

4.5 mm LCP Proximal Femur Plates.

Part of the Synthes Periarticular LCP Plating System.

Technique Guide

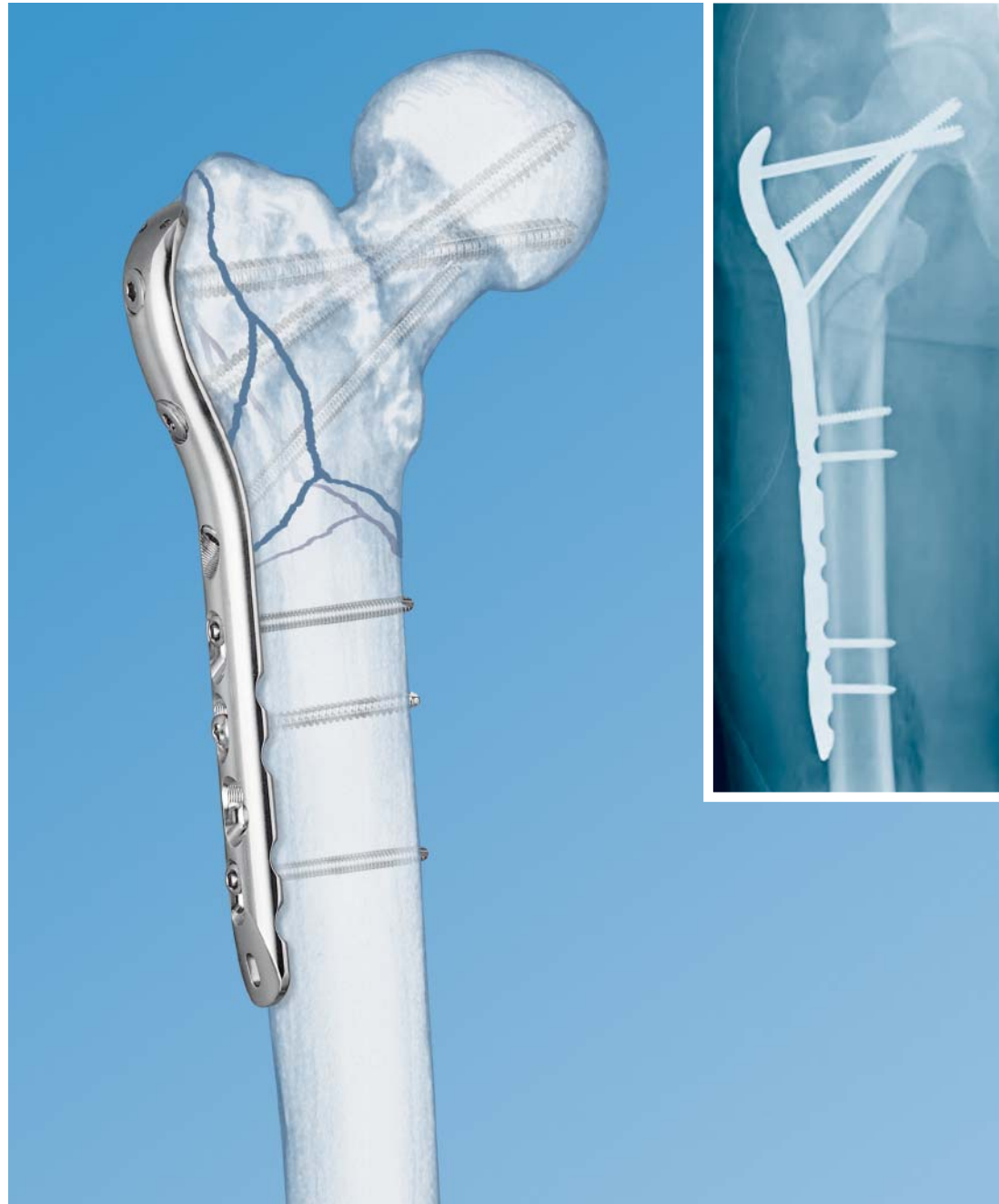


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4.5 mm LCP Proximal Femur Plates

The Synthes LCP Proximal Femur Plate is part of the LCP Periarticular Plating System, which merges locking screw technology with conventional plating techniques. The LCP Periarticular Plating System is capable of addressing complex fractures of the proximal femur with the 4.5 mm LCP Proximal Femur Plates and Proximal Femur Hook plates, complex fractures of the distal femur with the 4.5 mm LCP Condylar Plates, and complex fractures of the proximal tibia with the 4.5 mm LCP Proximal Tibia and LCP Medial Proximal Tibia Plates.

The locking compression plate (LCP) has Combi holes in the plate shaft that combine a dynamic compression unit (DCU) hole with a threaded locking hole. The Combi hole provides the flexibility of cortex screw or locking screw fixation.

The Synthes LCP Proximal Femur Plate is a limited-contact stainless steel plate. The proximal portion of the plate is precontoured for the proximal femur. The two proximal screw holes are designed for 7.3 mm cannulated locking screws and the third locking hole is designed for 5.0 mm cannulated locking screws. The hole for 5.0 mm locking screws is angled so the screw trajectory converges with the proximal 7.3 mm screw. Improved proximal femoral fixation in osteoporotic bone is achieved by the screw angulation and the locking interface with the plate. The remaining screw holes in the plate shaft are Combi holes. This provides the surgeon with the flexibility to achieve plate-to-bone apposition as well as axial compression or angular stability.

Note: For information on fixation principles using conventional and locking plate techniques, please refer to the *Synthes Large Fragment Locking Compression Plate (LCP) Technique Guide*.



Features

- Anatomically contoured to approximate the lateral aspect of the proximal femur
- Plates specifically designed for left or right femurs to accommodate average femoral neck anteversion
- Plate lengths allow spanning of the entire diaphysis in segmental fracture patterns
- Use of locking screws provides the option of an angularly stable construct independent of bone quality
- Plates can be tensioned to create a load-sharing construct
- Manufactured of implant quality 316L stainless steel
- The three proximal screw holes are at the following angles to the plate shaft:
 - First proximal hole (7.3 mm), 95°
 - Second proximal hole (7.3 mm), 120°
 - Third proximal hole (5.0 mm), 135°

The two proximal plate holes are threaded and accept 7.3 mm cannulated screws (locking, conical fully threaded, or conical partially threaded).

The third locking hole is threaded to accept 5.0 mm cannulated locking screws. (Necessity of this screw is fracture configuration dependent and should be identified during preoperative planning).

The holes in the shaft of the plate are Combi holes that accept 4.0 mm or 5.0 mm locking screws in the threaded portion of the hole and 4.5 mm cortex screws in the DCU portion.



AO Principles

In 1958, the AO formulated four basic principles, which have become the guidelines for internal fixation.¹ Those principles, as applied to the 4.5 mm LCP proximal femur plate, are:

Anatomic reduction

Anatomic plate profile assists reduction of the metaphysis to the diaphysis and facilitates restoration of the neck-shaft angle by proper screw placement.

Stable fixation

The combination of conventional and locking plate fixation offers optimum fixation irrespective of bone density.

Preservation of blood supply

A limited-contact design reduces plate-to-bone contact and helps to preserve the periosteal blood supply.

Early, active mobilization

Plate features combined with AO technique create an environment for bone healing.

1. M. E. Müller, M. Allgöwer, R. Schneider, and H. Willenegger.
Manual of Internal Fixation, 3rd Edition. Berlin: Springer-Verlag. 1991.

Indications

The 4.5 mm LCP proximal femur plate is intended for fractures of the femur including:

- Fractures of the trochanteric region, trochanteric simple, trochanterodiaphyseal, multifragmentary pertrochanteric, intertrochanteric reversed or transverse or with additional fracture of the medial cortex
- Fractures of the proximal end of the femur combined with ipsilateral shaft fractures
- Metastatic fracture of the proximal femur
- Osteotomies of the proximal femur
- Also for use in fixation of osteopenic bone and fixation of nonunions or malunions



Preoperative AP



Follow-up lateral



Follow-up AP

Preparation

1

Preparation

Required set

01.240.201 Periarticular LCP Plating System,
with 5.0 mm Locking Screws

or

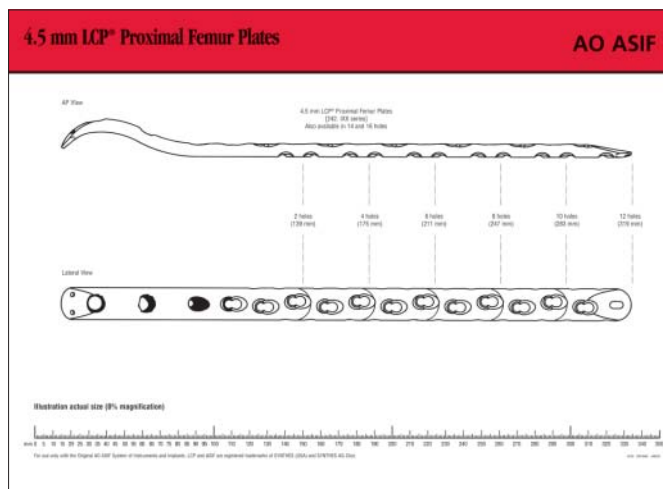
01.240.209 Periarticular LCP Plating System,
with 4.0 mm Locking Screws

- Complete the preoperative radiographic assessment and prepare the preoperative plan. AP and lateral radiographs of the entire femur are necessary for complete evaluation. Traction radiographs and views of the contralateral femur are useful adjuncts in the planning process.

When considering use of the 4.5 mm LCP proximal femur plate, identify proper placement of the three proximal screws.

Use the AO preoperative planner kit and the 4.5 mm LCP proximal femur plate template to aid in planning the procedure. Determine plate length and approximate screw lengths and instruments to be used. Position the patient supine on a radiolucent operating table, or a fracture extension table for lower energy fracture settings.

- Fluoroscopic visualization of the femur in both AP and lateral views must be verified prior to patient draping.

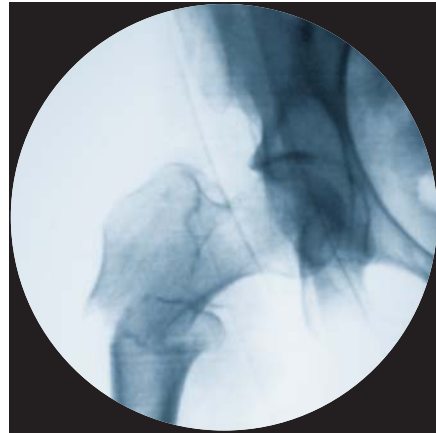


Reduce Fracture

2

Reduce fracture

Reduce the fracture using a fracture table, clamps, Schanz screws, or other conventional reduction techniques. Alternatively, provisional indirect fracture reduction may be facilitated by attaching the 4.5 mm LCP proximal femur plate to the proximal segment with appropriately oriented screws, and then to the diaphysis with plate holding forceps.



Insert Guide Wires

3

Insert guide wires and establish screw trajectories

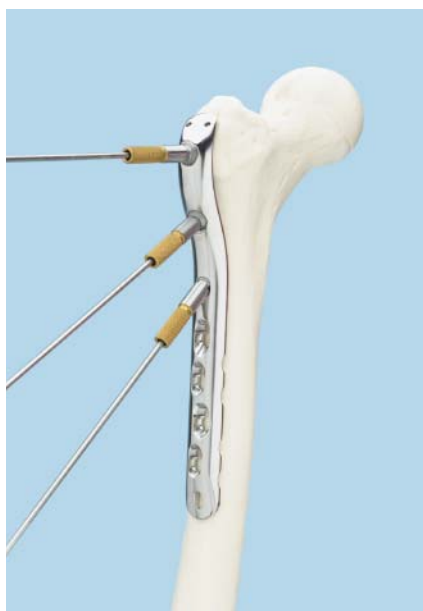
Instruments

310.243	2.5 mm Drill Tip Guide Wire
324.174	2.5 mm Wire Guide, for 5.0 mm screws
324.175	2.5 mm Wire Guide, for 7.3 mm screws

Note: It is more important to properly place guide wires in the proximal femur (considering the desired screw positions) than it is to precisely match the contour of the plate to the anatomy of the femur. The ability to lock the screws to the plate obviates the need for precise plate contouring and compressing the plate to the bone.

Before placing the plate on the bone, thread the wire guides into the plate holes for each of the three proximal locking screws. Use the 2.5 mm wire guide for 7.3 mm screws in the two proximal screw holes, and a 2.5 mm wire guide for 5.0 mm screws in the third locking screw hole. The wire guides can also be used as a manipulation aid for positioning the plate on the proximal femur.

- Using fluoroscopic image control (AP and lateral), insert a 2.5 mm drill tip guide wire through the wire guide in each of the three proximal locking holes. For proper screw measurement, guide wires should reach but not penetrate subchondral bone.



- ① Placement of the proximal guide wire in the AP view is into the midportion of the inferomedial quadrant of the femoral head along a path subtending a 50° angle relative to the calcar femoralis. Guide wire placement in this manner will facilitate placement of the proximal locking screw at a 95° angle to the femoral shaft (Figure 1).

The proximal wire is ideally placed slightly posterior to central in the lateral view. This accommodates an anteverted position for the second guide wire and screw. Accurate positioning of the proximal guide wire (and ultimately the locking screw) assures frontal plane alignment (Figures 2 and 3).

Before a drill tip guide wire is inserted into the second wire guide, verify correct sagittal plane alignment of the plate on the proximal femur. This usually requires both visual and fluoroscopic assessment and prevents an apex anterior deformity when the plate is attached to the diaphysis. When this alignment is satisfactory, insert the guide wires through the next two (distal) wire guides, maintaining biplanar fluoroscopic control. In some patterns, insertion of the third guide wire may have to be deferred until final reduction (and compression, where possible) has been achieved (Figure 4).

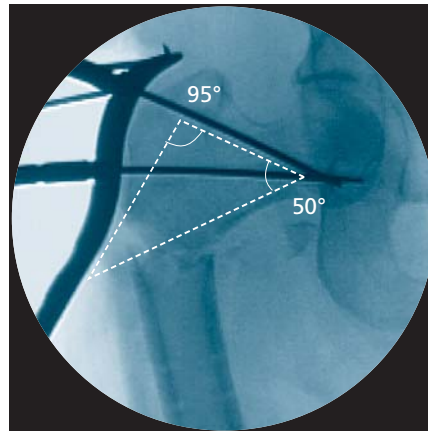


Figure 1

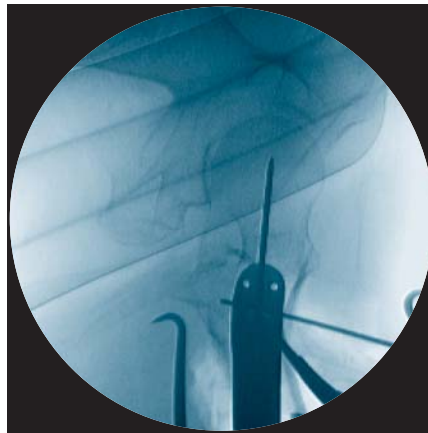


Figure 2



Figure 3

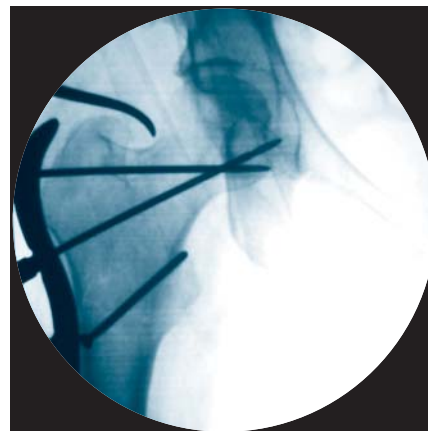


Figure 4

Insert Proximal Screws

4

Insert proximal 7.3 mm cannulated screw

Instruments

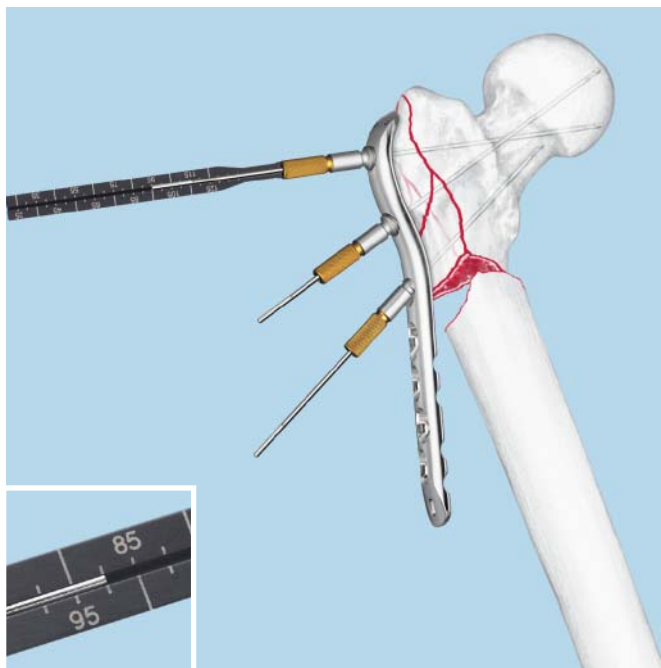
310.632	5.0 mm Cannulated Drill Bit, for use with 7.3 mm screws
310.634	4.3 mm Cannulated Drill Bit, for use with 5.0 mm screws
314.05	Cannulated, Hexagonal Screwdriver
314.23	Cannulated, Hexagonal Screwdriver Shaft
319.701	Cannulated Screw Measuring Device
511.771*	Torque Limiting Attachment, 4 Nm
or	
511.774	Torque Limiting Attachment, 4 Nm, for AO Reaming Coupler

Using the cannulated screw measuring device, measure for screw length over the guide wire. Select the appropriate length 7.3 mm cannulated locking screw. Use the cannulated hexagonal screwdriver to remove the wire guide.

Technique tip: The self-drilling, self-tapping flutes of the 5.0 mm and 7.3 mm screws make predrilling and pretapping unnecessary in most cases. In dense bone, the lateral cortex can be predrilled. If necessary, use the 5.0 mm cannulated drill bit for 7.3 mm screws or the 4.3 mm cannulated drill bit for 5.0 mm screws.

- Insert the screw, using fluoroscopy, with the cannulated hexagonal screwdriver or cannulated hexagonal screwdriver shaft. This screw, as with all locking screws not protected by a torque limiting attachment, may be inserted using power; however, final seating and tightening must be done manually. Once the screw has been locked to the plate, the guide wire may be removed.

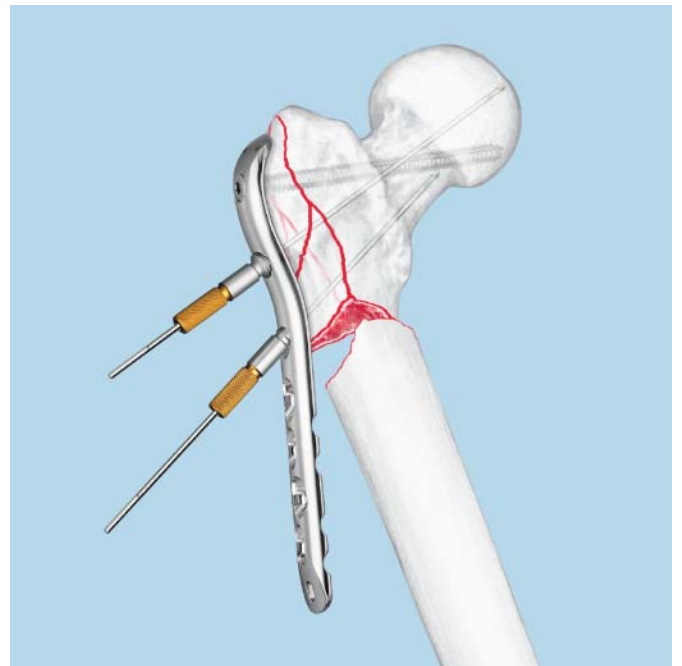
Note: Recheck each locking screw prior to closing to verify that the screws are securely locked to the plate. Screwheads must be flush with the plate in the locked position before they can be considered fully seated.



* Also available

In some cases it may be necessary to pull the plate to the bone; if so, use a fully threaded 7.3 mm cannulated conical screw in the proximal screw hole. However, use caution to avoid changing the alignment of the guide wire with the conical screw. If malalignment occurs, it may preclude final exchange of the conical screw for a locking screw, and thereby weaken the overall strength of the plate construct.

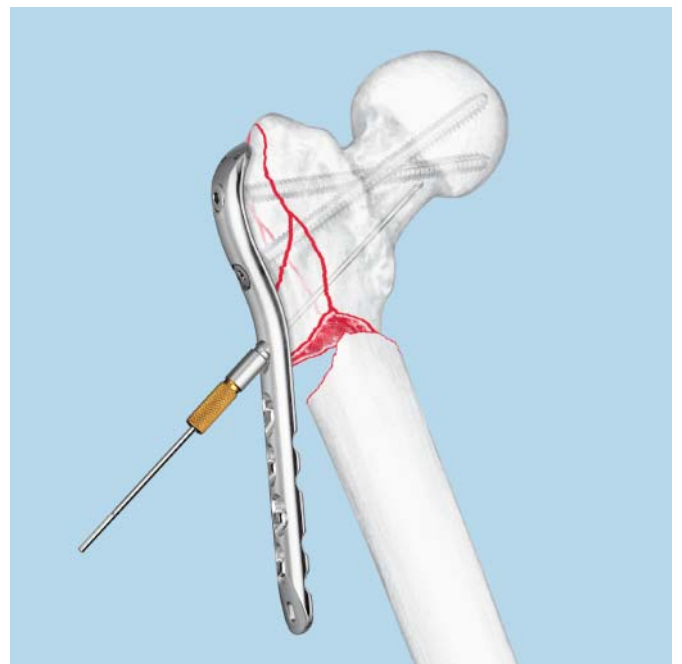
Important: It is always recommended to replace conical screws with locking screws to ensure angular stability.



5

Insert second 7.3 mm screw

Insert the second 7.3 mm screw using the same technique as described in Step 4.



Approximate Plate to Femoral Diaphysis

6

Approximate plate to femoral diaphysis

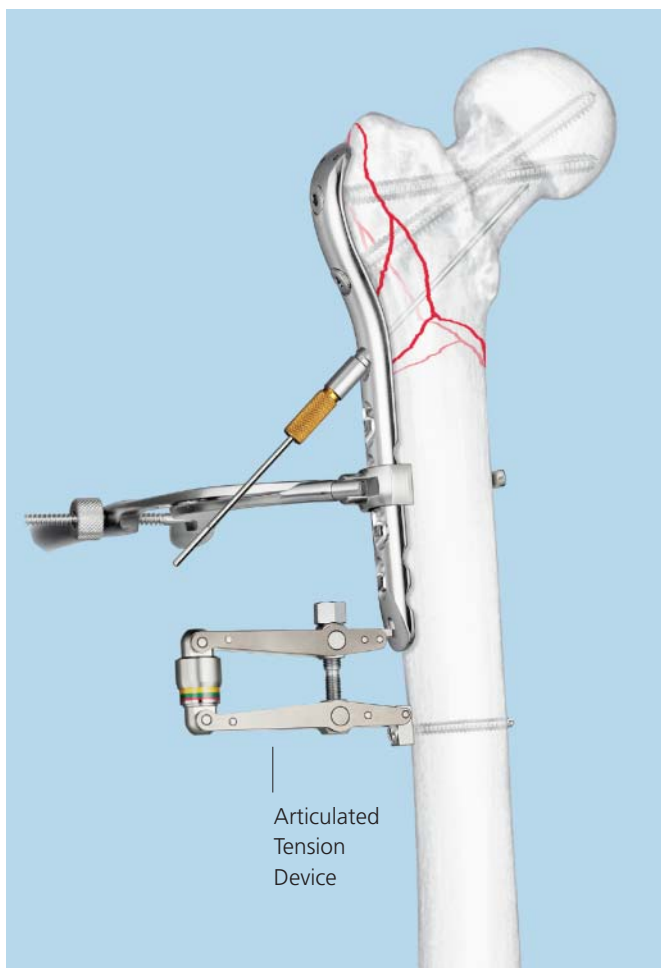
Instrument

321.12 Articulated Tension Device

Secure the plate to the lateral femoral shaft with bone holding forceps, adjusting horizontal plane alignment (rotation) as appropriate. Length restoration and fracture reduction can be facilitated by a number of indirect means, including a fracture table, the articulated tension device, the large distractor, the large distractor/compressor, or a large external fixator. Judicious, soft tissue preserving, direct reduction techniques with clamps may also be appropriate in some cases.

When the fracture pattern permits, a tensioning device should be applied to the end of the plate to tension the plate and compress the fracture.

Note: Use the articulated tension device to realign the fragments, tension the plate, and compress the fracture to create a load-sharing construct. Alternatively, although less desirable, the plate can be used as a bridging construct in patterns with segmental comminution where plate tensioning cannot be accomplished.



Insert Cortex Screws

7

Insert 4.5 mm cortex screws

Instruments

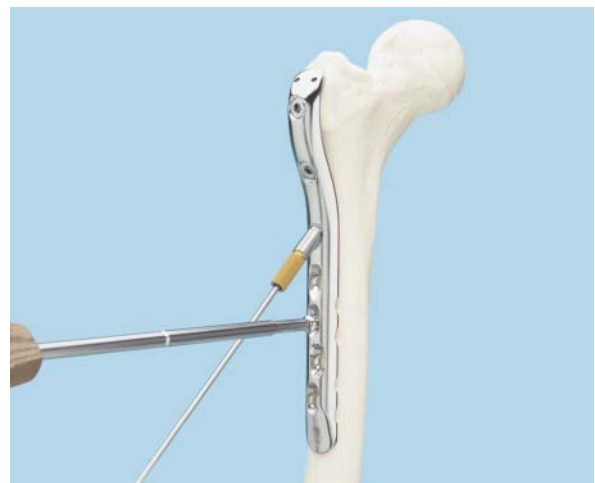
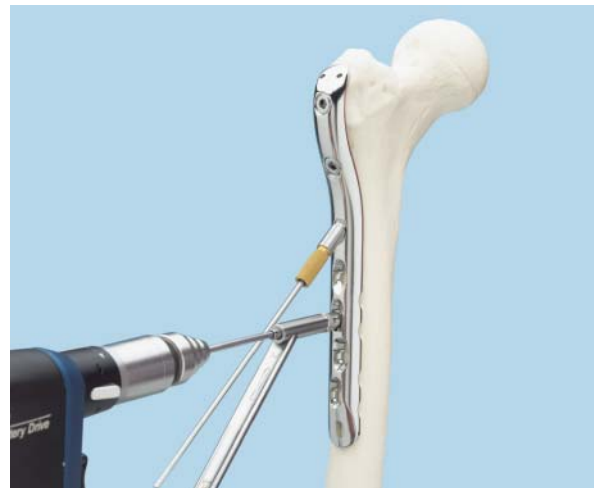
03.010.150	Star/HexDrive Screwdriver, T25, 3.5 mm hexagonal
310.31	3.2 mm Drill Bit
319.10	Depth Gauge, for large screws
323.46	4.5 mm Universal Drill Guide

Note: All 4.5 mm cortex screws must be inserted into the plate shaft before insertion of any locking screws in the plate shaft.

Use the 3.2 mm drill bit through the 4.5 mm universal drill guide to predrill the bone. For the neutral position, press the drill guide down in the nonthreaded hole. To obtain compression, place the drill guide at the end of the nonthreaded hole away from the fracture. (Do not apply downward pressure on the spring-loaded tip).

Measure for screw length using the depth gauge for large screws.

Select and insert the appropriate length 4.5 mm cortex screw using the Star/HexDrive screwdriver. Insert as many standard 4.5 mm cortex screws as necessary.



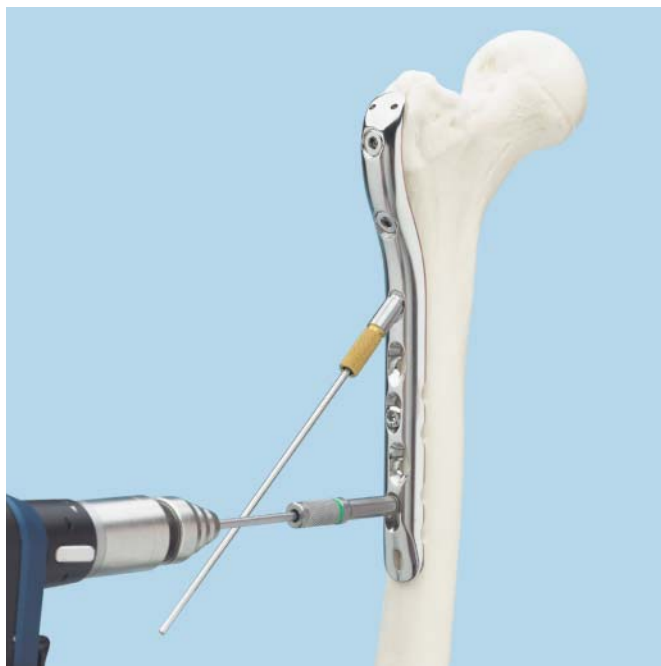
Insert Locking Screws

8

Insert 4.0 mm or 5.0 mm locking screws

Instruments

03.010.150	Star/HexDrive Screwdriver, T25, 3.5 mm hexagonal
03.010.151	Star/HexDrive Screwdriver Shaft, T25, 3.5 mm hexagonal
310.31 or 310.431	3.2 mm Drill Bit 4.3 mm Drill Bit
319.10	Depth Gauge, for large screws
324.176 or 312.449	3.2 mm Drill Guide, for 4.0 mm screws 4.3 mm Threaded Drill Guide
511.771* or 511.774	Torque Limiting Attachment, 4 Nm Torque Limiting Attachment, 4 Nm, for AO Reaming Coupler



Attach the appropriate drill guide to the locking portion of a Combi hole:

- Use the 3.2 mm drill guide when inserting 4.0 mm locking screws (green band)
- Use the 4.3 mm threaded drill guide when inserting 5.0 mm locking screws (blue band)





Note: Use of the drill guide is required. It will center the drill bit in the threaded portion of the Combi hole to create a screw trajectory that ensures the screw properly engages the plate.

Use the appropriate drill bit to drill to the desired depth:

- Use the 3.2 mm drill bit for 4.0 mm locking screws (green band)
- Use the 4.3 mm drill bit for 5.0 mm locking screws (blue band)

Note: Holes for locking screws may be drilled unicortically or bicortically, depending on bone quality.

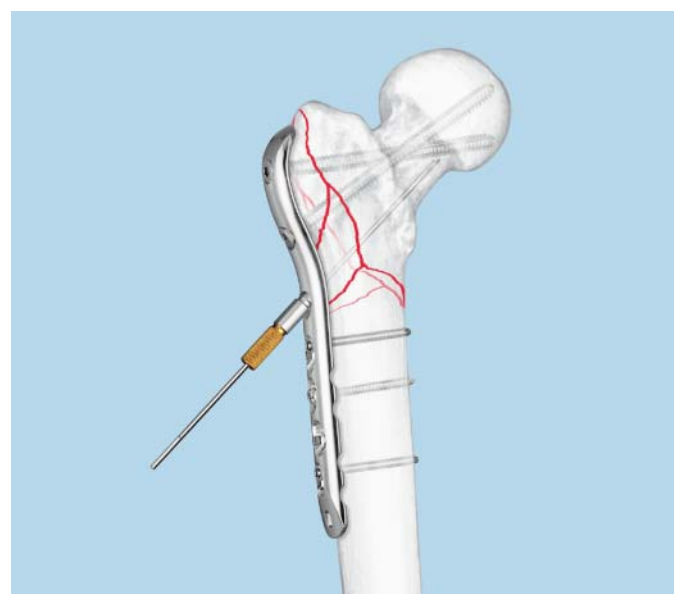
* Also available

Screw Size		Drill Guide Size (Drill Guide Part #)	Drill Bit Size (Drill Bit Part #)	Color Code
4.0 mm Locking		3.2 mm (324.176)	3.2 mm (310.31)	Green 
5.0 mm Locking		4.3 mm (312.449)	4.3 mm (310.431)	Blue 

Remove the drill guide and measure screw length using the depth gauge. Insert the appropriate length 4.0 mm or 5.0 mm locking screw using the appropriate screwdriver.

Warning: If the torque limiting attachment is unavailable, do not tighten locking screws to the plate using power. Perform final tightening by hand.

Repeat as necessary to insert additional locking screws.



Insert Cannulated Locking Screws

9

Insert oblique 5.0 mm cannulated locking screw*

Instruments

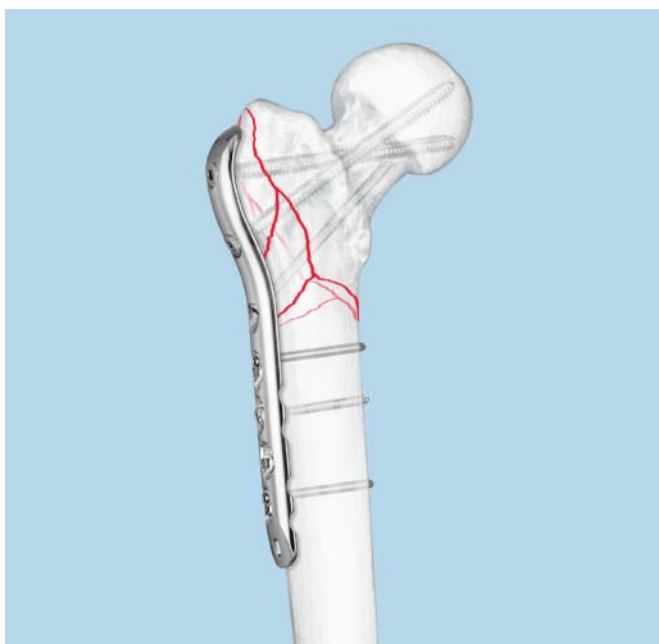
314.05	Cannulated Hexagonal Screwdriver
314.23	Cannulated Hexagonal Screwdriver Shaft
319.24	2.9 mm Cleaning Brush
319.461	2.5 mm Cleaning Stylet
319.701	Cannulated Screw Measuring Device

Using the wire guide and guide wire previously inserted at this hole location, measure for screw length with the cannulated screw measuring device. The correct length measurement will place the screw at the tip of the guide wire.

Screw length considerations: The angled 5.0 mm cannulated locking screw in the plate shaft is intended to converge with the 95°, 7.3 mm screw to create a buttress which will provide additional stability. This convergence should occur when using a 5.0 mm locking screw that is 85 mm in length.

- Remove the wire guide and insert the appropriate length screw over the 2.5 mm guide wire and into the bone using the cannulated hexagonal screwdriver or cannulated hexagonal screwdriver shaft. Locking screws may be inserted using power equipment; however, final seating and tightening must be done manually.

Important: Securely tighten all locking screws again before closing.



* The need for this screw is fracture configuration dependent and should be determined during preoperative planning.

Implant Removal

Implant removal

To remove locking screws, unlock all screws from the plate and then begin to remove the screws completely from the bone. This avoids rotation of the plate when removing the last locking screw.

Tips

Cleaning cannulated instruments

Cleaning the cannulation in each instrument is imperative for proper function. Instruments should be cleared intraoperatively using the 2.5 mm cleaning stylet to prevent accumulation of debris in the cannulation and potential binding of the instruments about the guide wire. Instruments should be cleaned postoperatively using the stylet and the 2.9 mm cleaning brush.

Preliminary plate shaft attachment

Instrument

311.449	Push-Pull Reduction Device
or	
324.033*	Pull Reduction Instrument, for LISS

The pull reduction instrument can be used to approximate the plate shaft to the diaphysis and counteract medial diaphyseal displacement.

Reduction and fixation

- If an extension table is used, careful traction should be applied to prevent the gastrocnemius muscle from pulling the distal fragment posteriorly or into hyperflexion. Posterior support of the distal fragment can assist reduction.
- Sagittal plane reduction may be facilitated using a Schanz screw as a “joystick” in the anterior cortex of the distal fragment. Insertion of a Schanz screw into the proximal fragment may also be helpful. Should it still be impossible to achieve fracture reduction, extend the incision to improve access.
- When using a radiolucent table, towel bumps can be used under the diaphyseal segment to help reduce the fracture in the lateral plane.
- Limb axis can be checked using the C-Arm and a cautery cord from the femoral head to the center of the ankle joint on an AP view. Use the C-Arm at the knee to check that the cord passes 10 mm medially to the center of the knee joint. Adjustment to varus-valgus reduction should be performed before locking screw placement in the malaligned fragment.
- Fractures not treated acutely should be placed in skeletal traction to maintain length until plate fixation can be performed.

* Also available

Screws Used with the 4.5 mm LCP Proximal Femur Plates

4.0 mm Locking Screws

Create a locked, fixed-angle screw/plate construct

- Threaded conical head
- Fully threaded shaft
- Self-tapping tip



4.5 mm Cortex Screws

Compress the plate to the bone or create axial compression

- May be used in the DCU portion of the Combi holes in the plate shaft
- Self-tapping tip



5.0 mm Cannulated Locking Screws

Create a locked, fixed-angle screw/plate construct

- Threaded conical head
- Fully threaded shaft
- Self-drilling, self-tapping tip



5.0 mm Cannulated Conical Screws

Compress the plate to the bone and provide interfragmentary compression

- Smooth conical head
- Partially threaded shaft
- Self-drilling, self-tapping tip



5.0 mm Locking Screws

Create a locked, fixed-angle screw/plate construct

- Threaded conical head
- Fully threaded shaft
- Self-tapping tip



7.3 mm Cannulated Locking Screws

Create a locked, fixed-angle screw/plate construct

- Threaded conical head
- Fully threaded shaft
- Self-drilling, self-tapping tip



7.3 mm Cannulated Conical Screws

Compress the plate to the bone

- Fully threaded shaft
- Smooth conical head
- Self-drilling, self-tapping tip



7.3 mm Cannulated Conical Screws, partially threaded

Compress the plate to the bone and provide interfragmentary compression

- Partially threaded shaft
- Smooth conical head
- Self-drilling, self-tapping tip



Selected Instruments from Periarticular LCP Plating System (01.240.201)

03.010.150 Star/HexDrive Screwdriver



310.243 2.5 mm Drill Tip Guide Wire



310.31 3.2 mm Drill Bit



310.431 4.3 mm Drill Bit



310.632 5.0 mm Cannulated Drill Bit



310.634 4.3 mm Cannulated Drill Bit



312.449 4.3 mm Threaded Drill Guide



Selected Instruments from Periarticular LCP Plating System (01.240.201) continued

313.93 Solid Hexagonal Screwdriver,
4.0 mm width across flats



314.05 Cannulated Hexagonal Screwdriver,
4.0 mm width across flats



319.10 Depth Gauge, for large screws



319.701 Cannulated Screw Measuring Device



321.12 Articulated Tension Device



323.46 4.5 mm Universal Drill Guide



324.174 2.5 mm Wire Guide, for 5.0 mm screws



324.175 2.5 mm Wire Guide, for 7.3 mm screws



324.176 3.2 mm Drill Guide, for 4.0 mm screws



511.774 Torque Limiting Attachment, 4 Nm,
for AO Reaming Coupler



4.5 mm LCP Proximal Femur Set (105.272)

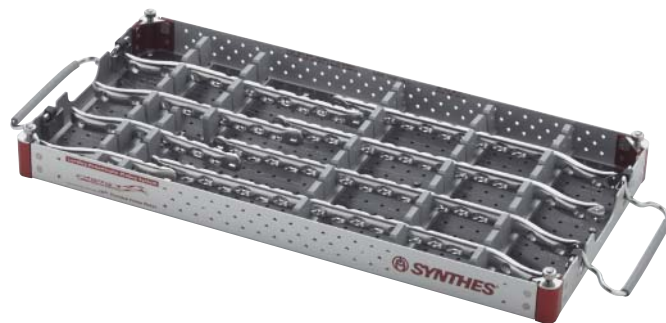
Graphic Case

690.381 4.5 mm LCP Proximal Femur Plate Set
Graphic Case

Implants

4.5 mm LCP Proximal Femur Plates[◇]

Left	Right	Holes	Length (mm)
242.102	242.802	2	139
242.104	242.804	4	175
242.106	242.806	6	211
242.108	242.808	8	247
242.110	242.810	10	283
242.112	242.812	12	319
242.114	242.814	14	355
242.116	242.816	16	391



Required Set

01.240.201 Periarticular LCP Plating System,
with 5.0 mm Locking Screws

or

01.240.209 Periarticular LCP Plating System,
with 4.0 mm Locking Screws

Recommended Additional Sets

105.90 Bone Forceps Set
115.400 Large Fragment LCP Instrument
and Implant Set
115.700 Large Distractor Set
115.720 Large External Fixator Set with Self-Drilling
Schanz screws

Note: For additional information, please refer to package insert.

For detailed cleaning and sterilization instructions, please refer to <http://us.synthes.com/Medical+Community/Cleaning+and+Sterilization.htm> or to the below listed inserts, which will be included in the shipping container:
—Processing Synthes Reusable Medical Devices—Instruments, Instrument Trays and Graphic Cases—DJ1305
—Processing Non-sterile Synthes Implants—DJ1304

[◇] Available nonsterile or sterile-packed.
Add "S" to catalog number to order sterile product.

Periarticular LCP Plating System, with 5.0 mm Locking Screws (01.240.201)

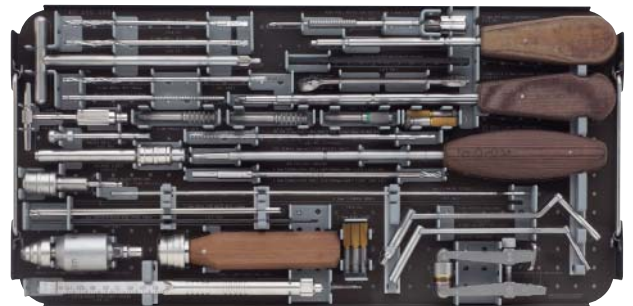
Graphic Cases and Screw Racks

- 60.240.201 Locking Periarticular Plating System Graphic Case
- 60.240.203 Screw Rack, for 4.5 mm cortex screws
- 60.240.204 Screw Rack, for 5.0 mm locking screws, with T25 StarDrive recess
- 60.240.205 Screw Rack, for 5.0 mm and 7.3 mm cannulated locking screws and 7.3 mm conical screws
- 60.240.206 Screw Rack, for 5.0 mm cannulated conical screws
- 60.240.208 Locking Periarticular Plating System Instrument Tray



Instruments

- 292.652 2.0 mm Non-Colored Threaded Guide Wire, 230 mm, spade point, 10 ea.
- 03.010.150 Star/HexDrive Screwdriver, T25, 3.5 mm Hexagonal, self-retaining
- 03.010.151 Star/HexDrive Screwdriver Shaft, T25, 3.5 mm hexagonal, self-retaining, 165 mm
- 310.243 2.5 mm Drill Tip Guide Wire, 200 mm, 10 ea.
- 310.31 3.2 mm Drill Bit, quick coupling, 145 mm
- 310.431 4.3 mm Drill Bit, quick coupling, 180 mm, for 5.0 mm Locking Screws
- 310.44 4.5 mm Drill Bit, quick coupling, 145 mm
- 310.632 5.0 mm Cannulated Drill Bit, quick coupling, 200 mm (short flute)
- 310.634 4.3 mm Cannulated Drill Bit, quick coupling, 200 mm (long flute)
- 310.99 Countersink, for 4.5 mm and 6.5 mm screws
- 311.44 T-Handle, with quick coupling
- 311.449 Push-Pull Reduction Device, for use with 4.5 mm LCP plates, 2 ea.
- 311.46 Tap for 4.5 mm Screws
- 312.449 4.3 mm Threaded Drill Guide, 4 ea.
- 312.48 4.5 mm/3.2 mm Insert Drill Sleeve



Periarticular LCP Plating System, with 5.0 mm Locking Screws (01.240.201)

continued

Instruments continued

313.93	Solid Hexagonal Screwdriver, 4.0 mm width across flats
314.05	Cannulated Hexagonal Screwdriver, 4.0 mm width across flats
314.11	Holding Sleeve
314.23	Cannulated Hexagonal Screwdriver Shaft, 4.0 mm width across flats
319.10	Depth Gauge, for 4.5 mm and 6.5 mm screws
319.24	2.9 mm Cleaning Brush
319.461	2.5 mm Cleaning Stylet
319.701	Cannulated Screw Measuring Device
321.12	Articulated Tension Device
321.16	Combination Wrench, 11 mm width across flats
323.46	4.5 mm Universal Drill Guide
324.174	2.5 mm Wire Guide, for 5.0 mm screws, 5 ea.
324.175	2.5 mm Wire Guide, for 7.3 mm screws, 2 ea.
324.176	3.2 mm Drill Guide, for 4.0 mm screws, 2 ea.
338.49	Large Quick Coupling
397.706	Handle, for AO Reaming Coupler Connection
511.774	Torque Limiting Attachment, 4 Nm, for AO Reaming Coupler

Implants

4.5 mm Cortex Screws, self-tapping

	Length		Length		
	(mm)	Qty.	(mm)	Qty.	
214.814	14	4	214.844	44	4
214.816	16	4	214.846	46	2
214.818	18	4	214.848	48	2
214.820	20	4	214.850	50	2
214.822	22	4	214.852	52	2
214.824	24	4	214.854	54	2
214.826	26	6	214.856	56	2
214.828	28	6	214.858	58	2
214.830	30	6	214.860	60	2
214.832	32	6	214.862	62	2
214.834	34	6	214.864	64	2
214.836	36	6	214.866	66	2
214.838	38	6	214.868	68	2
214.840	40	6	214.870	70	2
214.842	42	6			

Implants continued5.0 mm Periprosthetic Locking Screws, self-tapping,
with T25 StarDrive recess[◇]

	Length (mm)	Qty.
02.221.508	8	2
02.221.510	10	2
02.221.512	12	2

5.0 mm Locking Screws, self-tapping,
with T25 StarDrive recess

	Length (mm)	Qty.		Length (mm)	Qty.
212.201	14	4	212.215	42	6
212.202	16	4	212.216	44	2
212.203	18	4	212.217	46	2
212.204	20	4	212.218	48	2
212.205	22	4	212.219	50	2
212.206	24	4	212.220	55	2
212.207	26	6	212.221	60	2
212.208	28	6	212.222	65	2
212.209	30	6	212.223	70	2
212.210	32	6	212.224	75	2
212.211	34	6	212.225	80	2
212.212	36	6	212.226	85	2
212.213	38	6	212.227	90	2
212.214	40	6			

5.0 mm Cannulated Locking Screws

	Length (mm)	Qty.		Length (mm)	Qty.
02.205.025	25	2	02.205.090	90	2
02.205.030	30	2	02.205.095	95	2
02.205.035	35	2	02.205.100	100	2
02.205.040	40	2	02.205.105	105	2
02.205.045	45	2	02.205.110	110	2
02.205.050	50	2	02.205.115	115	2
02.205.055	55	4	02.205.120	120	2
02.205.060	60	4	02.205.125	125	2
02.205.065	65	4	02.205.130	130	2
02.205.070	70	4	02.205.135	135	2
02.205.075	75	4	02.205.140	140	2
02.205.080	80	4	02.205.145	145	2
02.205.085	85	4			

5.0 mm Cannulated Conical Screws

	Length (mm)	Qty.		Length (mm)	Qty.
02.205.240	40	2	02.205.270	70	2
02.205.245	45	2	02.205.275	75	2
02.205.250	50	2	02.205.280	80	2
02.205.255	55	2	02.205.285	85	2
02.205.260	60	2	02.205.290	90	2
02.205.265	65	2	02.205.295	95	2

[◇] Available nonsterile or sterile-packed.
Add "S" to catalog number to order sterile product.

Periarticular LCP Plating System, with 5.0 mm Locking Screws (01.240.201)

continued

Implants continued

7.3 mm Cannulated Locking Screws

	Length (mm)	Qty.		Length (mm)	Qty.
02.207.020	20	2	02.207.085	85	2
02.207.025	25	2	02.207.090	90	2
02.207.030	30	2	02.207.095	95	2
02.207.035	35	2	02.207.100	100	2
02.207.040	40	2	02.207.105	105	2
02.207.045	45	2	02.207.110	110	2
02.207.050	50	2	02.207.115	115	2
02.207.055	55	2	02.207.120	120	2
02.207.060	60	2	02.207.125	125	2
02.207.065	65	2	02.207.130	130	2
02.207.070	70	2	02.207.135	135	2
02.207.075	75	2	02.207.140	140	2
02.207.080	80	2	02.207.145	145	2

7.3 mm Cannulated Conical Screws (1 ea.)

	Length (mm)		Length (mm)
02.207.250	50	02.207.275	75
02.207.255	55	02.207.280	80
02.207.260	60	02.207.285	85
02.207.265	65	02.207.290	90
02.207.270	70	02.207.295	95

7.3 mm Cannulated Conical Screws, partially threaded (1 ea.)

	Length (mm)		Length (mm)
02.207.450	50	02.207.475	75
02.207.455	55	02.207.480	80
02.207.460	60	02.207.485	85
02.207.465	65	02.207.490	90
02.207.470	70	02.207.495	95

222.578 5.0 mm Screw Nut, 2 ea.

Also Available

	5.0 mm Periprosthetic Locking Screws, self-tapping, with T25 StarDrive recess [◇]
02.221.514	14 mm
02.221.518	18 mm
292.20	2.0 mm Kirschner Wire, 150 mm, trocar point
311.66	Tap for 6.5 mm Cancellous Bone Screws
312.67	6.5 mm/3.2 mm Double Drill Sleeve
394.35	Large Distractor
397.705	Handle, quick coupling, for ComPact Air Drive Connection
398.81	Self-Centering Bone Forceps
398.813	Plate Holding Forceps with swivel foot
511.761	Large Quick Coupling
511.771	Torque Limiting Attachment, 4 Nm
60.240.207	Screw Rack for 6.5 mm Cancellous Bone Screws
690.407	Screw Rack, for 4.5 mm Cortex Screws

[◇] Available nonsterile or sterile-packed.
Add "S" to catalog number to order sterile product.



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