

Locking Large Fragment Overview



PERI-LOC[◇] Locked Plating System

Locking Large Fragment Overview Surgical Technique

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Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is the individual surgeon's decision, which addresses the needs of the specific patient.

Product overview

Introduction

The PERI-LOC® Periarticular Locked Plating System from Smith & Nephew offers the advantages of locked plating with the flexibility and benefits of traditional plating in one system. Offering both locking and non-locking screw options, the PERI-LOC system can provide a construct that resists angular (eg varus, valgus, torsional and axial) collapse while simultaneously acting as an effective aid to fracture reduction.

A simple and straight forward instrument set features standardized drill bits and color-coded instrumentation, making PERI-LOC efficient and easy to use.

Indications

The PERI-LOC Periarticular Locked Plating System can be used in adult and pediatric patients as well as patients with osteopenic bone. It is indicated for fixation of pelvic, small and long bone fractures, including those of the tibia, fibula, femur, pelvis, acetabulum, metacarpals, metatarsals, humerus, ulna, radius, calcaneus and clavicle.

Disposable components in the PERI-LOC Periarticular Locked Plating System are for single use only.

Design features and benefits

Optimal plate contours

The plate contours in the PERI-LOC[®] system were determined by studying a large collection of cadaveric specimens at the Cleveland Museum of Natural History.



Unique, versatile screw hole design

The PERI-LOC system features a unique screw hole that was designed to be used in a variety of applications at the surgeon's discretion. Each screw hole accepts both locking and non-locking screw options and allows for up to 1mm of axial compression, distraction or translation per hole. The unique design of this screw hole supports customized screw configurations to optimally treat each specific fracture.



Streamlined instrumentation

The PERI-LOC system has been designed to minimize confusion during the procedure. Coordinating drill guides, drill bits and screwdrivers are color-coded for ease of use.



	Drill Diameter	Screw Diameter	Driver Size
Red	3.5mm	4.5mm, 6.5mm	T25
Yellow	4.5mm	5.7mm Cannulated	3.5mm Cannulated Hex

Implant overview

Anatomically contoured locking plates

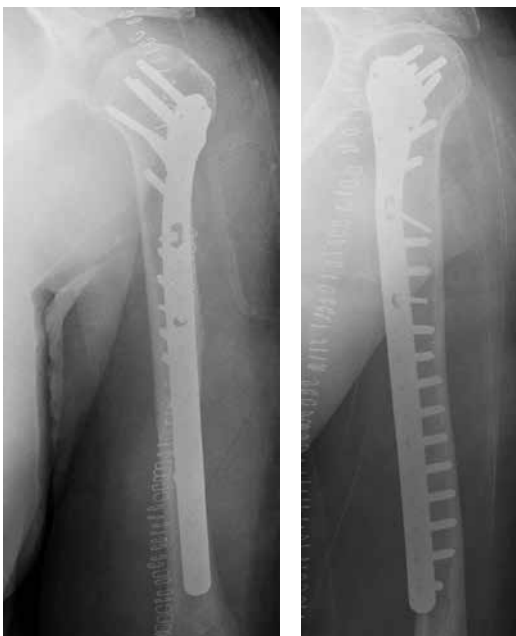
4.5mm Proximal Humerus Locking Plate

- Anteromedial bend of the plate shaft avoids excessive stripping of the deltoid
- Periarticular recesses allow for easy placement of independent lag screws
- Screw trajectory designed for optimal fixation of three and four part fractures
- Proximal suture holes with undercuts facilitate repair of soft tissues, particularly the rotator cuff tendons to augment bony fixation (up to a 2.0mm needle)
- Left/Right specific
- Available in 3, 5, 7, 9, 11, 13 and 15 hole configurations (93-246mm)



Specification overview

Plate dimensions	
Profile thickness of head	4.0mm
Width of head	22.7mm
Profile thickness of shaft	4.0mm
Width of shaft	12.4mm
Shaft hole spacing	12.7mm



4.5mm Lateral Distal Femur Locking Plate

- Beveled tip assists with submuscular insertion
- Radiolucent targeter available for percutaneous technique
- Anatomically designed with 90 inch (2.28 meter) radius anterior bow
- Periarticular recesses allow for easy placement of independent lag screws in strategic locations around the implant for reduction of the articular surface
- Left/Right specific
- Available in 6, 8, 10, 13, 16 and 19 hole configurations (155-399mm)



Specification overview

Plate dimensions	
Profile thickness of head	3.6mm
Width of head	36.0mm
Profile thickness of shaft	4.8mm
Width of shaft	17.6mm
Shaft hole spacing	18.0mm*

*Offset from center line by 1.7mm

Implant overview *continued*

4.5mm Lateral Proximal Tibia Locking Plate

- Beveled tip assists with submuscular insertion
- Radiolucent targeter available for percutaneous technique
- Plate head has a 5° posterior tilt and is contoured to match the lateral proximal tibia
- Plate shaft has a 3° bend to match the diaphysis of the tibia
- Proximal periarticular recesses allow for easy placement of independent lag screws for reduction of the articular surface
- Proximal suture holes for meniscal repair or K-wire placement for positioning
- Left/Right specific
- Available in 4, 6, 8, 10, 13 and 16 hole configurations (94-309mm)



Specification overview

Plate dimensions	
Profile thickness of head	3.0mm
Width of head	32.5mm
Profile thickness of shaft	3.7mm
Width of shaft	12.7mm
Shaft hole spacing	18.0mm

Compression plates

In addition to anatomically contoured locking plates, the PERI-LOC[®] system contains a variety of large fragment compression plates that can be used in many applications at the surgeon's discretion.

4.5mm Locking Compression Plate

- Beveled tip for submuscular insertion
- Each screw hole allows for 1mm of axial compression, distraction or translation
- Staggered hole placement for stress riser reduction
- Available in 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 and 24 hole configurations (85-444mm)



Specification overview

Plate dimensions	
Profile thickness of head	NA
Width of head	NA
Profile thickness of shaft	4.5mm
Width of shaft	15.0mm
Shaft hole spacing	18.0mm

4.5mm Narrow Compression Plate (non-locking)

- Beveled tip for submuscular insertion
- Ramped slots allow for 2mm of axial compression
- Available in 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 20 and 22 slot configurations (52-412mm)



Specification overview

Plate dimensions	
Profile thickness of head	NA
Width of head	NA
Profile thickness of shaft	4.0mm
Width of shaft	12.0mm
Shaft hole spacing	18.0mm

4.5mm Broad Compression Plate (non-locking)

- Beveled tip for submuscular insertion
- Ramped slots allow for 2mm of axial compression
- Staggered hole placement for stress riser reduction
- Available in 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20 and 22 slot configurations (123-411mm)



Specification overview

Plate dimensions	
Profile thickness of head	NA
Width of head	NA
Profile thickness of shaft	5.0mm
Width of shaft	16.0mm
Shaft hole spacing	18.0mm*

* Offset from center line by 1.6mm

Large fragment screws

4.5mm T25 Cortex Screws

- Aggressive self-tapping cutting flutes for ease of insertion in dense cortical bone
- T25 recess accepts self-retaining T25 driver



Specification overview

Screw dimensions	
Head height	3.6mm
Head outer diameter	8.0mm
Drive size	T25
Thread outer diameter	4.5mm
Core diameter	3.5mm
Thread pitch	1.75mm
Number of self-tapping flutes	3

4.5mm T25 Locking Screws

- Aggressive self-tapping cutting flutes for ease of insertion in dense cortical bone
- Head of locking screw has a triple-lead thread to facilitate ease of insertion
- T25 recess accepts self-retaining T25 driver



Specification overview

Screw dimensions	
Head height	3.4mm
Head outer diameter	7.9mm
Drive size	T25
Thread outer diameter	4.5mm
Core diameter	3.5mm
Thread pitch	1.75mm
Number of self-tapping flutes	3

5.7mm Cannulated Locking Screws

- 2.0mm cannulation
- Self-drilling, self-tapping cutting flutes for ease of insertion in dense cortical bone
- Accepts a 3.5mm Cannulated Hexdriver



Specification overview

Screw dimensions	
Head height	3.4mm
Head outer diameter	7.9mm
Hex size	3.5mm
Thread outer diameter	5.7mm
Core diameter	4.5mm
Thread pitch	1.75mm
Number of self-tapping flutes	3

6.5mm T25 Cancellous Screw, Partially Threaded

- Designed to be used inside or outside of the plate at the surgeon's discretion
- T25 recess accepts self-retaining T25 driver



Specification overview

Screw dimensions	
Head height	3.6mm
Head outer diameter	8.0mm
Driver size	T25
Thread outer diameter	6.5mm
Core diameter	3.0mm
Thread pitch	2.75mm
Number of self-tapping flutes	NA

4.5mm Locking Hole Insert

- Designed for filling unused holes in a plate, aiding in stress riser reduction¹
- Increases plate fatigue life
- Can be used in all 4.5mm PERI-LOC screw holes
- T25 recess accepts T25 driver



Specification overview

Screw dimensions	
Head height	3.4mm
Head outer diameter	7.7mm
Drive size	T25

Surgical technique

Fracture reduction

Articular fracture components must be anatomically reduced prior to plate application and screw insertion. Reduction aids should be placed so as not to interfere with final plate placement. Reduce and provisionally secure fragments using:

K-wires

2.0mm x 150mm	7116-1020
2.0mm x 228mm	7117-3361

Note If K-wires are to be inserted through the K-wire holes on a PERI-LOC[®] large fragment plate for the purpose of provisional fixation, it is recommended that 2.0mm wires be used. K-wires can also be placed through locking drill guides.

Provisional Fixation Pins

3.5mm x 18mm	7117-3324
3.5mm x 40mm	7117-3325

Note Initial insertion of provisional fixation pins may be started on power, but final seating should be performed by hand to avoid stripping of the threads and loss of purchase.

Reduction Forceps

Reduction Forceps with Ratchet, Bowed, 205mm	7117-3370
Reduction Forceps with Points, Broad	7117-3377
Reduction Forceps with Serrated Jaw	7117-3378



Reduction Forceps with Ratchet



Reduction Forceps with Points



Reduction Forceps with Serrated Jaw

4.5mm Proximal Humerus Locking Plate

Plate selection

Following fracture reduction, select the 4.5mm Proximal Humerus Locking Plate that best accommodates patient anatomy and fracture pattern.

Note The PERI-LOC® 4.5mm Proximal Humerus Locking Plate Preoperative Template (7118-0985) is available to assist with preoperative radiographic planning.

Plate positioning

Position the plate approximately 1cm distal to the rotator cuff attachment on the superior aspect of the greater tuberosity. The plate should sit posterolateral to the bicipital groove. Avoid placing plate too proximal on the humerus as this increases the risk of subacromial impingement. Similarly, placement too distal may compromise distal screw purchase in the humeral head.

The PERI-LOC 4.5mm Proximal Humerus Plate may be implanted using either the “proximal-first” or “shaft-first” screw insertion method.

Proximal-first method

This technique allows for initial fixation of the plate to the humeral head followed by its reduction to the shaft.

Shaft-first method

This technique allows for up to 5mm of proximal and/or distal plate translation along the humeral shaft prior to definitive fixation. To obtain maximum translation, the elongated slot in the plate shaft must be used. This method should be employed if plate positioning is an issue.



4.5mm Lateral Distal Femur Locking Plate

Plate selection

Following fracture reduction, select the 4.5mm Distal Femur Locking Plate that best accommodates patient anatomy and fracture pattern. In general, a longer plate allows for better mechanical advantage over a shorter plate. An allowance for five screw holes above the most proximal aspect of the fracture is recommended when selecting a plate length.

Note The PERI-LOC® 4.5mm Distal Femur Locking Plate Preoperative Template (7118-0915) is available to assist with preoperative radiographic planning.



Plate positioning

Position the plate by matching the contour of the plate to the distal portion of the lateral femur. Place a 3.5mm x 40mm Provisional Fixation Pin (7117-3325) through the center hole of the distal cluster.

To confirm proper plate placement, attach the 4.5mm/5.7mm Locking Screw Guide (7117-3539) with the 2.0mm K-wire Locking Guide Insert (7117-3531) to any of the distal holes. Insert a 2.0mm x 228mm K-wire (7117-3361) through the K-wire Locking Guide Insert. For correct coronal alignment, the K-wire must be parallel to the joint in the AP view.



If needed, loosen the Provisional Fixation Pin and adjust plate placement until correct alignment is achieved. Plate balance is essential as well. The most proximal and distal screw holes should be over bone, allowing for bicortical fixation of the bone. Proceed with definitive fixation.

Note Once correct alignment is achieved, this 2.0mm x 228mm K-wire may be used as a guide wire for a 5.7mm Cannulated Locking Screw.

4.5mm Lateral Proximal Tibia Locking Plate

Plate selection

Following fracture reduction, select the Lateral Proximal Tibia Locking Plate that best accommodates patient anatomy and fracture pattern. In general, a longer plate allows for better mechanical advantage over a shorter plate. An allowance for five screw holes below the most distal aspect of the fracture is recommended when selecting a plate length.

Note The PERI-LOC® 4.5mm Lateral Proximal Tibia Locking Plate Preoperative Template (7118-0916) is available to assist with preoperative radiographic planning.

Plate positioning

Insert the plate and position it to the lateral proximal tibia. Reduce the fracture manually and confirm coronal and sagittal alignment as well as plate position on the shaft. Allow for proximal positioning of the plate such that the most proximal screws support the articular surface.

Note The Lateral Proximal Tibia plate features periarticular recesses for placement of independent lag screws to assist with joint surface reduction.

Provisionally fix the plate to the diaphysis with two 3.5mm x 18mm Provisional Fixation Pins (7117-3324) with adequate spread between them. Place one 3.5mm x 40mm Provisional Fixation Pin (7117-3325) in one of the proximal holes under the joint. Proceed with definitive fixation.



Surgical technique *continued*

Screw insertion

The choice of screws, and the order and configuration, is a decision to be made by the individual surgeon depending on the patient's circumstances and needs. Smith & Nephew does not recommend any particular screw insertion order or configuration of the various types of screws available in the system.

4.5mm Cortex Screw

4.5mm Cortex Screws may be used in either Neutral or Compression mode. Neutral mode will place the screw directly in the center of the screw hole and is ideal when axial compression is not desired. Compression mode will place the screw eccentrically in the screw hole and allow the screw head to travel down the ramped hole so that axial compression is achieved during final seating. Each screw hole allows for 1mm of axial compression. If desired, distraction or translation can also be achieved using this technique.

Drill (neutral mode)

Attach the 3.5mm Neutral Locking Hole Insert (7117-3521) to the Universal Drill Guide Handle (7117-3349). Drill to the desired depth using the 3.5mm Drill Bit (7117-3505).

Drill (compression mode)

Attach the 3.5mm Compression Locking Hole Insert (7117-3522) to the Universal Drill Guide Handle (7117-3349). Position the locking hole insert into the desired hole with the arrow pointing towards the fracture line. Drill to the desired depth using the 3.5mm Drill Bit (7117-3505).



Measure

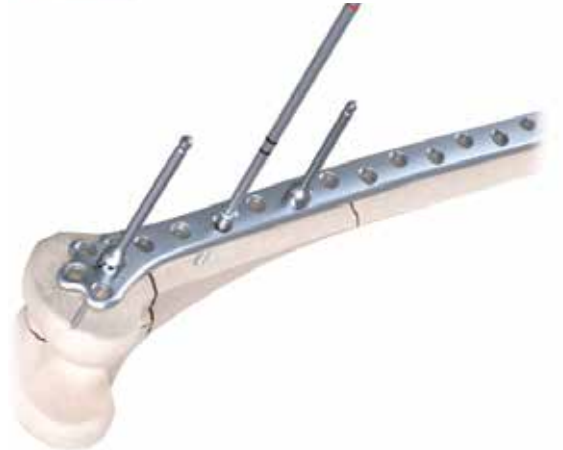
Measure for screw length by reading the exposed calibrations off the drill bit or by using the Large Fragment Screw Depth Gauge (7117-3331).

Tap (optional)

In areas of increased bone density, it may be beneficial to tap prior to screw insertion. Tap by using the 4.5mm Tap (7117-3319). This should be performed manually using the Small T-Handle (7117-3542).

Screw insertion

Insert the appropriate length 4.5mm Cortex Screw using the T25 Self-retaining Screwdriver (7117-3616). This should be done manually using the Large Screwdriver Handle (7117-3547).



4.5mm Locking Screw

There are two techniques that can be used to insert 4.5mm Locking Screws. If using percutaneous technique, the 4.5mm/5.7mm Locking Screw Guide (7117-3539) with the 3.5mm Locking Drill Guide Insert (7117-3530) will provide you with a channel through the soft tissue to insert screws. This option also provides a screw guide to ensure correct screw trajectory in osteopenic bone. Alternatively, this two piece assembly drill guide may be substituted with the 3.5mm Locking Drill Guide (7117-3451). This is a one piece drill guide and may be easier to thread into the locking holes located on highly contoured areas of the plate.

Using the 4.5mm/5.7mm Locking Screw Guide with the 3.5mm Locking Drill Guide Insert

Note This option may only be used with screws longer than 24mm. If the screw is 24mm or shorter, the screw may not be inserted through the 4.5mm/5.7mm Locking Screw Guide.

Drill

Thread the 4.5mm/5.7mm Locking Screw Guide (7117-3539) with the 3.5mm Locking Drill Guide Insert (7117-3530) into the threaded hole. Drill to the desired depth using the 3.5mm Drill Bit (7117-3505).



Measure

Measure for screw length by reading the exposed calibrations off the drill bit. If the measurement is longer than 24mm proceed with the described technique. If the measurement is 24mm or shorter, remove the 4.5mm/5.7mm Locking Screw Guide and insert the screw without the guide.

Tap (optional)

In areas of increased bone density, it may be beneficial to tap prior to screw insertion. Tap by using the 4.5mm Tap (7117-3319). This should be performed manually using the Small T-Handle (7117-3542).

Screw insertion

Remove the 3.5mm Locking Drill Guide Insert. Insert the appropriate length 4.5mm Locking Screw through the 4.5mm/5.7mm Locking Screw Guide using the T25 Self-retaining Screwdriver (7117-3616) to a depth where the top of the screw guide is in between the two black lines on the Screwdriver shaft. Remove the 4.5mm/5.7mm Locking Screw Guide, and proceed with final seating of the screw. Final seating should be performed manually using the Large Screwdriver Handle (7117-3547).



Using the 3.5mm Locking Drill Guide Drill

Thread the 3.5mm Locking Drill Guide (7117-3451) into the desired 4.5mm locking screw hole. Drill through the guide to the desired depth using the 3.5mm Drill Bit (7117-3505).



Measure

Measure for screw length by reading the exposed calibrations off the drill bit or by removing the locking drill guide and using the Large Fragment Screw Depth Gauge (7117-3331).

Tap (optional)

In areas of increased bone density, it may be beneficial to tap prior to screw insertion. Tap by using the 4.5mm Tap (7117-3319). This should be performed manually using the Small T-Handle (7117-3542).

Screw insertion

Remove the 3.5mm Locking Drill Guide and insert the appropriate length 4.5mm Locking Screw using the T25 Self-retaining Screwdriver (7117-3616). Final seating should be performed manually using the Large Screwdriver Handle (7117-3547).



Surgical technique *continued*

5.7mm Cannulated Locking Screw

Guide wire insertion

Thread the 4.5mm/5.7mm Locking Screw Guide (7117-3539) with the 2.0mm K-wire Locking Guide Insert (7117-3531) into the threaded hole. Insert a 2.0mm x 228mm K-wire (7117-3361) to the desired depth.



Measure

Measure for accurate screw length by sliding the 5.7mm Cannulated Depth Gauge (7117-3526) against the end of the 2.0mm K-wire Locking Guide Insert.



Screw insertion

Remove the 4.5mm/5.7mm Locking Screw Guide with 2.0mm K-wire Locking Guide Insert. Place the appropriate length 5.7mm Cannulated Locking Screw over the guide wire and insert using the 3.5mm Cannulated Hexdriver (7117-3536). Final seating should be performed manually using the Large Screwdriver Handle (7117-3547). Remove and discard guide wire.

Note In areas of increased bone density, it may be beneficial to drill prior to screw insertion. This should be done using the 4.5mm Cannulated Drill Bit (7117-3508).



6.5mm Cancellous Screws

Drill

Attach the 3.5mm Drill Guide Insert (7117-3513) to the Universal Drill Guide Handle (7117-3349). Drill to the desired depth using the 3.5mm Drill Bit (7117-3505).



Countersink (optional)

If using a 6.5mm Cancellous Screw outside the plate, countersinking the head will reduce implant profile. Prepare the bone surface by placing the Large Fragment Countersink (7117-3353) into the predrilled hole and turn to the right. Do not countersink on power. This should be performed manually using the Small T-Handle (7117-3542).

Measure

Measure for screw length by using the Large Fragment Screw Depth Gauge (7117-3331).



Tap (optional)

In areas of increased bone density, it may be beneficial to tap prior to screw insertion. Tap by using the 6.5mm Cancellous Tap (7117-3509). This should be performed manually using the Small T-Handle (7117-3542).

Screw insertion

Insert the appropriate length 6.5mm Cancellous Screw using the T25 Self-retaining Screwdriver (7117-3616). This should be done manually using the Large Screwdriver Handle (7117-3547).



4.5mm Locking Hole Insert

The 4.5mm Locking Hole Inserts (7480-0605) may be added to any 4.5mm screw hole in PERI-LOC Periarticular locking plates to increase plate fatigue and reduce stress risers.¹

Insert the 4.5mm Locking Hole Insert (7480-0605) into unused holes in the 4.5mm plates using the T25 Driver Shaft and a minimum 35 in-lb. Torque Limiter (7117-3623) (4.7NM)*.

The choice of Locking Hole Insert use and the configuration is a decision to be made by the individual surgeon depending on patient circumstances and needs. Smith & Nephew does not recommend any particular Locking Hole Insert quantity or configuration.



*Item currently not available in a set. Item must be ordered separately. The PERI-LOC 4.7NM Torque Limiter must be calibrated every six months.

Catalog information – Instruments

Sharp Hook

Cat. No. 7117-0043



Screw Forceps

Cat. No. 7117-0045



Reduction Forceps with Ratchet, 205mm

Cat. No. 7117-0044



Reduction Forceps with Speed Knob, 240mm

Cat. No. 7117-0050



Wire Bending Pliers, 140mm

Cat. No. 7117-0063



Socket Wrench with Universal Joint

Cat. No. 7117-0143



Articulated Tension Device with Gauge

Cat. No. 7117-0145



Large Fragment Screw Depth Gauge

Cat. No. 7117-3331



Universal Drill Guide Handle

Cat. No. 7117-3349



Large Fragment Countersink

Cat. No. 7117-3353



Lamina Spreader

Cat. No. 7117-3365



Reduction Forceps with Ratchet-Bowed, 205mm

Cat. No. 7117-3370



Reduction Forceps with Ratchet, 240mm

Cat. No. 7117-3371



Reduction Forceps with Points, Broad

Cat. No. 7117-3377



Reduction Forceps with Serrated Jaw

Cat. No. 7117-3378



Hohmann Retractor Long, 15mm Width

Cat. No. 7117-3393



Large Fragment Bending Iron

Cat. No. 7117-3484



3.5mm Self-retaining Hexdriver Shaft, 178mm

Cat. No. 7117-3487



3.5mm Drill Guide Insert

Cat. No. 7117-3513



2.0mm Parallel Wire/Drill Guide

Cat. No. 7117-3516



2.0mm Wire/Drill Insert

Cat. No. 7117-3517



3.5mm Compression Slot Insert

Cat. No. 7117-3518



3.5mm Neutral Slot Insert

Cat. No. 7117-3519



4.5mm Drill Guide Insert

Cat. No. 7117-3520



3.5mm Neutral Locking Hole Insert

Cat. No. 7117-3521



3.5mm Compression Locking Hole Insert

Cat. No. 7117-3522



Catalog information – Instruments *continued*

5.7mm Cannulated Depth Gauge

Cat. No. 7117-3526



Cannulated Bending Irons for K-wires

Cat. No. 7117-3527



Cannulated AO to Trinkle Adaptor

Cat. No. 7117-3528



3.5mm Locking Drill Guide Insert

Cat. No. 7117-3530



2.0mm K-Wire Locking Guide Insert

Cat. No. 7117-3531



4.5mm Locking Drill Guide Insert

Cat. No. 7117-3532



3.5mm Cannulated Hexdriver Shaft

Cat. No. 7117-3536



4.5/5.7mm Locking Screw Guide

Cat. No. 7117-3539



4.7mm Hexdriver

Cat. No. 7117-3540



Small T-Handle, Quick Coupling

Cat. No. 7117-3542



Tear Drop Handle Screwdriver with Quick Connect

Cat. No. 7117-3543



Self Centering Reverse Verbrugge

Cat. No. Description

7117-3544 190mm

7117-3545 240mm

7117-3546 280mm



Large Screwdriver Handle

Cat. No. 7117-3547



Large Fragment Guide Removal Assembly

Cat. No. 7117-3550



T25 Self-retaining Screwdriver Shaft, 120mm (not shown)

Cat. No. 7117-3586

T25 Self-retaining Screwdriver with Quick Connect, 178mm

Cat. No. 7117-3616



Catalog information – Disposables

K-wires with Trocar Point and Threaded Pins

Cat. No.	Description
7116-1020	2.0mm x 150mm
7117-3361	2.0mm x 228mm



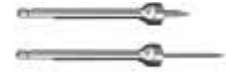
Tap with Quick Connect

Cat. No.	Description
7117-3319	4.5mm
7117-3509	6.5mm Cancellous



Provisional Fixation Pins

Cat. No.	Description
7117-3324	3.5mm x 18mm
7117-3325	3.5mm x 40mm



Drill Bits

Cat. No.	Description
7117-3504	3.5mm Short
7117-3505	3.5mm with Quick Connect
7117-3506	4.5mm with Quick Connect
7117-3507	4.5mm Short with Quick Connect
7117-3508	4.5mm Cannulated with Quick Connect



Catalog information – Sets

Large Fragment Instrument Set

Set No. 7181-0508

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7112-9401	Small Outer Case, 2.4mm	1	7117-3521	3.5mm Neutral Locking Hole Insert	1
7112-9402	Lid for Outer Cases	1	7117-3522	3.5mm Compression Locking Hole Insert	1
7117-0043	Sharp Hook	1	7117-3526	5.7mm Cannulated Depth Gauge	1
7117-0045	Screw Forceps	1	7117-3527	Cannulated Bending Iron for K-wires	1
7117-0063	Wire Bending Pliers	1	7117-3528	Cannulated AO to Trinkle Adaptor	1
7117-0351	Drill Guide Caddy	1	7117-3530	3.5mm Locking Drill Guide Insert	2
7117-0362	Tray Rev 1	1	7117-3531	2.0mm K-wire Locking Guide Insert	2
7117-0708	T25 Drill Caddy	1	7117-3532	4.5mm Locking Drill Guide Insert	2
7117-3331	Screw Depth Gauge	1	7117-3536	3.5mm Cannulated Hexdriver	2
7117-3349	Universal Drill Guide Handle	2	7117-3539	4.5/5.7mm Locking Screw Guide	4
7117-3353	Countersink	1	7117-3540	4.7mm Hexdriver	2
7117-3393	15mm Hohmann Retractor, Long	2	7117-3542	Small T-handle Quick Coupling	1
7117-3484	Large Fragment Bending Iron	2	7117-3543	Tear Drop Screwdriver Handle	1
7117-3487	3.5mm Self/Retaining Hexdriver Shaft, 178mm	1	7117-3547	Screwdriver Handle	1
7117-3513	3.5mm Drill Guide Insert	2	7117-3550	Guide Removal Assembly	1
7117-3516	2.0mm Parallel Wire/Drill Guide	1	7117-3586	T25 Self-retaining Screwdriver Shaft, 120mm	1
7117-3517	2.0mm Wire/Drill Insert	1	7117-3616	T25 Self-retaining Screwdriver with Quick Connect, 178mm	1
7117-3518	3.5mm Compress Slot Insert	1			
7117-3519	3.5mm Neutral Slot Insert	1			
7117-3520	4.5mm Drill Guide Insert	2			

Large Fragment Forceps Set

Set No. 7181-0112

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7112-9401	Small Outer Case, 2.4mm	1	7117-3370	Reduction Forceps with Ratchet Bowed	2
7112-9402	Lid for Outer Cases	1	7117-3371	240mm Reduction Forceps with Ratchet	1
7117-0044	Reduction Forceps, 205mm	1	7117-3377	Reduction Forceps with Broad Points	2
7117-0050	Reduction Forceps, 240mm	1	7117-3378	Reduction Forceps with Serrated Jaw	2
7117-0143	Socket Wrench	1	7117-3544	Reverse Verbrugge Forceps, 190mm	1
7117-0145	Tension Device	1	7117-3545	Reverse Verbrugge Forceps, 240mm	2
7117-0326	Forceps Tray	1	7117-3546	Reverse Verbrugge Forceps, 280mm	1
7117-0328	Large Fragment Straight Plates Tray	1			
7117-3365	Lamina Spreader	1			

Pins & Wires Set

Set No. 7181-0118

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7116-1020	2.0mm K-wire	6	7117-3506	4.5mm Drill Bit with Quick Connect	2
7117-3319	4.5mm Tap Quick Connect	2	7117-3507	4.5mm Short Drill Bit with Quick Connect	2
7117-3324	3.5mm PF Pin, 18mm	4	7117-3508	4.5mm Cann Drill Bit with Quick Connect	2
7117-3325	3.5mm PF Pin, 40mm	4	7117-3509	6.5mm Cancellous Tap with Quick Connect	2
7117-3361	2.0mm x 228mm K-wire with Trocar Point	6			
7117-3504	3.5mm Short Drill Bit	2			
7117-3505	3.5mm Drill Bit with Quick Connect	2			

PERI-LOC[®] Large Fragment Screw Set – T25

Set No. 7181-0470

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7112-9400	Large Outer Case, 4.8mm	1	7117-0363	Tray	1
7112-9402	Lid for Outer Cases	1	7117-0701	4.5mm T25 Cortex Screw, Caddy	1
7114-3110	10.0mm OD Washer	6	7117-0703	4.5mm T25 Locking Screw, Caddy	1
7114-3113	13.0mm OD Washer	6	7117-0705	6.5mm T25 Cancellous Screw, Caddy	1
7117-0355	5.7mm Cannulated Locking Screw, Caddy	1			

4.5mm Self-tapping T25 Cortex Screw



Cat. No.	Description	Qty	Cat. No.	Description	Qty
7382-6014	14mm	4	7382-6058	58mm	4
7382-6016	16mm	4	7382-6060	60mm	4
7382-6018	18mm	4	7382-6062	62mm	4
7382-6020	20mm	6	7382-6064	64mm	4
7382-6022	22mm	6	7382-6066	66mm	4
7382-6024	24mm	6	7382-6068	68mm	4
7382-6026	26mm	6	7382-6070	70mm	4
7382-6028	28mm	6	7382-6072	72mm	4
7382-6030	30mm	10	7382-6074	74mm	4
7382-6032	32mm	10	7382-6076	76mm	4
7382-6034	34mm	10	7382-6078	78mm	4
7382-6036	36mm	10	7382-6080	80mm	4
7382-6038	38mm	10	7382-6085	85mm	4
7382-6040	40mm	10	7382-6090	90mm	2
7382-6042	42mm	6	7382-6095	95mm	2
7382-6044	44mm	4	7382-6100	100mm	2
7382-6046	46mm	4	7380-6105*	105mm	0
7382-6048	48mm	4	7380-6110*	110mm	0
7382-6050	50mm	4	7380-6115*	115mm	0
7382-6052	52mm	4	7380-6120*	120mm	0
7382-6054	54mm	4	7380-6125*	125mm	0
7382-6056	56mm	4	7380-6130*	130mm	0

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Catalog information – Sets *continued*

PERI-LOC[®] Large Fragment Screw Set – T25 (*continued*)

4.5mm Self-tapping T25 Locking Screw

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7382-7010	10mm	4	7382-7056	56mm	4
7382-7012	12mm	4	7382-7058	58mm	4
7382-7014	14mm	4	7382-7060	60mm	4
7382-7016	16mm	4	7382-7062	62mm	4
7382-7018	18mm	4	7382-7064	64mm	4
7382-7020	20mm	6	7382-7066	66mm	4
7382-7022	22mm	6	7382-7068	68mm	4
7382-7024	24mm	6	7382-7070	70mm	4
7382-7026	26mm	6	7382-7072	72mm	4
7382-7028	28mm	6	7382-7074	74mm	4
7382-7030	30mm	10	7382-7076	76mm	4
7382-7032	32mm	10	7382-7078	78mm	4
7382-7034	34mm	10	7382-7080	80mm	4
7382-7036	36mm	10	7382-7085	85mm	4
7382-7038	38mm	10	7382-7090	90mm	2
7382-7040	40mm	10	7382-7095	95mm	2
7382-7042	42mm	6	7382-7100	100mm	2
7382-7044	44mm	4	7380-7105*	105mm	0
7382-7046	46mm	4	7380-7110*	110mm	0
7382-7048	48mm	4	7380-7115*	115mm	0
7382-7050	50mm	4	7380-7120*	120mm	0
7382-7052	52mm	4	7380-7125*	125mm	0
7382-7054	54mm	4	7380-7130*	130mm	0



5.7mm Cannulated Locking Screw

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7182-8020	20mm	3	7182-8075	75mm	5
7182-8025	25mm	3	7182-8080	80mm	5
7182-8030	30mm	3	7182-8085	85mm	3
7182-8035	35mm	3	7182-8090	90mm	3
7182-8040	40mm	3	7182-8095	95mm	3
7182-8045	45mm	3	7182-8100	100mm	3
7182-8050	50mm	3	7180-8105*	105mm	0
7182-8055	55mm	5	7180-8110*	110mm	0
7182-8060	60mm	5	7180-8115*	115mm	0
7182-8065	65mm	5	7180-8120*	120mm	0
7182-8070	70mm	5			



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PERI-LOC® Large Fragment Screw Set – T25 (continued)

6.5mm T25 Cancellous Screw, Partially Threaded

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7382-8150	50mm	2	7382-8185	85mm	2
7382-8155	55mm	2	7382-8190	90mm	2
7382-8160	60mm	2	7382-8195	95mm	2
7382-8165	65mm	2	7382-8200	100mm	2
7382-8170	70mm	2	7180-8205*	105mm	0
7382-8175	75mm	2	7180-8210*	110mm	0
7382-8180	80mm	2			



4.5mm Locking Hole Insert

Cat. No.	Description	Qty
7480-0605	4.5mm Locking Hole Insert	0
7117-3623	4.7NM Torque Limiter	0

4.5mm Lateral Proximal Tibia Locking Plates Set

Set No. 7181-0020

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7112-9401	Small Outer Case, 2.4mm	1	7180-0216	16 Hole, Left, 309mm	0
7112-9402	Lid for Outer Cases	1	7180-0304	4 Hole, Right, 94mm	1
7117-0320	Tray	1	7180-0306	6 Hole, Right, 130mm	1
7180-0204	4 Hole, Left, 94mm	1	7180-0308	8 Hole, Right, 165mm	1
7180-0206	6 Hole, Left, 130mm	1	7180-0310	10 Hole, Right, 201mm	1
7180-0208	8 Hole, Left, 165mm	1	7180-0313	13 Hole, Right, 255mm	0
7180-0210	10 Hole, Left, 201mm	1	7180-0316	16 Hole, Right, 309mm	0
7180-0213	13 Hole, Left, 255mm	0			



4.5mm Lateral Distal Femur Locking Plates Set

Set No. 7181-0121

Cat. No.	Description	Qty	Cat. No.	Description	Qty
7112-9401	Small Outer Case, 2.4mm	1	7180-0019	19 Hole, Left, 399mm	0
7112-9402	Lid for Outer Cases	1	7180-0106	6 Hole, Right, 155mm	1
7117-0323	Tray	1	7180-0108	8 Hole, Right, 193mm	1
7180-0006	6 Hole, Left, 155mm	1	7180-0110	10 Hole, Right, 230mm	1
7180-0008	8 Hole, Left, 193mm	1	7180-0113	13 Hole, Right, 286mm	1
7180-0010	10 Hole, Left, 230mm	1	7180-0116	16 Hole, Right, 342mm	0
7180-0013	13 Hole, Left, 286mm	1	7180-0119	19 Hole, Right, 399mm	0
7180-0016	16 Hole, Left, 342mm	0			



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Catalog information – Implants

4.5mm Proximal Humerus Locking Plates (sterile)

Cat. No.	Description	Length	Cat. No.	Description	Length
7180-1503	3 Hole, Right	93mm	7180-1603	3 Hole, Left	93mm
7180-1505	5 Hole, Right	119mm	7180-1605	5 Hole, Left	119mm
7180-1507	7 Hole, Right	144mm	7180-1607	7 Hole, Left	144mm
7180-1509	9 Hole, Right	169mm	7180-1609	9 Hole, Left	169mm
7180-1511	11 Hole, Right	195mm	7180-1611	11 Hole, Left	195mm
7180-1513	13 Hole, Right	220mm	7180-1613	13 Hole, Left	220mm
7180-1515	15 Hole, Right	246mm	7180-1615	15 Hole, Left	246mm



4.5mm Compression Locking Plates

Cat. No.	Description	Length	Cat. No.	Description	Length
7180-9304	4 Hole	85mm	7180-9316	16 Hole	301mm
7180-9306	6 Hole	121mm	7180-9318	18 Hole	336mm
7180-9308	8 Hole	157mm	7180-9320	20 Hole	372mm
7180-9310	10 Hole	193mm	7180-9322	22 Hole	408mm
7180-9312	12 Hole	229mm	7180-9324	24 Hole	444mm
7180-9314	14 Hole	265mm			



4.5mm Narrow Compression Plates

Cat. No.	Description	Length	Cat. No.	Description	Length
7180-9452	2 Hole	52mm	7180-9461	11 Hole	214mm
7180-9453	3 Hole	70mm	7180-9462	12 Hole	232mm
7180-9454	4 Hole	88mm	7180-9463	13 Hole	250mm
7180-9455	5 Hole	106mm	7180-9464	14 Hole	268mm
7180-9456	6 Hole	124mm	7180-9465	15 Hole	286mm
7180-9457	7 Hole	142mm	7180-9466	16 Hole	304mm
7180-9458	8 Hole	160mm	7180-9468	18 Hole	340mm
7180-9459	9 Hole	178mm	7180-9470	20 Hole	376mm
7180-9460	10 Hole	196mm	7180-9472	22 Hole	412mm



4.5mm Broad Compression Plates

Cat. No.	Description	Length	Cat. No.	Description	Length
7180-9486	6 Hole	118mm	7180-9492	12 Hole	231mm
7180-9487	7 Hole	141mm	7180-9494	14 Hole	267mm
7180-9488	8 Hole	159mm	7180-9496	16 Hole	303mm
7180-9489	9 Hole	177mm	7180-9498	18 Hole	339mm
7180-9490	10 Hole	195mm	7180-9500	20 Hole	375mm
7180-9491	11 Hole	213mm	7180-9502	22 Hole	411mm



Catalog information – Trays

Small Outer Base Tray
Cat. No. 7112-9401



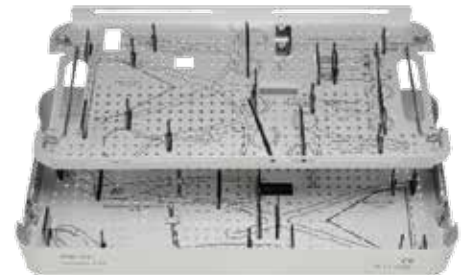
Outer Base Lid
Cat. No. 7112-9402



Drill Guide Caddy
Cat. No. 7117-0351



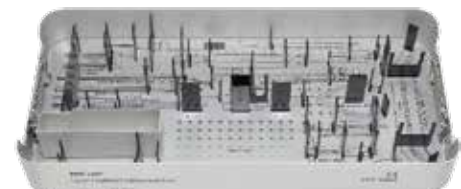
Forceps Tray
Cat. No. 7117-0326



Large Fragment Straight Plates Tray
Cat. No. 7117-0328



Instrument Tray
Cat. No. 7117-0362



Reference

1. Cartner J., Messina A., Baker C., Russell T., Tornetta P., Ricci W: Does Insertion Torque Affect the Mechanics of Locking Hole Inserts and Fatigue Performance of Bridge Plate Constructs? Bone & Joint Science, Vol 02, No 03, April 2011. 1-3.

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