

Proximal Femoral Nail:



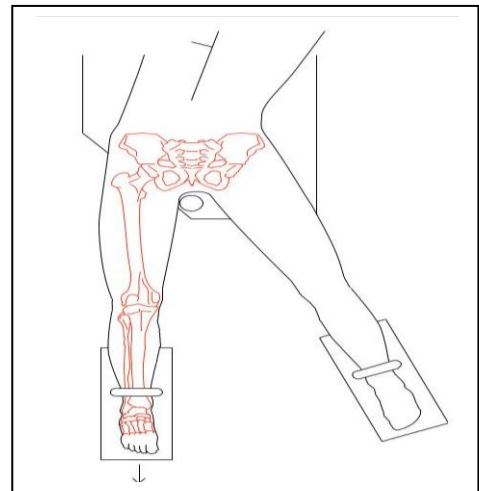
Design:

- Anatomic design correct 5° bend for easier insertion and improved fit
- Transverse locking holes to allow use of one nail in either left or right extremity
- Conical threads for secure connection to insertion/extraction instruments
- Cloverleaf cross section for the best interference fit in the medullary canal
- Designed to prevent penetration of posterior cortex during insertion, and to glide easily through medullary canal.
- Two transverse locking holes and additional AP locking hole distally
- Beveled proximal end to prevent soft tissue irritation
- Wide range of available sizes: 9mm to 12mm diameters and 320mm–440mm Length

Surgical Steps:

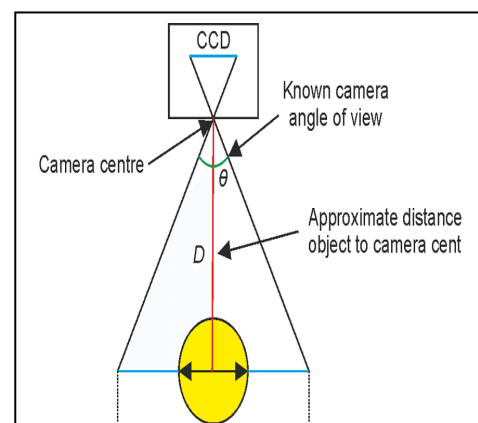
Patient Position and Approach:

Position patient supine on an extension table or a radiolucent operating table. Position the C-Arm of the image intensifier in such a way that it can visualize the proximal femur exactly the lateral and AP planes. For unimpeded access to the medullary cavity, abduct the upper part of the body by about 10–15° to the contra lateral side (or adduct the affected leg by 10–15°).



Determine CCD Angle:

Take an AP X-ray of the unaffected side preoperatively. Determine the CCD angle using a goniometer or the preoperative planning template. Standard PFN is available in 130°/135°.



Reduce Fracture:

If possible, carry out closed reduction of the fracture under image intensifier control.

Exact reduction and secure fixation of the patient to the operating table are essential for easy handling and a good surgical result.

Determine Nail Diameter:

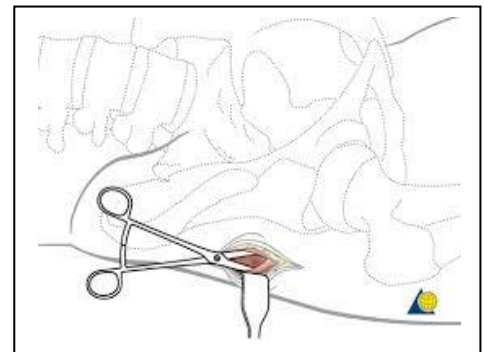
Determine the distal nail diameter by placing the AO/ASIF planning template over the isthmus on an AP X-ray.

- **Alternative :**

Under image intensifier control, place the Measuring Device (on the femur and position the square marking over the isthmus. If the transition to the cortex is still visible to the left and right of the marking, the corresponding nail diameter may be used.

Approach:

Palpate the greater trochanter. Make a 5cm incision approximately 5 to 8cm proximal from the tip of the greater trochanter. Make a parallel incision in the fasciae of the gluteus medius and split the gluteus medius in line with the fibres.



Nail Insertion:

Firstly placement of the Curved Bone Awl for Femur bone Opening, Insert of guide wire for femur opening followed by Proximal Reaming for femur bone. Then after assembly of Proximal jig and Ram, Ram Rod Handle and Driving Head prepare & nail insertion done.



5000-INS-0006	BONE AWL CURVED
5000-INS-0019	GUIDE WIRE PLAIN 2.5 MM X 950 MM
5300-INS-0019	PROXIMAL REAMER 14 MM WITH T- HANDLE
5300-INS-0001	PROXIMAL JIG 130°
5300-INS-0002	PROXIMAL JIG 135°
5000-INS-0012	RAM
5000-INS-0011	RAM ROD HANDLE
5000-INS-0008	INSERTION DRIVING HEAD DRIVING HEAD

Distal Locking:

Distal locking is usually performed with a single locking bolt. For static interlocking Use the cranial locking hole only for static interlocking, and the caudal locking hole for dynamic interlocking. Subtrochanteric fractures may be double-locked. Postoperative removal of the static locking bolt allows secondary dynamization.

Remove the drill sleeve 8.0/4.0 and determine the bolt length with the Depth Gauge for Locking Bolts. Add 2 to 4mm to the reading to ensure that the thread engages the far cortex.

Insert the locking bolt through the protection sleeve using the large Hexagonal Screwdriver Remove the protection sleeve and the aiming arm. Then remove the insertion handle using the Hexagonal Socket



5000-INS-0005 TROCAR FOR DISTAL LOCKING 8.0 MM PFN

5000-INS-0016 DRILL BIT Ø4MM 12" LONG

5000-INS-0023 DEPTH GAUGE FOR PFN

5000-INS-0016 I.L SCREW DRIVER 4.5MM LONG 12"

Proximal Locking:

Insertion of guide wires sleeve for femoral neck screw and hip pin, Insertion of 8.0mm Trocar for Hip Pin, Remove the Trocar and Insertion of Long Cannulated Reamer Q.C. for Femoral Neck Screw and Hip Pin drill, Remove the Cannulated Drill(Reamer) and insertion of measuring device Depth Gauge for Femoral neck Screw and hip pin Length, remove the Depth gauge and Insertion of 6.4mm Cannulated Hip Screw Tap and 8.0mm Cannulated Femoral Neck Screw Tap, then Insertion of PFN Screw with 5.0 mm Cannulated Screw Driver.



5300-INS-0005 GUIDE WIRE SLEVE FOR NECK SCREW 10.0 X 2.5 MM

5300-INS-0006 GUIDE WIRE SLEVE FOR HIP SCREW 8.0 MM X 2.0

5300-INS-0008 TROCAR FOR HIP SCREW 8.0 MM

5300-INS-0007 TROCAR FOR NECK SCREW 10.0 MM

5300-INS-0009 Ø 6.4 MM CANNULATED DRILL (REAMER) LONG Q.C

5300-INS-0010 Ø 8.0 MM CANNULATED DRILL (REAMER) LONG Q.C

5000-INS-0023 DEPTH GAUGE FOR PFN

5300-INS-0021 TAP Ø 6.4 MM FOR HIP SCREW (CANNULATED) Q.C

- 5300-INS-0022** TAP Ø 8.0 MM FOR NECK SCREW (CANNULATED) Q.C
5300-INS-0015 CANNULATED SCREW DRIVER FOR PFN SCREW 5MM LONG 12"

Insertion of End Cap:

Align the end cap with the nail axis using the hexagonal screwdriver in order to prevent tilting. Screw the end cap completely onto the nail until its collar touches the proximal end of the nail. In order to avoid losing the end cap and to facilitate insertion, the end cap can also be inserted through the Protection Sleeve.



- 5000-INS-0016** I.L SCREW DRIVER 4.5MM LONG 12"

Instruments

- 5300-INS-0001** PFN PROXIMAL & DISTAL JIG 135°
5300-INS-0002 PFN PROXIMAL & DISTAL JIG 130°



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- 5300-INS-0003** PROTECTION SLEEVE FOR NECK SCREW 12.0 X 10.0 MM



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- 5300-INS-0004** PROTECTION SLEEVE FOR HIP SCREW
 10.0 X 8.0 MM - 180 MM



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- 5300-INS-0005** GUIDE WIRE SLEVE FOR NECK SCREW 10.0 X 2.5 MM



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- 5300-INS-0006** GUIDE WIRE SLEVE FOR HIP SCREW 8.0 MM X 2.0



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- 5300-INS-0007** TROCAR FOR NECK SCREW 10.0 MM



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- 5300-INS-0008** TROCAR FOR HIP SCREW 8.0 MM



5300-INS-0009 Ø 6.4 MM CANNULATED DRILL (REAMER) LONG Q.C



5300-INS-0010 Ø 8.0 MM CANNULATED DRILL (REAMER) LONG Q.C



5300-INS-0011 NAIL CONNECTING BOLT CANNULATED FOR (PFN NAIL)



5300-INS-0012 PROTECTION SLEEVE FOR DISTAL LOCKING
10.0 X 8.0 MM



5300-INS-0013 DRILL SLEVE FOR Ø 4MM DRILL FOR DISTAL LOCKING
8.0 X 4.0 MM



5000-INS-0005 TROCAR FOR DISTAL LOCKING 8.0 MM PFN



5300-INS-0015 CANNULATED SCREW DRIVER FOR PFN SCREW
5MM LONG 12"



5300-INS-0016 GUIDE WIRE Ø 2.0 MM LONG -375 MM



5300-INS-0017 GUIDE WIRE Ø 2.5 MM LONG -375 MM



5300-INS-0018 T-HANDLE Q.C



5300-INS-0019 PROXIMAL REAMER 14 MM WITH T- HANDLE



5000-INS-0006 BONE AWL CURVED



5000-INS-0008 INSERTION DRIVING HEAD DRIVING HEAD



5000-INS-0009 RAM ROD



5000-INS-0010 KNOB FOR RAM ROD & DRIVING HEAD



5000-INS-0011 RAM ROD HANDLE



5000-INS-0012 RAM



5000-INS-0016 DRILL BIT Ø4MM 12" LONG



5000-INS-0015 TOMY BAR



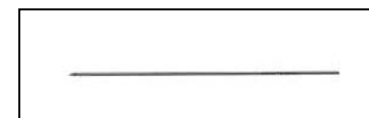
5000-INS-0016 I.L SCREW DRIVER 4.5MM LONG 12"



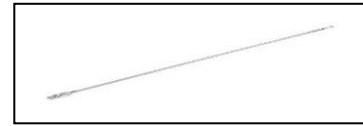
5000-INS-0017 TISSUE PROTECTOR



5000-INS-0019 GUIDE WIRE PLAIN 2.5 MM X 950 MM



5000-INS-0021 BALL TIP GUIDE WIRE 2.5 MM X 950 MM



5000-INS-0029 CANNULATED AWL CURVED



5300-INS-0033 GUIDE WIRE HOLDING FORCEP



5000-INS-0031 TEFLON TUBE



5000-INS-0023 DEPTH GAUGE



5000-INS-0022 FIX SPANNER 16 MM



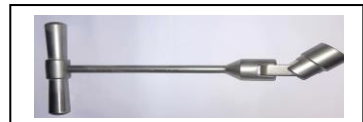
5300-INS-0021 TAP Ø 6.4 MM FOR HIP SCREW (CANNULATED) Q.C



5300-INS-0022 TAP Ø 8.0 MM FOR NECK SCREW (CANNULATED) Q.C



5300-INS-0040 POLY AXIAL WRENCH 16 MM



5300-INS-0041 PROTECTION SLEEVE 16 X 14 MM (SOLAPUR SLEEVE)



Implant Size:

130° - Ø 9.0 MM LONG PROXIMAL FEMORAL NAIL – RIGHT

SS 316L	TITANIUM	SIZE
1627-SS-9034	1627-TT-9034	340 MM
1627-SS-9036	1627-TT-9036	360 MM
1627-SS-9038	1627-TT-9038	380 MM
1627-SS-9040	1627-TT-9040	400 MM
1627-SS-9042	1627-TT-9042	420 MM
1627-SS-9044	1627-TT-9044	440 MM

130° - Ø 10.0 MM LONG PROXIMAL FEMORAL NAIL – RIGHT

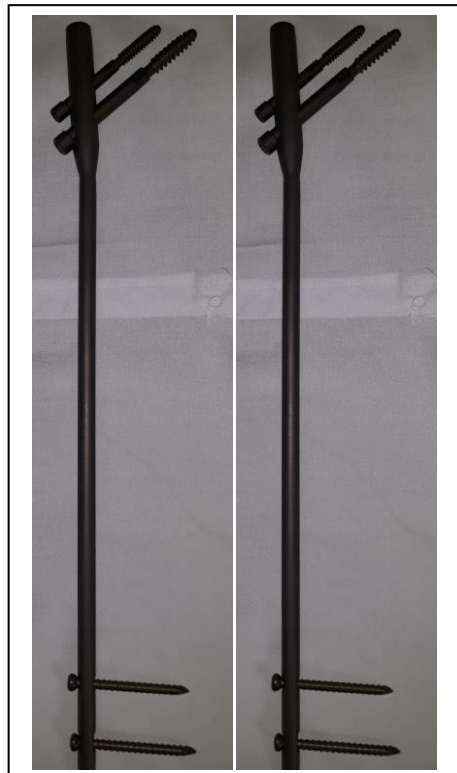
SS 316L	TITANIUM	SIZE
1627-SS-1034	1627-TT-1034	340 MM
1627-SS-1036	1627-TT-1036	360 MM
1627-SS-1038	1627-TT-1038	380 MM
1627-SS-1040	1627-TT-1040	400 MM
1627-SS-1042	1627-TT-1042	420 MM
1627-SS-1044	1627-TT-1044	440 MM

130° - Ø 11.0 MM LONG PROXIMAL FEMORAL NAIL – RIGHT

SS 316L	TITANIUM	SIZE
1627-SS-1134	1627-TT-1134	340 MM
1627-SS-1136	1627-TT-1136	360 MM
1627-SS-1138	1627-TT-1138	380 MM
1627-SS-1140	1627-TT-1140	400 MM
1627-SS-1142	1627-TT-1142	420 MM
1627-SS-1144	1627-TT-1144	440 MM

130° - Ø 12.0 MM LONG PROXIMAL FEMORAL NAIL – RIGHT

SS 316L	TITANIUM	SIZE
1627-SS-1234	1627-TT-1234	340 MM
1627-SS-1236	1627-TT-1236	360 MM
1627-SS-1238	1627-TT-1238	380 MM
1627-SS-1240	1627-TT-1240	400 MM
1627-SS-1242	1627-TT-1242	420 MM
1627-SS-1244	1627-TT-1244	440 MM



130° Ø 9.0 MM LONG PROXIMAL FEMORAL NAIL – LEFT

SS 316L	TITANIUM	SIZE
1628-SS-9034	1628-TT-9034	340 MM
1628-SS-9036	1628-TT-9036	360 MM
1628-SS-9038	1628-TT-9038	380 MM
1628-SS-9040	1628-TT-9040	400 MM
1628-SS-9042	1628-TT-9042	420 MM
1628-SS-9044	1628-TT-9044	440 MM

130° Ø 10.0 MM LONG PROXIMAL FEMORAL NAIL – LEFT

SS 316L	TITANIUM	SIZE
1628-SS-1034	1628-TT-1034	340 MM
1628-SS-1036	1628-TT-1036	360 MM
1628-SS-1038	1628-TT-1038	380 MM
1628-SS-1040	1628-TT-1040	400 MM
1628-SS-1042	1628-TT-1042	420 MM
1628-SS-1044	1628-TT-1044	440 MM

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1628-SS-1140	1628-TT-1140	400 MM
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1628-SS-1144	1628-TT-1144	440 MM

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1628-SS-1242	1628-TT-1242	420 MM
1628-SS-1244	1628-TT-1244	440 MM

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1629-SS-1238	1629-TT-1238	380 MM
1629-SS-1240	1629-TT-1240	400 MM
1629-SS-1242	1629-TT-1242	420 MM
1629-SS-1244	1629-TT-1244	440 MM

135° Ø 9.0 MM LONG PROXIMAL FEMORAL NAIL – LEFT

SS 316L	TITANIUM	SIZE
1630-SS-9034	1630-TT-9034	340 MM
1630-SS-9036	1630-TT-9036	360 MM
1630-SS-9038	1630-TT-9038	380 MM
1630-SS-9040	1630-TT-9040	400 MM
1630-SS-9042	1630-TT-9042	420 MM
1630-SS-9044	1630-TT-9044	440 MM

135° Ø 10.0 MM LONG PROXIMAL FEMORAL NAIL – LEFT

SS 316L	TITANIUM	SIZE
1630-SS-1034	1630-TT-1034	340 MM
1630-SS-1036	1630-TT-1036	360 MM
1630-SS-1038	1630-TT-1038	380 MM
1630-SS-1040	1630-TT-1040	400 MM
1630-SS-1042	1630-TT-1042	420 MM
1630-SS-1044	1630-TT-1044	440 MM

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1630-SS-1240	1630-TT-1240	400 MM
1630-SS-1242	1630-TT-1242	420 MM
1630-SS-1244	1630-TT-1244	440 MM

Screw Used For Proximal Femoral Nail

4.9 mm Interlocking Bolt

16 mm to 80 mm (2 mm Diff.)

(1717-SS-5000 / 1717-TT-5000)



6.4 mm Hip Pin (For PFN Nail)

40 mm to 120 mm (5 mm Diff.)

(1717-SS-6400 / 1717-TT-6400)



8.0 mm Femoral Neck Screw (For PFN Nail)

40 mm to 120 mm (5 mm Diff.)

(1717-SS-8000 / 1717-TT-8000)



Address

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Taluka - Waghodiya Dist. Vadodara-391510
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