maxx
orthopedics

Libertas® Mini TR Hip System

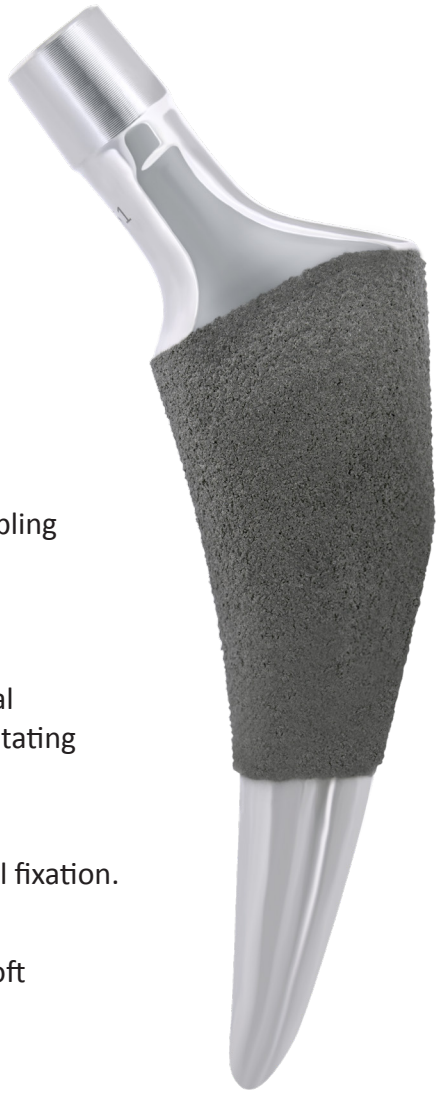
Surgical Technique

Contents

SYSTEM OVERVIEW

Optimized Design for the Direct Anterior Approach

The Libertas Mini TR System features distal reduction designed to address challenges with proximal-distal mismatch and a short stem length for optimal performance for any surgical approach including the direct anterior approach. Overall stem design maintains similar features of the Libertas Tapered Reduction (TR) System and utilizes Ti-GrowthC® plasma coating and vertical grooves to promote increased stability in primary hip arthroplasty procedures.



Key Design Features

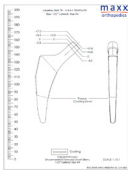
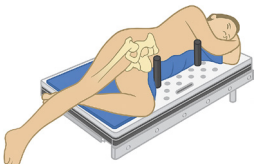
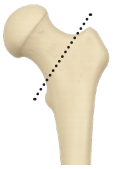
- **Reduced Stem Length:**
  Approximately 37mm shorter than the standard TR stem, enabling easier insertion and soft tissue management during DA approach procedures.
- **Distal Reduction Geometry:**
  Helps accommodate variations in proximal/distal femoral canal anatomical mismatch, reducing the risk of hoop stresses, facilitating press-fit stability, and preventing distal potting
- **Vertical Stabilizing Grooves:**
  Designed to enhance rotational and axial stability during initial fixation.
- **Highly Polished Tapered Neck:**
  Minimizes potential impingement and wear on surrounding soft tissues and liners.
- **Ti-GrowthC® Plasma Coating:**
  Plasma-sprayed titanium coating with optimal surface roughness and porosity to promote rapid bone ongrowth and robust long-term fixation.

Surgeon Insight

"The short length and overall design make it ideal for direct anterior approaches, providing the confidence to achieve solid fixation with less soft tissue disruption."

— Siraj Sayeed, MD

QUICK STEPS & TIPS

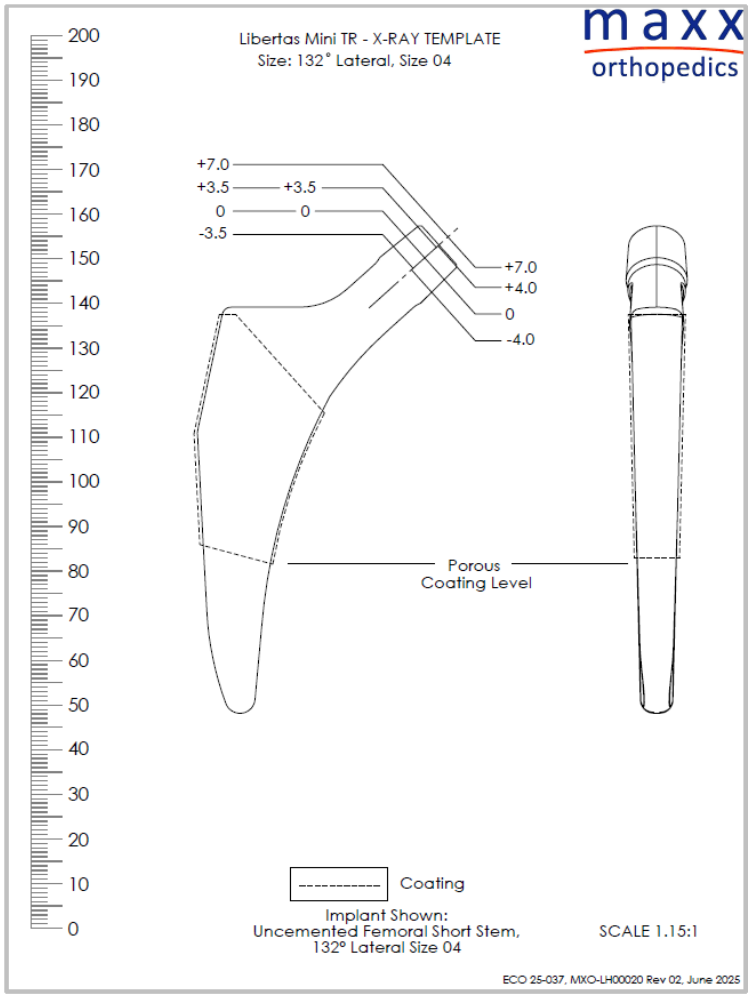
Step		Quick Steps & Tips
Pre-Operative Planning		• Template to determine probable stem size, offset, and neck cut level. • Compare femoral vs. acetabular centers to predict leg length & offset changes.
Patient Positioning		• Position patient based on chosen approach (DA, anterolateral, posterior). • Ensure stable support and maintain neutral limb alignment for accurate reconstruction.
Femoral Neck Resection		• Align neck resection guide with femoral canal axis and mark the planned cut. • Perform osteotomy at templated level, avoiding varus/ valgus cuts to preserve offset.
Femoral Canal Preparation		• Use box chisel to access canal and establish alignment. • Insert tapered starter reamer with T-handle, maintaining slight lateral bias to avoid varus.
Femoral Broaching		• Sequentially broach to final size, watching for pitch change, increased resistance, and absence of further motion. • Apply gentle valgus-directed force to engage lateral cortex and minimize varus risk.
Calcar Preparation		• Guide calcar planer over broach post, ensure axial alignment. • Start power before contacting bone; avoid excessive removal — optional for Mini TR.
Trial Reduction		• Place neck trial and Morse taper head trial; reduce hip. • Assess ROM, offset, leg length, and document selected combination before proceeding.
Stem Insertion		• Insert stem maintaining version and alignment, impact until seating sound changes. • Do not over-impact; visual and auditory cues override exact broach depth.
Femoral Head Assembly & Final Reduction		• Dry taper, place definitive head with slight twist, impact firmly. • Reduce hip, confirm stability, leg length, and offset before closure.

PREOPERATIVE PLANNING

Pre-operative planning is essential to determine the probable implant size, style, and alignment needed to restore hip biomechanics. This process should consider patient bone quality, femoral morphology, and canal dimensions to help select the optimal Mini TR stem size, offset, and neck resection level for achieving leg length and soft tissue balance.

Position the Libertas Mini TR Template on the AP radiograph to align with the native femoral canal. Confirm mediolateral cortical engagement in the proximal two-thirds of the stem and use the template markings to identify the anticipated femoral head center for various neck lengths and offsets.

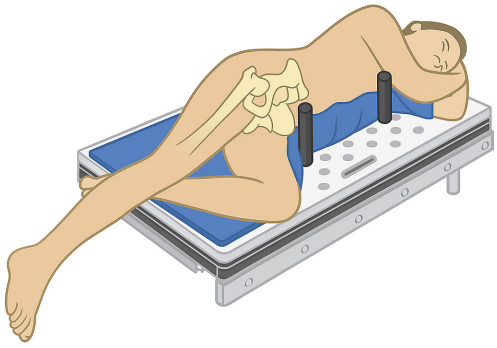
Compare the femoral and acetabular centers of rotation. A femoral center positioned superior to the acetabular center potentially indicates expected leg lengthening.



NOTE:
Pre-operative templating should be used to record the anticipated stem size and offset. These values serve only as a reference. The final stem size and offset must always be determined intra-operatively based on broach stability, soft tissue balance, and trial reduction findings.

PATIENT POSITIONING

The goal of patient positioning and surgical exposure is to provide adequate visualization of the hip anatomy to assess leg length, offset, and joint stability. This technique is approach agnostic and may be performed using a variety of surgical approaches depending on surgeon experience and preference — including direct anterior (DA), anterolateral, or posterior.

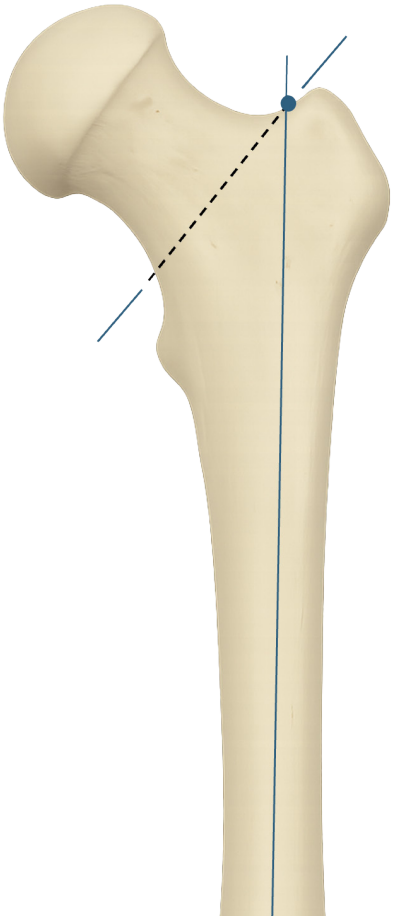


Position the patient accordingly to allow clear access to the acetabulum and proximal femur, ensuring stable support throughout the procedure to facilitate accurate reconstruction of hip biomechanics.

NOTE:
The surgical steps described in this technique are applicable across all standard hip approaches. Specific retractor placement, soft tissue handling, and femoral mobilization should be adapted as needed to match the chosen approach and optimize visualization.

FEMORAL NECK RESECTION

An accurate neck resection is critical to achieving the intended implant fit, leg length, and offset. Use the anatomic landmarks identified during pre-operative templating to guide the osteotomy.

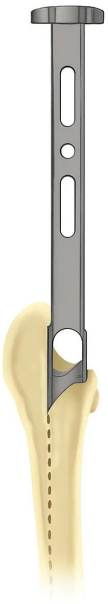


Position the Neck Resection Guide on the exposed proximal femur, aligning the guide carefully with the femoral canal axis.

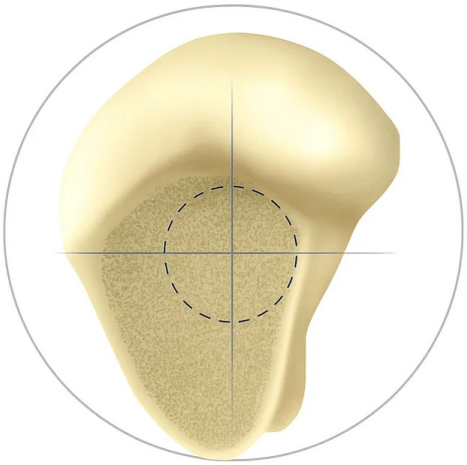
Mark the planned level of the femoral neck cut using electrocautery or another preferred marking instrument. With the guide in place, perform the osteotomy using an oscillating saw, following the marked line precisely.

Care should be taken to maintain alignment throughout the cut to avoid varus or valgus inclination, which could compromise final stem positioning.

FEMORAL CANAL PREPARATION



Use a Box Chisel to establish initial access to the femoral canal and define the canal's orientation. Position the chisel to clear dense bone along the lateral aspect of the proximal femur, creating a pathway that facilitates introduction of subsequent broaches.



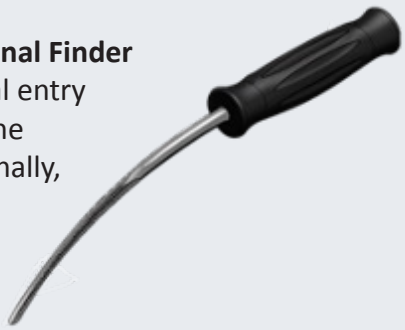
Proper use of the box chisel helps open the canal, reducing the risk of undersized or varus placement by allowing the preparation to follow the true anatomic axis of the femoral canal.

The Libertas Mini TR system utilizes a broach-only technique for final canal preparation. However, a Tapered Reamer is used with the T-handle to initiate canal entry and confirm alignment with the native femoral axis.

Insert the reamer gently along the planned femoral version, advancing until the first graduation aligns with the medial aspect of the femoral neck resection.

This controlled reaming establishes a clear pathway for subsequent broaching, helps verify alignment, and minimizes the risk of eccentric preparation.

NOTE:
Alternatively, the **Curved Canal Finder** may be used to initiate canal entry particularly when utilizing the **anterior approach**. Additionally, the curved canal finder may be used for lateralization



FEMORAL BROACHING

Select the smallest Mini TR broach and secure it to the broach handle, ensuring the handle is fully locked. Begin broaching along the established canal axis and planned version. The orientation of this initial broach is critical, as it sets the medial-lateral and anterior-posterior positioning for all subsequent broaches and the final implant.

Tips on Lateralization:

- Maintain slight lateral bias during broaching for the smaller broaches used in the sequential process to ensure engagement of the lateral cortex beneath the greater trochanter.
- Proper lateralization helps avoid medial drift of the broach, reducing the risk of varus malalignment and under-sizing.

Sequentially broach upward in size, advancing each broach until achieving a firm fit. Indicators of appropriate sizing and engagement include a noticeable change in the pitch of mallet strikes on the broach handle, increased resistance to forward advancement, and the absence of further broach motion. Continue until the desired press-fit or the templated size is reached, always maintaining proper alignment to preserve cortical support and minimize varus risk.

Note:

Libertas broach handles are available in three variants:

Straight, Curved, and Dual Offset. The choice of broach handle should be based on surgeon preference and the specific surgical approach to optimize access and maintain proper alignment.

The Curved Broach Handle is shown to the right.

CALCAR PREPARATION

Note:

Calcar preparation is optional with the Libertas Mini TR, which features a collarless design. Planing may be used at the surgeon's discretion to create a uniform surface and optimize load distribution but is not required for all cases.

If desired, calcar planing may be performed to contour the resected femoral neck flush with the broach face, helping to minimize shear forces at the implant-bone interface.

Assemble the calcar planer to the power reamer adaptor. Guide the planer over the broach post, ensuring it is axially aligned and seated securely on the post to maintain stability during operation.

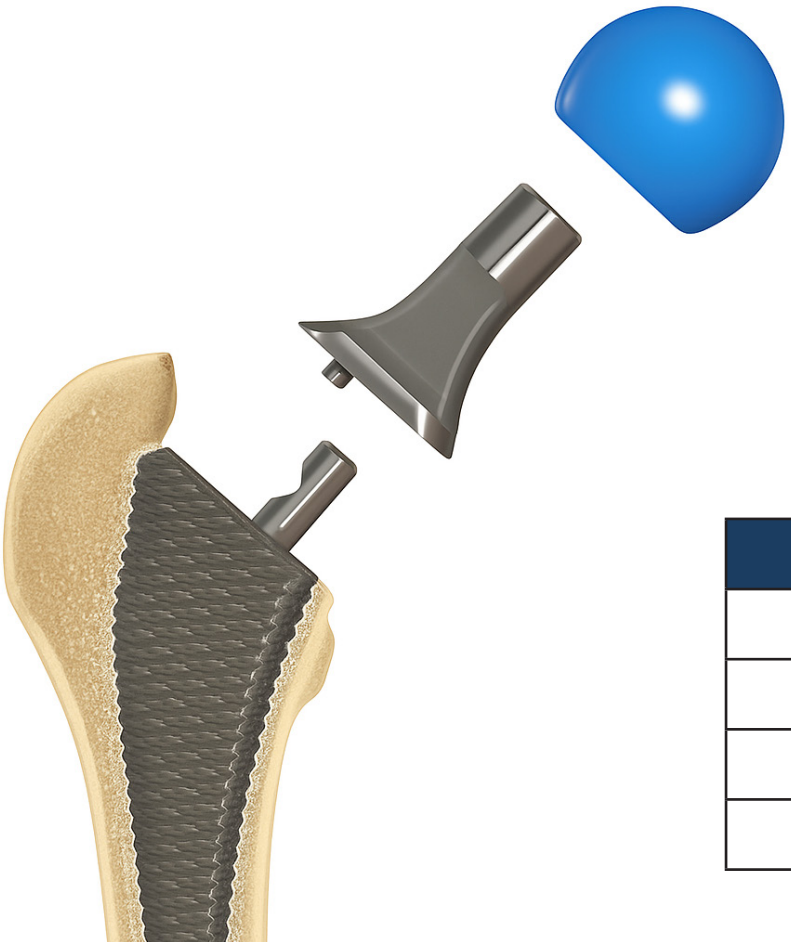
Start the power before engaging the calcar to avoid catching or chatter. Slowly advance the calcar planer toward the broach under continuous power until the positive stop contacts the broach face and excess bone is removed.

Note:

Failure to maintain proper alignment or to initiate power before contacting the bone may result in uneven resection or damage to the proximal femur.

TRIAL REDUCTION

Assemble the appropriate Neck Trial onto the broach post, ensuring it is fully seated and properly aligned. Next, select and place a Head Trial onto the Neck Trial. Head and Neck trials are offered in a variety of sizes to match final implant size selection. Reference the sizes and corresponding colors of trials during this step:



TRIAL HEAD SIZE	HEAD TRIAL COLOR
22mm	Brown
28mm	Gray
32mm	Blue
36mm	Green
40mm	Yellow

TRIAL NECK SIZE	TRIAL NECK COLOR
132° STD. Size 4-17	Black
132° STD. Size 18-24	Black
132° LAT. Size 4-17	Silver
132° LAT. Size 18-24	Silver

Perform a trial reduction, assessing joint stability, range of motion, and soft tissue tension through a full arc. Verify that leg length and offset goals are met and adjust neck length or head diameter as needed.

Once satisfactory biomechanics are confirmed, remove the trial head and neck. Reattach the broach handle and extract the final broach from the canal. The size of the last broach determines the final stem size to be implanted.

Note:

Record the selected neck length and femoral head size after trial reduction. This ensures the correct components are prepared and verified prior to final implantation.

STEM INSERTION

Attach and securely lock the selected Mini TR stem to the Femoral Stem Inserter. Align the implant with the prepared canal, maintaining the established version and orientation from broaching.

Slide the stem gently into the canal by hand to engage the prepared metaphysis. Once aligned, advance the implant using controlled, moderate mallet blows on the inserter. Continue impaction until there is a distinct change in pitch, indicating the stem has reached its final seated position and achieved cortical contact.

Confirm stem seating and alignment with intra-operative imaging as needed to ensure the implant is fully engaged and positioned according to plan.

These clinical indicators—rather than the exact broach seating level—should guide the final implant position.

FEMORAL HEAD ASSEMBLY

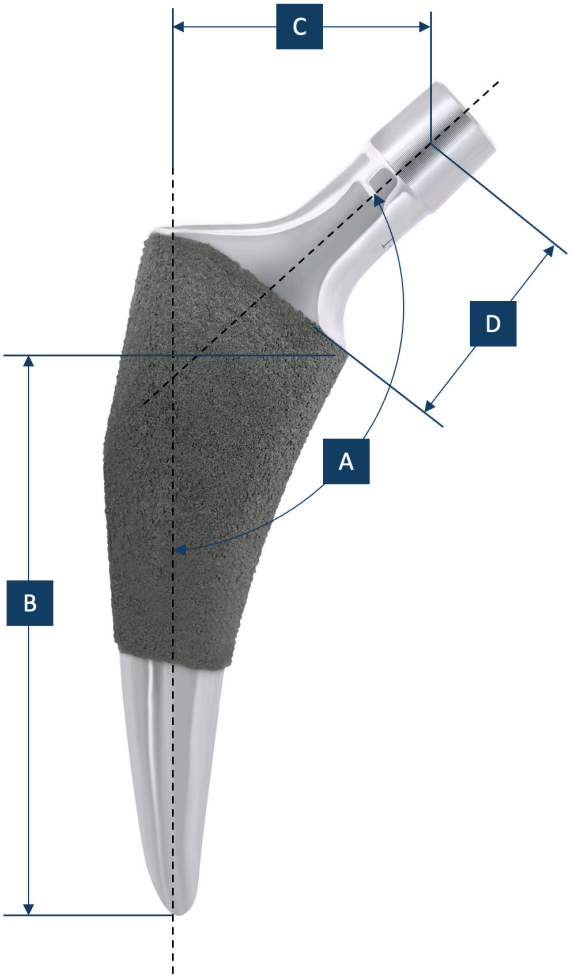
Place the Head Trial onto the clean stem taper and reduce the hip. Once satisfied, remove the Head Trial and thoroughly dry the stem trunnion with a laparotomy sponge or sterile towel to ensure a secure taper junction.

Using the modular head impactor, deliver firm, axial blows to fully engage the head onto the taper. Verify secure engagement by applying gentle traction and checking rotational stability.

Reduce the femoral head into the acetabular component and perform a final assessment of leg length, offset, and stability. Proceed with closure per surgeon preference. Femoral Head implants are offered in a variety of materials, diameters, and offsets as detailed below:

12/14 HEAD	CoCr					Biolox® delta – CeramTec				
OFFSET	HEAD SIZES (mm)									
	22	28	32	36	40	22	28	32	36	40
-4										
-3.5										
+0										
+3.5										
+4										
+7										
+8										

SYSTEM SPECIFICATIONS



NOTE:
Stem sizes 09 through 24 feature the Distal Reduction to address potential femoral proximal/ distal anatomical mismatch

LIBERTAS® MINI TR FEMORAL STEM STANDARD (132° NECK ANGLE)				
Size	A	B	C	D
	Neck Angle	Stem Length	Offset	Neck Length
04	132°	91mm	36.0mm	31.5mm
05		93mm	36.3mm	
06		95mm	36.0mm	
07		97mm	37.1mm	
08		99mm	37.6mm	
09		100mm	38.1mm	
10		103mm	38.6mm	
11		105mm	39.1mm	
12		107mm	39.6mm	
13		109mm	40.1mm	
14		111mm	40.6mm	
15		113mm	41.1mm	
16		115mm	41.6mm	
17		117mm	42.1mm	
18		119mm	44.8mm	34.5mm
20		123mm	45.8mm	
22		127mm	46.8mm	
24		130mm	47.8mm	

LIBERTAS® MINI TR FEMORAL STEM LATERAL (132° NECK ANGLE)				
Size	A	B	C	D
	Neck Angle	Stem Length	Offset	Neck Length
04	132°	91mm	43.8mm	37.0mm
05		93mm	44.1mm	
06		95mm	43.8mm	
07		97mm	44.9mm	
08		99mm	45.4mm	
09		100mm	45.9mm	
10		103mm	46.4mm	
11		105mm	46.9mm	
12		107mm	47.4mm	
13		109mm	47.9mm	
14		111mm	48.4mm	
15		113mm	48.9mm	
16		115mm	49.4mm	
17		117mm	49.9mm	
18		119mm	52.6mm	40.0mm
20		123mm	53.6mm	
22		127mm	54.6mm	
24		130mm	55.6mm	

SYSTEM SPECIFICATIONS (Continued)

LIBERTAS® MINI TR FEMORAL STEM LATERAL (132° NECK ANGLE)														
Size	Stem Length	Horizontal Offset							Neck Length					
		-4	-3.5	+0	+3.5	+4	+7	+8	-4	-3.5	+0	+3.5	+4	+7	+8
04	91mm	40.8	41.1	43.8	46.4	46.7	49.0	49.6	33.0	33.5	37.0	40.5	41.0	44.0	45.0
05	93mm	41.2	41.5	44.1	46.7	47.1	49.3	50.0	33.0	33.5	37.0	40.5	41.0	44.0	45.0
06	95mm	41.4	41.8	44.4	47.0	47.4	49.6	50.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
07	97mm	41.9	42.3	44.9	47.5	47.9	50.1	50.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
08	99mm	42.4	42.8	45.4	48.0	48.4	50.6	51.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
09	100mm	42.9	43.3	45.9	48.5	48.9	51.1	51.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
10	103mm	43.4	43.8	46.4	49.0	49.4	51.6	52.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
11	105mm	43.9	44.3	46.9	49.5	49.9	52.1	52.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
12	107mm	44.4	44.8	47.4	50.0	50.4	52.6	53.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
13	109mm	44.9	45.3	47.9	50.5	50.9	53.1	53.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
14	111mm	45.4	45.8	48.4	51.0	51.4	53.6	54.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
15	113mm	45.9	46.3	48.9	51.5	51.9	54.1	54.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
16	115mm	46.4	46.8	49.4	52.0	52.4	54.6	55.2	33.0	33.5	37.0	40.5	41.0	44.0	45.0
17	117mm	46.9	47.3	49.9	52.5	52.9	55.1	55.7	33.0	33.5	37.0	40.5	41.0	44.0	45.0
18	119mm	49.6	50.0	52.6	55.2	55.6	57.8	58.5	36.0	36.5	40.0	43.5	44.0	47.0	48.0
20	123mm	50.6	51.0	53.6	56.2	56.6	58.8	59.5	36.0	36.5	40.0	43.5	44.0	47.0	48.0
22	127mm	51.6	52.0	54.6	57.2	57.6	59.8	60.5	36.0	36.5	40.0	43.5	44.0	47.0	48.0
24	130mm	52.6	53.0	55.6	58.2	58.6	60.8	61.5	36.0	36.5	40.0	43.5	44.0	47.0	48.0

LIBERTAS® MINI TR FEMORAL STEM STANDARD (132° NECK ANGLE)														
Size	Stem Length	Horizontal Offset							Neck Length					
		-4	-3.5	+0	+3.5	+4	+7	+8	-4	-3.5	+0	+3.5	+4	+7	+8
04	91mm	33.0	33.4	36.0	38.6	38.9	41.2	41.8	27.5	28.0	31.5	35.0	35.5	38.5	39.5
05	93mm	33.4	33.7	36.3	39.0	39.3	41.6	42.2	27.5	28.0	31.5	35.0	35.5	38.5	39.5
06	95mm	33.6	34.0	36.6	39.2	39.6	41.8	42.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
07	97mm	34.1	34.5	37.1	39.7	40.1	42.3	42.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
08	99mm	34.6	35.0	37.6	40.2	40.6	42.8	43.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
09	100mm	35.1	35.5	38.1	40.7	41.1	43.3	43.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
10	103mm	35.6	36.0	38.6	41.2	41.6	43.8	44.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
11	105mm	36.1	36.5	39.1	41.7	42.1	44.3	44.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
12	107mm	36.6	37.0	39.6	42.2	42.6	44.8	45.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
13	109mm	37.1	37.5	40.1	42.7	43.1	45.3	45.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
14	111mm	37.6	38.0	40.6	43.2	43.6	45.8	46.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
15	113mm	38.1	38.5	41.1	43.7	44.1	46.3	46.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
16	115mm	38.6	39.0	41.6	44.2	44.6	46.8	47.4	27.5	28.0	31.5	35.0	35.5	38.5	39.5
17	117mm	39.1	39.5	42.1	44.7	45.1	47.3	47.9	27.5	28.0	31.5	35.0	35.5	38.5	39.5
18	119mm	41.9	42.2	44.8	47.4	47.8	50.0	50.7	30.5	31.0	34.5	38.0	38.5	41.5	42.5
20	123mm	42.9	43.2	45.8	48.4	48.8	51.0	51.7	30.5	31.0	34.5	38.0	38.5	41.5	42.5
22	127mm	43.9	44.2	46.8	49.4	49.8	52.0	52.7	30.5	31.0	34.5	38.0	38.5	41.5	42.5
24	130mm	44.9	45.2	47.8	50.4	50.8	53.0	53.7	30.5	31.0	34.5	38.0	38.5	41.5	42.5

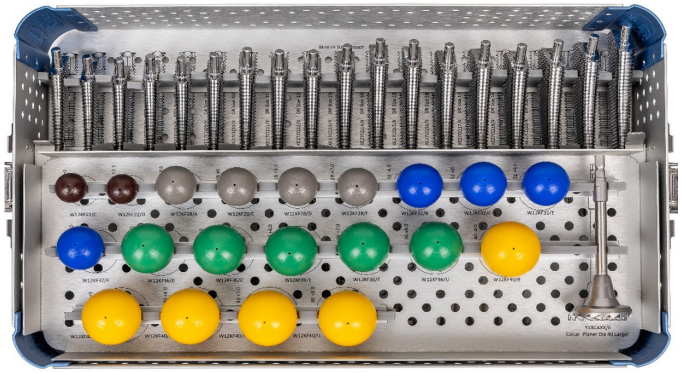
LIBERTAS® MINI TR HIP SYSTEM

Ordering Information

PART #	DESCRIPTION
INS-LIB-MINITR	LIBERTAS MINI TR UNCEMENTED STEM SET
INS-LIB-GF-PA	LIBERTAS GENERAL FEMORAL SET
INS-LIB-AA	LIBERTAS ANTERIOR APPROACH SET
INS-LIB-AA-BH	LIBERTAS DUAL OFFSET BROACH HANDLE SET

INS-LIB-MINITR

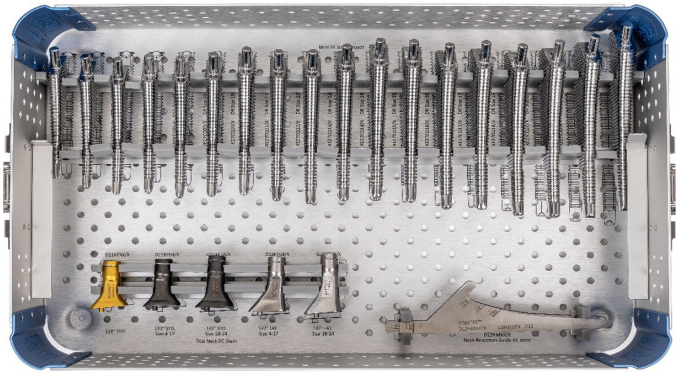
LIBERTAS MINI TR UNCEMENTED STEM SET - TOP



PART #	DESCRIPTION	QTY
W12KF22/C	Trial Femoral Head 22 +00mm	1
W12KF22/D	Trial Femoral Head 22 +3.5mm	1
W12KF28/A	Trial Femoral Head 28 -3.5mm	1
W12KF28/C	Trial Femoral Head 28 +00mm	1
W12KF28/D	Trial Femoral Head 28 +3.5mm	1
W12KF28/F	Trial Femoral Head 28 +7.0mm	1
W12KF32/B	Trial Femoral Head 32 -4.0mm	1
W12KF32/C	Trial Femoral Head 32 +00mm	1
W12KF32/E	Trial Femoral Head 32 +4.0mm	1
W12KF32/F	Trial Femoral Head 32 +7.0mm	1
W12KF36/B	Trial Femoral Head 36 -4.0mm	1
W12KF36/C	Trial Femoral Head 36 +00mm	1
W12KF36/E	Trial Femoral Head 36 +4.0mm	1
W12KF36/F	Trial Femoral Head 36 +7.0mm	1
W12KF36/U	Trial Femoral Head 36 +8.0mm	1
W12KF40/B	Trial Femoral Head 40 -4.0mm	1
W12KF40/C	Trial Femoral Head 40 +00mm	1
W12KF40/E	Trial Femoral Head 40 +4.0mm	1
W12KF40/F	Trial Femoral Head 40 +7.0mm	1
W12KF40/U	Trial Femoral Head 40 +8.0mm	1
Y18CAXX/X	Calcar Planer (Dia 40)	1

INS-LIB-MINITR

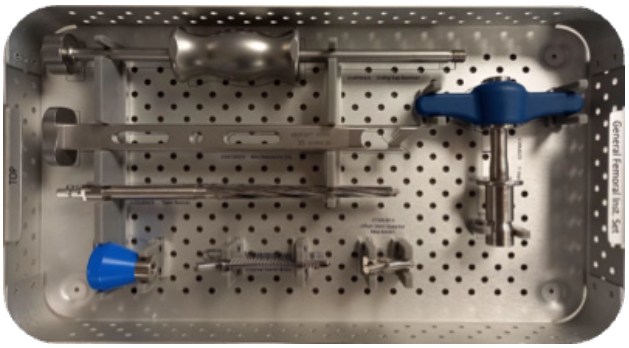
LIBERTAS MINI TR UNCEMENTED STEM SET - BOTTOM



PART #	DESCRIPTION	QTY
XE01CQ04/X	Mini TR Stem STD Broach - 04	1
XE01CQ05/X	Mini TR Stem STD Broach – 05	1
XE01CQ06/X	Mini TR Stem STD Broach – 06	1
XE01CQ07/X	Mini TR Stem STD Broach – 07	1
XE01CQ08/X	Mini TR Stem STD Broach – 08	1
XE27CQ09/X	Mini TR Stem DR Broach – 09	1
XE27CQ10/X	Mini TR Stem DR Broach – 10	1
XE27CQ11/X	Mini TR Stem DR Broach – 11	1
XE27CQ12/X	Mini TR Stem DR Broach – 12	1
XE27CQ13/X	Mini TR Stem DR Broach – 13	1
XE27CQ14/X	Mini TR Stem DR Broach – 14	1
XE27CQ15/X	Mini TR Stem DR Broach – 15	1
XE27CQ16/X	Mini TR Stem DR Broach – 16	1
XE27CQ17/X	Mini TR Stem DR Broach – 17	1
XE27CQ18/X	Mini TR Stem DR Broach – 18	1
XE27CQ20/X	Mini TR Stem DR Broach – 20	1
XE27CQ22/X	Mini TR Stem DR Broach – 22	1
XE27CQ24/X	Mini TR Stem DR Broach - 24	1
D21KFXX/X	Trial Neck PC Stem 128° Standard	1
D22KF04/X	Trial Neck PC Stem 132° Standard (Size 4-17)	1
D22KF18/X	Trial Neck PC Stem 132° Standard (Size 18-24)	1
D23KF04/X	Trial Neck PC Stem 132° Lateral (Size 4-17)	1
D23KF18/X	Trial Neck PC Stem 132° Lateral (Size 18-24)	1
D12HMXX/X	Neck Resection Guide PC Stem	1

INS-LIB-GF-PA

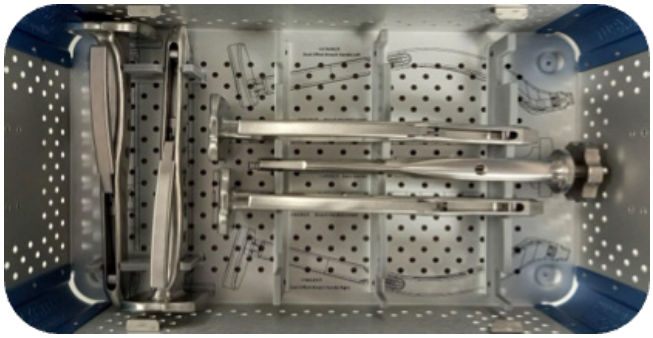
LIBERTAS GENERAL FEMORAL SET - TOP



PART #	DESCRIPTION	QTY
U14FRXX/X	Sliding Slap Hammer	1
U10CDXX/X	Box Osteotome (XS)	1
U13CAXX/X	Taper Reamer	1
U12FJXX/X	Femoral Head Impactor Block	1
FCXXSMST-H	Universal Starter Broach	1
FTXX03P-H	Offset Stem Impactor Attachment	1
U14AJ02/X	T-Handle	1

INS-LIB-GF-PA

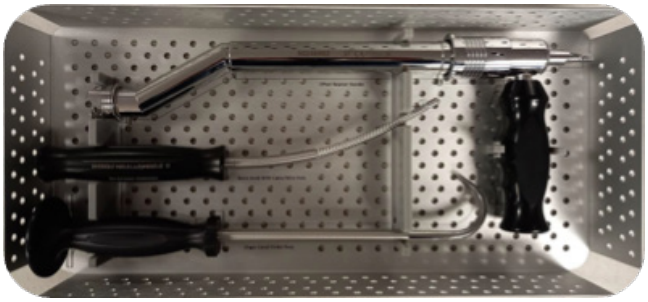
LIBERTAS GENERAL FEMORAL SET - BOTTOM



PART #	DESCRIPTION	QTY
U15AJXX/X	Broach Handle (Straight)	2
U16AJXX/X	Broach Handle (Curved)	2
U14EIXX/X	Stem Inserter	1

INS-LIB-AA

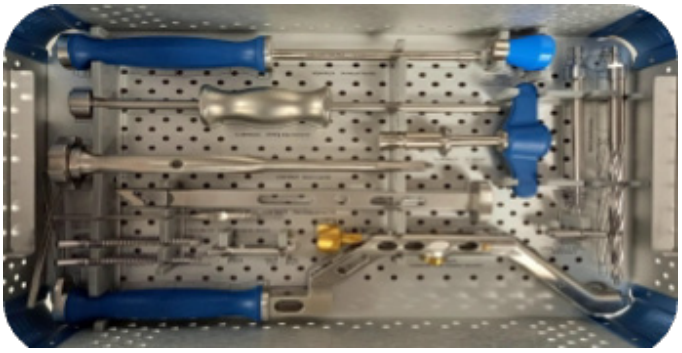
LIBERTAS ANTERIOR APPROACH SET - TOP



PART #	DESCRIPTION	QTY
50246902	Offset Reamer Handle - Stryker Z/H - Dual Reamer Coupling	1
3004-02	Unger Canal Finder Rasp – Curved with 2.5" Smooth Proximal	1
5920-01	Bone Hook with Cable/Wire Hole	1

INS-LIB-AA

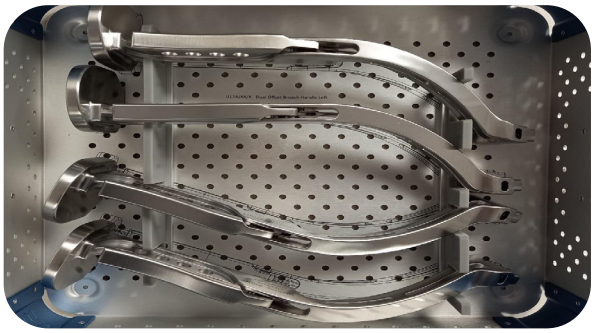
LIBERTAS ANTERIOR APPROACH SET - BOTTOM



PART #	DESCRIPTION	QTY
U09AIXX/X	Universal Handle	1
U12FJXX/X	Femoral Head Impactor Block	1
U14FRXX/X	Sliding Slap Hammer	1
U14AJ02/X	T-Handle	1
U14EIXX/X	Stem Inserter	1
U10CDXX/X	Box Osteotome (XS)	1
S16FJXX/X-13	Alignment Rod	1
FCXXSMST-H	Universal Starter Broach	2
U36CDXS/X	Box Osteotome Tip (XS)	1
S16FJXX/X	Acetabular Shell Impactor (Curved)	1
R14GGXX/X	Femoral Head Extractor	1
U13CAXX/X	Taper Reamer	1
FTXX03P-H	Offset Stem Impactor Attachment	1

INS-LIB-AA-BH

LIBERTAS DUAL OFFSET BROACH HANDLE SET



PART #	DESCRIPTION	QTY
U17AJXX/X	Dual Offset Broach Handle, Left	2
U18AJXX/X	Dual Offset Broach Handle, Right	2

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