

#### Resolve<sup>™</sup> Modular Stem

Revision Femoral Hip System



Surgical Technique Guide

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## Device Description

#### Resolve Modular Revision Stem -

The Resolve Stem is a modular stem system optimized for primary and revision hip arthroplasty. Its modularity is designed to address the challenges of severe bone deficiencies and complex cases.

The system offers five proximal component heights – 55, 65, 75, 85, and 95 mm – with standard and high offset neck options. A total of 74 distal stem options are available, including:

- 140 mm and 180 mm taper stems (straight)
- 180 mm clothespin stems (curved)
- 220 mm and 300 mm interlocking stems (curved)

Both clothespin and interlocking stems are compatible with interlocking screws for additional stability.

The distal stem is implanted first to ensure secure distal fixation, followed by the proximal component, which allows independent adjustment of biomechanical parameters such as version, offset, and leg length.

#### **INDICATIONS**

- 1. Non-inflammatory degenerative joint disease Including osteoarthritis and avascular necrosis.
- 2. Rheumatoid arthritis.
- 3. Correction of functional deformity.
- 4. Treatment of non-union, femoral neck fracture and trochanteric fractures of the proximal femur with head Involvement, unmanageable using other techniques.
- 5. Revision of previously failed total hip arthroplasty.

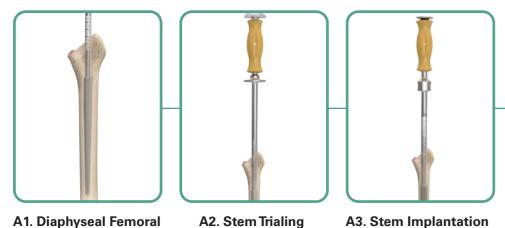
This device is a single use implant and intended for cementless use only.



## Surgical Overview

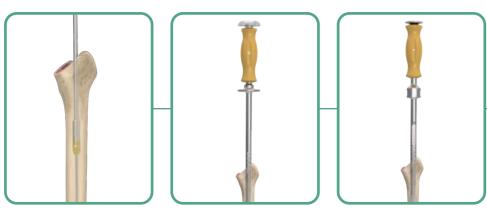
#### **Diaphysis Preparation**

#### A. For Taper Stem



#### **B. For Clothespin Stem**

**Canal Preparation** 



B1. Diaphyseal Femoral Canal Preparation

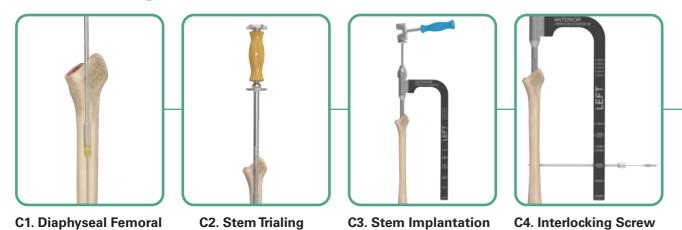
B2. Stem Trialing

B3. Stem Implantation

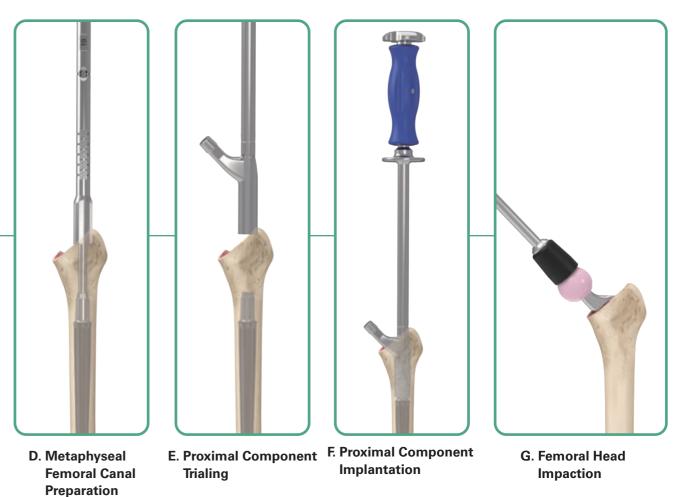
Preparation

#### **C For Interlocking Stem**

**Canal Preparation** 



#### **Metaphysis Preparation**



IV

## Preoperative Planning and Templating

Preoperative planning is essential for determining the optimal implant size and selection appropriate for the patient. A/P and M/L radiographs are necessary for X-ray templating.

The A/P radiograph should include bilateral hip joints to facilitate evaluation of the affected side. These images help estimate leg length discrepancy, femoral offset, and the center of rotation required to restore the proper hip biomechanics. The M/L radiograph provides valuable information on femoral anterior bowing, which is useful when templating for 140 mm and 180 mm straight taper stems, 180 mm curved clothespin stems, and 220 mm or 300 mm curved interlocking stems.

It is recommended to template using the 75 mm proximal component as a standard height to allow intraoperative selection of 1 to 2 sizes longer or shorter, enabling adjustments of leg lengths or compensation for variations in distal stem insertion depth.

The templates indicate the femoral head centers for each head/neck combination (ranging from-3 mm to +10 mm, depending on the selected head material and diameter). Final implant selection should take into account the acetabular cup position and size, as well as the location of the hip joint center.

Diaphysis Preparation For Taper Stem

Section A1 to A3



## A1. Diaphyseal Femoral Canal Preparation

After removing the previous stem, cement, and debris, use the **Resolve Starter Reamer** with the **Modular T-handle** to achieve clear access to the medullary canal, ensuring it is free of obstruction prior to distal reaming.

The depth marks on the **Resolve Starter Reamer**, which represent the femoral head center (+0 mm head offset) of the five proximal component heights (55, 65, 75, 85, and 95 mm), are also presented on the **Resolve Taper Reamer**, **Stem Trial Inserter**, **Stem Inserter**, and **Proximal Reamer** to help determine the appropriate seating depth.

Ream to the desired depth mark, using the tip of the greater trochanter as a reference, until clear access is achieved. An initial reaming depth of 75 mm is recommended to allow intraoperative flexibility for adjusting 1 to 2 sizes up or down.



Instruments





Resolve Starter Reamer

Modular T-handl

## A1. Diaphyseal Femoral Canal Preparation

Begin the reaming process with the smallest size of the **Resolve Taper Reamer** using the **Modular T-handle**, and progressively increase the reamer size in 1 mm increments. Maintain the same reaming depth established by the **Resolve Starter Reamer**, referencing the tip of the greater trochanter to achieve appropriate cortical engagement.

**Resolve Taper Reamers** are available in two lengths: 140 mm (Ø11-28 mm) and 180 mm (Ø12-28 mm), corresponding to the respective lengths of the taper stems.



#### Note:

If the greater trochanter is deficient and cannot be used as a reference, measurements obtained from preoperative templating are necessary to estimate the approximate location of the greater trochanter tip or femoral head center.

Additionally, proximal component trialing should be performed following stem implantation to determine the appropriate proximal component height.

Instrument





Resolve Taper Reamer

Modular T-handle

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### A2. Stem Trialing

Select the **Taper Stem Trial** that matches the size of the final reamer used. Assemble the trial to the **Stem Trial Inserter**, and insert it into the prepared canal until the depth mark on the inserter corresponds to the final reaming depth.



#### Note:

To achieve the desired press-fit of the taper stem in the prepared canal, the actual dimensions of the taper reamer and the taper stem trial are 1 mm smaller than the final implant diameter.

	Taper Reamer	Taper Stem Trial	Taper Stem
Size	#15	#15	#15
<b>Actual Dimension</b>	14 mm	14 mm	15 mm



## A3. Stem Implantation

Fully thread the **Guide Rod** to the top of the selected stem using the Guide Rod Hex Driver. Advance the Stem Inserter over the Guide Rod assembly until a 'click' sound is heard to confirm secure engagement.

Insert the stem into the canal using the **Stem Inserter**, aligning it to the depth corresponding to the previously trialed position. Once the stem is seated in the desired position and has achieved sufficient stability, identify the depth mark on the shaft of the **Stem Inserter** and use the tip of the greater trochanter as a reference to determine the appropriate proximal component height (55, 65, 75, 85, and 95 mm).





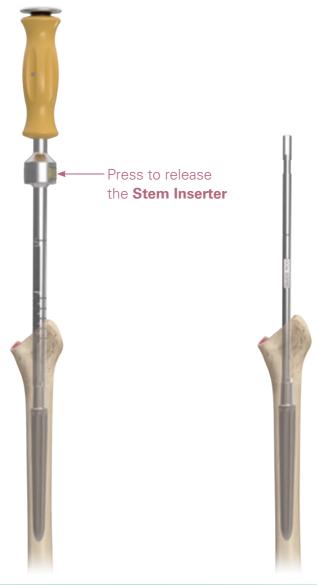
Note:



### A3.Stem Implantation

Press the gold button on the shaft to release the **Stem Inserter**. Leave the **Guide Rod** attached to the stem.

Continue from Section D (Metaphyseal Femoral Canal Preparation) through Section G (Femoral Head Impaction) to complete the metaphysis preparation.



Instruments



# Diaphysis Preparation For Clothespin Stem Section B1 to B3



## B1. Diaphyseal Femoral Canal Preparation

When preparing the femoral canal for the curved clothespin stem, use the flexible reaming assembly (**Guide Wire**, **Flexible Reamer Shaft**, and **Flexible Reamer Head**) to follow the natural bow of the femur. Advance the flexible reaming assembly into the medullary canal to the appropriate depth. Fluoroscopy may be used to confirm the proper depth and alignment during reaming.

Sequentially increase the flexible reamer size in 0.5 mm increments until the appropriate cortical engagement is achieved. It is recommended that the final flexible reamer diameter be line-to-line or 0.5 mm larger than the desired implant diameter, depending on the patient's bone quality.



To prepare the flared proximal region of the 12-15 mm clothespin stem, use the **Transition Reamer** after flexible reaming to ream the canal to the appropriate depth, based on the planned proximal component height determined during preoperative templating, using the tip of the greater trochanter as a reference.

Guide Wire Flexible Reamer Shaft



Flexible Reamer Head



#### B2. Stem Trialing

Assemble the **Clothespin Stem Trial** to the **Stem Trial Inserter**, and insert the stem trial into the prepared canal until the desired depth mark on the inserter aligns with the tip of the greater trochanter or matches the depth achieved with the transition reamer, if used. The depth mark corresponds to the femoral head center (+0 mm head offset) of the five proximal component heights (55, 65, 75, 85, and 95 mm).





The actual dimension of the clothespin stem trial is 0.5 mm smaller than the final implant diameter.



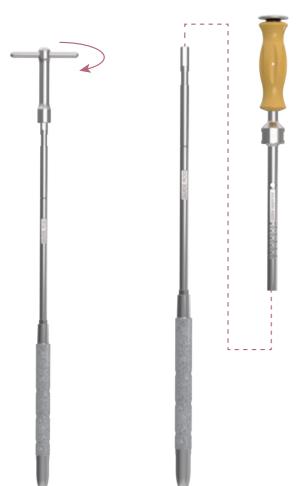


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### **B3.Stem Implantation**

Fully thread the **Guide Rod** to the top of the selected stem using the **Guide Rod Hex Driver**. Advance the **Stem Inserter** over the **Guide Rod** assembly until a 'click' sound is heard to confirm secure engagement.

Insert the stem into the canal using the **Stem Inserter**, aligning it to the depth corresponding to the previously trialed position. Once the stem is seated in the desired position and has achieved sufficient stability, identify the depth mark on the shaft of the **Stem Inserter** and use the tip of the greater trochanter as a reference to determine the appropriate proximal component height (55, 65, 75, 85, and 95 mm).







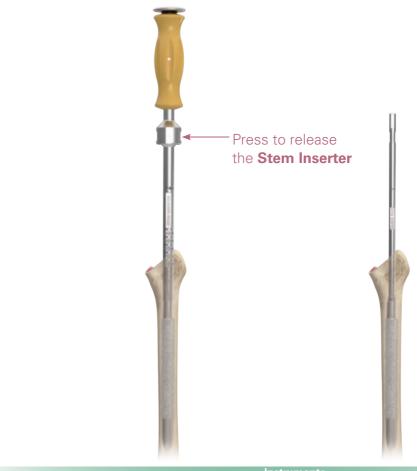
### **B3.Stem Implantation**

Press the gold button on the shaft to release the **Stem Inserter**. Leave the **Guide Rod** attached to the stem.

#### **✓** Note:

If interlocking screws are required to enhance the initial fixation of the clothespin stem, implantation of the clothespin stem and preparation for the interlocking screws should be performed using the **Target Device**. Refer to Section C3 (Stem Implantation) and C4 (Interlocking Screw Preparation) for detailed instructions.

Continue from Section D (Metaphyseal Femoral Canal Preparation) through Section G (Femoral Head Impaction) to complete the metaphysis preparation.



Instruments



# Diaphysis Preparation For Interlocking Stem Section C1 to C4



## C1. Diaphyseal Femoral Canal Preparation

When preparing the femoral canal for the curved interlocking stem, use the flexible reaming assembly (**Guide Wire**, **Flexible Reamer Shaft**, and **Flexible Reamer Head**) to follow the natural bow of the femur. Advance the flexible reaming assembly into the medullary canal to the appropriate depth. Fluoroscopy may be used to confirm the proper depth and alignment during reaming.

Sequentially increase the flexible reamer size in 0.5 mm increments until the appropriate cortical engagement is achieved. The final reamer diameter will depend on the patient's bone quality. It is recommended that over-reaming be performed.



#### Note:

To prepare the flared proximal region of the 15 mm interlocking stem, use the **Transition Reamer** after flexible reaming to ream the canal to the appropriate depth, based on the planned proximal component height determined during preoperative templating, using the tip of the greater trochanter as a reference.



### C2. Stem Trialing

Assemble the **Interlocking Stem Trial** to the **Stem Trial Inserter**, and insert the stem trial into the prepared canal until the desired depth mark on the inserter aligns with the tip of the greater trochanter or matches the depth achieved with the transition reamer, if used. The depth mark corresponds to the femoral head center (+0 mm head offset) of the five proximal component heights (55, 65, 75, 85, and 95 mm).





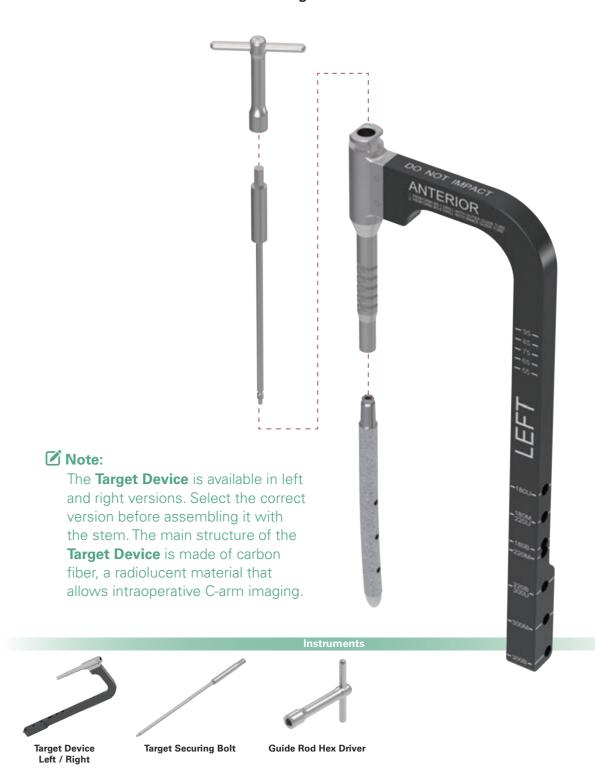
The actual dimension of the interlocking stem trial is 0.5 mm smaller than the final implant diameter.





### C3. Stem Implantation

Interlocking stem implantation and interlocking screw preparation should be performed using the **Target Device**. Utilize the **Target Securing Bolt** and **Guide Rod Hex Driver** to assemble the selected stem to the **Target Device**.



Interlocking Stem

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#### C3. Stem Implantation

A pre-alignment check is recommended before implantation. Advance the **Outer Guide Tube** and **5.1 mm Drill** through the guide holes of the **Target Device** to verify that all holes on the implant are properly aligned and correctly positioned relative to the **Target Device**.



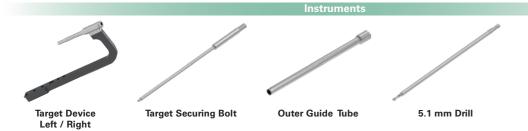


The "220" and "300" hole marks on the **Target Device** are used to prepare interlocking screws for the 220 mm and 300 mm interlocking stems, respectively. The "180" hole marks are for preparing interlocking screws for the 180 mm clothespin stem. The mark "**U**" represents the upper interlocking screw position, "**M**" represents the middle, and "**B**" reprensents the bottom.

#### Note:

The number and configuration of interlocking holes on the clothespin stem and interlocking stem depend on the stem's diameter and length, as shown in the table.

Stem Diameter (mm)	Clothespin Stem 180 mm	Interlocking Stem 220 mm & 300 mm
Ø12-14	1 hole (Bottom)	-
Ø15-16	2 holes (Middle, Bottom)	2 holes (Middle, Bottom)
Ø17-26	3 holes (Upper, Middle, Bottom)	3 holes (Upper, Middle, Bottom)



### C3. Stem Implantation

Attach the **Impaction Handle** to the **Target Device**. Advance the stem into the canal to the depth corresponding to the previously trialed position by moderately tapping the **Impaction Handle**. Once the stem is seated in the desired position and has achieved sufficient stability, identify the depth mark on the shaft of the **Target Device**. Use the tip of the greater trochanter as a reference to determine the appropriate proximal component height (55, 65, 75, 85, or 95 mm).





Impaction Handle

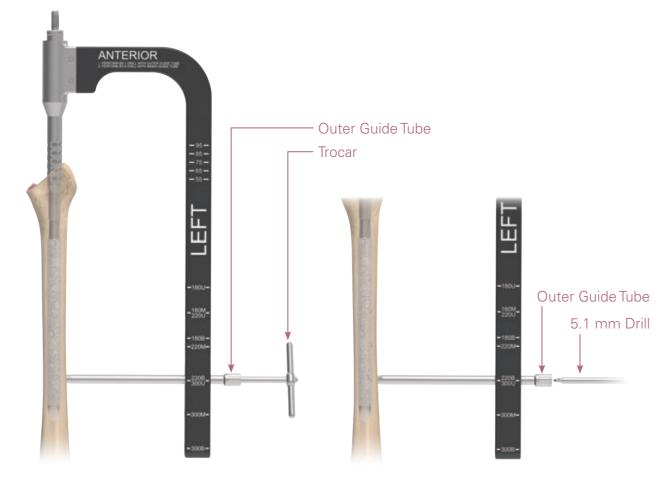
Interlocking Stem

**Resolve Modular Revision Stem** 

## C4. Interlocking Screw Preparation

After making an incision and exposing the lateral femoral cortex, insert the **Outer Guide Tube** and **Trocar** through the hole of the **Target Device** to create a trocar point at the lateral cortex, starting with the most distal guide hole (based on the screw hole configuration of the selected stem).

Then, remove the **Trocar** and replace it with a **5.1 mm Drill** to perforate the lateral cortex.

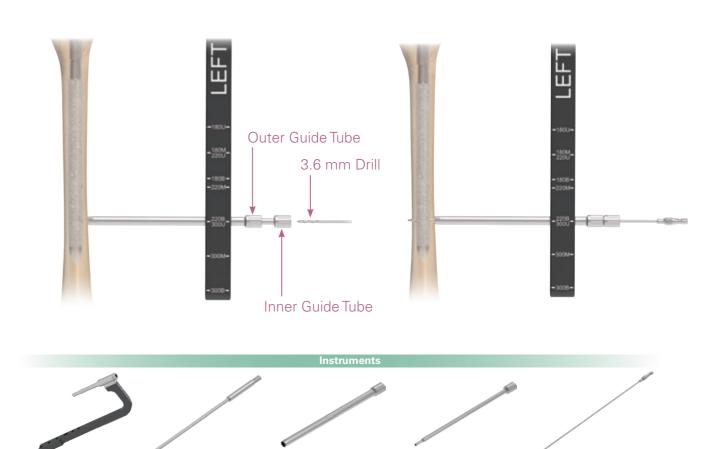




## C4. Interlocking Screw Preparation

After completing the drilling of the lateral cortex, insert the **Inner Guide Tube** into the Outer Guide Tube and use the 3.6 mm Drill to perforate the medial cortex.

Leave the **3.6 mm Drill**, Inner Guide Tube, and Outer Guide Tube in place at the most distal guide hole as stabilizers between the **Target Device** and stem, if the selected stem has more than one interlocking hole. Repeat the previous procedures starting from the trocar step to prepare the lateral and medial cortex for the remaining interlocking screw holes.



**Outer Guide Tube** 

Inner Guide Tube

3.6 mm Drill

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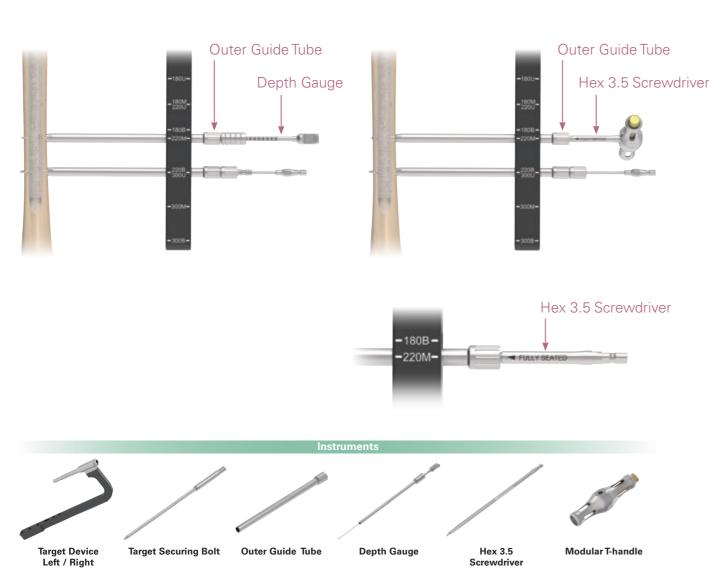
Target Device

Interlocking Stem

## C4. Interlocking Screw Preparation

Remove the **Inner Guide Tube** and insert the **Depth Gauge** into the **Outer Guide Tube** to determine the required length of the interlocking screw. Then, use the **Hex 3.5 Screwdriver** with the **Modular T-handle** to secure the interlocking screw in place through the **Outer Guide Tube**. The **Hex 3.5 Screwdriver** features a groove marker that indicates when the interlocking screw is fully seated.

Repeat this step until all drilled holes along the stem are secured with interlocking screws. Secure the most distal hole as the final step, as the **Outer Guide Tube**, **Inner Guide Tube**, and **3.6 mm Drill** remain in place to serve as stabilizers during preparation of the other screw holes.



## C4. Interlocking Screw Preparation

Remove the targeting device assembly from the distal stem, then fully thread the **Guide Rod** to the top of the stem using the **Guide Rod Hex Driver**.

Continue from Section D (Metaphyseal Femoral Canal Preparation) through Section G (Femoral Head Impaction) to complete the metaphysis preparation.

**Guide Rod** 

**Guide Rod Hex Driver** 



### Metaphysis Preparation

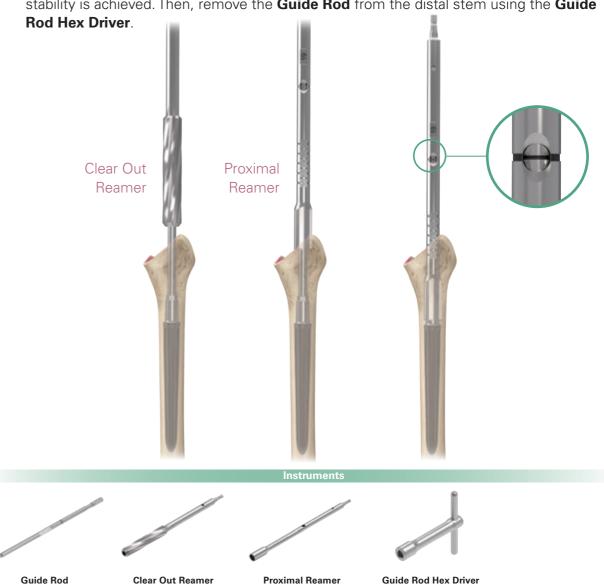
Section D to G



## D. Metaphyseal Femoral Canal Preparation

Ream the proximal femur over the **Guide Rod**, starting with the **Clear Out Reamer** to create initial clearance proximal to the implanted distal stem. The **Guide Rod** acts as a stopper to prevent over-reaming. This step prepares the proximal femur to accommodate the initial 19 mm proximal reamer.

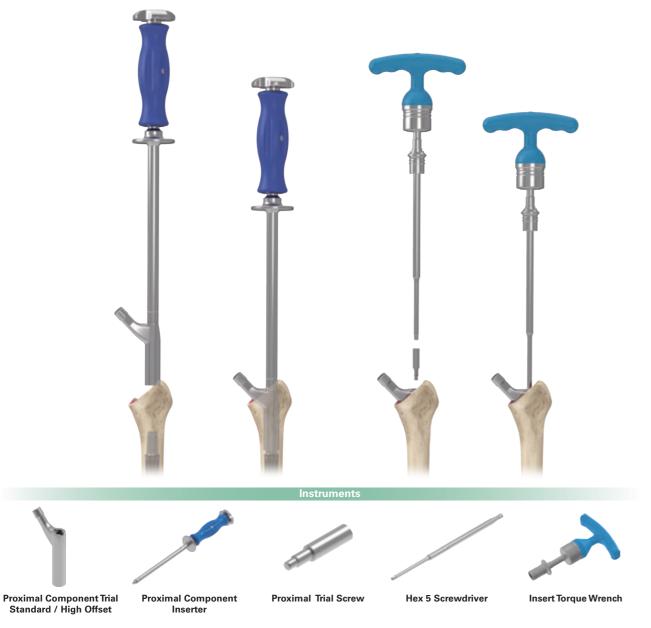
Continue reaming the proximal femur over the **Guide Rod** using the **Proximal Reamer** until the line mark on the **Guide Rod** is visible through the open window on the reamer shaft. Gradually increase the **Proximal Reamer** size (19, 21, 23, and 25 mm) until optimal stability is achieved. Then, remove the **Guide Rod** from the distal stem using the **Guide** 



## E. Proximal Component Trialing

Select the **Proximal Component Trial** that corresponds to the referenced depth mark from distal stem insertion, matches the size of the final Proximal Reamer, and conofirm the appropriate offset option. Attach the trial to the Proximal Component Inserter and advance the trial into the canal until it engages with the distal stem.

Secure the **Proximal Trial Screw** using the assembly of **Hex 5 Screwdriver** and **Insert Torque** Wrench until a click is felt to tighten the **Proximal Component Trial** onto the distal stem.



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## E. Proximal Component Trialing

Perform a trial reduction to confirm appropriate femoral offset, leg length, version, joint stability, and range of motion with the Femoral Head Trial and the Proximal Component Trial.

Mark a reference line to indicate the version of the **Proximal Component Trial** for final proximal component implantation.

After trial reduction, use the assembly of **Hex 5 Screwdriver** and **Modular T-handle** to remove the Proximal Trial Screw, then remove the Proximal Component Trial.













Femoral Head Trial Hex 5 Screwdriver Modular T-handle

## F. Proximal Component Implantation

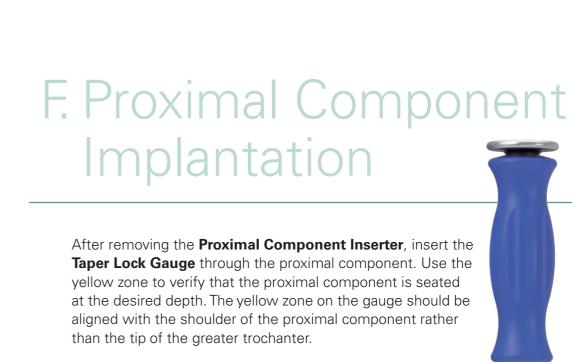
Introduce the selected proximal component onto the distal stem using the **Proximal Component Inserter**. Align it with the reference mark established during trialing to confirm the correct version. Then, impact the proximal component onto the taper junction of the distal stem using the inserter until the trunnion is engaged.



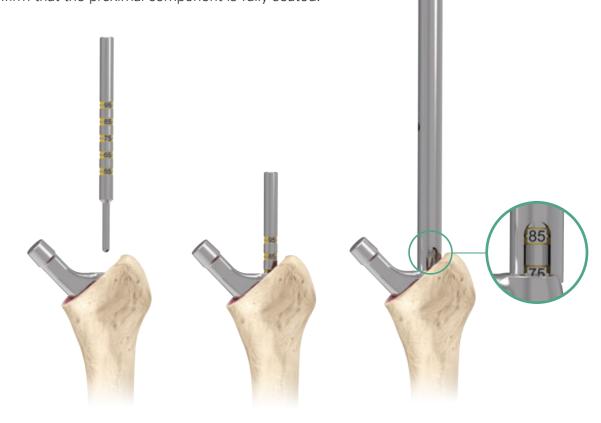
If there is a deficiency in the femoral cortex above the diaphyseal stem fixation point, the surgeon should be prepared to use cortical strut grafts to reinforce the femur.

Instruments



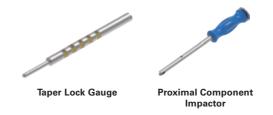


If the desired insertion depth has not been achieved, continue impaction using the **Proximal Component Impactor**. Check the **Taper Lock Gauge** through the impactor's window to confirm that the proximal component is fully seated.



Instruments

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## F. Proximal Component Implantation

Tighten the proximal screw using the assembly of **Hex 5 Screwdriver** and **Insert Torque Wrench** until a click is felt, indicating that the appropriate torque has been applied to secure the proximal component onto the distal stem.



Instruments

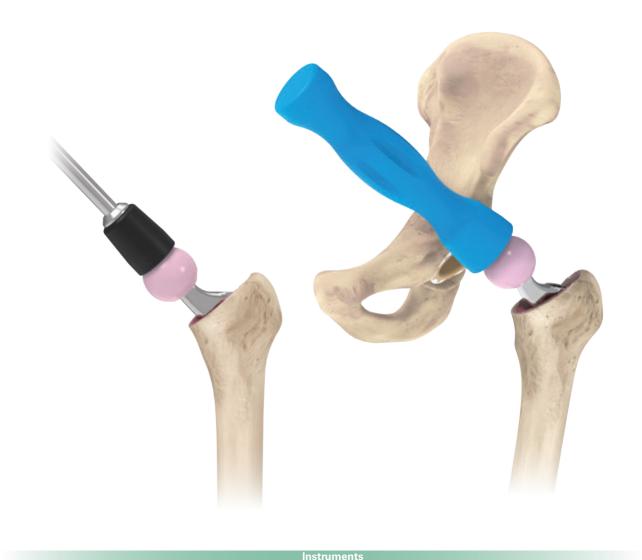




G.Femoral Head Impaction

Perform a final trial reduction using the **Femoral Head Trials** to confirm joint stability, range of motion, and leg length. Once the appropriate femoral head size is determined, manually place it onto the cleaned and dried taper, gently twisting it into place.

Attach the **Femoral Head Impactor** to the **Universal Handle** and moderately impact the femoral head until it is firmly seated. Clean the bearing surface, then reduce the hip with the **Pusher**.



Femoral Head Trial







29 30

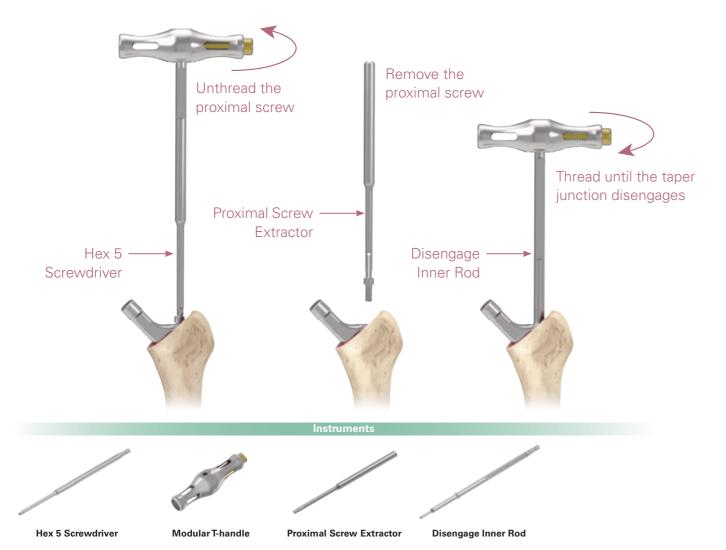
## Appendix

In case removal of the assembled proximal component and distal stem is required, follow the implant removal steps below.

## 1. Disengage the taper junction between the proximal component and distal stem

Unthread the proximal screw using the assembly of **Hex 5 Screwdriver** and **Modular T-handle**. Then, use the **Proximal Screw Extractor** to remove the proximal screw.

Select the **Disengage Inner Rod** with the length (55, 65, 75, 85, and 95 mm) matching the proximal component height, and attach it to the **Modular T-handle**. Thread the **Disengage Inner Rod** assembly into the proximal component until the taper junction with the distal stem disengages.



### **Appendix**



## 2. Retrieve the proximal component

Slide the **Hammer** over the **Slide Rod**, then thread the **Slide Rod** to the shoulder of the proximal component. Apply backslaps with the **Hammer** to retrieve the proximal component.



#### 3. Retrieve the distal stem

Thread the **Stem Extractor** to the top of the distal stem using the **Stem Extractor Wrench**. Then attach the **Slide Rod** with **Hammer** to the **Stem Extractor**. Use the **Hammer** to apply backslaps and retrieve the distal stem.





#### Special Order Items

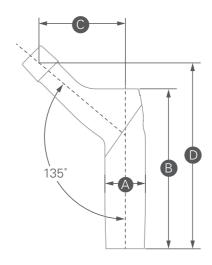
#### Order Information

#### **Proximal Component** Standard 1112 - 1119 $\emptyset$ 19 $\times$ L55 1112 - 1219 Ø19 × L65 1112 - 1319 Ø19 × L75 $\emptyset$ 19 × L85 1112 - 1419 1112 - 1519 $\emptyset$ 19 $\times$ L95 Ø21 × L65 1112 - 1221 Ø21 × L75 1112 - 1321 Ø21 × L85 1112 - 1421 1112 - 1521 $\emptyset$ 21 × L95 Ø23 × L65 1112 - 1223 Ø23 × L75 1112 - 1323 1112 - 1423 Ø23 × L85 1112 - 1523 Ø23 × L95 1112 - 1225 Ø25 × L65 $\emptyset25 \times L75$ 1112 - 1325 1112 - 1425 $\emptyset25 \times L85$ 1112 - 1525 $\emptyset25 \times L95$ 1112 - 3119 Ø19 × L55 **High Offset** 1112 - 3219 $\emptyset$ 19 × L65 1112 - 3319 $\emptyset$ 19 $\times$ L75 1112 - 3419 $\emptyset$ 19 $\times$ L85 1112 - 3519 $\emptyset$ 19 × L95 1112 - 3221 Ø21 × L65 Ø21 × L75 1112 - 3321 1112 - 3421 Ø21 × L85 1112 - 3521 Ø21 × L95 1112 - 3223 Ø23 × L65 $\emptyset23 \times L75$ 1112 - 3323 $\emptyset23 \times L85$ 1112 - 3423 1112 - 3523 $\emptyset23 \times L95$ 1112 - 3225 $\emptyset25 \times L65$ 1112 - 3325 $\emptyset25 \times L75$ 1112 - 3425 $\emptyset25 \times L85$

1112 - 3525

 $\emptyset25 \times L95$ 

#### Order Information



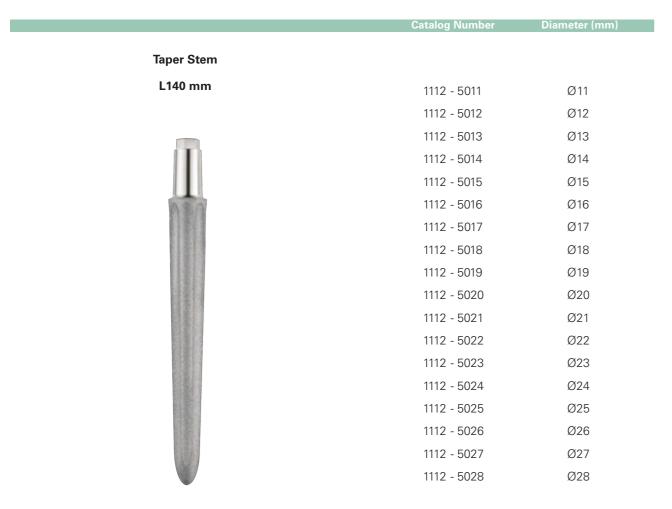
#### **Proximal Component**

Size	A	В	© Offset		D Vortice I Unich t
	Diameter	Height	Standard	High offset	Vertical Height
Ø19 x 55	19	55	40	46	67
Ø19 x 65	19	65	40	46	77
Ø19 x 75	19	75	40	46	87
Ø19 x 85	19	85	40	46	97
Ø19 x 95	19	95	40	46	107
Ø21 x 65	21	65	42	48	77
Ø21 x 75	21	75	42	48	87
Ø21 x 85	21	85	42	48	97
Ø21 x 95	21	95	42	48	107
Ø23 x 65	23	65	44	50	77
Ø23 x 75	23	75	44	50	87
Ø23 x 85	23	85	44	50	97
Ø23 x 95	23	95	44	50	107
Ø25 x 65	25	65	44	50	77
Ø25 x 75	25	75	44	50	87
Ø25 x 85	25	85	44	50	97
Ø25 x 95	25	95	44	50	107

Unit: mm

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#### Order Information



#### Order Information

	Catalog Number	Diameter (mm)
	Catalog Number	Diameter (mm)
Taper Stem		
L180 mm	1112 - 5112	Ø12
	1112 - 5113	Ø13
	1112 - 5114	Ø14
	1112 - 5115	Ø15
	1112 - 5116	Ø16
6736	1112 - 5117	Ø17
	1112 - 5118	Ø18
	1112 - 5119	Ø19
	1112 - 5120	Ø20
	1112 - 5121	Ø21
	1112 - 5122	Ø22
	1112 - 5123	Ø23
	1112 - 5124	Ø24
	1112 - 5125	Ø25
	1112 - 5126	Ø26
	1112 - 5127	Ø27
	1112 - 5128	Ø28
W		

#### Order Information

#### **Clothespin Stem** L180 mm 1112 - 7112 Ø12 1112 - 7113 Ø13 1112 - 7114 Ø14 1112 - 7115 Ø15 Ø16 1112 - 7116 1112 - 7117 Ø17 1112 - 7118 Ø18 1112 - 7119 Ø19 1112 - 7120 Ø20 1112 - 7121 Ø21 1112 - 7122 Ø22 1112 - 7123 Ø23 1112 - 7124 Ø24 1112 - 7125 Ø25 1112 - 7126 Ø26

	Catalog Number	Length (mm)
Interlocking Screw		
	1912 - 1025	25
	1912 - 1030	30
NAME OF THE PARTY	1912 - 1035	35
and the second	1912 - 1040	40
op-	1912 - 1045	45
	1912 - 1050	50
	1912 - 1055	55
	1912 - 1060	60
	1912 - 1065	65
	1912 - 1070	70
	1912 - 1075	75

#### Order Information

		Catalog Number	Diameter (mm)
Interlocking Stem			
	1 220	1112 - 7215	Ø15
	L220 mm	1112 - 7216	Ø16
40.		1112 - 7217	Ø17
111		1112 - 7217	Ø18
		1112 - 7218	Ø19
		1112 - 7220	Ø20
		1112 - 7221	Ø21
		1112 - 7222	Ø22
		1112 - 7223	Ø23
•		1112 - 7224	Ø24
		1112 - 7225	Ø25
		1112 - 7226	Ø26
•			
	L300 mm	1112 - 7315	Ø15
	L300 IIIII	1112 - 7316	Ø16
		1112 - 7317	Ø17
		1112 - 7318	Ø18
		1112 - 7319	Ø19
		1112 - 7320	Ø20
		1112 - 7321	Ø21
		1112 - 7322	Ø22
		1112 - 7323	Ø23
		1112 - 7324	Ø24
		1112 - 7325	Ø25
		1112 - 7326	Ø26
		1112 7020	220

### Femoral Head

#### Femoral Head

**U2 Femoral Head** 



1206 - 1122	* Ø 22	+ 0
1206 - 1322	* Ø 22	+ 3
1206 - 1522	* Ø 22	+ 6
1206 - 1722	* Ø 22	+ 9
1206 - 1028	Ø 28	- 3
1206 - 1128	Ø 28	+ 0
1206 - 1228	Ø 28	+ 2.5
1206 - 1428	Ø 28	+ 5
1206 - 1628	Ø 28	+ 7.5
1206 - 1828	Ø 28	+ 10
1206 - 1032	Ø 32	- 3
1206 - 1132	Ø 32	+ 0
1206 - 1232	Ø 32	+ 2.5
1206 - 1432	Ø 32	+ 5
1206 - 1632	Ø 32	+ 7.5
1206 - 1832	Ø 32	+ 10
1206 - 1036	Ø 36	- 3
1206 - 1136	Ø 36	+ 0
1206 - 1236	Ø 36	+ 2.5
1206 - 1436	Ø 36	+ 5
1206 - 1636	Ø 36	+ 7.5
1206 - 1836	Ø 36	+ 10

Catalog Number Diameter (mm) Offset (mm)

	Catalog Number	Diameter (mm)	Offset (mm)
BIOLOX® delta	1203 - 5028	Ø 28 S	- 2.5
Ceramic Head	1203 - 5228	Ø 28 M	+ 1
	1203 - 5428	Ø 28 L	+ 4
	1203 - 5032	Ø 32 S	- 3
	1203 - 5232	Ø 32 M	+ 1
	1203 - 5432	Ø 32 L	+ 5
	1203 - 5632	Ø 32 XL	+ 8
	1203 - 5036	Ø 36 S	- 3
	1203 - 5236	Ø 36 M	+ 1
	1203 - 5436	Ø 36 L	+ 5
	1203 - 5636	Ø 36 XL	+ 9
	1203 - 5040	Ø 40 S	- 3
	1203 - 5240	Ø 40 M	+ 1
	1203 - 5440	Ø 40 L	+ 5
	1203 - 5640	Ø 40 XL	+ 9

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<sup>\*</sup> The actual spherical diameter of a 22 mm head is 22.2 mm.

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