

Patella Large Reamer Resurfacing System



Surgical Technique

The objective of this system is to resurface the articular surface of the patella with the precision of a reamer. The reamed patellar surface can accommodate an oval or round resurfacing patellar component.

Surgical Technique developed in conjunction with Warren Jablonsky, MD, McHenry County Orthopedics, Crystal Lake, IL.



Figure 1

Trim tissue surrounding the patella using electrocautery (bovie) (Fig.1).



Figure 2

Use a rongeur to remove osteophytes and reduce the patella to its true size (Fig. 2).



Figure 3

The bovie should also be used to release soft tissue attachments to the estimated level of resection (Fig. 3).



Figure 4

Place the collet over the patella so that it fits snugly around the patellar diameter (Fig. 4). The goal is to reduce the patella to its smallest diameter so that the smallest possible collet will fit around the entire patella. Use the patellar reamer collets as sizing templates to select the appropriately sized collet and reamer.

Note: The collet should be resting on the soft tissue surrounding the patella. If the patella does not enter the collet evenly but instead enters at an angle, the collet may not be completely surrounding the patella, but instead resting on part of the bone itself. If the collet is only slightly larger than the patella, you may trim 1mm-2mm of the medial and lateral edges of the patella to ensure a snug fit. If the collet is far smaller than the patella, choose the next size up and assess fit.



Figure 5

Measure patellar thickness with the patellar calipers (Fig. 5).

Note: The patella should measure a minimum of 19 mm before reaming to use this resurfacing technique.

Determine the design and diameter of the patellar implant to be used. A round or oval resurfacing design may be chosen. The round resurfacing patella is 9mm thick, and the depth stop for this technique prepares for 9mm resection. The oval patella's thickness is variable.

Note: Minor adjustments may be necessary at the time of resection to accommodate the largest diameter oval patella implants. Please see Chart A.



Figure 6

Slide the correct diameter of patellar reamer collet into place on the patellar reamer guide. Attach the patellar reamer guide to the patella. Secure the patellar reamer guide to the patella by tightening the set screw.

Attach the correct patellar reamer and patellar depth stop to the patellar reamer shaft. Before the patellar reamer assembly is attached to power equipment, lower the assembly through the patellar reamer guide until the reamer contacts the patella (Fig. 6).

Nota Bene

The technique description herein is made available to the healthcare professional to illustrate the authors' suggested treatment for the uncomplicated procedure. In the final analysis, the preferred treatment is that which addresses the needs of the patient.

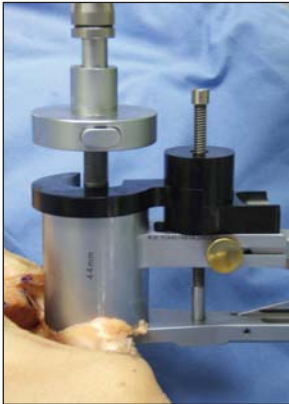


Figure 7

Rotate the black resurfacing patellar depth gauge around so that the hooked end or “claw” surrounds the patellar reamer shaft (Fig. 7). Lower the depth stop by compressing the button until it meets the depth gauge.



Figure 8

Remove the depth gauge from the assembly. Ream the patella until the depth stop engages the patellar reamer guide (Fig 8).

Note: Excessive force on the reamer shaft may alter the depth of resection, causing overreaming.

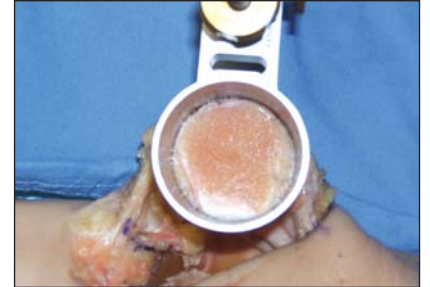


Figure 9

After reaming, the patella should have a completely flat articular surface (Fig. 9). Measure the resected patella to ensure adequate resection (the resected patella should measure its original depth minus 9mm).



Figure 10

Drill the appropriate fixation holes for the resurfacing patellar prosthesis using the correctly sized drill guide and resurfacing drill (Fig. 10).



Figure 11

Place the patellar trial into the prepared patella (Fig. 11). If desired, use the calipers to remeasure the composite thickness of bone and trial.

Chart A
Oval Patella Sizing Options

Thickness	Diameter
8.5mm	29mm
9.0mm	32mm
9.0mm	35mm
9.5mm	38mm
10mm	41mm

This technique is indicated for patients with osteoarthritis who are undergoing Total Knee Arthroplasty. It is intended to be used as an adjunct to the femoral and tibial preparation as described in other GENESIS® II TKA techniques.

Catalog Information – GENESIS[®] II Patella Large Reamer Resurfacing System

Set Numbers

Cat. No.	Description
7144-0400	Patella Large Reamer Resurfacing System Set (Stand Alone Set)
7144-3016	Patella Large Reamer Resurfacing System Set* (Optional Add-on to GENESIS II Universal Patella Set)
008104	Loaner Services Set

*Available beginning April 1, 2005

Large Depth Stop

Cat. No. 7144-0427



Large Resurfacing Depth Gauge

Cat. No. 7144-0431



Resurfacing Patellar Collet

Cat. No.	Description
7144-0744	Resurfacing Patellar Collet 38 mm
7144-0745	Resurfacing Patellar Collet 41 mm
7144-0748	Resurfacing Patellar Collet 44 mm
7144-0746	Resurfacing Patellar Collet 46 mm
7144-0747	Resurfacing Patellar Collet 51 mm



Resurfacing Patellar Reamer

Cat. No.	Description
7144-0751	Resurfacing Patellar Reamer 38 mm
7144-0752	Resurfacing Patellar Reamer 41 mm
7144-0349	Resurfacing Patellar Reamer 44 mm
7144-0753	Resurfacing Patellar Reamer 46 mm
7144-0754	Resurfacing Patellar Reamer 51 mm



Orthopaedics

Smith & Nephew, Inc.
1450 Brooks Road
Memphis, TN 38116
USA

www.smith-nephew.com

Telephone: 901-396-2121
Information: 1-800-821-5700
Orders/inquiries: 1-800-238-7538