



iNSituTM

Hip System

With **THE BLADE**

Surgical Technique

Featuring "Femur-First" Optional Technique

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iNSitu™ Hip System Surgical Technique

Acetabular Cup

Solid, Holed and Multi-Holed Options available.



Size 42 - 68



Size 46 - 68

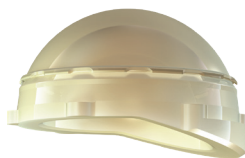


Size 50 - 68

Acetabular Liner

αpoly™

Neutral, Hooded and Face Changing Options available in all sizes.



Femoral Heads

Four diameters, multiple offsets available in **BIOLOX® delta** and **CoCr**.



Blade Femoral Stems

Size 3 - Size 24 available in **Standard** and **Lateralized** Offsets.



iNSitu™ Hip System Surgical Technique

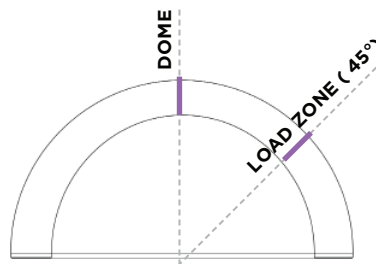
Sizing and Compatibility

The iNSitu™ Hip System is color coded. Liner groupings and head offsets are uniquely colored for quick reference during surgery. Along with the liner and head trials, the color coding is used for compatibility referencing on component packaging.

Cup	Liner	Head	UMHWPE Thickness	
			Load Zone	Dome
Size 42	42/44 x 28mm ID	28mm	4.9mm	5.4mm
Size 44				
Size 46	46 x 32mm ID	32mm	4.7mm	5.1mm
Size 48	48 x 32mm ID	32mm	5.4mm	5.9mm
Size 50	50 x 36mm ID	36mm	4.4mm	4.9mm
Size 52	52 x 36mm ID	36mm	5.4mm	5.9mm
Size 54	54/56 x 36mm ID	36mm	6.4mm	6.9mm
Size 56	54/56 x 40mm ID	40mm	4.4mm	4.9mm
Size 58	58/60 x 36mm ID	36mm	7.9mm	8.4mm
Size 60	58/60 x 40mm ID	40mm	5.9mm	6.4mm
Size 62	62-68 x 36mm ID	36mm	9.9mm	10.4mm
Size 64				
Size 66	62-68 x 40mm ID	40mm	7.9mm	8.4mm
Size 68				

Size	Offset
28mm	-3.5mm
	0mm
	+3.5mm
32mm	+7mm
	-4mm
	0mm
	+4mm
36mm	+7mm
	+10mm
	-4mm
	0mm
40mm	+4mm
	+8mm
	+10mm
	-4mm

*Largest offset in each size has a skirted head and is available in CoCr only.



Stem Specifications



Blade Stem Specifications

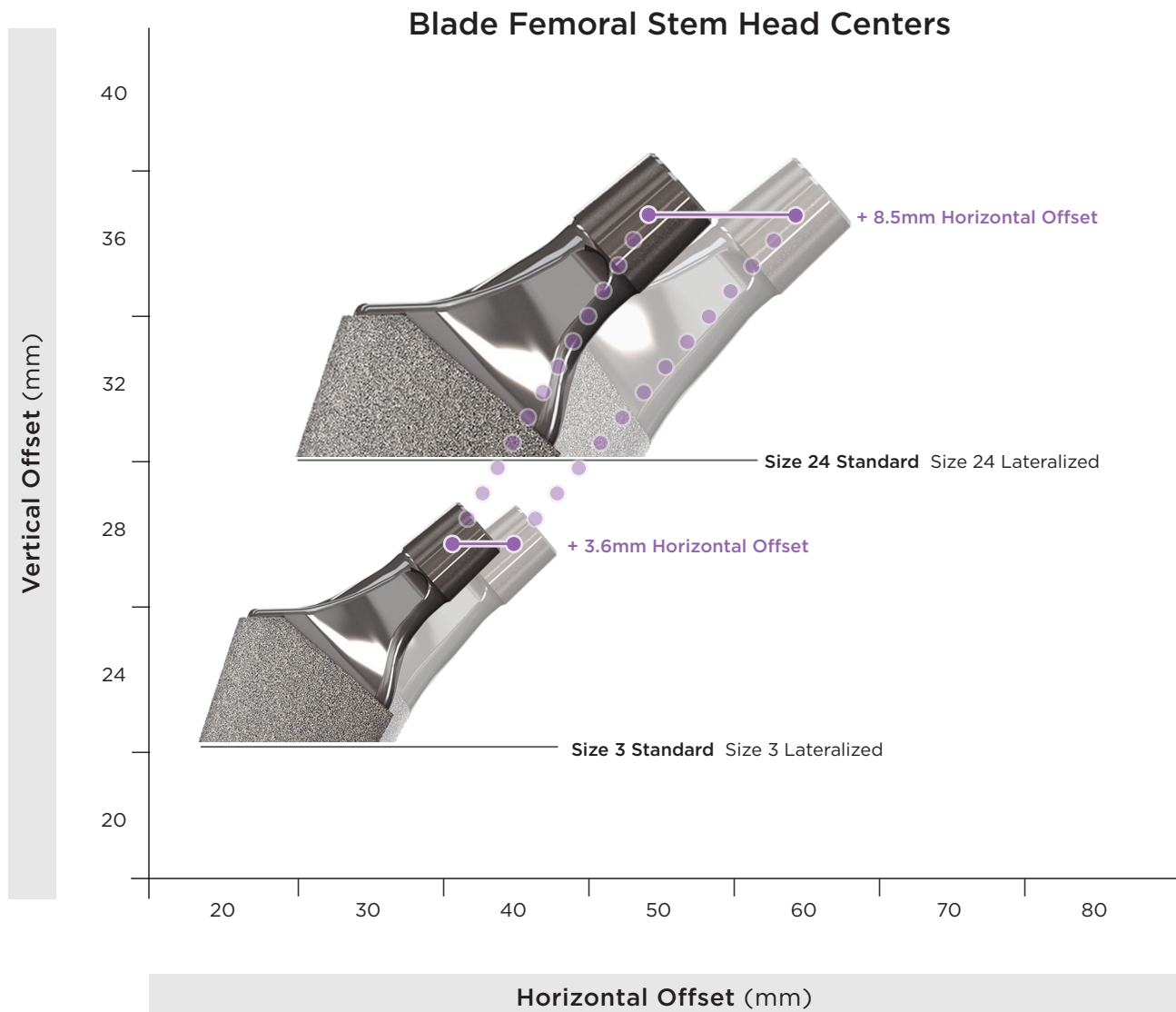
Stem Size	A	B	C	D		E	
	Shoulder Length (mm)	Shoulder Stem Length (mm)	Vertical Offset (mm)	Horizontal Offset (mm)		Neck Length (mm)	
				Standard	Lateral	Standard	Lateral
3	73.98	92	28	34.2	37.8	31.08	33.55
4	74.96	93	28.5	34.9	38.6	31.58	34.12
5	106.83	124.8	28.9	35.5	39.5	31.95	34.69
6	108.89	126.9	29.3	36.1	40.4	32.31	35.26
7	110.91	128.9	29.8	36.8	41.2	32.82	35.84
8	112.81	130.8	30.2	37.4	42.1	33.18	36.41
9	114.83	132.8	30.6	38	43	33.54	36.98
10	116.85	134.9	31	38.7	43.9	33.97	37.55
11	118.78	136.8	31.5	39.3	44.7	34.41	38.12
12	120.81	138.8	31.9	40	45.6	34.84	38.69
13	122.82	140.8	32.3	40.6	46.5	35.21	39.26
14	124.82	142.8	32.7	41.2	47.4	35.57	39.83
15	126.84	144.8	33.2	41.9	48.2	36.08	40.4
16	128.71	146.7	33.6	42.5	49.1	36.44	40.97
17	130.72	148.7	34	43.1	50	36.8	41.54
18	132.75	150.7	34.4	43.8	50.9	37.24	42.11
20	136.78	154.8	35.3	45.1	52.6	38.1	43.26
22	140.79	158.8	36.1	46.3	54.4	38.83	44.4
24	144.81	162.8	37	47.6	56.1	39.7	45.54

C, D, E are the distance to head center when using +0 head

Stem Specifications

Progressive Lateralization

A lateralized version of each stem is available, providing a progressively greater horizontal offset with each size, while still maintaining leg length, vertical offset and neck angle. The stem is designed to more accurately match anatomical variations and consistencies for optimal biomechanical reconstruction.



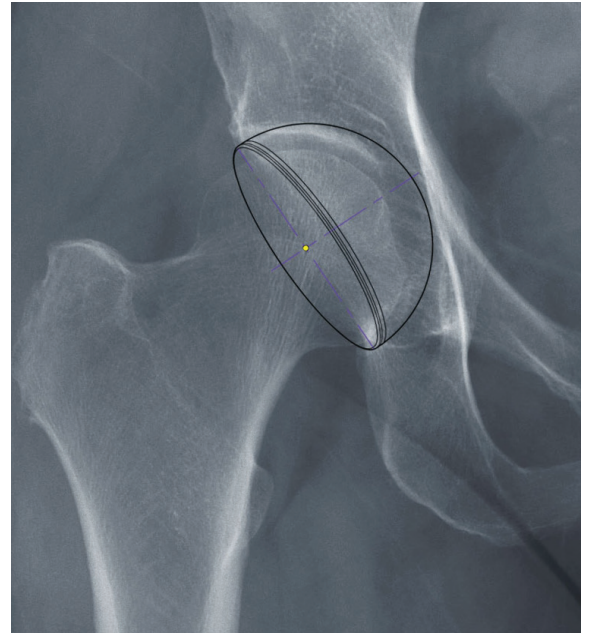
Pre-Operative Planning

Pre-Operative Planning

Accurate pre-operative planning and templating aid in selecting the optimal implant size and position to help restore the patient's natural hip anatomy. For the best templating results, obtain a high quality anterior/posterior view with both femora in 15 degrees of internal rotation.

The goals of templating are as follows:

- Acetabular component size and positioning
- The center of rotation
- Leg length discrepancy
- Femoral component size
- Femoral offset



Acetabular Templating

Utilizing the acetabular templates, determine the optimal cup size for the patient's anatomy. Once the size has been determined and centered within the acetabulum, mark the center of rotation.

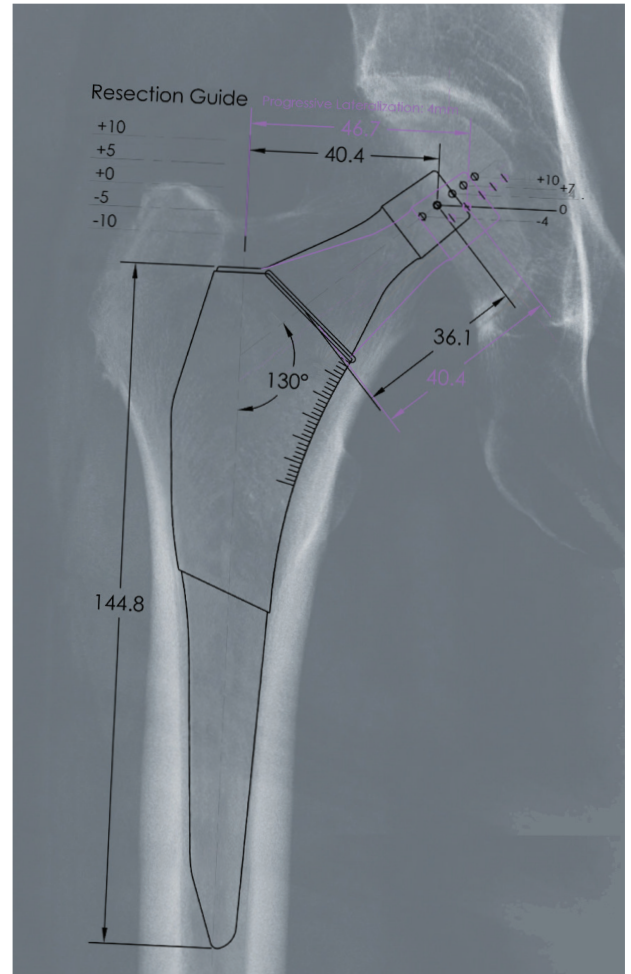
Pre-Operative Planning

Femoral Templating

Utilizing the femoral templates, establish the probable size and position of the femoral stem. With the template aligned along the axis of the femur, choose the template size that achieves proximal medio-lateral cortical contact with the body of the implant and an offset option aligning with the cup's center of rotation.

The Blade Femoral Stem has standard and lateralized offset options. The lateralized option offers an increased horizontal offset without affecting leg length.

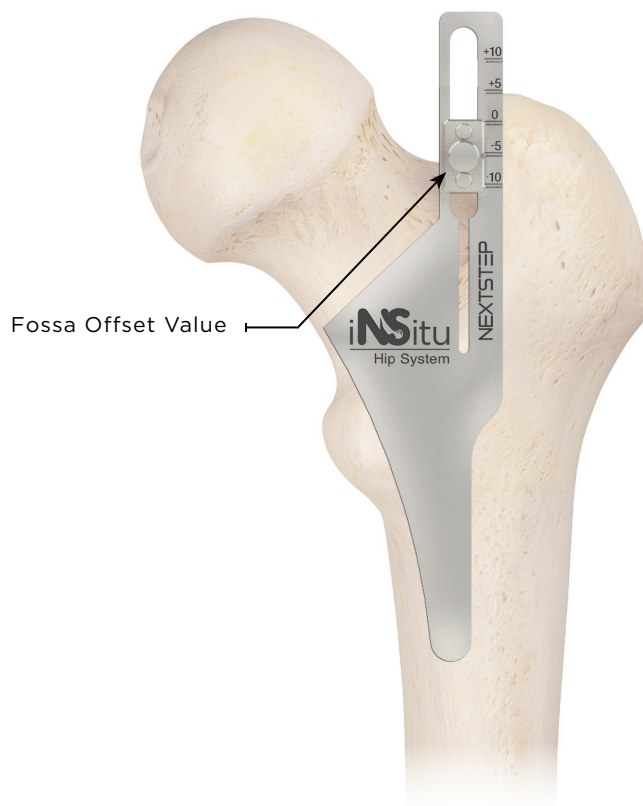
Identify the fossa height: the lowest point of the trochanteric fossa. This value will be used as a reference during intra-operative neck resection.



iNSitu™ Hip System Surgical Technique

Femoral Neck Resection

Using the fossa offset identified during pre-operative templating, adjust the peg on the **Femoral Resection Guide** to the corresponding value. Align the guide with the long axis of the femur, and move distally until the peg rests in the trochanteric fossa. Mark the resection line. Resect the femoral head.



Description	REF
Femoral Resection Guide	10-95-3000
Femoral Head Extractor	10-95-3027

Femoral

Optional 'Femur-First' Technique

Femoral preparation can be completed prior to acetabular preparation as an alternative to the standard technique.

After the initial femoral neck resection, the leg is in position for femoral preparation. Instead of moving on to the acetabulum, prepare the femur following the instructions on pages 19-20. Leave the final broach in place, and move on to acetabular preparation, following the instructions on pages 11-18

Once the acetabulum is prepared and the cup/liner trial is in place, femoral neck and head trialing can be completed to assess proper positioning, offset, and leg length as described on page 22. Continue following instructions for removing the trials and broach. The remainder of the procedure*, outlining acetabular liner, femoral stem, and femoral head insertion, may be followed as specified on pages 23-24.

* Note: It is very important that final acetabular liner insertion PRECEDES femoral stem insertion.

Acetabular Preparation

If the standard technique is preferred rather than the “Femur-First”, following the femoral neck resection, expose the acetabular cavity using the preferred surgical approach. Excise the labrum and remove osteophytes to gain full exposure of the acetabulum for reaming and determining true bone anatomy. Specialized acetabular **Retractors** are available to facilitate exposure.



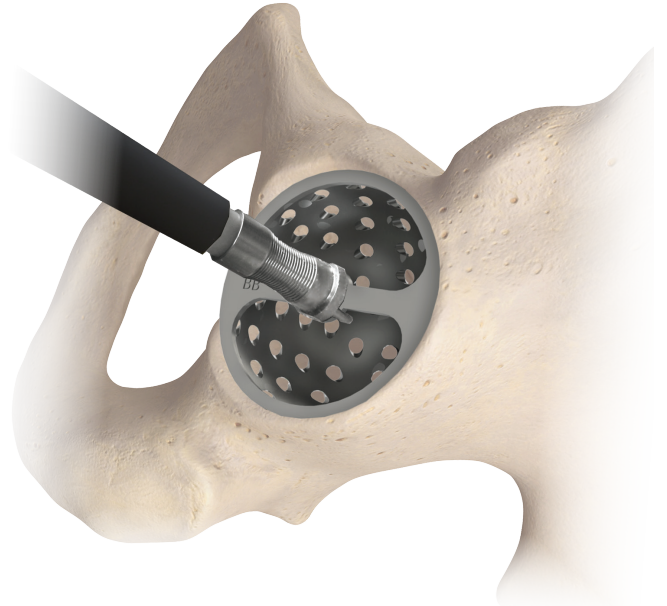
Description	REF
Number Three Retractor	10-95-1003
Number Five Retractor	10-95-1005
Number Seven Retractor	10-95-1007
Number Nine Retractor	10-95-1009

Acetabular

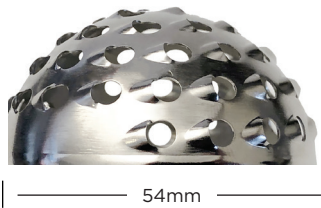
Acetabular Reaming

Attach an **Acetabular Reamer** smaller than the femoral head to the **Reamer Driver** (available in straight and offset configurations). Ream the acetabulum, gradually increasing reamer sizes, until bleeding subchondral bone is exposed and a hemispherical dome is achieved. The final reamer size used corresponds to the final cup size.

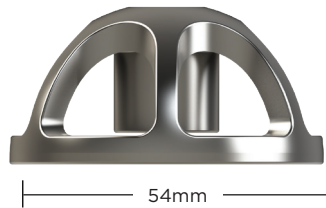
Note: The Acetabular Cup provides a 0.5mm circumferential press fit (for a total of 1mm press fit) when used with a corresponding size reamer.



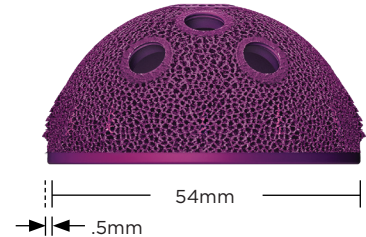
54mm Reamer



Size 54 Quick Connect Cup Trial



Size 54 Acetabular Cup



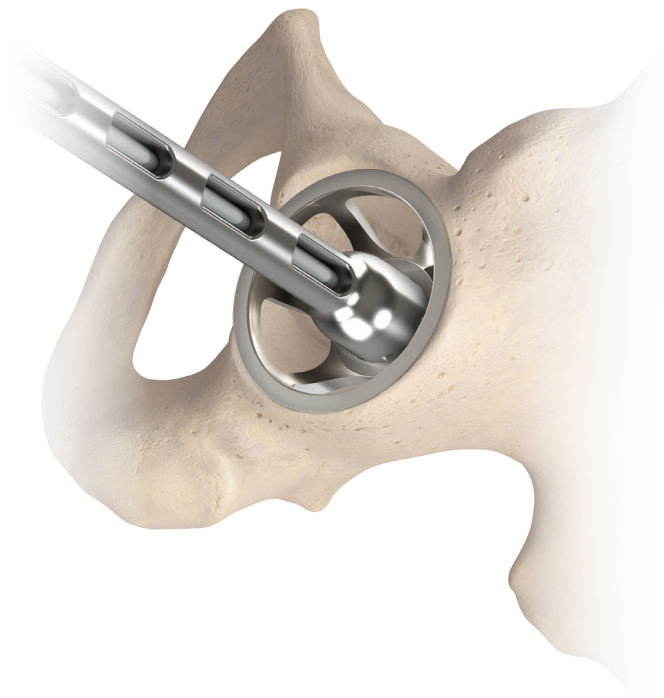
Description

REF

Dual Connect Offset Reamer Driver	10-95-2005
Standard Reamer Driver	10-95-2004
Acetabular Reamers	10-83-XX40 - 10-83-XX70

Acetabular Trialing and Alignment

A **Quick Connect Cup Trial** can be used to confirm proper acetabular preparation and to gauge final implant fit and placement. Select the cup trial corresponding to the final reamer used. The reamer and cup trial are the same size and only the final implant is designed with the 1mm press fit. Attach the cup trial to the **Acetabular Cup Impactor** (available in straight and offset configurations), and place the trial into the acetabulum. Assess contact with the subchondral bone through the cutouts in the cup trial.



Description	REF
Straight Cup Impactor	10-95-2007
Offset Cup Impactor	10-95-2008
Quick Connect Cup Trial	10-84-0042 - 10-84-0068

Acetabular

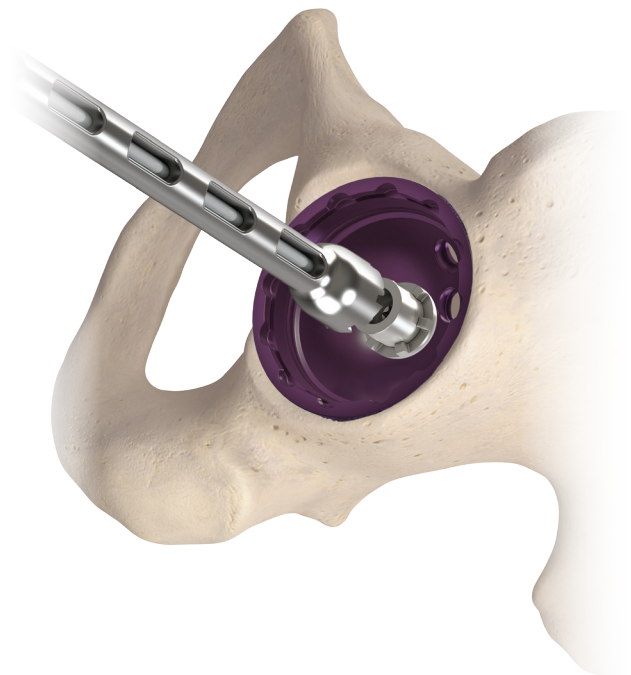
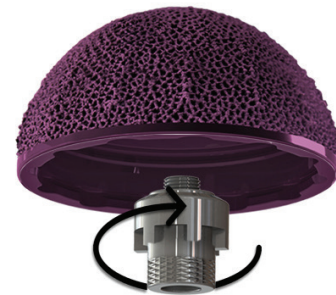
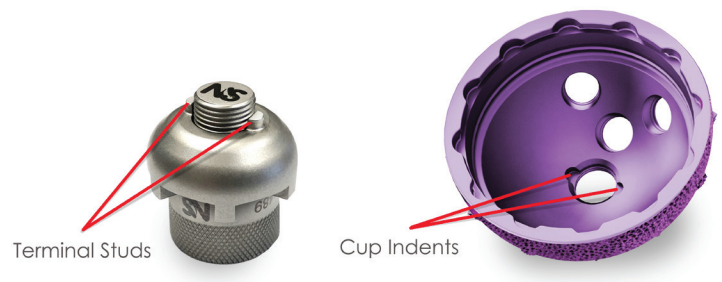
Acetabular Cup Insertion

The **Terminal** features two raised studs that key into corresponding indents on the inner diameter of the acetabular cup. To avoid cross-threading, rotate the **Terminal** using fingers or the **Multipurpose Hexalobe Driver** until the studs seat flush with the indents in the acetabular cup. Securely tighten the **Terminal** – complete seating occurs after approximately one full thread engagement (i.e. $\frac{3}{4}$ to full turn of the **Terminal**).

The acetabular **Cup Impactor** (available in straight and offset configurations) snaps onto the terminal. The surgeon may attach the acetabular cup impactor to the terminal and directly insert the acetabular cup into the acetabulum or attach the acetabular cup impactor to the terminal in situ.

Note on iNSitu connection: With the smooth apical dome of the cup in line with the incision, manually introduce the acetabular cup and terminal into the acetabulum, rotate the acetabular cup into alignment, and then attach the acetabular cup impactor in situ.

The acetabular cup is typically impacted at 45 degrees of abduction and 15 degrees of anteversion. Impact the cup until fully seated in the acetabulum.

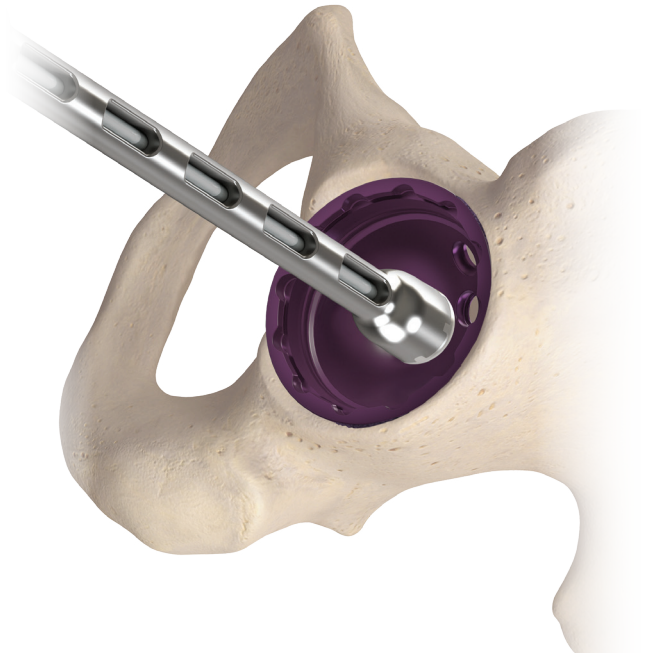


Description	REF
Terminal	10-95-2009
Straight Cup Impactor	10-95-2007
Offset Cup Impactor	10-95-2008
Multipurpose Hexalobe Driver T20/T40	10-95-2029

Acetabular

Pull the trigger on the acetabular cup Impactor to disengage the terminal. Remove the terminal from the cup using the **Terminal Retriever** (available in fixed and u-joint configurations).

The optional **Secondary Cup Impactor** attached to the acetabular cup impactor may be used to ensure the acetabular cup is fully seated.

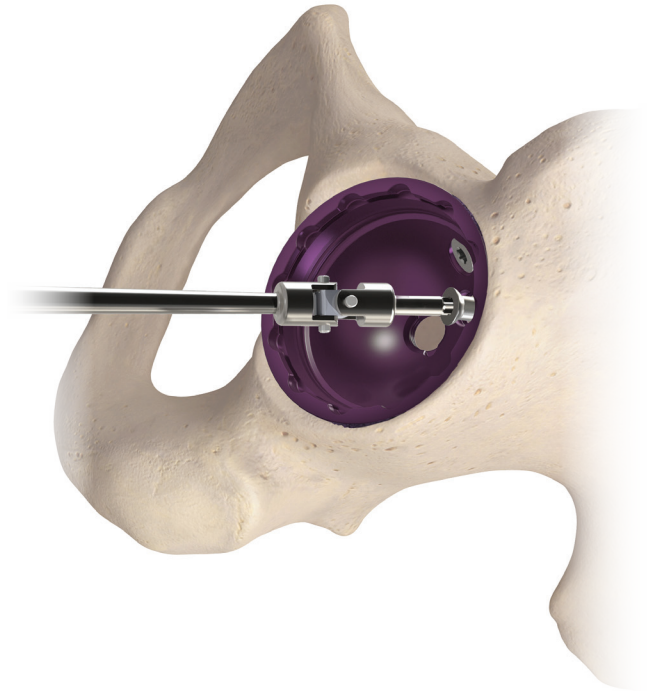


Description	REF
Fixed Terminal Retriever	10-95-2015
U-Joint Terminal Retriever	10-95-2014
Secondary Cup Impactor	10-95-2013

Acetabular

Screw Insertion (Optional)

Optional bone screws are available for supplementary fixation of the Holed and Multi-Holed acetabular cup. With the **Fixed Angled Drill Guide**, drill pilot holes using a **U-Joint Drill Bit**. Verify hole depth using the **Angled Depth Gauge**. Insert Bone Screws using the **U-Joint Screwdriver**. To ensure proper seating of the acetabular liner, the screw heads must seat below the internal diameter of the acetabular cup.

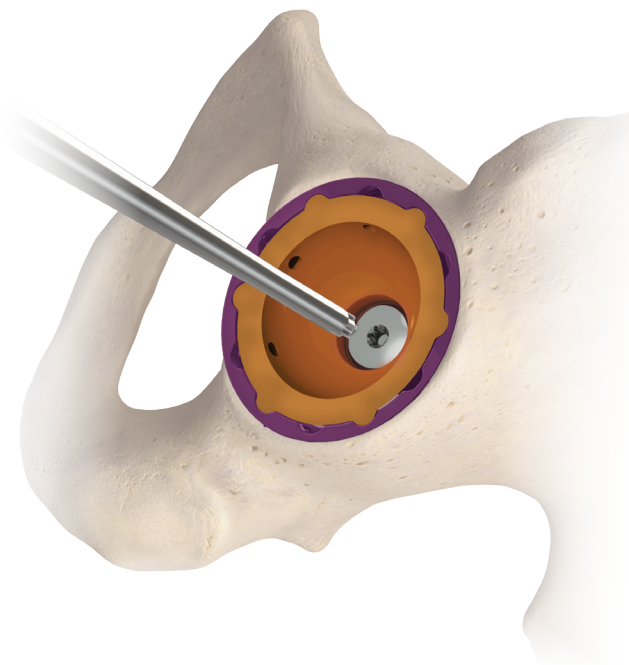


Description	REF
Fixed Angled Drill Guide	10-95-2025
Short U-Joint Drill Bit	10-95-2040
Medium U-Joint Drill Bit	10-95-2041
Angled Depth Gauge	10-95-2027
Fixed Handle U-Joint Screwdriver	10-95-2035
Multipurpose Hexalobe Driver T20/T40	10-95-2029

Liner Trialing (Optional)

To confirm final acetabular liner selection, a **Liner Trial** may be placed into the acetabular cup for reduction. Liner trials are available in neutral, hooded, and face changing configurations.

Liner Trial may be screwed in using an optional **Liner Trial Screw** and the **Screw/Hole Cover Driver T20**.



Description	REF
Neutral Liner Trials	10-85-2842 - 10-85-4062
Hooded Liner Trials	10-86-2842 - 10-86-4062
Face Changing Liner Trials	10-87-2842 - 10-87-4062
Liner Trial Screw	10-95-4026
Screw/Hole Cover Driver T20	10-95-2034

Acetabular

Apical Hole Cover (Optional)

Prior to final liner insertion, thread the apical hole cover (packaged with the cup) into the cup. Using the **Screw/Hole Cover Driver T20**, hand tighten the apical hole cover and ensure it seats below the internal diameter of the acetabular cup. To prevent cross threading, keep driver perpendicular to the cup, and turn driver “counterclockwise” one turn before driving hole cover clockwise to fully seat. During ccw turning, an audible “click” may be heard or felt, indicating proper thread alignment.

Screw Hole Cover (Optional)

Prior to final liner insertion, thread the screw hole cover (packaged with the cup) into the cup. Using the **Screw/Hole Cover Driver T20**, hand tighten the screw hole cover and ensure it seats below the internal diameter of the acetabular cup.

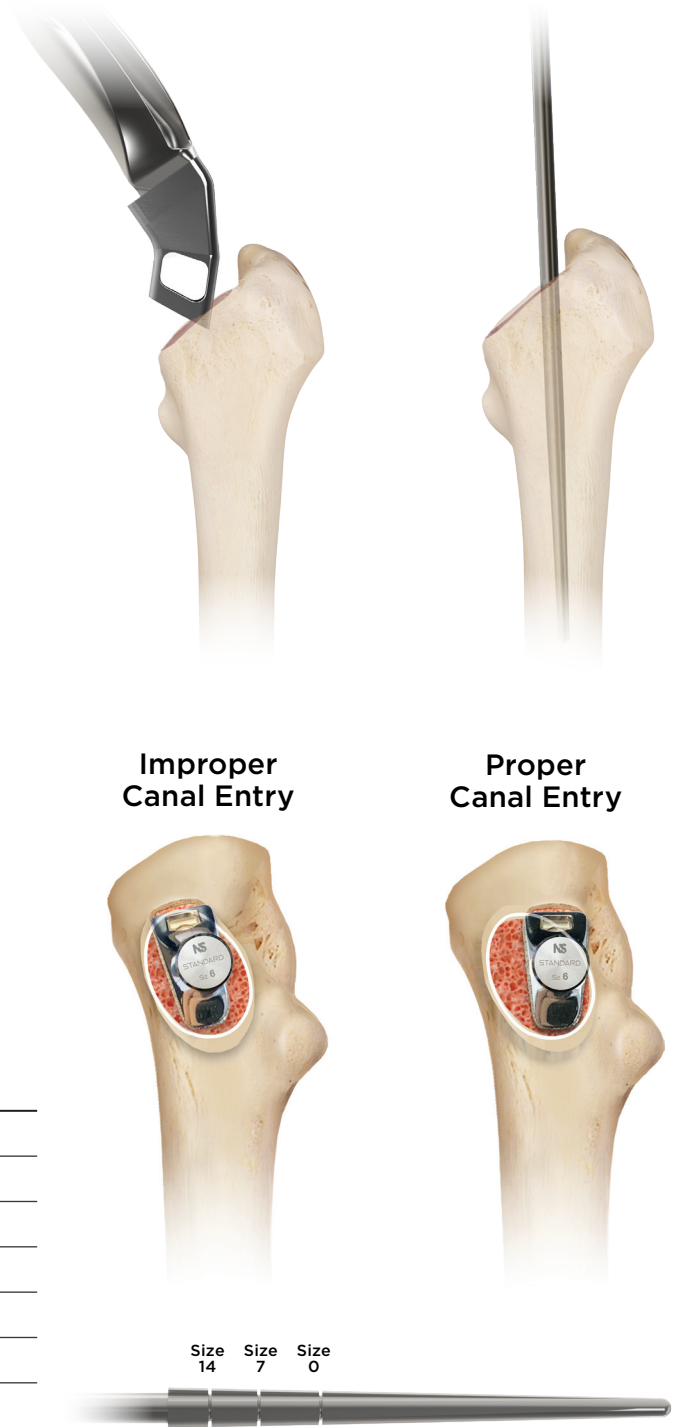
Description	REF
Screw/Hole Cover Driver T20	10-95-2034

Accessing the Femoral Canal

Attach the **Dual Taper Box Osteotome** to the **Broach Handle** (available in straight and double offset configurations). The box osteotome is trapezoidal in shape and may be used to create an entry into the femoral canal and to establish version. To prevent under-sizing or varus positioning, the greater trochanter, posterolaterally up to the Piriformis Fossa, can be prepared with the Box Osteotome or a rongeur. This helps clear the femoral canal so the femoral prep instruments avoid interference from the dense bone surrounding the trochanter providing ideal lateralization to avoid varus positioning and femoral component under-sizing.

Utilizing the **Canal Finder**, create an open pathway to the medullary canal to the appropriate depth along the neutral alignment of the femoral axis. The canal finder should pass with little resistance if proper alignment has been achieved. To further aid neutral stem alignment, the quick connect **Lateralizing Reamer** may be used to widen the canal entry point. The optional **Dual Taper Canal Finding Rasp** may be used to open the pathway to the medullary canal and establish version.

Description	REF
Dual Taper Box Osteotome	10-95-3033
Straight Broach Handle	10-95-3003
Double Offset Broach Handle Left	10-95-3005
Double Offset Broach Handle Right	10-95-3006
Canal Finder	10-95-3009
Lateralizing Reamer	10-95-3010
Dual Taper Canal Finding Rasp	10-95-3031



Femoral

Femoral Canal Preparation

Attach the **Dual Taper Starter Broach** to the **Broach Handle** (available in straight and double offset configurations). Maintaining axial and rotational alignment, insert and impact into the femur. Utilizing progressively larger **Broaches**, enlarge the cavity until axial and rotational stability is achieved.

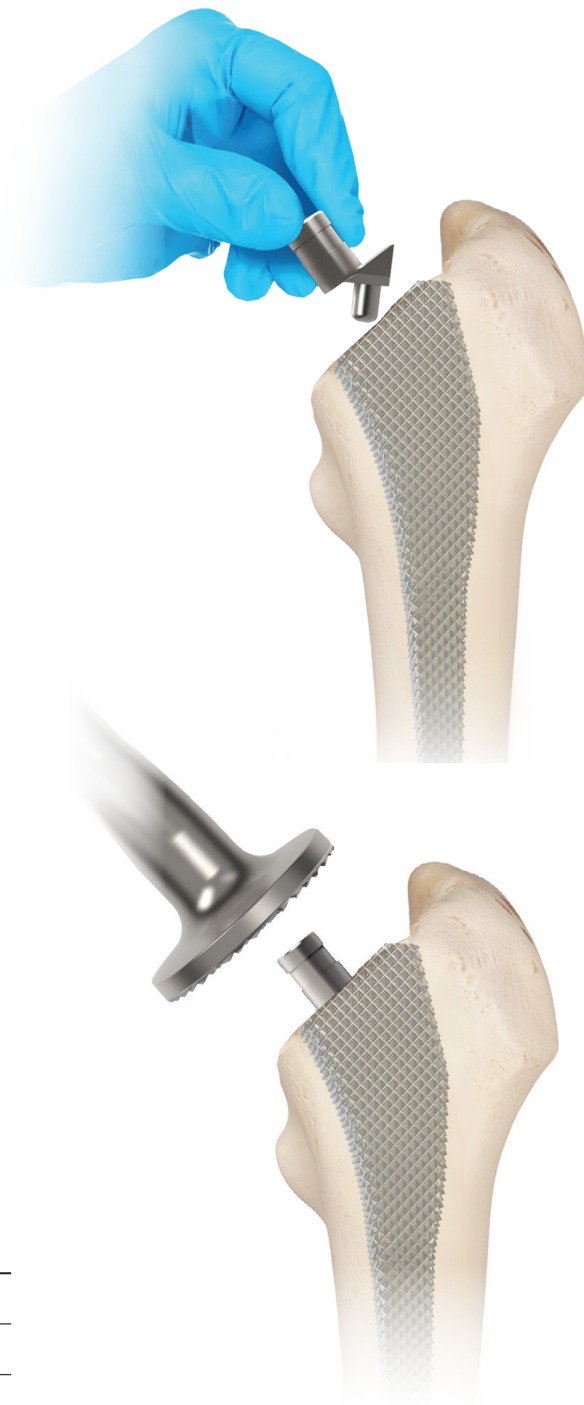
Upon reaching the final size, detach the broach handle from broach by pulling the trigger, leaving the broach fully seated in the femoral canal.



Description	REF
Dual Taper Starter Broach	10-95-3032
Straight Broach Handle	10-95-3003
Double Offset Broach Handle Left	10-95-3005
Double Offset Broach Handle Right	10-95-3006
Dual Taper Broaches	10-80-0303 - 10-80-0324

Calcar Preparation (Optional)

It may be necessary to mill excess bone from the resected neck to ensure the stem is seated at the expected level. Attach the **Calcar Planer Adapter** to the broach and guide the **Calcar Planer** (available in diamond and twin blade) over the calcar planer adapter. Initiate power prior to engaging contact with the bone to prevent damage to femur.



Description	REF
Calcar Planer Adapter	10-95-3013
Twin Blade Calcar Planer	10-95-3015
Diamond Blade Calcar Planer	10-95-3014

Femoral

Trial Reduction

To assess proper positioning, offset and leg length, attach the appropriate **Neck Trial** and **Head Trial** to the broach in situ. Two neck trials are available per broach size, standard and lateralized offset. The head trials provide for neck length adjustment. Perform a trial reduction of the hip. Adjust the neck and head trials until the desired leg length and offset are achieved.

Upon confirmation of final component sizes, remove the head trial and neck trial and attach the **Broach Handle** to the **Broach** and remove.

IMPORTANT:

Proceed to Final Liner Insertion on the next page prior to femoral stem insertion - reversing this order makes it difficult to insert the liner.



Description	REF
Dual Taper Standard Neck Trials	10-81-0303 - 10-81-0324
Dual Taper Lateralized Neck Trials	10-81-0403 - 10-81-0424
Head Trials	10-82-2800 - 10-82-4004
Straight Broach Handle	10-95-3003
Single Offset Broach Handle	10-95-3004
Double Offset Broach Handle Left	10-95-3005
Double Offset Broach Handle Right	10-95-3006
Dual Taper Broaches	10-80-0303 - 10-80-0324

Final Liner Insertion

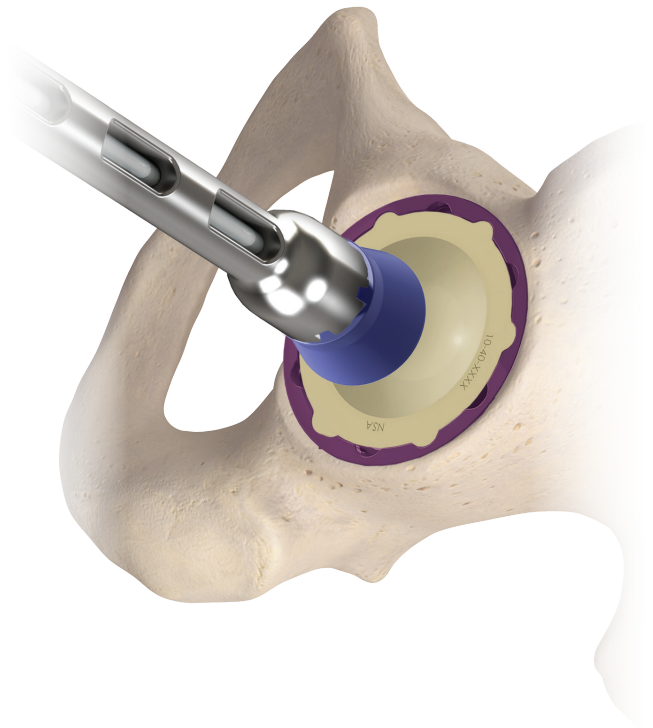
Clean the cup of any tissue or debris and ensure that the screws, screw hole covers and apical hole covers have been correctly countersunk to not impede with the UHMWPE liner.

Attach the appropriately sized **Liner Impactor** to the **Cup Impactor** (available in straight and offset configurations).

Place the liner into the cup, aligning the anti-rotational tabs with the castellations of the cup. Strike the impactor with a small mallet until the annular locking ring on the liner engages with the locking mechanism of the cup and the anti-rotational tabs are flush with the rim of the cup.

Note: There are twice as many castellations on the cup as there are tabs on the liner.

Note: The liners can be assembled with hand force, a strong blow is not required.



Description	REF
Liner Impactors	10-95-2018 - 10-95-2021
Straight Cup Impactor	10-95-2007
Offset Cup Impactor	10-95-2008

Femoral

Femoral Implant Insertion

(Complete only after Final Liner Insertion)

Insert the final stem size using the **Modular Stem Inserter** or **Straight Stem Inserter**. The Modular Stem Inserter connects to the broach handle. Maintaining proper alignment, gently impact the stem using a small mallet to gradually seat the implant. The femoral stem has a stem cap over the taper to protect the taper and keep it clean and dry and may be left on the stem during final insertion.



Description	REF
Straight Stem Inserter	10-95-3017
Modular Stem Inserter	10-95-3028
Straight Threaded Stem Inserter	10-95-3034

Femoral Head Impaction

Remove the stem cap and ensure the taper interface is clean and dry. Place the final femoral head on the taper. Using the **Head Impactor**, firmly impact the head along the taper axis with a small mallet.



Description	REF
Head Impactor	10-95-3018

Reducing the Joint

The hip can then be carefully reduced and closure performed using the surgeon's preferred technique.

Component Removal

In the unlikely event that the stem needs to be removed, the **Stem Extractor** (available in straight and u-joint configurations) is screwed into the threaded hole on the lateral/proximal shoulder of the stem. The **Slap Hammer** is then threaded into the end of the stem extractor and is used to extract the stem, using the slap hammer handle to guide and control the blows

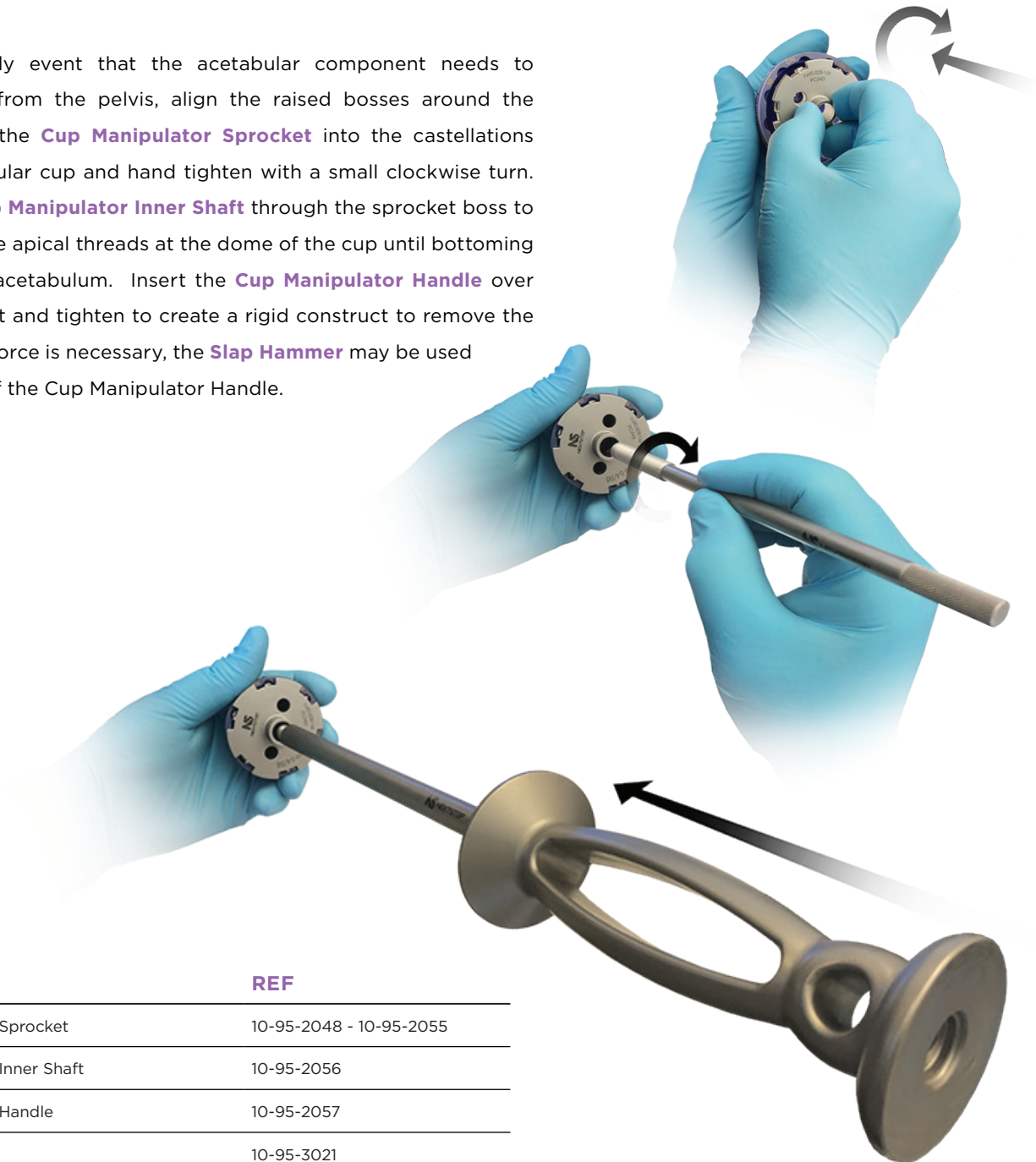


Description	REF
Straight Stem Extractor	10-95-3019
U-Joint Stem Extractor	10-95-3020
Slap Hammer	10-95-3021

Acetabular

Component Removal

In the unlikely event that the acetabular component needs to be removed from the pelvis, align the raised bosses around the periphery of the **Cup Manipulator Sprocket** into the castellations of the acetabular cup and hand tighten with a small clockwise turn. Insert the **Cup Manipulator Inner Shaft** through the sprocket boss to thread into the apical threads at the dome of the cup until bottoming out with the acetabulum. Insert the **Cup Manipulator Handle** over the inner shaft and tighten to create a rigid construct to remove the cup. If more force is necessary, the **Slap Hammer** may be used on the back of the Cup Manipulator Handle.



Description	REF
Cup Manipulator Sprocket	10-95-2048 - 10-95-2055
Cup Manipulator Inner Shaft	10-95-2056
Cup Manipulator Handle	10-95-2057
Slap Hammer	10-95-3021

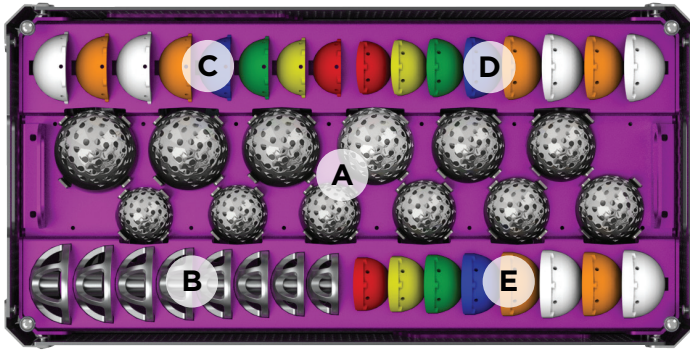
Instruments

Ordering and Case Locations

Instrument Sets

Acetabular Prep Tray

Top Tray



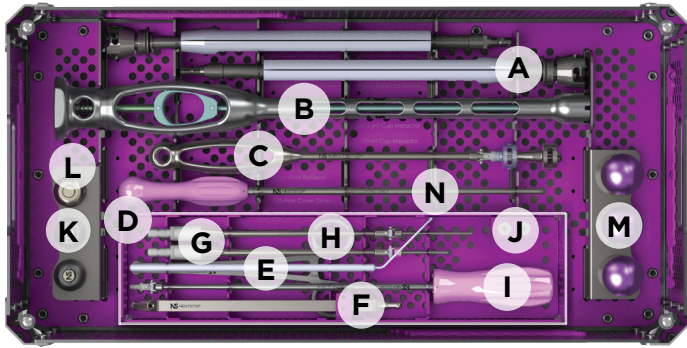
Ref	SKU	Description
A	10-83-0040/-0240	Full Hemisphere/Low Rider Reamer Size 40
A	10-83-0042/-0242	Full Hemisphere/Low Rider Reamer Size 42
A	10-83-0044/-0244	Full Hemisphere/Low Rider Reamer Size 44
A	10-83-0046/-0246	Full Hemisphere/Low Rider Reamer Size 46
A	10-83-0048/-0248	Full Hemisphere/Low Rider Reamer Size 48
A	10-83-0050/-0250	Full Hemisphere/Low Rider Reamer Size 50
A	10-83-0052/-0252	Full Hemisphere/Low Rider Reamer Size 52
A	10-83-0054/-0254	Full Hemisphere/Low Rider Reamer Size 54
A	10-83-0056/-0256	Full Hemisphere/Low Rider Reamer Size 56
A	10-83-0058/-0258	Full Hemisphere/Low Rider Reamer Size 58
A	10-83-0060/-0260	Full Hemisphere/Low Rider Reamer Size 60
A	10-83-0062/-0262	Full Hemisphere/Low Rider Reamer Size 62
B	10-84-0046	Quick Connect Cup Trial Size 46
B	10-84-0048	Quick Connect Cup Trial Size 48
B	10-84-0050	Quick Connect Cup Trial Size 50
B	10-84-0052	Quick Connect Cup Trial Size 52
B	10-84-0054	Quick Connect Cup Trial Size 54
B	10-84-0056	Quick Connect Cup Trial Size 56
B	10-84-0058	Quick Connect Cup Trial Size 58
B	10-84-0060	Quick Connect Cup Trial Size 60
C	10-85-3246	Neutral Liner Trial Size 46 x 32mm ID
C	10-85-3248	Neutral Liner Trial Size 48 x 32mm ID
C	10-85-3650	Neutral Liner Trial Size 50 x 36mm ID
C	10-85-3652	Neutral Liner Trial Size 52 x 36mm ID
C	10-85-3654	Neutral Liner Trial Size 54/56 x 36mm ID

Ref	SKU	Description
C	10-85-3658	Neutral Liner Trial Size 58/60 x 36mm ID
C	10-85-4054	Neutral Liner Trial Size 54/56 x 40mm ID
C	10-85-4058	Neutral Liner Trial Size 58/60 x 40mm ID
D	10-86-3246	Hooded Liner Trial Size 46 x 32mm ID
D	10-86-3248	Hooded Liner Trial Size 48 x 32mm ID
D	10-86-3650	Hooded Liner Trial Size 50 x 36mm ID
D	10-86-3652	Hooded Liner Trial Size 52 x 36mm ID
D	10-86-3654	Hooded Liner Trial Size 54/56 x 36mm ID
D	10-86-3658	Hooded Liner Trial Size 58/60 x 36mm ID
D	10-86-4054	Hooded Liner Trial Size 54/56 x 40mm ID
D	10-86-4058	Hooded Liner Trial Size 58/60 x 40mm ID
E	10-87-3246	Face Changing Liner Trial Size 46 x 32mm ID
E	10-87-3248	Face Changing Liner Trial Size 48 x 32mm ID
E	10-87-3650	Face Changing Liner Trial Size 50 x 36mm ID
E	10-87-3652	Face Changing Liner Trial Size 52 x 36mm ID
E	10-87-3654	Face Changing Liner Trial Size 54/56 x 36mm ID
E	10-87-3658	Face Changing Liner Trial Size 58/60 x 36mm ID
E	10-87-4054	Face Changing Liner Trial Size 54/56 x 40mm ID
E	10-87-4058	Face Changing Liner Trial Size 58/60 x 40mm ID

* Tray has either Full Hemisphere or Low Rider Reamers

Acetabular Prep Tray

Lower Tray



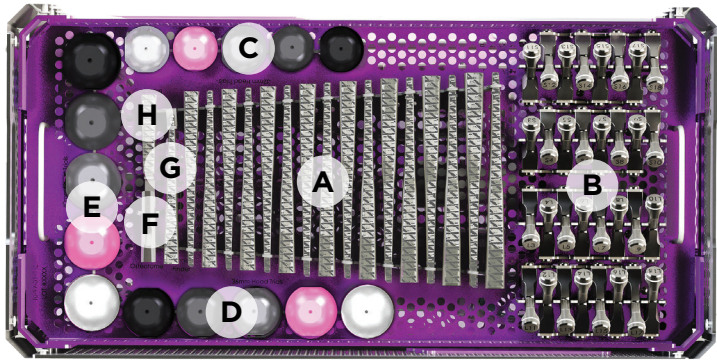
Ref	SKU	Description
A	10-95-2004	Straight Reamer Driver x2
B	10-95-2007	Straight Cup Impactor
OPTION	10-95-2008	Offset Cup Impactor
C	10-95-2015	Fixed Terminal Retriever
OPTION	10-95-2014	U-Joint Terminal Retriever
D	10-99-0108	Removeable Screw Set
E	10-95-2027	Angled Depth Gauge
F	10-95-2025	Fixed Drill Guide
G	10-95-2040	Short U-Joint Drill Bit
G	10-95-2041	Medium U-Joint Drill Bit
H	10-95-3023	Screw Holding Forceps
I	10-95-2035	Fixed Handle U-Joint T20 Screwdriver
J	10-95-4026	Liner Trial Screw, x2
NOT SHOWN	10-95-2029	Multipurpose Hexalobe Driver T20/T40
K	10-95-2009	Terminal, x2
L	10-95-2013	Secondary Cup Impactor
M	10-95-2019	Liner Impactor Size 32mm
M	10-95-2020	Liner Impactor Size 36mm
M	10-95-2021	Liner Impactor Size 40mm
N	10-95-2034	Screw/Hole Cover Driver T20

* See NSA sales rep for additional instrument options

Instrument Sets

Blade Femoral Prep Tray

Top Tray

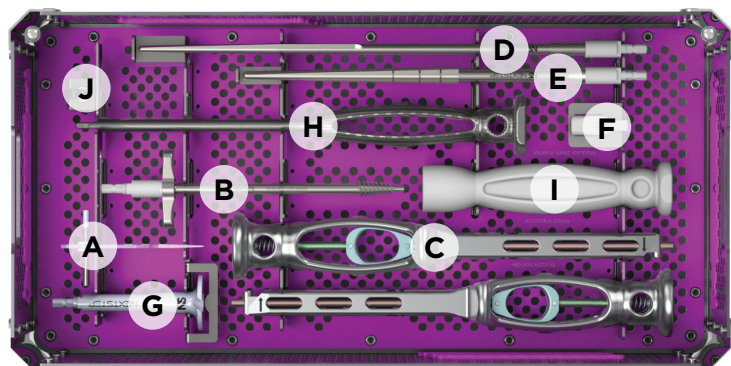


Ref	SKU	Description
A	10-80-0303	Dual Taper Broach Size 3
A	10-80-0304	Dual Taper Broach Size 4
A	10-80-0305	Dual Taper Broach Size 5
A	10-80-0306	Dual Taper Broach Size 6
A	10-80-0307	Dual Taper Broach Size 7
A	10-80-0308	Dual Taper Broach Size 8
A	10-80-0309	Dual Taper Broach Size 9
A	10-80-0310	Dual Taper Broach Size 10
A	10-80-0311	Dual Taper Broach Size 11
A	10-80-0312	Dual Taper Broach Size 12
A	10-80-0313	Dual Taper Broach Size 13
A	10-80-0314	Dual Taper Broach Size 14
A	10-80-0315	Dual Taper Broach Size 15
A	10-80-0316	Dual Taper Broach Size 16
A	10-80-0317	Dual Taper Broach Size 17
A	10-80-0318	Dual Taper Broach Size 18
A	10-80-0320	Dual Taper Broach Size 20
A	10-80-0322	Dual Taper Broach Size 22
A	10-80-0324	Dual Taper Broach Size 24
B	10-81-0303	Dual Taper Standard Neck Trial Size 3
B	10-81-0403	Dual Taper Lateralized Neck Trial Size 3
B	10-81-0304	Dual Taper Standard Neck Trial Size 4
B	10-81-0404	Dual Taper Lateralized Neck Trial Size 4
B	10-81-0305	Dual Taper Standard Neck Trial Size 5
B	10-81-0405	Dual Taper Lateralized Neck Trial Size 5
B	10-81-0306	Dual Taper Standard Neck Trial Size 6
B	10-81-0406	Dual Taper Lateralized Neck Trial Size 6
B	10-81-0307	Dual Taper Standard Neck Trial Size 7
B	10-81-0407	Dual Taper Lateralized Neck Trial Size 7
B	10-81-0308	Dual Taper Standard Neck Trial Size 8
B	10-81-0408	Dual Taper Lateralized Neck Trial Size 8

Ref	SKU	Description
B	10-81-0309	Dual Taper Standard Neck Trial Size 9
B	10-81-0409	Dual Taper Lateralized Neck Trial Size 9
B	10-81-0310	Dual Taper Standard Neck Trial Size 10
B	10-81-0410	Dual Taper Lateralized Neck Trial Size 10
B	10-81-0311	Dual Taper Standard Neck Trial Size 11
B	10-81-0411	Dual Taper Lateralized Neck Trial Size 11
B	10-81-0312	Dual Taper Standard Neck Trial Size 12
B	10-81-0412	Dual Taper Lateralized Neck Trial Size 12
B	10-81-0313	Dual Taper Standard Neck Trial Size 13
B	10-81-0413	Dual Taper Lateralized Neck Trial Size 13
B	10-81-0314	Dual Taper Standard Neck Trial Size 14
B	10-81-0414	Dual Taper Lateralized Neck Trial Size 14
B	10-81-0315	Dual Taper Standard Neck Trial Size 15
B	10-81-0415	Dual Taper Lateralized Neck Trial Size 15
B	10-81-0316	Dual Taper Standard Neck Trial Size 16
B	10-81-0416	Dual Taper Lateralized Neck Trial Size 16
B	10-81-0317	Dual Taper Standard Neck Trial Size 17
B	10-81-0417	Dual Taper Lateralized Neck Trial Size 17
B	10-81-0318	Dual Taper Standard Neck Trial Size 18
B	10-81-0418	Dual Taper Lateralized Neck Trial Size 18
B	10-81-0320	Dual Taper Standard Neck Trial Size 20
B	10-81-0420	Dual Taper Lateralized Neck Trial Size 20
B	10-81-0322	Dual Taper Standard Neck Trial Size 22
B	10-81-0422	Dual Taper Lateralized Neck Trial Size 22
B	10-81-0324	Dual Taper Standard Neck Trial Size 24
B	10-81-0424	Dual Taper Lateralized Neck Trial Size 24
C	10-82-3200	Dual Taper Head Trial 32mm x -4mm
C	10-82-3201	Dual Taper Head Trial 32mm x +0mm
C	10-82-3202	Dual Taper Head Trial 32mm x +4mm
C	10-82-3203	Dual Taper Head Trial 32mm x +7mm
C	10-82-3204	Dual Taper Head Trial 32mm x +10mm
D	10-82-3600	Dual Taper Head Trial 36mm x -4mm
D	10-82-3601	Dual Taper Head Trial 36mm x +0mm
D	10-82-3602	Dual Taper Head Trial 36mm x +4mm
D	10-82-3603	Dual Taper Head Trial 36mm x +8mm
D	10-82-3604	Dual Taper Head Trial 36mm x +10mm
E	10-82-4000	Dual Taper Head Trial 40mm x -4mm
E	10-82-4001	Dual Taper Head Trial 40mm x +0mm
E	10-82-4002	Dual Taper Head Trial 40mm x +4mm
E	10-82-4003	Dual Taper Head Trial 40mm x +8mm
E	10-82-4004	Dual Taper Head Trial 40mm x +10mm
F	10-95-3033	Dual Taper Box Osteotome
G	10-95-3031	Dual Taper Canal Finding Rasp
H	10-95-3032	Dual Taper Starter Broach

Blade Femoral Prep Tray

Lower Tray

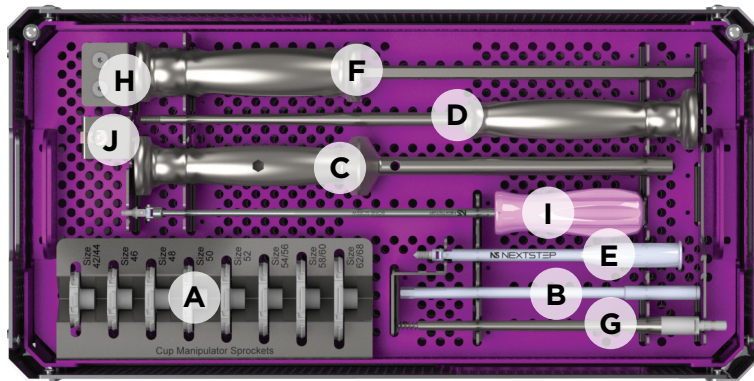


Ref	SKU	Description
A	10-95-3000	Femoral Neck Resection Guide
B	10-95-3027	Femoral Head Extractor
C	10-95-3003	Straight Broach Handle, x2
D	10-95-3009	Canal Finder
E	10-95-3010	Lateralizing Reamer
F	10-95-3028	Modular Stem Inserter, Optional
G	10-95-3014	Diamond Blade Calcar Planer
OPTION	10-95-3015	Twin Blade Calcar Planer
H	10-95-3017	Straight Stem Inserter
OPTION	10-95-3034	Straight Threaded Stem Inserter
I	10-95-3018	Head Impactor
J	10-95-3013	Calcar Planer Adapter

* See NSA sales rep for additional instrument options

Instrument Sets

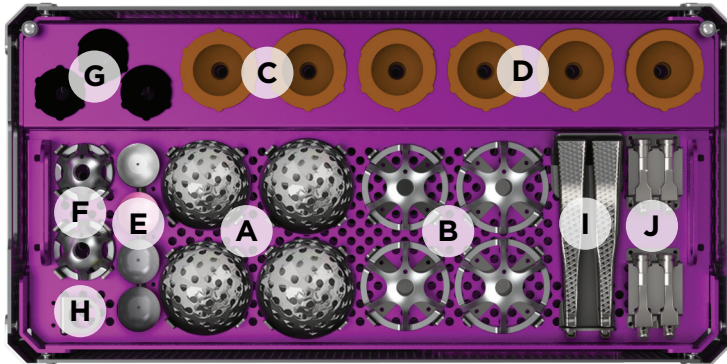
Extraction Tray



Ref	SKU	Description
A	10-95-2048	Cup Manipulator Sprocket, Size 42/44
A	10-95-2049	Cup Manipulator Sprocket, Size 46
A	10-95-2050	Cup Manipulator Sprocket, Size 48
A	10-95-2051	Cup Manipulator Sprocket, Size 50
A	10-95-2052	Cup Manipulator Sprocket, Size 52
A	10-95-2053	Cup Manipulator Sprocket, Size 54/56
A	10-95-2054	Cup Manipulator Sprocket, Size 58/60
A	10-95-2055	Cup Manipulator Sprocket, Size 62/68
B	10-95-2056	Manipulator, Inner Shaft
C	10-95-2057	Manipulator, Handle
D	10-95-3019	Straight Stem Extractor
E	10-95-3020	U-Joint Stem Extractor
F	10-95-3021	Slap Hammer
G	10-95-2022	Liner Extractor Tool
H	10-95-4026	Liner Trial Screw x2
I	10-95-2035	Fixed Handle U-Joint Screwdriver T20
J	10-95-3013	Calcar Planer Adapter

* See NSA sales rep for additional instrument options

Blade Outlier Tray



Ref	SKU	Description
A	10-83-0064/-0264	Full Hemisphere/Low Rider Reamer Size 64
A	10-83-0066/-0266	Full Hemisphere/Low Rider Reamer Size 66
A	10-83-0068/-0268	Full Hemisphere/Low Rider Reamer Size 68
A	10-83-0070/-0270	Full Hemisphere/Low Rider Reamer Size 70
B	10-84-0062	Quick Connect Cup Trial Size 62
B	10-84-0064	Quick Connect Cup Trial Size 64
B	10-84-0066	Quick Connect Cup Trial Size 66
B	10-84-0068	Quick Connect Cup Trial Size 68
C	10-85-3662	Neutral Liner Trial Size 62/68 x 36mm ID
C	10-87-3662	Face Changing Liner Trial Size 62/68 x 36mm ID
C	10-86-3662	Hooded Liner Trial Size 62/68 x 36mm ID
D	10-85-4062	Neutral Liner Trial Size 62/68 x 40mm ID
D	10-86-4062	Hooded Liner Trial Size 62/68 x 40mm ID
D	10-87-4062	Face Changing Liner Trial Size 62/68 x 40mm ID
E	10-82-2800	Head Trial 28mm x -3.5mm
E	10-82-2801	Head Trial 28mm x +0mm
E	10-82-2802	Head Trial 28mm x +3.5mm
E	10-82-2803	Head Trial 28mm x +7mm
F	10-84-0042	Quick Connect Cup Trial Size 42
F	10-84-0044	Quick Connect Cup Trial Size 44
G	10-85-2842	Neutral Liner Trial Size 42/44 x 28mm ID
G	10-86-2842	Hooded Liner Trial Size 42/44 x 28mm ID
G	10-87-2842	Face Changing Liner Trial Size 42/44 x 28mm ID
H	10-95-2018	Liner Impactor Size 28mm

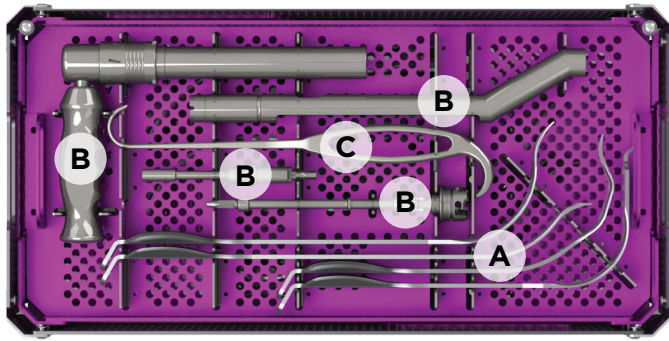
Ref	SKU	Description
I	10-80-0320	Dual Taper Broach Size 20
I	10-80-0322	Dual Taper Broach Size 22
I	10-80-0324	Dual Taper Broach Size 24
J	10-81-0320	Dual Taper Standard Neck Trial Size 20
J	10-81-0420	Dual Taper Lateralized Neck Trial Size 20
J	10-81-0322	Dual Taper Standard Neck Trial Size 22
J	10-81-0422	Dual Taper Lateralized Neck Trial Size 22
J	10-81-0324	Dual Taper Standard Neck Trial Size 24
J	10-81-0424	Dual Taper Lateralized Neck Trial Size 24

* Tray has either Full Hemisphere or Low Rider Reamers

Instrument Sets

Direct Anterior Tray

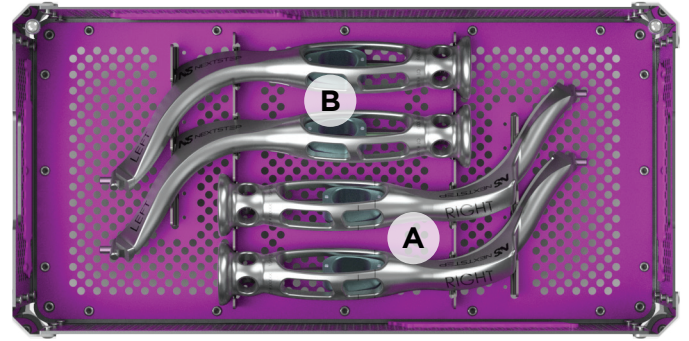
Top Tray



Ref	SKU	Description
A	10-95-1003	Number Three Retractor
A	10-95-1005	Number Five Retractor
A	10-95-1007	Number Seven Retractor
A	10-95-1009	Number Nine Retractor
B	10-95-2005	Dual Connect Offset Reamer Driver
C	10-95-3001	Bone Hook

* See NSA sales rep for additional instrument options

Lower Tray



Ref	SKU	Description
A	10-95-3005	Double Offset Broach Handle Left, x2
B	10-95-3006	Double Offset Broach Handle Right, x2

iNSitu™ Hip System Surgical Technique

Indications

The iNSitu™ Total Hip System is indicated for use in skeletally mature individuals undergoing surgery for total hip replacement due to:

- A severely painful and/or disabled joint from osteoarthritis, traumatic arthritis, rheumatoid arthritis, avascular necrosis, or congenital hip dysplasia;
- Acute traumatic fracture of the femoral head or neck;
- Failed previous hip surgery including joint reconstruction, internal fixation, arthrodesis, hemiarthroplasty, surface replacement arthroplasty or total hip replacement.

The iNSitu™ Total Hip System femoral stem is intended for cementless fixation. The iNSitu™ Total Hip System acetabular cup is intended for cementless fixation. The porous structured surface provides biological fixation in a cementless application.

Contraindications

Contraindications may be relative or absolute and must be taken into account by the physician when making a decision on whether to use the device.

Absolute contraindications include:

- Infection, sepsis, and osteomyelitis.

Relative contraindications include:

- Uncooperative patient or patient with neurological disorders and are incapable of following directions
- Osteoporosis
- Metabolic disorders which may impair bone formation
- Osteomalacia
- Distant foci of infections which may spread to the implant site
- Rapid joint destruction, marked bone loss or bone resorption apparent on roentgenogram
- Vascular insufficiency, muscular atrophy, or neuromuscular disease.



Consult instructions before use.

Rx only

Caution: Federal law (USA) restricts this device to sale by or on the order of a physician.



NextStep Arthropedix, LLC

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(330) 733 7600

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Please refer to package insert for complete product information, including contraindications, warnings, precautions, and adverse effects.

Literature Number: L10.003.DT Rev B
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