RetroConstruction™
THE MOST ADVANCED TECHNIQUES IN ACL/PCL RECONSTRUCTION
“I have used the RetroConstruction technique on all my ACL reconstructions, primary and revision. This technique allows the optimum choice for femoral tunnel position without dependence on tibial tunnel positioning. Femoral tunnels can be in a more lateral and posterior position which is more anatomic and allows more normal biomechanics. One of the major reasons for failed ACL surgery can be averted.

This technique has also been helpful in ACL reconstruction in young patients by allowing tunnels within the epiphysis which do not cross the physis. It is also applicable to revision surgery by allowing femoral tunnel placement in a more anatomic position which usually results in no overlap of the new tunnel and the previous tunnel which has often been placed too vertically.

The RetroDrill® reamer and FlipCutter® drill are also an excellent adjunct in PCL surgery especially for double bundle techniques.

Most importantly, routine use of the RetroConstruction technique keeps the surgeon from settling on tunnel positions which are “almost” ideal. The tunnels can be placed in the desired anatomic location with cortical integrity maintained for excellent fixation with shorter grafts.”

William E. Garrett, M.D., PhD, Duke University
Past President, AOSSM
Anatomic ACL Socket Placement

Anatomic femoral socket placement is paramount to successful ACL reconstruction. Using the FlipCutter® drill with the Femoral ACL Marking Hooks allows surgeons the unique opportunity to drill the femoral socket completely independent of the tibial tunnel or medial portal, without the additional morbidity of a two-incision technique.

Research has shown that independent femoral socket creation, utilizing RetroConstruction™ instrumentation, facilitates anatomic socket creation more accurately and consistently than transtibial techniques.* Postoperative studies have demonstrated knee kinematics and stability more similar to the native knee.**


Superior Tunnel and Socket Quality

Inside/out retrograde drilling of bone sockets and tunnels has been proven to reduce fragmentation of intraarticular tunnel rims and leave smooth, consistent tunnel walls compared to standard antegrade drilling.* Maintaining cortical rim integrity provides a better graft/tunnel interface and may lead to superior fixation and graft incorporation with decreased tunnel widening.

RetroConstruction™ for Pediatric and Revision Surgery

RetroConstruction instrumentation is ideal for avoiding anatomic structures and hardware. The small diameter pin and inside/out drilling facilitates passage around growth plates and old implants. Several technique articles and studies show effective use of RetroConstruction instruments for these unique indications.


Least Invasive Techniques and Superior Graft Fixation Options

The ability to drill sockets instead of tunnels in the femur and tibia reduces morbidity and improves cosmesis, while preserving tissue and bone. Leaving intact cortices allows consistent cortical fixation over the femur and tibia with TightRope® button implants. Adjustable TightRope implants facilitate strong cortical fixation, while allowing graft adjustment and tensioning on both sides of the graft.
FlipCutter® Drill

The innovative FlipCutter is an all-in-one guide pin and reamer that allows minimally invasive socket creation from the inside/out. The FlipCutter allows a whole new level of freedom in socket positioning and is ideal for hard-to-reach areas such as tibial socket creation for PCLR, anatomic femoral socket creation for ACLR, socket creation for meniscal allograft, meniscal root avulsion repair and retrograde OATS® of the patella.

Disposables:

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>FlipCutter IIs, 5 mm – 13 mm (a)</td>
<td>AR-1204AF-50 – 130</td>
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<tr>
<td>FlipCutters, 6 mm x 6 mm – 13 mm</td>
<td>AR-1204F-60 – 130</td>
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<tr>
<td>BTB TightRope Implant System, w/10 mm FlipCutter II</td>
<td>AR-1588BTB-02</td>
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<td>TightRope RT Implant System, w/8 mm FlipCutter II</td>
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<td>AR-1588RT-11</td>
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<tr>
<td>TightRope RT Implant System, w/11 mm FlipCutter II</td>
<td>AR-1588RT-13</td>
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</table>

Short FlipCutter

The Short FlipCutter II is 3.54” shorter than the standard FlipCutter II. This shorter length decreases the distance surgeons must reach while drilling, enabling more control and accuracy. The Short FlipCutter II is also ideal for pediatric procedures when using a C-arm. Together with the Side-Release RetroConstruction™ Handle, the Short FlipCutter II makes anatomic, minimally invasive drilling easier than ever.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Code</th>
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<tr>
<td>Short FlipCutter IIs, 5 mm – 12 mm (b)</td>
<td>AR-1204AS-50 – 120</td>
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<tr>
<td>Side-Release RetroConstruction Handle (c)</td>
<td>AR-1510HR</td>
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<tr>
<td>Stepped Drill Sleeve for Side-Release Handle, ratcheting</td>
<td>AR-1510FS-7</td>
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<tr>
<td>Drill Sleeve for Side-Release Handle, ratcheting, 2.4 mm</td>
<td>AR-1510FD-24</td>
</tr>
<tr>
<td>Drill Sleeve for Side-Release Handle, ratcheting, 3.0 mm</td>
<td>AR-1510FD-30</td>
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</tbody>
</table>
RetroConstruction™ Drill Guide Set

The RetroConstruction Drill Guide Set gives surgeons six different marking hook options for multiple indications all in one, small, easy-to-manage set. The adjustable C-ring allows several drilling angles without sacrificing accuracy. The additional stepped drill sleeve acts as a depth stop for retrograde drilling with the FlipCutter® drill, preserving the cortex and staying in the bone after FlipCutter removal for insertion of graft passing suture.

### RetroConstruction Drill Guide Set (AR-1510S) includes:

- **Side-Release RetroConstruction Handle** AR-1510HR
- **Drill Sleeve for RetroConstruction Drill Guide, 3.5 mm** AR-1510D
- **Drill Sleeve for Side-Release Handle, ratcheting, 2.4 mm** AR-1510FD-24
- **Drill Sleeve for Side-Release Handle, ratcheting, 3.0 mm** AR-1510FD-30
- **Stepped Drill Sleeve for Side-Release Handle, ratcheting** AR-1510FS-7
- **Obturator, 3.5 mm** AR-1204F-OB
- **Insert, 2.4 mm** AR-1204F-24I
- **Tibial ACL Marking Hook** for RetroConstruction Drill Guide (b) AR-1510T
- **Femoral ACL Marking Hook** for RetroConstruction Drill Guide (c) AR-1510F
- **Femoral ACL Marking Hook** for RetroConstruction Drill Guide, curved (e) AR-1510F-01
- **Tibial PCL Marking Hook** for RetroConstruction Drill Guide (a) AR-1510PT
- **Femoral PCL Marking Hook** for RetroConstruction Drill Guide (d) AR-1510PF
- **Multi-Use Marking Hook** for RetroConstruction Drill Guide (f) AR-1510M
- **RetroConstruction Drill Guide System Case** AR-1510C

**Optional:**

- **Pin Tip Tibial ACL Drill Guide** AR-1510GT
- **RetroConstruction Marking Hook**
  - for Tibial ACLR, 52.5° (for RetroDrill) AR-1510R
- **Footprint Femoral ACL Guide, left (h)** AR-1510FL
- **Footprint Femoral ACL Guide, right** AR-1510FR
- **Footprint Femoral ACL Guide w/7 mm offset, left (g)** AR-1510FPL
- **Footprint Femoral ACL Guide w/7 mm offset, right** AR-1510FPR
- **Anatomic Contour PCL Guide, left** AR-1510PTL
- **Anatomic Contour PCL Guide, right** AR-1510PTR
- **Drill Tip Guide Pin, 3.5 mm (predis for FlipCutter)** AR-1250F
- **Pin Tip Tibial Marking Hook ACL Guide, small angle** AR-1510GTS
- **Footprint Femoral ACL Guide, small angle, right** AR-1510FRS
- **Footprint Femoral ACL Guide, small angle, left** AR-1510FLS
ACL ToolBox Instrumentation Set

The ACL ToolBox was designed to fit the needs of modern ACL reconstructions. The streamlined three-layer case contains all the reusable instruments needed to complete the majority of common ACL procedures and contains an additional “pin mat” area for customization. The ACL ToolBox now contains the RetroConstruction™ Guide System with commonly used ACL marking hooks such as the footprint guides for femoral ACL drilling. Variable drill sleeves are included for all techniques and can be used with standard 2.4 mm pins, 3 mm RetroDrill® Pins and the 3.5 mm FlipCutters®. Everything needed to complete an ACL reconstruction can be found in this case including graft harvesting, notch preparation, tunnel drilling, graft passing and fixation.

ACL ToolBox Reconstruction Set (AR-1900S) includes:

- Chuck Key AR-8241
- Hook Probe 3.4 mm Tip w/5 mm Markings AR-10010
- Side-Release RetroConstruction Handle AR-1510HR
- Drill Sleeve for Side-Release Handle, ratcheting, 2.4 mm AR-1510FD-24
- Drill Sleeve for Side-Release Handle, ratcheting, 3.0 mm AR-1510FD-30
- Stepped Drill Sleeve for Side-Release Handle, ratcheting AR-1510FS-7
- Cannulated Drill, 8 mm AR-1208L
- Cannulated Drill, 9 mm AR-1209L
- Cannulated Drill, 10 mm AR-1214L
- Cannulated Drill, 11 mm AR-1217L
- Parallel Guide Sleeve, 2.4 mm Pins AR-1245L
- Offset Drill Guide, 3.5 mm AR-1246-1
- Offset Drill Guide, Pin, 3.5 mm AR-1246-3
- Tunnel Plug for 8, 9, 10, 11 and 12 mm Drill Holes AR-1258
- Semitendinosus Stripper, 7 mm AR-1278L
- Pigtail Hamstring Tendon Stripper, open end, 5 mm AR-1278P
- Tunnel/Notchplasty Rasp AR-1282
- Cannulated Headed Reamers, 8 mm – 11 mm AR-1408 – AR-1411
- Reamer Handle and Pin Puller AR-1415
- Graft Harvesting Retractor AR-1420
- Femoral ACL Marking Hook, curved AR-1510FR-01
- Footprint Femoral ACL Guide, left AR-1510FL
- Footprint Femoral ACL Guide, right AR-1510FR
- Tibial ACL Marking Hook AR-1510T
- RetroScrew Driver, thin AR-1586R
- Insert, 2.4 mm AR-1204F-24I
- Obturator, 3.5 mm AR-1204F-OB
- Transportal ACL Guide, 6 mm offset AR-1800-06
- Transportal ACL Guide, 7 mm offset AR-1800-07
- Transtubial Femoral ACL Drill Guide, 6 mm AR-1804
- Transtubial Femoral ACL Drill Guide, 7 mm AR-1801
- Reusable Obturator for Tibial Tunnel Cannula AR-1807
- Graft Harvesting Cutting Guides, 8.5 mm, 9.5 mm & 10.5 mm AR-1809, 10, & 11
- Notchplasty and Graft Harvesting Osteotome, 5 mm AR-1830
- Tunnel Notcher AR-1844
- Graft Sizing Block, 4.5 – 12 mm holes (in 0.5 mm increments) AR-1886
- BioComposite Interference Screw Driver AR-1996CD-1
- Cannulated Screwdriver Shaft for Delta Bio-Interference Screw AR-1997D
- Cannulated Screwdriver Shaft, 3.5 mm Hex AR-1998
- BioComposite Interference Screw Taps, 7 mm – 10, quick connect AR-1998CT-07 – 10
- Ratcheting Screwdriver Handle AR-2285H
- Parallel Graft Knife Handle AR-2285H
- ACL Cruciate ToolBox Instrumentation Case AR-1900C
PCL ToolBox Instrumentation Set

The PCL ToolBox provides all the necessary instruments to perform a variety of modern PCL reconstruction techniques all within one streamlined set. The set includes the RetroConstruction™ Drill Guide System with drill sleeves for use with FlipCutter®, RetroDrill® and standard 2.4 mm guide pins. Femoral and tibial RetroConstruction marking hooks allow reproducible and safe placement of pins and drills into the anatomic footprints. The set also provides femoral Double Bundle Drill Guides, curved instruments for tibial preparation, Knee Obturator for easy posterior portal placement, the “Worm” Curving Suture Passer, Tunnel Plugs, drills, screwdrivers, notchers and other accessories all in one location. The PCL ToolBox facilitates standard transtibial PCL Reconstruction as well as modern techniques such as the arthroscopic inlay and GraftLink® all-inside PCL.

PCL ToolBox Reconstruction Set (AR-1269S) includes:

- Hook Probe, 3.4 mm AR-10010
- Drill Sleeve for RetroConstruction Drill Guide, stepped AR-1204FDS
- Obturator, 3.5 mm AR-1204F-OB
- Insert, 2.4 mm AR-1204F-24i
- Cannulated Drill, 9 mm AR-1209L
- Cannulated Drill, 10 mm AR-1214L
- Cannulated Drill, 11 mm AR-1217L
- Parallel Guide Sleeve, 2.4 mm pins AR-1245L
- Offset Drill Guide 3.5 mm AR-1246-1
- Offset Drill Guide, 3.5 mm pins AR-1246-3
- Tunnel Plug AR-1258
- PCL Suture Pusher AR-1263
- PCL Rasp AR-1264
- Knee Obturator for Posterior Portal AR-1266
- PCL Popliteal Protector Cap AR-1267
- “Worm” Curving Suture Passer AR-1268
- Cannulated Headed Reamers, 8 – 11 mm AR-1408 – AR-1411
- Jacob’s Chuck Handle AR-1415
- Side-Release RetroConstruction Handle AR-1510HR
- Tibial PCL Marking Hook for RetroConstruction Drill Guide AR-1510PT
- Femoral PCL Marking Hook for RetroConstruction Drill Guide AR-1510PF
- Anatomic Contour PCL Guide, left AR-1510PTL
- Anatomic Contour PCL Guide, right AR-1510PTR
- Drill Sleeve for RetroConstruction Drill Guide, 2.4 mm AR-1778R-24
- Drill Sleeve for RetroConstruction Drill Guide, 3 mm AR-1778R-30
- Obturator for AR-1802D AR-1807
- Tunnel Notcher AR-1845
- Graft Sizing Block AR-1886
- BioComposite Driver, quick connect AR-1996CD-1
- Cannulated Screwdriver Shaft for Delta Bio-Interference Screw AR-1997D
- Cannulated Screwdriver Shaft, 3.5 mm Hex AR-1998
- Ratcheting Screwdriver Handle AR-1999
- Double Bundle PCL Guides, 6 mm – 11 mm AR-5015-06 – 11
- PCL Curved Curette, closed end AR-5013
- PCL Straight Curette, closed end AR-5014
- Chuck Key AR-8241
- PCL Cruciate ToolBox Instrumentation Case AR-1269C
Anatomic Contour PCL Tibial Guide™

These transitiibial PCL guides, developed in conjunction with the Mayo Clinic, greatly simplify tibial pin positioning by referencing anatomic constants. The “over-the-back” hook grasps the distal edge of the posterior facet, guiding the pin into the proper position in the sagittal plane. The wide, convex tip helps position the guide properly in the coronal plane, between the mamillary bodies.

The unique left- and right-specific curves facilitate positioning around the ACL for isolated PCL reconstructions – which can often lead to medialized placement of the tunnel with straight guides. These curves also guide the surgeon with proper positioning of the guide in the coronal plane adjacent to the anteromedial tibial crest for proper pin positioning.

Anatomic Contour PCL Guide, left  AR-1510PTL
Anatomic Contour PCL Guide, right  AR-1510PTR

Tibial PCL Marking Hook

The PCL reconstruction guide may be used for the inlay procedure and allows placement of the socket within the posterior facet for anatomic inlay positioning. By using the FlipCutter® and the PCL TightRope®, an inlay construct may be achieved in a more minimally invasive way.

Tibial PCL Marking Hook for RetroConstruction Drill Guide AR-1510PT

Femoral PCL Marking Hook

The Femoral PCL Marking Hook allows for a variable angle drilling to reduce the “killer corner” angle of the femoral socket. The 8 mm “footprint” marking hook also allows visualization of the socket before drilling.

Femoral PCL Marking Hook for RetroConstruction Drill Guide AR-1510PF

PCL TightRope® Suture

Arthrex TightRope technology has been incorporated into the unique PCL TightRope construct greatly simplifying graft preparation and passing, while strengthening fixation. The PCL TightRope construct includes a proprietary, self-reinforcing, four-point locking system that resists cyclic displacement.

The round graft button secures the bone plug into the tibial socket. Suture holes in the button allow incorporation of whipstitched sutures into the fixation, which facilitates graft passing and augments fixation. The larger, attachable distal button is placed onto the implant after passing through the tibial tunnel and locks into place securely.

PCL TightRope AR-1588TP
RetroDrill® Reamers

RetroCutters® are designed with reverse flutes to cut from the inside/out. This reaming mechanism produces “milled” sockets and tunnels which avoids ovalization and fragmentation of tunnel rims common with outside/in drilling. RetroCutters are available in 5-12 mm diameters and are single use to assure optimal sharpness for every case.

The cannulated RetroDrill Guide Pin allows passage of a FiberStick™ or a Nitinol Suture Passing Wire for graft passing or screw transport. The noncannulated RetroDrill Guide Pin provides extra stiffness and is ideal for drilling tunnels. The noncannulated RetroDrill Guide Pin may also be used to drill sockets in conjunction with the RetroPasser® (see page 13). RetroDrill Guide Pins and RetroCutters are sterile and single use.

Small Marking Hooks for All-Epiphyseal ACLR

Staying true to the RetroConstruction™ product line, these unique Small Angle Marking Hooks facilitate referencing of the native ACL footprint and bony landmarks while providing ergonomics to reproducibly perform all-epiphyseal ACL reconstruction in skeletally-immature patients. Ideal for use with Short FlipCutter® drills and the Side-release RetroConstruction Handle.

Footprint Femoral ACL Guide, small angle, right (a) AR-1510FRS
Footprint Femoral ACL Guide, small angle, left AR-1510FLS
Pin Tip Tibial Marking Hook ACL Guide, small angle (b) AR-1510GTS
Collateral Ligament Reconstruction Set

The Collateral Ligament Reconstruction Set is based upon over a decade of international scientific research to improve safety and accuracy of your posterolateral and medial/posteromedial reconstructions.*

The instrument set is based upon detailed anatomic studies which have lead to precise, biomechanically-validated anatomic reconstructions for individual components and the main structures of both the posterolateral and medial structures of the knee.*

The unique Fibular Marking Hook provides anatomic precision for minimally invasive and open techniques, for fibular-based reconstructions. The shape of the Fibular Marking Hook tightly contours the fibular head, enabling surgeons to get around anatomic structures when placing the 8 mm diameter paddle which is designed specifically to fit onto the fibular attachment of the popliteofibular ligament (PFL).

The Tibial Marking Hook is designed for both posterolateral and medial/posteromedial tibial based reconstructions. The ergonomic 8 mm diameter paddle provides tactile feedback upon entry into the posterior popliteal sulcus and confirms the exit point of the Zebra Guide Pin during posterolateral corner reconstructions.

The Parallel Drill Guide has been designed to increase the efficiency of anatomic tunnel drilling by reducing divergent tunnels and allowing precision placement at multiple incremental distances for both medial and lateral femoral-based reconstructions.

Collateral Ligament Reconstruction Set (AR-5500S) includes:

- Fibular Marking Hook (a) AR-5500
- Tibial Collateral Marking Hook (b) AR-5501
- Femoral Collateral Marking Hook AR-5502
- Parallel Drill Guide (c) AR-5503
- Collateral Ligament Retractor (d) AR-5504
- Drill Sleeve, 2.4 mm AR-5505
- Collateral Ligament Rasp AR-5506
- RetroConstruction Handle AR-1510H
- Cannulated Drill, 6 mm AR-1206L
- Cannulated Drill, 7 mm AR-1207L
- Cannulated Drill, 8 mm AR-1208L
- Cannulated Drill, 9 mm AR-1209L
- Cannulated Drill, 10 mm AR-1214L
- Graft Sizing Block AR-1886

Accessories:
- Zebra Guide Pin, 2.4 mm, open eyelet AR-1250Z
- Drill Pin II, ACL TightRope, open eyelet, 4 mm AR-1595T
- Tunnel Notcher for Bio-Interference Screw AR-1845
- #2 FiberLoop w/Straight Needle AR-7234
- #2 FiberStick, 50" (blue), one end stiffened, 12 inches AR-7209

* All references are listed in the Collateral Ligament brochure LB1-0127-EN
ACL TightRope® Graft Fixation
The ACL TightRope builds on Arthrex’s TightRope technology to offer adjustable cortical fixation for cruciate ligament reconstruction. Arthrex’s proprietary four-point knotless fixation (a) resists cyclic displacement and offers strong pull-out strength.* The ACL TightRope eliminates the need for multiple implant sizes, facilitates graft-fill of short sockets and allows retensioning of grafts after fixation and cycling.

ACL TightRope AR-1588T

ACL TightRope RT
The ACL TightRope RT allows surgeons to advance the graft by pulling the tensioning strands in the same direction of graft advancement. This innovation eliminates the need to retrieve shortening strands from the joint and allows the surgeon to pull in-line with graft advancement.

ACL TightRope RT, double-loaded (a) AR-1588RT-J
ACL TightRope RT AR-1588RT
TightRope RT Implant Systems,
  w/8, 9, 10, and 11 mm FlipCutter II AR-1588RT-07, 18, 11, and 13
ACL TightRope RT Implant Delivery System,
  w/ACL TightRope Drill Pin AR-1588RTS

ACL TightRope DB
The ACL TightRope DB offers the simplicity and strength of the ACLTR*, with the addition of aperture graft compression and greater coverage of the ACL footprint. The ACLTR DB comes with a disposable driver that can be attached to the graft and implant to facilitate graft advancement and orientation.

ACL TightRope DB, 7 mm wedge AR-1588TDB-7
ACL TightRope DB Implant Delivery System,
  w/ACL TightRope Drill Pin AR-1588TDB-7S

TightRope BTB (Bone-Tendon-Bone)
The simplicity and strength of the ACL TightRope RT can now be used with bone-tendon ACL grafts. The BTB TightRope offers the same adjustable, four-point locking system as the ACL TightRope RT but allows placement through a small drill hole in the cortical bone block.

TightRope BTB AR-1588BTB
TightRope BTB, double-loaded AR-1588BTB-J
ACL TightRope BTB Implant Delivery System
  w/10 mm FlipCutter II AR-1588BTB-02

Accessories for all TightRopes except ABS:
Drill Pin, ACL TightRope, open eyelet, 4 mm AR-1595T
ACL TightRope Drill Pin, closed eyelet, 4 mm AR-1595TC
TightRope Suture Cutter AR-4520

* data on file
TightRope® ABS (Attachable Button System)

TightRope ABS (Attachable Button System) The unique TightRope ABS system allows the ACL TightRope implant to be passed through a small bone tunnel without a button. Once passed through the tunnel, a large slotted button may be assembled to the TightRope implant.

The Concave ABS Buttons provide a larger footprint for full tunnels from 4-13 mm. The center of the button is concave which countersinks suture and has a collar posteriorly to keep the button centered and stable in the tunnel.

- TightRope ABS
- Open TightRope ABS
- TightRope ABS Button, 8 mm x 12 mm
- Autograft GraftLink Convenience Pack
- Allograft GraftLink Convenience Pack

Optional Buttons:
- TightRope ABS Button, round, 14 mm
- TightRope ABS Button, oblong, 3.4 mm x 13 mm
- Concave ABS Button, 11 mm w/4 mm collar (a)
- Concave ABS Button, 14 mm w/7 mm collar (a)
- Concave ABS Button, 20 mm w/9 mm collar (a)

TightRope Suture Tensioner Handles

The TightRope Suture Tensioner Handles offer surgeons the ability to tension TightRopes more effectively while avoiding the discomfort that can sometimes occur with repetitive tightening over the course of several surgeries. The TightRope Suture Tensioner Handles can be connected in order to keep them together when not in use (a).

- TightRope Suture Tensioner Handles

TightRope Button Extender

Ideal for cortical blow-outs, revisions, and full tunnels, the TightRope Button Extender easily loads onto a TightRope Button without removing the graft. A large 20 mm x 5 mm footprint maximizes button-to-bone contact against the cortex.

- TightRope Button Extender
RetroScrew® Fixation

A revolutionary advancement in graft fixation, the PLLA, titanium or BioComposite™ RetroScrew allows true tunnel orifice graft fixation with a round head to minimize graft abrasion, tunnel widening and maximize graft fixation and stiffness. Retrograde insertion provides maximum graft tensioning and fixation in cortical bone.

RetroScrew, 7 mm x 20 mm AR-1586RB-07
RetroScrew, 8 mm x 20 mm AR-1586RB-08
RetroScrew, 9 mm x 20 mm AR-1586RB-09
RetroScrew, 10 mm x 20 mm AR-1586RB-10
Femoral RetroScrew, 7 mm x 20 mm AR-1586FRB-07
Femoral RetroScrew, 8 mm x 20 mm AR-1586FRB-08
Femoral RetroScrew, 9 mm x 20 mm AR-1586FRB-09
Femoral RetroScrew, 10 mm x 20 mm AR-1586FRB-10
Titanium Femoral RetroScrew, 7 mm x 20 mm AR-1586FR-07
Titanium Femoral RetroScrew, 8 mm x 20 mm AR-1586FR-08
Titanium Femoral RetroScrew, 9 mm x 20 mm AR-1586FR-09
Titanium Femoral RetroScrew, 10 mm x 20 mm AR-1586FR-10
Titanium Tibial RetroScrew, 8 mm x 20 mm AR-1586R-08
Titanium Tibial RetroScrew, 9 mm x 20 mm AR-1586R-09
Titanium Tibial RetroScrew, 10 mm x 20 mm AR-1586R-10
RetroScrew Reverse Thread, 8 mm x 20 mm AR-1586LB-08
RetroScrew Reverse Thread, 9 mm x 20 mm AR-1586LB-09
RetroScrew Reverse Thread, 10 mm x 20 mm AR-1586LB-10
BioComposite RetroScrew, 7 mm x 20 mm AR-1586RC-07
BioComposite RetroScrew, 8 mm x 20 mm AR-1586RC-08
BioComposite RetroScrew, 9 mm x 20 mm AR-1586RC-09
BioComposite RetroScrew, 10 mm x 20 mm (a) AR-1586RC-10

Accessories:
RetroScrew Driver, thin AR-1586R
Retro Tunnel Notcher AR-1843BT
Shoehorn Cannula, 6 mm I.D. x 9 cm, qty. 5 AR-6565
FiberStick, #2 FiberWire, 50 inches (blue) one end stiffened, 12 inches, qty. 5 AR-7209
RetroScrew Tamp, straight AR-1586ST
RetroScrew Tamp, 90° AR-1586ST-90

RetroButton® XL

The RetroButton XL's unique button design facilitates greater button coverage over cortical bone, while minimizing the distance the button must travel past the cortex to flip. The “Z” shaped button covers 20 mm of bone with only 18 mm of overall length. This facilitates flipping and decreases the chance of catching soft tissue under the button.

The short 11 mm loop allows the graft to be positioned directly under the button, maximizing soft tissue fill in short tunnels. Use the RetroButton XL when the femoral cortex is inadvertently damaged during drilling, for revision ACLR or when the femoral condyle is too small for a socket.

RetroButton XL, 20 mm long, 11 mm loop AR-1592
**Minimally Invasive Hamstring Harvesting Set**

The minimally invasive hamstring harvest technique allows for removal of the hamstring tendons through a small posteromedial incision. Because the hamstring tendons lie more superficial in the popliteal crease, they are easily exposed and released from proximal attachments. The small incision also improves cosmesis and may decrease post-op morbidity.

The set includes two harvesters made especially for the minimally invasive technique. Shorter shafts improve stiffness and facilitate harvesting from the posteromedial incision. The open harvester is large enough to load the thicker, more proximal portion of the hamstring tendons. The closed distal harvester is slightly sharper, permitting elevation of the tendons off the tibial insertion.

Minimally Invasive Hamstring Harvesting Set

**GraftPro™ Graft Preparation System**

The new GraftPro System brings graft preparation and tensioning to a new level of simplicity and convenience. The unique ratcheting adjustment track system allows one-handed movement of attachments along the length of the board and locks them into place automatically. All attachments are interchangeable from the adjustable tracks to the fixed positions. Two parallel rails allow simultaneous preparation and tensioning of two grafts at a time or a single double bundle graft. The BTB well facilitates stable cutting of patella tendon bone blocks to size and drilling of suture holes through the board. New enhanced attachments hold a variety of implants and grafts in place firmly and atraumatically.

**GraftPro Graft Preparation System (AR-2950DS) includes**

<table>
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<tbody>
<tr>
<td>GraftPro Case</td>
<td>AR-2950DC</td>
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<td>GraftPro Board</td>
<td>AR-2950D</td>
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<tr>
<td>GraftPro Posts, qty. 2</td>
<td>AR-2950AP</td>
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<tr>
<td>GraftPro GraftLink Tensioner (a)</td>
<td>AR-2950GT</td>
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<tr>
<td>GraftPro GraftLink Holder (b)</td>
<td>AR-2950GH</td>
</tr>
<tr>
<td>GraftPro Button Holder (c)</td>
<td>AR-2950BH</td>
</tr>
<tr>
<td>GraftPro Soft Tissue Clamp, qty. 2 (d)</td>
<td>AR-2950SC</td>
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</table>

**Optional**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>Cutting Board Clamp</td>
<td>AR-2950CBC</td>
</tr>
</tbody>
</table>

**Minimally Invasive Hamstring Harvesting Set**

| Minimally Invasive Hamstring Harvesting Set | AR-1279S |
**FiberWire® with Straight Needles**

The new FiberWire with Straight Needle constructs include a 38” FiberWire with 64 mm needle on one end; or a 38” FiberWire with a 64 mm needle on both ends. Each product is packaged in a box of 12.

These new products are ideal for quickly creating locking stitches for graft prep, as well as tendon avulsions.

- #2 FiberWire w/Straight Needle AR-7246
- #2 FiberWire w/two Straight Needles AR-7246-02
- #2 FiberLoop with Swaged Straight Needle AR-7284

**Suture Tensioner w/Tensiometer**

The Suture Tensioner with Tensiometer allows simplified ACL graft tensioning over a Suture Button for All-inside ACLR, or through a tibial tunnel when used with the optional foot. The built-in tensiometer approximates graft tension in Newtons and pounds, allowing surgeons to standardize the procedure. Compared to standard tensioning devices, the Suture Tensioner is much less cumbersome, more versatile, and simple to use.

- Suture Tensioner w/Tensiometer AR-1529
- Tensiometer Foot AR-1530

**FiberLoop® with FiberTag™ Suture**

The SpeedWhip™ Rip-Stop Technique eliminates the weak link in graft preparation by reinforcing the suture/tissue interface with a FiberTag scaffold. FiberTag can be placed onto a graft end to facilitate attachment of the ACL TightRope™.

- FiberLoop w/FiberTag AR-7264

**FiberLoop and TigerLoop™ Suture**

The #2 FiberLoop and TigerLoop are continuous loops of #2 FiberWire on a thin, straight Nitinol needle or a curved tapered needle. The straight needle is easy to handle and moves freely on the suture to recenter itself after passing through tissue and to facilitate even tensioning.

Graft preparation using the Arthrex SpeedWhip technique reduces time spent preparing the graft, uniformly compresses the graft, improves strength* and allows for last minute adjustments in graft length.

- #2 FiberLoop (blue), w/Straight Needle AR-7234
- #2 TigerLoop (green/white), w/Straight Needle, w/TigerWire AR-7234T
- #2 FiberLoop w/Curved Needle, 20” (blue), 1/2 circle 0 FiberLoop w/Straight Needle, 13” (blue), 76 mm needle w/7 mm loop AR-7253
- 0 TigerLoop w/Straight Needle, 13” (white/black), 76 mm needle w/7 mm loop AR-7253T

* data on file
**Titanium Buttons and FiberWire® Suture**
Two- and four-hole titanium Suture Buttons are ideal for primary or backup FiberWire fixation of ACL/PCL grafts and augmenting bone bridges. Suture Buttons come presterilized, ready for use.

| Suture Button, 3.5 mm                  | AR-8920 |
| Suture Button, 12 mm round            | AR-8922 |
| Suture Button Inserter                | AR-8923 |
| Concave ABS Button, 11 mm w/4 mm collar | AR-1588TB-3 |
| Concave ABS Button, 14 mm w/7 mm collar | AR-1588TB-4 |
| Concave ABS Button, 20 mm w/9 mm collar | AR-1588TB-5 |

**Recommended Suture:**

| #5 FiberWire, 38 inches (blue), qty. 12 | AR-7210 |
| Suture Passing Wire                    | AR-1255-18 |
| #2 FiberWire, 38 inches, 2 strands     | AR-7201 |
| (1 blue, 1 white/black), qty. 12       | |

**RetroPasser® Suture Shuttle**

The RetroPasser is used to pass suture retrievers through the guide pin sleeve and guide pin tunnel during RetroConstruction™ procedures. After retrograde drilling and socket creation, the RetroDrill® Guide Pin is removed and immediately replaced with the RetroPasser. The Nitinol wire with wire loop passes a #2 FiberWire suture loop into the joint for retrieval and subsequent passing of graft passing sutures from the anteromedial portal.

RetroPasser AR-1259

**CoolCut™ Caliblator Ablator**

Anatomic socket placement is paramount to successful ACL reconstruction. Despite extensive research on the location of the native ACL, identification and referencing of the ACL footprint and bony landmarks can be difficult in a live arthroscopic setting. The direct measurement technique has been shown to reproducibly locate the average center of the native ACL in a surgical setting.*

The Caliblator further simplifies direct measurement by allowing surgeons to arthroscopically measure the femur and tibia and mark desired guide pin location for reference. The mark can then be referenced for FlipCutter® guide placement or with a standard guide pin and Low Profile Reamer through the anteromedial portal.

CoolCut Caliblator AR-9802C

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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.