Preference for percutaneous anchor placement for glenohumeral joint procedures is at the surgeon’s discretion using the Bio-SutureTak Spear with Trocar.

The Bio-SutureTak and Shoulder Repair Set provide a comprehensive solution to facilitate arthroscopic shoulder reconstruction. Patient positioning using the Beach Chair Lateral Traction Device or the 3-Point Shoulder Distraction System allows for reliable joint distraction. Glenohumeral joint access is facilitated with a variety of clear translucent cannulas. The Bio-SutureTak simplifies implant insertion. Using an insertion guide, with or without offsets, a pilot hole is precisely placed on the glenoid rim.

Suture passage through tissue is then performed with available instruments including the Corkscrew®, and various terminal designed SutureLassos™, BirdBeaks®, Penetrators™, and the NeedlePunch®. The Bio-SutureTak loaded with FiberWire® suture, which is twice the strength per diameter than other permanent braided sutures, alleviates concern for suture breakage while knot tying with Single, Two-Hole or 6th Finger Knot Pushers.
To promote tissue healing to bone, a bleeding bone surface is prepared with a series of Tissue Elevators available in 15 and 30 degree angles and/or specifically designed Glenoid and Bankart Rasps. When significant scarring or an ALPSA lesion is present, a Tissue Elevator may be used. A Glenoid Rasp or shaver is introduced to remove fibrous adhesions.

The Metal Offset Guide is passed through the anterior inferior, threaded, translucent Twist-In Cannula set at the 5 o’clock position on the glenoid margin to establish placement of the initial Bio-SutureTak. The trocar is removed allowing the fish-mouth design of the guide to remain securely on the bone surface rim.

A pilot hole for the Bio-SutureTak is completed to a precise, appropriate depth as the collar of the drill contacts the back of the guide. The preset depth of the pilot hole assures that the suture loop of the implant is countersunk below the bone surface.

The Bio-SutureTak is then placed through the guide and inserted into bone by gentle impaction until the laser line on the handle end of the inserter is flush with the back of the guide. The guide and implant driver are removed. Security of the anchor placement is tested by pulling on the #2 FiberWire suture looped through the suture eyelet molded in the implant.

A Push/Pull Crochet Hook is used to transfer a single suture limb to the anterior superior portal. Visualizing the anchor eyelet during suture transfer avoids the potential of disengaging the suture from the implant.
A Corkscrew SutureLasso is inserted into the anterior inferior cannula and passed through the labral tissue inferior to the anchor’s position. Once the tip of the lasso penetrates the tissue the Nitinol suture wire is advanced into the joint. Through the anterior superior portal a CrabClaw™ is used to retrieve the wire loop outside of the cannula. While holding the wire loop the SutureLasso is removed from the anterior inferior portal.

Three to four centimeters of the suture limb is passed through the wire lasso loop outside the anterior superior portal and the wire loop exiting the anterior inferior cannula is pulled out the cannula which shuttles the suture through the labral tissue and out the inferior cannula.

The suture loop of the Bio-SutureTak facilitates ease of suture-sliding through tissue and anchor necessary for securing sliding knots. Alternating half-hitch or sliding knot tying using the 6th Finger Knot Pusher, CrabClaw, Single Hole or Two-Hole Knot Pusher provides multiple options for knot tying.

A Suture Cutter, specially designed to cut FiberWire, is used to cut the excess suture leaving a 3 mm tail.

Alternative suture passing option: Using a single portal, a BirdBeak or Penetrator Suture Retriever may be used to penetrate the tissue. The jaws of the instrument are opened retrieving a single suture limb. In hard to reach areas a suture hand-off with a Suture Retriever can bring suture to the jaw opening of the BirdBeak or Penetrator alleviating potential tissue damage.

SLAP repair is performed in a similar manner. Optional percutaneous anchor placement with the Spear alleviates cannula placement through the rotator cuff. Sutures are transferred to the anterior superior cannula with a Suture Retriever. A BirdBeak or SutureLasso passed in the same percutaneous path as the anchor is used to pass suture through the superior labrum. The flexible eyelet of the Bio-SutureTak enables the surgeon to retrieve and tie the suture via the anterior superior cannula.
## Ordering Information

### 2.4 mm Implant:
- Bio-SutureTak Suture Anchor, 2.4 mm x 12 mm, w/#2 FiberWire
- AR-1934BF-24

### Bio-SutureTak Instrumentation Set (AR-1934-24S) for 2.4 mm implants:
- FASTak Spear, w/Trocar & Blunt Obturator
  - AR-1948
- Step Drill, 1.8 mm, for 2.4 mm Bio-SutureTak
  - AR-1934D-24
- Bio-SutureTak Instrumentation Case
  - AR-1934-24C

### Optional Instruments, 2.4 mm implants only:
- FASTak Spear, w/Trocar Obturator, single use
  - AR-1945S
- Spade Tip Drill, for use w/2.4 mm Bio-SutureTak
  - AR-1934SD-24
- 2.4 mm Bio-SutureTak Disposables Kit
  - (includes: Spear - AR-1945S and Step Drill - AR-1934D-24)
  - AR-1934-24DS

### 3 mm Implants:
- Bio-SutureTak Suture Anchor, 3 mm x 14 mm, w/#2 Tevdek
  - AR-1934B
- Bio-SutureTak Suture Anchor, 3 mm x 14 mm, w/#2 FiberWire
  - AR-1934BF
- Bio-SutureTak Suture Anchor, 3 mm x 14 mm, w/two #2 FiberWire
  - AR-1934BF-2
- Bio-SutureTak Suture Anchor, 3 mm x 14 mm, w/#2 TigerTail
  - AR-1934BFT
- Bio-SutureTak Suture Anchor, 3 mm x 14 mm, w/two #2 TigerTail
  - AR-1934BFT-2
- PEEK SutureTak, 3 mm x 12 mm w/#2 FiberWire
  - AR-1934PS

### Bio-SutureTak Instrumentation Set (AR-1934S) for 3 mm implants includes:
- FASTak II Spear with Trocar, reusable
  - AR-1949
- Spear with Trocar and Blunt Obturator
  - AR-1949-02
- Bio-SutureTak Instrumentation Case
  - AR-1934C

### Optional Instruments, 3 mm implants only:
- Plication Driver
  - AR-1934DBS
- Bio-SutureTak Spear w/Circumferential Teeth, 3 mm
  - AR-1946
- Bio-SutureTak Disposables Kit
  - (includes: Clear Guide - AR-1250LT and Drill - AR-1934CG)
  - AR-1934DS
- Bio-SutureTak Disposables Kit
  - (includes: Metal Spear - AR-1949 and Step Drill - AR-1250LT)
  - AR-1934DS-2
- Clear Guide for Bio-SutureTak, FASTak II and FASTak
  - AR-1934CG
- Offset Clear Guide for Bio-SutureTak, FASTak II and FASTak
  - AR-1934G
- Spade Tip Drill, thick shaft
  - AR-1252
- Spade Tip Drill
  - AR-1257
- Portal Dilator for Bio-SutureTak Spear
  - AR-1949PD
- Needle for Portal Dilator
  - AR-6521
- Metal Offset Guide
  - AR-1934R
- Metal Offset Guide, disposable
  - AR-1934GS
- Bio-SutureTak Spear w/Circumferential Teeth, 3 mm
  - AR-1946

### 3.7 mm Implants:
- Bio-SutureTak Suture Anchor, 3.7 mm x 14 mm, w/#2 FiberWire
  - AR-1934BLF
- Bio-SutureTak Suture Anchor, 3.7 mm x 14 mm, w/#2 TigerTail
  - AR-1934BLFT

### Bio-SutureTak Instrumentation Set (AR-1934LS) for 3.7 mm implants includes:
- Bio-SutureTak Spear, 3.7 mm
  - AR-1907
- Bio-SutureTak Instrumentation Case
  - AR-1934C

### Required Drills:
- Step Drill, for 2.4 mm Bio-SutureTak
  - AR-1934D-24
- Step Drill, for 3 mm Bio-SutureTak
  - AR-1250LT
- Step Drill, for 3 mm PEEK SutureTak
  - AR-1934PD
- Step Drill, for 3.7 mm Bio-SutureTak
  - AR-1908

### Bio-SutureTak Open Procedures, Implants and Instruments:
- Bio-SutureTak Suture Anchor w/Needles, w/#2 FiberWire, 3 mm x 14 mm
  - AR-1934BNF
- Short Spear, for Bio-FASTak w/Needles and Bio-SutureTak w/Needles
  - AR-1326G
- Short Spade Tip Drill
  - AR-1256
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.

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