

AVANCESM

HIP PROSTHESIS



PRIMARY HIP SURGICAL TECHNIQUE

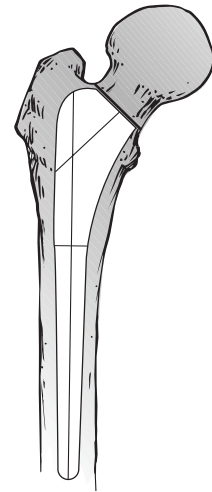
Developed by
Henry A. Finn, M.D.



STEP 1

PREOPERATIVE PLANNING

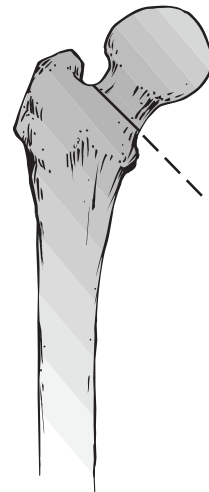
- Mark head center and intramedullary axis on the A-P radiograph.
- Estimate size of Balance rasp.
- Determine final resection level.



STEP 2

RESECTION OF THE FEMORAL NECK

- Resect neck 5–10mm above proposed final resection level (at 45°).



BALANCE™
HIP PROSTHESIS

PRIMARY HIP SURGICAL TECHNIQUE

The Balance™ Primary Hip System was developed by Henry A. Finn, M.D., Associate Professor of Clinical Surgery Director, The University of Chicago Bone and Joint Replacement Center at Weiss, Chicago, Illinois.

BALANCED WITH PROXIMAL FIT-AND-FILL BETWEEN 3-POINT FIXATION

- Press-fit surgical application
- Designed to allow immediate post-op weight bearing
- 1mm anatomic proportional build-up
- Bi-planar taper geometry
- 3-point fixation
- 5° anteverted neck
- Proximal anatomic fit-and-fill

IMPORTANT NOTE:

Due to the unique design of this implant, patients are anticipated to achieve full weight bearing the day following surgery.

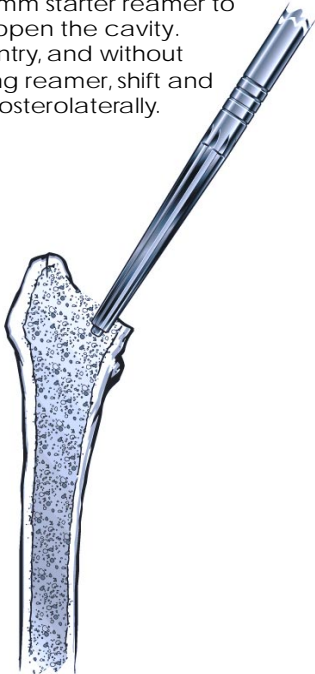
This brochure describes the surgical technique used by Henry A. Finn, M.D. Biomet, as the manufacturer of this device, does not practice medicine and does not recommend this or any other surgical technique for use on a specific patient. The surgeon who performs any implant procedure is responsible for determining and using the appropriate techniques for implanting the prosthesis in each individual patient. Biomet is not responsible for selection of the appropriate surgical technique to be used for an individual patient.

The Balance Hip Prosthesis is marketed for non-cemented use in skeletally mature patients undergoing primary hip replacement surgery as a result of noninflammatory degenerative joint disease.

STEP 3

OPENING THE FEMORAL CANAL

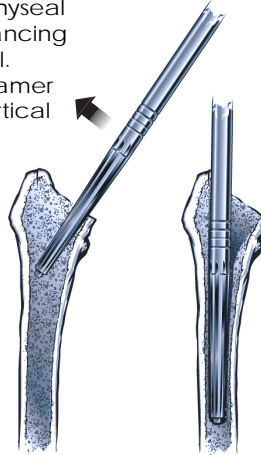
- Use a 7mm starter reamer to initially open the cavity.
- Upon entry, and without removing reamer, shift and ream posterolaterally.



STEP 4

OBTAIN NEUTRAL ACCESS TO CANAL AND SIZE

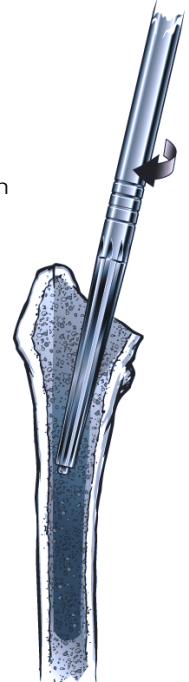
- Introduce conical reamer into the femoral neck, gradually tilting the reamer posterolaterally.
- Ream medial aspect of greater trochanter until reamer is in neutral alignment.
- Ream diaphyseal canal, advancing down canal.
- Increase reamer size until cortical bone is contacted.



STEP 5

REAMING TO REMOVE METAPHYSEAL CANCELLOUS BONE

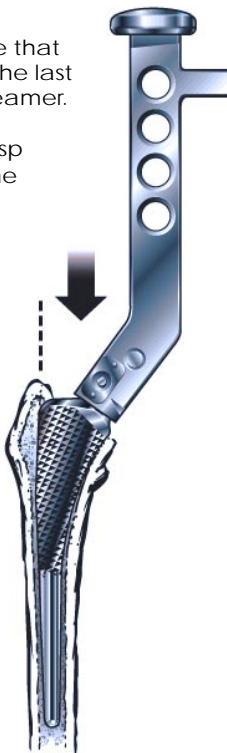
- Using the last reamer from Step 4, pull and partially ream proximally.
- Tilt reamer medially to the calcar region to remove medial cancellous bone.
- Tilt reamer along the anterior cortex to the anterolateral aspect to remove the remaining metaphyseal bone.
- The goal of this step is to remove all cancellous bone in the proximal 1/3 of the femur.



STEP 6

USE RASP AS A TRIAL PROSTHESIS

- Select a rasp size that corresponds to the last size of conical reamer.
- Assemble rasp handle to the rasp body, and use the rasp as a trial prosthesis.
- The rasp should be fully seated with light mallet blows, and provide rotational and axial stability by cortical contact in the proximal 1/3 of the femur.



STEP 7

TRIAL REDUCTION

- Detach rasp handle.
- Rasp body is left in situ and serves as trial prosthesis.
- Fit trial head/neck provisional on rasp body.
- Perform trial reduction and determine appropriate neck length.
- Reattach rasp handle and remove rasp.



STEP 8

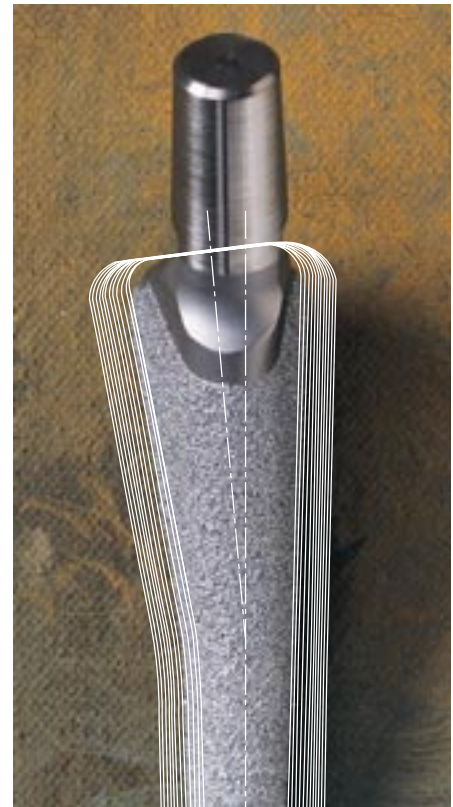
STEM INSERTION

- Attach stem inserter to selected Balance prosthesis.
- If the prosthesis has been properly selected, and the proximal femur adequately prepared, implantation of the stem should require no more than 5–8mm of impaction with light mallet blows to achieve proper stability. If not, consider reapplying conical reamer to remove additional bone.
- Remove stem inserter and mount trial femoral head. Reduce to check stability and range of movement. Then remove trial head.
- Impact prosthetic femoral head on neck using plastic driver.



BALANCE PARTS LISTING

Balance Femoral Implants		
Implant Part No.	Provisional Part No.	Description
180000	31-100100	7mm x 140mm Right
180001	31-100101	7mm x 140mm Left
180002	31-100102	8mm x 145mm Right
180003	31-100103	8mm x 145mm Left
180004	31-100104	9mm x 150mm Right
180005	31-100105	9mm x 150mm Left
180006	31-100106	10mm x 155mm Right
180007	31-100107	10mm x 155mm Left
180008	31-100108	11mm x 160mm Right
180009	31-100109	11mm x 160mm Left
180010	31-100110	12mm x 165mm Right
180011	31-100111	12mm x 165mm Left
180012	31-100112	13mm x 170mm Right
180013	31-100113	13mm x 170mm Left
180014	31-100114	14mm x 175mm Right
180015	31-100115	14mm x 175mm Left
180016	31-100116	15mm x 180mm Right
180017	31-100117	15mm x 180mm Left
180018	31-100118	16mm x 180mm Right
180019	31-100119	16mm x 180mm Left
180020	31-100120	17mm x 180mm Right
180021	31-100121	17mm x 180mm Left
180022	31-100122	18mm x 180mm Right
180023	31-100123	18mm x 180mm Left



- Proximal anatomic fit-and-fill provides optimal initial stability and bone contact
- Decreased risk of subsidence
- Designed to allow immediate weight bearing
- Power preparation to avoid broaching
- Fixation and stability with minimal impaction force to the implant
- Proximal loading to help decrease stress shielding
- Tapered design diminishes "end of stem" pain^{1,2}

Balance Primary Femoral Hip Looser Sets	
Part No.	Description
999306	Right Hip Trials Only (trial implants listed above)
999307	Left Hip Trials Only (trial implants listed above)
999706	Right Hip Implants (implants listed above)
999707	Left Hip Implants (implants listed above)

Balance Hip Template Set

179999

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¹Mauerhan, DR; Mesa, J; Gregory, AM; Mokris, JG: Integral Porous Femoral Stem. *The Journal of Arthroplasty*, Vol. 12, No. 3, 1997.

²Hozack, WJ; Rothman, RH; Eng, K; Mesa, J: Primary Cementless Hip Arthroplasty With a Titanium Plasma Sprayed Prosthesis. *Clinical Orthopaedics and Related Research*, No. 333, pp. 217-225, 1996.

