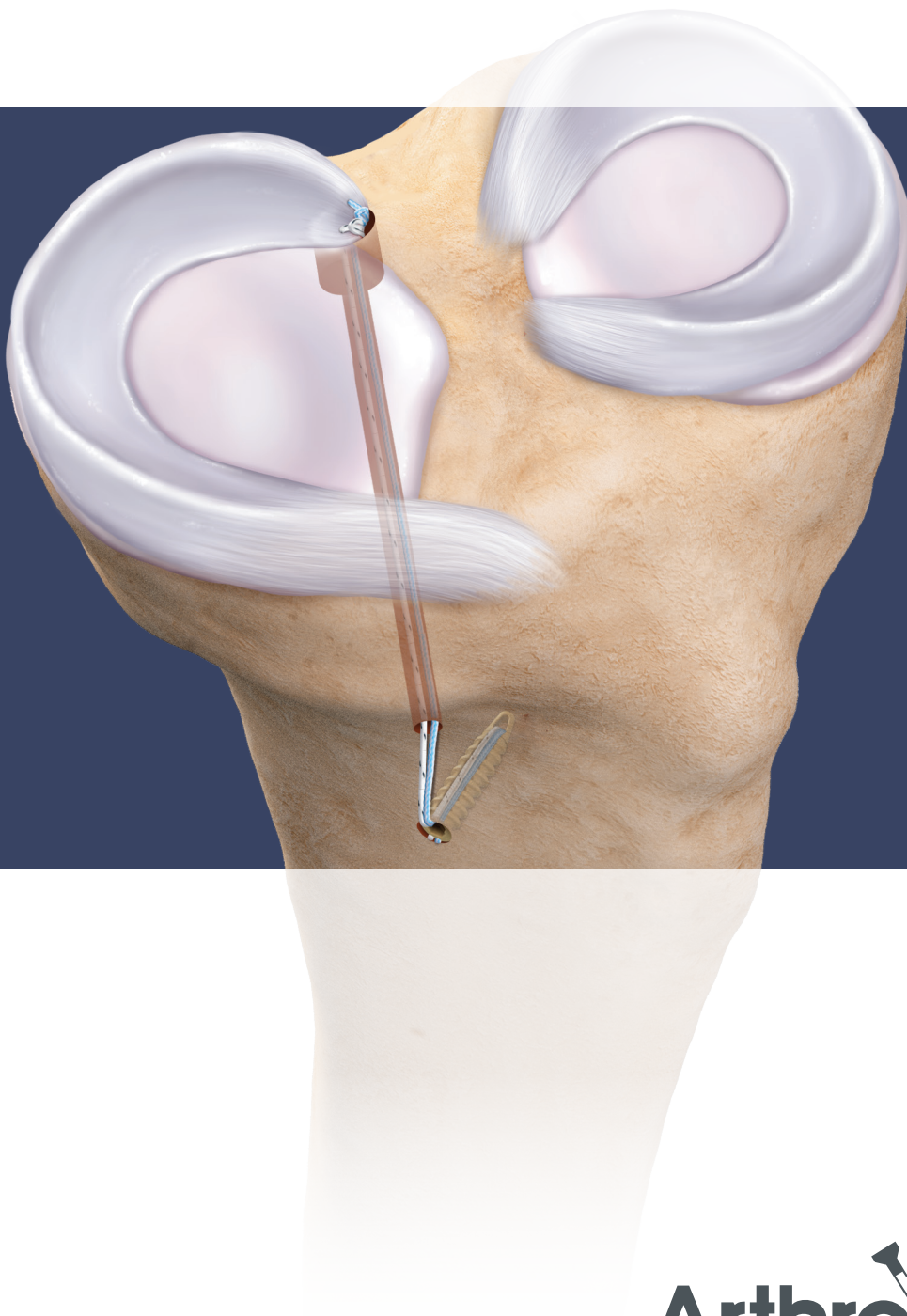


# Meniscal Root Repair With PEEK SwiveLock<sup>®</sup> Anchor

Surgical Technique



# Meniscal Root Repair Introduction

Meniscal root avulsions are a challenging injury causing meniscal extrusion and loss of hoop stress distribution, which can lead to the development of knee arthritis.<sup>1</sup> Securing the meniscus in a small bone socket has proven to be an effective means to restore hoop stresses and improve outcomes.<sup>2</sup> The FlipCutter® II reamer and meniscal root marking hook allow for a minimally invasive retroconstruction repair technique that helps preserve bone while securely fixing meniscal tissue.

## Meniscal Root Repair With PEEK SwiveLock® Anchor

A complete system for meniscal root repair includes the meniscal root marking hooks, which have multiple settings to accommodate various anatomies, the Knee Scorpion™ suture passer, and meniscal root repair kit with PEEK SwiveLock anchor. Arthrex offers two meniscus root marking hooks based on surgeon preference. The over-the-back marking hook sits securely over the back of the tibia to allow stable drilling using a 6 mm FlipCutter® II reamer for socket preparation.

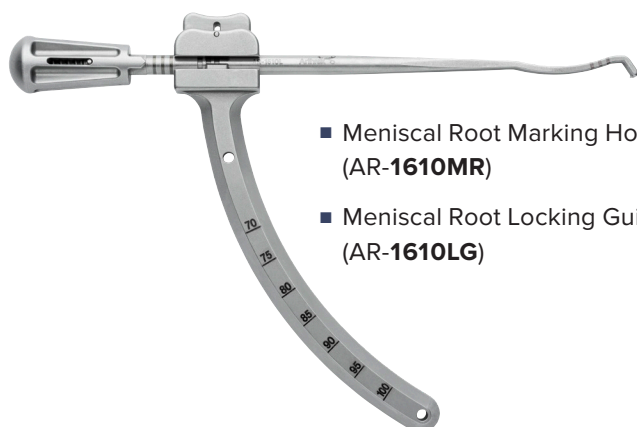
The point-to-point guide allows surgeons to directly target their drill location at the meniscal root footprint. The low-profile Knee Scorpion instrument simplifies suture passing in tight recesses of the knee. Complete knotless fixation of the sutures with the 4.75 mm PEEK SwiveLock anchor.



■ Knee Scorpion Suture Passer (AR-12990)

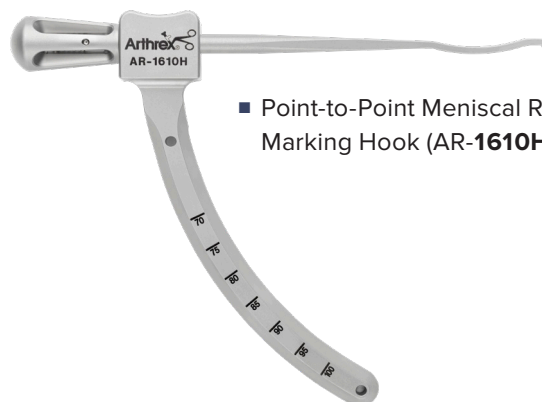


■ PEEK SwiveLock Anchor (AR-2324PSLC)



■ Meniscal Root Marking Hook (AR-1610MR)

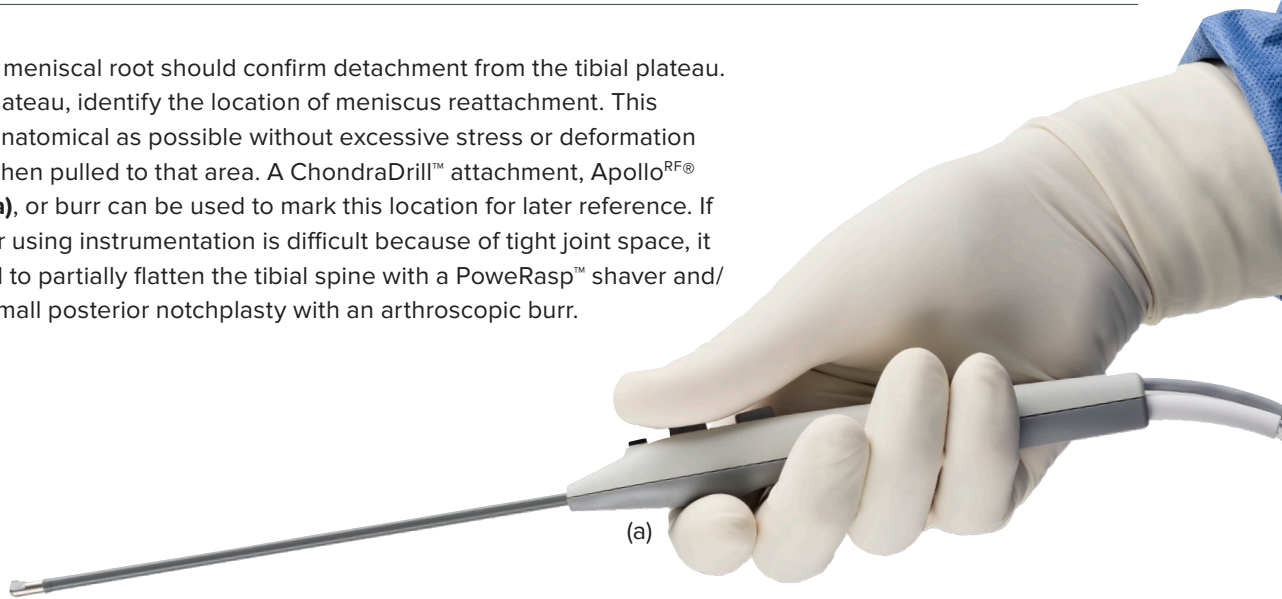
■ Meniscal Root Locking Guide (AR-1610LG)



■ Point-to-Point Meniscal Root Marking Hook (AR-1610H)

## Arthroscopic Evaluation and Preparation

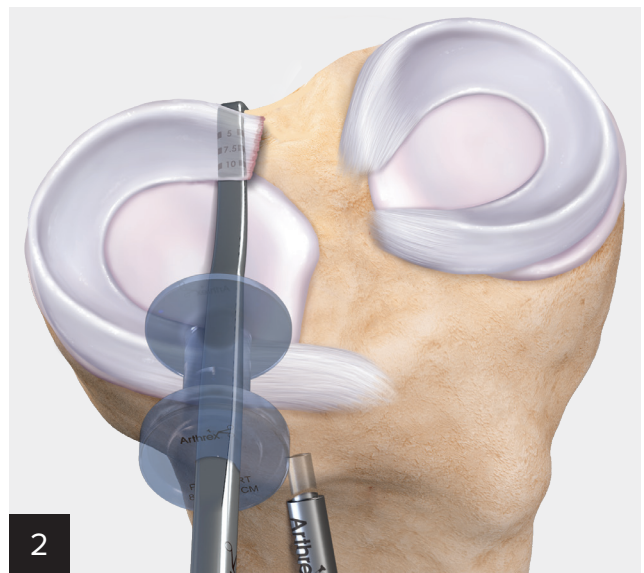
Probing of the meniscal root should confirm detachment from the tibial plateau. On the tibial plateau, identify the location of meniscus reattachment. This should be as anatomical as possible without excessive stress or deformation of the tissue when pulled to that area. A ChondraDrill™ attachment, Apollo<sup>RF</sup>® MP90 probe **(a)**, or burr can be used to mark this location for later reference. If visualization or using instrumentation is difficult because of tight joint space, it may be helpful to partially flatten the tibial spine with a PowerRasp™ shaver and/or perform a small posterior notchplasty with an arthroscopic burr.



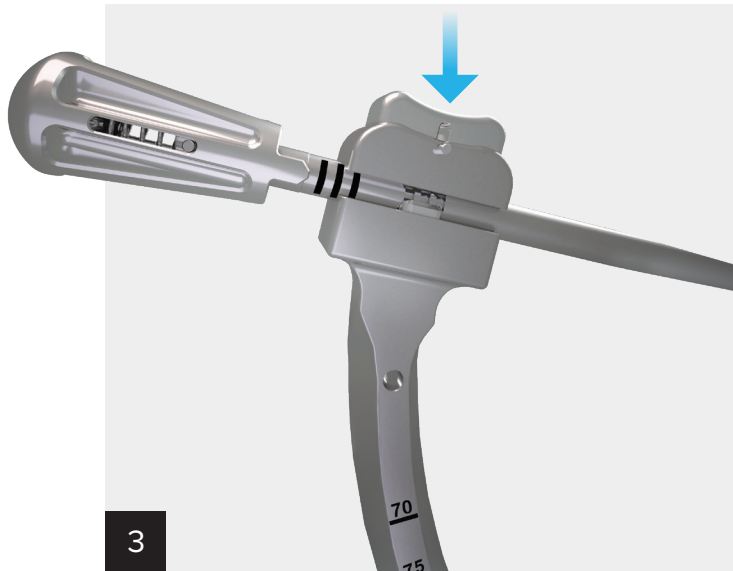
## Tibial Socket Creation **Option A: Meniscal Root Locking Guide**



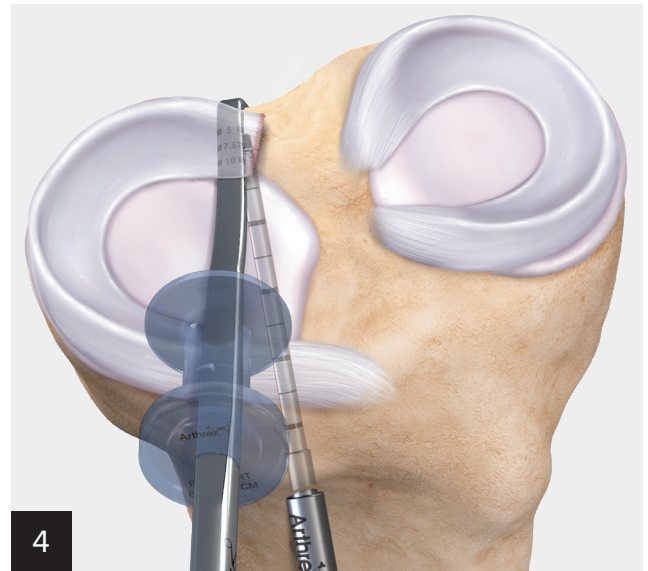
Engage the lock to prevent rotation of the marking hook while introducing the guide into the joint through a PassPort Button™ cannula.



Position the marking hook over the back of the tibia at the desired location for tissue reattachment.

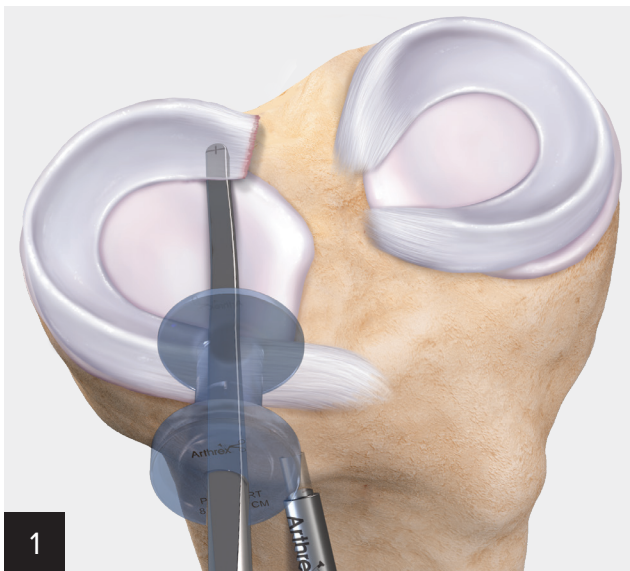


Adjust the offset by depressing the button on the locking guide and aligning the laser marks with the desired offset.



Use a 6 mm FlipCutter® II reamer to create a bone socket. Drill on a forward setting and pull back until the socket has reached a depth of approximately 5 mm to 10 mm.

## Tibial Socket Creation **Option B: Point-to-Point Guide**

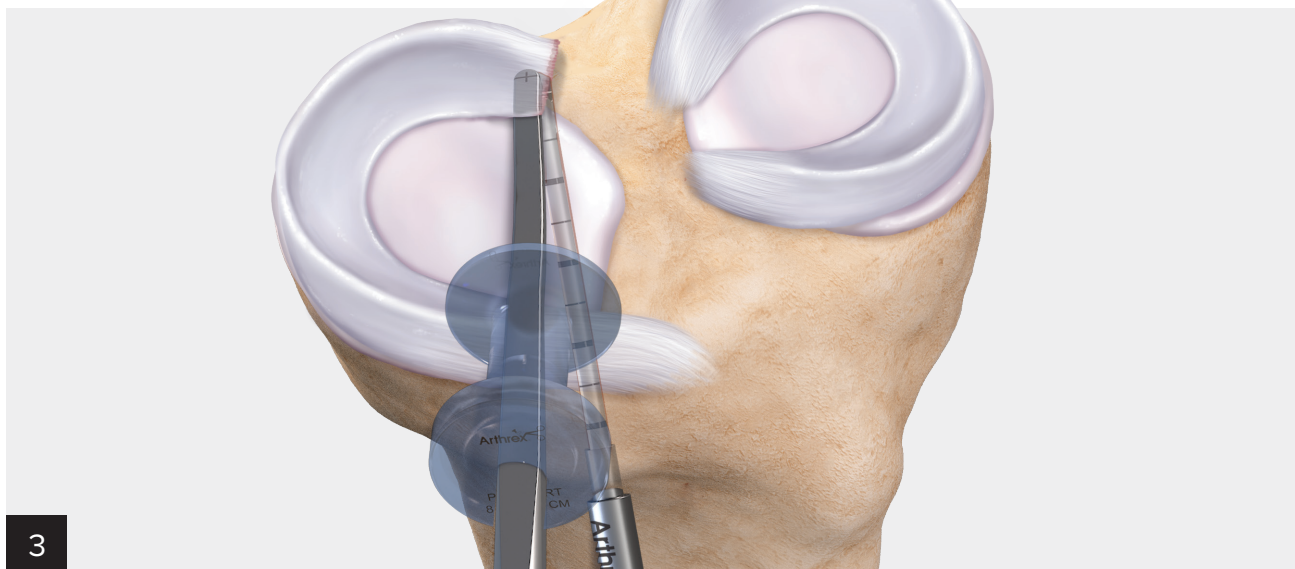


Position the distal tip of the point-to-point guide at the desired exit location at the meniscal root footprint.



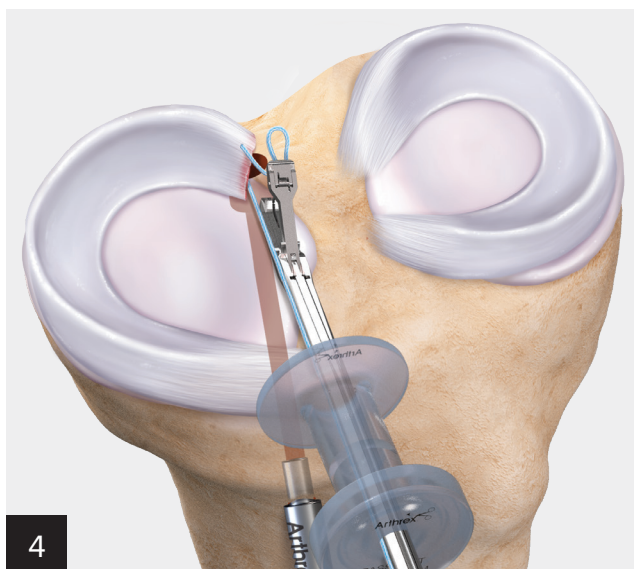
Once the drill guide has been positioned at the desired location on the tibial plateau, the angle of approach can be adjusted by pulling back on the nob and swiveling the guide to the appropriate angle. The guide can be set at 10°, 20°, 30°, or 40° off center.



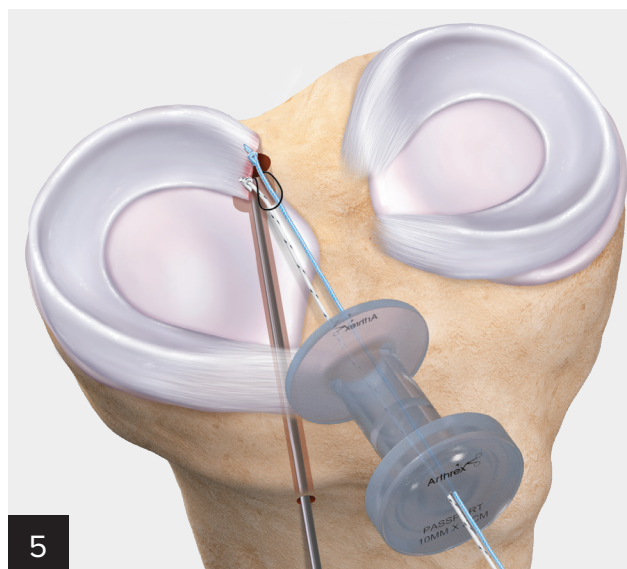


Use a 6 mm FlipCutter® II reamer to create a bone socket. Drill on a forward setting and pull back until the socket has reached a depth of approximately 5 mm to 10 mm.

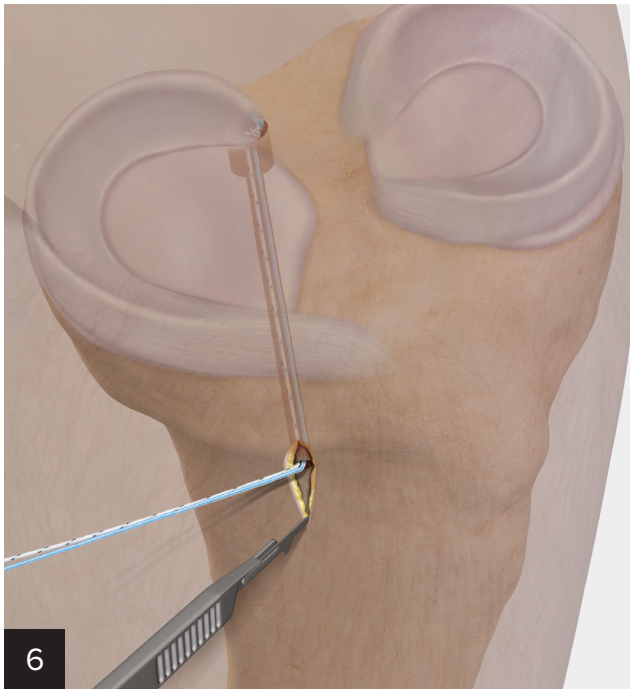
## Suture Passing



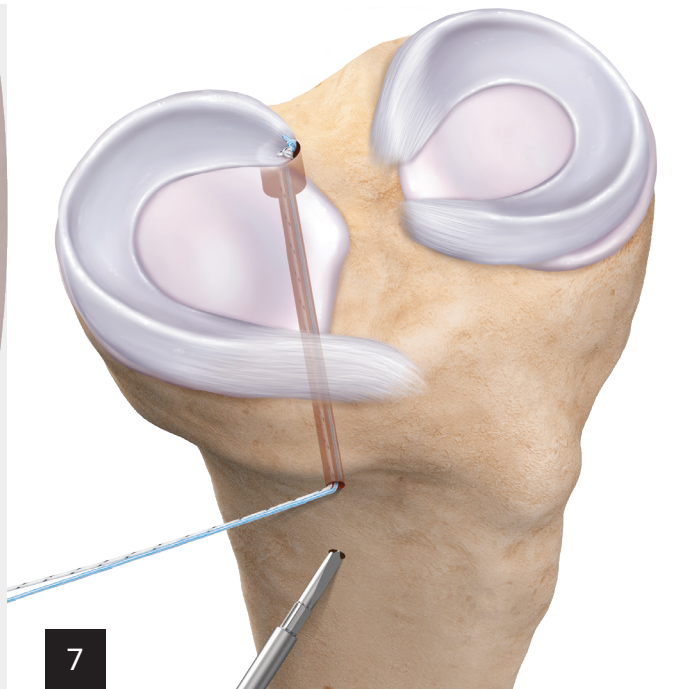
The Knee Scorpion™ suture passer can be used to pass a size 0 FiberLink™ and TigerLink™ suture to create two cinch stitches.



Use the SutureLasso™ needle and passing wire to shuttle the suture to the anterior tibia.

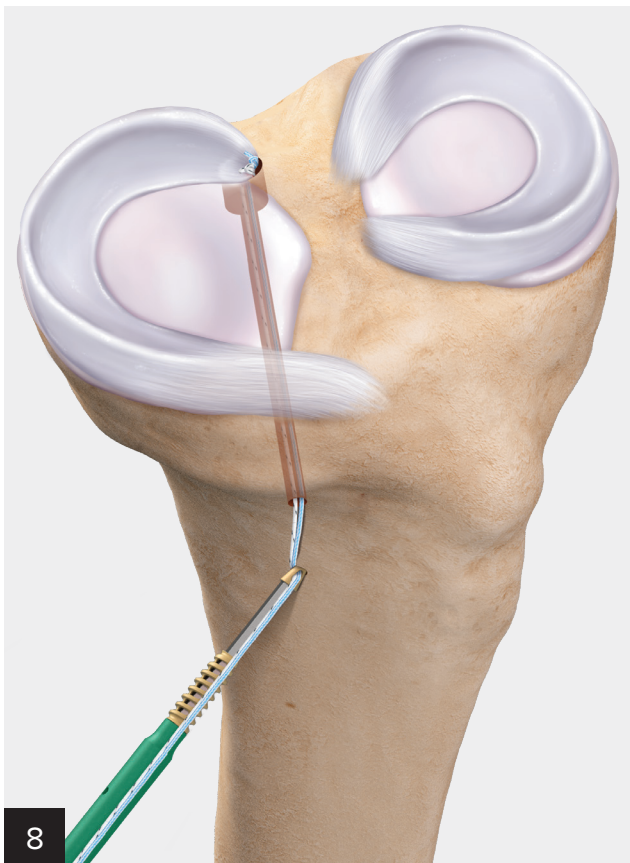


Extend the tibial incision 1 cm distal from the transtibial bone preparation.

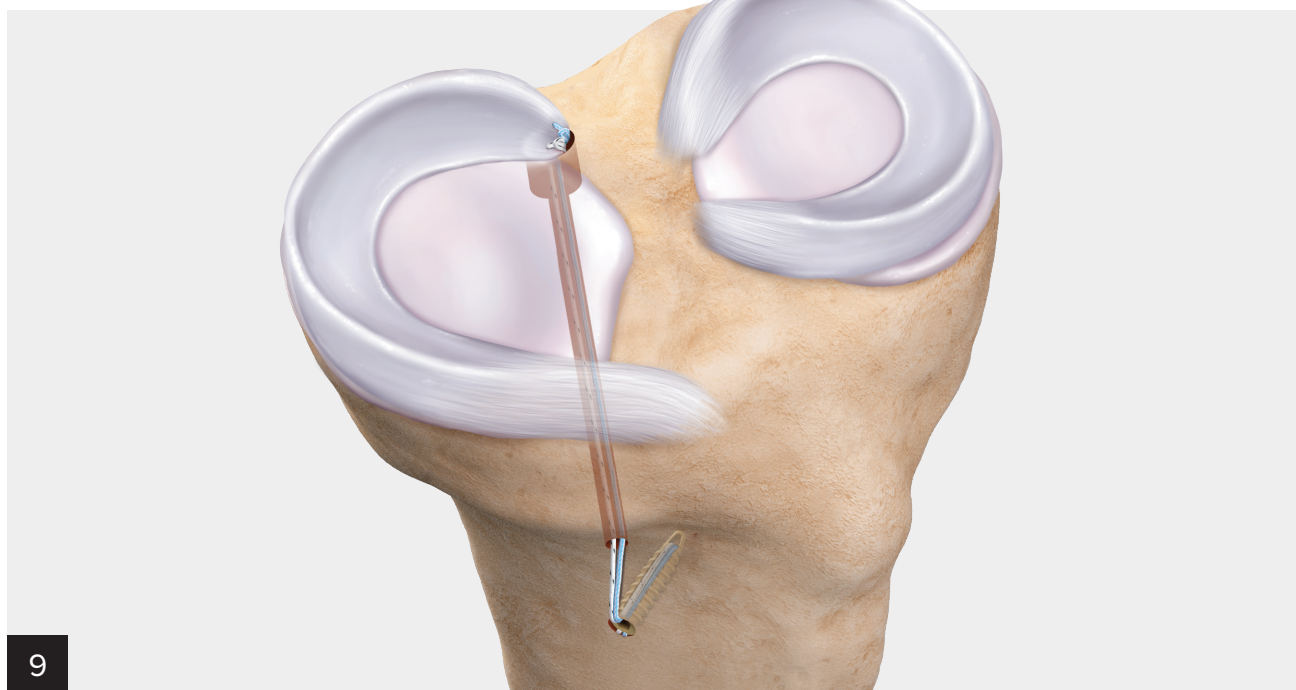


Use the spade-tip drill bit to prepare a socket for the anchor. The socket should be prepared to the depth of the positive stop collar on the spade-tip drill. This represents a 20 mm depth.

## Suture Fixation



Pass the suture through the eyelet of the 4.75 mm PEEK SwiveLock® anchor. Tension the suture and place the anchor into the drill hole until the eyelet is fully seated. Maintain tension on the suture and advance the SwiveLock anchor into the tibia.



Remove the driver first and then the eyelet retention suture. Final fixation.

## Ordering Information

### Meniscal Root Repair Kit With PEEK SwiveLock® Anchor Set (AR-4550P)

Set Description	Item Number
Knee Scorpion™ Needle FlipCutter® II Reamer, 6 mm PassPort Button™ Cannula, 8 mm × 3 cm 2-0 FiberStick™ Suture, qty. 2 SutureLasso™ Needle w/ Nitinol Passing Wire 0 FiberLink™ Suture 0 TigerLink™ Suture PEEK SwiveLock Anchor, 4.75 mm × 19.1 mm Spade-Tip Drill Bit SwiveLock Anchor Tap, for hard bone	

### Meniscus Repair and Resection Set (AR-4555S)

Set Description	Item Number
Meniscal Root Marking Hook	AR-1610MR
Locking Guide for Meniscal Root Marking Hook	AR-1610LG
Knee Scorpion Suture Passer	AR-12990
2.75 mm Mini Suture Retriever, straight	AR-11540
MegaBiter™ Punch, straight	AR-41006
MegaBiter Punch, up-curved	AR-41026
MegaBiter Punch, straight left	AR-41006L
MegaBiter Punch, straight right	AR-41006R

Probe, 3.4 mm hook	AR-10010
Meniscus Repair Rasp	AR-4130
Side-Release RetroConstruction™ Handle	AR-1510HR
Drill Sleeve for Side-Release Handle, ratcheting, 2.4 mm	AR-1510FD-24
Stepped Drill Sleeve for Side-Release Handle, ratcheting	AR-1510FS-7
Insert for Stepped Drill Sleeve, 2.4 mm	AR-1204F-24I
Meniscus Repair and Resection Instrument Case	AR-4555C

## Meniscal Root Marking Hooks

Set Description	Item Number
Meniscal Root Marking Hook	AR-1610MR
Locking Guide for Meniscal Root Marking Hook	AR-1610LG
Point-to-Point Meniscal Root Marking Hook	AR-1610H

Products may not be available in all markets because product availability is subject to the regulatory approvals and medical practices in individual markets. Please contact your Arthrex representative if you have questions about the availability of products in your area.

## References

1. Pagnani MJ, Cooper DE, Warren RF. Extrusion of the medial meniscus. *Arthroscopy*. 1991;7(3):297-300. doi:10.1016/0749-8063(91)90131-g
2. Lee JH, Lim YJ, Kim KB, Kim KH, Song JH. Arthroscopic pull-out suture repair of posterior root tear of the medial meniscus: radiographic and clinical results with a 2-year follow-up. *Arthroscopy*. 2009;25(9):951-958. doi:10.1016/j.arthro.2009.03.018



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. Postoperative management is patient-specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level and/or outcomes.

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