



Bio-Moore® II
Modular Prosthesis

BIOMET
ORTHOPEDICS, INC.

Bio-Moore II

Biomet's Bio-Moore® II Hip System effectively addresses inventory and cost considerations without sacrificing modularity or surgical flexibility.

Developed from a proven design, Biomet's Bio-Moore® II Hip enhances the modularity and flexibility needed for successful hip arthroplasty. The Bio-Moore® II System allows the surgeon to use the stem as an endoprosthesis, Bi-Polar or total hip. Constructed from titanium alloy, its I-beam design and roughened finish provide for excellent fixation.

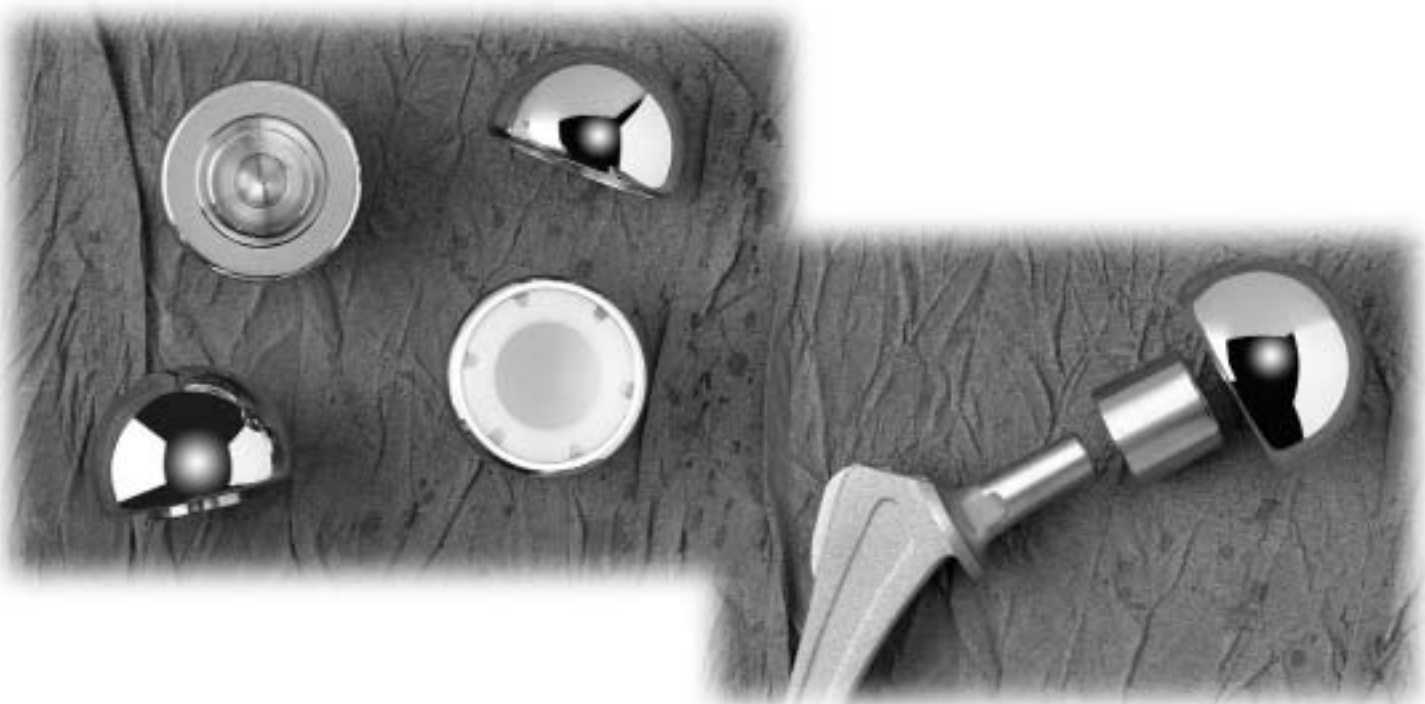
Sizing Flexibility Ensures Proper Fit

The Bio-Moore® II is offered in both solid or fenestrated configurations. A lateral fin is incorporated into the design to enhance the implant's stability. Resistance to rotational forces is further enhanced with the modified I-beam stem design and the textured Interlok® surface. A complete set of provisionals allows for proper implant-to-patient sizing regardless of which stem configuration is selected.

The Bio-Moore® II offers four sizes of stem diameters: 10, 12, 14 and 16mm in a solid stem design. Fenestrated stems are available in 12, 14 and 16mm diameters. Stem length is a uniform 6.5 inches (165mm) per size.

Simple Instrumentation Ensures Ease of Implantation

The broach-only technique and simple-to-use insertion and trialing instruments are designed to provide consistent implant fit.



Biomet, as the manufacturer of this device, does not practice medicine and does not recommend any particular surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and utilizing the appropriate techniques for implanting the prosthesis in each individual patient. Biomet is not responsible for selection of the appropriate surgical technique to be utilized on an individual patient.

Biomet's Bio-Moore® II Modular Prosthesis can be utilized as a uni-polar, bi-polar or total hip arthroplasty.

RingLoc® Bi-Polar

Utilizing Biomet's time-tested RingLoc® technology, the bi-polar cup will work with any of Biomet's 28mm modular heads. This allows any one of seven different neck lengths to be selected for optimum leg length adjustment and soft tissue tension. Seventeen bi-polar outer shell diameters ranging from 41mm to 55mm in 1mm increments are available, plus a 58mm diameter option to complete the system.

Endo II Endoprosthesis Head

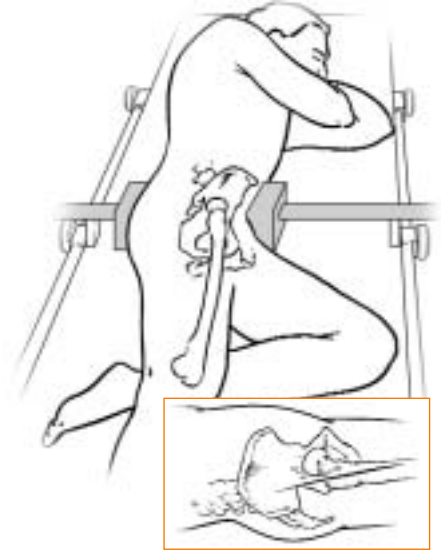
Maintaining flexibility is the cornerstone to the Endo II System, Biomet's endoprosthesis head. There are 17 endoprosthetic heads that can also be utilized with the Bio-Moore® II System. Similar to the bi-polar shells, they range in size from 41mm to 55mm in 1mm increments and also include 58mm and 61mm diameter heads. Taper inserts provide alternative neck lengths of -6, -3, Std., +3 and +6mm. Should revision from a bi-polar or endoprosthesis ever become necessary, the Bio-Moore® II can be utilized as a total hip and is compatible with any of Biomet's acetabular components. The "Type I" neck taper on the stem will accept Biomet's 22, 26, 28 and 32mm femoral heads.



Bio-Moore® II Surgical Technique

Bio-Moore® II Modular Prosthesis

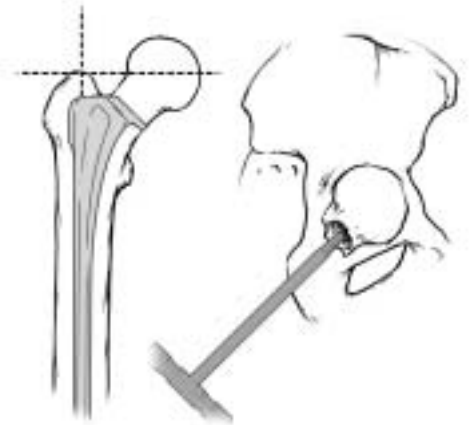
Place the patient in a lateral decubitus position with the affected hip up. Both a lateral approach and standard posterior approach can be accommodated. It is imperative that the pelvis remain stable, but that the operated leg be mobile. Once the soft tissues and capsule have been opened, gently dislocate the femoral head. Place a large skid under the neck for better exposure. The surgical technique proceeds as follows:



Step 1

Resecting the Femoral Head

The provisional can be used as a template for the resection level. If the hip is fractured, remove the head/neck fragment with a corkscrew.



Step 2

Gauge Acetabulum (Bi-Polar, Uni-Polar)

Sizing of the acetabulum is conducted by using provisional shells that are threaded onto the gauge handle. These provisionals are utilized for both bi-polar and uni-polar applications. Both implants and provisionals are sized from 41–55mm in 1mm increments and 58 and 61mm (uni-polar only) are also offered.



Step 3

Opening the Femoral Canal

A hollow chisel is introduced into the trochanteric fossa. This initial opening is made in-line with the proximal shaft axis.



Step 4

Broaching the Proximal Femur

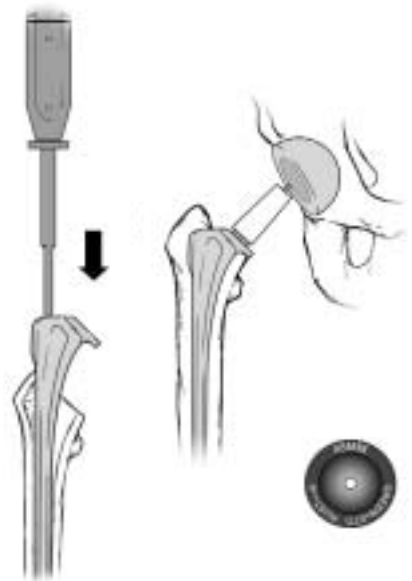
The mediolateral axis of the broach should be parallel to the anatomic mediolateral axis of the femoral neck. Each broach should be inserted to the depth of the teeth. Sequential broaching should be performed to the preoperatively determined size. Failure to properly seat the broach to its full depth will result in the implant being too tight and sitting proud. Additional broaching may be needed. The broaches and implants are sized 1:1. This will allow for an excellent press-fit. Allowing a 2mm differential between the final broach and implant when cementing will provide a 1mm circumferential cement mantle. Example: Broach to a size 14mm. Cement in a size 12mm implant.



Step 5

Trial Reduction

Once the canal has been broached, a trial reduction with the appropriate size femoral provisional trial component and acetabular component, which were determined in Step 2, may be carried out. When utilizing uni-polar components, Biomet offers 5 neck lengths, -6, -3, Std., +3 and +6mm. By utilizing the aluminum trial shells, the proper head/neck provisional may be selected. Aluminum bi-polar trial shells and trial posts (-6, -3, Std., +3, +6) are used to trial for either uni-polar or bipolar implants. Example: Through trialing it has been determined that a 45mm uni-polar will be used. With the 45mm trial selected, determine the proper neck length, usually beginning with a Std. or white trial head/neck. In the same fashion, when trialing for a Bi-Polar prosthesis, use any of Biomet's 7 neck lengths and obtain proper joint stability. When performing a total hip arthroplasty, follow the appropriate surgical technique to prepare the acetabulum. Trial with the appropriate head provisional to obtain suitable leg length and joint stability.



Bio-Moore® II Surgical Technique

Bio-Moore® II Modular Prosthesis

Step 6a & 6b

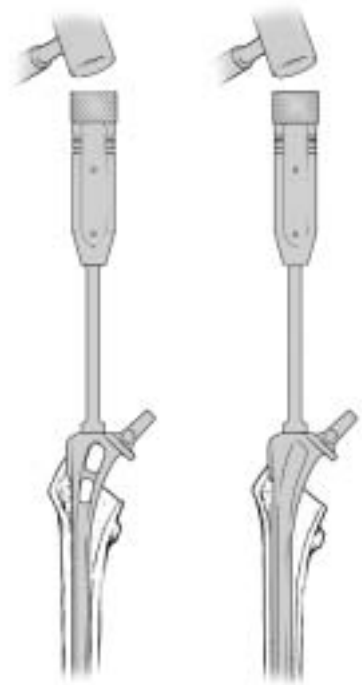
Inserting a Cementless Bio-Moore® II Component

After extracting the broach or provisional, select the Bio-Moore® II implant that corresponds to the last size broach used. Example: 12mm broach used, select a 12mm Bio-Moore® II implant. The stems are available in 10, 12, 14 and 16mm solid and 12, 14 and 16mm fenestrated diameters. The femoral inserter is placed in the proximal insertion slots on the implant and the implant is fully seated.

Note: It is recommended that you cement the solid stem.

Inserting a Cemented Bio-Moore® II Component

After extracting the broach or provisional, select the Bio-Moore® II implant that is 2mm smaller than the final broach used. This will provide for a 1mm circumferential cement mantle. Example: If broaching to 14mm, select a 12mm Bio-Moore® II implant and cement into place. Before inserting the implant, thoroughly cleanse the femoral canal of debris and insert cement plug below tip of implant. Inject cement in a retrograde manner from the distal plug upward. Place inserter onto stem and seat component until the collar is flush with the femoral calcar.



Step 7

Final Trial Reduction

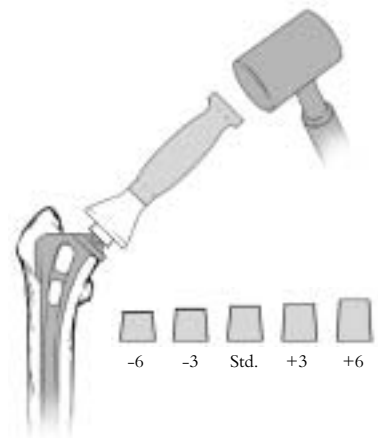
After seating the final femoral component, a final trial reduction can be performed by using the “Type I” taper threaded provisional heads and provisional Endo/Bi-Polar head.



Step 8

Seating Taper Insert on Stem (Uni-Polar)

After determining through the trial reduction which neck length is appropriate and drying the trunion of the femoral component, select either the -6, -3, Std., +3 or +6mm taper insert. **Note: The taper insert must be utilized on any Biomet femoral component when implanting an Endo II uni-polar head.** Seat the appropriate size insert with the head driver.



Step 9

Seating Uni-Polar on Taper Insert

Select the appropriate size uni-polar and secure it onto the taper insert with a twisting motion. Impact the uni-polar utilizing a head driver.



Disassembly of Uni-Polar

In the event the uni-polar has to be removed, select the appropriate size head removal ramp. Because of the variety of neck lengths offered, removal ramps for each size taper insert are available. Attach removal ramp to the ramp basic frame. Place under taper insert and lever the component as illustrated.



Removal of Bio-Moore® II Implant

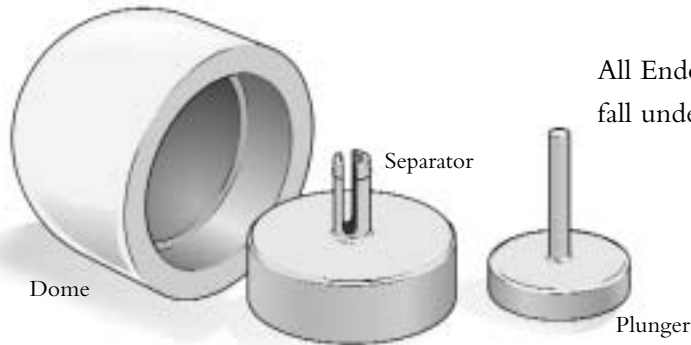
In the event the stem would need to be removed, attach the modular stem extractor onto the neck flats of the Bio-Moore® II implant and remove.



Bio-Moore II

Endo II Surgical Technique

Disassembly of the Endo II Taper Insert and Shell



All Endo II head separator components fall under one part number: 31-482573.

Step 1

Place the assembled Endo II head and taper insert over the separator. Resistance will be felt due to the tines that extend proximally on the separator. **Warning: DO NOT attempt this if the plunger is assembled to the separator.**

Using hand pressure only, push the head downward until an audible click is heard. The taper insert should set flush on the base of the separator.



Step 2

Lining the post on the plunger up with the hole on the bottom of the separator, lower the separator onto the plunger. **Note: The base of the separator will stand several millimeters proud because the taper is still set.**



Step 3

Carefully place the dome over the Endo II head, plunger and separator.



Step 4

Using a mallet, impact the plate on the top of the dome. This will enable the tines that have been pushed through the Endo II taper insert to force the taper with the Endo II head to break.



Step 5

Remove the dome.

Remove the head from the taper insert.

Remove the separator and the taper insert from the post on the plunger.

Using Kocher Forceps, squeeze the tines on the end of the separator together and slide the tapered insert off.



Removing the head from the taper insert.

Bio-Moore® II Product Information

Components

Bio-Moore® II Prosthesis				
Solid Stem Part No.	Fenestrated Stem Part No.	Provisional Part No.	Stem Diameter	Length
139202	-	31-482569	10.0mm Straight Stem	165mm
139203	139209	31-482570	12.0mm Straight Stem	165mm
139204	139210	31-482571	14.0mm Straight Stem	165mm
139205	139211	31-482572	16.0mm Straight Stem	165mm

Bi-Polar Prosthesis		
Implant Part No.	Provisional Part No.	Size
11-165206	31-479551	41mm Shell Diameter
11-165208	31-479552	42mm Shell Diameter
11-265210	31-479553	43mm Shell Diameter
11-265212	31-479554	44mm Shell Diameter
11-265214	31-479555	45mm Shell Diameter
11-265216	31-479556	46mm Shell Diameter
11-265218	31-479557	47mm Shell Diameter
11-265220	31-479558	48mm Shell Diameter
11-265222	31-479559	49mm Shell Diameter
11-265224	31-479560	50mm Shell Diameter
11-265226	31-479561	51mm Shell Diameter
11-265228	31-479562	52mm Shell Diameter
11-265230	31-479563	53mm Shell Diameter
11-265232	31-479564	54mm Shell Diameter
11-265234	31-479565	55mm Shell Diameter
11-265240	31-479568	58mm Shell Diameter

Endo II Uni-Polar Prosthesis		
Implant Part No.	Provisional Part No.	Size
12-139006	31-479551	41mm Shell Diameter
12-139008	31-479552	42mm Shell Diameter
12-139010	31-479553	43mm Shell Diameter
12-139012	31-479554	44mm Shell Diameter
12-139014	31-479555	45mm Shell Diameter
12-139016	31-479556	46mm Shell Diameter
12-139018	31-479557	47mm Shell Diameter
12-139020	31-479558	48mm Shell Diameter
12-139022	31-479559	49mm Shell Diameter
12-139024	31-479560	50mm Shell Diameter
12-139026	31-479561	51mm Shell Diameter
12-139028	31-479562	52mm Shell Diameter
12-139030	31-479563	53mm Shell Diameter
12-139032	31-479564	54mm Shell Diameter
12-139034	31-479565	55mm Shell Diameter
12-139040	31-479568	58mm Shell Diameter
12-139046	31-479571	61mm Shell Diameter

Components

28mm Modular Head Prosthesis	
Cobalt Chrome Part No.	Threaded Prov. Head Part No.
163660	31-482590
163661	31-482591
163662	31-482592
163663	31-482593
163664	31-482594
163665	31-482595
163666	31-482596

Endo II Taper Insert	
Part No.	Neck Length
139245	-6mm
139246	-3mm
139247	Standard
139248	+3mm
139249	+6mm

Instrumentation

Bio-Moore® II Rasps

31-482417	10mm
31-482412	12mm
31-482413	14mm
31-482414	16mm
31-482418	18mm

Stem Impactor

31-482465

Resected Head Extractor (Corkscrew)

425420

Modified Moore Hollow Chisel

31-473679

Femoral Head Gauge Set (3 Templates)

438420

Threaded Inserter/Extractor (For Provisional Stems)

31-473601

Modular Stem Extractor

31-473589

Modular Head/Taper Adaptor Removal Instrumentation

31-473540	Basic Frame
31-473490	-6mm Neck Ramp
31-473493	-3mm Neck Ramp
31-473491	Std. Neck Ramp
31-473492	+3mm Neck Ramp
31-473494	+6, +9, +12mm Neck Ramp

Bio-Moore® II X-Ray Overlay Set

139298

Endoprosthesis Driver

437520

Endo II Head Separator

31-482573

BIOMET
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