibia Plate

Refer to the package insert (also printed at the back of this manual) for 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 and/or a CT scan. Estimate the appropriate length and location of screws for the desired plate position.

STEP 2  PATIENT POSITIONING

Position the patient supine. Examine the fracture using fluoroscopy.

STEP 3  APPROACH

Create an anterolateral, lateral curved or straight incision to the proximal tibia that allows for fracture reduction. Dissect through the fascia and split the iliotibial band. Carefully avoid surrounding soft tissue.

STEP 4  FRACTURE REDUCTION

Reduce the fracture and verify that the articular surface is anatomically reduced using fluoroscopy. Provisional fixation may be performed using K-wires and/or independent lag screws.

Confirm reduction using fluoroscopy.

STEP 5  PLATE PLACEMENT

Position the plate on the lateral proximal tibia. Confirm plate position using fluoroscopy.

K-wires or reduction clamps may be used to provisionally fix the plate to the bone.
STEP 6  SCREW INSERTION

The Lateral Non-Locking Plate accepts 2.5mm and 3.5mm Non-Locking and 4.0mm Cancellous Screws. The 3.5mm Non-Locking slots may be used for dynamic compression (see page 33).
Positioning Slot Screw

3.5mm Non-Locking or 4.0mm Cancellous Screws

Placing the positioning slot non-locking screw first allows for minor plate position adjustments. Use the 2.7x190mm Drill to 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 length and diameter using the gauges within the screw module. Insert a 3.5mm Non-Locking or 4.0mm Cancellous Screw into the elongated slot using the T15 Driver and the Quick Connect Handle manually or under power. Confirm plate position using fluoroscopy.

Adjust plate position as necessary before final tightening manually. Confirm screw position using fluoroscopy.

Screw insertion - Positioning Slot Screw
SCREW INSERTION (CONT’D)

Proximal Screws

2.5mm Non-Locking Screws

Pre-drill to the desired depth using the 1.8x190mm 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 manually or under power.

If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.

3.5mm Non-Locking and 4.0mm Cancellous Screws

Pre-drill to the desired depth using the 2.7x190mm mm Drill Bit and the **3.5mm Soft Tissue Protector**. Measure hole depth 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. Insert 3.5mm Non-Locking Screws or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power.

If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
**Distal Screws**

**3.5mm Non-Locking or 4.0mm Cancellous Screws**

Screws may be placed eccentrically in the slotted holes to provide fracture compression.

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 Screws or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power.

If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.

---

**DYNAMIC COMPRESSION**

Dynamic compression of the fracture may be achieved by eccentrically placing a non-locking or cancellous screw through a 3.5mm Non-Locking Slot. All 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 3.5mm Soft Tissue Protector, Spring Loaded into the oblong hole with no downward pressure. Place the selected Soft Tissue Protector eccentrically in the slotted hole.

Drill to the desired depth with the selected drill. Measure hole depth using the Depth Gauge. Use the T15 Driver or Screw Holding Forceps to select the desired screw. 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 to insert the screw under power if desired.
**STEP 7  VERIFY PLACEMENT**

Confirm screw placement, screw trajectories, and joint reconstruction in all planes using fluoroscopy, radiographs, and/or CT. Ensure the screw tips are not intra-articular.

**FINAL CONSTRUCT**

![Lateral view](image1.png) ![AP view](image2.png)

**OPTIONAL: REMOVAL**

To remove 2.5mm screws, use the Non-Self Retaining T8 Driver. For 3.5mm and 4.0mm screws, use the Non-Self Retaining T15 Driver. Remove all non-locking and cancellous screws using the T8 or T15 Non-Self Retaining Driver.

**NON-SELF RETAINING DRIVERS**

Non-Self Retaining Drivers help to maximize torque applied to the screw head during insertion and/or removal.

![T8 Non-Self Retaining Driver](image3.png)

![T15 Non-Self Retaining Driver](image4.png)
SURGICAL TECHNIQUE

ANTHEM®
Medial Locking Proximal Tibia Plate

Refer to the package insert (also printed at the back of this manual) for 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 and/or a CT. Estimate the appropriate length and location of screws for the desired plate position.

STEP 2 PATIENT POSITIONING

Position the patient supine. Using fluoroscopy, examine the fracture with AP and lateral views.

STEP 3 APPROACH

Create a medial/posteromedial incision to the proximal tibia that allows for fracture reduction. Carefully avoid surrounding soft tissue.

STEP 4 FRACTURE REDUCTION

Reduce the fracture and verify that the articular surface is anatomically using fluoroscopy. Provisional fixation may be performed using K-wires.

STEP 5 PLATE PLACEMENT

Position the plate on the medial proximal tibia. Confirm plate position using fluoroscopy. K-wires or reduction clamps may be used to provisionally fix the plate to the bone.
**Screw Compatibility**

Screw compatibility is shown below for the Medial Locking Plate. If screw-plate locking is desired in a polyaxial hole, only use locking screws. MonoAx® screws may not be used in polyaxial holes. The 3.5mm Non-Locking slots may be used for dynamic compression (see page 33). Screw insertion order depends upon fracture type, preliminary reduction, and surgeon preference. Screws may be inserted through the proximal periarticular end of the plate or through the distal diaphyseal section.

All non-locking screws should be placed prior to any locking screws.
Positioning Slot Screw

3.5mm Non-Locking Screws and 4.0mm Cancellous Screws

Placing the positioning slot non-locking screw first allows for minor plate position adjustments.

Use the 2.7mm Drill to 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 length and diameter using the gauges within the screw module.

Insert a 3.5mm Non-Locking or 4.0mm Cancellous Screw into the elongated slot using the T15 Driver and the Quick Connect Handle manually or under power. Confirm plate position using fluoroscopy.

Adjust plate position as necessary before final tightening manually. Confirm screw position using fluoroscopy.
**Polyaxial Proximal Screws**

**Polyaxial Rafting Screws**

**3.5mm Locking and Non-Locking Screws 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 Locking or Non-Locking Screws or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.

**Distal Screws**

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

Screws may be placed eccentrically in the 3.5mm Non-Locking Slots to provide fracture compression (see page 33).

Pre-drill to the desired depth using the 2.7mm Drill Bit and the selected drill guide (see page 22). Measure hole depth 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. Insert 3.5mm Locking or Non-Locking Screws or 4.0mm Cancellous Screws using the T15 Driver with the Quick Connect Handle manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
STEP 7  VERIFY PLACEMENT

Confirm screw placement, screw trajectories, and joint reconstruction in all planes using fluoroscopy. Ensure that screw tips are not intra-articular.

FINAL CONSTRUCT

Lateral view

AP view
OPTIONAL: REMOVAL

Unlock all screws from the plate with a non-self retaining driver but do not remove the locking screws. This prevents simultaneous rotation of the plate and screws during removal. 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. 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 insertion and/or removal.
SURGICAL TECHNIQUE

ANTHEM®
Posteromedial Buttress Proximal Tibia Plate

Refer to the package insert (also printed at the back of this manual) for 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 and/or a CT scan. Estimate the appropriate length and location of screws for the desired plate position.

STEP 2  PATIENT POSITIONING
Position the patient supine or prone. Examine the fracture using fluoroscopy.

STEP 3  APPROACH
Create a posteromedial or posterior incision to the proximal tibia that allows for fracture reduction. Carefully avoid surrounding soft tissue.

STEP 4  FRACTURE REDUCTION
Reduce the fracture and verify that the articular surface is anatomically reduced using fluoroscopy. Provisional fixation may be performed using K-wires and/or independent lag screws.
Confirm reduction using fluoroscopy.

STEP 5  PLATE PLACEMENT
Position the plate on the proximal tibia. Confirm plate position using fluoroscopy.
K-wires or reduction clamps may be used to provisionally fix the plate to the bone.
Screw Compatibility

Screw compatibility is shown below for the Posteromedial Buttress Plate. If screw-plate locking is desired in a polyaxial hole, only use locking screws. MonoAx® screws may not be used in polyaxial holes. The 3.5mm Non-Locking slots may be used for dynamic compression (see page 33).
Positioning Slot Screw

Placing the positioning slot non-locking screw first allows for minor plate position adjustments.

Use the 2.7mm Drill to 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 a 3.5mm Non-Locking or 4.0mm Cancellous Screw into the elongated slot. Confirm plate position using fluoroscopy.

Adjust plate position as necessary before final tightening. Confirm screw position using fluoroscopy.

The Posteromedial Butress Plate is designed to be undercontoured. The thin profile flexes to the bone when lagged down.
Proximal Screws

3.5mm Non-Locking Screws 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 non-locking screw.

Verify the 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 manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
Distal Screws

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

Screws may be placed eccentrically in the 3.5mm Non-Locking Slots to provide fracture compression (Refer to page 33 for instructions on achieving dynamic compression).

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 the screw length and diameter using the gauges within the screw module. Insert 3.5mm or 4.0mm Cancellous screws using the T15 Driver with the Quick Connect Handle manually or under power. If under power, final tightening should be performed manually. Confirm screw position using fluoroscopy.
STEP 7  VERIFY PLACEMENT

Confirm screw placement, screw trajectories, and joint reconstruction in all planes using fluoroscopy. Ensure that screw tips are not intra-articular.

FINAL CONSTRUCT

Lateral view  AP view
OPTIONAL: REMOVAL

Unlock all screws from the plate with a non-self retaining driver but do not remove the locking screws. This prevents simultaneous rotation of the plate and screws during removal. 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. 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 insertion and/or removal.
INSTRUMENT OVERVIEW

AIMING ARM INSTRUMENTS

6187.1000 Plate Attachment Bolt

6187.1100 Attachment Post, Left

6187.1300 Arm Attachment Nut

6187.2100 Attachment Post, Right

6187.3000 Aiming Arm, Left

6187.4000 Aiming Arm, Right

6187.3100 Tissue Protection Sleeve
AIMING ARM INSTRUMENTS (CONT’D)

6187.3110 Entry Trocar

6187.3150 Plug

6187.3200 Drill Sleeve

6187.3201 Dynamic Compression Sleeve

6187.3202 Drill Sleeve, Long

6187.3235 Drill, 3.5x280mm, Calibrated

6187.3300 Positioning Pin

6187.3400 Plate Reduction Device, 230mm, AO Quick Connect

6187.3500 K-wire Sleeve

6187.3227 Drill, 2.7x280mm, Calibrated

6187.3235 Drill, 3.5x280mm, Calibrated

6187.3600 Depth Gauge
AIMING ARM INSTRUMENTS (CONT’D)

6187.3715 Driver, T15 SR, 170mm, AO Quick Connect

6187.3815 Driver, T15 NSR, 200mm, AO Quick Connect

6187.3350 Sleeve, Screw Retention

6187.3935 Tap, 3.5x280mm, AO Quick Connect

6187.3940 Tap, 4.0x280mm, AO Quick Connect

6187.3105 Sleeve, Kickstand

K-WIRES

6179.1113 K-wire, 1.25x150mm, Trocar Tip

6187.0180 K-wire, 1.8x150mm, Trocar Tip
K-WIRES (CONT’D)

6179.1116 K-wire, 1.6x150mm, Trocar Tip

6187.0200 K-wire, 2.0x250mm, Trocar Tip

6187.0201 K-wire, 2.0x250mm, Drill Tip

6179.1216 1.6mm Plate Holding K-Wire

FORCEPS

6179.2001 Lobster Claw Reduction Forceps, Ratcheting

6179.2003 Point to Point Reduction Forceps, Narrow, Ratcheting
FORCEPS (CONT’D)

6179.2004 Point to Point Reduction Forceps, Wide, Ratcheting

DRILL GUIDES

6171.3118 1.8mm Polyaxial Soft Tissue Protector

6186.3127 2.7mm Polyaxial Soft Tissue Protector

6179.3125 2.5mm Soft Tissue Protector

6179.3135 3.5mm Soft Tissue Protector
DRILL GUIDES (CONT’D)

6179.3227 2.7mm Locking Drill Guide

6179.3316 1.6mm K-Wire Sleeve Insert

6171.4218 1.8mm Speed Lock Drill Guide

6171.4227 2.7mm Speed Lock Drill Guide

DRILLS

6187.5018 Drill, 1.8x190mm, AO Quick Connect

6187.5025 Drill, 2.5x140mm, AO Quick Connect

6187.5027 Drill, 2.7x190mm, AO Quick Connect

6187.5035 Drill, 3.5x140mm, AO Quick Connect
TAPS AND COUNTERSINKS

6179.5125 2.5mm Non-Locking Tap, AO Quick Connect

6179.5135 3.5mm Non-Locking Tap, AO Quick Connect

6179.5140 4.0mm Cancellous Tap, AO Quick Connect

6179.7000 Countersink, AO Quick Connect

HANDLES

6188.7001 Handle, AO Quick Connect

PLATE BENDING INSTRUMENTS

6179.7002 Plate Bending Iron

6179.7003 Plate Bending Iron Inverted
PLATE BENDING INSTRUMENTS (CONT’D)

6179.7005 Universal Bending Clamp

RETRACTORS

6179.7014 Radiolucent Hohmann Retractor, 8mm

6179.7015 Radiolucent Hohmann Retractor, 15mm

6171.7008 Malleable Wire Replacement
RETRACTORS (CONT’D)

6171.0002 Radiolucent Weitlaners 3x4, 8”

TORQUE LIMITERS

6171.5012 Torque Limiting Attachment, 1.2Nm, AO Quick Connect

6187.3801 Torque Limiting Attachment, 2.5Nm, AO Quick Connect

ELEVATOR/DENTAL PICK

6179.7019 Periosteal Elevator, 6mm Width, Curved

6179.7025 Dental Pick, Large Handle
DRIVERS

6187.5708 Driver, T8 SR, 100mm

6187.5715 Driver, T15 SR, 100mm

6187.5808 Driver, T8 NSR, 100mm

6187.5815 Driver, T15 NSR, 100mm

ADDITIONAL INSTRUMENTS

6179.7023 Plate Reduction Device, AO Quick Connect

6179.2000 Screw Holding Forceps

6179.2007 Wire Bending Pliers
# ANTHEM® SS PROXIMAL TIBIA FRACTURE SYSTEM IMPLANT SET 9187.9001

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2187.1102</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 2 Hole, 76mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.1104</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 4 Hole, 102mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.1106</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 6 Hole, 128mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.1108</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 8 Hole, 154mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.2102</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 2 Hole, 76mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.2104</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 4 Hole, 102mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.2106</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 6 Hole, 128mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.2108</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 8 Hole, 154mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3102</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 2 Hole, 88mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3104</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 4 Hole, 114mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3106</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 6 Hole, 140mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3108</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 8 Hole, 166mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3110</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 10 Hole, 192mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3112</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 12 Hole, 218mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3302</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 2 Hole, 91mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3304</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 4 Hole, 117mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3306</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 6 Hole, 143mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3308</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 8 Hole, 169mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3310</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 10 Hole, 195mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3312</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 12 Hole, 221mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3502</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 2 Hole, 69mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3504</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 4 Hole, 95mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3506</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 6 Hole, 121mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3702</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 2 Hole, 86mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3704</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 4 Hole, 112mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3706</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 6 Hole, 138mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3708</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 8 Hole, 164mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3710</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 10 Hole, 190mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.3712</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 12 Hole, 216mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4102</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 2 Hole, 88mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4104</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 4 Hole, 114mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4106</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 6 Hole, 140mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4108</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 8 Hole, 166mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4110</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 10 Hole, 192mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4112</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 12 Hole, 218mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>PART NO.</td>
<td>DESCRIPTION</td>
<td>QTY</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>2187.4302</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 2 Hole, 91mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4304</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 4 Hole, 117mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4306</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 6 Hole, 143mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4308</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 8 Hole, 169mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4310</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 10 Hole, 195mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4312</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 12 Hole, 221mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4502</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 2 Hole, 69mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4504</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 4 Hole, 95mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4506</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 6 Hole, 121mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4702</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 2 Hole, 86mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4704</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 4 Hole, 112mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4706</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 6 Hole, 138mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4708</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 8 Hole, 164mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4710</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 10 Hole, 190mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>2187.4712</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 12 Hole, 216mm, SS</td>
<td>1</td>
</tr>
<tr>
<td>9187.0001</td>
<td>ANTHEM® SS Proximal Tibia Fracture System Graphic Case</td>
<td></td>
</tr>
</tbody>
</table>
## ANTHEM® Ti PROXIMAL TIBIA FRACTURE SYSTEM IMPLANT SET 9187.9002

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1187.1102</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 2 Hole, 76mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.1104</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 4 Hole, 102mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.1106</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Left, 6 Hole, 128mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.2102</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 2 Hole, 76mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.2104</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 4 Hole, 102mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.2106</td>
<td>ANTHEM® Lateral Non-Locking Proximal Tibia Plate, Right, 6 Hole, 128mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3102</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 2 Hole, 88mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3104</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 4 Hole, 114mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3106</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 6 Hole, 140mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3108</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 8 Hole, 166mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3110</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 10 Hole, 192mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3112</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Left, 12 Hole, 218mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3302</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 2 Hole, 91mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3304</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 4 Hole, 117mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3306</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 6 Hole, 143mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3308</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 8 Hole, 169mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3310</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 10 Hole, 195mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3312</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Left, 12 Hole, 221mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3502</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 2 Hole, 69mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3504</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 4 Hole, 95mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3506</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Left, 6 Hole, 121mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3702</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 2 Hole, 86mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3704</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 4 Hole, 112mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3706</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 6 Hole, 138mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3708</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 8 Hole, 164mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3710</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 10 Hole, 190mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.3712</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Left, 12 Hole, 216mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4102</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 2 Hole, 88mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4104</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 4 Hole, 114mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4106</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 6 Hole, 140mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4108</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 8 Hole, 166mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4110</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 10 Hole, 192mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4112</td>
<td>ANTHEM® Lateral Proximal Tibia Plate XR, Right, 12 Hole, 218mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4302</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 2 Hole, 91mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4304</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 4 Hole, 117mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>PART NO.</td>
<td>DESCRIPTION</td>
<td>QTY</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>1187.4306</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 6 Hole, 143mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4308</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 8 Hole, 169mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4310</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 10 Hole, 195mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4312</td>
<td>ANTHEM® Medial Proximal Tibia Plate, Right, 12 Hole, 221mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4502</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 2 Hole, 69mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4504</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 4 Hole, 95mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4506</td>
<td>ANTHEM® Posteromedial Proximal Tibia Plate, Right, 6 Hole, 121mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4702</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 2 Hole, 86mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4704</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 4 Hole, 112mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4706</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 6 Hole, 138mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4708</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 8 Hole, 164mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4710</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 10 Hole, 190mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>1187.4712</td>
<td>ANTHEM® Lateral Proximal Tibia Plate, Right, 12 Hole, 216mm, Ti</td>
<td>1</td>
</tr>
<tr>
<td>9187.0002</td>
<td>ANTHEM® Ti Proximal Tibia Fracture System Graphic Case</td>
<td></td>
</tr>
</tbody>
</table>
## ANTHEM® PROXIMAL TIBIA FRACTURE SYSTEM

### SCREW MODULE 9187.9003

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>6179.2000</td>
<td>Screw Holding Forceps</td>
<td>1</td>
<td>7179.3040</td>
<td>Non-Locking Screw, 3.5x40mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5530</td>
<td>Locking Screw, 2.5x30mm, CoCr</td>
<td>4</td>
<td>7179.3042</td>
<td>Non-Locking Screw, 3.5x42mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5535</td>
<td>Locking Screw, 2.5x35mm CoCr</td>
<td>4</td>
<td>7179.3044</td>
<td>Non-Locking Screw, 3.5x44mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5540</td>
<td>Locking Screw, 2.5x40mm CoCr</td>
<td>4</td>
<td>7179.3046</td>
<td>Non-Locking Screw, 3.5x46mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5545</td>
<td>Locking Screw, 2.5x45mm CoCr</td>
<td>4</td>
<td>7179.3048</td>
<td>Non-Locking Screw, 3.5x48mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5550</td>
<td>Locking Screw, 2.5x50mm CoCr</td>
<td>4</td>
<td>7179.3050</td>
<td>Non-Locking Screw, 3.5x50mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5555</td>
<td>Locking Screw, 2.5x55mm CoCr</td>
<td>4</td>
<td>7179.3052</td>
<td>Non-Locking Screw, 3.5x52mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5560</td>
<td>Locking Screw, 2.5x60mm CoCr</td>
<td>4</td>
<td>7179.3054</td>
<td>Non-Locking Screw, 3.5x54mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5565</td>
<td>Locking Screw, 2.5x65mm CoCr</td>
<td>4</td>
<td>7179.3056</td>
<td>Non-Locking Screw, 3.5x56mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5570</td>
<td>Locking Screw, 2.5x70mm CoCr</td>
<td>4</td>
<td>7179.3058</td>
<td>Non-Locking Screw, 3.5x58mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5575</td>
<td>Locking Screw, 2.5x75mm CoCr</td>
<td>4</td>
<td>7179.3060</td>
<td>Non-Locking Screw, 3.5x60mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5580</td>
<td>Locking Screw, 2.5x80mm CoCr</td>
<td>4</td>
<td>7179.3065</td>
<td>Non-Locking Screw, 3.5x65mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5585</td>
<td>Locking Screw, 2.5x85mm CoCr</td>
<td>4</td>
<td>7179.3070</td>
<td>Non-Locking Screw, 3.5x70mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5590</td>
<td>Locking Screw, 2.5x90mm, CoCr</td>
<td>4</td>
<td>7179.3075</td>
<td>Non-Locking Screw, 3.5x75mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.5595</td>
<td>Locking Screw, 2.5x95mm, CoCr</td>
<td>4</td>
<td>7179.3080</td>
<td>Non-Locking Screw, 3.5x80mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.6530</td>
<td>Non-Locking Screw, 2.5x30mm, CoCr</td>
<td>4</td>
<td>7179.3085</td>
<td>Non-Locking Screw, 3.5x85mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.6535</td>
<td>Non-Locking Screw, 2.5x35mm, CoCr</td>
<td>4</td>
<td>7179.3090</td>
<td>Non-Locking Screw, 3.5x90mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.6540</td>
<td>Non-Locking Screw, 2.5x40mm, CoCr</td>
<td>4</td>
<td>7179.3095</td>
<td>Non-Locking Screw, 3.5x95mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7171.6545</td>
<td>Non-Locking Screw, 2.5x45mm, CoCr</td>
<td>4</td>
<td>7179.4040</td>
<td>Cancellous Screw, 4.0x40mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6550</td>
<td>Non-Locking Screw, 2.5x50mm, CoCr</td>
<td>4</td>
<td>7179.4045</td>
<td>Cancellous Screw, 4.0x45mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6555</td>
<td>Non-Locking Screw, 2.5x55mm, CoCr</td>
<td>4</td>
<td>7179.4050</td>
<td>Cancellous Screw, 4.0x50mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6560</td>
<td>Non-Locking Screw, 2.5x60mm, CoCr</td>
<td>4</td>
<td>7179.4055</td>
<td>Cancellous Screw, 4.0x55mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6565</td>
<td>Non-Locking Screw, 2.5x65mm, CoCr</td>
<td>4</td>
<td>7179.4060</td>
<td>Cancellous Screw, 4.0x60mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6570</td>
<td>Non-Locking Screw, 2.5x70mm, CoCr</td>
<td>4</td>
<td>7179.4065</td>
<td>Cancellous Screw, 4.0x65mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6575</td>
<td>Non-Locking Screw, 2.5x75mm, CoCr</td>
<td>4</td>
<td>7179.4070</td>
<td>Cancellous Screw, 4.0x70mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6580</td>
<td>Non-Locking Screw, 2.5x80mm, CoCr</td>
<td>4</td>
<td>7179.4075</td>
<td>Cancellous Screw, 4.0x75mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6585</td>
<td>Non-Locking Screw, 2.5x85mm, CoCr</td>
<td>4</td>
<td>7179.4080</td>
<td>Cancellous Screw, 4.0x80mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6590</td>
<td>Non-Locking Screw, 2.5x90mm, CoCr</td>
<td>4</td>
<td>7179.4085</td>
<td>Cancellous Screw, 4.0x85mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7171.6595</td>
<td>Non-Locking Screw, 2.5x95mm, CoCr</td>
<td>4</td>
<td>7179.4090</td>
<td>Cancellous Screw, 4.0x90mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.3020</td>
<td>Non-Locking Screw, 3.5x20mm, CoCr</td>
<td>5</td>
<td>7179.4095</td>
<td>Cancellous Screw, 4.0x95mm, Fully Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.3022</td>
<td>Non-Locking Screw, 3.5x22mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3024</td>
<td>Non-Locking Screw, 3.5x24mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3026</td>
<td>Non-Locking Screw, 3.5x26mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3028</td>
<td>Non-Locking Screw, 3.5x28mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3030</td>
<td>Non-Locking Screw, 3.5x30mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3032</td>
<td>Non-Locking Screw, 3.5x32mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3034</td>
<td>Non-Locking Screw, 3.5x34mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3036</td>
<td>Non-Locking Screw, 3.5x36mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7179.3038</td>
<td>Non-Locking Screw, 3.5x38mm, CoCr</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

62 | ANTHEM® Proximal Tibia Fracture System
<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>7179.5020</td>
<td>Locking Screw, 3.5x20mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5022</td>
<td>Locking Screw, 3.5x22mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5024</td>
<td>Locking Screw, 3.5x24mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5026</td>
<td>Locking Screw, 3.5x26mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5028</td>
<td>Locking Screw, 3.5x28mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5030</td>
<td>Locking Screw, 3.5x30mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5032</td>
<td>Locking Screw, 3.5x32mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5034</td>
<td>Locking Screw, 3.5x34mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5036</td>
<td>Locking Screw, 3.5x36mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5038</td>
<td>Locking Screw, 3.5x38mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5040</td>
<td>Locking Screw, 3.5x40mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5042</td>
<td>Locking Screw, 3.5x42mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5044</td>
<td>Locking Screw, 3.5x44mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5046</td>
<td>Locking Screw, 3.5x46mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5048</td>
<td>Locking Screw, 3.5x48mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5050</td>
<td>Locking Screw, 3.5x50mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5052</td>
<td>Locking Screw, 3.5x52mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5054</td>
<td>Locking Screw, 3.5x54mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5056</td>
<td>Locking Screw, 3.5x56mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5058</td>
<td>Locking Screw, 3.5x58mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5060</td>
<td>Locking Screw, 3.5x60mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5065</td>
<td>Locking Screw, 3.5x65mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5070</td>
<td>Locking Screw, 3.5x70mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5075</td>
<td>Locking Screw, 3.5x75mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5080</td>
<td>Locking Screw, 3.5x80mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5085</td>
<td>Locking Screw, 3.5x85mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5090</td>
<td>Locking Screw, 3.5x90mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.5095</td>
<td>Locking Screw, 3.5x95mm, CoCr</td>
<td>5</td>
</tr>
<tr>
<td>7179.8040</td>
<td>Cancellous Screw, 4.0x40mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8045</td>
<td>Cancellous Screw, 4.0x45mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8050</td>
<td>Cancellous Screw, 4.0x50mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8055</td>
<td>Cancellous Screw, 4.0x55mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8060</td>
<td>Cancellous Screw, 4.0x60mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8065</td>
<td>Cancellous Screw, 4.0x65mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8070</td>
<td>Cancellous Screw, 4.0x70mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8075</td>
<td>Cancellous Screw, 4.0x75mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8080</td>
<td>Cancellous Screw, 4.0x80mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8085</td>
<td>Cancellous Screw, 4.0x85mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8090</td>
<td>Cancellous Screw, 4.0x90mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>7179.8095</td>
<td>Cancellous Screw, 4.0x95mm, Partially Threaded, CoCr</td>
<td>2</td>
</tr>
<tr>
<td>9187.0003</td>
<td>ANTHEM® CoCr Proximal Tibia Fracture System Graphic Case</td>
<td>2</td>
</tr>
<tr>
<td>PART NO.</td>
<td>DESCRIPTION</td>
<td>QTY</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>2179.0004</td>
<td>ANTHEM® Reconstruction Plate, 4 Hole, 46mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.0006</td>
<td>ANTHEM® Reconstruction Plate, 6 Hole, 70mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.0008</td>
<td>ANTHEM® Reconstruction Plate, 8 Hole, 94mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.0010</td>
<td>ANTHEM® Reconstruction Plate, 10 Hole, 118mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.1304</td>
<td>ANTHEM® One Third Tubular Plate, 4 Hole, 48mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.1306</td>
<td>ANTHEM® One Third Tubular Plate, 6 Hole, 72mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.1308</td>
<td>ANTHEM® One Third Tubular Plate, 8 Hole, 96mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>2179.1310</td>
<td>ANTHEM® One Third Tubular Plate, 10 Hole, 120mm, SS</td>
<td>2</td>
</tr>
<tr>
<td>9187.0004</td>
<td>ANTHEM® SS Proximal Tibia Small Fragment Module</td>
<td></td>
</tr>
<tr>
<td>PART NO.</td>
<td>DESCRIPTION</td>
<td>QUANTITY</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>1179.0004</td>
<td>ANTHEM® Reconstruction Plate, 4 Hole, 46mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.0006</td>
<td>ANTHEM® Reconstruction Plate, 6 Hole, 70mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.0008</td>
<td>ANTHEM® Reconstruction Plate, 8 Hole, 94mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.0010</td>
<td>ANTHEM® Reconstruction Plate, 10 Hole, 118mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.1304</td>
<td>ANTHEM® One Third Tubular Plate, 4 Hole, 48mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.1306</td>
<td>ANTHEM® One Third Tubular Plate, 6 Hole, 72mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.1308</td>
<td>ANTHEM® One Third Tubular Plate, 8 Hole, 96mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>1179.1310</td>
<td>ANTHEM® One Third Tubular Plate, 10 Hole, 120mm, Ti</td>
<td>2</td>
</tr>
<tr>
<td>9187.0005</td>
<td>ANTHEM® Ti Proximal Tibia Small Fragment Module</td>
<td>1</td>
</tr>
</tbody>
</table>
# ANTHEM® PROXIMAL TIBIA FRACTURE SYSTEM INSTRUMENT SET 9187.9006

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>6187.0180</td>
<td>K-wire, 1.8x150mm, Trocar</td>
<td>10</td>
</tr>
<tr>
<td>6187.0200</td>
<td>K-wire, 2.0x250mm, Trocar</td>
<td>10</td>
</tr>
<tr>
<td>6187.0201</td>
<td>K-wire, 2.0x250mm, Drill</td>
<td>5</td>
</tr>
<tr>
<td>6187.1000</td>
<td>Plate Attachment Bolt</td>
<td>2</td>
</tr>
<tr>
<td>6187.1100</td>
<td>Attachment Post, Left</td>
<td>1</td>
</tr>
<tr>
<td>6187.2100</td>
<td>Attachment Post, Right</td>
<td>1</td>
</tr>
<tr>
<td>6187.1300</td>
<td>Arm Attachment Nut</td>
<td>3</td>
</tr>
<tr>
<td>6187.3000</td>
<td>Aiming Arm, Left</td>
<td>1</td>
</tr>
<tr>
<td>6187.4000</td>
<td>Aiming Arm, Right</td>
<td>1</td>
</tr>
<tr>
<td>6187.3100</td>
<td>Tissue Protection Sleeve</td>
<td>4</td>
</tr>
<tr>
<td>6187.3105</td>
<td>Kickstand Sleeve</td>
<td>2</td>
</tr>
<tr>
<td>6187.3110</td>
<td>Entry Trocar</td>
<td>2</td>
</tr>
<tr>
<td>6187.3150</td>
<td>Plug</td>
<td>4</td>
</tr>
<tr>
<td>6187.3200</td>
<td>Drill Sleeve</td>
<td>4</td>
</tr>
<tr>
<td>6187.3201</td>
<td>Dynamic Compression Sleeve</td>
<td>2</td>
</tr>
<tr>
<td>6187.3202</td>
<td>Drill Sleeve, Long</td>
<td>2</td>
</tr>
<tr>
<td>6187.3227</td>
<td>Drill, 2.7x280mm, Calibrated, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.3235</td>
<td>Drill, 3.5x280mm, Calibrated, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.3300</td>
<td>Positioning Pin</td>
<td>2</td>
</tr>
<tr>
<td>6187.3350</td>
<td>Screw Retention Sleeve</td>
<td>1</td>
</tr>
<tr>
<td>6187.3400</td>
<td>Plate Reduction Device, 230mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.3500</td>
<td>K-wire Sleeve</td>
<td>2</td>
</tr>
<tr>
<td>6187.3600</td>
<td>Depth Gauge</td>
<td>1</td>
</tr>
<tr>
<td>6187.3715</td>
<td>Driver, T15 SR, 170mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.3801</td>
<td>Torque Limiting Attachment, 2.5Nm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.3815</td>
<td>Driver, T15 NSR, 200mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.3935</td>
<td>Tap, 3.5x280mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.3940</td>
<td>Tap, 4.0x280mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.5018</td>
<td>Drill, 1.8x190mm, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.5025</td>
<td>Drill, 2.5x140mm, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.5027</td>
<td>Drill, 2.7x190mm, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.5035</td>
<td>Drill, 3.5x140mm, AO Quick Connect</td>
<td>2</td>
</tr>
<tr>
<td>6187.5708</td>
<td>Driver, T8 SR, 100mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.5715</td>
<td>Driver, T15 SR, 100mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.5808</td>
<td>Driver, T8 NSR, 100mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6187.5815</td>
<td>Driver, T15 NSR, 100mm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>PART NO.</td>
<td>DESCRIPTION</td>
<td>QTY</td>
</tr>
<tr>
<td>---------</td>
<td>--------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>6179.1113</td>
<td>K-wire, 1.25x150mm, Trocar Tip</td>
<td>10</td>
</tr>
<tr>
<td>6179.1116</td>
<td>K-wire, 1.6x150mm, Trocar Tip</td>
<td>10</td>
</tr>
<tr>
<td>6179.1216</td>
<td>1.6mm Plate Holding K-Wire</td>
<td>2</td>
</tr>
<tr>
<td>6179.2001</td>
<td>Lobster Claw Reduction Forceps, ratcheting</td>
<td>2</td>
</tr>
<tr>
<td>6179.2003</td>
<td>Point to Point Reduction Forceps, narrow, ratcheting</td>
<td>1</td>
</tr>
<tr>
<td>6179.2004</td>
<td>Point to Point Reduction Forceps, wide, ratcheting</td>
<td>1</td>
</tr>
<tr>
<td>6179.2007</td>
<td>Wire Bending Pliers</td>
<td>1</td>
</tr>
<tr>
<td>6179.3125</td>
<td>2.5mm Soft Tissue Protector</td>
<td>1</td>
</tr>
<tr>
<td>6179.3135</td>
<td>3.5mm Soft Tissue Protector</td>
<td>1</td>
</tr>
<tr>
<td>6179.3227</td>
<td>2.7mm Locking Drill Guide</td>
<td>2</td>
</tr>
<tr>
<td>6179.5125</td>
<td>2.5mm Non-Locking Tap</td>
<td>1</td>
</tr>
<tr>
<td>6179.5135</td>
<td>3.5mm Non-Locking Tap</td>
<td>1</td>
</tr>
<tr>
<td>6179.5140</td>
<td>4.0mm Cancellous Tap</td>
<td>1</td>
</tr>
<tr>
<td>6179.7000</td>
<td>Countersink, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6179.7002</td>
<td>Plate Bending Iron</td>
<td>1</td>
</tr>
<tr>
<td>6179.7003</td>
<td>Plate Bending Iron Inverted</td>
<td>1</td>
</tr>
<tr>
<td>6179.7005</td>
<td>Universal Bending Clamp</td>
<td>1</td>
</tr>
<tr>
<td>6179.7014</td>
<td>Radiolucent Hohmann Retractor, 8mm</td>
<td>2</td>
</tr>
<tr>
<td>6179.7015</td>
<td>Radiolucent Hohmann Retractor, 15mm</td>
<td>2</td>
</tr>
<tr>
<td>6179.7019</td>
<td>Periosteal Elevator, 6mm Width, Curved</td>
<td>2</td>
</tr>
<tr>
<td>6179.7023</td>
<td>Plate Reduction Device</td>
<td>1</td>
</tr>
<tr>
<td>6179.7025</td>
<td>Dental Pick, Large Handle</td>
<td>2</td>
</tr>
<tr>
<td>6179.7031</td>
<td>Depth Gauge, 110mm</td>
<td>1</td>
</tr>
<tr>
<td>6171.0002</td>
<td>Radiolucent Weitlaners 3x4, 8&quot;</td>
<td>1</td>
</tr>
<tr>
<td>6171.3118</td>
<td>1.8mm Polyaxial Soft Tissue Protector</td>
<td>1</td>
</tr>
<tr>
<td>6171.4218</td>
<td>1.8mm Speedlock Drill Guide</td>
<td>1</td>
</tr>
<tr>
<td>6171.4227</td>
<td>2.7mm Speedlock Drill Guide</td>
<td>1</td>
</tr>
<tr>
<td>6171.5012</td>
<td>Torque Limiting Attachment, 1.2Nm, AO Quick Connect</td>
<td>1</td>
</tr>
<tr>
<td>6171.7008</td>
<td>Malleable Wire Replacement</td>
<td>5</td>
</tr>
<tr>
<td>6186.3127</td>
<td>2.7mm Polyaxial Soft Tissue Protector</td>
<td>1</td>
</tr>
<tr>
<td>6188.7001</td>
<td>Handle, AO Quick Connect</td>
<td>1</td>
</tr>
</tbody>
</table>
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, titanium alloy, cobalt chromium molybdenum alloy, or stainless steel, as specified in ASTM F67, F136, F1295, F1472, F1537, F2229, F138 and F139. All implants are for single use only.

INDICATIONS
The ANTHEM® Fracture System is indicated for fixation of fractures, osteotomies, arthrodeseis 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. The clavicle hook plate may be used for dislocations of the acromioclavicular joint. Mini fragment plates are also indicated for fixation of fractures of the acetabulum, patella, and bone fragments, replantation, malunions and nonunions, and for non-load bearing stabilization and reduction of long bone fragments.

Small fragment, mini fragment, proximal tibia, clavicle and distal fibula plates may be used in all pediatric subgroups (except neonates) and small stature adults. Distal radius and mini fragment plates may be used in adolescents (12-21 years of age). Plating may be used in patients with osteopenic bone.

CONTRAINDICATIONS
Use of these implants is contraindicated in patients with the following conditions:
- 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.

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.

PRECAUTIONS
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
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.

CAUTIONS
Pre-operative
- These implants are for 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.

Post-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).

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 device 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.
IMPORTANT INFORMATION ON THE ANTHEM® FRACTURE SYSTEM

- Improper alignment can cause a mal-union 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.
- 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 aldehydes-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. If visible soil is present, then repeat cleaning process starting with Step 3.
4. Prepare Enzol® (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, flush the 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 Enzol® (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^-6. 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 to ensure an SAL of 10^-6. 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 in² total, or a minimum of four (4) 7.5in 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:

<table>
<thead>
<tr>
<th>Method</th>
<th>Cycle Type</th>
<th>Temperature</th>
<th>Exposure Time</th>
<th>Drying Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam</td>
<td>Pre-vacuum</td>
<td>132°C(270°F)</td>
<td>4 Minutes</td>
<td>30 Minutes</td>
</tr>
</tbody>
</table>

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