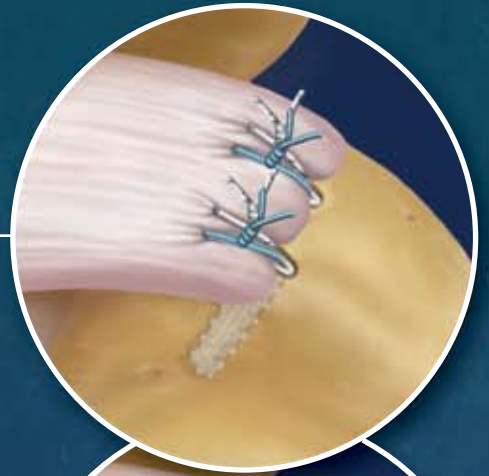


# Arthrex is Reaching New Heights in Rotator Cuff Repair

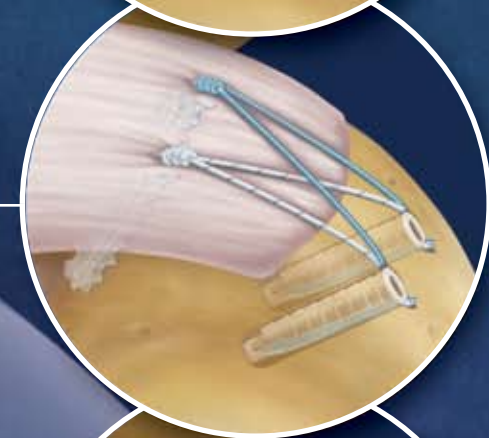
*Bio-Corkscrew® FT*



*Knotless SwiveLock™ & FiberChain™*



*SutureBridge™*



*RC Allograft™*



# Fully Threaded Corkscrew® Suture Anchors

The fully threaded Corkscrew family of suture anchors was designed for maximum fixation strength and simple insertion. An internal drive mechanism is combined with a unique FiberWire® suture eyelet to allow for continuous threads along the entire length of the anchor. This design allows the anchor to be inserted flush with the cortical bone surface providing excellent fixation strength and stability while preventing the anchor “pull-back” effect that can occur in conventional anchors with protruding eyelets. The internal drive configuration allows for high insertion torque and the suture eyelet self-aligns to eliminate the need for specific eyelet orientation at the tissue edge. The anchors are double-loaded with FiberWire suture to provide the best possible combination for superior repair strength.

## Bio-Corkscrew FT Suture Anchor



The Bio-Corkscrew FT is made from bioabsorbable PLLA. Its strong internal square drive mechanism increases insertion torque to minimize stripping during insertion into hard cortical bone. A punch is required to prepare a bone socket for anchor insertion. Combination punch/taps are available for use in extremely hard bone.

## Corkscrew FT II Suture Anchor

The Corkscrew FT II is made of titanium. It also features the unique FiberWire eyelet to minimize suture abrasion and maximize suture slide during knot tying. It has a strong internal hex drive mechanism. The anchor is inserted without the need for bone socket preparation. A mallet is used to introduce the anchor tip, then the anchor is screwed in until flush.

## PEEK Corkscrew FT Suture Anchor

The PEEK Corkscrew FT is made from polyetheretherketone, which is a nonabsorbable, thermoplastic material with excellent biocompatibility and biostability characteristics. The anchor is radiolucent and will not cause an artifact on imaging studies. A tapped bone socket is required for installation.

### Associated Literature:

Double Row Rotator Cuff Repair using the Bio-Corkscrew FT and Bio-Corkscrew LT0215

New Materials in Sports Medicine (PEEK) LA0200

## Ordering Information

- Bio-Corkscrew FT  
4.5 mm x 15 mm,  
w/two #2 FiberWire  
AR-1927BF-45
- Corkscrew FT Combo Punch/Tap  
AR-1927PTB-45
- Bio-Corkscrew FT, 5.5 mm x 15 mm,  
w/two #2 FiberWire  
AR-1927BF
- Bio-Corkscrew FT, 5.5 mm x 15 mm,  
w/two #2 FiberWire & Needles  
AR-1927BNF
- Bio-Corkscrew FT, 5.5 mm x 15 mm,  
w/two #2 TigerTail  
AR-1927BFT
- Bio-Corkscrew FT w/two NeedlePunch Needles,  
5.5 mm x 15 mm, w/two #2 FiberWire  
AR-1927BNP
- Bio-Corkscrew FT w/four NeedlePunch Needles,  
5.5 mm x 15 mm, w/two #2 FiberWire  
AR-1927BNP4
- Bio-Corkscrew FT Punch  
AR-1927PB
- Bio-Corkscrew FT Punch, disposable  
AR-1927PBS
- Punch/Tap for 5.5 mm Bio-Corkscrew FT  
AR-1927CTB
- Bio-Corkscrew FT, 6.5 mm x 15 mm,  
w/two #2 FiberWire  
AR-1927BF-65
- Corkscrew FT II Suture Anchor, 5.5 mm x 16 mm,  
w/two #2 FiberWire  
AR-1927SF-2
- Corkscrew FT II Suture Anchor w/Needles,  
5.5 mm x 16 mm, w/two #2 FiberWire  
AR-1928SNF-2
- Corkscrew FT II Suture Anchor  
w/NeedlePunch Needles,  
5.5 mm x 16 mm, w/two #2 FiberWire  
AR-1928NP-2
- Corkscrew FT II Suture Anchor, 5.5 mm x 16 mm,  
w/two #2 TigerTail  
AR-1928SFT-2
- Corkscrew FT III Suture Anchor  
5.5 mm x 16 mm, w/three #2 FiberWire  
AR-1928SF-3
- PEEK Corkscrew FT  
4.5 mm x 16 mm, w/two #2 FiberWire  
AR-1927PSF-45
- Corkscrew FT Combo Punch/Tap  
AR-1927PTB-45
- PEEK Corkscrew FT  
5.5 mm x 16 mm, w/two #2 FiberWire  
AR-1927PSF
- PEEK Corkscrew FT Combo Punch/Tap  
AR-1928PT

# SutureBridge™

A transosseous equivalent SutureBridge that enhances footprint compression and may promote tendon healing-to-bone can be achieved with minimal knot tying. The repair consists of a tied medial row constructed with two, fully threaded Corkscrew FT anchors, combined with knotless lateral fixation using two PushLocks. The result is a quick, secure and low profile repair with excellent contact between tendon and bone. The construct provides stability in rotation and protects a broad healing zone from synovial fluid infiltration.

Cadaveric biomechanical testing of the SutureBridge construct showed that the average load to failure was 460N vs. 373N for a standard single row repair. Gap formation under cyclic loading averaged only 1.1 mm vs. 2.4 mm for a standard single row repair. (data on file)



**1** Insert two medial row Bio-Corkscrew FT anchors and pass FiberWires with the Scorpion Suture Passer



**2** Tie the medial knots, retrieve one suture from each Bio-Corkscrew FT and load through the Bio-PushLock eyelet



**3** Insert the Bio-PushLock into a dilated bone socket, tension the sutures and impact the anchor body into its final position. Cut the sutures flush.

### Associated Literature/Media:

SutureBridge Double Row Rotator Cuff Repair Using the PushLock and Bio-Corkscrew FT  
*LT0515*

DVD: Arthroscopic Double Row Rotator Cuff Repair Featuring the SutureBridge Technique with Bio-Corkscrew FT & PushLock Anchors  
*DVD-1085*

## Ordering Information

### Implants/Disposables:

- Bio-Corkscrew FT, 5.5 mm x 15 mm, w/two #2 FiberWire  
*AR-1927BF*
- Corkscrew FT II, 5.5 mm x 16 mm, w/two #2 FiberWire  
*AR-1928SF-2*
- PEEK Corkscrew FT, 5.5 mm x 16 mm, w/two #2 FiberWire  
*AR-1928PSF-2*
- Bio-PushLock, 3.5 mm x 14 mm  
*AR-1926B*
- PEEK PushLock, 3.5 mm x 14 mm  
*AR-1926PS*
- Bio-PushLock, 4.5 mm x 18.5 mm  
*AR-1922B*
- PEEK PushLock, 4.5 mm x 18.5 mm  
*AR-1922PS*
- Scorpion Needle  
*AR-13990N*
- Crystal Cannula, 5.75 mm I.D. x 7 cm  
*AR-6560*

### Accessory Instruments:

- Chondro Pick, straight, 40° tip  
*AR-8670*
- Bio-Corkscrew FT Punch  
*AR-1927PB*
- Bio-Corkscrew FT Punch, disposable  
*AR-1927PBS*
- Punch/Tap for Bio-Corkscrew FT  
*AR-1927CTB*
- Punch for 3.5 mm PushLock  
*AR-1926P*
- Punch for 4.5 mm PushLock (hard bone only)  
*AR-1922P*
- PEEK Corkscrew FT Combo Punch/Tap  
*AR-1928PT*
- Scorpion™ Suture Passer, 16 mm  
*AR-13990*
- Scorpion Suture Passer, 20 mm  
*AR-13992*
- KingFisher Suture Retriever/Tissue Grasper w/SR Handle  
*AR-13970SR*
- KingFisher Suture Retriever/Tissue Grasper w/WishBone Handle  
*AR-13970W*
- Suture Cutter, open ended, left notch  
*AR-11794L*
- Suture Cutter, open ended, left notch w/WishBone Handle  
*AR-11794LW*

# Knotless SwiveLock & FiberChain/Single Row Repair

Knotless rotator cuff repair is made simple with the SwiveLock Suture Anchor and FiberChain. Developed in conjunction with Stephen S. Burkhart, M.D., FiberChain is a specialty suture that is formed from #2 FiberWire. One end is a standard single suture strand, while the other is fashioned into ten chain links that are each approximately 6 mm long. The SwiveLock Suture Anchor consists of a fully threaded, anchor body (PLLA or PEEK) and a forked, swivel tip (PEEK) that are loaded onto a tenodesis style driver. The thread configuration is the same as for the proven Bio-Corkscrew FT.



**1** Pass FiberChain leader with a Scorpion Suture Passer



**2** Thread leader through terminal link and cinch onto cuff



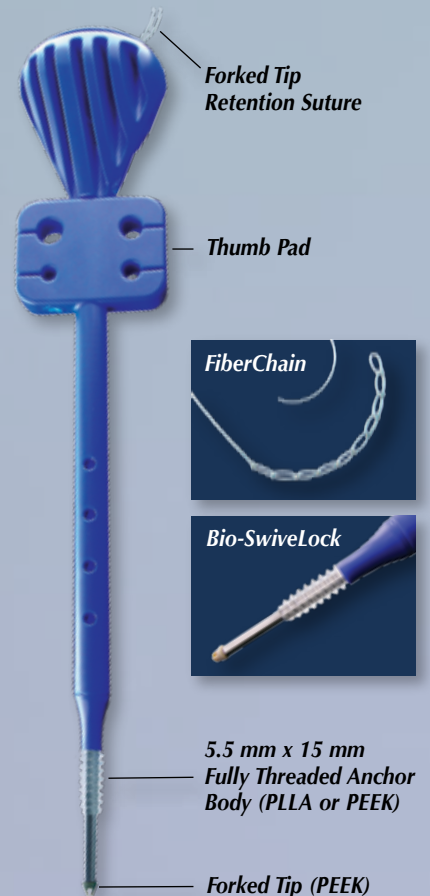
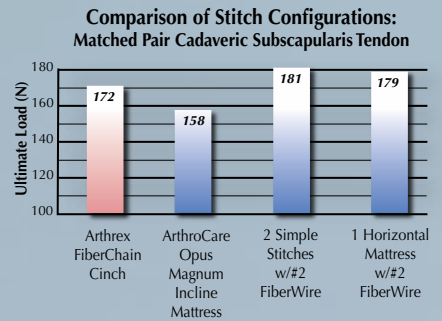
**3** Prepare bone socket lateral to cuff edge with a Bio-Corkscrew FT punch



**4** Capture appropriate FiberChain link with forked tip and insert SwiveLock

## ... the science behind the technology.

Biomechanical testing was performed to compare the simple FiberChain cinch stitch to several other stitch configurations. The stitches were placed in cadaveric subscapularis tendon and then pulled to failure. No statistically significant difference in strength existed among the stitch configurations. The easy-to-perform, knotless FiberChain cinch stitch was shown to be strong and reliable. (data on file)



# Knotless Double Row Repair with SwiveLock

A totally knotless, transosseous equivalent rotator cuff repair can easily be performed when the SwiveLock anchor is combined with a specially configured Bio-Corkscrew FT that is provided with a preloaded FiberChain.

## Associated Literature/Media:

SwiveLock and FiberChain Knotless Rotator Cuff Repair  
LT0217

DVD: Arthroscopic Rotator Cuff Repair  
Featuring the SwiveLock Anchor  
DVD-1088



**1** Punch medial bone sockets and insert two Bio-Corkscrew FT anchors preloaded with FiberChain



**2** Pass the FiberChains using the Scorpion Suture Passer



**3** Prepare lateral bone sockets with the Bio-Corkscrew FT Punch



**4** Secure the FiberChains laterally with SwiveLock anchors and cut the sutures flush

## Ordering Information

### Implants/Disposables:

- Bio-SwiveLock Suture Anchor, 5.5 mm x 15 mm  
AR-2323BSL
- PEEK SwiveLock Suture Anchor, 5.5 mm x 15 mm  
AR-2323PSL
- FiberChain, #2 FiberWire, w/10 loops, 7 mm long  
AR-7270
- Bio-Corkscrew FT Suture Anchor, 5.5 mm x 15 mm, w/FiberChain  
AR-1927BFC
- Scorpion Needle  
AR-13990N
- Crystal Cannula, 5.75 mm I.D. x 7 cm  
AR-6560

### Accessory Instruments:

- Chondro Pick, straight, 40° tip  
AR-8670
- Bio-Corkscrew FT Punch, AR-1927PB
- Bio-Corkscrew FT Punch, disposable  
AR-1927PBS
- Bio-Corkscrew FT Punch/Tap, AR-1927CTB
- Suture Retriever, 3.4 mm, straight  
AR-12540
- Suture Retriever, straight, 3.4 mm w/WishBone Handle  
AR-12540W
- Scorpion Suture Passer, 16 mm  
AR-13990
- Scorpion Suture Passer, 20 mm  
AR-13992
- KingFisher Suture Retriever/Tissue Grasper, w/SR Handle  
AR-13970SR
- KingFisher Suture Retriever/Tissue Grasper, w/WishBone Handle  
AR-13970W
- Suture Cutter, open ended, left notch  
AR-11794L
- Suture Cutter, open ended, left notch, w/WishBone Handle  
AR-11794LW



## Promote Healing Using Autogenous Bone Marrow

Bone marrow is a source of stem cells and progenitor cells that can repair, maintain, and differentiate into a variety of tissues. Many studies have investigated the benefits of bone marrow, promoting its use for bony and tendon defects. The BioSponge™ and RC Allograft can both act as carriers of bone marrow which promotes a biological response to damaged rotator cuff tissue.

### SutureBridge Enhanced with BioSponge

The porous collagen BioSponge can be readily hydrated with aspirated bone marrow and delivered arthroscopically under the tissue prior to implanting the lateral row implants of the SutureBridge.\*

### RC Allograft Augmentation

RC Allograft is sterile rotator cuff tendon allograft that can be hydrated with bone marrow and used to reinforce rotator cuff repairs.\*

\* BioSponge and RC Allograft impregnated with bone marrow aspirate should be inserted in a mini-open technique.

### Bone Marrow Aspiration

Bone marrow aspirate (BMA) provides a cell suspension that can be readily processed intraoperatively for immediate implantation. BMA is commonly withdrawn from the iliac crest but can be aspirated arthroscopically from the femur and humerus.

#### Arthroscopic Technique:



Insert bone marrow aspiration needle into humeral head



Remove trocar and connect syringe. Aspirate 10-20 cc's of bone marrow.



Hydrate the BioSponge or RC Allograft with bone marrow in prep tray. Alternatively, the BMA can be injected directly or localized to a repair site and facilitate healing.

### Ordering Information

Bone Marrow Aspirate Kit (AR-1101DS) includes:

- 1 Bone Marrow Needle
- 1 60 cc Syringe
- 1 Prep Tray

BioSponge  
AR-1101BB

RC Allograft  
241001

(order through ATSI)



## Accessory Instruments

### Scorpion

The Scorpion Suture Passer adds simplicity to suture passing in rotator cuff repair. Ergonomically designed for one-hand use, the multi-function Scorpion grasps cuff tissue, then directly passes and retrieves a FiberWire.

The low profile, standard Scorpion grasps 16 mm of tissue and fits through a 5.75 mm cannula. A larger, 20 mm version was developed for use in double row techniques that require a deeper medial bite. A "Humpback" version, with locking jaws, is available for use in thicker rotator cuff tissue. The "Humpback" requires a 7 mm cannula.

All Scorpions use the same disposable needle which withstands multiple suture passes during a single case.

### KingFisher

The KingFisher Suture Retriever/Tissue Grasper enables the surgeon to perform multiple tasks with one tool, improving the speed and efficiency of the procedure. The KingFisher is the optimal tool for arthroscopic tissue grasping/reduction, foreign body removal as well as suture retrieval/management. The jaws feature a self-releasing locking mechanism to aid in clamping tissue. The low profile jaws of the KingFisher allow the surgeon to reach tight areas easily. The 4.2 mm diameter shaft allows the KingFisher to fit down a small 5.75 mm Crystal Cannula®.

### Footprint Chondro Picks

These three uniquely angled picks can be used to prepare a good bleeding bone surface on the rotator cuff footprint to enhance the healing response. Anatomically curved shafts and angled tips facilitate access to the tuberosity to stimulate a healing environment safely between medial and lateral anchor fixation rows.

### SutureLasso SD

The small diameter SutureLassos feature a stiff shaft and a sharp, atraumatic tip with an outer diameter of only 1.8 mm. The SutureLasso SD is available in a variety of tip configurations and is pre-loaded with a Nitinol wire shuttle loop. A thumb pad is used for easy, one-handed wire advancement.

Skip a shuttling step during margin convergence suturing by loading a FiberStick directly through the SutureLasso SD in place of the Nitinol wire loop. The FiberStick is a #2 FiberWire with 12 inches stiffened to allow easy advancement through most cannulated instruments.

### ProWick™ - Shoulder Postoperative Dressing and Cold Therapy System

The ProWick System was specifically designed for use in shoulder surgery. It is a tapeless system composed of state-of-the-art, super-absorbent material that quickly wicks away exudate from the surgical incision sites while compression and cold therapy are applied to the healing shoulder.



Dressing



Cold Therapy

## Ordering Information

Scorpion Suture Passer,  
16 mm  
AR-13990

Scorpion Suture Passer,  
20 mm  
AR-13992

Scorpion Suture Passer,  
Humpback,  
16 mm  
AR-13993

Scorpion Needle,  
quantity 5  
AR-13990N

KingFisher Suture Retriever/  
Tissue Grasper,  
w/SR Handle  
AR-13970SR

KingFisher Suture Retriever/  
Tissue Grasper, w/WishBone Handle  
AR-13970W

Chondro Pick, straight, 40° tip  
AR-8670

Chondro Pick, concave, 90° tip  
AR-8671

Chondro Pick, convex, 60° tip  
AR-8672

SutureLasso SD, 90° up  
AR-4068-90

SutureLasso SD, Crescent  
AR-4068C

SutureLasso SD, 45° curve right  
AR-4068-45R

SutureLasso SD, 45° curve left  
AR-4068-45L

SutureLasso SD, 25° tight curve right  
AR-4068-45R

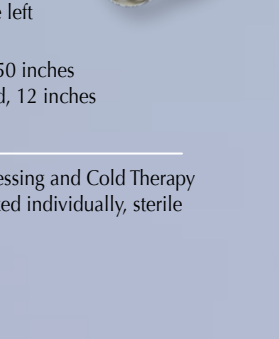
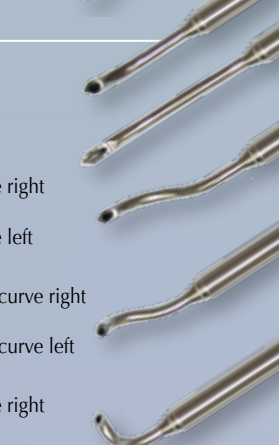
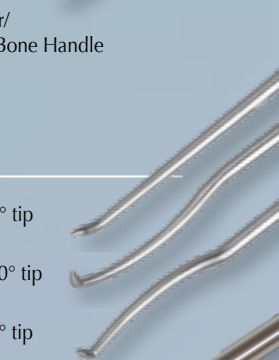
SutureLasso SD, 25° tight curve left  
AR-4068-45L

SutureLasso SD, 90° curve right  
AR-4068-90R

SutureLasso SD, 90° curve left  
AR-4068-90L

FiberStick, #2 FiberWire, 50 inches  
(blue), one end stiffened, 12 inches  
AR-7209

ProWick Postoperative Dressing and Cold Therapy  
System, box of 10, packed individually, sterile  
AR-1625





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*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. 5,964,783; 6,652,563; 6,716,234; 6,994,719; 7,029,490 and PATENTS PENDING

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