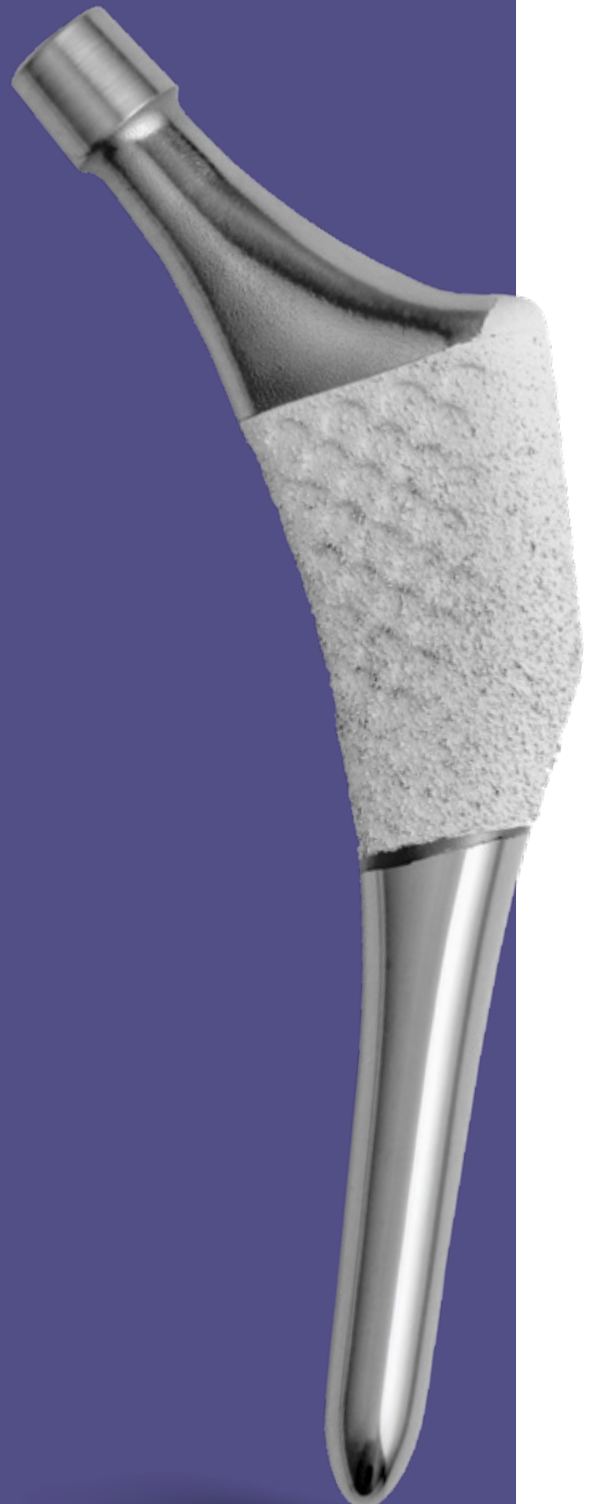


stryker

**ANATO<sup>®</sup>**

**Femoral Hip System**

# Surgical Protocol



## INDICATIONS

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The indications for use of the total hip replacement prostheses include:

- Noninflammatory degenerative joint disease, including osteoarthritis and avascular necrosis;
- Rheumatoid arthritis;
- Correction of functional deformity;
- Revision procedures where other treatments or devices have failed; and,
- Nonunions, femoral neck fractures, and trochanteric fractures of the proximal femur with head involvement that are unmanageable using other techniques.

*Additional indication specific to use of Anato Stems are with compatible Howmedica Osteonics Constrained Liners:*

- When the stem is to be used with compatible Howmedica Osteonics Constrained Liners, the device is intended for use in primary or revision patients at high risk of hip dislocation due to a history of prior dislocation, bone loss, soft tissue laxity, neuromuscular disease, or intra-operative instability.

The Anato Hip Stem is intended for cementless use only and is intended for total and hemi-arthroplasty procedures.

## CONTRAINDICATIONS

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- Active infection or suspected latent infection in or about the hip joint;
- Bone stock that is inadequate for support or fixation of the prosthesis;
- Skeletal immaturity; and,
- Any mental or neuromuscular disorder that would create an unacceptable risk of prosthesis instability, prosthesis fixation failure, or complications in post-operative care.

## WARNINGS AND PRECAUTIONS

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See package insert for warnings, precautions, adverse effects and other essential product information.

Before using Anato Stem instrumentation, verify:

- Instruments have been properly disassembled prior to cleaning and sterilization;
- Instruments have been properly assembled post-sterilization;
- Instruments have maintained design integrity; and,
- Proper size configurations are available.

**For Instructions for Cleaning, Sterilization, Inspection, and Maintenance of Orthopaedic Medical Devices, refer to LSTPI-B and L24002000.**

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# ANATO

## Femoral Hip System

The Anato Hip Stem is intended for cementless, press-fit application. The proximal region of the stem is coated with PureFix HA over a commercially pure titanium plasma spray substrate. The Anato femoral hip system is suitable for various surgical approaches, including direct anterior.

The total system includes:

- Left and right monolithic femoral hip implants
- Neutral and anteverted neck options. There is a 7 degree difference between the two options
- 8 body sizes ranging from size 1 to size 8
- One anatomic stem offset of 130 degrees

The stem is designed for use with Stryker V40 femoral heads and their compatible acetabular components.

This publication sets forth detailed recommended procedures for using Stryker Orthopaedics devices and instruments. It offers guidance that a surgeon should need, but, as with any such technical guide, each surgeon must consider the particular needs of each patient and make appropriate adjustments when and as required.



# STEP 1

## PRE-OPERATIVE PLANNING

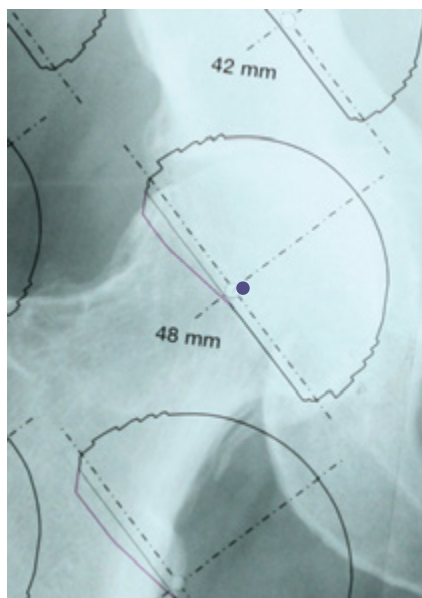


Figure 1

Pre-operative planning aids in the determination of probable implant style and size. The pre-operative planning process should take qualitative and quantitative factors (including patient bone quality, density, and morphology) into consideration in order to evaluate and select the appropriate instrument/implant system for the patient.

When templating the acetabulum, place an acetabulum template over the area on the X-ray. Be sure that the cup is well centered within the acetabulum and the size fills between the tear drop and the superior rim. After templating the acetabulum for size, mark the center of rotation represented by the purple dot (Figure 1).



Figure 2

Optimal femoral stem fit, prosthetic neck length, angle and version can be evaluated with the use of pre-operative X-ray analysis. The following parameters should be determined using an A/P radiograph: stem size, femoral offset, leg length, neck angle, and center of rotation.

The Anato stem provides offset across all sizes through a 130° neck angle. Choose the Anato template for which the stem size achieves adequate metaphyseal fill and recreates the desired leg length and offset (Figure 2). This engagement can be seen when the end of the lateral flare is at the transition between the metaphyses and diaphyses (see arrow in Figure 2). The proximal end of the coated region should then be at the level of the piriformis fossa. The template has markings that indicate the center of the femoral head for



Figure 3

a range of head offset options. The predicted change in leg length and offset is determined by the relative positioning of the center of rotation markings on the femoral and acetabular components. For example, if a given femoral component center of rotation marking is superior to the center of rotation marking of the acetabular component, leg lengthening is predicted. The desired change in leg length is determined by the radiographic leg length inequality that was previously determined with an A/P bilateral film. If 8mm of leg lengthening is required in order to equalize the leg lengths, the center of rotation marking of the femoral component must be 8mm above the center of rotation of the acetabular component. Once the final estimated stem size and position is determined, the neck resection level should be noted (Figure 3). This will be used as a reference during intra-operative neck resection.



### Templates

**ANATO Acetate  
Templates  
Lit# LTEM107**



Acetate templates include 20% magnification.

# STEP 2

## FEMORAL NECK RESECTION

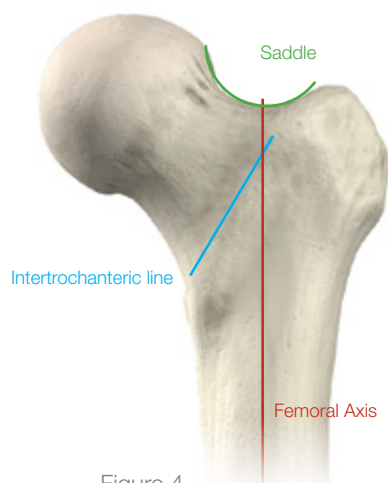


Figure 4

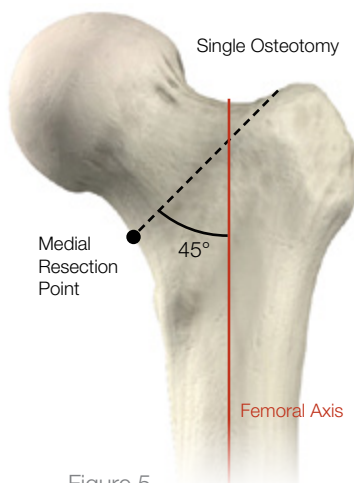


Figure 5

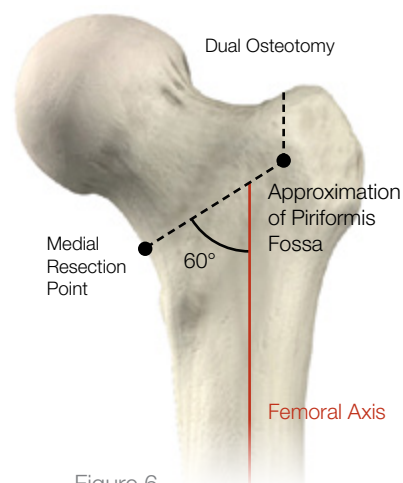


Figure 6

A proper neck resection level directly affects the final placement and fit of the femoral stem. As the visual landmarks for surgical approaches may vary, it is important to note that different landmarks may be used to aid in locating the appropriate resection. (Figure 4). The height of the cut can be adjusted in line with the templating activity in order to reconstruct the correct patient anatomy.

Illustrated is a view of the proximal femur with the anterior landmarks highlighted (Figure 4). Outlined in blue is the intertrochanteric line which represents the origin of the quadriceps muscle and the insertion of the anterior capsule. The second landmark, the saddle (green line), is a shape created by the outline of the superior aspect of the head-neck-greater trochanter. This helps define the starting point for the femoral neck osteotomy.

### Single Osteotomy

The neck osteotomy should start at the saddle proximal to the intertrochanteric line and extend distally at approximately a 45 degree angle with respect to the femoral shaft (Figure 5). If the intertrochanteric line cannot be approximated, an estimation of the femoral axis will also aid in approximating the direction of the cut.

### Dual Osteotomy (Optional)

Illustrated is a view of the proximal femur highlighting the landmarks that are typically visible from the posterior approach (Figure 6). The point represents the insertion area of the piriformis tendon. This neck resection consists of two separate cuts. The first is a vertical cut to the depth of the insertion of the piriformis tendon. The second cut is approximately 60 degrees from the femoral axis to the medial resection cut.



#### Note

The medial resection point will serve as a reference for depth and seating of the broaches and stems in the subsequent steps and operations.

# STEP 3

## PREPARING THE FEMORAL CANAL

To help ensure proper final orientation of the stem, lateral preparation may be required. Retraction of the gluteus medius and removal of a portion of the superior lateral neck and/or piriformis fossa will permit true axial introduction of the instruments and implant. A box osteotome is useful in removing bone from this area. Connect the box osteotome to the broach handle. Use a mallet to strike the end of the broach handle with careful controlled blows to remove bone of the superior femoral neck and open the medullary canal.



Figure 7



### Instruments

**MIS Modular 8mm Hollow Box  
Chisel 4849-8-108**



**Offset Broach Handle  
1020-1460**



# STEP 3

## PREPARING THE FEMORAL CANAL CONTINUED



Figure 8

### Distal Reaming

The Anato hip stem design encourages metaphyseal load transfer. This design enables engagement in the metaphysis and the prevention of distal fixation. If the pre-operative planning anticipates a potential contact between the stem and the diaphyseal cortex then it is recommended to ream with flexible reamers up to the diameter corresponding to the templated implant size in Table 1 below. This decision may also be made at the time of broaching.

**TABLE 1: RECOMMENDED REAMING DIAMETER**

| STEM SIZE | DISTAL STEM DIAMETER (MM) | RECOMMENDED REAMING DIAMETER (MM) |
|-----------|---------------------------|-----------------------------------|
| 1         | 7.6                       | 10.0                              |
| 2         | 7.9                       | 10.0                              |
| 3         | 8.4                       | 10.0                              |
| 4         | 9.4                       | 11.0                              |
| 5         | 10.4                      | 12.0                              |
| 6         | 11.7                      | 13.0                              |
| 7         | 13.5                      | 14.0                              |
| 8         | 15.2                      | 16.0                              |



#### Note

The BixCut IM fixed-head system with modified trickle fitting, can be used to prepare the femur to receive an Anato hip stem. Be sure to use the 0227 BixCut family of reamers. (See instrument list in the Appendix for full list of part numbers).



#### Instrument

**BixCut Reamer 6mm – 16mm  
0227-XXXX**



#### Note

It is recommended that the starting reamer diameter be 2mm smaller than the final recommended reaming diameter as described in column three of Table 1 above.

#### Guide Wire Information:

For BixCut Reamers sizes 6 & 7, the compatible guide wire is 2.5mm in diameter (part #1806-0084S).

All other BixCut Reamers are compatible with guide wires with a 3.0mm diameter (part #1806-0085S).



# STEP 4

## BROACHING

Assemble the broach to the broach handle. An audible click will be heard when the broach is secured onto the broach handle.

Begin with the size 1 broach and progressively increase the broach size until the appropriate amount of size is achieved (Figure 9).



### Note

Additional bone preparation may be performed with standard surgical instruments, such as curettes, rongeurs, etc.



### Note

Apply a lateral force to the broach during impaction to avoid a varus position. The broach will determine the size and the position of the final implant.



### Instruments

**Offset Broach Handle**  
1020-1460



**Anato Broach Size 1-8 Left/Right**  
4845-2-9XX  
4845-7-9XX



Figure 9

Appropriate fill will be denoted by a change in pitch, tactile resistance, or when the broach ceases to advance. Verify a secure fit by ensuring that the broach has axial and rotational stability. With proper cortical contact, the broach should not twist or turn relative to the femur. If there is movement, a larger size broach may be needed, or distal reaming may be necessary as the broach may be contacting distally in diaphyseal bone.

Generally, if the broach sinks below the level of the neck resection, advance to the next larger broach. Relying on the neck resection height alone for final seating height may lead to improper sizing and inadequate stem fixation. The final broach should seat firmly in the metaphysis.

Upon reaching the final size and depth of the broach, detach the broach handle from the broach, leaving the broach fully seated in the femoral canal.



### Note

If the broach is unstable either before or after trial reductions the use of a larger broach is recommended. If it is suspected that the broach is hanging up distally, distal reaming may be required.



### Tip

The appropriate size is achieved when the broach stops advancing and the shoulder seats at approximately the same level as the trochanteric fossa. The last tooth of the broach corresponds to the upper limit of the coating on the stem as seen in Figure 10.



# STEP 4

## BROACHING CONTINUED

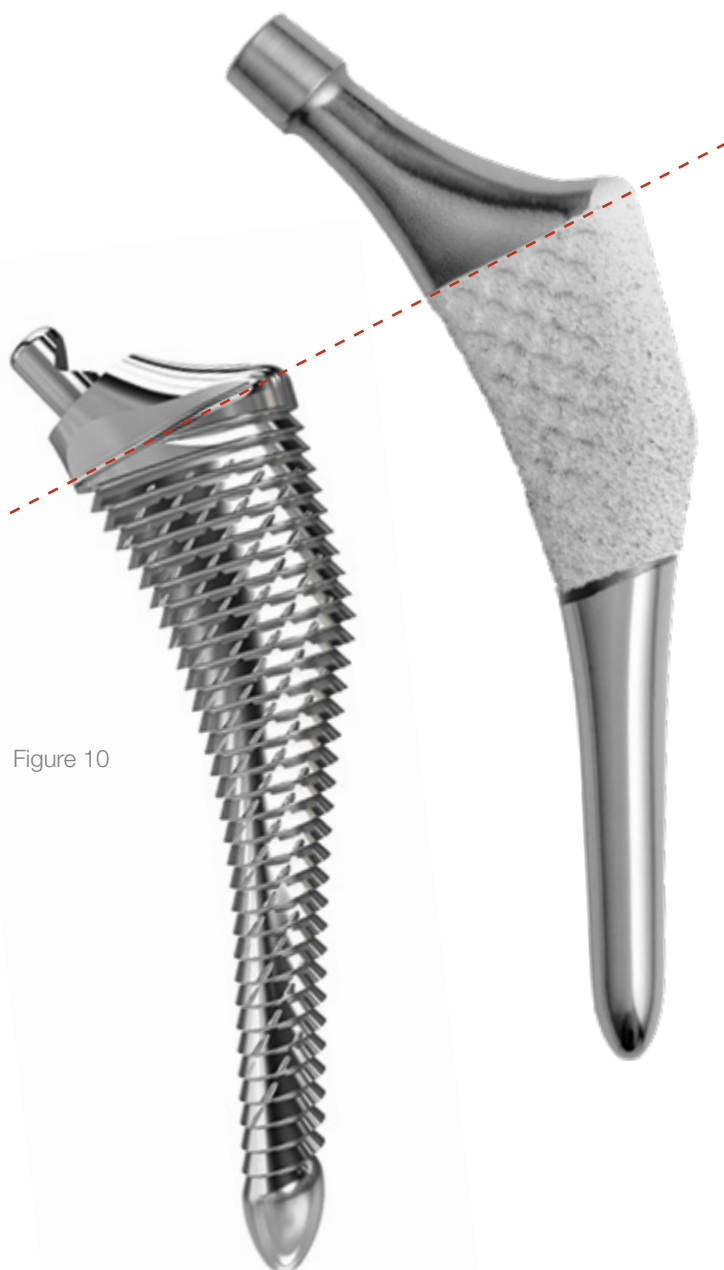


Figure 10



### Note

Please refer to the appendix for additional broach handle information.

### OPTIONAL STEP

Take an intra-operative x-ray if needed to evaluate alignment and fit of the selected implant.

### Optional Instruments:

The existing ABG II Monolithic hip stem broach sizes 6-8 are compatible with this system, since they provide the same proximal fit.

| PART NUMBER | DESCRIPTION                   |
|-------------|-------------------------------|
| 4845-2-956  | ABGII MIS Broach Size 6 Right |
| 4845-2-957  | ABGII MIS Broach Size 7 Right |
| 4845-2-958  | ABGII MIS Broach Size 8 Right |
| 4845-2-966  | ABGII MIS Broach Size 6 Left  |
| 4845-2-967  | ABGII MIS Broach Size 7 Left  |
| 4845-2-968  | ABGII MIS Broach Size 8 Left  |

Note that the ABG II Broaches Size 6-8 may remove additional bone distal to the implant in patients with tighter distal femoral canals.

# STEP 5

## TRIAL REDUCTION






Figure 11

### Selection of neck trial (anteverted or neutral) and assembly of neck trial onto broach

The trial assembly, which consists of the broach, trial neck, and trial head (Figure 11), is used to provide an evaluation of the hip mechanics during a trial reduction. Before the selection and implantation of the final component, modifications to the pre-operative plan, in terms of neck length and/or head diameter, can be made. With the broach left in the femur, the surgeon can adjust the biomechanics through version options and head offsets. These can be balanced to achieve good internal/external rotational mobility in extension and good stability of the hip in flexion/internal rotation/adduction and in extension/external rotation.

Based on the chart below, select a neck trial which has the same version as the planned monolithic implant option.

**TABLE 2: NECK TRIAL SELECTION GUIDE**

| COLOR  | VERSION                   | RIGHT OR LEFT  |
|--------|---------------------------|--|
| Silver | Anteverted<br>(7 degrees) | Right/Left  |
| Black  | Neutral                   | Right       |
| Gold   | Neutral                   | Left        |



### Note

The same neck trials can be used for all implant sizes because the implant neck lengths are built into the broaches.



### Instruments

**Anato Left Neutral  
Neck Trial**  
4845-7-970



**Anato Right Neutral  
Neck Trial**  
4845-7-971



**Anato Left/Right  
Anteverted Neck Trial**  
4845-7-973



# STEP 5

## TRIAL REDUCTION CONTINUED



Figure 12

Assemble the neck trial onto the broach. Next, assemble a V40 head trial onto the neck trial (Figure 12).

Femoral heads come in multiple offsets and are different for each femoral head implant material and diameter (see Table 3). For this reason, final head material should be chosen prior to trial reduction. Offsets add or subtract from the base neck length of the implant and help to achieve the desired leg length and offset.

After the trial has been assembled to the broach, perform a trial reduction of the hip to evaluate the biomechanics. Upon confirmation of the selected components, remove the trial head and trial neck, and reassemble the broach handle to the broach and remove it from the femoral canal. The final broach size determines the correct implant size.

TABLE 3: HEAD COMPATIBILITY GUIDE

| HEAD   | HEAD SIZE | HEAD OFFSETS                 |
|--|-----------|------------------------------|
| CoCr V40   | 22        | +0, +3, +8                   |
|  | 26        | -3, +0, +4, +8               |
|  | 28        | -4, +0, +4, +8               |
|  | 32        | -4, +0, +4, +8               |
|  | 36        | -5, +0, +5                   |
|  | 40        | -4, +0, +4, +8               |
|  | 44        | -4, +0, +4, +8               |
| Alumina V40  | 28        | -2.7, +0, +4                 |
|  | 32        | -4, +0, +4                   |
|  | 36        | -5, +0, +5                   |
| Alumina C-Taper<br>(when used with C-Taper<br>Adaptor Sleeve-catalog<br>#17-0000E)                   | 28        | -2.5, +0, +5                 |
|  | 32        | -2.5, +0, +5                 |
|  | 36        | -5, +0, +5                   |
| delta BIOLOX V40   | 28        | -4, -2.7, +0, +4             |
|  | 32        | -4, +0, +4                   |
|  | 36        | -5, -2.5, +0, +2.5, +5, +7.5 |
| delta BIOLOX C-Taper<br>(when used with C-Taper Sleeve<br>- catalog #17-0000E)                       | 28        | -2.5, +0, +2.5, +5           |
|  | 32        | -2.5, +0, +2.5, +5           |
|  | 36        | -5, -2.5, +0, +2.5, +5, +7.5 |
| delta BIOLOX Universal Taper<br>(when used with<br>Universal Taper Sleeve -<br>catalog #6519-T-XXXX) | 28        | -2.5, +0, +4                 |
|  | 32        | -2.5, +0, +4                 |
|  | 36        | -2.5, +0, +4                 |
|  | 40        | -2.5, +0, +4                 |
|  | 44        | -2.5, +0, +4                 |

\*+0mm is the maximum offset allowed for the size 1 stem

\*+6mm is the maximum offset allowed for the size 2 stem

\*+8mm is the maximum offset allowed for the size 3-8 stems



### Note

Ensure that the broach post and the V40 trunnion are clear of debris prior to assembling the neck and head trials.



### Note

For additional acetabular and head compatibility information please see Table 8 in the Appendix.

For additional instruction on acetabular and head implantation, please see the respective surgical technique for the compatible products referenced above.



### Note

Head trials with an "R" suffix are made from a radiopaque material, making them visible on X-ray. Instrument 6264-x-xxxR V40 head trial



### Instruments

V40 Head Trial  
6264-x-xxxR



# STEP 6

## IMPLANTING THE STEM

The stem can be inserted by hand until approximately 1 cm of the coated region lies above the final broach position. Final implant seating is achieved by gently impacting the stem using the stem impactor (Figure 13). The use of the bullet tipped femoral impactor is intended to allow for rotation of the stem to follow the shape of the femoral canal.

Figure 13



### Note

The surgeon should **NOT** attempt to continue impacting the femoral component if visual and auditory clues indicate that the stem is firmly seated in the canal. These clues, rather than the broach seating level, should be used to determine the final seating height of the implant. Continued aggressive impaction could lead to femoral fracture. In the event that dense bone is encountered intra-operatively and compounding anatomical factors are present, the seating of the implant may not be consistent with the level of the broach due to the viscoelastic nature of the femoral bone.



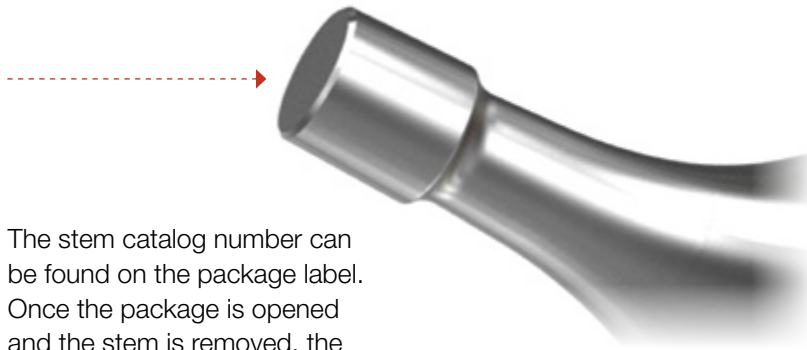
### Instruments

**Stem Impactor**  
4842-1-000



# STEP 6

## IMPLANTING THE STEM CONTINUED



The stem catalog number can be found on the package label. Once the package is opened and the stem is removed, the stem size and part number can be found on the trunnion.

Figure 14



### Note

Prior to implanting the final stem and femoral head, check the implants for potential damage. Ensure that the final stem matches the last broach used. Use the markings on the face of the trunnion to verify the stem size and taper type.

### FACE OF A SIZE 1 LEFT ANTEVERTED ANATO STEM



TABLE 4: IMPLANT PART NUMBER REFERENCE GUIDE

| CATALOG NUMBER | GUIDE  |
|----------------|--|
| 4845-7-XYZ     | X indicates LEFT (2) or RIGHT (1) Implant          |
|                | Y indicates Version –Anteverted (0) or Neutral (1) |
|                | Z indicates Size of Implant (1-8)                  |

# STEP 7

## FINAL REDUCTION



Figure 15

Prior to final head assembly, neck length/head offset may be re-evaluated using a V40 head trial. Place the head trial on to the stem neck taper and reduce the hip. Evaluate leg length and soft tissue tension. Remove the head trial and dry the implant trunnion with a laparotomy sponge or sterile towel.

Select the appropriate corresponding V40 femoral head or sleeve and place it onto the dry trunnion of the femoral stem with a slight twist. Impact the head with moderate impactions using the head impactor (Figure 15).

Verify the head is secure on the trunnion after head impaction by applying traction to the head confirming stability on the trunnion.

The use of a V40 universal adaptor sleeve is necessary when using a BIOLOX *delta* universal taper ceramic femoral head with an Anato stem. After completing the trialing process, intra-operatively assemble the adaptor sleeve to the femoral stem manually. The universal adaptor sleeve must be fully seated on the stem trunnion before the head is assembled.



### Note

Ensure that the V40 taper is clean prior to assembling the head trial or head implant



### Warnings

In no instance should any attempt be made to preassemble the adaptor sleeve inside the BIOLOX *delta* universal ceramic head. Intra-operatively assemble the BIOLOX *delta* universal taper ceramic head onto the sleeved femoral stem and set with moderate blows using the Stem Head Impactor (1104- 1000). Care must be taken to avoid excessive impact forces when assembling the ceramic head to the sleeved femoral component.

The wound must be fully lavaged prior to wound closure in order to ensure the removal of any debris that was potentially generated during surgery.

Reduce the femoral head into the acetabular cup and re-check for range of motion and soft tissue tension. The surgical site is then closed according to surgeon preference.

**TABLE 5: UNIVERSAL ADAPTOR SLEEVES – TITANIUM**

| CATALOG NUMBER | OFFSET (MM) | TAPER |
|----------------|-------------|-------|
| 6519-T-025     | -2.5        | V40   |
| 6519-T-100     | +0          | V40   |
| 6519-T-204     | +4          | V40   |



### Instruments

**Head and Neck Impactor**  
4845-5-520



**V40 Head Trial**  
6264-x-xxxR



# STEP 7

## FINAL REDUCTION CONTINUED



Figure 16  
Optional Step

### OPTIONAL STEP: Extraction

When using the stem extractor, secure it below the neck so that it is oriented beneath the taper as shown (Figure 16). Mallet blows can be used on the underside of the strike plate to remove the stem. If additional force is required, the use of the McReynolds slap hammer may be used to aid in removing the stem. This instrument can be used in conjunction with the McReynolds slap hammer by connecting it to 6869-1-000 (in conjunction with 6869-2-000 and 6869-3-000).

### Optional Instruments:

| PART NUMBER | DESCRIPTION       |
|-------------|-------------------|
| 4845-7-530  | Stem extractor    |
| 6869-1-000  | McReynolds Driver |
| 6869-2-000  | McReynolds Driver |
| 6869-3-000  | McReynolds Driver |



### Warnings

The use of this device may cause damage to the implant and reduce its service life. As such, if the stem extractor is used to remove an implant, the implant must not be reused.



### Instruments

**Stem Extractor**  
**4845-7-530**





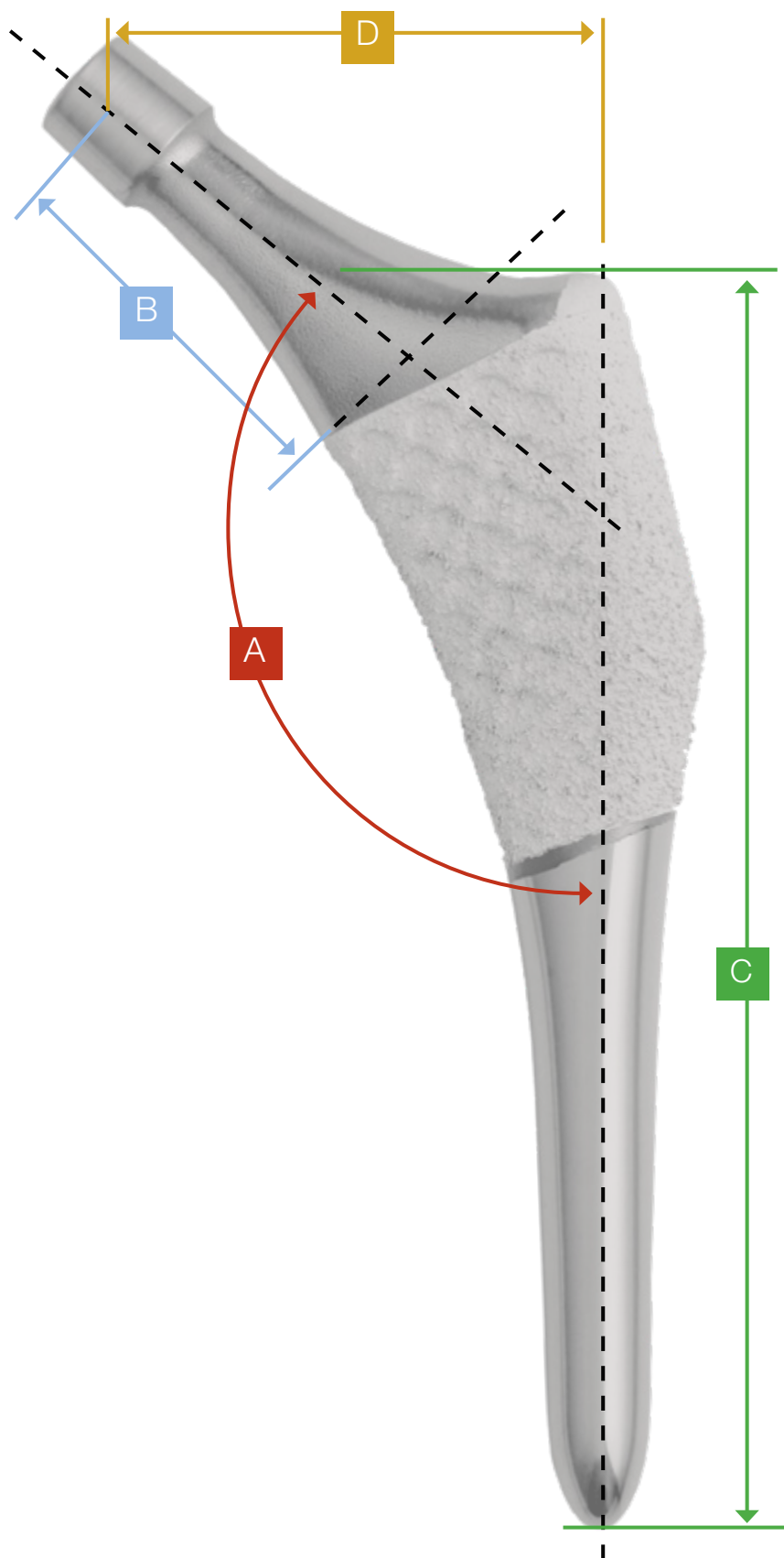


### Note

Stem Length is measured from the top of the lateral shoulder to the distal tip.

**TABLE 6: ANATO HIP STEM OFFSET TABLE**

|                |            |                         |      | A                      | B                | C                | D                             |
|----------------|------------|-------------------------|------|------------------------|------------------|------------------|-------------------------------|
| CATALOG NUMBER |            | STEM DESCRIPTION        | SIZE | NECK ANGLE DEGREE SIZE | NECK LENGTH (MM) | STEM LENGTH (MM) | FEMORAL OFFSET WITH +0MM HEAD |
| ANTEVERTED     | 4845-7-101 | Size 1 Right Anteverted | 1    | 130°                   | 28               | 99               | 37                            |
|                | 4845-7-102 | Size 2 Right Anteverted | 2    |                        | 28               | 99               | 39                            |
|                | 4845-7-103 | Size 3 Right Anteverted | 3    |                        | 32               | 110              | 42                            |
|                | 4845-7-104 | Size 4 Right Anteverted | 4    |                        | 32               | 115              | 44                            |
|                | 4845-7-105 | Size 5 Right Anteverted | 5    |                        | 34               | 120              | 44                            |
|                | 4845-7-106 | Size 6 Right Anteverted | 6    |                        | 34               | 120              | 47                            |
|                | 4845-7-107 | Size 7 Right Anteverted | 7    |                        | 36               | 120              | 50                            |
|                | 4845-7-108 | Size 8 Right Anteverted | 8    |                        | 38               | 120              | 53                            |
|                | 4845-7-201 | Size 1 Left Anteverted  | 1    |                        | 28               | 99               | 37                            |
|                | 4845-7-202 | Size 2 Left Anteverted  | 2    |                        | 28               | 99               | 39                            |
|                | 4845-7-203 | Size 3 Left Anteverted  | 3    |                        | 32               | 110              | 42                            |
|                | 4845-7-204 | Size 4 Left Anteverted  | 4    |                        | 32               | 115              | 44                            |
|                | 4845-7-205 | Size 5 Left Anteverted  | 5    |                        | 34               | 120              | 44                            |
|                | 4845-7-206 | Size 6 Left Anteverted  | 6    |                        | 34               | 120              | 47                            |
|                | 4845-7-207 | Size 7 Left Anteverted  | 7    |                        | 36               | 120              | 50                            |
|                | 4845-7-208 | Size 8 Left Anteverted  | 8    |                        | 38               | 120              | 53                            |
|                |            |                         |      |                        |                  |                  |                               |
| NEUTRAL        | 4845-7-111 | Size 1 Right Neutral    | 1    | 130°                   | 28               | 99               | 37                            |
|                | 4845-7-112 | Size 2 Right Neutral    | 2    |                        | 28               | 99               | 39                            |
|                | 4845-7-113 | Size 3 Right Neutral    | 3    |                        | 32               | 110              | 42                            |
|                | 4845-7-114 | Size 4 Right Neutral    | 4    |                        | 32               | 115              | 44                            |
|                | 4845-7-115 | Size 5 Right Neutral    | 5    |                        | 34               | 120              | 44                            |
|                | 4845-7-116 | Size 6 Right Neutral    | 6    |                        | 34               | 120              | 47                            |
|                | 4845-7-117 | Size 7 Right Neutral    | 7    |                        | 36               | 120              | 50                            |
|                | 4845-7-118 | Size 8 Right Neutral    | 8    |                        | 38               | 120              | 53                            |
|                | 4845-7-211 | Size 1 Left Neutral     | 1    |                        | 28               | 99               | 37                            |
|                | 4845-7-212 | Size 2 Left Neutral     | 2    |                        | 28               | 99               | 39                            |
|                | 4845-7-213 | Size 3 Left Neutral     | 3    |                        | 32               | 110              | 42                            |
|                | 4845-7-214 | Size 4 Left Neutral     | 4    |                        | 32               | 115              | 44                            |
|                | 4845-7-215 | Size 5 Left Neutral     | 5    |                        | 34               | 120              | 44                            |
|                | 4845-7-216 | Size 6 Left Neutral     | 6    |                        | 34               | 120              | 47                            |
|                | 4845-7-217 | Size 7 Left Neutral     | 7    |                        | 36               | 120              | 50                            |
|                | 4845-7-218 | Size 8 Left Neutral     | 8    |                        | 38               | 120              | 53                            |



The Anato hip stem utilizes the same broach handle connection as the Accolade TMZF (LASST), Accolade II (LSP76) and ABG II Monolithic hip stem (LSP77). This is also the same broach handle connection as seen in the direct anterior instrument set (DAA-SS-1).

**TABLE 7: BROACH HANDLE OPTIONS**

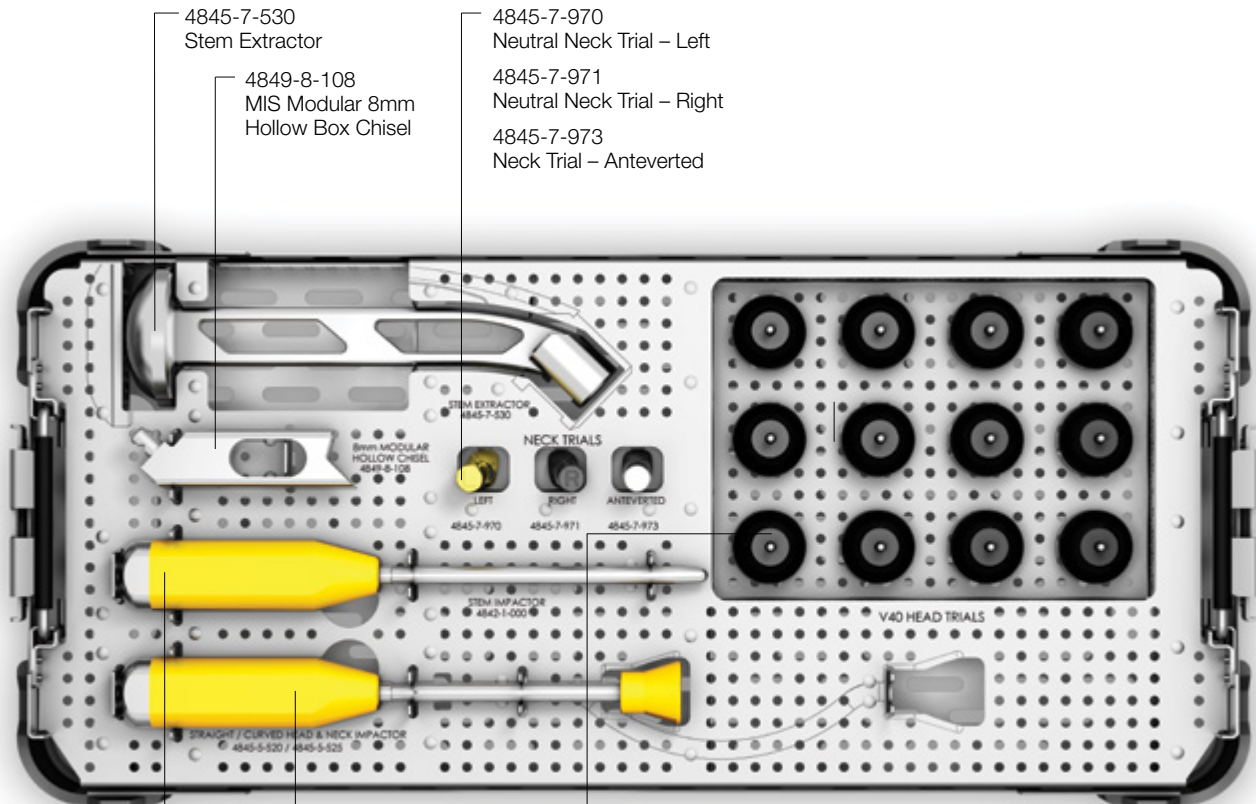
| PART DESCRIPTION       | PART NUMBER |
|------------------------|-------------|
| Offset Broach Handle   | 1020-1460   |
| Straight Broach Handle | 1440-1460   |

**TABLE 8: ANATO HIP STEM COMPATIBLE FEMORAL HEADS**

| HEAD                                      | HEAD DIAMETER (MM) | OFFSET (MM)                  |
|---|--------------------|------------------------------|
| V40 BIOLOX <i>delta</i>                   | 28                 | -4.0, -2.7, +0, +4.0         |
| V40 BIOLOX <i>delta</i>                   | 32                 | -4.0, +0, +4.0               |
| V40 BIOLOX <i>delta</i>                   | 36                 | -5, -2.5, +0, +2.5, +5, +7.5 |
| Universal Taper, BIOLOX <i>delta</i> Head | 28, 32, 36, 40, 44 |                              |
| Universal Taper Sleeves - V40 stems       |                    | -2.5, +0, +4                 |
| V40 CoCr                                  | 22                 | +0, +3, +8                   |
| V40 CoCr                                  | 26                 | -3, +0, +4, +8               |
| V40 CoCr                                  | 28                 | -4, +0, +4, +8               |
| V40 CoCr                                  | 32                 | -4, +0, +4, +8               |
| V40 LFIT CoCr                             | 22                 | +0, +3, +8                   |
| V40 LFIT CoCr                             | 26                 | -3, +0, +4, +8               |
| V40 LFIT CoCr                             | 28                 | -4, +0, +4, +8               |
| V40 LFIT CoCr                             | 32                 | -4, +0, +4, +8               |
| V40 LFIT CoCr                             | 36                 | -5, +0, +5                   |
| V40 LFIT CoCr                             | 40                 | -4, +0, +4, +8               |
| V40 LFIT CoCr                             | 44                 | -4, +0, +4, +8               |
| Alumina V40 Head                          | 28                 | -2.7, +0, +4                 |
| Alumina V40 Head                          | 32                 | -4, +0, +4                   |
| Alumina V40 Head                          | 36                 | -5, +0, +5                   |
| C-Taper Alumina                           | 28, 32             | -2.5, +0, +5                 |
| C-Taper Alumina                           | 36                 | -5, +0, +5                   |
| C-Taper Delta                             | 28, 32             | -2.5, +0, +2.5, +5           |
| C-Taper Delta                             | 36                 | -5, -2.5, +0, +2.5, +5, +7.5 |
| Unitrax V40 Head                          | 38, 40-56, 58, 61  | +0                           |
| Unitrax V40 Monolithic Adapter            |                    | -4, +0, +4, +8               |
| V40/C-taper Adapter Sleeve                |                    |                              |

- +0mm is the maximum offset allowed for the size 1 stem
- +6mm is the maximum offset allowed for the size 2 stem
- +8mm is the maximum offset allowed for the size 3-8 stems

### 4845-7-602 Anato Top Tray General Instruments



4845-7-530  
Stem Extractor

4849-8-108  
MIS Modular 8mm  
Hollow Box Chisel

4845-7-970  
Neutral Neck Trial – Left

4845-7-971  
Neutral Neck Trial – Right

4845-7-973  
Neck Trial – Anteverted

4845-5-520  
Head / Neck Impactor

**Optional**  
4845-5-525  
Curved Head/Neck  
Impactor

4842-1-000  
Stem Impactor

6264-8-028R  
28mm -4mm V40 Head Trial

6264-8-928R  
28mm -2.7mm V40 Head Trial

6264-8-128R  
28mm +0mm V40 Head Trial

6264-8-228R  
28mm +4mm V40 Head Trial

6264-8-328R  
28mm +8mm V40 Head Trial

6264-8-428R  
28mm +12mm V40 Head Trial

6264-8-032R  
32mm -4mm V40 Head Trial

6264-8-632R  
32mm -2.5mm V40 Head Trial

6264-8-132R  
32mm +0mm V40 Head Trial

6264-8-232R  
32mm +4mm V40 Head Trial

6264-8-332R  
32mm +8mm V40 Head Trial

6264-8-432R  
32mm +12mm V40 Head Trial

6264-8-036R  
36mm -5mm V40 Head Trial

6264-8-436R  
36mm -2.5mm V40 Head Trial

6264-8-136R  
36mm +0mm V40 Head Trial

6264-8-536R  
36mm +2.5mm V40 Head Trial

6264-3-236R  
36mm +4mm V40 Head Trial

6264-8-236R  
36mm +5mm V40 Head Trial

6264-8-736R  
36mm +7.5mm V40 Head Trial

4845-7-603 **Anato Bottom Tray BixCut Reamers**

0227-6080  
BixCut Reamer 8mm

0227-6090  
BixCut Reamer 9mm

0227-6100  
BixCut Reamer 10mm

0227-6110  
BixCut Reamer 11mm

0227-8120  
BixCut Reamer 12mm

0227-8130  
BixCut Reamer 13mm

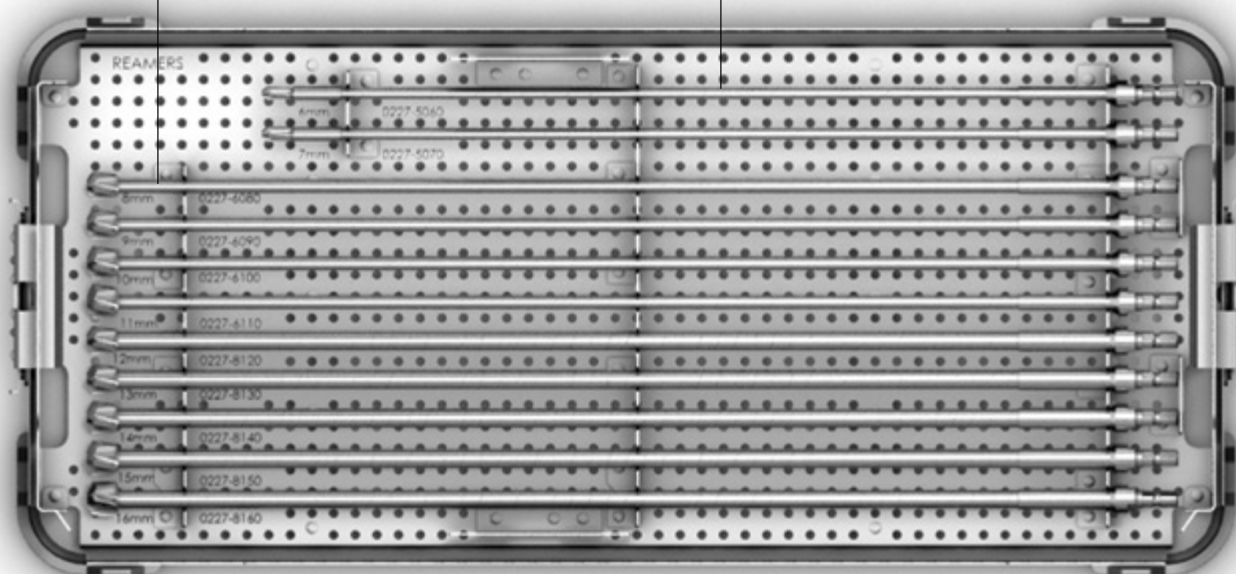
0227-8140  
BixCut Reamer 14mm

0227-8150  
BixCut Reamer 15mm

0227-8160  
BixCut Reamer 16mm

0227-5060  
BixCut Reamer 6mm

0227-5070  
BixCut Reamer 7mm



1806-0080S  
3.0mm x 800mm  
Ball Tip Guide Wire

1806-0083S  
2.5mm x 800mm  
Ball Tip Guide Wire

4845-7-601 **ANATO Broach Tray**

4845-7-600 **Stryker Case**

4845-2-961  
ANATO Broach Size 1 Left

4845-2-962  
ANATO Broach Size 2 Left

4845-2-963  
ANATO Broach Size 3 Left

4845-2-964  
ANATO Broach Size 4 Left

4845-2-965  
ANATO Broach Size 5 Left

4845-7-966  
ANATO Broach Size 6 Left

4845-7-967  
ANATO Broach Size 7 Left

4845-7-968  
ANATO Broach Size 8 Left

The longer broaches mentioned in step 4, broaching, can also fit into this tray in the place of the comparable size and side broach.

4845-2-956 ABGII MIS Broach Size 6 Right

4845-2-957 ABGII MIS Broach Size 7 Right

4845-2-958 ABGII MIS Broach Size 8 Right

4845-2-966 ABGII MIS Broach Size 6 Left

4845-2-967 ABGII MIS Broach Size 7 Left

4845-2-968 ABGII MIS Broach Size 8 Left

4845-2-951  
ANATO Broach Size 1 Right

4845-2-952  
ANATO Broach Size 2 Right

4845-2-953  
ANATO Broach Size 3 Right

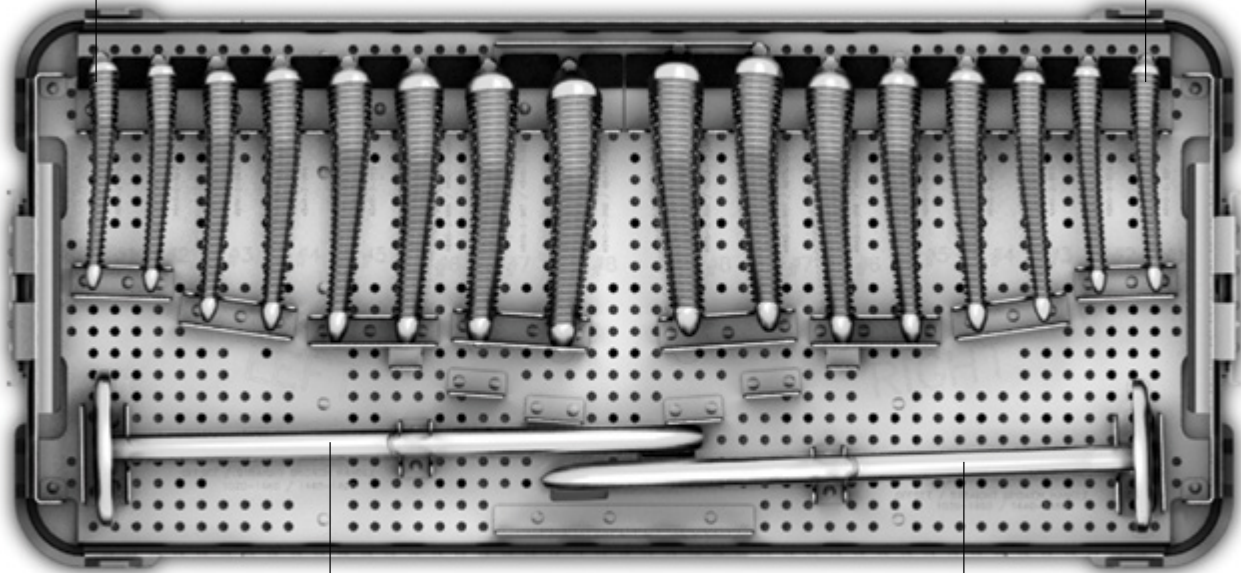
4845-2-954  
ANATO Broach Size 4 Right

4845-2-955  
ANATO Broach Size 5 Right

4845-7-956  
ANATO Broach Size 6 Right

4845-7-957  
ANATO Broach Size 7 Right

4845-7-958  
ANATO Broach Size 8 Right



1020-1460  
Offset Broach Handle

**Optional**  
1440-1460  
Straight Broach Handle

NOTES



NOTES

**stryker**

325 Corporate Drive  
Mahwah, NJ 07430  
t: 201 831 5000

**stryker.com**

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