Knotted SwiveLock® Anchor System

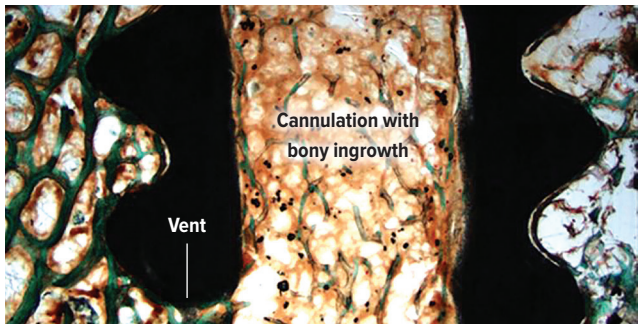
Surgical Technique

Arthrex®
Vet Systems

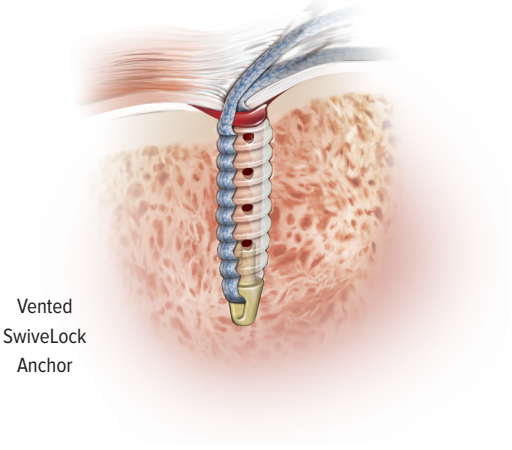
Knotless SwiveLock® Anchors and FiberTape® Sutures

Knotless SwiveLock anchors and FiberTape sutures provide our strongest and lowest profile constructs:

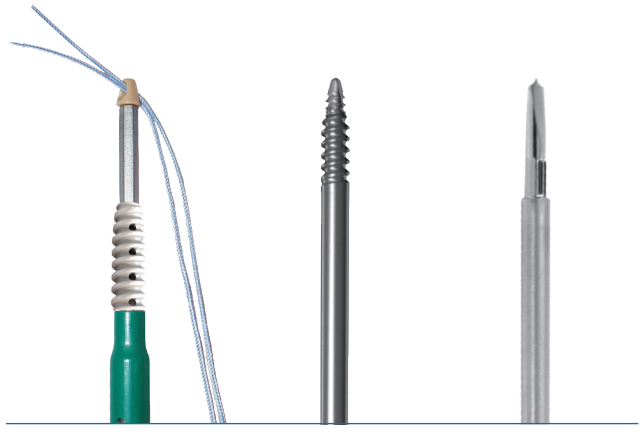
- Strong, knotless constructs
- Polyetheretherketone (PEEK) anchor material
  - PEEK is an inert, nonabsorbable, thermoplastic material
- Vented anchor bodies
  - Promotes bone marrow flow and allows for bony ingrowth
  - Canine pilot study shows evidence of bony ingrowth at 8 weeks[1]
- FiberTape suture
  - High strength
  - More resistant to tissue cut-through than round sutures[2]
  - Large footprint



Cross section of a vented BioComposite SwiveLock anchor 8 weeks after implantation in a canine model showing bony ingrowth in the vents and center cannulation.[1]



Vented SwiveLock Anchor



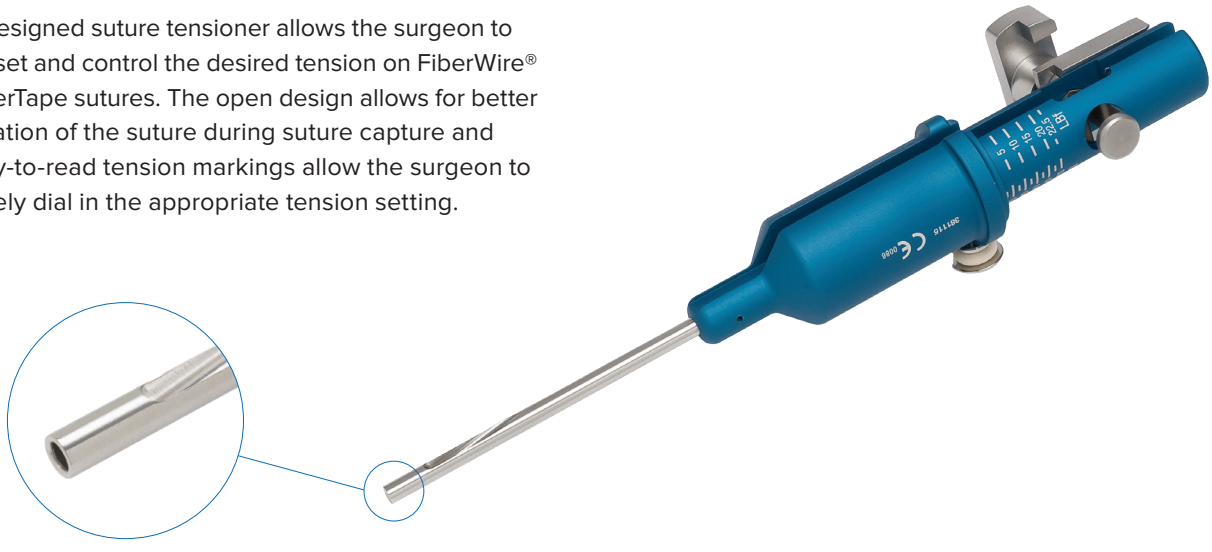
PEEK SwiveLock Anchor, 4.75 mm VAR-2324PSLC

Tap for 4.75 mm SwiveLock Anchor VAR-2324PTB

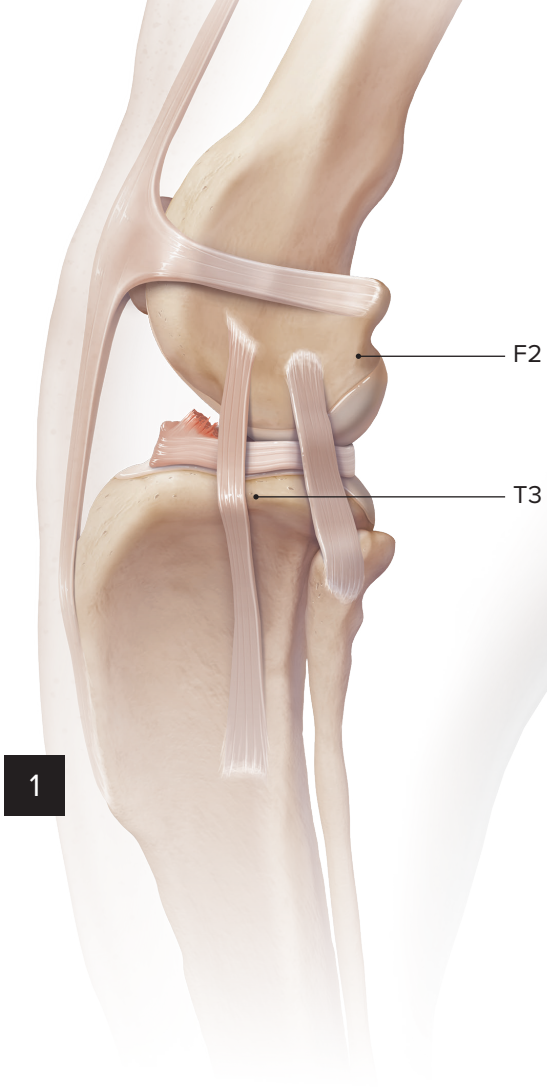
Spade Tip Drill for 4.75 mm SwiveLock Anchor VAR-1927D

Suture Tensioner With Tensiometer

The redesigned suture tensioner allows the surgeon to quickly set and control the desired tension on FiberWire® and FiberTape sutures. The open design allows for better visualization of the suture during suture capture and the easy-to-read tension markings allow the surgeon to accurately dial in the appropriate tension setting.



1. Arthrex, Inc. LA0218A. Naples, FL; 2010.
2. Arthrex, Inc. LA1-00031-EN_A. Naples, FL; 2015.



1

Knotted SwiveLock® Anchor System Surgical Technique

To begin, position the patient in lateral or dorsal recumbency under general anesthetic. A hanging limb technique with aseptic preparation and appropriate draping should be followed.

Using a lateral parapatellar approach with arthrotomy, perform a thorough exploration of the internal structures of the joint. Pathologic ligament and meniscus should be treated appropriately. Using standard technique, lavage the joint and close the joint capsule incision.

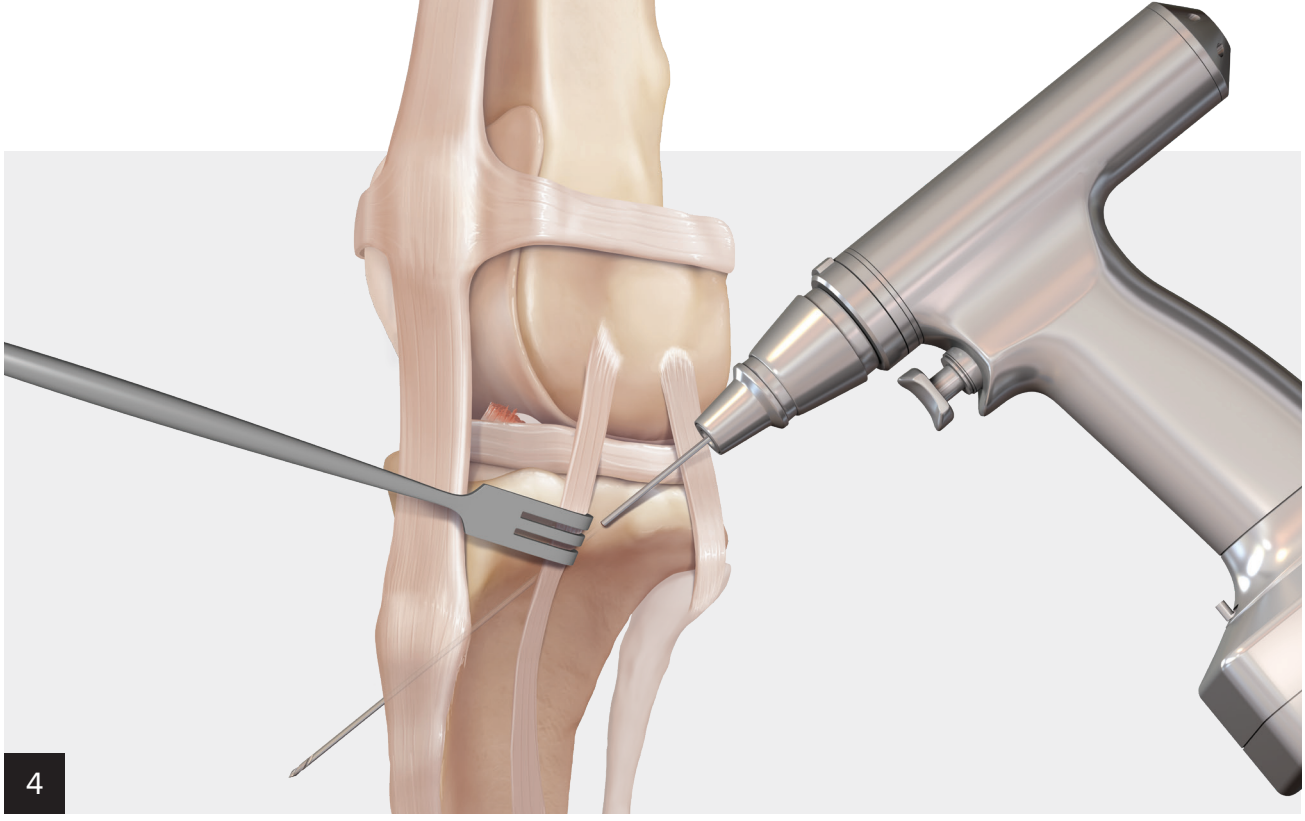
Illustration of a simulated joint specimen shows the isometric sites for suture anchorage in the femur and tibia. In the femur, the isometric position is located caudally below the level of the distal pole of the fabella (F2). In the tibia, the isometric site is located 2 mm to 4 mm caudal to the bony protuberance, that forms the caudal wall of the sulcus for the long digital extensor (LDE) tendon.

2

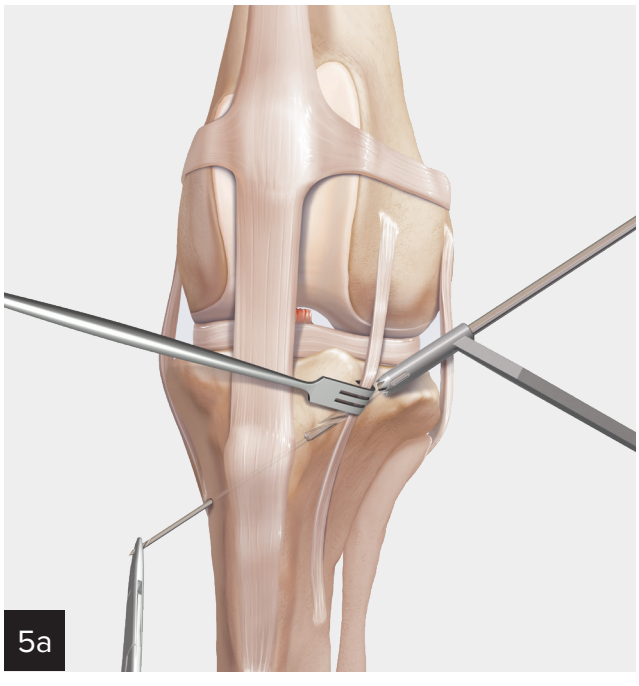
Using the spade-tip drill at the F2 site, advance the drill until it “bottoms out.” Drill at an angle towards the center of the trochlear groove to ensure the drill does not “blow out” the back of the femoral condyle.

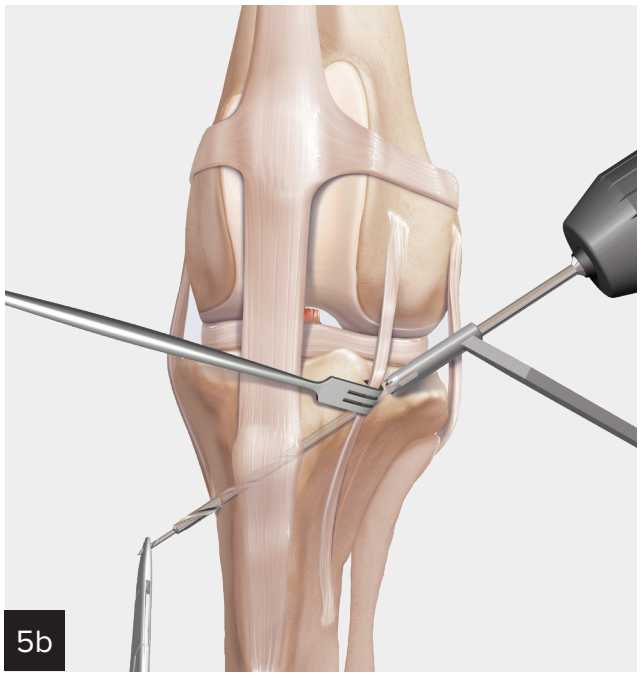
3

Use the tap to thread the tunnel created with the spade-tip drill. Advance the tap until the black laser line is flush with the surrounding bone.

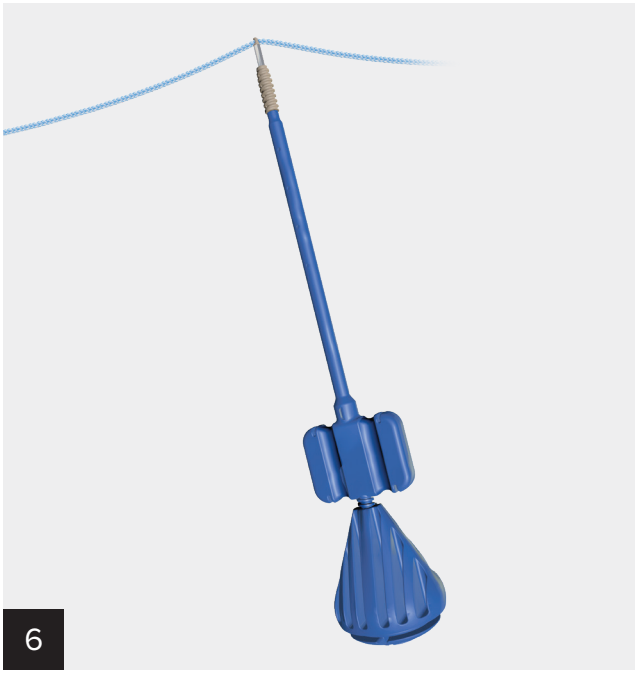


Locate the T3 site by palpating the bony protuberance that forms the caudal wall of the sulcus for the LDE tendon. The T3 site is located at the peak of the LDE groove just caudal to the LDE. Drill a tunnel with a 0.045-inch (1.14 mm) guidewire; the guidewire will pass beneath the sulcus and exit the caudomedial cortex of the proximal tibia.

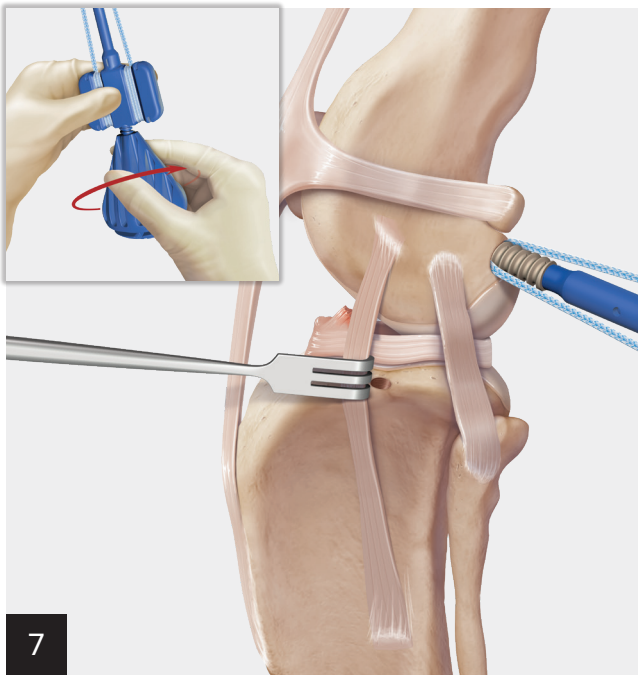




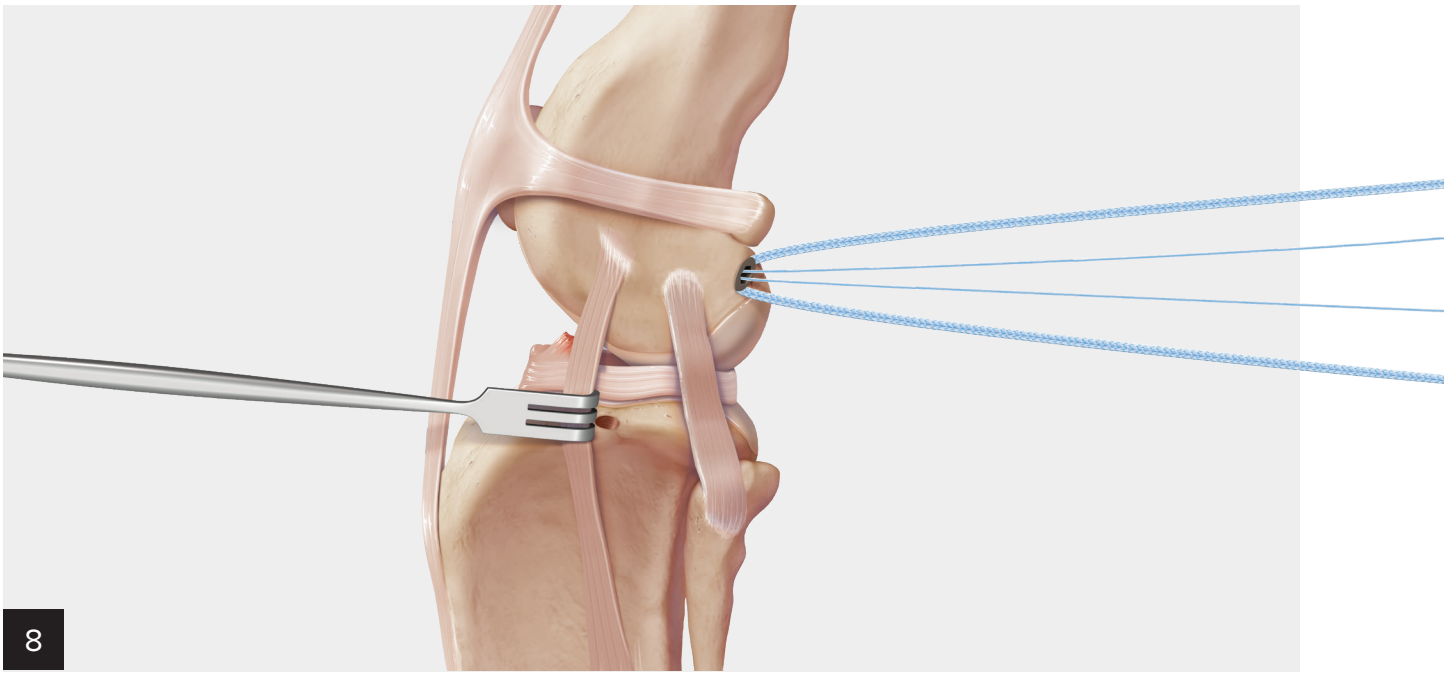
Use hemostats to grasp the tip of the guidewire. Place a 2.5 mm drill bit over the guidewire with a tissue protector in place and drill over it. Hold the guidewire in place with the hemostats, and remove the drill bit. Use a gentle reaming action to smooth the bone tunnel. Note: use 2.0 cannulated drill for a 3.5 mm SwiveLock® anchor.



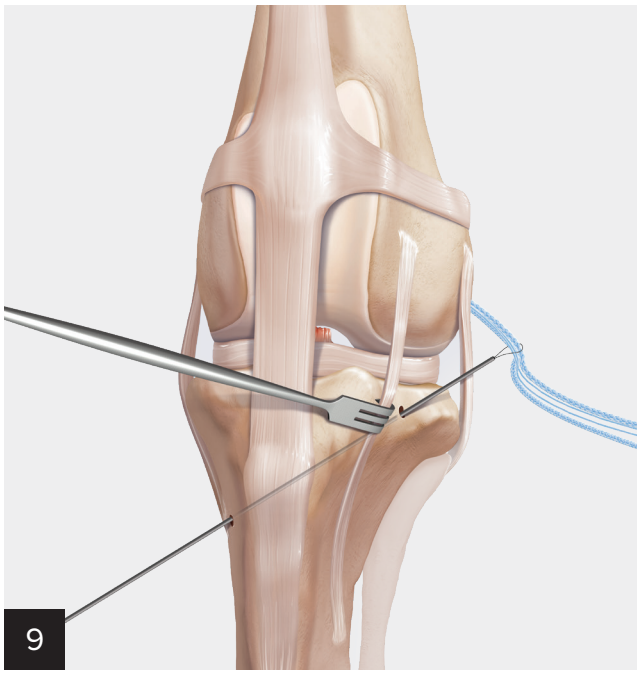
Open the FiberTape® suture and anchor packaging. Thread the two compressed ends of the FiberTape suture through the eyelet tip of the anchor. Take care to minimize contamination of the FiberTape implant by double gloving and not allowing the FiberTape suture to contact the patient's skin.



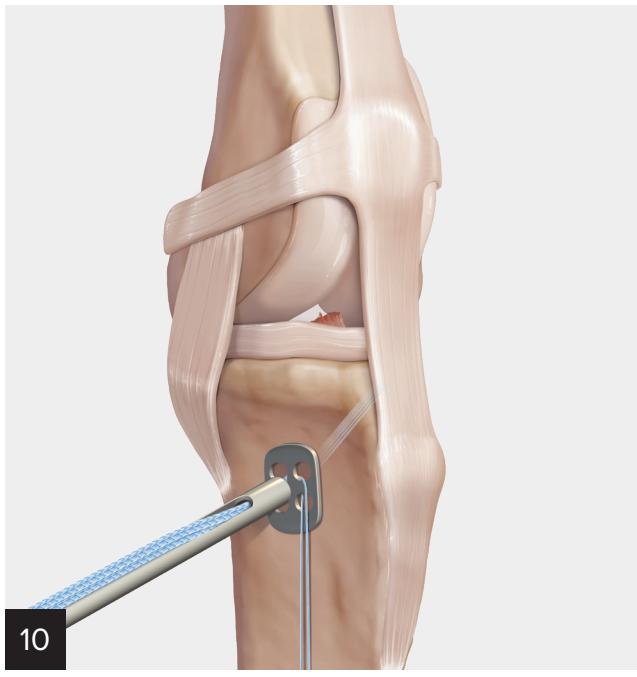
Insert the anchor making sure the FiberTape suture exits the bone anchor interface distally. Holding the square paddle of the inserter, turn the teardrop handle to advance the anchor into the tunnel. The anchor should be inserted completely to ensure all anchor threads are in the bone tunnel.



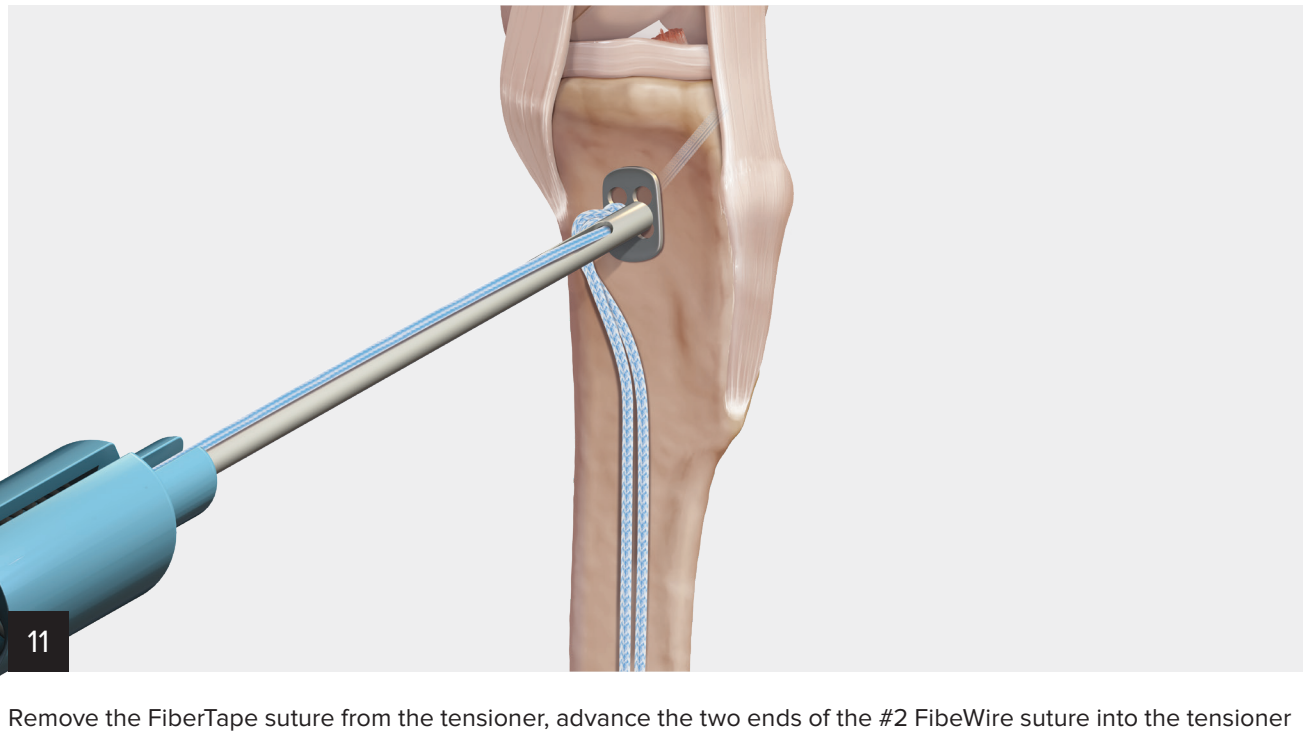
Disengage the SwiveLock® inserter and remove it from the anchor. Maintain the #2 FiberWire® retention suture within the bone tunnel, along with the 2 mm FiberTape suture.



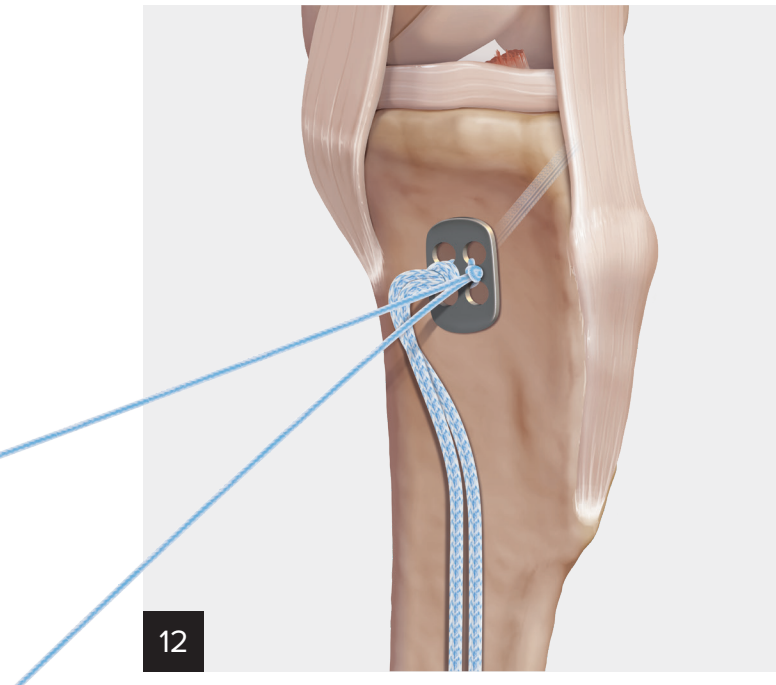
Using a suture-passing wire, load the four ends of the FiberTape® and FiberWire® sutures and pull all four ends through the bone tunnel. Note: A 3.5 mm two-hole button can also be used. If difficultly is encountered with tunnel passage, a second suture passing may be needed; these ends are placed through a 3.5 mm two-hole button.



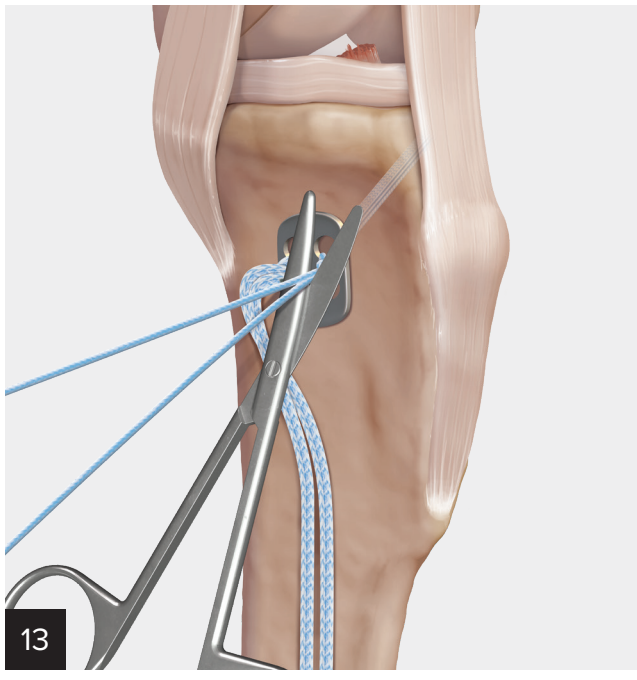
Advance the four-hole button over the FiberWire and FiberTape strands and seat it firmly and completely against the medial tibial bone. Advance the two blue strands of FiberTape suture into the tensioner and tension to 10 to 12 lb. Check drawer, internal rotation, and range of motion (ROM) of the stifle. Cycle the joint through a full ROM 20 to 30 times. Adjust tensioning as needed.



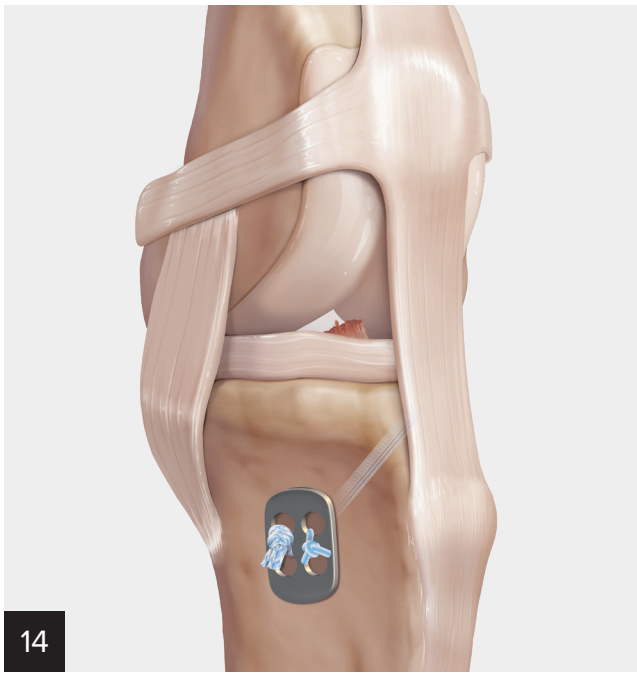
Remove the FiberTape suture from the tensioner, advance the two ends of the #2 FibeWire suture into the tensioner and tension to 10 to 12 lb, and, confirm ROM, internal rotation, and drawer are optimized. Put the stifle at a weight-bearing angle (ie, ~140˚) and tie a knot (single throw) with the blue strands of the FiberWire suture. Reinforce the knot with four to five throws.



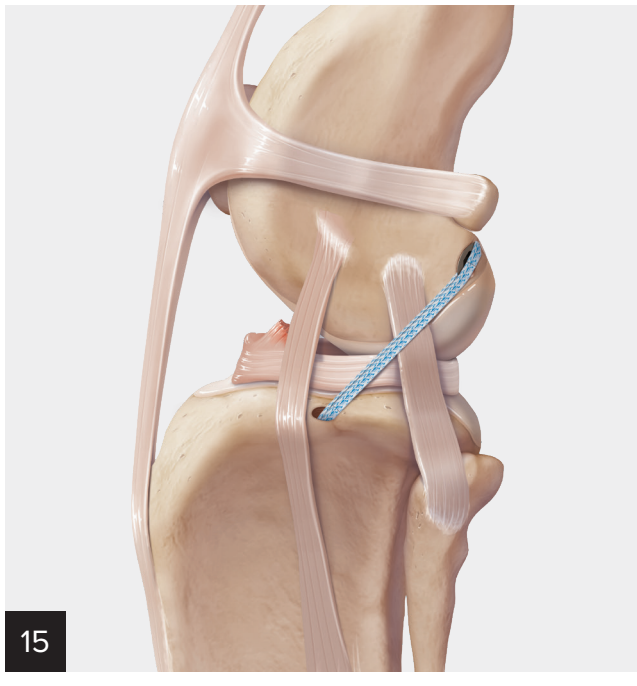
Remove the tensioner from the white strands of suture and recheck the ROM, rotation, and drawer. If satisfied, tie the FibeWire® suture.



Cut the limbs of suture, leaving about ¼ inch (6 to 7 mm) of suture limbs.



Medial view.



Lateral view.

Ordering Information

Implants

Product Description	Item Number
Suture Button, 7.5 mm, oblong, 4-hole, qty. 1	VAR-**8922**
PEEK 3.5 mm Knotless SwiveLock® Kit (VAR-2325PSLK)	
PEEK SwiveLock Anchor, 3.5 mm × 14.8 mm, closed eyelet, qty. 5	AR-**2325PSLC**
FiberTape® Suture, 2 mm, 36 in (blue), qty. 6	AR-**7237**
Suture Button, 3.5 mm × 11 mm, qty. 5	AR-**8920**
PEEK 4.75 mm Knotless SwiveLock Kit (VAR-2324PSLK)	
PEEK SwiveLock Anchor, 4.75 mm × 19.1 mm, closed eyelet, qty. 5	AR-**2324PSLC**
FiberTape Suture, 2 mm, 36 in (blue), qty. 6	AR-**7237**
Suture Button, 3.5 mm × 11 mm, qty. 5	AR-**8920**
PEEK 5.5 mm Knotless SwiveLock Kit (VAR-2324PSLK)	
PEEK SwiveLock Anchor, 5.5 mm × 19.1 mm, closed eyelet, qty. 5	AR-**2323PSLC**
FiberTape Suture, 2 mm, 36 in (blue), qty. 6	AR-**7237**
Suture Button, 3.5 mm × 11 mm, qty. 5	AR-**8920**

Instruments

Product Description	Item Number
Tap for 4.75 mm SwiveLock Anchor	VAR-**2324PTB**
Tap for 5.5 mm SwiveLock Anchor	VAR-**1927CTB**
Tap for 3.5 mm SwiveLock Anchor	VAR-**1678-03**
Drill for 3.5 mm SwiveLock Anchor	VAR-**1678-05**
Spade-Tip Drill for 4.75 mm and 5.5 mm SwiveLock Anchors	VAR-**1927D**
Cannulated Drill, 2.0 mm	VAR-**8933-20C**
Cannulated Drill, 2.5 mm	VAR-**8737-09**
Drill Guide/Tissue Protector for 3.5 mm SwiveLock Anchors	VAR-**1678-01**
Guidewire, 0.045 in (1.14 mm), qty. 6	VAR-**8933K**
Suture Passing Wire, nitinol, 8 in	VAR-**1255-08**
Small Joint FiberWire® Scissors	VAR-**11797**

Arthrex® Vet Systems

This is not veterinary advice and Arthrex recommends that veterinarians be trained in the use of any particular product before using it in surgery. A veterinarian must always rely on their own professional clinical judgment when deciding whether to use a particular product. A veterinarian must always refer to the package insert, product label, and/or directions for use before using any Arthrex product. Products may not be available in all markets because product availability is subject to the regulatory or veterinary practices in individual markets. 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 or outcomes. Please contact your Arthrex representative if you have questions about availability of products in your area.

View U.S. patent information at www.arthrex.com/corporate/virtual-patent-marking