Surgical Technique International Version





# PERI-LOC<sup>o</sup> PFP 4.5mm Proximal Femur Locking Plate

# Surgical Technique

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#### Nota Bene

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

## Product overview

### Introduction

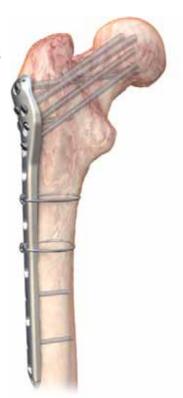
Proximal femur fractures are challenging injuries that are prone to a variety of complications. Factors such as rotational instability, the presence of varied fracture patterns and complex deforming forces, and the frequent association of these fractures with comminution and/or poor bone quality require dedicated implants for optimal fracture fixation.

The PERI-LOC° PFP 4.5mm Proximal Femur Locking Plate offers a total of six individual screw options in the proximal femur for superior stability and intraoperative versatility. An anatomically bowed shaft maximises plate-to-bone coverage extending down the shaft of the femur for an optimal anatomic implant fit. The minimally invasive procedure is facilitated by a radiolucent targeting system designed to reduce the potential for soft tissue damage or disruption of blood supply.

The PERI-LOC Locked Plating System combines the advantages of locked plating with the flexibility and benefits of traditional plates and screws. Utilising both locking and non-locking screws, the PERI-LOC system allows for the creation of a fixed-angle construct capable of resisting angular collapse and rotational displacement. Its enhanced stability also allows it to function as an effective fracture reduction aid. A simple, intuitive instrument set featuring standardised drill bits and screwdrivers along with colour-coded Drill Guides helps make the PERI-LOC system efficient and easy to use.

With its multiple points of fixation and anatomic plate design, the PERI-LOC 4.5mm Proximal Femur Locking Plate (PFP) is geared towards superior fixation of challenging proximal femur fractures.

All PERI-LOC PFP implants are manufactured using the highest quality 316L stainless steel for strength and durability.



## Indications

The PERI-LOC° 4.5mm Proximal Femur Locking Plate is indicated for the treatment of:

- Fractures of the trochanteric region including simple intertrochanteric, reverse intertrochanteric, transverse trochanteric, complex multifragmentary and fractures with medial cortex instability
- Proximal femur fractures with ipsilateral shaft fractures
- Metastatic proximal femur fractures
- Proximal femur osteotomies
- Fractures in osteopenic bone
- Non-unions and malunions
- Basi/transcervical femoral neck fractures
- Subcapital femoral neck fractures
- Subtrochanteric femur fractures



# PERI-LOC<sup>⋄</sup> Proximal Femur case examples



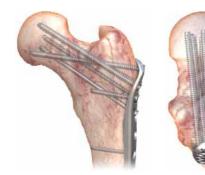


Post-operative radiographs

# Design features and benefits

#### Multiple fixation points

Each PERI-LOC° 4.5mm Proximal Femur Locking Plate offers up to six points of fixation in the proximal femur. Five screws support the femoral neck and head and one targets the calcar femorale. Multiple points of fixation optimise the implant's ability to resist rotational and varus stresses through the trochanteric region. Screws may be inserted in either locking or non-locking mode to allow for the creation of customisable hybrid locked plating constructs.



#### Anatomical plate design

The head of the 4.5mm Proximal Femur Locking Plate is precontoured to fit the anatomy of the lateral aspect of the greater trochanter. Extending down the shaft of the femur, the plate sits straight along the lateral cortex with an anterior curve beginning at the six-hole plate option. This anterior curve provides an anatomic plate fit to ensure optimal plate position on bone. Left and right Proximal Femur Locking Plate versions are the natural result of an anatomically contoured plate design.



#### Minimally invasive

A radiolucent targeter is available for percutaneous fixation of proximal femur fractures. The targeter is comprised of two parts, a base segment for short plates and an extension that matches the anatomic contour of the plate to ensure precision targeting of the distal holes in longer plates. Standard PERI-LOC radiolucent targeter instrumentation facilitates streamlined minimally invasive fixation of proximal femur fractures.



# PERI-LOC<sup> PFP</sup> implant overview

# PERI-LOC 4.5mm Proximal Femur Locking Plate

- Anatomically contoured to the lateral aspect of the proximal femur
- Left and right specific
- Six distinct points of fixation in the proximal femur
- Bullet plate tip assists with percutaneous insertion and minimises prominence
- Locking or non-locking option in every screw hole
- Each screw hole accepts 4.5mm Cortex,
  4.5mm Locking, 5.7mm Cannulated Locking,
  6.5mm Cancellous, 6.5mm Cannulated Conical and/or 6.5mm Cannulated Locking Screws
- 2.3 metre anatomic bow beginning at the sixth hole to maximise plate coverage extending down the femoral shaft
- Radiolucent targeter available for percutaneous fracture fixation
- Compatible with the PERI-LOC Large Fragment Locked Plating System
- Manufactured from 316L stainless steel for strength and durability



#### PERI-LOC° PFP Screws

- Low-profile heads to reduce soft tissue irritation
- Self-Tapping 4.5mm Cortex and 4.5mm Locking Screws
- Self-Drilling, Self-Tapping 5.7mm Cannulated Locking, 6.5mm Cannulated Conical and 6.5mm Cannulated Locking Screws
- Manufactured from 316L stainless steel for strength and durability



New 6.5mm Cannulated Screws

#### PERI-LOC PFP Cable Saddle

- Holds cable in position around a plate
- Snap-fits into 4.5mm and 5.7mm screws
- No drilling required
- System compatibility:

Standard ACCORD° Cable System implants and all cable systems using up to a 2.0mm diameter stainless steel cable

 Manufactured from 316L stainless steel for strength and durability



Cable Saddle

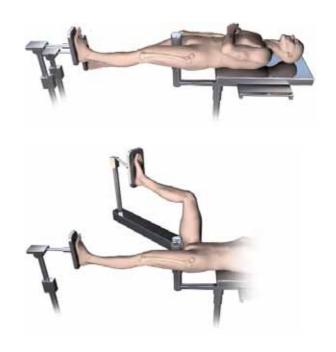
# Surgical technique

# Patient positioning

Place the patient in the supine or lateral position on a radiolucent surgical table according to surgeon preference and fracture pattern. If using a fracture table, the foot of the affected limb is placed in a foot holder or a skeletal traction pin is used to achieve traction. The unaffected limb is extended down and away from the affected limb or placed up in a leg holder.

Check the affected limb for length and rotation by comparison to the unaffected limb. Rotate the C-Arm to ensure optimal AP and lateral visualisation of the proximal femur.

**Note** If using a radiolucent surgical table, a distraction device may be helpful in reducing the fracture.



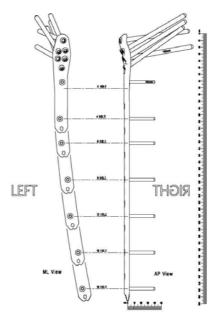
# Fracture reduction and provisional fixation

Obtain gross skeletal alignment using applied traction, reduction forceps, a ball spike pusher, half pins or other conventional methods of reduction. Provisionally secure fracture fragments using 2.0mm K-wires or reduction forceps. Reduction aids should be placed so as not to interfere with final plate placement.

#### Plate selection

Following fracture reduction, select the 4.5mm Proximal Femur Locking Plate that best accommodates patient anatomy and fracture pattern. The PERI-LOC° 4.5mm Proximal Femur Locking Plate Pre-operative Template is available to assist with preoperative radiographic planning. Plate and screw length may be determined.

**Note** As template magnification levels are set at 117%, all measurements are estimates of true size. All implant measurements must be verified intraoperatively.



PERI-LOC 4.5mm Lateral Proximal Femur Locking Plate Pre-operative Template

# Plate positioning

Position the PERI-LOC 4.5mm Locking Proximal Femur Plate against the lateral aspect of the greater trochanter. Extending distally, the plate will line up along the lateral cortex of the femoral shaft. Thread a 3.2mm Drill Guide into the designated "Alpha" hole on the plate\*. The 4.5mm Proximal Femur Locking Plate may be provisionally fixed to the proximal femur using 3.2mm Drill Tip Guide Pins and then compressed to the femoral shaft using reduction forceps and/or Provisional Fixation Pins. The Alpha hole serves as the designated point of reference for correct plate position within the proximal fragment and initial Guide Pin insertion. The Drill Guide can also be used as a handle to aid in positioning the plate.

**Note** The 3.2mm Drill Guide has a hex recess that will accept a 4.7mm Hexdriver. This may be helpful in Drill Guide removal and during plate positioning.

**Note** Based on patient anatomy and plate position, not all proximal screws options may be used.



<sup>\*</sup>If inserting the plate using the open technique

## Open technique

### Alpha hole Guide Pin insertion

Thread the 3.2mm Drill Guide (7117-6753) into the Alpha hole of the proximal femur locking plate.

Verify the plate position on the greater trochanter in both the AP and lateral views. Attach a 3.2mm Drill Tip Guide Pin (7117-5704) to power via the Mini Connect Adaptor and insert into the femoral head through the Drill Guide to the desired depth.

Optimal Guide Pin position is just superior to the calcar (AP view) and in-line with the femoral neck axis (AP and lateral views). The Guide Pin should be inserted to the desired depth, but should not penetrate the subchondral bone of the femoral head.

**Note** If the plate and Guide Pin are in the desired position, proceed to Beta hole Guide Pin insertion section (page 14).

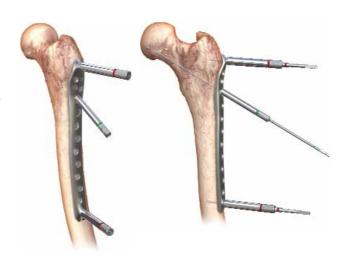




In the instance of sub-optimal Guide Pin placement, reposition as follows:

- Remove the 3.2mm Guide Pin
- Reposition the PERI-LOC° Proximal Femur Plate on the greater trochanter
- Repeat the steps for Alpha hole guide pin insertion

The PERI-LOC Proximal Femur Locking Plate may also be positioned using an Adjustable Drill Guide in the event that optimal Guide Pin placement proves difficult.



# Adjustable guide option for Guide Pin insertion

Assemble the Adjustable Guide Pin Sleeve (7117-6767) by inserting the Adjustable Guide Pin Insert into the centre slot of the Guide Pin Sleeve (7117-6768). The adjustable drill guide provides controlled means to adjust the trajectory of the guide pin insertion. It is recommended that the Alpha hole guide pin be placed and optimised first. With the Guide Pin Sleeve threaded into a screw hole, the Guide Pin Insert can be positioned within the Guide Pin Sleeve to achieve either on-axis or 3° or 6° of off-axis guide pin insertion.

**Note** Off-axis guide pin insertion is used only for plate repositioning on the proximal femur. It is not an indication of polyaxial plate capabilities.





# Adjustable guide technique for Alpha Guide Pin insertion

Thread the Adjustable Guide Pin Sleeve into the Alpha hole of the proximal femur plate using the 4.7mm Hexdriver with Handle. Ensure that the hexdriver is in the centre position of the Guide Pin Sleeve.

Insert the Guide Pin Insert into the desired position of the Guide Pin Sleeve and rotate until the flats on the insert are perpendicular to the sleeve. This will lock the insert into place.

Attach a 3.2mm Drill Tip Guide Pin (7117-5704) to power via the Mini Connect Adaptor and advance through the Adjustable Guide Pin Insert to the desired depth. Verify plate position on the greater trochanter in the AP view.

Optimal Guide Pin position is just superior to the calcar (AP view) and in-line with the femoral neck axis (AP and lateral views). The Guide Pin should be inserted to the desired depth, but should not penetrate the subchondral bone of the femoral head.



In the lateral view, verify the correct femoral neck anteversion and 3.2mm Guide Pin placement.

**Note** If the plate and Guide Pin are in the desired position, proceed to Beta hole Guide Pin insertion section (page 14).

In the instance of sub-optimal Guide Pin placement, reposition either using free-hand technique and/or by using the Angular Adjustment Guide.



# Angular adjustment guide technique Thread a 3.5mm Drill Guide (7117-3451) into

both the most proximal and second or third from most distal screw holes of the plate.

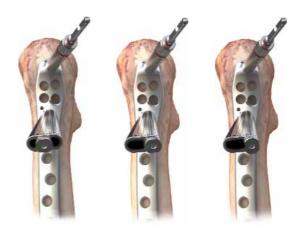
Attach a 3.5mm x 18mm Provisional Fixation
Pin (7117-5706) to power via the Quick Connect Adaptor and insert one into each 3.5mm

Drill Guide.

**Note** Advance the provisional fixation pin on power, but tighten by hand using a T-Handle to avoid stripping the pin and/or loss of reduction.



With the plate provisionally fixed to bone, remove the sub-optimal 3.2mm Guide Pin. Unlock the Guide Pin Insert by rotating the sleeve until the flats are parallel with the slot in the Guide Pin Sleeve. Adjust and lock the sleeve insert into either the 3° or 6° offset position, depending on the desired final guide pin placement.



Advance the 3.2mm Drill Tip Guide Pin through the repositioned sleeve insert as previously described. Verify the Guide Pin position in both the AP and lateral views.



If satisfied with Guide Pin position, remove both provisional fixation pins from the 3.5mm Drill Guides. Unlock the Guide Pin Insert by rotating the Guide Pin Insert until the flats are parallel with the slot in the Guide Pin Sleeve. Reposition the plate so that the sleeve insert is in the centre of the Adjustable Guide Pin Sleeve and lock in place. The 3.5mm Drill Guides may be left in place to serve as handles during repositioning.

Re-insert the 3.5mm x 18mm Provisional Fixation Pin into the distal-most 3.5mm Drill Guide as previously described.



#### Beta hole Guide Pin insertion

Thread a 3.2mm Drill Guide into the most superior/posterior hole in the proximal portion of the plate (Beta hole). Insert a 3.2mm Drill Tip Guide Pin through the Drill Guide to the desired depth. Verify guide pin position in both the AP and lateral views.

**Note** Always ensure that at least two Guide Pins have been inserted into the proximal femur before proceeding with screw insertion. These guide pins will help control any rotational instability.

**Note** A 4.5mm x 80mm Provisional Fixation Pin (7117-5705) may be inserted through the Beta hole in place of the 3.2mm Guide Pin if fracture compression or plate-to-bone reduction is desired prior to screw insertion. This requires a 4.5mm Drill Guide (7117-3541) in place of the 3.2mm version.

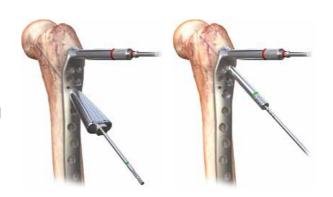
Determine which screws are most appropriate for fracture fixation. A combination of 4.5mm Cortex, 4.5mm Locking, 5.7mm Cannulated Locking, 6.5mm Cancellous, 6.5mm Cannulated Conical and 6.5mm Cannulated Locking Screws may be used. It is recommended that screw insertion begin with the Alpha hole before proceeding further.

**Note** It is recommended that all guide pins for remaining proximal screws be inserted and verified under fluoroscopy in both the AP and lateral views to confirm position prior to proceeding with screw insertion.



#### Screw insertion

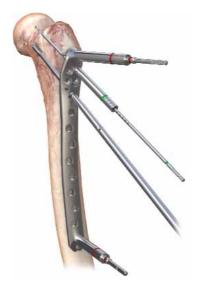
**6.5mm Cannulated Screw insertion**Measure for screw length by reading the exposed calibrations off the 3.2mm Drill Tip Guide Pin or by sliding the 6.5mm Cannulated Depth Gauge (7117-6770) over the guide pin to the back of the Guide Pin Insert.



Remove the Adjustable Guide Pin Sleeve and Insert. Attach the 4.7mm Cannulated Hexdriver (7117-7161) to power via the Large Quick Connect Adaptor and insert the appropriate length 6.5mm Cannulated Conical or Cannulated Locking Screw over the 3.2mm Drill Tip Guide Pin. Alternatively, screws may be inserted by hand using the Quick Connect T-Handle (7117-7204).

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.

Note The self-drilling/tapping design of the 6.5mm Cannulated Conical and Locking Screws renders pre-drilling and tapping for the screw unnecessary in most instances. However, if encountering hard bone, it may be useful to drill and/or tap prior to screw insertion\*.



#### 5.7mm Cannulated Locking Screw insertion

Thread the 4.5mm Locking Screw Guide (7117-3541) into the desired screw hole and insert and drill with the 4.5mm Drill Bit (7117-3506) to the desired depth. Verify drill bit placement in both the AP and lateral views. Calibrations on side of drill will determine screw length.



**Note** Due to the density of the bone in the proximal femur and the likelihood of pin skiving, it is recommended that 2.0mm K-wires not be used.

Remove the 4.5mm Drill Bit and 4.5mm Locking Drill Guide.

Attach the 3.5mm Hexdriver (7117-3537) to power via the Connector and insert the appropriate length 5.7mm Cannulated Locking Screw. Alternatively, screws may be inserted by hand using the Large Quick Connect Handle.



**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.

#### 4.5mm Cortex Screw

Insert the Universal Drill Guide Handle (7117-3349) with 3.5mm Neutral Locking Hole Insert (7117-3521) into the desired screw hole in the plate shaft and drill accordingly with Short 3.5mm Drill Bit (7117-3504). If inserting a 4.5mm Cortex Screw into the proximal portion of the plate, it is recommended that the Long 3.5mm Drill Bit (7117-3505) be used.



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



Insert the appropriate length 4.5mm Cortex Screw using the 3.5mm Hexdriver Shaft (7117-3537) and Large Quick Connect Handle.

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.



#### 4.5mm Locking Screw

Thread a 3.5mm Locking Drill Guide (7117-3451) One-Piece\* into the desired screw hole in the plate and drill accordingly with the Short 3.5mm Drill Bit.

**Note** If inserting a 4.5mm Locking Screw into the proximal portion of the plate, it is recommended that the Long 3.5mm Drill Bit be used.



Measure for screw length by reading the exposed calibrations off the drill bit or by using the Large Screw Depth Gauge.



Insert the appropriate length 4.5mm Locking Screw using the 3.5mm Hexdriver Shaft and Large Quick Connect Handle.

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head, or damage to the screwdriver.

Fill remaining screw holes as desired.



#### Cable Saddle and Hole Filler

The Hole Filler (7480-0603) may be added to any screw hole in the PERI-LOC° Proximal Femur Locking Plate as desired.

Insert the Hole Filler using the 3.5mm Hexdriver Shaft and Large Quick Connect Handle.



The Cable Saddle (7480-0601 or 7480-0602) is compatible with any stainless steel cables between 1.6mm and 2.0mm. Attach the Cable Saddle to the Cable Saddle Insertion Tool (7117-6766). Insert the Cable Saddle using the insertion tool into any desired Hole Filler or the head of an inserted screw.

The cable can be threaded into the Cable Saddle with the insertion tool still attached.

Proceed accordingly with cable application as described in the particular technique.



# Percutaneous technique using radiolucent targeter

### **Radiolucent Targeter assembly**

Assemble the PERI-LOC° Targeter Handle (7117-6748 Left or 7117-6749 Right) to the selected plate by threading the 4.5mm Drill Guide through the handle into the most proximal hole until tight. For final tightening, rotate the locking nut clockwise using the Locking Tool (7117-6746). Attach the corresponding Targeter Base to the handle (7117-6750 or 7117-6751). Verify targeter assembly by inserting a PERI-LOC Targeter 3.5mm Drill Guide (7117-3382) into a PERI-LOC Targeter 4.5mm Screw Guide (7117-3397) and passing the assembly through the most distal hole in the base.

The targeter extension (7117-6752) is required for 12-hole plates and longer. Tighten the assembly to the plate and pass a Long 3.5mm Drill Bit through the drill guide. Remove the screw/drill guide assembly and targeter base prior to plate insertion.









#### Plate insertion and provisional fixation

Insert the plate through the incision using the attached handle as an insertion aid. Slide the plate down the shaft of the femur between muscle and periosteum keeping the distal tip of the plate against bone. Confirm plate position under fluoroscopy in the AP and lateral views.

Attach a 3.5mm x 18mm Provisional Fixation Pin (7117-5703) to power via the Quick Connector and insert through the drill guide of the superior most hole. Tighten the pin by hand using the Quick Connect Handle to avoid stripping the pin. Attach the appropriate targeter base to the handle.

**Note** It is acceptable to use a 3.5mm Provisional Fixation Pin proximally with the 4.5mm Drill Guide.

**Note** For plates 12 holes in length and longer, a targeter extension will be required for percutaneous targeting of all plate holes.

With the plate provisionally secured to bone proximally, make a stab incision over the second or third most distal screw hole in line with the targeter base. Insert a Trocar (7117-3404) into a 4.5mm Screw Guide and pass the assembly through the targeter base into the plate. Remove the trocar from the screw guide and replace it with a 3.5mm Drill Guide. Thread the drill guide into the plate until tight. Insert a 3.5mm x 18mm Provisional Fixation Pin through the drill guide and tighten as previously described.



#### Alpha hole Guide Pin insertion

Insert a 3.2mm Drill Guide (7117-6745) into a 4.5mm Screw Guide, pass the assembly through the targeter and thread into the Alpha hole until tight. Attach a 3.2mm Drill Tip Guide Pin (7117-5701) to power via the Mini Connector and insert through the drill guide to the desired depth in the femoral neck and head. Verify Guide Pin position under fluoroscopy in both the AP and lateral views.

Optimal Guide Pin position is just superior to the calcar (AP view) and in-line with the femoral neck axis (AP and lateral views). The Guide Pin should be inserted to the desired depth, but should not penetrate the subchondral bone of the femoral head.

**Note** If the plate and Guide Pin are in the desired position, proceed to Beta hole Guide Pin insertion section (page 23).





#### Plate repositioning

In the instance of suboptimal Guide Pin position:

- Remove the 3.2mm Drill Tip Guide Pin
- Remove the proximal and distal provisional fixation pins (remove screw guide assemblies as needed)
- Adjust plate position
- Re-insert screw guide assemblies if removed and provisional fixation pins
- Insert a 3.2mm Guide Pin through the Alpha hole



#### Beta hole Guide Pin insertion

Thread a 4.5mm Screw/3.2mm Drill Guide assembly into the most superior/posterior hole in the proximal portion of the plate (Beta hole). Insert a 3.2mm Drill Tip Guide Pin through the Drill Guide to the desired depth. Verify Guide Pin position in both the AP and lateral views.



**Note** Always ensure that at least two Guide Pins have been inserted into the proximal femur before proceeding with screw insertion. These Guide Pins will help control any rotational instability.

**Note** A 4.5mm x 80mm Provisional Fixation Pin (7117-5702) may be inserted through the Beta hole in place of the 3.2mm Guide Pin if fracture compression or plate-to-bone reduction is desired prior to screw insertion. This requires a 4.5mm Drill Guide (7117-3383) in place of the 3.2mm version.



Determine which screws are most appropriate for fracture fixation. A combination of 4.5mm Cortex, 4.5mm Locking, 5.7mm Cannulated Locking, 6.5mm Cancellous, 6.5mm Cannulated Conical and 6.5mm Cannulated Locking Screws may be used. Begin screw insertion with the Alpha and Beta holes before proceeding further.



## Screw insertion

**6.5mm Cannulated Screw insertion**Measure for screw length by reading the exposed calibrations off the 3.2mm Drill Tip Guide Pin or by sliding the Cannulated Depth Gauge over the Guide Pin to the back of the 3.2mm Drill Guide.



Remove the 3.2mm Drill Guide from the screw guide. Attach the 4.7mm Cannulated Hexdriver to power via the Large AO Quick Connect and insert the appropriate length 6.5mm Cannulated Conical or Cannulated Locking Screw over the 3.2mm Drill Tip Guide Pin. Alternatively, screws may be inserted by hand using the Quick Connect T-Handle.

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.

Note The self-drilling/tapping design of the 6.5mm Cannulated Conical and Locking Screws renders pre-drilling and tapping for the screw unnecessary in most instances. However, if encountering hard bone, it may be useful to drill and/or tap prior to screw insertion\*.



5.7mm Cannulated Locking Screw insertion Insert a 4.5mm Drill Guide (7117-3383) into a 4.5mm Screw Guide. Pass the assembly through the targeter base into the desired screw hole and tighten. Insert a 4.5mm Drill Bit (7117-3403) through the assembly to the desired depth. Verify drill bit placement in both the AP and lateral views.



Measure for screw length by reading the exposed calibrations off the drill bit or by using the 4.5mm Depth Gauge (7117-6747) by removing the Drill Guide and passing the depth gauge through the Screw Guide.



Attach the 3.5mm Cannulated Hexdriver (7117-3434) to power via the Mini Connector and insert the appropriate length 5.7mm Cannulated Locking Screw. Alternatively, screws may be inserted by hand using the Large Quick Connect Handle.

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.

**Note** The self-drilling/tapping design of the 5.7mm Cannulated Locking Screws renders pre-drilling unnecessary in most instances. However, if encountering hard bone, the 4.5mm Cannulated Drill (7117-3444) may be used.



4.5mm Cortex and Locking Screw insertion Pass a 4.5mm Screw/3.2mm Drill Guide assembly through the targeter base and into the desired screw hole in the plate shaft. Tighten the Drill Guide into the plate and drill accordingly with Long 3.5mm Drill Bit (7117-3402).



Measure for screw length by reading the exposed calibrations off the drill bit. Remove the drill bit and Drill Guide.



Insert the appropriate length 4.5mm Cortex or Locking Screw using the 3.5mm Hexdriver Shaft (7117-3409) and Large Quick Connect Handle.

**Note** Screws may be inserted on power, but should always be tightened by hand in order to avoid loss of reduction, stripping of the screw head or damage to the screwdriver.

Fill remaining screw holes as desired.



## Targeter removal

Remove all provisional fixation pins and screw guide sleeves still in place. Loosen the locking nut by rotating the Locking Tool counter-clockwise. Remove the Drill Guide. Extract the targeter assembly from the incision taking care to prevent the connecting bolt from falling out of the targeter.

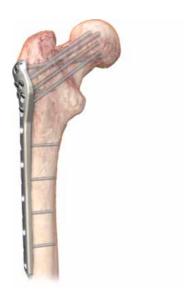






# Closure

Obtain final AP and lateral radiographic images to confirm implant position and fracture reduction. Wound closure follows standard technique.



# Catalogue information

# PERI-LOC $^{\diamond}$ International Proximal Femur Instrument Set Set No. 7181-3504

#### Instrument Case

Cat. No.	Description	
7117-6774	International Proximal Femur Instrument Tray	1
7117-6775	International Proximal Femur Instrument Tray Lid	1

#### Instruments

Cat. No.	Description	Tray Qty
7117-3451	PERI-LOC 3.5mm Locking Drill Guide	2
7117-3541	PERI-LOC 4.5mm Locking Drill Guide	2
7117-5704	PERI-LOC 3.2mm X 300mm Drill Tip Guide	6
7117-5705	PERI-LOC 4.5mm Tap PF Pin 80mm Short	2
7117-5706	PERI-LOC 3.5mm Tap PF Pin 18mm Short	2
7117-6753	PERI-LOC 3.2mm Drill Guide	4
7117-6766	Cable Saddle Insertion Tool	1
7117-6767	Adjustable Guide Pin Sleeve	1
7117-6768	Adjustable Guide Pin Insert	1
7117-6770	PERI-LOC 6.5mm Cannulated Screw Depth Gauge	1
7117-7134	PERI-LOC 5.0mm Cannulated Drill Bit	2
7117-7143	PERI-LOC 6.5mm Cannulated Screw Tap with Quick Connect	1
7117-7161	PERI-LOC 4.7mm Cannulated Hexdriver Short	1
7117-7204	T-Handle with Large AO Quick Connect	1
7117-7205	Quick Chuck Adaptor (Halls/Jacobs Male to Large AO)	1
7163-1186	Mini Adaptor (Halls/Jacobs Male to Mini Connect)	1

## PERI-LOC° International Proximal Femur Implant Set

Set No. 7181-3505

## Implant Case

Cat. No.	Description	Tray Qty
7117-6760	PERI-LOC International Proximal Femur Implant Tray	1
7117-6761	PERI-LOC International Proximal Femur Implant Tray Lid	1

### Implants

Cat. No.	Description	Tray Qty
7480-0060	PERI-LOC 6.5mm x 60mm Cannulated Conical Screw	2
7480-0065	PERI-LOC 6.5mm x 65mm Cannulated Conical Screw	2
7480-0070	PERI-LOC 6.5mm x 70mm Cannulated Conical Screw	2
7480-0075	PERI-LOC 6.5mm x 75mm Cannulated Conical Screw	2
7480-0080	PERI-LOC 6.5mm x 80mm Cannulated Conical Screw	2
7480-0085	PERI-LOC 6.5mm x 85mm Cannulated Conical Screw	2
7480-0090	PERI-LOC 6.5mm x 90mm Cannulated Conical Screw	2
7480-0095	PERI-LOC 6.5mm x 95mm Cannulated Conical Screw	2
7480-0100	PERI-LOC 6.5mm x 100mm Cannulated Conical Screw	2
7480-0105	PERI-LOC 6.5mm x 105mm Cannulated Conical Screw	2
7480-0110	PERI-LOC 6.5mm x 110mm Cannulated Conical Screw	2
7480-0115	PERI-LOC 6.5mm x 115mm Cannulated Conical Screw	2
7480-0120	PERI-LOC 6.5mm x 120mm Cannulated Conical Screw	2
7480-0125	PERI-LOC 6.5mm x 125mm Cannulated Conical Screw	2

# Catalogue information

# PERI-LOC<sup>o</sup> International Proximal Femur Implants (continued)

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Cat. No.	Description	Tray Qty
7480-0130	PERI-LOC 6.5mm x 130mm Cannulated Conical Screw	2
7480-0260	PERI-LOC 6.5mm x 60mm Cannulated Locking Screw	2
7480-0265	PERI-LOC 6.5mm x 65mm Cannulated Locking Screw	2
7480-0270	PERI-LOC 6.5mm x 70mm Cannulated Locking Screw	2
7480-0275	PERI-LOC 6.5mm x 75mm Cannulated Locking Screw	2
7480-0280	PERI-LOC 6.5mm x 80mm Cannulated Locking Screw	4
7480-0285	PERI-LOC 6.5mm x 85mm Cannulated Locking Screw	4
7480-0290	PERI-LOC 6.5mm x 90mm Cannulated Locking Screw	4
7480-0295	PERI-LOC 6.5mm x 95mm Cannulated Locking Screw	4
7480-0300	PERI-LOC 6.5mm x 100mm Cannulated Locking Screw	4
7480-0305	PERI-LOC 6.5mm x 105mm Cannulated Locking Screw	4
7480-0310	PERI-LOC 6.5mm x 110mm Cannulated Locking Screw	3
7480-0315	PERI-LOC 6.5mm x 115mm Cannulated Locking Screw	3
7480-0320	PERI-LOC 6.5mm x 120mm Cannulated Locking Screw	3
7480-0325	PERI-LOC 6.5mm x 125mm Cannulated Locking Screw	2
7480-0330	PERI-LOC 6.5mm x 130mm Cannulated Locking Screw	2
7480-0402	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0404	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0406	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0409	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0412	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0502	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0504	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0506	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0509	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0512	PERI-LOC 4.5mm Proximal Femur Locking Plate	1
7480-0601	PERI-LOC Cable Saddle Short	6
7480-0602	PERI-LOC Cable Saddle Tall	6
7480-0603	PERI-LOC 4.5mm Screw Hole Filler	4

# PERI-LOC° Proximal Femur Targeter Set Set No. 7181-3503

## Instrument Case

Cat. No.	Description
7117-6757	PERI-LOC Proximal Femur Targeter Outer Tray
7117-6758	PERI-LOC Proximal Femur Targeter Instrument Tray
7117-6759	PERI-LOC Proximal Femur Targeter Outer Tray Lid

## Instruments

Cat. No.	Description	Tray Qty
7106-3004	Cannulated AO to Hall Adaptor	1
7117-3382	PERI-LOC Targeter 3.5mm Drill Guide	2
7117-3383	PERI-LOC Targeter 4.5mm Drill Guide	2
7117-3397	PERI-LOC Targeter 4.5mm Screw Guide	4
7117-3402	PERI-LOC Targeter 3.5mm Drill Bit	2
7117-3403	PERI-LOC Targeter 4.5mm Drill Bit	2
7117-3404	PERI-LOC Targeter 4.5mm Trocar	1
7117-3410	PERI-LOC Targeter 4.7mm Hexdriver Shaft	1
7117-3436	PERI-LOC Targeter 4.5mm Base Plug	10
7117-3481	PERI-LOC Targeter 3.5mm Hexdriver Shaft	2
7117-3547	Large Screwdriver Handle	1
7117-5701	3.2mm x 358mm Calibrated Drill Tip Guide Pin	6
7117-5702	PERI-LOC Targeter 4.5mm Drill Tip PF Pin, 80mm	2
7117-5703	PERI-LOC Targeter 3.5mm Drill Tip PF Pin,18mm	2
7117-6745	PERI-LOC Targeter 3.2mm Drill Guide	4
7117-6746	PERI-LOC Targeter Handle Locking Tool	1
7117-6747	PERI-LOC Targeter 4.5mm Depth Gauge	1
7117-6769	PERI-LOC Targeter 6.5mm Cannulated Screw Depth Gauge	1
7117-7131	Teardrop Screwdriver Handle w/Large AO Quick Connect	1
7117-7158	PERI-LOC Targeter 4.7mm Cannulated Hexdriver Shaft	1
7117-7205	Quick Chuck Adaptor (Hall/Jacobs Male To Large AO)	1
7117-6748	PERI-LOC Proximal Femur Targeter Handle Left	1
7117-6749	PERI-LOC Proximal Femur Targeter Handle Right	1
7117-6750	PERI-LOC Proximal Femur Targeter Base Left	1
7117-6751	PERI-LOC Proximal Femur Targeter Base Right	1
7117-6752	PERI-LOC Proximal Femur Targeter Base Extension	1
7163-1186	Mini Adaptor (Hall/Jacobs Male To Mini Connect)	1

Notes	



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