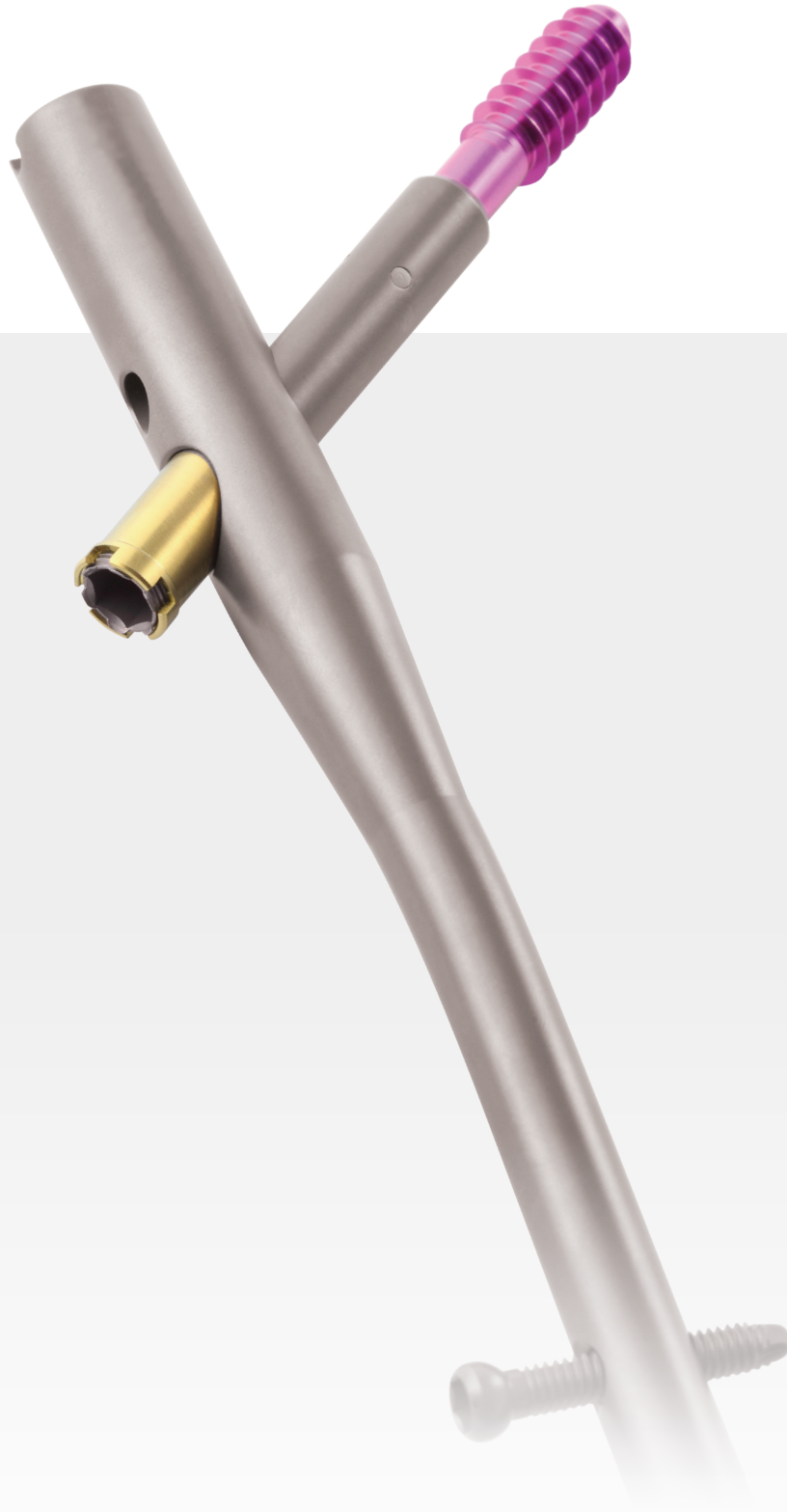


Trochanteric Nail System

Surgical Technique



04	Introduction
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Trochanteric Nail System

Introduction

The trochanteric nail is a next-generation hip nail that addresses the remaining shortcomings of current systems such as lateral lag screw irritation, lag screw cut out, workflow inefficiencies, and loss of rotational reduction. The system consists of three nail types—short nails, long nails, and the innovative ES nails.



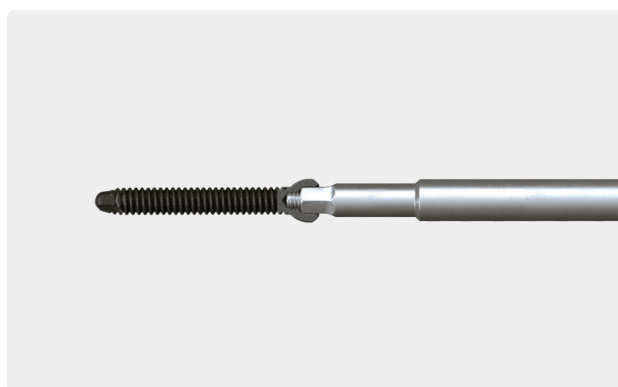
Telescoping Lag Screw

The Arthrex telescoping lag screw allows for controlled self-contained collapse within the lag screw. Other lag screws are designed to slide within the nail during the healing process, which can cause the lateral end of the lag screw to protrude into the patient's soft tissue, causing irritation and/or bursitis.



Biological Augmentation

The system allows for the delivery of orthobiologics (BoneSync™ cement, Angel® platelet-rich plasma, AlloSync Pure™, etc) through the lag screw and instrumentation.



Advanced Instrumentation

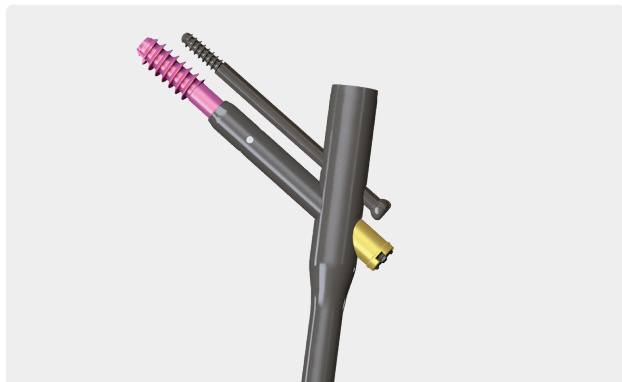
System instruments are designed to reduce surgical pain points and facilitate operative workflow. Some examples include locking the lag screw through the inserter (no set screw required), captured distal 5.0 mm screws, calibrated drill bits, and jig removal through the more lateral impactor hole.

ES Nail Option

The ES nail combines the mechanical advantages of a long nail with the ease of a short nail. It doubles the torsional rigidity compared to a distally locked, long nail and provides more rigidity than an unlocked long trochanteric nail.¹ It extends through the isthmus of the bone, which can reduce distal tip stress risers, potential “pendulum” effects, and risks of peri-prosthetic fractures associated with short nails.

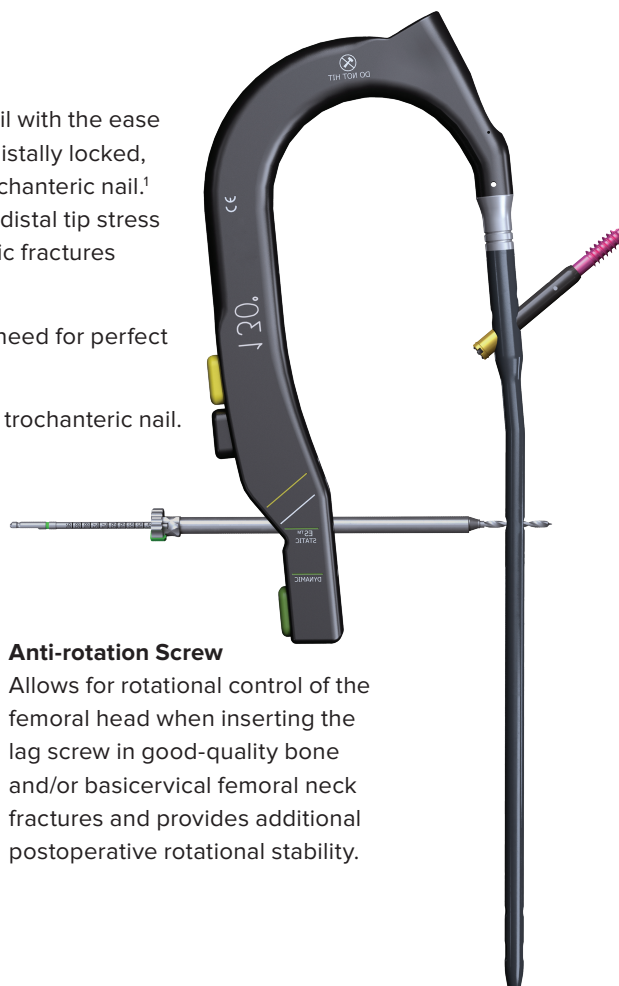
The ES hole is easily targeted through the nail jig without the need for perfect circles or additional attachments or devices.

Patients with shaft fractures should not be treated with the ES trochanteric nail.



Reference

1. Test report T0209. Stress analysis of the aos extended short trochanteric nail vs. the short and long trochanteric nails. *Advanced Orthopaedic Solutions*; September 2006.



Anti-rotation Screw

Allows for rotational control of the femoral head when inserting the lag screw in good-quality bone and/or basicervical femoral neck fractures and provides additional postoperative rotational stability.

Indications and Preoperative Planning

Indications

The Arthrex Trochanteric Nail System is intended to treat stable and unstable proximal fractures of the femur including pertrochanteric, intertrochanteric, and high subtrochanteric fractures and combinations of these fractures. The long trochanteric nail is additionally indicated for subtrochanteric fractures, pertrochanteric fractures associated with shaft fractures, pathologic fractures (including prophylactic use) in osteoporotic bone of the trochanteric and diaphyseal areas, long subtrochanteric fractures, ipsilateral femoral fractures, proximal and distal nonunions and malunions, and revision procedures.

The ES nail is only intended to treat stable and unstable proximal fractures of the femur including pertrochanteric, intertrochanteric, and high subtrochanteric fractures and combinations of these fractures.

Preoperative Planning

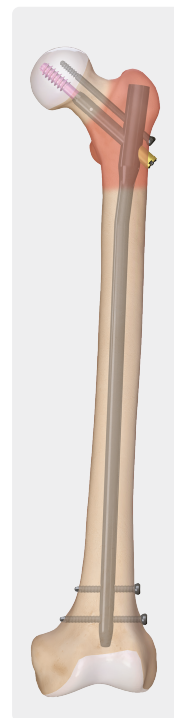
Preoperative radiographs of the uninjured femur may be used to establish proper nail diameter, expected amount of reaming (if necessary), lag screw angle, nail length, and lag screw length.



Short Trochanteric Nail

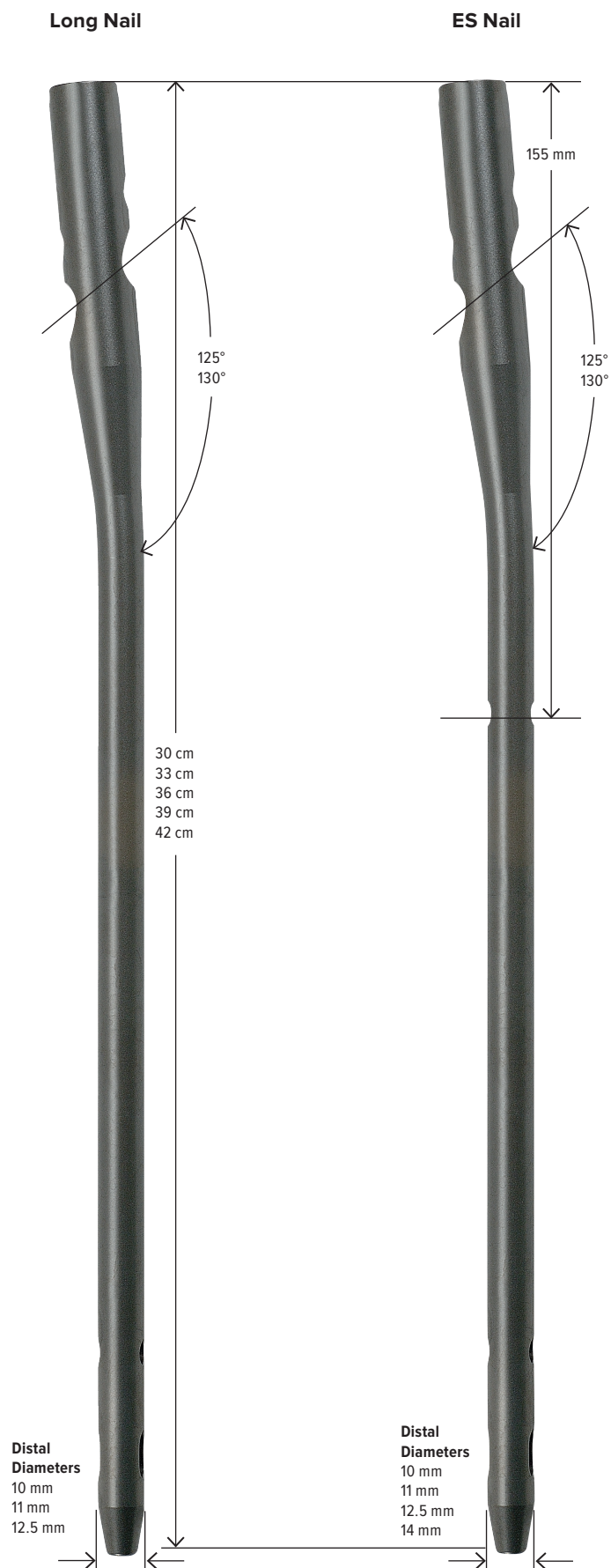
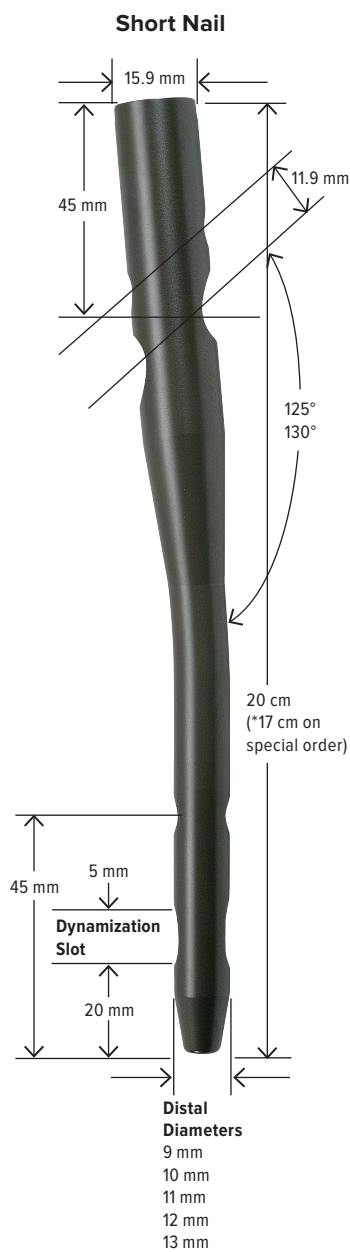


ES Trochanteric Nail



Long Trochanteric Nail

Implant Features

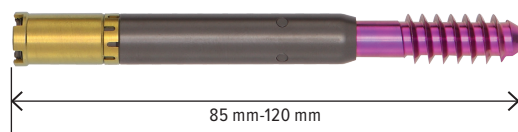


All Nails
5° Lateralization

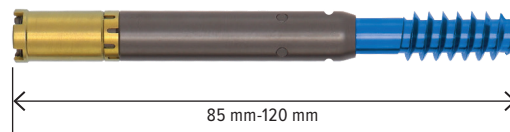
Long and ES Nails
10° Anteversion

Nail Length (cm)	Radius of Curvature (m)
30	0.9
33	0.9
36	1.0
39	1.3
42	1.3

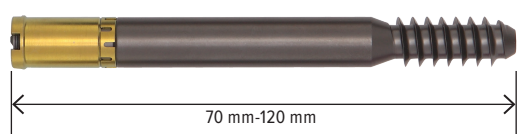
10.5 mm Telescoping Lag Screw



10.5 mm Telescoping Lag Screw, Left



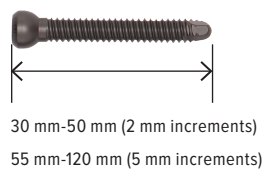
10.5 mm Solid Locking Lag Screw



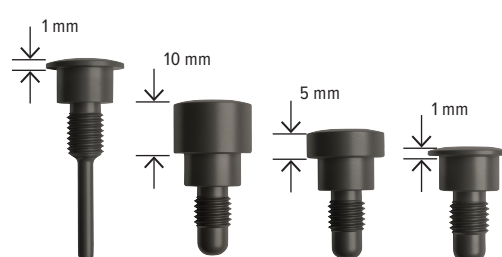
5.0 mm Anti-rotation Screw



5.0 mm Captured Cortical Screw

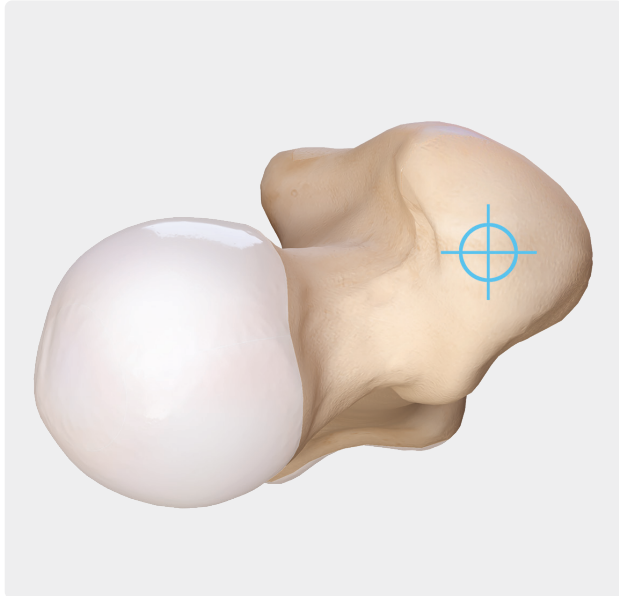


Captured End Caps



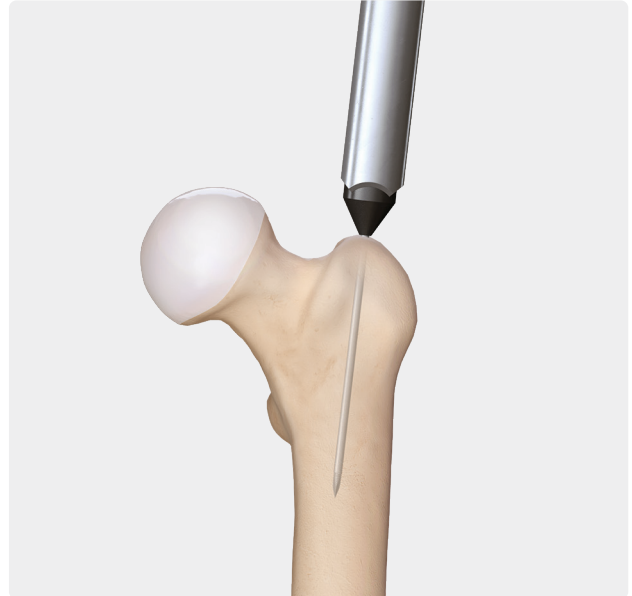
Entry Point

In general, the entry point for the nail is located at the tip of the greater trochanter. This may vary depending on the patient anatomy, fracture pattern, etc.



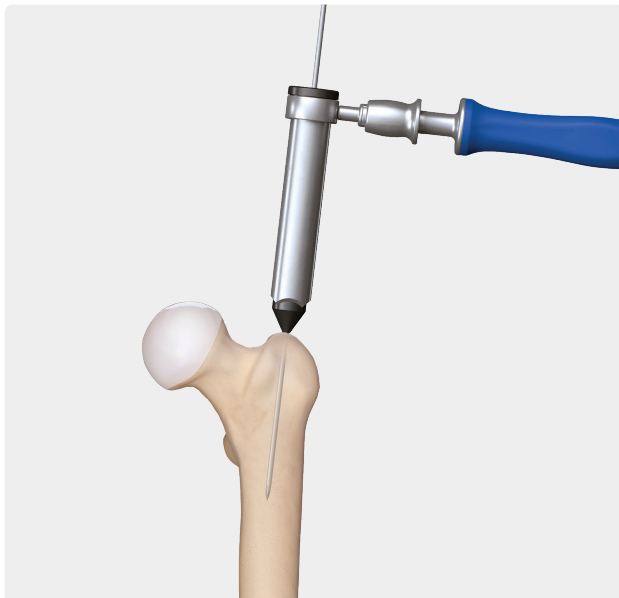
AP—tip of the greater trochanter or slightly medial.

Lateral—junction of the anterior and middle third of greater trochanter to optimize placement within the femoral neck.



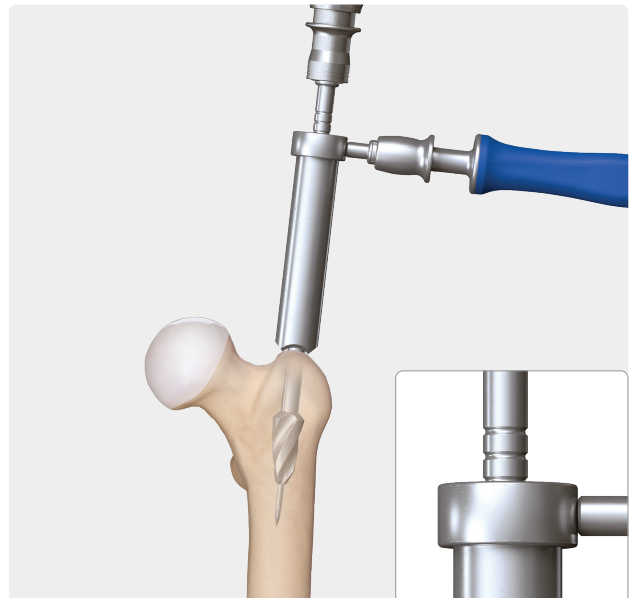
Trochanteric Nail System Surgical Technique

Entry Option 1—Opening One-Step Reamer



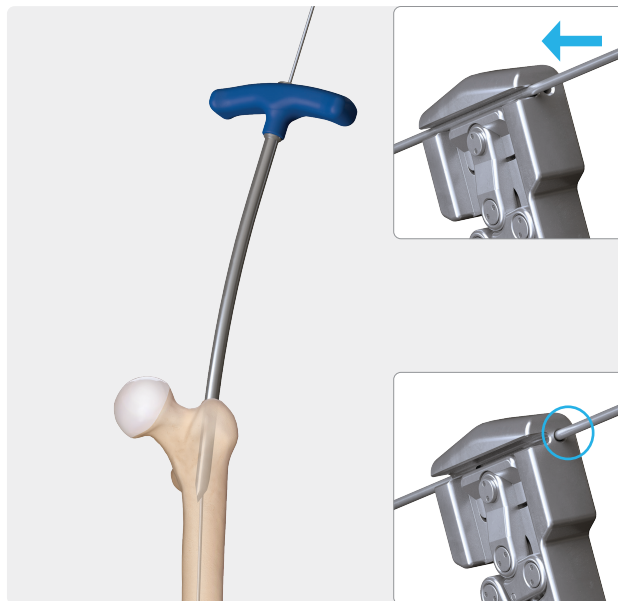
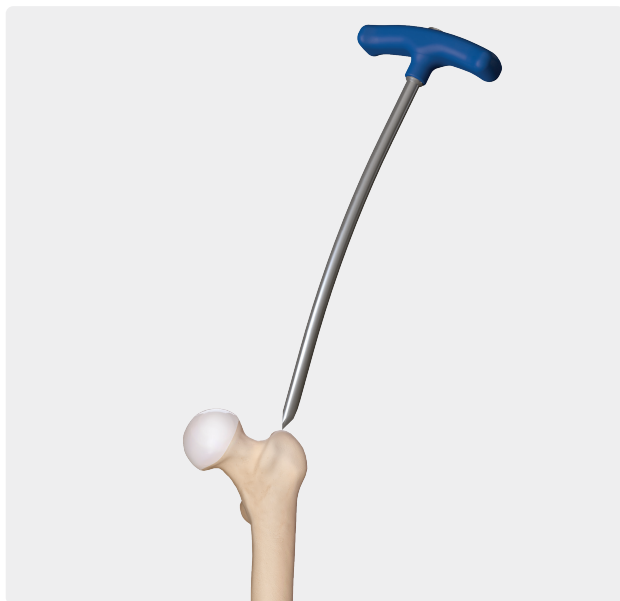
01a

Insert the **3.2 mm guide pin** through the **soft-tissue protector with pin guide** while aiming towards the central axis of the femoral shaft in the AP and lateral image views, distal to the lesser trochanter.



Remove the **black pin guide** and then ream over the 3.2 mm guide pin with the **16.5 mm cannulated entry reamer**. The entry reamer has grooves that are read from the top of the **soft-tissue protector**. The grooves indicate the reaming depth needed to insert the nail flush, 5 mm, or 10 mm deep into the femur.

Entry Option 2—Cannulated Awl



01b

Alternatively, the greater trochanter can be opened with a **cannulated curved awl**, followed by the 3.0 mm ball nose guidewire placed through the curved awl to the desired depth. The **guidewire gripper** can be used through the guidewire cannulation or the side groove option to advance the wire. The awl is then removed.

Prepare the proximal body with the **16.5 mm cannulated entry reamer** over the **3.0 mm ball nose guidewire** through the **soft-tissue protector**.

Intramedullary Reaming—Long and ES Nails Only



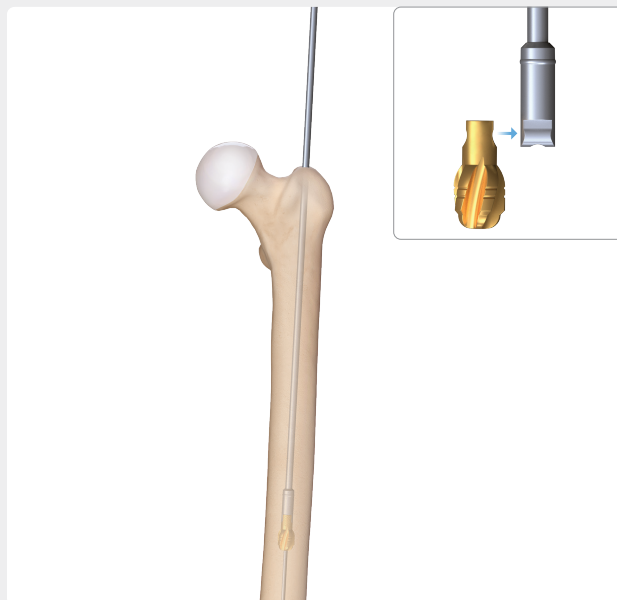
In general, it is not necessary to use flexible reamers to ream the femoral canal for the short trochanteric nail. Reaming may be necessary when using the ES trochanteric nail or long trochanteric nail.

A **reduction tool** (fracture finger) is available to assist in passing the **3.0 mm ball nose guidewire** through diaphyseal fractures by providing additional control of the proximal femoral fragment to gain alignment with the distal fragment(s).

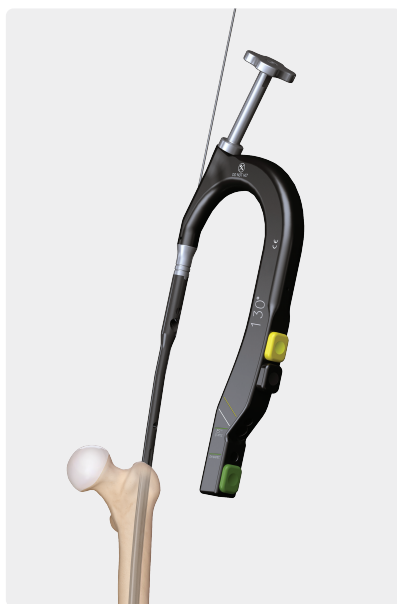
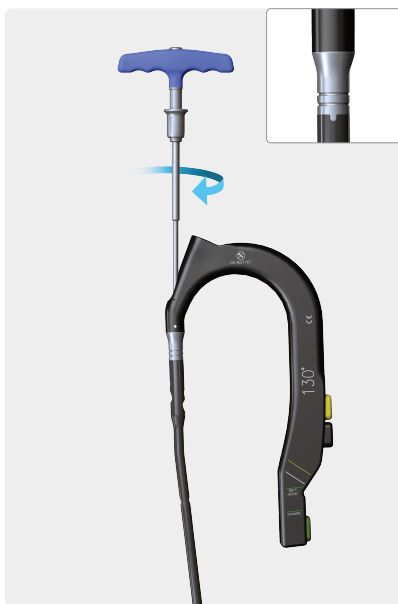
The **guidewire gripper** is used through the guidewire cannulation or the side groove option to advance the wire to the desired depth within the distal femur.



The length for the ES trochanteric nail and long trochanteric nails is determined by sliding the **guidewire depth gauge** over the guidewire to the greater trochanter and reading the measurement from the laser mark on the guidewire.



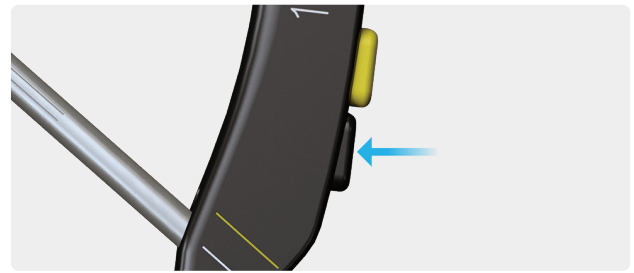
Begin reaming with the 8 mm end-cutting reamer over the ball nose guidewire. All other reamers are side cutting. Sequentially ream until cortical chatter is achieved. It is recommended to ream at least 1 mm to 1.5 mm over the desired nail diameter.



02

Attach the **125° or 130° radiolucent targeting arm** to the desired nail with the **ball hex driver**. Introduce the nail into the proximal femur. If a ball-tip guidewire is used, pass the nail over the guidewire.

For the ES and long nails, use the targeting arm to control nail rotation during implantation. Start with the targeting arm anterior and rotate laterally as the nail advances. This allows the bow of the nail to pass through the proximal femur. The short nail has no bow so it can be implanted with the jig lateral to the leg. If needed, gentle malleting on the **impactor pad** can be used to advance the nail. **Do NOT directly impact the radiolucent targeting arm!**



03

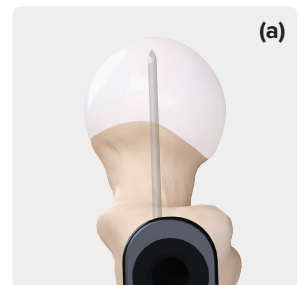
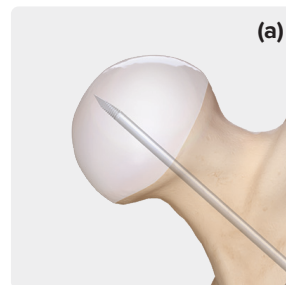
Once the nail has been implanted, insert the lag screw triple-sleeve assembly through the targeting arm by pressing the black button. The assembly consists of the **lag screw sheath**, **3.2 mm pin guide**, and **3.2 mm obturator**.

Make an incision and push the assembly up to the lateral cortex of the femur and then remove the obturator.



04

Insert the **3.2 mm lag screw guide pin** with a pin driver through the pin guide into the femoral head. The positioning of the guide pin should be checked on both AP and lateral views.



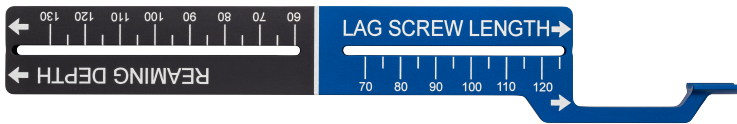
AP (a)—the guide pin should be centered AP in the femoral head or slightly inferior.

Lateral (b)—the guide pin should be centered in the femoral head or slightly posterior.

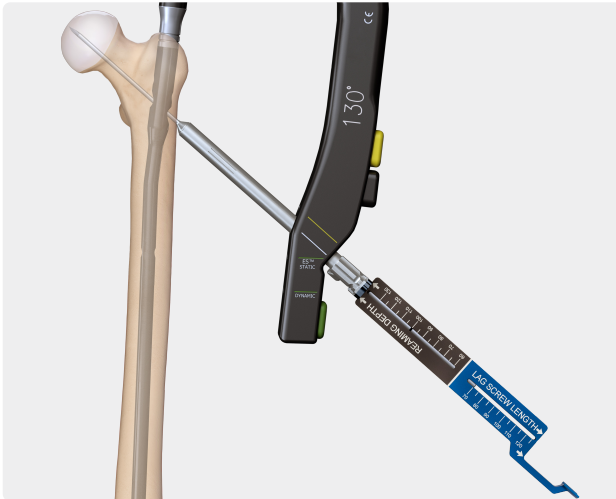
Advance the tip of the guide pin approximately 5 mm from the subchondral bone.

Note: If there is intraoperative instability of the femoral head fragment, the anti-rotation screw sheath and drill guide may be inserted into the targeting module at this time. The anti-rotation screw or just the anti-rotation drill may be used to stabilize the head fragment while preparing and inserting the lag screw.

Measurement Device — Lag Screw Depth Gauge



The lag screw depth gauge is a dual-sided tool designed to provide two measurements: (1) the reaming depth to the tip of the guide pin, and (2) the appropriate lag screw length to ensure the locking ring is centered within the nail when the screw is advanced to the guide pin tip.



01

With the pin guide against the lateral cortex, place the “REAMING DEPTH” side of the lag screw depth gauge over the guide pin and against the pin guide.

This measurement will provide the reaming distance from the 3.2 mm pin guide to the tip of the guide pin.



02

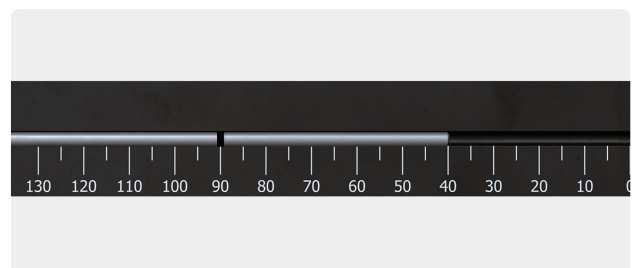
Place the “LAG SCREW LENGTH” side of the lag screw depth gauge over the guide pin with extension pressed against the targeting arm above or below the lag screw cannula.

This measurement will provide the lag screw length required to ensure the locking ring is centered within the nail when advanced to the tip of the guide pin.

Alternate Measurement Device — Legacy Depth Gauge

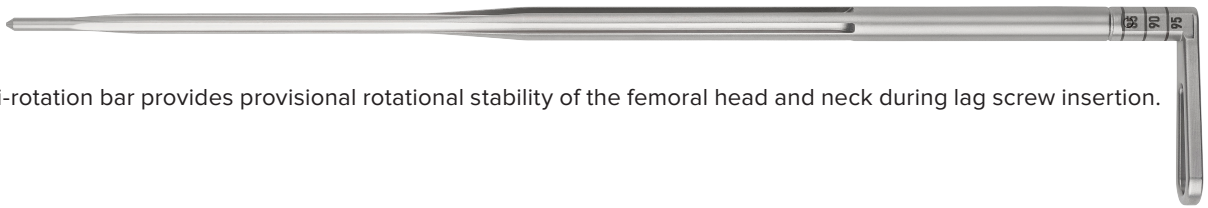


Place the **guide pin depth gauge** under the **3.2 mm lag screw guide pin** with the flat end against the pin guide.

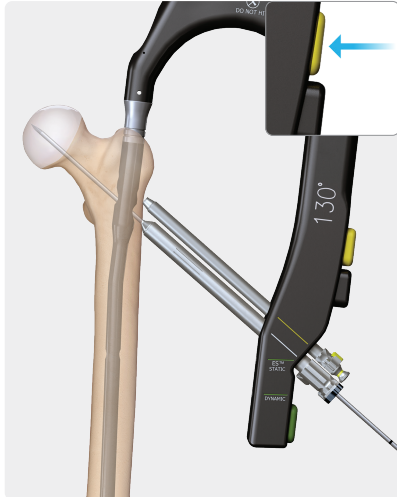


Read the required length from the depth gauge and ensure that the pin guide is touching the bone. The guide pin measures to the tip so at least 5 to 10 mm should be subtracted from the measurement when determining reaming depth and lag screw length selection. Fracture reduction, nail position, and/or anticipated fracture compression should be considered.

Anti-Rotation Bar (Optional)

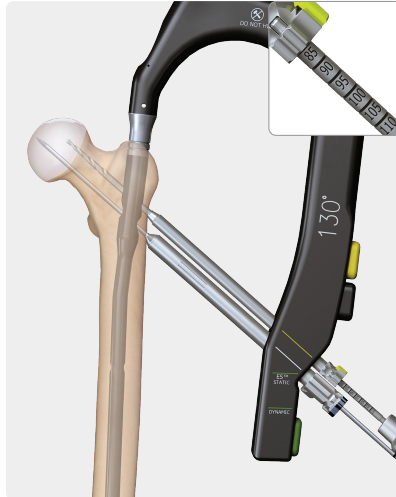


The anti-rotation bar provides provisional rotational stability of the femoral head and neck during lag screw insertion.



01

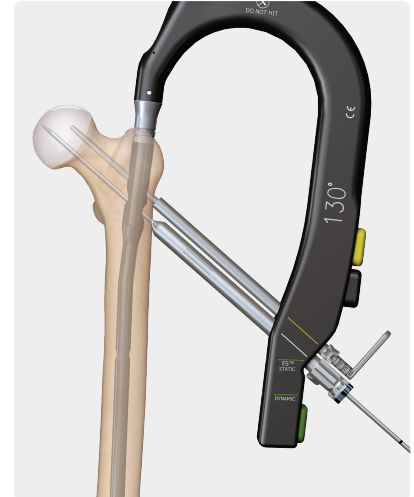
While depressing the yellow button, insert the anti-rotation triple-sleeve assembly into the targeting arm. Ensure that it is properly seated and positioned against the lateral cortex.



02

Remove the obturator and drill using the 5.0 mm calibrated stepped drill bit.

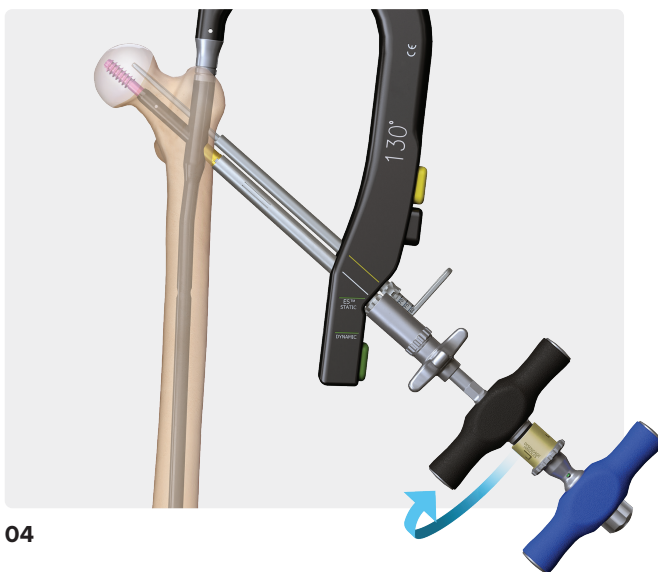
Note: A drill depth of approximately 10-15 mm short of the intended lag screw position is recommended. To maximize anti-rotation screw thread purchase, avoid drilling beyond the desired screw location.



03

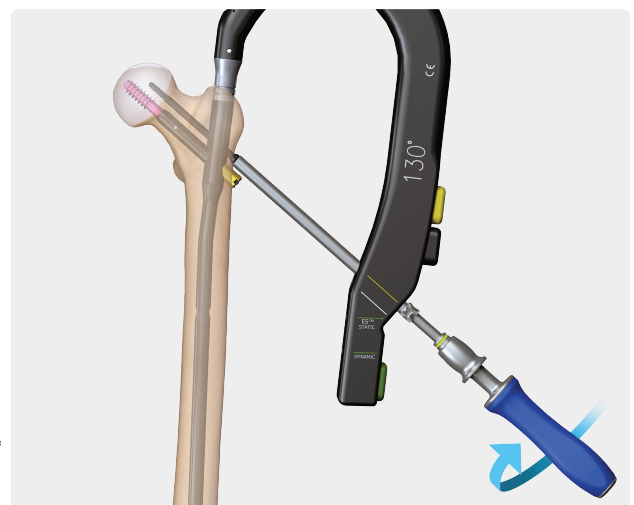
Remove the inner drill cannula. Using the drill measurement, insert the appropriately sized anti-rotation bar into the outer sheath.

Calibration marks may be used to confirm the proper depth and potential anti-rotation screw length.



04

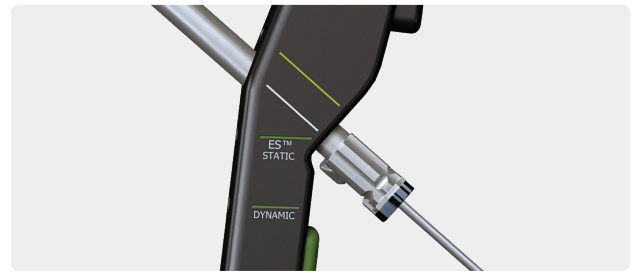
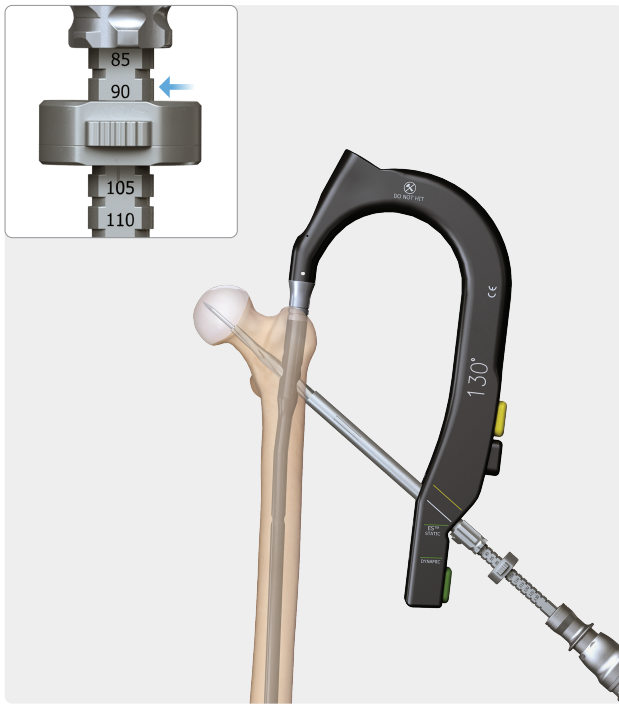
Once positioned, proceed with the steps for inserting the lag screw.



05

Following insertion and locking of the lag screw, remove the anti-rotation bar.

If desired, an anti-rotation screw may be inserted.

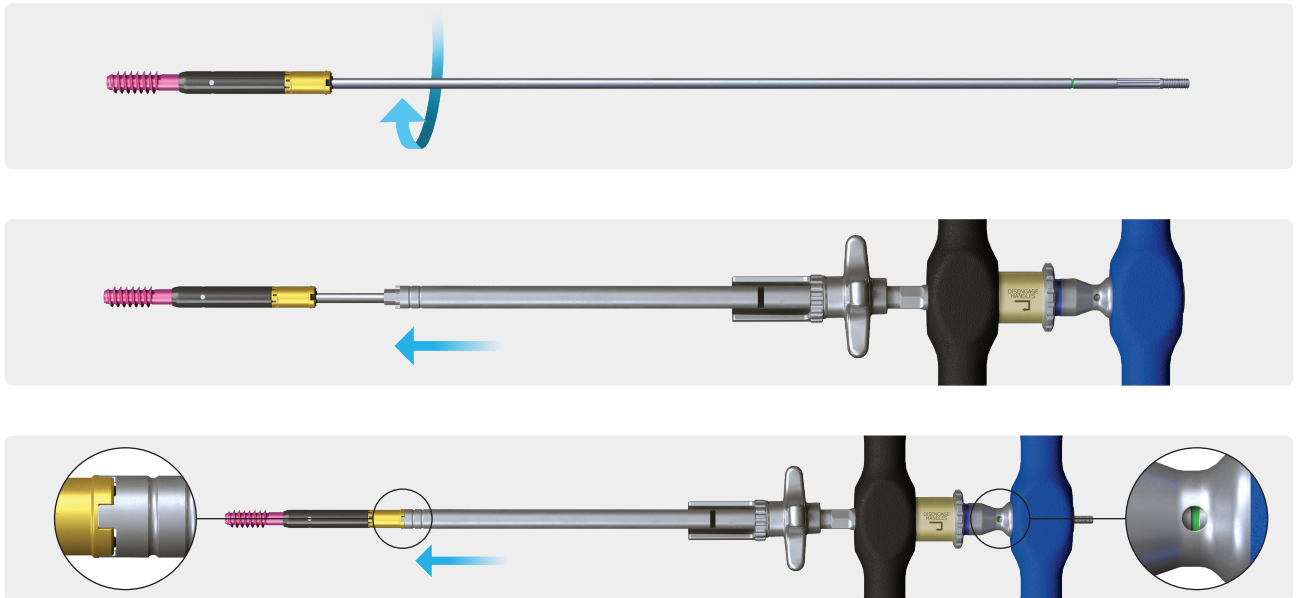


06

Set the **adjustable stop** on the **10.3 mm cannulated lag screw drill** to the desired depth. At least 5-10 mm less than the measurement is recommended so the tip of the drill does not pass beyond the guide pin.

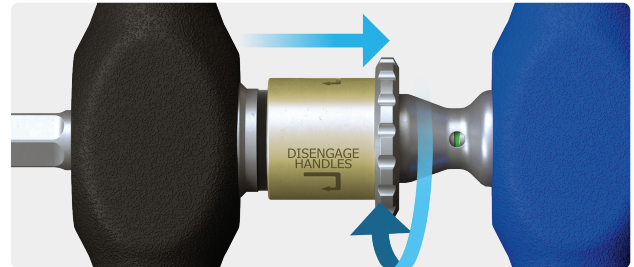
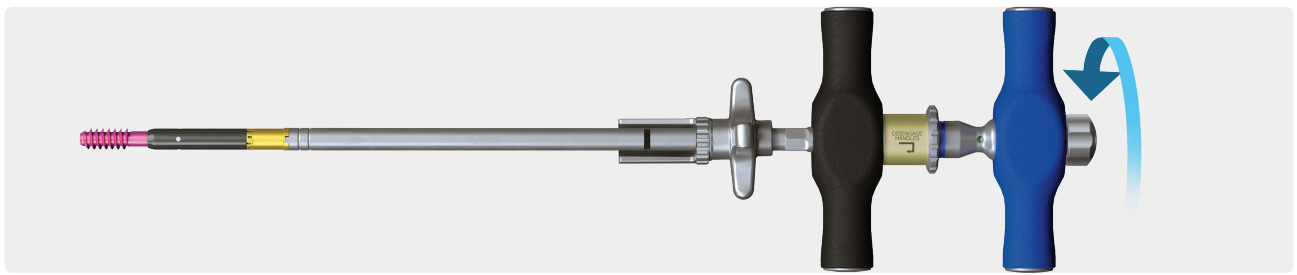
Remove the **3.2 mm pin guide** from the **lag screw sheath** by depressing the black lever. Drill over the lag screw guide pin through the femoral head until the stop contacts the sheath. Confirm the desired depth radiographically and ensure the sheath is seated against the bone.

A **lag screw tap** is available if needed.



07

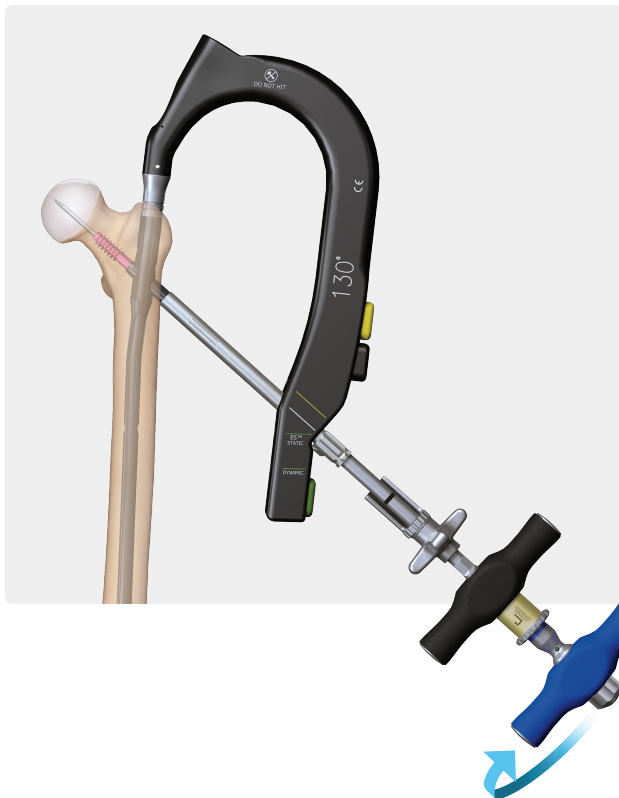
Screw the **lag screw capturing rod** onto the desired length lag screw. Slide the **lag screw inserter** over the **lag screw capturing rod** and rotate the inserter until the “castle” pieces and hex driver mate with the lag screw. A green line centered in the window in the blue handle can be used to ensure proper alignment.



08

Screw the **lag screw capturing rod nut** onto the rear of the assembly. **Do NOT use the ball hex driver for this step. Hand tighten ONLY!**

The gold ring should be set forward showing the blue ring to prepare for lag screw insertion. If the black ring is showing, pull back and rotate the knob clockwise.

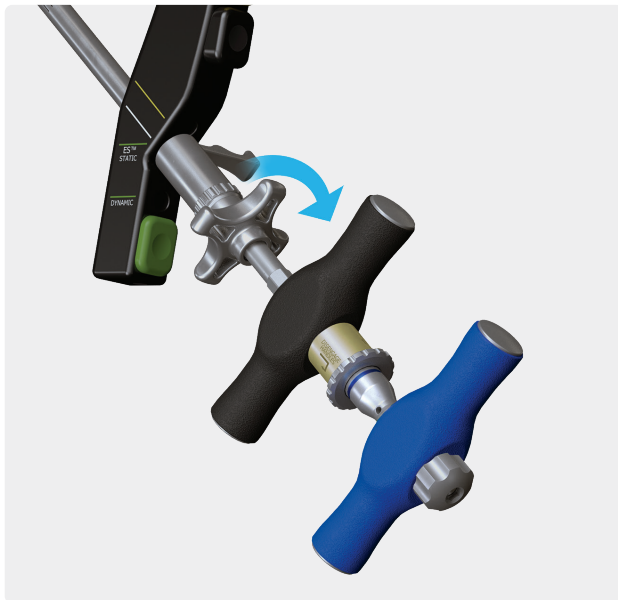


09

Insert the lag screw over the **3.2 mm lag screw guide pin** through the **lag screw sheath** to the desired depth using the blue handle. When the black laser marking on the inserter reaches the sheath, the lag screw has exited the other end of the sheath.

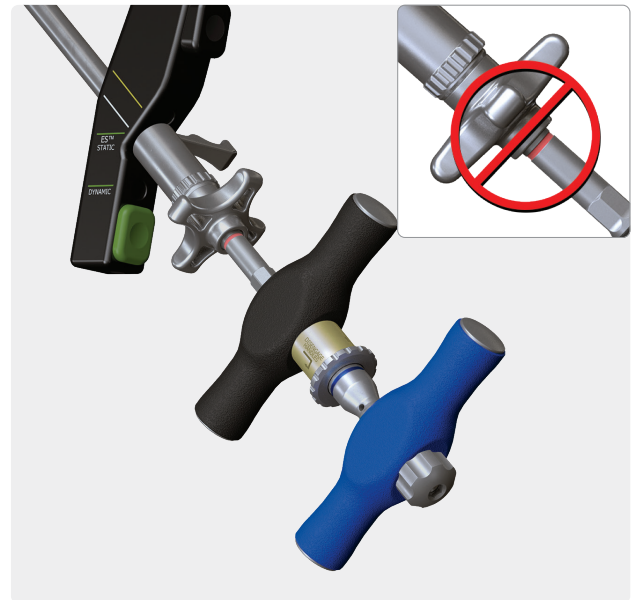
Note: If intraoperative compression is planned, countersink the lag screw to provide enough travel for the lag screw to lock into the nail.

Note: The left threaded lag screw is implanted by turning the handle counterclockwise.



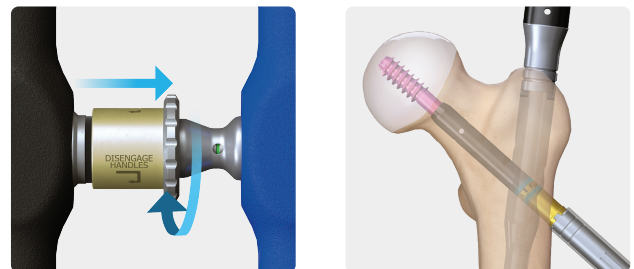
10

Push the **compression sleeve** towards the targeting arm and rotate clockwise until it makes contact. If intraoperative compression is desired, continue rotating the compression sleeve clockwise until compression is achieved.



The mechanism will stop advancing and spin in place showing a red line when the lag screw is too lateral and can no longer be locked. If this occurs, the lag screw should be inserted further into the head and the compression knob used again.

Note: If planning for compression, choose a shorter lag screw and countersink the lateral edge of the lag screw prior to the compression step.



11

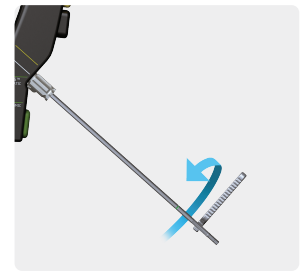
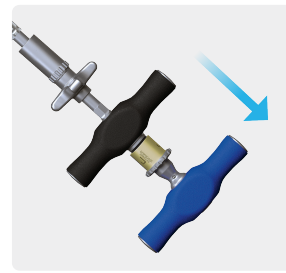
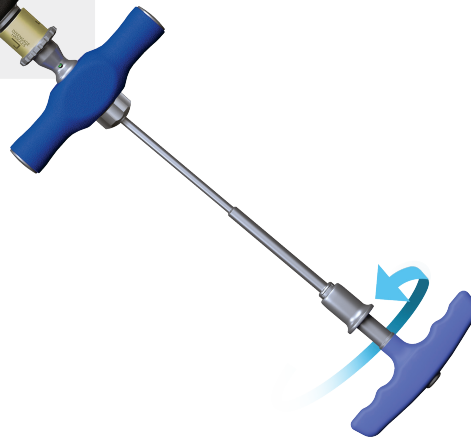
Pull back on the gold knob and turn counterclockwise to engage the black handle. The black ring will now be showing.

To lock the telescoping lag screw/solid locking lag screw, hold the blue lag screw insertion handle stationary and turn the black locking T-handle clockwise until the torque limiter clicks.



12

Unscrew the **lag screw capturing rod nut** by hand or with the **ball hex driver**.



Pull out the inserter assembly and unscrew the **lag screw capturing rod** by hand or with the **lag screw capturing rod wrench**.



13

To allow postoperative compression in the telescoping lag screw, remove the activation sleeve by inserting the **activation tool** through the sheath into the lag screw and turning counterclockwise. The activation sleeve will retain to the tip of the activation tool once disengaged from the lag screw.

Remove the **lag screw sheath**.

Note: If postoperative compression is not desired, leave the activation sleeve within the lag screw.



Anti-rotation Screw Insertion (Optional)



If there is rotational instability during insertion of the lag screw, a **5.0 mm anti-rotation screw** may be used to prevent rotation of the femoral head. Place the **anti-rotation screw triple-sleeve** assembly into the anti-rotation hole in the targeting arm while depressing the yellow button. Extend the incision as needed. Remove the **anti-rotation obturator** and drill with the **5.0 mm calibrated step drill**.



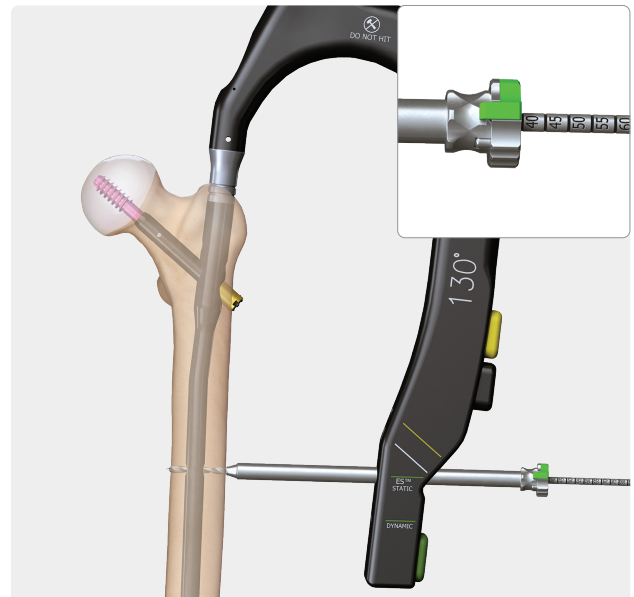
Remove the **anti-rotation drill guide** from the sheath and insert the desired length **5.0 mm anti-rotation screw** using the **3.5 mm hex driver**.

It is recommended to use an anti-rotational screw at least 10 mm shorter than the lag screw.

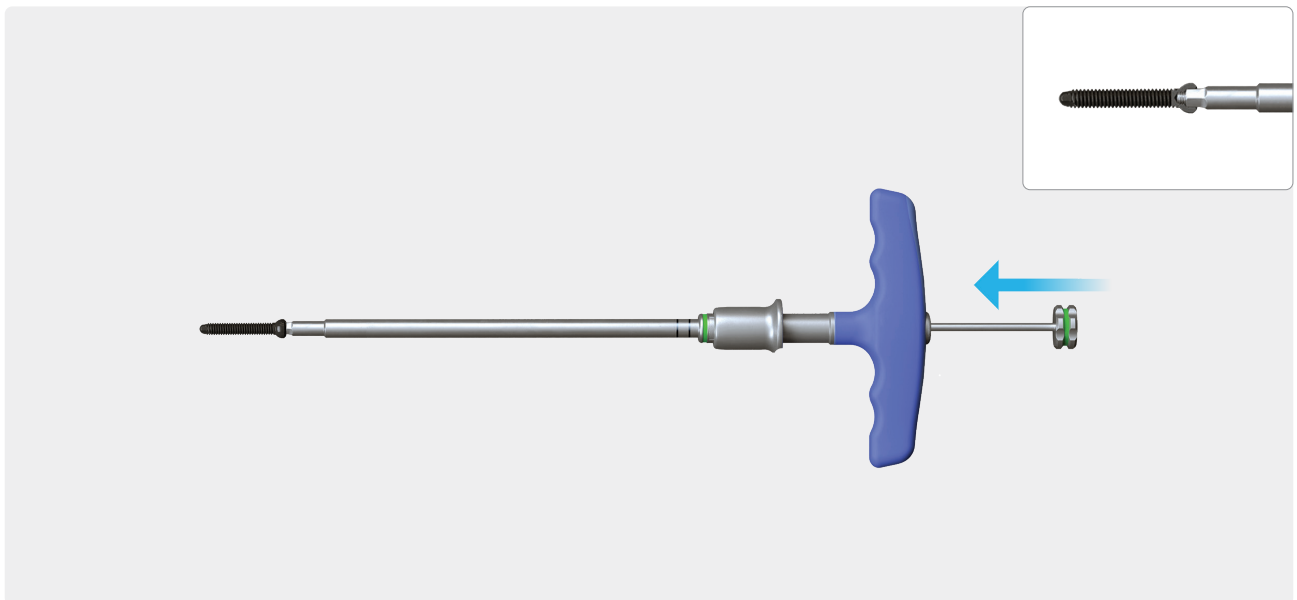


14

For the ES and short nails, distal locking is accomplished using the targeting arm. Place the **distal screw triple-sleeve** assembly through the appropriate distal hole while depressing the green button on the targeting arm and mark the skin.



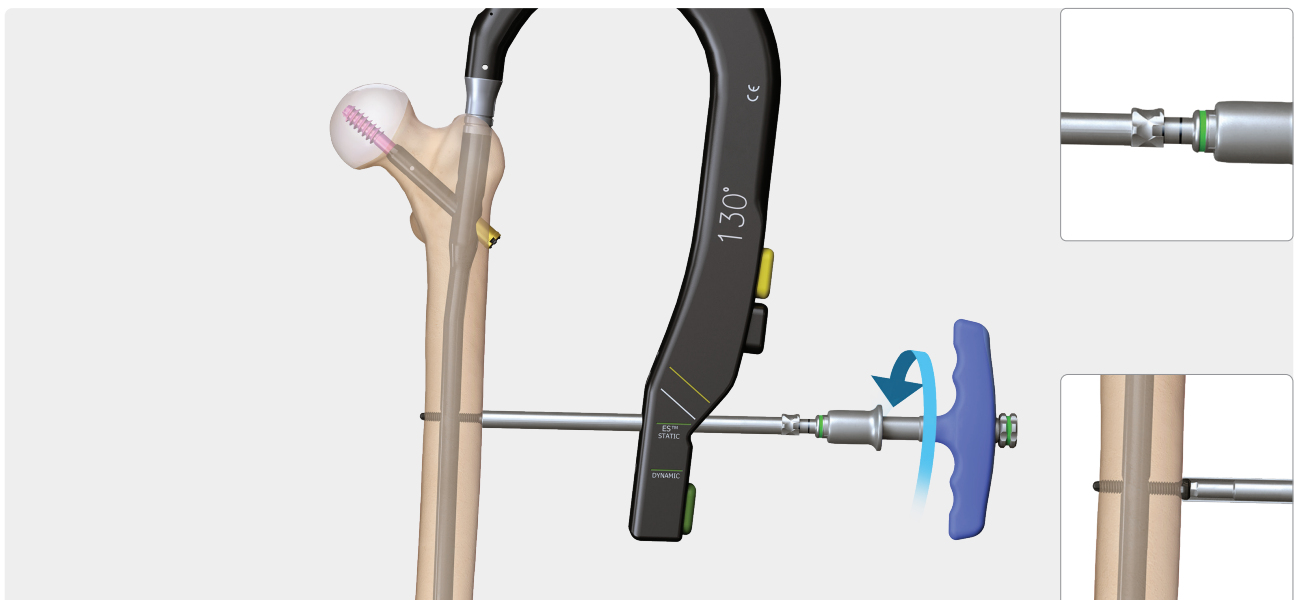
Make the incision and place the distal screw triple-sleeve assembly to the lateral cortex of the bone. Remove the **distal drill guide obturator**. Drill bicortically using the **4.0 mm calibrated drill bit** and measure off of the drill bit.



15

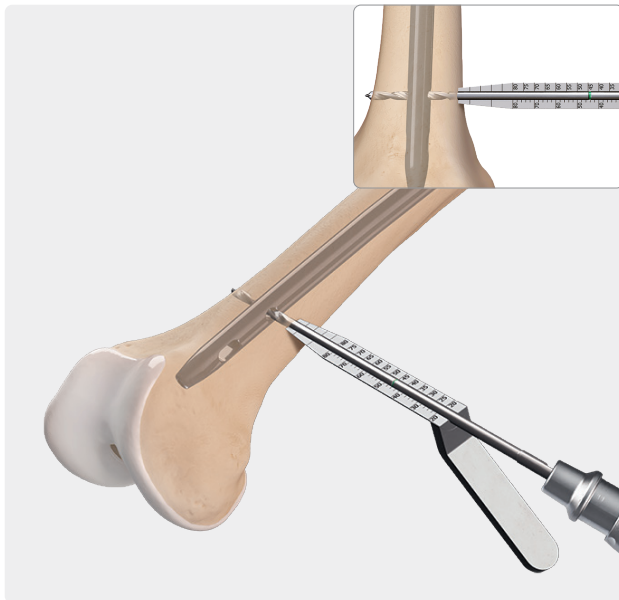
Assemble the **5.0 mm captured cortical screw** onto the **5.0 mm cannulated hex driver** and **T-handle** and then screw the **screw capturing rod** into the head of the 5.0 mm screw.

Depending on preference, a **straight screwdriver handle** with its own capturing rod is also available.



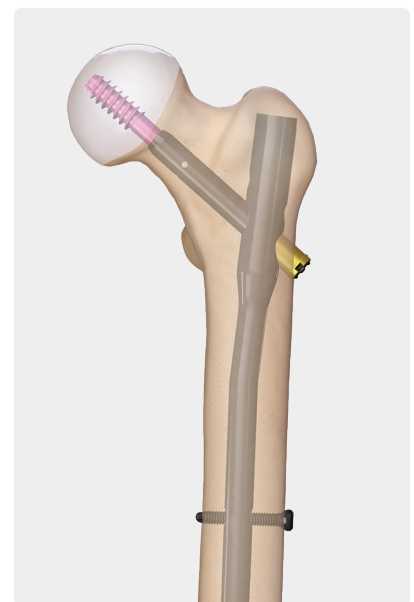
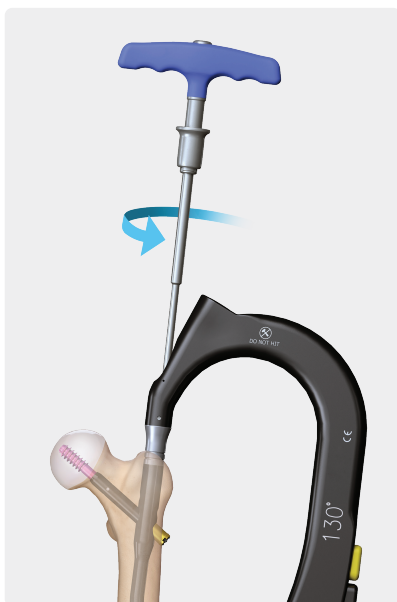
16a

Remove the **distal drill guide** and insert the 5.0 mm screw through the sheath using the captured hex driver. When the first laser mark reaches the sheath, the bottom of the screw head has reached the other end of the sheath. Unscrew the capturing rod in the hex driver and remove the driver assembly.



16b

For the long nail, distal locking is accomplished using the perfect circles technique and confirming the screw length with the calibrated line on the **4.0 mm short drill bit** with the **distal depth gauge** or **hook-tip depth gauge**.



17

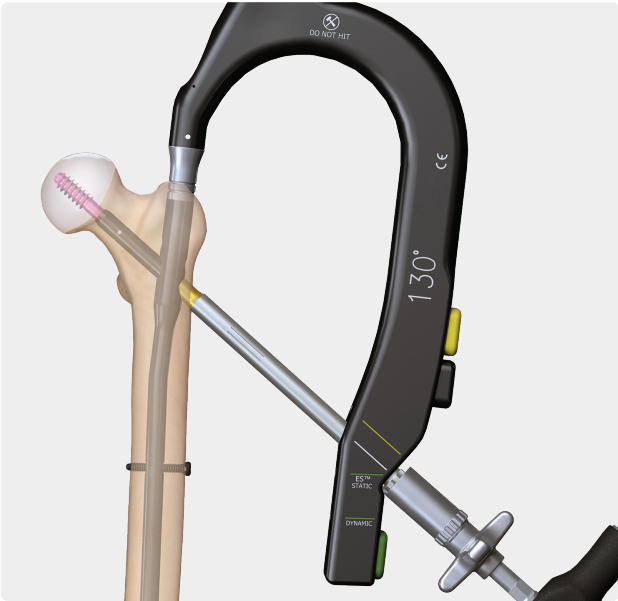
To remove the jig, use the ball hex driver to unscrew the locking bolt through the top hole or the impactor pad attachment hole.

End Cap (optional)

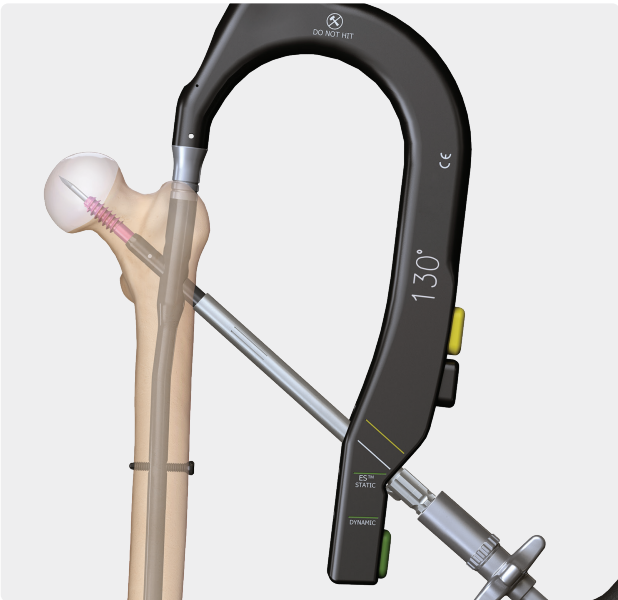
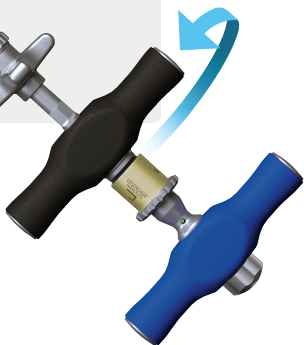
An end cap can be used to protect the proximal threads of the nail and/or increase the proximal height of the nail. Choose the proper end cap based on the depth of countersink of the nail, flush, 5 mm, or 10 mm. Using the **5.0 mm hex driver with T-handle** or **straight handle** and corresponding **capturing rod**, implant the appropriate end cap into the proximal end of the nail.

Removal Technique

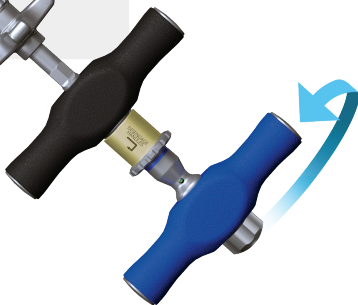
Lag Screw Loosening and Removal



Pull back on the gold knob and turn counterclockwise so the black ring is showing. Hold the blue insertion handle stationary and turn the black locking T-handle counterclockwise until the locking ring is loosened.

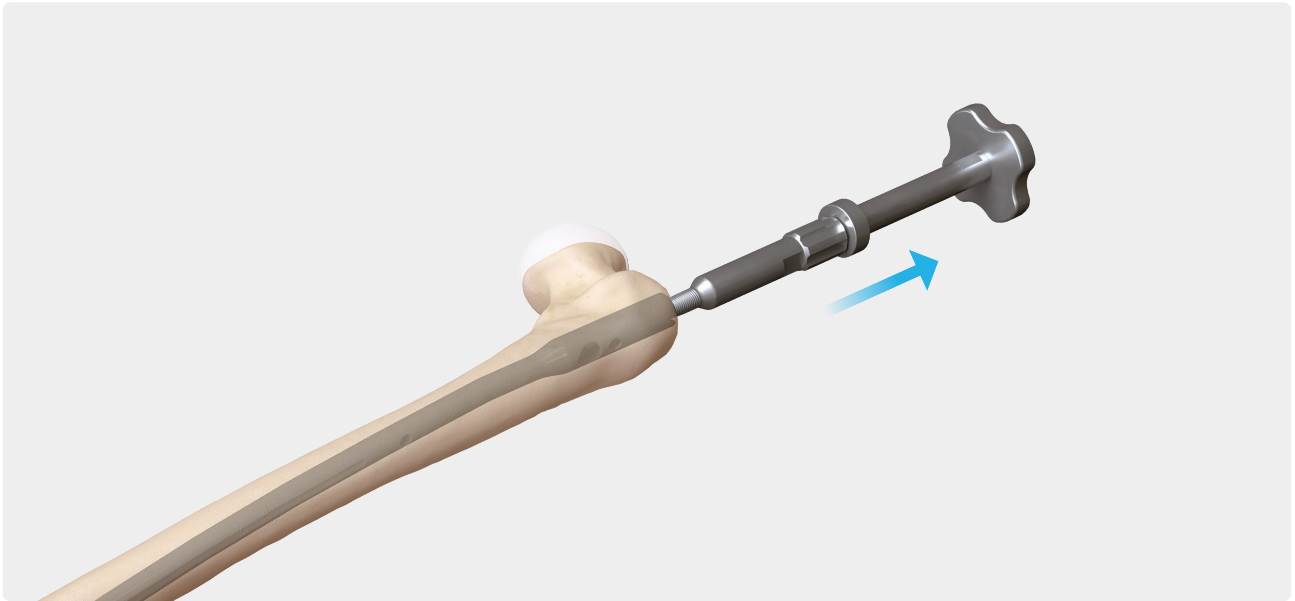


Pull back on the gold knob and turn counterclockwise so the black ring is showing. Hold the blue insertion handle stationary and turn the black locking T-handle counterclockwise until the locking ring is loosened.



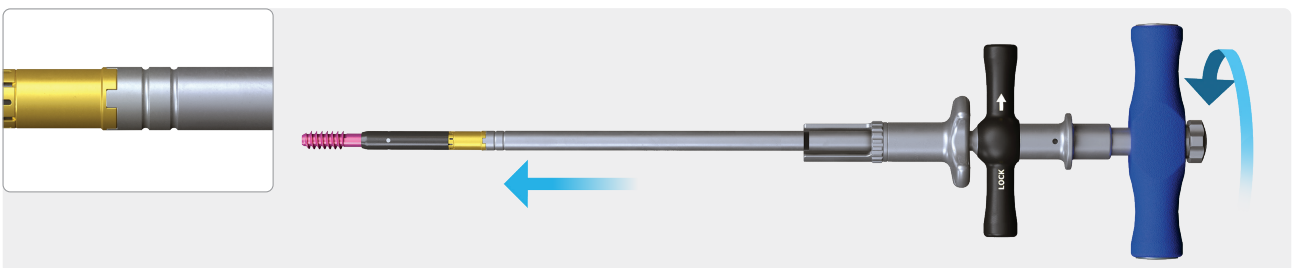
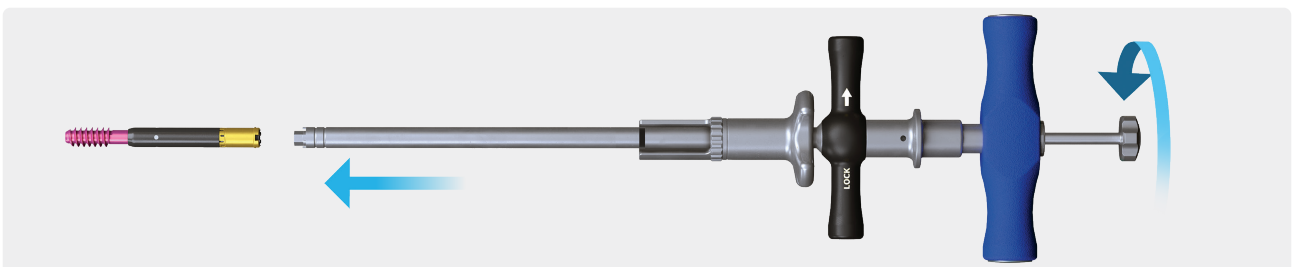
Removal Technique

Nail Removal

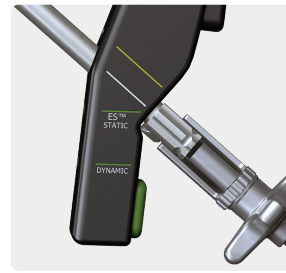


To extract the nail, remove the end cap if present and attach the extraction bolt. Remove the lag screw as shown in the previous section (jig not required) and the anti-rotation screw (if present) and cortical locking screws. Attach the impactor pad to the extraction bolt and then apply backward blows with a mallet.

Legacy Lag Screw Inserter Technique



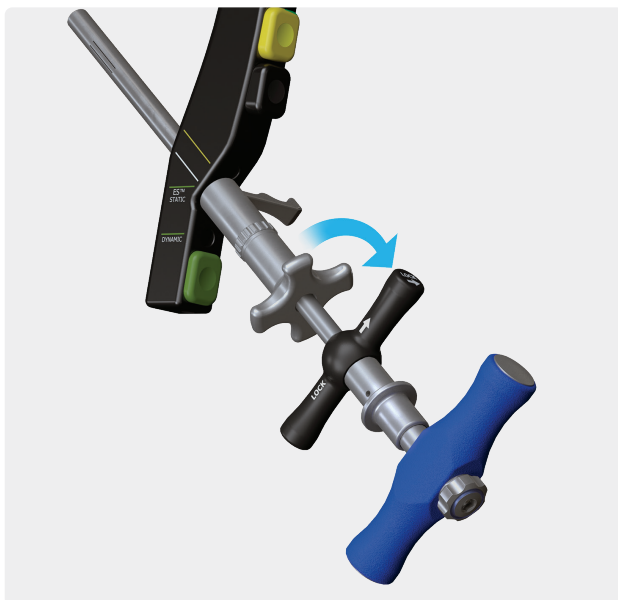
Thread the **compression sleeve** over the **lag screw inserter**. Place the **lag screw capturing rod** through the lag screw inserter and attach the selected 10.5 mm telescoping or solid locking lag screw onto the inserter. Rotate the inserter until the “castle” pieces and hex driver mate with the lag screw.



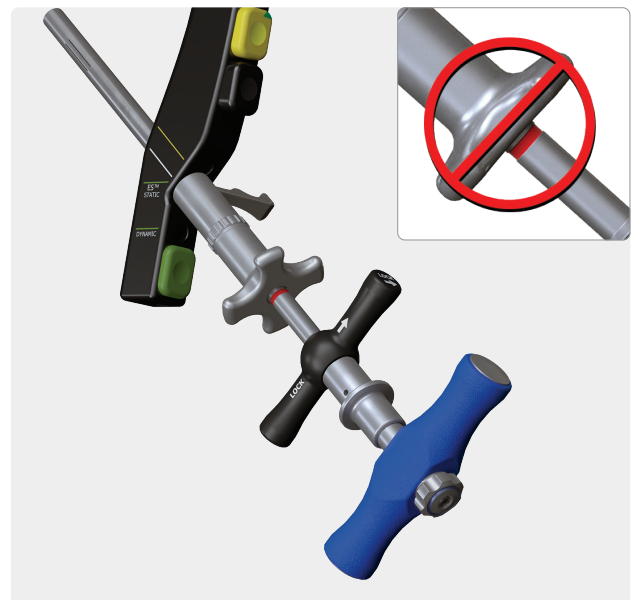
Insert the lag screw over the **3.2 mm lag screw guide pin** through the **lag screw sheath** to the desired depth using the blue handle. When the black laser marking on the inserter reaches the sheath, the lag screw has exited the other end of the sheath.

Note: If intraoperative compression is planned, countersink the lag screw to provide enough travel for the lag screw to lock into the nail.

Note: The left-threaded lag screw is implanted by turning the handle counterclockwise.

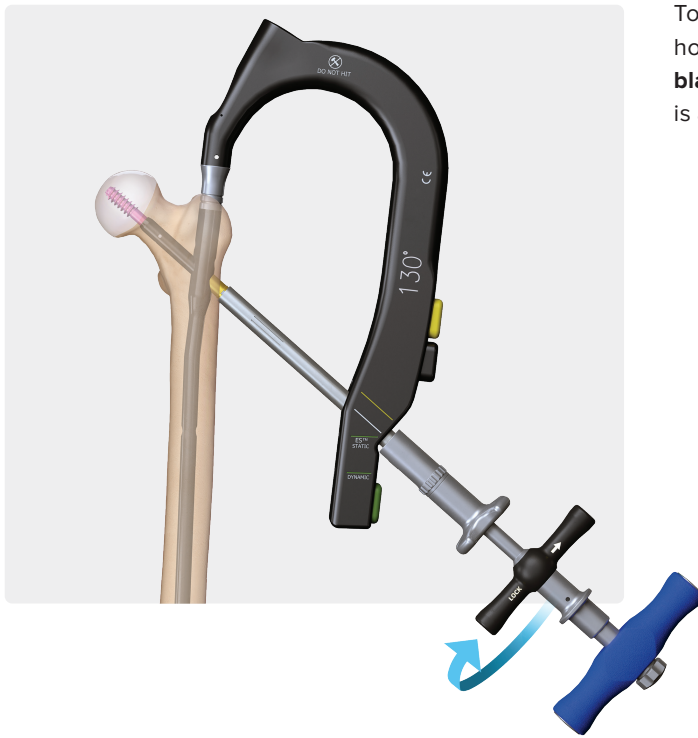


Push the **compression sleeve** towards the targeting arm and rotate clockwise until it makes contact. If intraoperative compression is desired, continue rotating the compression sleeve clockwise until compression is achieved.

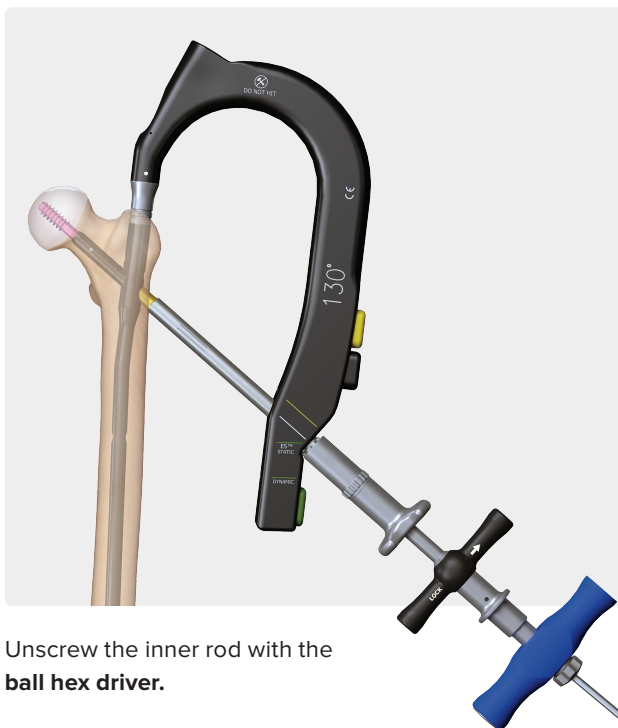


The mechanism will stop advancing and spin in place showing a red line when the lag screw is too lateral and can no longer be locked. If this occurs, the lag screw should be inserted further into the head and the compression knob used again.

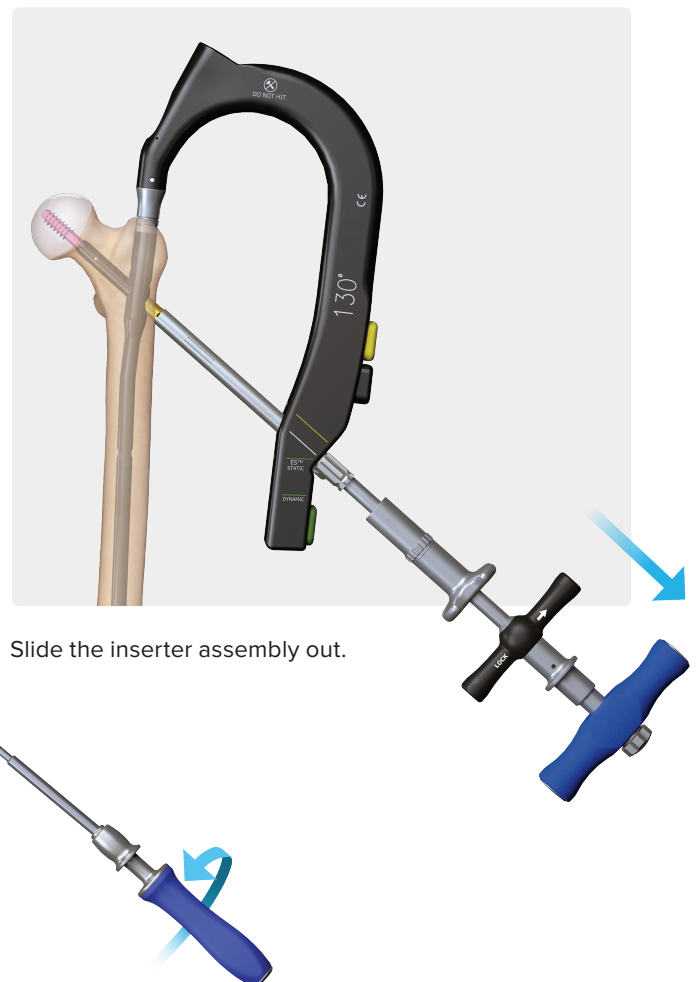
Note: If planning for compression, choose a shorter lag screw and countersink the lateral edge of the lag screw prior to the compression step.



To lock the **telescoping or solid locking lag screw**, hold the **blue insertion handle** stationary and turn the **black locking T-handle** clockwise until firm resistance is achieved.

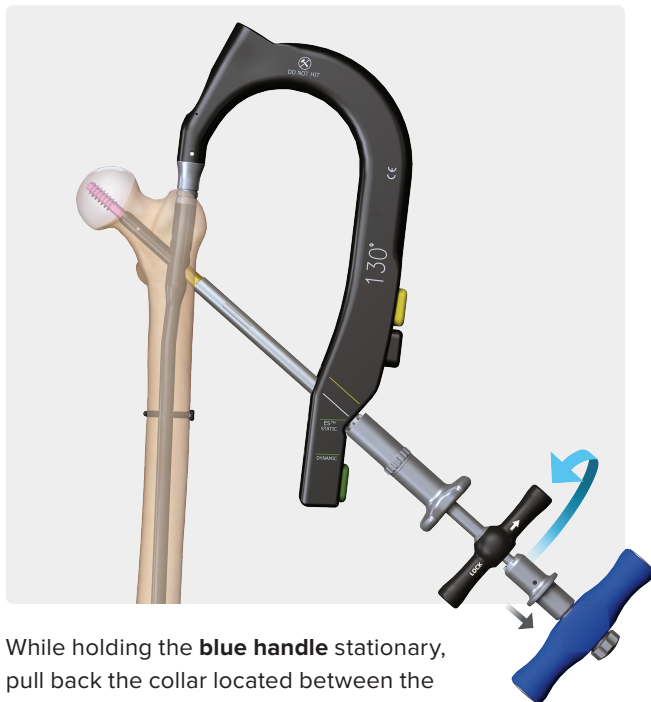


Unscrew the inner rod with the **ball hex driver**.



Slide the inserter assembly out.

Lag Screw Loosening and Removal



While holding the **blue handle** stationary, pull back the collar located between the T-handles and turn the **black lock T-handle** counterclockwise to unlock the screw from the nail.



Once the locking mechanism is disengaged, turn the **black T-handle** counterclockwise until the screw is removed from the bone and nail.

Note: Using the blue handle for removal may inadvertently lock the nail.

Ordering Information

Trochanteric Nail System

Instruments	
Obturator, 3.6 mm	0227-000
Awl T-handle, curved, cannulated, silicone, blue	0256-200
Entry reamer, cannulated, large Hudson, 16.5 mm	0257-000
Hip screw drill, cannulated, large Hudson, 10.3 mm	0258-000
Lag screw tap, cannulated, large Hudson, 10.5 mm	0259-000
Adjustable stop assembly	0261-000
Pin guide, soft tissue protector, 3.2 mm	0304-100
Pin guide, 3.2 mm	0312-200
Anti-rotation drill guide, locking assembly, 5.0 mm	0313-100
Distal drill guide, locking assembly, 4.0 mm	0315-100
Screw driver handle, cannulated, silicone, Hudson	0467-100
T-Handle, cannulated, silicone, large Hudson	0468-100
Quick connect, cannulated, silicone, large Hudson female/J-Hall	0469-100
Hex screw driver, long, large Hudson, 3.5 mm	0471-000
Hex screw driver, cannulated, large Hudson, 5.0 mm	0472-000
Ball hex driver, large Hudson, $\frac{9}{32}$ in	0474-000
Hex driver, cannulated, large Hudson, $\frac{9}{32}$ in	0475-000
Screw capturing rod, short, for T-handle	0476-000
Screw capturing rod, long, for straight handle	0477-000
Guidewire gripper	0481-100
Silicone palm handle, $\frac{3}{16}$ square quick connect	0486-100

Guide pin depth gauge (legacy)	0506-000
Lag screw depth gauge	AR-9095-73
Guidewire depth gauge, modular/trochanteric nail	0512-200
Depth gauge, distal	0514-200
Hook tip depth gauge, trochanteric nail	0531-000
Obturator, pin guide, 3.2 mm	0616-000
Lag screw sheath with handle	0617-300
Obturator, anti-rotation drill guide, 5.0 mm	0620-000
Anti-rotation and distal sheath, locking	0621-100
Obturator, drill guide, distal, 4.0 mm	0622-000
Soft tissue protector, Hudson, quick connect	0623-000
Reduction tool	0804-000
Ball spike	0817-000
Impactor pad	0826-000
Extractor bolt	0828-000
Lag screw removal tool	0856-100
Lag screw extraction tool, capturing rod	0857-100
Lag screw extraction tool, capturing rod nut	0858-200
Radiolucent targeting arm, 125° trochanteric nail	1267-100
Radiolucent targeting arm, 130° trochanteric nail	1268-100
Locking bolt, radiolucent insertion guide	1269-000
Lag screw tap, left, cannulated, large Hudson, 10.5 mm	4046-000

Lag screw inserter, trochanteric nail	5030-000
Lag screw locking tool	5031-100
Compression sleeve, lag screw inserter	5032-000
Lag screw capturing rod	5033-100
Lag screw capturing rod nut	5046-100
Lag screw capturing rod wrench	5048-000
Trochanteric nail instrument tray 1	9914-000
Trochanteric nail instrument tray 2	9914-100
Reamers	
Flexible reamer shaft	0233-000
Reamer head, 9 mm	0234-090
Reamer head, 9.5 mm	0234-095
Reamer head, 10 mm	0234-100
Reamer head, 10.5 mm	0234-105
Reamer head, 11 mm	0234-110
Reamer head, 11.5 mm	0234-115
Reamer head, 12 mm	0234-120
Reamer head, 12.5 mm	0234-125
Reamer head, 13 mm	0234-130
Reamer head, 13.5 mm	0234-135
Reamer head, 14 mm	0234-140
Reamer head, 14.5 mm	0234-145
Reamer head, 15 mm	0234-150
Reamer head, 15.5 mm	0234-155
Reamer head, 16.5 mm	0234-165
Monobloc reamer, forward cutting, 8.0 mm (Hudson)	0251-080
Lower extremity reamer case	9918-100
Disposables	
Guide pin, 3.2 mm × 330 mm	S0100-000
Guide pin, 3.2 mm × 381 mm	S0100-381
Step drill, calibrated, 5.0 mm	S0209-200
Drill, AO style, 4.0 mm × 165 mm	S0210-200
Drill, calibrated, AO, 4.0 mm × 280 mm	S0219-100
Cortical tap, large Hudson, 5.0 mm	S0260-000
Activation tool	S0457-000
Ball nose guidewire, sterile, 3.0 mm × 900 mm	0101-900S
Anti-rotation bar, short	AR-9095-67S
Anti-rotation bar, long	AR-9095-67LS
Short Trochanteric Nails	
Trochanteric nail, 9 mm × 20 cm × 125°	1029-200
Trochanteric nail, 10 mm × 20 cm × 125°	1030-200
Trochanteric nail, 11 mm × 20 cm × 125°	1031-200
Trochanteric nail, 12 mm × 20 cm × 125°	1032-200
Trochanteric nail, 13 mm × 20 cm × 125°	1033-200
Trochanteric nail, 9 mm × 20 cm × 130°	1034-200
Trochanteric nail, 10 mm × 20 cm × 130°	1040-200
Trochanteric nail, 11 mm × 20 cm × 130°	1036-200
Trochanteric nail, 12 mm × 20 cm × 130°	1041-200
Trochanteric nail, 13 mm × 20 cm × 130°	1037-200
Short Trochanteric Nails (Special Order)	
Trochanteric nail, 9 mm × 17 cm × 130°	1034-170
Trochanteric nail, 10 mm × 17 cm × 130°	1040-170
Trochanteric nail, 11 mm × 17 cm × 130°	1036-170

ES Trochanteric Nails	
ES Trochanteric nail, left, 10 mm × 30 cm × 125°	1020-305
ES Trochanteric nail, left, 10 mm × 33 cm × 125°	1020-335
ES Trochanteric nail, left, 10 mm × 36 cm × 125°	1020-365
ES Trochanteric nail, left, 10 mm × 39 cm × 125°	1020-395
ES Trochanteric nail, left, 10 mm × 42 cm × 125°	1020-425
ES Trochanteric nail, left, 11 mm × 30 cm × 125°	1022-305
ES Trochanteric nail, left, 11 mm × 33 cm × 125°	1022-335
ES Trochanteric nail, left, 11 mm × 36 cm × 125°	1022-365
ES Trochanteric nail, left, 11 mm × 39 cm × 125°	1022-395
ES Trochanteric nail, left, 11 mm × 42 cm × 125°	1022-425
ES Trochanteric nail, right, 10 mm × 30 cm × 125°	1021-305
ES Trochanteric nail, right, 10 mm × 33 cm × 125°	1021-335
ES Trochanteric nail, right, 10 mm × 36 cm × 125°	1021-365
ES Trochanteric nail, right, 10 mm × 39 cm × 125°	1021-395
ES Trochanteric nail, right, 10 mm × 42 cm × 125°	1021-425
ES Trochanteric nail, right, 11 mm × 30 cm × 125°	1023-305
ES Trochanteric nail, right, 11 mm × 33 cm × 125°	1023-335
ES Trochanteric nail, right, 11 mm × 36 cm × 125°	1023-365
ES Trochanteric nail, right, 11 mm × 39 cm × 125°	1023-395
ES Trochanteric nail, right, 11 mm × 42 cm × 125°	1023-425
ES Trochanteric nail, left, 10 mm × 30 cm × 130°	1066-305
ES Trochanteric nail, left, 10 mm × 33 cm × 130°	1066-335
ES Trochanteric nail, left, 10 mm × 36 cm × 130°	1066-365
ES Trochanteric nail, left, 10 mm × 39 cm × 130°	1066-395
ES Trochanteric nail, left, 10 mm × 42 cm × 130°	1066-425
ES Trochanteric nail, left, 11 mm × 30 cm × 130°	1058-305
ES Trochanteric nail, left, 11 mm × 33 cm × 130°	1058-335
ES Trochanteric nail, left, 11 mm × 36 cm × 130°	1058-365
ES Trochanteric nail, left, 11 mm × 39 cm × 130°	1058-395
ES Trochanteric nail, left, 11 mm × 42 cm × 130°	1058-425
ES Trochanteric nail, right, 10 mm × 30 cm × 130°	1067-305
ES Trochanteric nail, right, 10 mm × 33 cm × 130°	1067-335
ES Trochanteric nail, right, 10 mm × 36 cm × 130°	1067-365
ES Trochanteric nail, right, 10 mm × 39 cm × 130°	1067-395
ES Trochanteric nail, right, 10 mm × 42 cm × 130°	1067-425
ES Trochanteric nail, right, 11 mm × 30 cm × 130°	1059-305
ES Trochanteric nail, right, 11 mm × 33 cm × 130°	1059-335
ES Trochanteric nail, right, 11 mm × 36 cm × 130°	1059-365
ES Trochanteric nail, right, 11 mm × 39 cm × 130°	1059-395
ES Trochanteric nail, right, 11 mm × 42 cm × 130°	1059-425
ES Trochanteric Nails (Special Order)	
ES Trochanteric nail, left, 12.5 mm × 30 cm × 125°	1120-305
ES Trochanteric nail, left, 12.5 mm × 33 cm × 125°	1120-335
ES Trochanteric nail, left, 12.5 mm × 36 cm × 125°	1120-365
ES Trochanteric nail, left, 12.5 mm × 39 cm × 125°	1120-395
ES Trochanteric nail, left, 12.5 mm × 42 cm × 125°	1120-425
ES Trochanteric nail, right, 12.5 mm × 30 cm × 125°	1121-305
ES Trochanteric nail, right, 12.5 mm × 33 cm × 125°	1121-335
ES Trochanteric nail, right, 12.5 mm × 36 cm × 125°	1121-365
ES Trochanteric nail, right, 12.5 mm × 39 cm × 125°	1121-395
ES Trochanteric nail, right, 12.5 mm × 42 cm × 125°	1121-425
ES Trochanteric nail, left, 12.5 mm × 30 cm × 130°	1122-305

ES Trochanteric Nails (Special Order)		
ES Trochanteric nail, left, 12.5 mm × 33 cm × 130°	1122-335	
ES Trochanteric nail, left, 12.5 mm × 36 cm × 130°	1122-365	
ES Trochanteric nail, left, 12.5 mm × 39 cm × 130°	1122-395	
ES Trochanteric nail, left, 12.5 mm × 42 cm × 130°	1122-425	
ES Trochanteric nail, right, 12.5 mm × 30 cm × 130°	1123-305	
ES Trochanteric nail, right, 12.5 mm × 33 cm × 130°	1123-335	
ES Trochanteric nail, right, 12.5 mm × 36 cm × 130°	1123-365	
ES Trochanteric nail, right, 12.5 mm × 39 cm × 130°	1123-395	
ES Trochanteric nail, right, 12.5 mm × 42 cm × 130°	1123-425	
ES Trochanteric nail, left, 14 mm × 30 cm × 130°	1068-305	
ES Trochanteric nail, left, 14 mm × 33 cm × 130°	1068-335	
ES Trochanteric nail, left, 14 mm × 36 cm × 130°	1068-365	
ES Trochanteric nail, left, 14 mm × 39 cm × 130°	1068-395	
ES Trochanteric nail, left, 14 mm × 42 cm × 130°	1068-425	
ES Trochanteric nail, right, 14 mm × 30 cm × 130°	1069-305	
ES Trochanteric nail, right, 14 mm × 33 cm × 130°	1069-335	
ES Trochanteric nail, right, 14 mm × 36 cm × 130°	1069-365	
ES Trochanteric nail, right, 14 mm × 39 cm × 130°	1069-395	
ES Trochanteric nail, right, 14 mm × 42 cm × 130°	1069-425	
Long Trochanteric Nails		
Trochanteric nail, left, 10 mm × 30 cm × 125°	1020-300	
Trochanteric nail, left, 10 mm × 33 cm × 125°	1020-330	
Trochanteric nail, left, 10 mm × 36 cm × 125°	1020-360	
Trochanteric nail, left, 10 mm × 39 cm × 125°	1020-390	
Trochanteric nail, left, 10 mm × 42 cm × 125°	1020-420	
Trochanteric nail, left, 11 mm × 30 cm × 125°	1022-300	
Trochanteric nail, left, 11 mm × 33 cm × 125°	1022-330	
Trochanteric nail, left, 11 mm × 36 cm × 125°	1022-360	
Trochanteric nail, left, 11 mm × 39 cm × 125°	1022-390	
Trochanteric nail, left, 11 mm × 42 cm × 125°	1022-420	
Trochanteric nail, right, 10 mm × 30 cm × 125°	1021-300	
Trochanteric nail, right, 10 mm × 33 cm × 125°	1021-330	
Trochanteric nail, right, 10 mm × 36 cm × 125°	1021-360	
Trochanteric nail, right, 10 mm × 39 cm × 125°	1021-390	
Trochanteric nail, right, 10 mm × 42 cm × 125°	1021-420	
Trochanteric nail, right, 11 mm × 30 cm × 125°	1023-300	
Trochanteric nail, right, 11 mm × 33 cm × 125°	1023-330	
Trochanteric nail, right, 11 mm × 36 cm × 125°	1023-360	
Trochanteric nail, right, 11 mm × 39 cm × 125°	1023-390	
Trochanteric nail, right, 11 mm × 42 cm × 125°	1023-420	
Trochanteric nail, left, 10 mm × 30 cm × 130°	1050-300	
Trochanteric nail, left, 10 mm × 33 cm × 130°	1050-330	
Trochanteric nail, left, 10 mm × 36 cm × 130°	1050-360	
Trochanteric nail, left, 10 mm × 39 cm × 130°	1050-390	
Trochanteric nail, left, 10 mm × 42 cm × 130°	1050-420	
Trochanteric nail, left, 11 mm × 30 cm × 130°	1058-300	
Trochanteric nail, left, 11 mm × 33 cm × 130°	1058-330	
Trochanteric nail, left, 11 mm × 36 cm × 130°	1058-360	
Trochanteric nail, left, 11 mm × 39 cm × 130°	1058-390	
Trochanteric nail, left, 11 mm × 42 cm × 130°	1058-420	

Trochanteric nail, right, 10 mm × 30 cm × 130°	1051-300
Trochanteric nail, right, 10 mm × 33 cm × 130°	1051-330
Trochanteric nail, right, 10 mm × 36 cm × 130°	1051-360
Trochanteric nail, right, 10 mm × 39 cm × 130°	1051-390
Trochanteric nail, right, 10 mm × 42 cm × 130°	1051-420
Trochanteric nail, right, 11 mm × 30 cm × 130°	1059-300
Trochanteric nail, right, 11 mm × 33 cm × 130°	1059-330
Trochanteric nail, right, 11 mm × 36 cm × 130°	1059-360
Trochanteric nail, right, 11 mm × 39 cm × 130°	1059-390
Trochanteric nail, right, 11 mm × 42 cm × 130°	1059-420
Long Trochanteric Nails (Special Order)	
Trochanteric nail, left, 12.5 mm × 30 cm × 130°	1122-300
Trochanteric nail, left, 12.5 mm × 33 cm × 130°	1122-330
Trochanteric nail, left, 12.5 mm × 36 cm × 130°	1122-360
Trochanteric nail, left, 12.5 mm × 39 cm × 130°	1122-390
Trochanteric nail, left, 12.5 mm × 42 cm × 130°	1122-420
Trochanteric nail, right, 12.5 mm × 30 cm × 130°	1123-300
Trochanteric nail, right, 12.5 mm × 33 cm × 130°	1123-330
Trochanteric nail, right, 12.5 mm × 36 cm × 130°	1123-360
Trochanteric nail, right, 12.5 mm × 39 cm × 130°	1123-390
Trochanteric nail, right, 12.5 mm × 42 cm × 130°	1123-420
Solid Lag Screws	
Solid locking lag screw, 10.5 mm × 70 mm	1094-070
Solid locking lag screw, 10.5 mm × 75 mm	1094-075
Solid locking lag screw, 10.5 mm × 80 mm	1094-080
Solid locking lag screw, 10.5 mm × 85 mm	1094-085
Solid locking lag screw, 10.5 mm × 90 mm	1094-090
Solid locking lag screw, 10.5 mm × 95 mm	1094-095
Solid locking lag screw, 10.5 mm × 100 mm	1094-100
Solid locking lag screw, 10.5 mm × 105 mm	1094-105
Solid locking lag screw, 10.5 mm × 110 mm	1094-110
Solid locking lag screw, 10.5 mm × 115 mm	1094-115
Solid locking lag screw, 10.5 mm × 120 mm	1094-120
Telescoping Lag Screws	
Telescoping lag screw, 10.5 mm × 85 mm	1099-085
Telescoping lag screw, 10.5 mm × 90 mm	1099-090
Telescoping lag screw, 10.5 mm × 95 mm	1099-095
Telescoping lag screw, 10.5 mm × 100 mm	1099-100
Telescoping lag screw, 10.5 mm × 105 mm	1099-105
Telescoping lag screw, 10.5 mm × 110 mm	1099-110
Telescoping lag screw, 10.5 mm × 115 mm	1099-115
Telescoping lag screw, 10.5 mm × 120 mm	1099-120
Telescoping Lag Screws, left	
Telescoping lag screw, left, 10.5 mm × 85 mm	1192-085
Telescoping lag screw, left, 10.5 mm × 90 mm	1192-090
Telescoping lag screw, left, 10.5 mm × 95 mm	1192-095
Telescoping lag screw, left, 10.5 mm × 100 mm	1192-100
Telescoping lag screw, left, 10.5 mm × 105 mm	1192-105
Telescoping lag screw, left, 10.5 mm × 110 mm	1192-110
Telescoping lag screw, left, 10.5 mm × 115 mm	1192-115
Telescoping lag screw, left, 10.5 mm × 120 mm	1192-120

Anti-Rotation Screws	
Anti-rotation screw, cancellous, 5.0 mm × 60 mm	8021-060
Anti-rotation screw, cancellous, 5.0 mm × 65 mm	8021-065
Anti-rotation screw, cancellous, 5.0 mm × 70 mm	8021-070
Anti-rotation screw, cancellous, 5.0 mm × 75 mm	8021-075
Anti-rotation screw, cancellous, 5.0 mm × 80 mm	8021-080
Anti-rotation screw, cancellous, 5.0 mm × 85 mm	8021-085
Anti-rotation screw, cancellous, 5.0 mm × 90 mm	8021-090
Anti-rotation screw, cancellous, 5.0 mm × 95 mm	8021-095
Anti-rotation screw, cancellous, 5.0 mm × 100 mm	8021-100
Anti-rotation screw, cancellous, 5.0 mm × 105 mm	8021-105
Anti-rotation screw, cancellous, 5.0 mm × 110 mm	8021-110
Distal Screws	
Cortical screw, captured, 5.0 mm x 24 mm	8001-024
Cortical screw, captured, 5.0 mm x 26 mm	8001-026
Cortical screw, captured, 5.0 mm x 28 mm	8001-028
Captured cortical screw, 5.0 mm × 30 mm	8001-030
Captured cortical screw, 5.0 mm × 32 mm	8001-032
Captured cortical screw, 5.0 mm × 34 mm	8001-034
Captured cortical screw, 5.0 mm × 36 mm	8001-036
Captured cortical screw 5.0 mm × 38 mm	8001-038
Captured cortical screw, 5.0 mm × 40 mm	8001-040
Captured cortical screw 5.0 mm × 42 mm	8001-042
Captured cortical screw, 5.0 mm × 44 mm	8001-044
Captured cortical screw, 5.0 mm × 46 mm	8001-046
Captured cortical screw, 5.0 mm × 48 mm	8001-048
Captured cortical screw, 5.0 mm × 50 mm	8001-050
Captured cortical screw, 5.0 mm × 55 mm	8001-055
Captured cortical screw, 5.0 mm × 60 mm	8001-060

5.0 mm Distal Screws	
Captured cortical screw, 5.0 mm × 65 mm	8001-065
Captured cortical screw, 5.0 mm × 70 mm	8001-070
Captured cortical screw, 5.0 mm × 75 mm	8001-075
Captured cortical screw, 5.0 mm × 80 mm	8001-080
Captured cortical screw, 5.0 mm × 85 mm	8001-085
Captured cortical screw, 5.0 mm × 90 mm	8001-090
Captured cortical screw, 5.0 mm × 95 mm	8001-095
Captured cortical screw, 5.0 mm × 100 mm	8001-100
Captured cortical screw, 5.0 mm × 105 mm	8001-105
Captured cortical screw, 5.0 mm × 110 mm	8001-110
End Caps	
Captured bullet tip end cap, 1 mm	1047-019
Captured bullet tip end cap, 5 mm	1047-059
Captured bullet tip end cap, 10 mm	1047-109
Locking end cap, captured, Trochanteric Nail, 1 mm	1048-019
Anti-rotation set screw	1085-000

Products advertised in this brochure / surgical technique guide may not be available in all countries. For information on availability, please contact Arthrex Customer Service or your local Arthrex representative.

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience, and should conduct a thorough review of pertinent medical literature and the product's directions for use. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.



Arthrex manufacturer, authorized representative, and importer information (Arthrex eIFUs)



US patent information