# Meniscal Root Repair Using the PEEK SwiveLock® Anchor

Surgical Technique



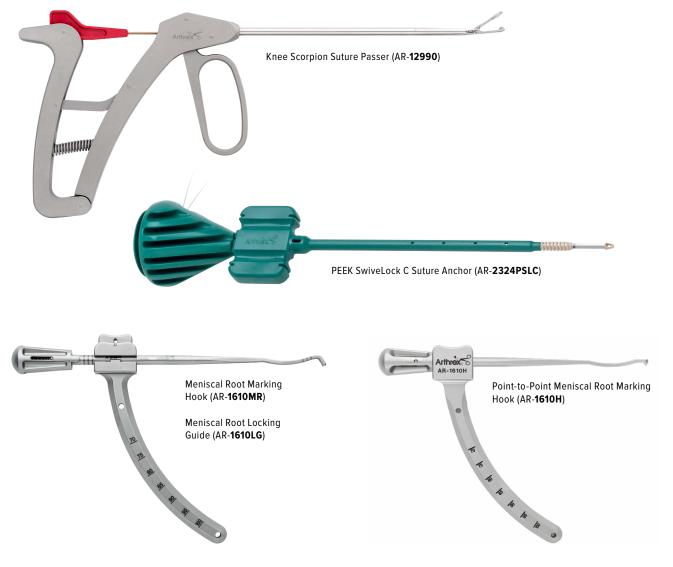


#### Meniscal Root Repair Introduction

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. 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 Using the 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 a PEEK SwiveLock anchor. Arthrex offers two meniscal 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.

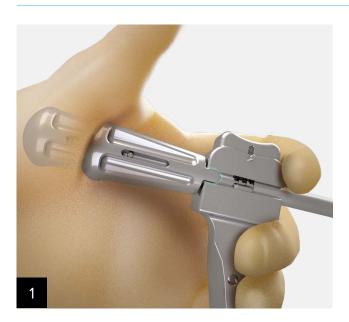


## Arthroscopic Evaluation and Preparation

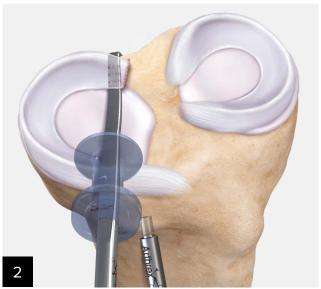
Probing the meniscal root should confirm detachment from the tibial plateau. On the tibial plateau, identify the location of meniscus reattachment. This should be as anatomical as possible without excessive stress or deformation of the tissue when pulled to that area. The lower profile size of the Apollo<sup>RF®</sup> SJ50 can be used to precisely 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 PoweRasp™ shaver and/or perform a small posterior notchplasty with an arthroscopic burr.



# Tibial Socket Creation Option A: Meniscal Root Locking Guide



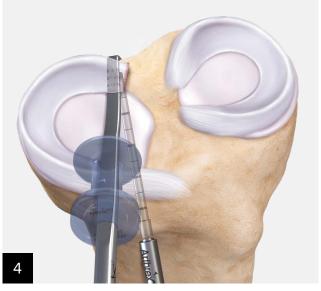
Engage the lock to prevent the marking hook from rotating while introducing the guide into the joint through a PassPort Button™ cannula.



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 pointto-point guide at the desired exit location at the meniscal root footprint.

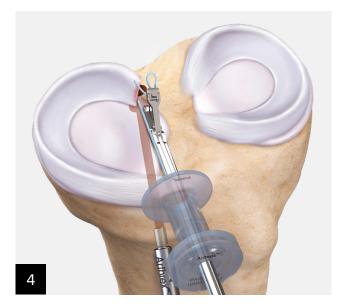


Once the drill guide has been positioned at the desired location on the tibial plateau, the angle of approach can be adjusted by pulling back on the nob and swiveling the guide to the appropriate angle. The guide can be set at 10°, 20°, 30°, or 40° off-center.



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  $^{\scriptscriptstyle{\mathsf{M}}}$  suture passer can be used to pass a size 0 FiberLink™ and a TigerLink™ suture to create two cinch stitches.



Use the SutureLasso $^{\mathsf{m}}$  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 is now complete and the remaining suture tails can be cut flush to bone.

## **Ordering Information**

#### Meniscal Root Repair Kit

Product description	Item number
Meniscal Root Repair Kit With PEEK	AR- <b>4550P</b>
SwiveLock® C Anchor Set	
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	

#### Meniscal Root Marking Hooks

Product description	Item number
Meniscal root marking hook	AR- <b>1610MR</b>
Locking guide for meniscal root marking hook	AR- <b>1610LG</b>
Point-to-point meniscal root marking hook	AR- <b>1610H</b>

#### Meniscal Repair and Resection Set

Product description	Item number
Meniscus Repair and Resection Set	AR- <b>4555S</b>
Point-to-point marking hook	AR- <b>1610H</b>
Knee Scorpion™ suture passer	AR- <b>12990</b>
2.75 mm mini suture retriever, straight	AR- <b>11540</b>
MegaBiter™ punch, straight	AR- <b>41006</b>
MegaBiter punch, up-curved	AR- <b>41026</b>
MegaBiter punch, straight left	AR- <b>41006L</b>
MegaBiter punch, straight right	AR- <b>41006R</b>
Probe, 3.4 mm hook	AR- <b>10010</b>
Meniscus repair rasp	AR- <b>4130</b>
Side-release RetroConstruction™ handle	AR- <b>1510HR</b>
Drill sleeve for side-release handle, ratcheting, 2.4 mm	AR- <b>1510FD-24</b>
Stepped drill sleeve for side-release handle, ratcheting	AR- <b>1510FS-7</b>
Insert for stepped drill sleeve, 2.4 mm	AR- <b>1204F-24I</b>
Meniscus repair and resection instrument case	AR- <b>4555C</b>

Products advertised in this brochure / surgical technique guide may not be available in all countries. For information on availability, please contact Arthrex Customer Service or your local Arthrex representative.

#### 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



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