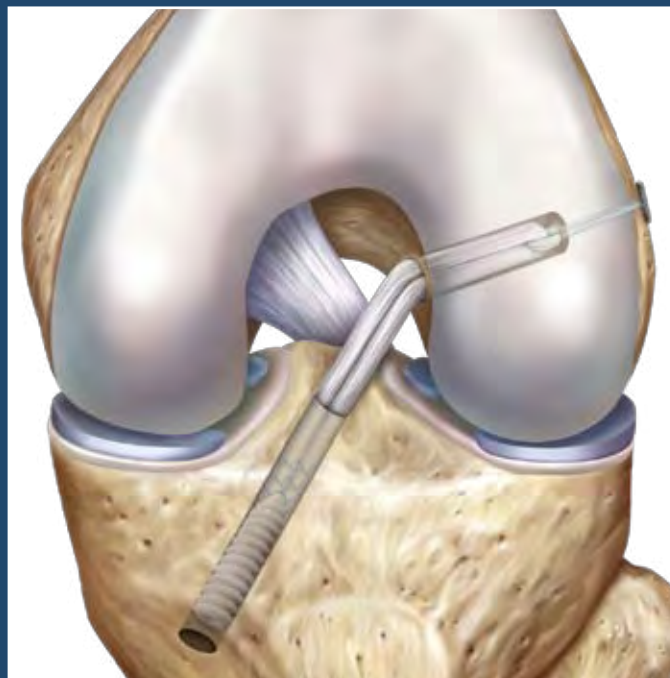




ACL Reconstruction using the FlipCutter™
and the Constant Femoral Guide

Surgical Technique

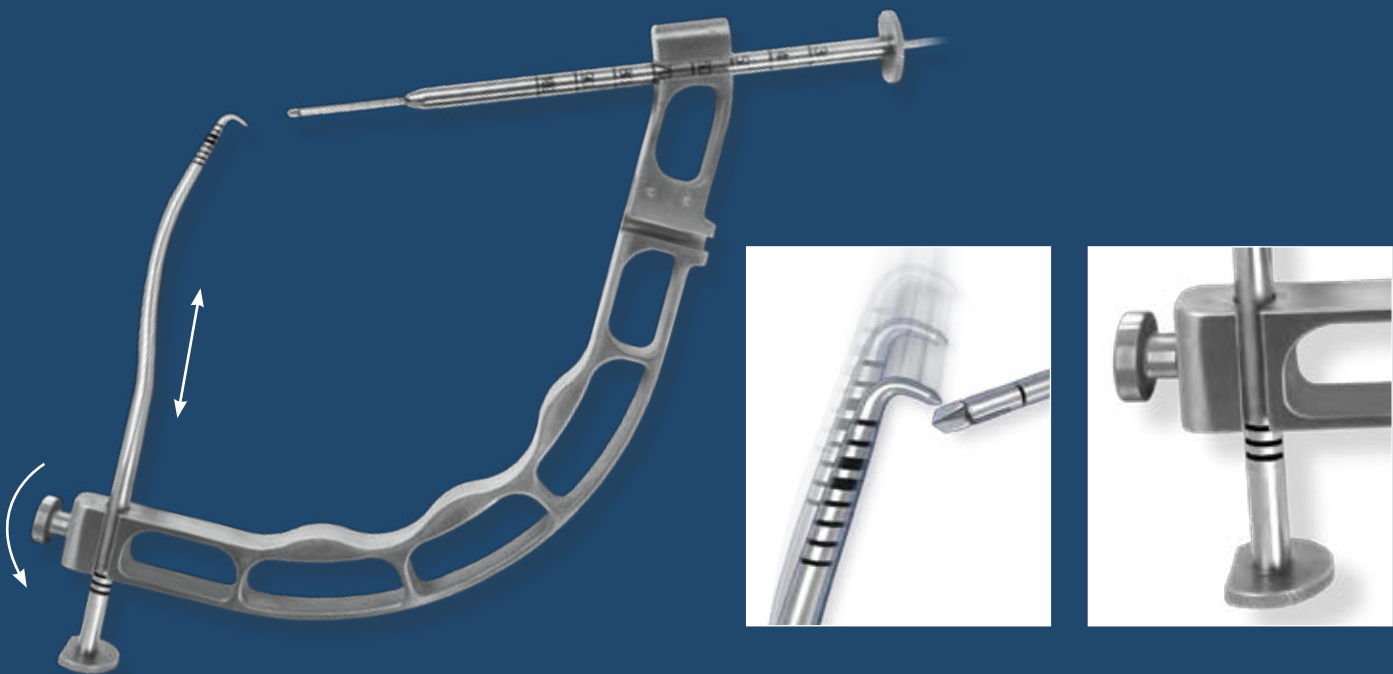


FlipCutter ACL Reconstruction

Anatomic femoral socket placement is paramount to good clinical outcomes in ACL reconstruction. The restrictions of the transtibial approach have been shown to force socket placement outside the native footprint and thus cause unacceptable rotational instability.

The two-incision technique has been shown to offer increased flexibility in anatomic femoral socket placement, but can lead to higher morbidity and unacceptable cosmesis.

FlipCutter technology allows surgeons to place the femoral socket without anatomic restrictions or femoral soft tissue dissection. Using the Constant Femoral Guide surgeons can place the FlipCutter in any orientation, from an outside/in approach. Once in the joint, the FlipCutter can then be used as a retrograde reamer to create the femoral socket from the inside/out.



GUIDE ASSEMBLY

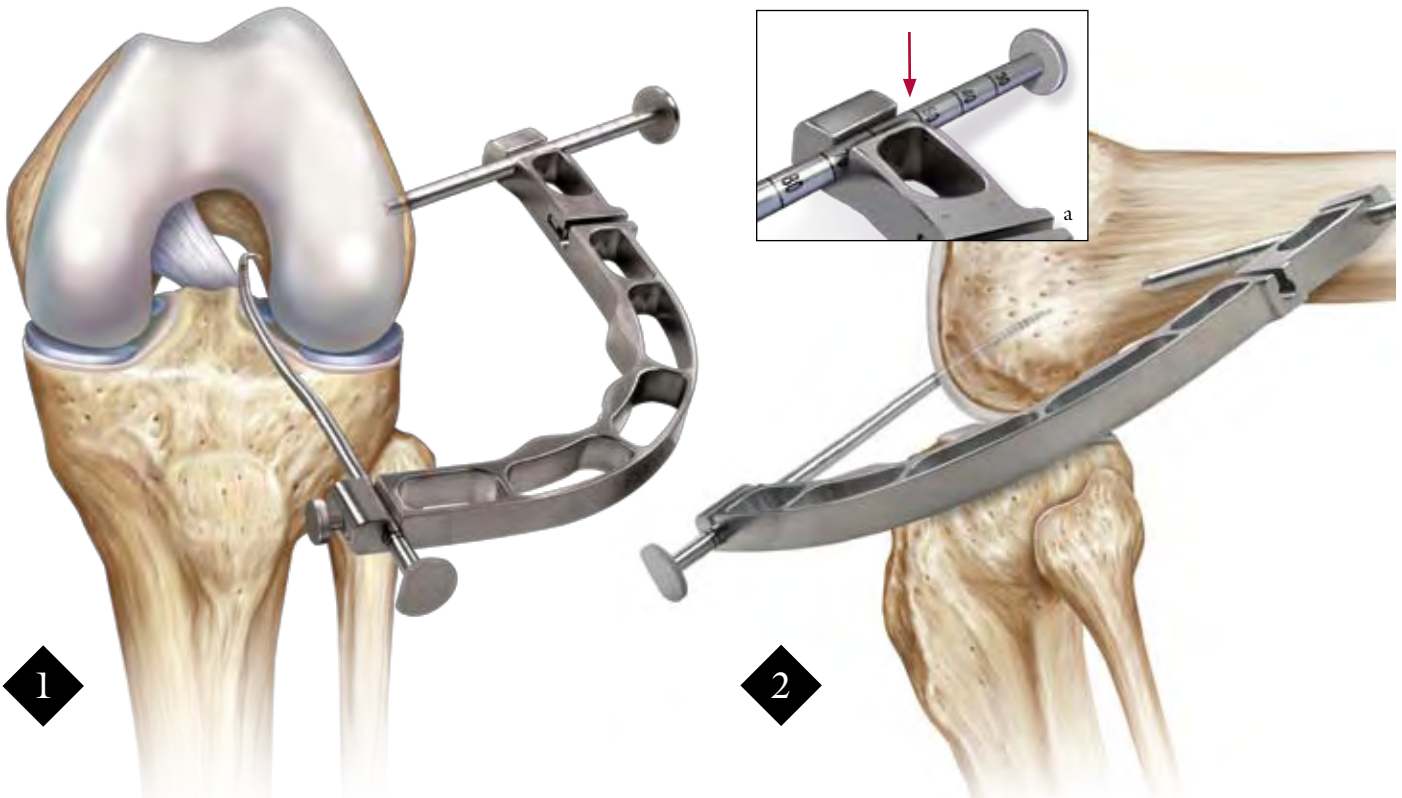
Adjust the marking hook to the desired offset. This is performed by loosening the knob on the side of the frame. This allows the hook to be adjusted from a “tip-to-tip” setting, or as an offset hook to reference the posterior cortex.

The marking hook has laser lines every 2 mm with the thickest lines representing 7 and 9 mm of offset.

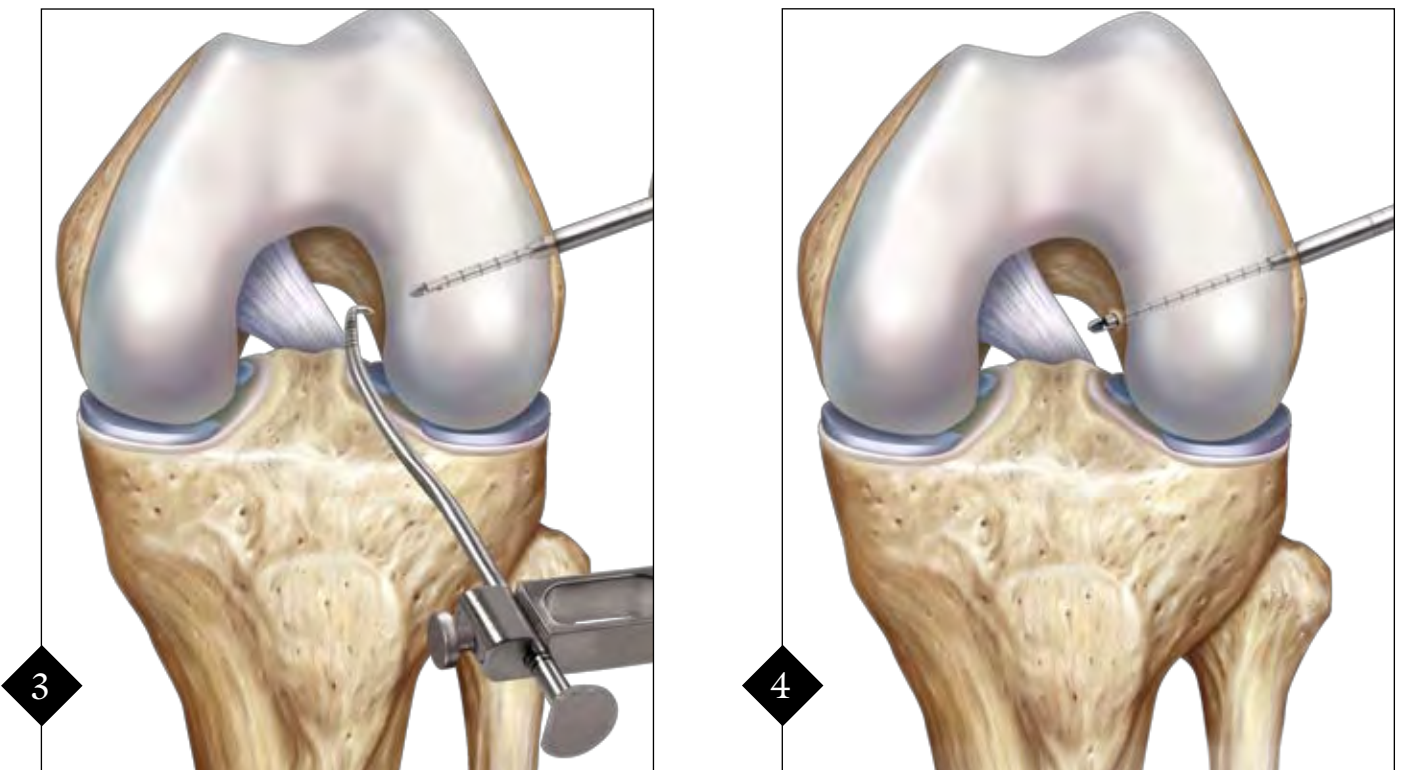
The base of the hook has three lines that correspond with “tip-to-tip” setting, 7 and 9 mm of offset.

Note: When tightening the knob, the surgeon should feel it fall into the dimple on the marking hook shaft. Adequate tightness is confirmed by attempting to rotate the marking hook. If any motion is felt, retighten the knob.

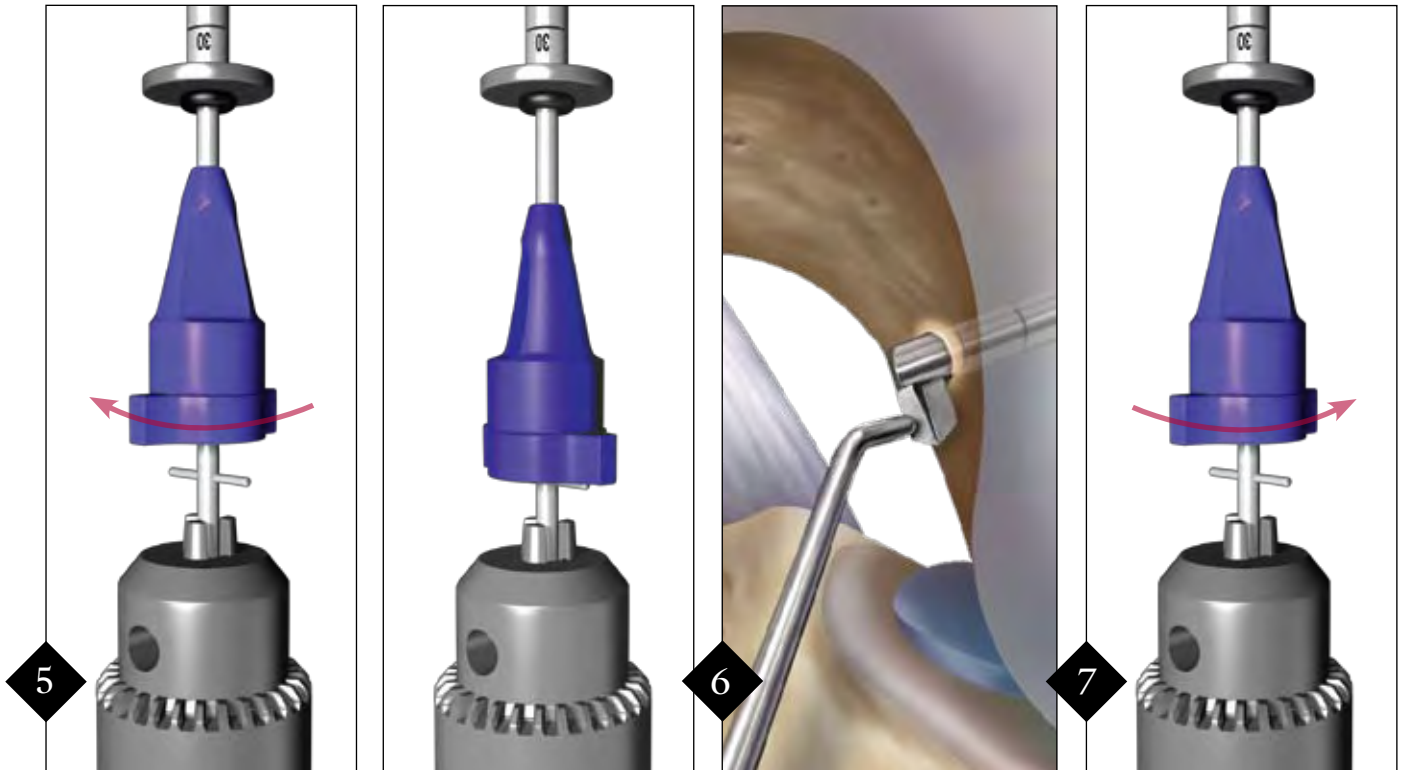
ACL Reconstruction using the FlipCutter and the Constant Femoral Guide



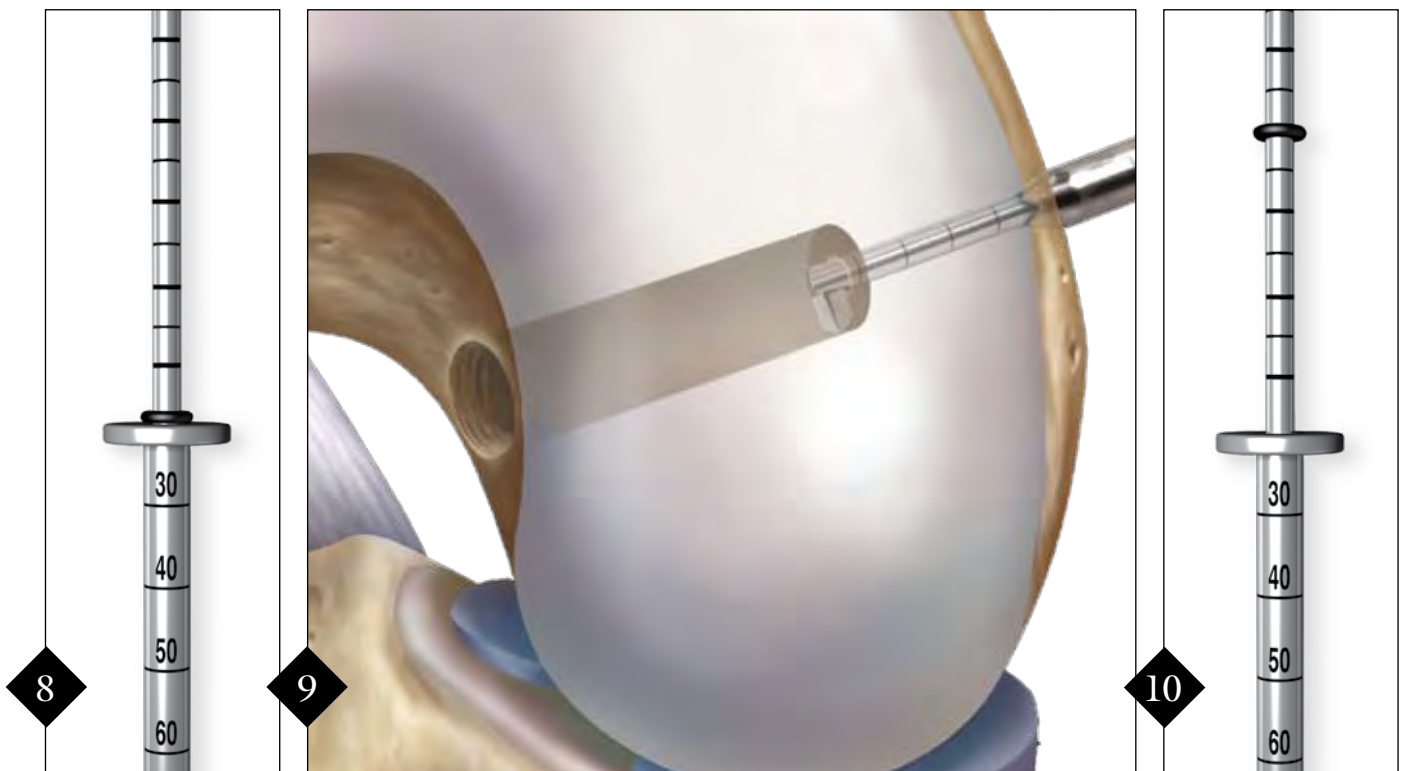
Place the marking hook through the lateral portal while viewing medially. Medial portal placement of the hook is also possible. The drill sleeve may be placed in the 90° or 110° slot depending on desired socket orientation and patient anatomy. Take note of the intraosseous measurement on the drill sleeve, (in this example, 50 mm (a)). In this example, the marking hook is placed in the center of the ACL footprint as the guide has been set up to target the tip of the guide.



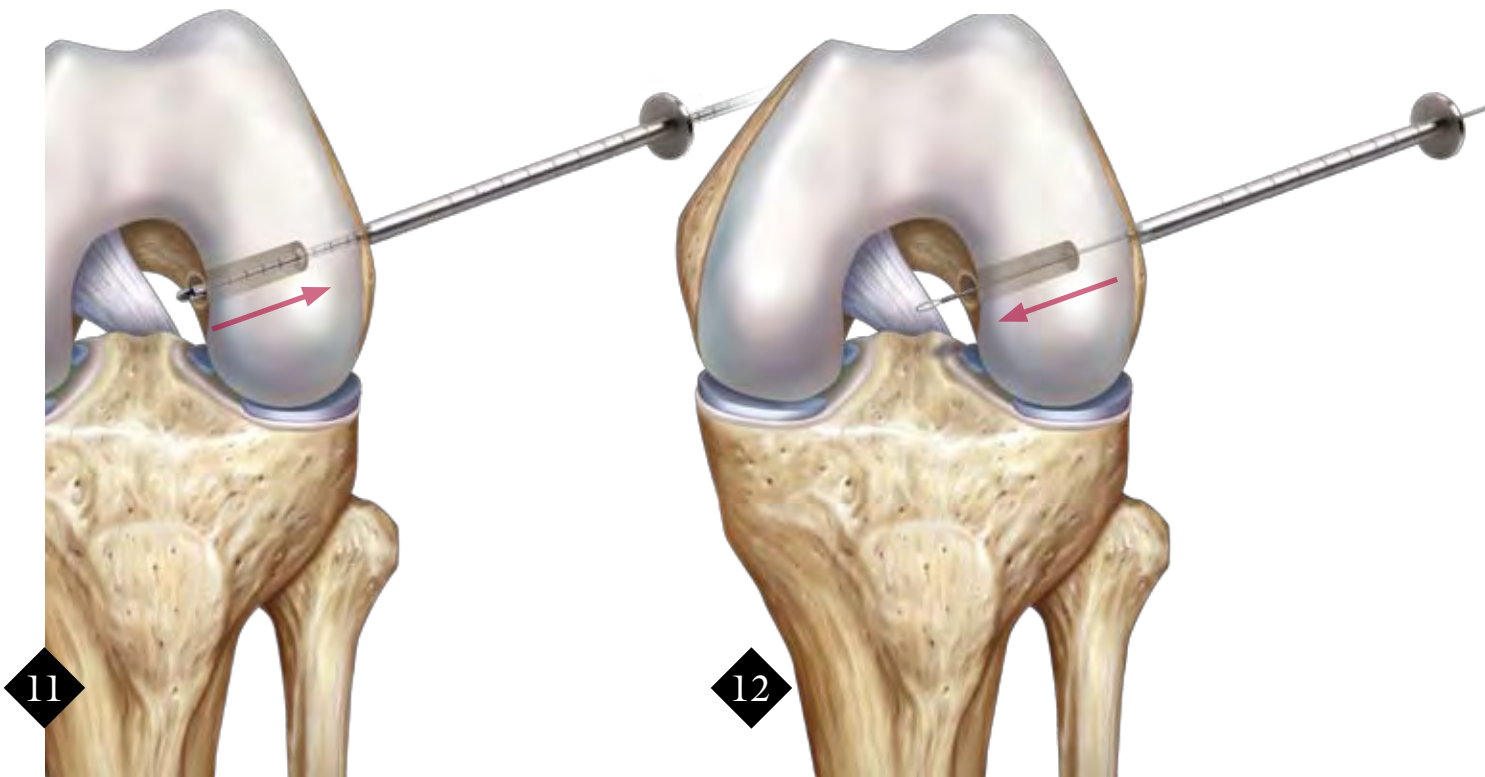
Drill the appropriate size FlipCutter into the joint. *Note: Avoid drilling FlipCutter into the marking hook.* Once the FlipCutter tip is in the joint, slide back the drill sleeve and remove the Constant Femoral Guide. *Surgical Pearl: To double check intraosseous length, place the FlipCutter pin into the drill sleeve and against the bone. Set the rubber ring at the expected intraosseous length, as read off the drill sleeve. As the FlipCutter is drilled into the joint, check and see if the rubber ring contacts the drill sleeve at the expected distance. Add or subtract any difference from the previous measurement.*



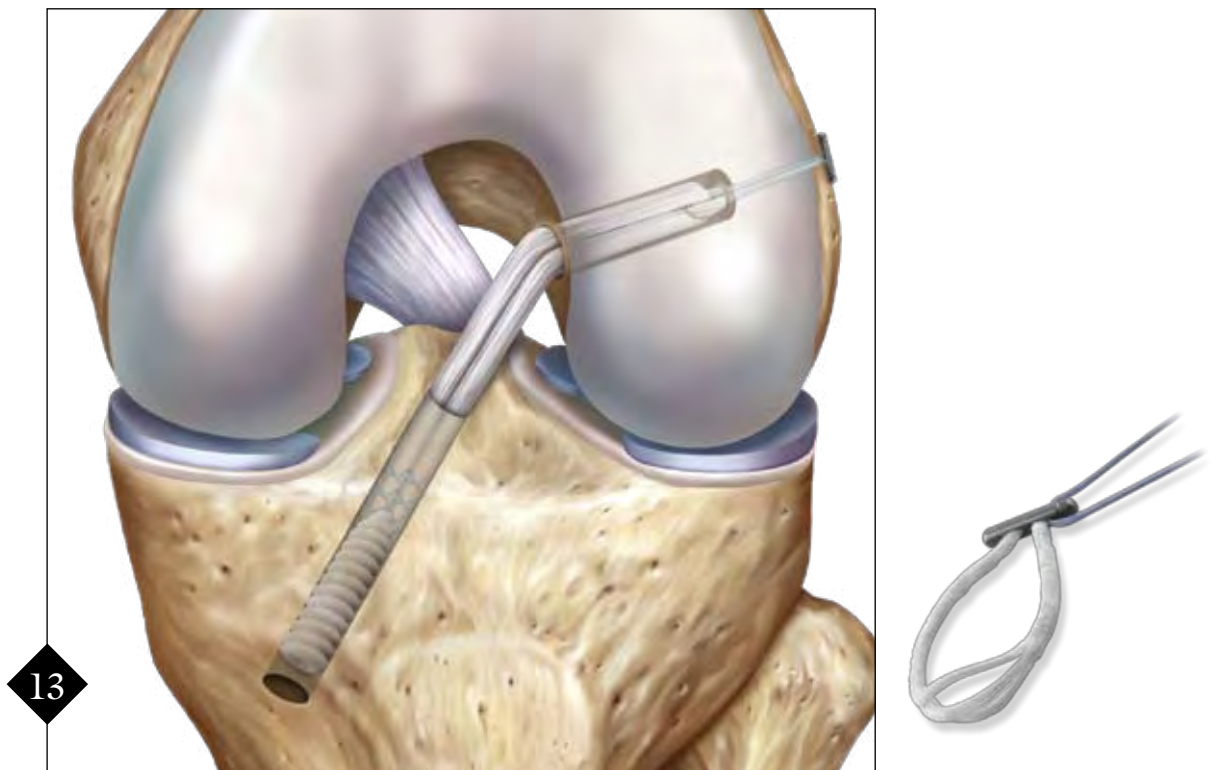
Turn the winged portion of the blue hub counterclockwise (left) until it contacts the crosspin. *Note: Do not continue to turn after contacting the crosspin, as this could overtighten the pin.* Using an arthroscopic probe, fold the blade of the FlipCutter until it is perpendicular to the shaft. Turn the winged portion of the blue hub clockwise (right) until tight before drilling.



Push the drill sleeve down to bone. Set the rubber ring against the drill sleeve. Drill on forward, while pulling back on the FlipCutter until desired length is obtained as read on the pin. *Note: The FlipCutter shaft is marked in 5 mm increments. Count the lines between the drill sleeve and the rubber ring (in this example, 35 mm.)*



Push the FlipCutter back into the joint. Straighten the blade tip with an arthroscopic probe after loosening. While keeping the drill sleeve in place, remove the FlipCutter and immediately replace with a looped Nitinol wire. *Note: A RetroPasser™ may be used in this step as well.*



Calculate the RetroButton size (intraosseous length - socket depth + 10 mm), for grafts over 8 mm (intraosseous length - socket depth + 15 mm). Use looped Nitinol wire to pass RetroButton passing sutures. Pull the RetroButton and graft into place. Fix the tibia with a RetroScrew or a Delta BioComposite Interference Screw.

Ordering Information

Constant Femoral Guide AR-1865

Disposables:

FlipCutters AR-1204F-60 - 130
(6 mm - 13 mm)

Graft Passing Wire AR-1255

RetroPasser AR-1259

Implants:

RetroButton AR-1588-15 - 60
(15 mm - 60 mm)

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique.

In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use.



U.S. PATENT NOS. 5,350,383; 6,716,234 and PATENT PENDING

©2008, Arthrex Inc. All rights reserved. LT0169A