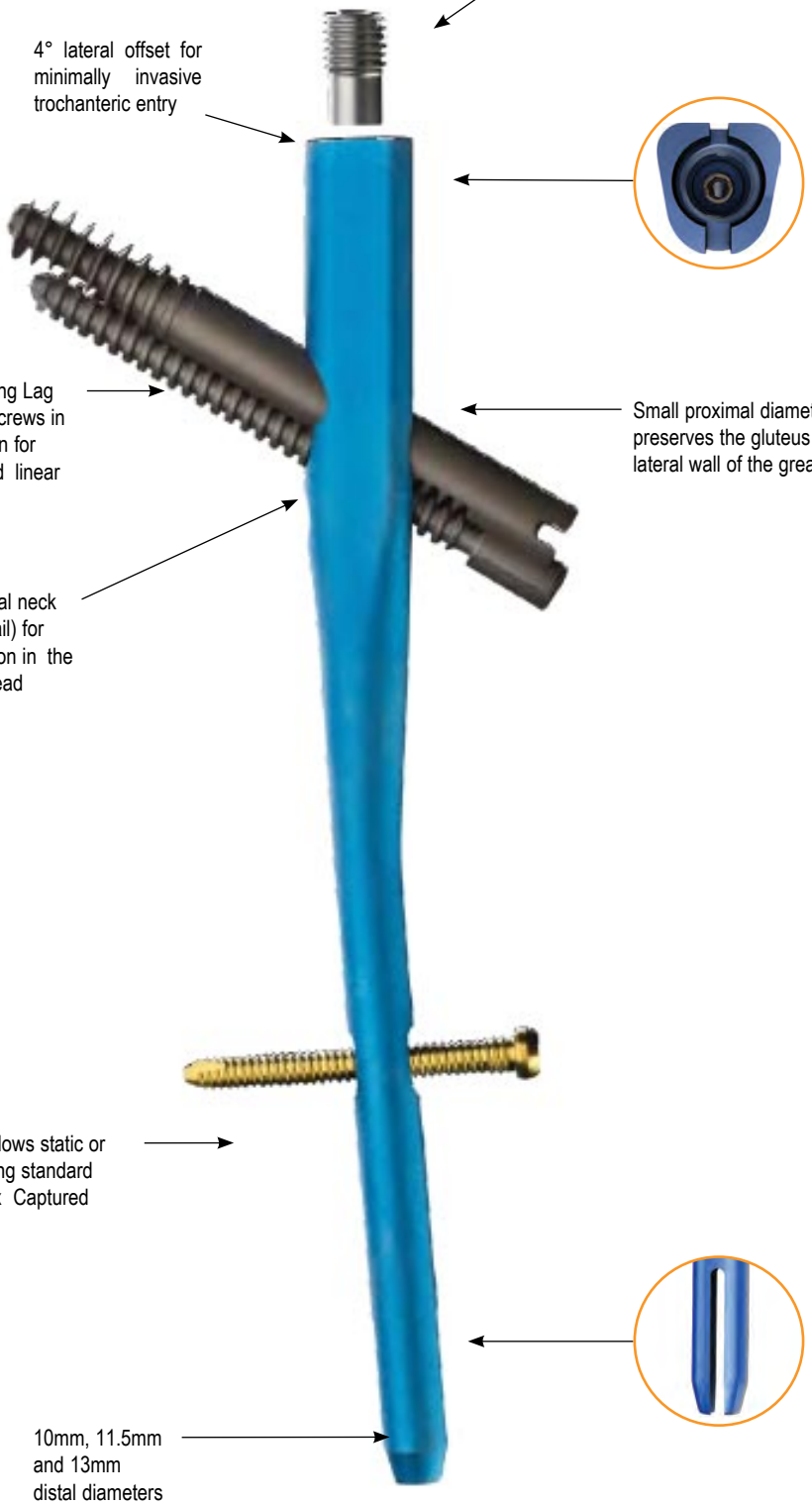
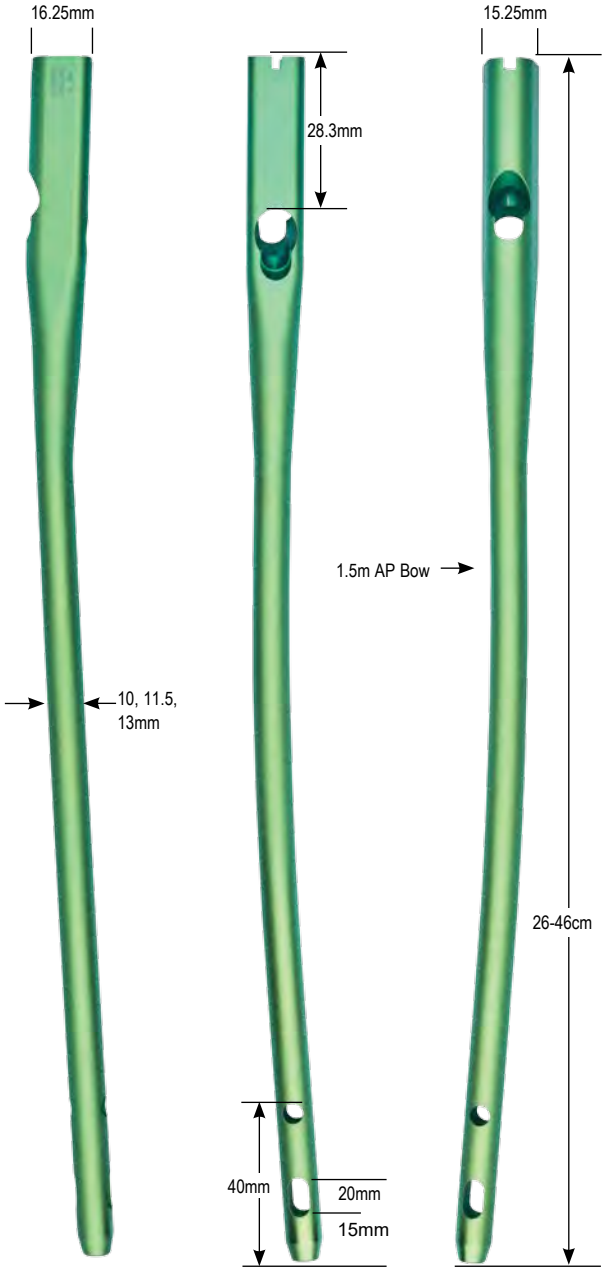
Manyetix PFN Surgical Technique

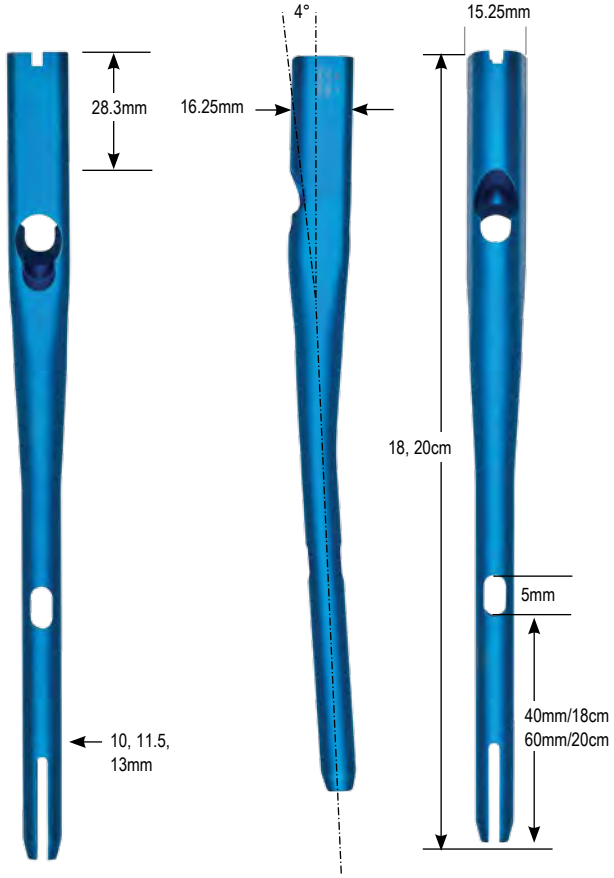

Preloaded Cannulated Set Screw allows for creation of a fixed angle device or facilitates postoperative sliding
4° lateral offset for minimally invasive trochanteric entry
Trapezoidal nail profile provides enhanced stability in the proximal femur for early weight bearing
Integrated Interlocking Lag and Compression Screws in figure eight formation for superior stability and linear compression
Small proximal diameter (15.25 X 16.25) preserves the gluteus medius tendon and the lateral wall of the greater trochanter
12° of built-in femoral neck anteversion (long nail) for optimal screw position in the femoral neck and head
Distal locking slot allows static or dynamic locking using standard 5.0mm Internal Hex Captured Locking Screws
Clothespin distal tip reduces nail stiffness and the potential for periprosthetic fracture distal to the nail
10mm, 11.5mm and 13mm distal diameters

Implant specifications

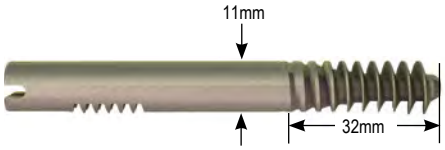
MANYETIX PFN nail (long)



MANYETIX PFN nail (short)



MANYETIX lag and compression screws

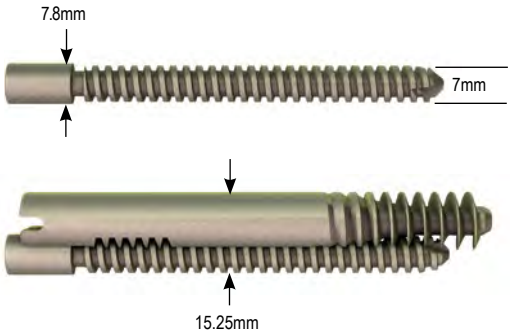


Minor diameter tapers from 11-5.6mm

MANYETIX PFN subtrochanteric lag screw

Minor diameter tapers from 11-5.6mm

Subtrochanteric Lag Screw 70-125mm



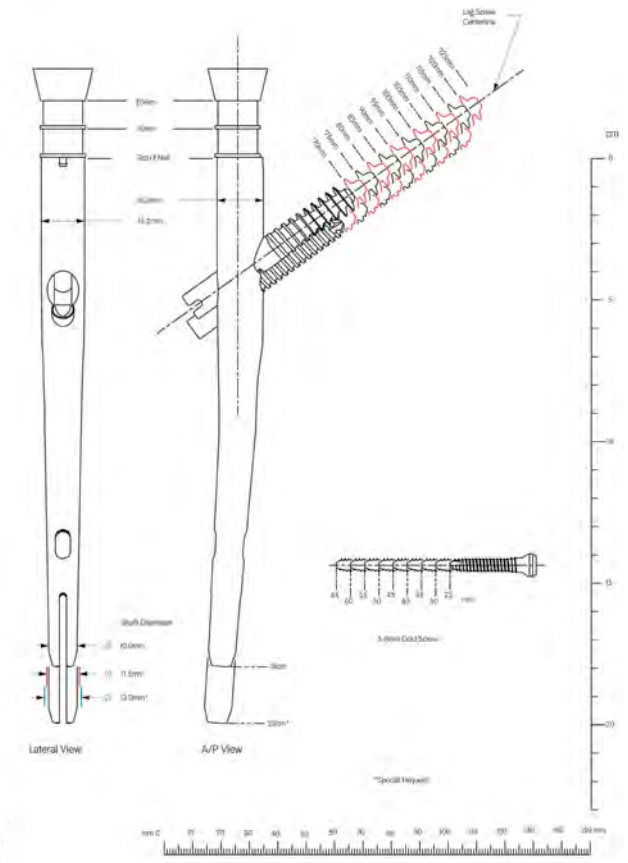
Integrated Interlocking Screws (sold together) 70-125mm

Surgical technique

Implant selection

The MANYETIX PFN Nail Preoperative Template Set may be used to assist with preoperative implant selection. Nail size, screw length and femoral neck angle may be determined.

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

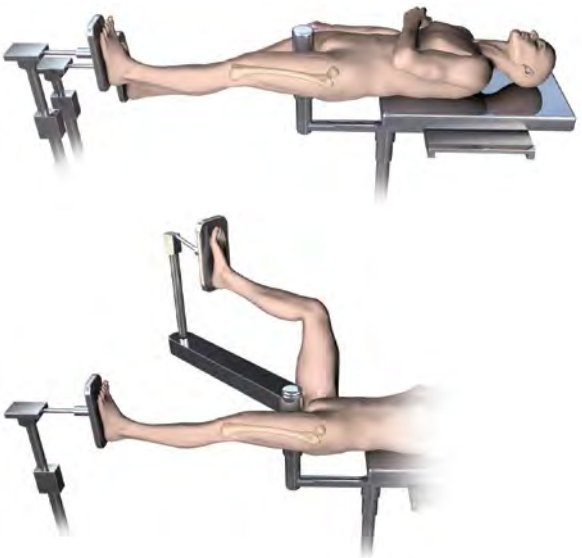


MANYETIX PFN Nail Preoperative Template Set

Patient positioning

Place the patient in the supine or lateral decubitus position on a fracture table according to surgeon preference and/or fracture pattern. The foot of the affected
limb is placed in a foot holder or a skeletal traction pin is inserted through the calcaneus to achieve traction. The unaffected limb is extended down and away from the affected limb or is placed up in a leg holder.

The torso may be abducted 10°–15° to allow for clear access to the intramedullary canal. Check the affected limb for length and rotation by comparison to the unaffected limb. Rotate the C-Arm to ensure optimal AP and lateral visualization of the proximal femur.

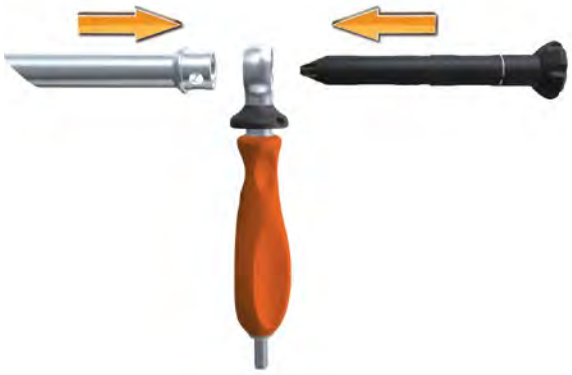


Note If using a radiolucent table, a distraction device may be helpful in reducing the fracture.

Opening the proximal femur

Incision and entry point

Assemble the Honeycomb, Entry Portal Handle and Entry Portal Tube . The pieces will lock in place securely at either 0° or 180°.

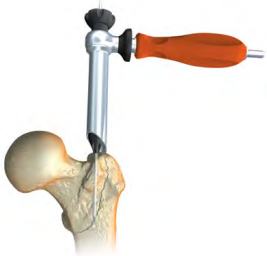


A longitudinal incision is made proximal to the greater trochanter. Carry the incision through to the fascia and palpate the tip of the greater trochanter.

The optimal entry point is located on the medial face of the greater trochanter, 4° from the anatomical axis in the AP and in-line with the intramedullary canal in the lateral.

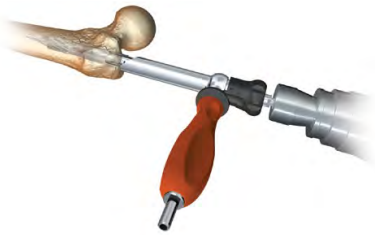
Entry portal acquisition

Insert the Entry Portal Instrumentation through the incision down to bone. Attach a Guide Pin 3.2mm x 343mm to power via the Mini Connector and insert 2–3cm into the trochanteric region. Avoid over-insertion of the guide pin as this can establish a false trajectory and lead to fracture malalignment. Confirm guide pin placement in the AP and lateral planes.



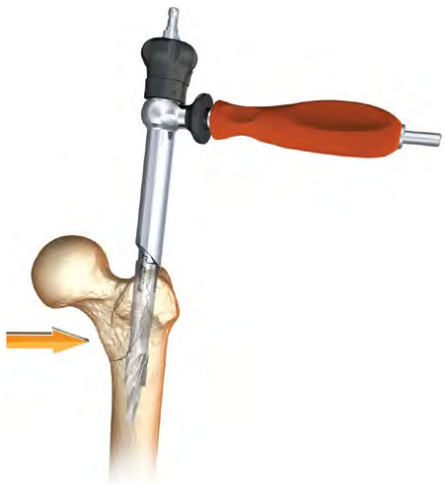
Note In the instance of suboptimal guide pin placement, rotate the Honeycomb within the Entry Portal Tube to the desired location and insert another 3.2mm guide pin.

Following guide pin placement, remove the Honeycomb from the Entry Portal Tube along with any additionally inserted guide pins. Insert the 12.5mm Entry Reamer into the 16mm Channel Reamer and attach to power. Advance the assembly through the Entry Portal Instrumentation 1-2cm into the trochanteric region



Adjust the angle of the reamer assembly to the desired trajectory and advance to the positive stop on the Entry Portal Tube. The channel reamer will be at the level of the lesser trochanter. If the Entry Portal Instrumentation is not used, the channel reamer must be inserted to the level of the lesser trochanter.

Confirm the reamer assembly's final position and fracture reduction in both the AP and lateral planes. Remove the reamer assembly and guide pin.



Note If inserting a long MANYETIX PFN nail, leave the channel reamer in place.

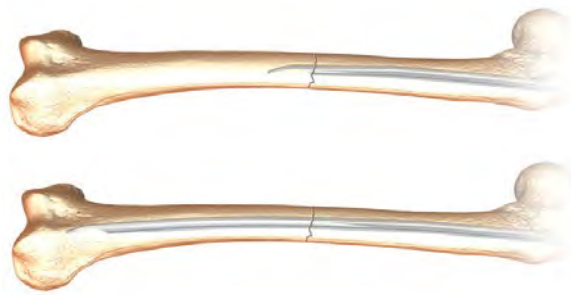
Note In the instance of hard bone, it may be necessary to use the 17mm Channel Reamer.

Intramedullary reaming

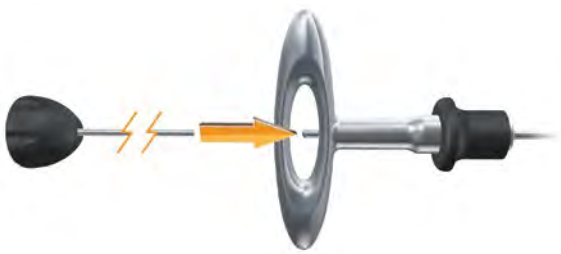
Fracture reduction

Insert the back end of the 3.0mm Ball Tip Guide Rod into the front end of the Gripper and gently close the trigger-grip. Connect the Reducer and Reducer Connector so that the words “Slot Orientation” are in line with the opening at the tip. Complete the Reducer assembly by connecting it to the T-Handle .

Introduce the Reducer into the intramedullary canal through the channel reamer and Entry Portal Instrumentation. Care should be taken to maintain fracture reduction. Pass the ball tip guide rod through the back of the T-Handle and insert to the desired depth using the Reducer’s curved tip to avoid any areas of comminution. The guide rod should be center- center in the AP and lateral views.



Once the guide rod is in position, detach the Gripper and remove the Reducer from the intramedullary canal. Slide the Obturator (571674078) into the back of the T-Handle during extraction in order to maintain guide rod position within the canal.



Implant measurement (long nails)

After Reducer removal, re-confirm guide rod position in the distal femur. Advance the Ruler over the guide rod through the channel reamer and Entry Portal Instrumentation. The metal tip of the Ruler should be at the level of the greater trochanter.

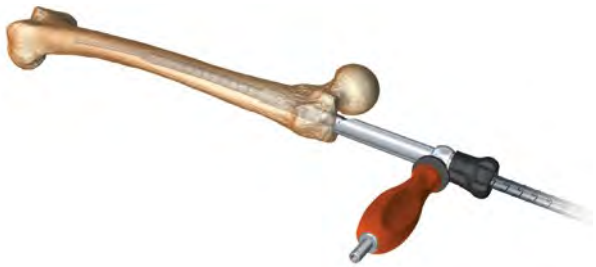
Confirm guide rod position in the window at the proximal end of the Ruler as shown in order to ensure accurate implant measurement. Push down on the top of the Ruler until contact is made with the guide rod. Implant length is read from the exposed calibrations near the thumbwheel on the Ruler.

Note Resistance on the Ruler may be adjusted by tightening or loosening the thumbwheel.

Intramedullary reaming (optional)

Preparing the canal

Beginning with the 9.0mm End Cutting Reamer Head and Flexible Reamer Shaft , ream the intramedullary canal sequentially in half millimeter increments to a size* 1-1.5mm larger than the selected nail size. Ensure guide rod position during reaming by inserting the Obturator into the back of the Reamer unit during retraction. Continue to confirm guide rod position throughout reaming. Periodically move the Reamer back and forth in the canal to clear debris from the cutting flutes.



Note The channel reamers will not accommodate Reamer Heads larger than 12.5mm.

Nail insertion

Nail assembly

Attach the Drill Guide Handle to the nail with the Guide Bolt and tighten with the Guide Bolt Wrench and T-Handle. The nail can only be attached to the Drill Guide Handle in one way. Attach the desired Drill Guide Drop to the Drill Guide Handle and insert the MANYETIX PFN Lag Screw Drill Sleeve into the drop until it locks. Verify targeting accuracy by passing the MANYETIX PFN Lag Screw Drill through the assembly. An incorrectly attached nail will not target. Attach the Cannulated Impactor to the Drill Guide Handle and remove the Drill Guide Drop/Lag Screw Drill Sleeve for insertion.

Note To ease assembly of the Nail onto the Drill Guide, there are Nail Mounting Fixtures provided in the Tray that are designed to hold the distal end of the Nail during assembly.

Insertion

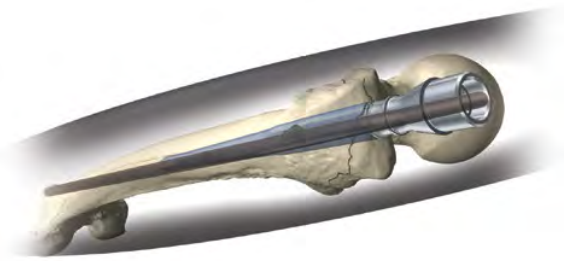
Orient the Drill Guide Handle in the lateral position and manually advance the nail into the proximal femur.

Note Do not definitively seat the nail until femoral neck anteversion has been determined. Further insertion of the nail may be required to adequately seat the implant.

For long nails, begin insertion with the Drill Guide Handle in the AP plane. As the nail taper reaches the isthmus of the canal, rotate the handle to the lateral position. Light hammer blows may be necessary when implanting long nails.

Nail anteversion

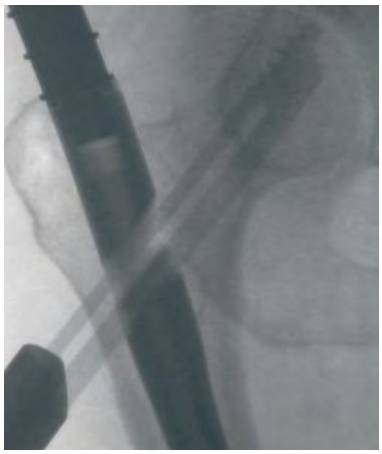
Nail anteversion under fluoroscopy, adjust the drill guide until the wire embedded in
the handle transects the nail and the femoral neck and head in the lateral view. If desired, gently impact the nail with the Slotted Hammer to set anteversion.



Insertion depth

To confirm nail insertion depth, orient the C-Arm in the AP plane and attach the desired Drill Guide Drop to the Drill Guide Handle. Attach the Alignment Tower to the drop and slide the back end of the Alignment Arm into the tower.

The Alignment Arm represents the location of both lag and compression screws prior to insertion. With the C-Arm in the AP, note the position of the Alignment Arm under fluoroscopy. The radiolucent slot in the center of the arm should be center-center in the femoral neck and head. This represents the central axis of both the 11mm Subtrochanteric and 11mm Integrated Interlocking Lag Screw. The compression screw sits beneath the lag screw in the Integrated Screw formation. Definitively seat the nail using the Slotted Hammer. Remove the Impactor from the Drill Guide Handle and the 3.0mm Ball Tip Guide Rod from the intramedullary canal if used.



Note After definitively seating the nail, confirm that the nail and Drill Guide Handle are securely connected as hammering can loosen the Guide Bolt.

Proximal locking overview

Integrated Interlocking Screws

1. Insert the Guide Pin 3.2mm x 343mm
2. Measure for the lag screw
3. Drill the lateral cortex with the 7.0mm Compression Screw Starter Drill
4. Drill with the 7.0mm Compression Screw Drill
5. Insert the Anti-Rotation Bar
6. Drill over the guide pin with the Lag Screw Drill
7. Insert the Integrated Interlocking Lag Screw
8. Remove the Anti-Rotation Bar
9. Insert the Integrated Interlocking Compression Screw
10. Engage the Cannulated Set Screw (optional)

Subtrochanteric Lag Screw

1. Insert the Guide Pin 3.2mm x 343mm
2. Measure for the lag screw
3. Drill over the guide pin with the Lag Screw Drill
4. Insert the Subtrochanteric Lag Screw
5. Attach the Compressing Dial to compress the fracture
6. Engage the Cannulated Set Screw (essential)

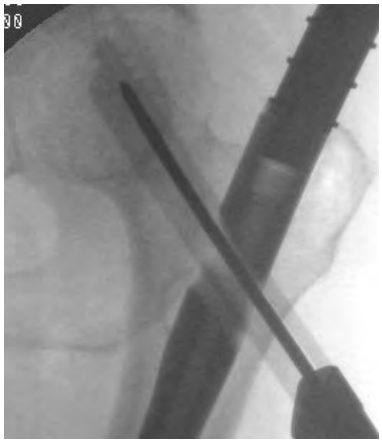
Proximal locking

Lag Screw Drill Sleeve insertion
Make an incision at the site of lag screw entry and insert the MANYETIX PFN Lag Screw Drill Sleeve into the Drill Guide Drop until it locks.

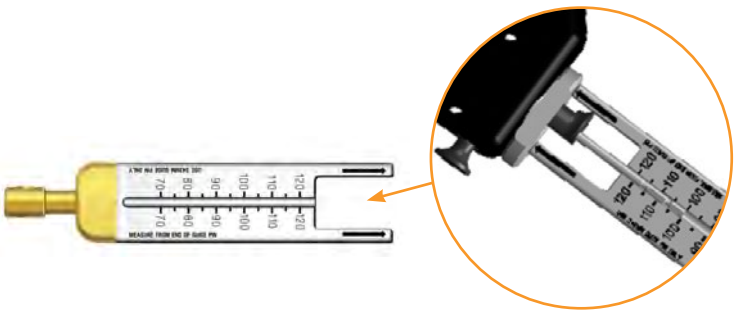
Lag Screw Guide Pin insertion
Pass the MANYETIX PFN 3.2mm Guide Pin Sleeve through the Lag Screw Drill Sleeve down to bone.

Attach a Guide Pin 3.2mm x 343mm to power via the Mini Connector and insert through the Guide Pin Sleeve to the desired position in the femoral neck and head.

Confirm Guide Pin position in both the AP and lateral planes. The Guide Pin should be center-center in both views with a Tip-Apex Distance of less than 25mm[1].



Lag screw measurement
Slide the MANYETIX PFN Lag Screw Length Gauge over the Guide Pin to the back of the Lag Screw Drill Sleeve. Lag Screw length is taken from the exposed calibrations at the end of the Guide Pin.

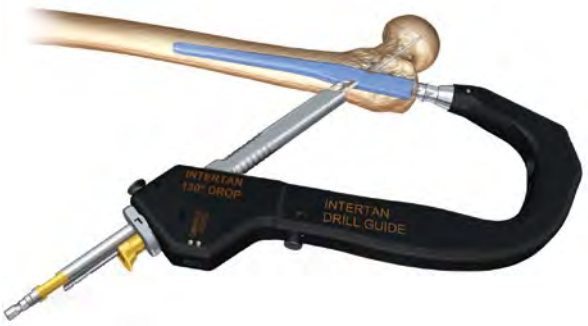


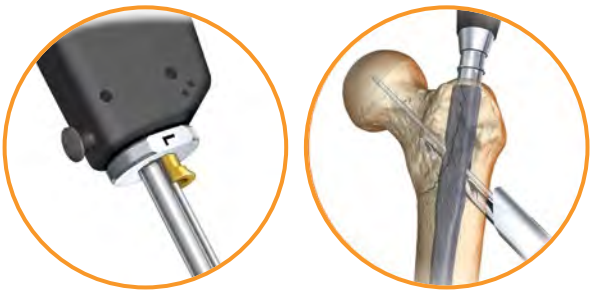
Note The Lag Screw Length Gauge measures to the tip of the Guide Pin.

The MANYETIX PFN nail may be inserted with either **Integrated Interlocking Screws** or a **single Subtrochanteric Lag Screw**. Select the desired construct and proceed with lag screw insertion.

Integrated Interlocking Screw insertion

Confirm Guide Pin position. Attach the MANYETIX PFN 7.0mm Compression Screw Starter Drill to power and insert into the Lag Screw Drill Sleeve beneath the Guide Pin. Advance the Compression Screw Starter Drill under power until it abuts with the back end of the Lag Screw Drill Sleeve.





Attach the 7.0mm Compression Screw Drill to power and insert through the Lag Screw Drill Sleeve into the hole created by the Compression Screw Starter Drill. Advance the Compression Screw Drill under fluoroscopy to a depth 5mm less than the measurement taken from the Guide Pin. The mark on the Compression Screw Drill will be flush with the back of the Lag Screw Drill Sleeve.

Remove the Compression Screw Drill and manually insert the Anti-Rotation Bar into the same hole. If the Anti-Rotation Bar meets with resistance upon insertion, remove it and re-drill with the Compression Screw Drill.

Confirm Guide Pin position and remove the 3.2mm Guide Pin Sleeve. Attach the MANYETIX PFN Lag Screw Drill to power and insert into the Lag Screw Drill Sleeve over the Guide Pin. Drill to the depth measured for the Lag Screw. The calibrations on the Lag Screw Drill will be flush with the back of the Lag Screw Drill Sleeve. Re-confirm Lag Screw Drill position under fluoroscopy.

Note In the instance of hard bone, it may be necessary to use the Lag Screw Tap prior to lag screw insertion.

Integrated Interlocking Screw insertion: No compression

Select a Lag Screw equal in length to the drilled depth.

Example

Drilling depth	100mm
Screw length	100mm

Align the back end of the appropriate length Interlocking Lag Screw with the Lag Screwdriver . Thread the Retaining Rod into the Lag Screw and tighten. Insert the assembly into the Lag Screw Drill Sleeve over the Guide Pin.

Advance the Lag Screw manually until the “0mm” mark on the Lag Screwdriver is flush with the back of the Lag Screw Drill Sleeve and the T-Handle is perpendicular to the Drill Guide Assembly. The groove on the undersurface of the Lag Screwdriver must be oriented towards the patient’s feet in order to remove the Anti-Rotation Bar.

Remove the Anti-Rotation Bar and attach the Compression Screw that was packaged with the Lag Screw to the Compression Screw Hexdriver. Attach the T-Handle to the Compression Screw Hexdriver and insert the assembly into the Lag Screw Drill Sleeve beneath the Lag Screwdriver. Advance the Compression Screw until the blue line on the Compression Screw Hexdriver is flush with the back of the Lag Screw Drill Sleeve.

Integrated Interlocking Screw insertion: With compression

Select a Lag Screw equal in length to the drilled depth minus the desired amount of compression.

Example Drilling depth 100mm
Compression 10mm
Screw length 90mm

Align the back end of the appropriate length Integrated Interlocking Lag Screw with the Lag Screwdriver. Thread the Retaining Rod into the Lag Screw and tighten. Insert the assembly into the Lag Screw Drill Sleeve over the Guide Pin.

Advance the Lag Screw manually until the mark on the Lag Screwdriver representing the desired amount of compression is flush with the back of the Lag Screw Drill Sleeve and the T-Handle is perpendicular to the Drill Guide assembly. The groove on the under-surface of the Lag Screwdriver must be oriented towards the patient's feet in order to remove the Anti-Rotation Bar.

Remove the Anti-Rotation Bar and attach the Compression Screw that was packaged with the Lag Screw to the Compression Screw Hexdriver. Attach the T-Handle to the Compression Screw Hexdriver and insert the assembly into the Lag Screw Drill Sleeve beneath the Lag Screwdriver. Advance the compression screw until the blue line on the Compression Screw Hexdriver is flush with the back of the Lag Screw Drill Sleeve.

After releasing traction on the affected limb, compression is achieved by advancing the Compression Screw assembly clockwise until the “0mm” mark on the Lag Screwdriver is visible. As the head of the Compression Screw abuts within the nail, the gear mechanism of the Integrated Interlocking Screws will compress the fracture. It is recommended to stop compression when the “0mm” mark appears. However, extra compression (2-3mm) may be achieved by advancing the Compression Screw Hexdriver until the red mark on the Lag Screwdriver appears.

Note It is not recommended to exceed 10mm of compression.

Integrated Interlocking Screw insertion: Locking the Cannulated Set Screw (optional)

Attach the Set Screwdriver to the T-Handle and insert through the top of the Drill Guide Handle and Guide Bolt until it engages with the hex of the Cannulated Set Screw. Turn clockwise to engage the set screw with the Integrated Interlocking Lag Screw.

The Integrated Interlocking Screws are incapable of excessive medial migration and/ or rotation within the nail, but can still slide to allow postoperative compression. To facilitate sliding, do not lock the Cannulated Set Screw. Full engagement of the Set Screw with the Lag Screw converts the construct into a fixed angle device.

Subtrochanteric Lag Screw insertion

Confirm Guide Pin position and remove the 3.2mm Guide Pin Sleeve. Attach the MANYETIX PFN Lag Screw Drill to power and insert into the Lag Screw Drill Sleeve over the Guide Pin. Drill to the depth measured for the Lag Screw. The calibrations on the Lag Screw Drill will be flush with the back of the Lag Screw Drill Sleeve. Re-confirm Lag Screw Drill position under fluoroscopy.

Subtrochanteric Lag Screw insertion: No compression

Select a lag screw equal in length to the drilled depth.

Example Drilling depth 100mm
Screw length 100mm

Align the back end of the appropriate length Subtrochanteric Lag Screw with the Subtrochanteric Lag Screwdriver. Thread the Retaining Rod into the Lag Screw and tighten the assembly. Attach the Compressing Dial to the Lag Screwdriver and turn clockwise until the “0mm” mark on the Lag Screwdriver is flush with the base of the dial.

Attach the T-Handle to the Lag Screwdriver and insert the assembly into the Lag Screw Drill Sleeve over the Guide Pin. Advance the Lag Screwdriver manually until the Compressing Dial is flush with the back of the Lag Screw Drill Sleeve. For proper Lag Screw alignment with the pre-assembled Cannulated Set Screw, the T-Handle must be either parallel or perpendicular to the Drill Guide assembly.

Subtrochanteric Lag Screw insertion: With compression

Select a Lag Screw equal in length to the drilled depth minus the desired amount of compression.

Example Drilling depth 100mm
Compression 10mm
Screw length 90mm

Align the back end of the appropriate length Subtrochanteric Lag Screw with the Subtrochanteric Lag Screwdriver. Thread the Retaining Rod into the Lag Screw and tighten the assembly. Attach the Compressing Dial to the Lag Screwdriver and turn clockwise until the mark on the Lag Screwdriver representing the desired amount of compression is flush with the base of the dial.

Attach the T-Handle to the Lag Screwdriver and insert the assembly into the Lag Screw Drill Sleeve over the Guide Pin. Advance the Lag Screwdriver manually until the Compressing Dial is flush with the back of the Lag Screw Drill Sleeve. For proper Lag Screw alignment with the pre-assembled Cannulated Set Screw, the T-Handle must be either parallel or perpendicular to the Drill Guide assembly. Release any traction on the affected limb to allow for fracture compression.

Compression is achieved by turning the Compressing Dial clockwise until the “0mm” mark on the Lag Screwdriver is visible at the base of the dial. It is recommended to stop compression when the “0mm” mark appears. However, extra compression (2-3mm) may be achieved by turning the Compressing Dial until the red mark on the Lag Screwdriver appears.

Note It is not recommended to exceed 10mm of compression.

Subtrochanteric Lag Screw insertion: Locking the Cannulated Set Screw

Attach the Set Screwdriver to the T-Handle and insert through the top of the Drill Guide Handle and Guide Bolt until it engages with the hex of the Cannulated Set Screw. Turn clockwise to engage the Set Screw with the Subtrochanteric Lag Screw. To prevent Lag Screw sliding within the nail, firmly engage the Set Screw with the Lag Screw. To allow postoperative sliding, back the Set Screw off 1/4 turn from the Lag Screw once engaged.

Note As all four grooves on the body of the Lag Screw are equal in length, the same amount of sliding may be achieved with the T-Handle in either the perpendicular or parallel position.

To confirm Set screw position, reattach the T-Handle to the Subtrochanteric Lag Screwdriver and turn it within the Lag Screw Drill Sleeve. If the Lag Screwdriver will not turn, the Set Screw was successfully engaged. If it turns, repeat the previous steps for locking the Set Screw.

Distal locking

Short nail: 18cm and 20cm

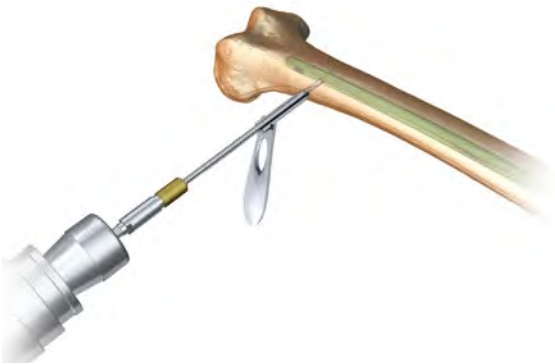
Reconfirm fracture reduction via radiographic imaging. Make a small incision at the site of screw entry and insert the 9.0mm Drill Sleeve and 4.0mm Drill Sleeve through the desired slot on the Drill Guide. Drop down to bone. Drill both cortices with the 4.0mm Long Pilot Drill*.

Measure for screw length using either the calibrations on the 4.0mm Long Pilot Drill* or by removing the 4.0mm Drill Sleeve and using the Screw Depth Gauge. Attach the appropriate length 5.0mm locking screw to the Medium Hexdriver and insert through the 9.0mm Drill Sleeve on power until the laser etched ring on the hexdriver reaches the back of the drill sleeve. Attach the T-Handle to the hexdriver and tighten the locking screw by hand.

Note If encountering hard bone, the MANYETIX PFN 4.7 Diaphyseal Drill can be used through the gold sleeve. This item is not included in the sets.

Long nail: 26-46cm

Distal locking is performed in the lateral plane using a free-hand technique. Reconfirm fracture reduction and align the C-Arm over the desired locking hole. Obtain a “perfect circle” image of the locking hole and use a blunt object to approximate the location of the locking hole by dimpling the skin.



Make a stab incision at the site of screw entry, insert the 4.0mm Short Drill down to bone, and drill both cortices.

Measure for screw length using the Screw Depth Gauge. Alternatively, leave the 4.0mm Short Drill in place, insert the Screw Length Sleeve down to bone, and read the exposed calibrations off the drill. Insert the appropriate length 5.0mm locking screw using either the Medium or Short Hexdriver and T-Handle

Nail Cap insertion: Optional

Remove the Drill Guide Handle using the Guide Bolt Wrench and T-Handle. Attach the MANYETIX PFN Nail Cap to the Medium Hexdriver/ T-Handle assembly and insert into the top of the nail until tight.

Note If cross-threading occurs, rotate the nail cap counterclockwise until its threads line up with those of the nail. Proceed with insertion until tight.

Closure

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

Implant removal: Optional

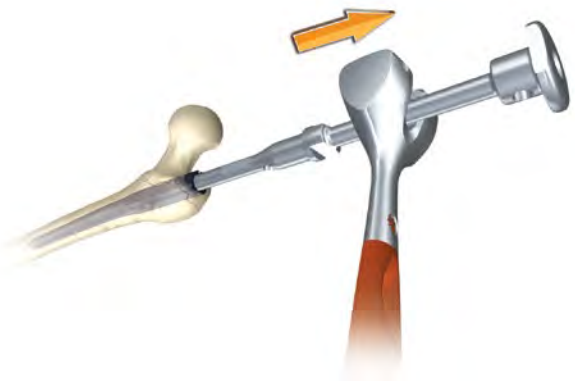
Disengage the Cannulated Set Screw Remove the nail cap if implanted using the Medium Hexdriver and T-Handle. Attach the Set Screwdriver to the T-Handle and insert into the top of the nail until it engages with the hex of the Cannulated Set Screw. Turn counterclockwise to fully disengage the set screw from the lag screw.

Subtrochanteric Lag Screw removal Attach a Guide Pin 3.2mm x 343mm to power via the Mini Connector and insert into the back of the Subtrochanteric Lag Screw under fluoroscopy. This may also be performed manually. Slide the Subtrochanteric Lag Screwdriver over the guide pin and engage it with the back of the lag screw. Thread the retaining rod into the lag screw and attach the T-Handle to the back of the lag screwdriver. Remove using counterclockwise turns of the assembly.

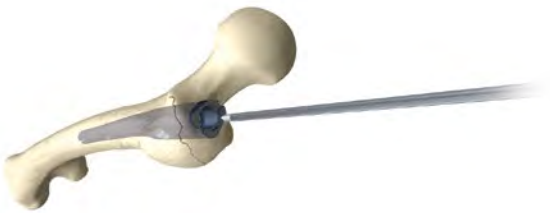
Integrated Interlocking Screw removal Insert the Compression Screw Hexdriver into the back of the Compression Screw and engage the retaining rod. Attach the T-Handle to the back of the hexdriver and remove using counterclockwise turns of the assembly.

Under fluoroscopy, insert a Guide Pin 3.2mm x 343mm into the back of the Integrated Interlocking Lag Screw. Slide the Lag Screwdriver over the guide pin and engage it with the back of the lag screw. Thread the retaining rod into the lag screw and remove using counterclockwise turns of the assembly.

Open nail extraction technique
Remove all but one of the locking screws using the Medium Hexdriver and T-Handle. Thread the Nail Extractor into the Impactor or One Piece Impactor and introduce the extraction assembly into the top of the nail. Remove the final locking screw(s) and extract the nail with a back-slapping motion using the Slotted Hammer.



Percutaneous nail extraction technique This technique assumes the absence of a nail cap. Attach a Guide Pin 3.2mm x 343mm to power via the Mini Connector and insert into the top of the nail under fluoroscopy. This may also be performed manually.



Attach the 12.5mm Entry Reamer to power. Make a one inch incision around the guide pin and advance the entry reamer over the guide pin and into the top of the nail to remove bony ingrowth. Nail extraction follows the previously described technique.

Note The tip of the entry reamer is straight for approximately one inch before flaring out. It is this portion of the entry reamer that enters the top of the nail.

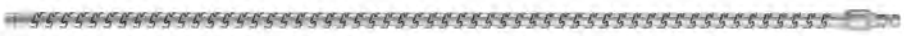
Instruments for fracture reduction and intramedullary reaming (long nail)

T-Handle
Cat. No. 571674076

Reamer Heads
Cat. No. 571118231 to 571118256*

Gripper
Cat. No.571674080

Obturator
Cat. No.571674078



Flexible Reamer Shaft
Cat. No. 571118200

Reducer
Cat. No.571674077

3.0mm x 1000mm Ball Tip Guide Rod Cat. No. 571631626

Guide Pin 3.2mm x 343mm
Cat. No. 571631436

12.5mm Entry Reamer
Cat. No. 571631116

Honeycomb Cat. No.571674075

Entry Portal Tube
Cat. No.571674060

Entry Portal Handle
Cat. No. 571674092

14mm Channel Reamer*
Cat. No. 571631023

Instruments for nail assembly and insertion

Drill Guide Handle
Cat. No. 571674001

Alignment Arm Cat. No.571674066

Guide Bolt
Cat. No.571674071

Alignment Tower
Cat. No.571674018

Drill Guide Drop 125° and 130°Cat. No. 571674002 and 571674003

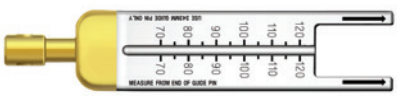
Slotted Hammer
Cat. No.571674082

Cannulated Impactor - Medium
Cat. No. 571675081

Guide Bolt Wrench
Cat. No. 571631140

Lag Screw Drill Sleeve
Cat. No. 571674023

3.2mm Guide Pin Sleeve
Cat. No. 571674532



Lag Screw Length Gauge
Cat. No. 571674558

Cannulated Awl
Cat. No.
571674000

7.0mm Compression Screw Starter Drill Cat. No. 571674570

Lag Screw Tap Cat. No.571674009

7.0mm Compression Screw Drill Cat. No. 571674034

11mm Lag Screw Drill Cat. No. 571674540

Compression Screw Hexdriver Cat. No. 571674035

Anti-Rotation Bar Cat. No.571674041

Set Screwdriver Cat. No.571665014

Lag Screwdriver Inner Rod Cat. No.57167406A

Lag Screwdriver Cat. No.571674067

4.0mm Short Drill** Cat. No. 571631117

Screwdriver Release Cat. No. 571674084

Screw Length Sleeve Cat. No. 571674085

Compressing Dial Cat. No.571674069

Nail Extractor Cat.No.571631320

Cannulated Impactor – Long* Cat. No. 571631185

Screw Depth Gauge Cat. No. 571631189

4.0mm Long Pilot Drill* Cat. No. 571631110

4.0mm Inner Drill Sleeve Cat. No. 571674083

9.0mm Drill Sleeve Cat. No. 571631152

Medium Hexdriver Cat. No. 571631066

Short Hexdriver Cat. No.571631068

Catalog Information

Base Instrument Set*

Set No. 571674012

Cat. No.	Description	Qty
571129401	Small Outer Case	1 ea
571129402	Lid for Outer Case	1 ea
571674021	PFN Base Tray	1 ea

Instruments

Cat. No.	Description	Tray Qty
5716310 66	Medium Hexdriver	1 ea
571631068	Short Hexdriver	1 ea
571631116	12.5mm Entry Reamer	1 ea
571631140	Guide Bolt Wrench	1 ea
571631152	9.0mm Drill Sleeve	2 ea
571631161	Multipurpose Driver	1 ea
571631186	Mini Connector	1 ea
571631189	Screw Depth Gauge	1 ea
571674000	Cannulated Awl	1 ea
571674060	Entry Portal Tube	1 ea
571674074	3.2mm T-Handle Trocar	1 ea
571674075	Honeycomb	1 ea
571665014	Set Screw Driver	1 ea
571674068	Subtrochanteric Lag Screw Driver	1 ea
571674001	Drill Guide Handle	1 ea
571674003	130° Drill Guide Drop	1 ea
571674069	Compressing Dial	1 ea
571674570	7.0mm Compression Starter Drill	1 ea
571674540	Lag Screw Drill	1 ea
571674009	Lag Screw Tap	1 ea
571674071	Guide Bolt	2 ea
571674018	Alignment Tower	1 ea
571674002	125° Drill Guide Drop	1 ea

Cat. No.	Description	Tray Qty
571674076 or 571674576	T-Handle	1 ea
571674077	Reducer	1 ea
571674078	Obturator	1 ea
571674079	Ruler	1 ea
571674080	Gripper	1 ea
571675081	Cannulated Impactor – Medium	1 ea
571674082	Slotted Hammer	1 ea
571674083	4.0mm Drill Sleeve	3 ea
571674084	Screwdriver Release Handle	1 ea
571674085	Screw Length Sleeve	1 ea
571674092	Entry Portal Handle	1 ea
571674523	Lag Screw Drill Sleeve	1 ea
571674041	Anti-Rotation Bar	1 ea
571687111	IMHS™ CP Nail Extractor	1 ea
571674532	3.2mm Guide Pin Sleeve	1 ea
571674034	7.0mm Compression Screw Drill	1 ea
571674035	Compression Screw Hexdriver	1 ea
571674558	Lag Screw Length Gauge	1 ea
571674062	16mm Channel Reamer	1 ea
571674063	17mm Channel Reamer	1 ea
571674066	Alignment Arm	1 ea
571674067	Lag Screw Driver	1 ea

Disposables

Set No. 571671200

Cat. No.	Description	Tray Qty
571631121	4.0mm Long AO Pilot Drill, 333mm	2 ea
571631123	4.0mm Short AO Pilot Drill, 161mm	2 ea
571631626	3.0mm X 1000mm Ball Tip Guide Rod	2 ea
571631436	Guide Pin 3.2mm X 343mm	3 ea
571641123*	4.7/4.0 Diaphyseal Drill	

Optional Instruments

Cat. No.	Description	Qty
571631070	Long Hexdriver	1 ea
571674002	125° Drill Guide Drop	1 ea
571751153	AO Mini Connector	1 ea
571631187	Trinkle to Mini Connector	1 ea

Set: Optional

Set No. 571671212

Cat. No.	Description	Qty
571118200	Flexible Reamer	1 ea
571631130	Flexible Reamer Extender	1 ea
571118232	9.0mm Reamer Head	1 ea
571118233	9.5mm Reamer Head	1 ea
571118234	10.0mm Reamer Head	1 ea
571118235	10.5mm Reamer Head	1 ea
571118236	11.0mm Reamer Head	1 ea
571118237	11.5mm Reamer Head	1 ea
571118238	12.0mm Reamer Head	1 ea
571118239	12.5mm Reamer Head	1 ea
571118240	13.0mm Reamer Head	1 ea
571118241	13.5mm Reamer Head	1 ea
571118242	14.0mm Reamer Head	1 ea
571118243**	14.5mm Reamer Head	1 ea
571118244**	15.0mm Reamer Head	1 ea
571118245**	15.5mm Reamer Head	1 ea
571118246**	16.0mm Reamer Head	1 ea

Implants

11.0mm Subtrochanteric Lag Screws

Cat. No.	Description	Qty
2064107075	Intertrochanteric 75mm Lag	1
2064107580	Intertrochanteric 80mm Lag	1
2064108085	Intertrochanteric 85mm Lag	1
2064108590	Intertrochanteric 90mm Lag	1
2064109095	Intertrochanteric 95mm Lag	1
2064195100	Intertrochanteric 100mm Lag	1
2064100105	Intertrochanteric 105mm Lag	1
2064105110	Intertrochanteric 10mm Lag	1
2064110115	Intertrochanteric 115mm Lag	1
2064115120	Intertrochanteric 120mm Lag	1
2064120125	Intertrochanteric 125mm Lag	1

7mm Compression Screw

Cat. No.	Length	
2063107570	70mm	Compression Screw
2063108075	75mm	Compression Screw
2063108580	80mm	Compression Screw
2063109085	85mm	Compression Screw
2063109590	90mm	Compression Screw
2063110095	95mm	Compression Screw
2063105100	100mm	Compression Screw
2063110105	105mm	Compression Screw
2063115110	110mm	Compression Screw
2063120115	115mm	Compression Screw
2063125120	120mm	Compression Screw

5.0mm Internal Hex Captured Locking Screws***

Cat. No.	Length
2001015025	25mm
2001015030	30mm
2001015035	35mm
2001015040	40mm
2001015045	45mm
2001015050	50mm

Other Implants

Cat. No.	Description
2063100130	Compression Screw, 30mm
2063100000	Set Screw
2063100030	Nail Cap, 0mm

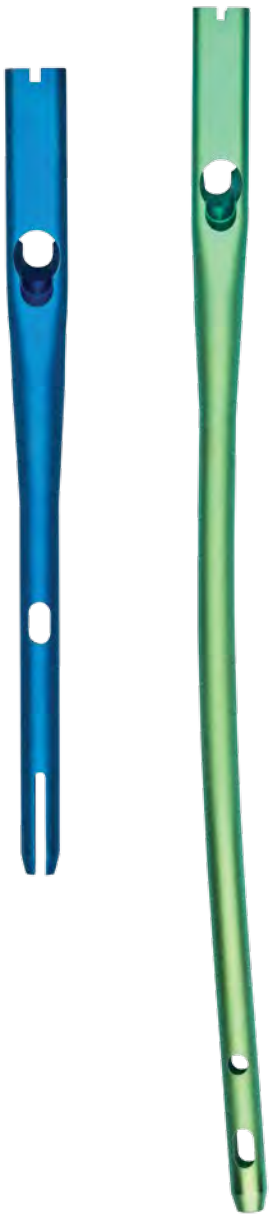
Replacement Items

Cat. No.	Description
571674086	Subtrochanteric Lag Screw Hexdriver Rod
571674087	Lag Wrench Retaining Rod Assembly
571674088	Compression Screw Hexdriver Shaft

MANYETIX PFN Intertrochanteric Antegrade Nails

Short Nails (Blue)

Cat. No.	Distal Diameter	Length	Neck Angle
2061251018	10mm (10s Nail)	18cm	125°
2061301018	10mm (10s Nail)	18cm	130°
2060251020	10mm (10s Nail)	20cm	125°
2060301020	10mm (10s Nail)	20cm	130°
2061251118	11.5mm	18cm	125°
2061301118	11.5mm	18cm	130°
2060251120	11.5mm	20cm	125°
2060301120	11.5mm	20cm	130°
2061251318	13mm	18cm	125°
2061301318	13mm	18cm	130°
2060251320	13mm	20cm	125°
2060301320	13mm	20cm	130°



10mm (10s Nail) Diameter Nails (26cm-46cm) (Lime/Rose)

Left	Right	Length	Neck Angle
2060311026	2060301026	26	130°
2060311028	2060301028	28	130°
2060311030	2060301030	30	130°
2060311032	2060301032	32	130°
2060311034	2060301034	34	130°
2060311036	2060301036	36	130°
2060311038	2060301038	38	130°
2060311040	2060301040	40	130°
2060311042	2060301042	42	130°
2060311044	2060301044	44	130°
2060311046	2060301046	46	130°

11.5mm Diameter Nails (26cm-46cm) (Lime/Rose)

Left	Right	Length	Neck Angle
2060311126	2060301126	26	130°
2060311128	2060301128	28	130°
2060311130	2060301130	30	130°
2060311132	2060301132	32	130°
2060311134	2060301134	34	130°
2060311136	2060301136	36	130°
2060311138	2060301138	38	130°
2060311140	2060301140	40	130°
2060311142	2060301142	42	130°
2060311144	2060301144	44	130°
2060311146	2060301146	46	130°

13mm Diameter Nails (26cm-46cm) (Lime/Rose)

Left	Right	Length	Neck Angle
2060311326	2060301326	26	130°
2060311328	2060301328	28	130°
2060311330	2060301330	30	130°
2060311332	2060301332	32	130°
2060311334	2060301334	34	130°
2060311336	2060301336	36	130°
2060311338	2060301338	38	130°
2060311340	2060301340	40	130°
2060311342	2060301342	42	130°
2060311344	2060301344	44	130°
2060311346	2060301346	46	130°

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