



Knee Preservation System

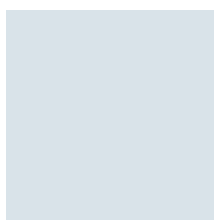
Anatomic ACL Reconstruction
using the Bullseye® Cruciate System



COMMITTED TO INNOVATION

SURGICAL
TECHNIQUE

Anatomic ACL Reconstruction using the Bullseye® Cruciate System



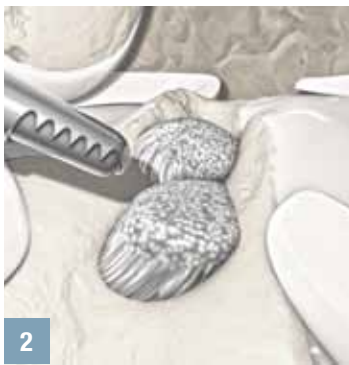
This surgical technique delivers an anatomical medial portal approach to ACL reconstruction. The Bullseye® Cruciate System instrumentation used in tandem with the XO Button® and GENESYS™ Matryx® Interference Screw safely facilitates a more accurate and reproducible reconstruction that stimulates the patient's biological healing and restores the natural anatomy.

FEMORAL TUNNEL POSITIONING AND DRILLING



This surgical approach requires three portals. The standard anteromedial portal and anterolateral portal should be placed close to the patellar tendon. The accessory anteromedial portal should be just above the meniscus lower and more medial than the anteromedial portal.

With the surgical markings in place, incise the anteromedial and anterolateral portals.



Insert a ConMed Linvatec shaver and excise any remaining ACL tissue.



Create the AAM portal with the arthroscope placed in the anterolateral portal looking medially. With the knee flexed at 90 degrees, palpate the medial joint line.

Under direct visualization, insert a needle anterior to the medial femoral condyle and above the medial meniscus to avoid damage. The needle should be directed towards the intercondylar notch.

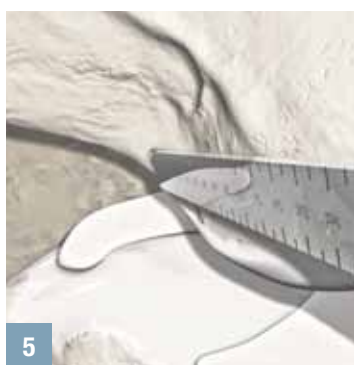
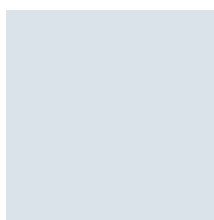
Advance the needle to confirm access to the femoral footprint of the ACL.



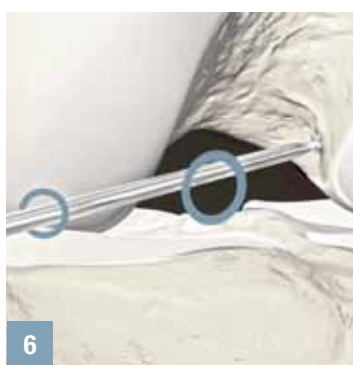
Incise the skin making sure to orient the blade away from the femoral condyle to prevent damaging the articular surface. Switch the arthroscope to the anteromedial portal. Mark the center of the femoral ACL footprint using a microfracture awl.

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FEMORAL TUNNEL POSITIONING AND DRILLING (CONTINUED)

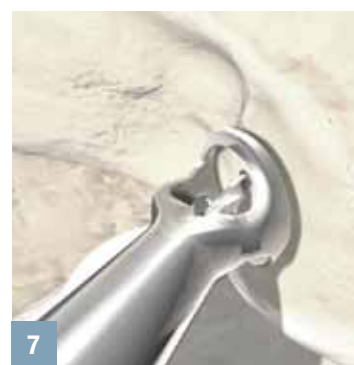


Use the Bullseye® Native Footprint Ruler to assess the footprint of the native ACL stump.



With the ACL footprint identified and the center marked, insert the Bullseye® Femoral Footprint Guide into the AAM portal with the knee flexed at 90 degrees.

Place the guide at the center of the ACL footprint. Once the correct position is achieved, advance the XACTPIN™ Graft Passing Guide Pin a few millimeters to notch the bone.



Back the XACTPIN™ out to confirm that the location marked by the XACTPIN™ is the center of the footprint.

Using the guide to position the XACTPIN™, hyperflex and elevate the knee then advance the XACTPIN™ through the lateral cortex and skin.



Manually pull back to hook the head of the XACTPIN™ guide pin on the external femoral cortex to determine the aperture to cortex length.

Advance the XACTPIN™ so that the necked down portion is outside of the skin laterally and the pin is tight in the femoral tunnel.



Use a twisting motion to remove the Femoral Footprint Guide from the joint.



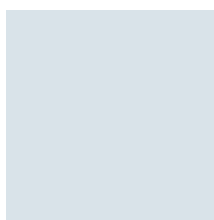
Insert the mono-fluted Sentinel® Drill Bit over the guide pin through the AAM portal with the cutting edge facing away from the femoral condyle and advance the drill bit to the femoral ACL footprint.



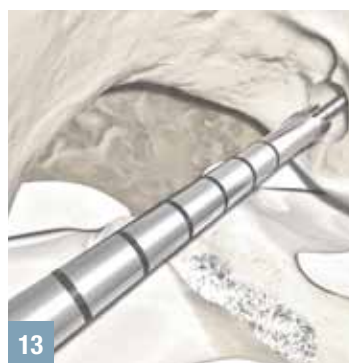
Using a piston-like back and forth motion, drill the femoral socket to the desired depth cautiously to prevent blow out of the lateral femoral cortex.

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FEMORAL TUNNEL POSITIONING AND DRILLING (CONTINUED)



Keeping the hand off of the trigger, slide the Sentinel® Drill Bit past the medial femoral condyle and out of the portal, making sure to keep the blade oriented away from the condylar surface.



Use the XO Button® Drill Bit to drill the femoral channel. Advance the drill bit through the lateral cortex.

Using the XO Button® Drill Bit as you would use a standard depth gauge, manually pull back on the bit to hook the head of the drill bit on the external femoral cortex to confirm the aperture to cortex length previously determined.

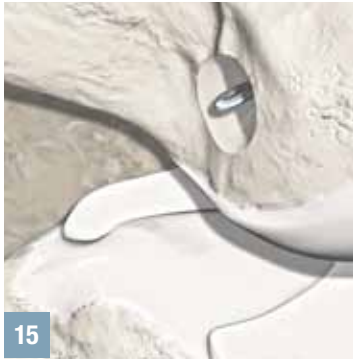


Remove the XO Button® Drill Bit leaving the XACTPIN™ in place.

Place the two free ends of the #2 passing suture through the eyelet of the guide pin.

Then, pull the guide pin through the femur laterally, making sure to keep a finger in the suture loop to prevent it from being pulled into the knee joint.

TIBIAL TUNNEL POSITIONING AND DRILLING



Once the suture ends are retrieved laterally, pull the looped end of the suture to the entrance of the femoral tunnel.



Move the arthroscope to the anterolateral portal. Then insert the Lightwave® Ablator into the anteromedial portal to mark the center of the tibial ACL footprint.



Set the angle of the Bullseye® Tibial Footprint Guide to the desired settings. Insert the tip into the anteromedial portal, placing the tip of the guide into the center of the tibial ACL footprint.

Advance the external guide sleeve flush to the anterior tibial cortex.



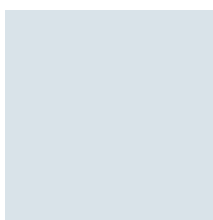
Use the ConMed Linvatec M-Power® 2 handpiece and pin driver attachment to advance the tibial guide pin until it meets the point of the guide arm.

Depress the guide lever to remove the Pin-Sleeve.

Remove the Bullseye® Tibial Footprint Guide from the joint.

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GRAFT POSITIONING AND FIXATION



Place a curette over the point of the guide pin to protect against inadvertent advancement when drilling. Be sure to use the appropriate size Badger® or Sentinel® Drill Bit to drill the tibial tunnel.



Use the appropriate size SE™ Graft Tensioner Drill Guide. Place the guide in the tibial tunnel and position two Breakaway Pins and then remove the guide.



Use a probe to bring the loop of the passing suture into the joint. Retrieve the loop through the tibial tunnel using suture retrieval forceps.

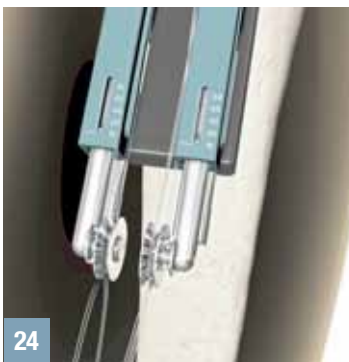


With the suture loop exposed externally, load the suture strands of the XO Button® loaded graft into the passing suture loop and pull them through the femoral tunnel, making sure to keep the graft construct outside of the tibia.



Pull the XO Button® loaded graft into the joint and through the femur while hyperflexing and elevating the knee to ease the graft passage.

Ensure that the XO Button®, device has flipped and is “seated.”



Load the SE™ Graft Tensioner Suture Separator. Spread the whip-stitch strands radially as you load the SE™ Graft Tensioner.

Tying the appropriate bundle strands to the left and right tensioner wheels allows the bundles to be individually and accurately tensioned.

Apply the desired graft tension and then cycle the knee to alleviate laxity. Hold the knee at fifteen degrees and set the desired final tension.



Load the appropriately sized GENESYS™ Matryx® Interference Screw onto the Tri-Lobe Driver.

Ensure that the knee is in fifteen degrees of flexion. Advance the BioScrew® HyperFlex® Guidewire into the tibial tunnel and in the center of the four graft bundles. Load the GENESYS™ Matryx® Interference Screw and driver onto the guidewire and advance it through the tensioner and into the tibial tunnel until it is flush with the external tibial cortex.

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FINAL CONSTRUCT

Remove the SE™ Graft Tensioner and Breakaway Pins and follow the normal procedures to close the incisions.

Note the anatomic position of the final graft placement. Performing an Anatomic ACL Reconstruction using the medial portal approach provides improved rotational stability compared to a non-anatomic reconstruction. When ranging the knee through flexion and extension, no graft impingement is observed. Additionally, with this technique a notchplasty is generally not needed except if an unnatural anatomy such as an “A” shaped intercondylar notch is present.

These are a few of the numerous advantages of using the ConMed Linvatec Bullseye® Cruciate System.



ORDERING INFORMATION

BULLSEYE® FEMORAL FOOTPRINT GUIDES

| | |
|------|---------|
| 5mm | SB5000 |
| 6mm | SB6000 |
| 7mm | SB7000 |
| 8mm | SB8000 |
| 9mm | SB9000 |
| 10mm | SB10000 |
| 11mm | SB11000 |

BULLSEYE® FEMORAL FOOTPRINT RULER

| | |
|-----------------------------------|--------|
| Bullseye® Femoral Footprint Ruler | RL1000 |
|-----------------------------------|--------|

PINN-ACL® CRUCIATE GUIDE SYSTEM

| | |
|---|------|
| Pinn-ACL Cruciate Guide System (includes ACL Guide Arm and Pin-Sleeve) | 8731 |
|---|------|

BULLSEYE® TIBIAL FOOTPRINT GUIDES

| | |
|-----|--------|
| 5mm | DB5TAM |
| 6mm | DB6TAM |
| 7mm | DB7TAM |
| 8mm | DB8TAM |

SENTINEL® DRILL BITS

(STERILE, 4 PER BOX)

| | |
|----------------|--------|
| 5.5mm x 9 in. | S8555 |
| 6.0mm x 9 in. | S8560 |
| 6.5mm x 9 in. | S8565 |
| 7.0mm x 9 in. | S8570 |
| 7.5mm x 9 in. | S8575 |
| 8.0mm x 9 in. | S8580 |
| 8.5mm x 9 in. | S8585 |
| 9.0mm x 9 in. | S8590 |
| 9.5mm x 9 in. | S8595 |
| 10mm x 9 in. | S8510 |
| 10.5mm x 9 in. | S85105 |
| 11mm x 9 in. | S8511 |
| 11.5mm x 9 in. | S85115 |
| 12mm x 9 in. | S8512 |
| 12.5mm x 9 in. | S85125 |
| 13mm x 9 in. | S8513 |

ACCESSORIES

| | |
|---|-----------|
| XACTPIN™ Graft Passing Guide Pin, 2.4mm | C8677 |
| High Strength Guide Pin, 2.4mm | 9744 |
| Graft Passing Guide Pin, 2.4mm | C8675 |
| EL Depth Probe | 21.1001EL |

SE™ GRAFT TENSIONER

| | |
|--|-------|
| SE Graft Tensioner | C9050 |
| SE Graft Tensioner Drill Guide, 6mm | C9051 |
| SE Graft Tensioner Drill Guide, 8mm | C9052 |
| SE Graft Tensioner Suture Separator | C9053 |
| SE Graft Tensioner Breakaway Pins with Graft Tension Calculator | C9054 |
| SE Graft Tensioner System Sterilization Tray | C9055 |
| Screw Pick-up | 8606 |

GENESYS™ MATRYX® INTERFERENCE SCREWS

| | | | |
|------------|----------|-------------|----------|
| 5.0 x 20mm | 235020M5 | 7.0 x 30mm | 237030M5 |
| 5.0 x 25mm | 235025M5 | 8.0 x 20mm | 238020M5 |
| 5.0 x 30mm | 235030M5 | 8.0 x 25mm | 238025M5 |
| 5.5 x 15mm | 235515M5 | 8.0 x 30mm | 238030M5 |
| 5.5 x 20mm | 235520M5 | 8.0 x 35mm | 238035M5 |
| 5.5 x 25mm | 235525M5 | 9.0 x 20mm | 239020M5 |
| 5.5 x 30mm | 235530M5 | 9.0 x 25mm | 239025M5 |
| 6.0 x 15mm | 236015M5 | 9.0 x 30mm | 239030M5 |
| 6.0 x 20mm | 236020M5 | 9.0 x 35mm | 239035M5 |
| 6.0 x 25mm | 236025M5 | 10.0 x 20mm | 231020M5 |
| 6.0 x 30mm | 236030M5 | 10.0 x 25mm | 231025M5 |
| 6.5 x 15mm | 236515M5 | 10.0 x 30mm | 231030M5 |
| 6.5 x 20mm | 236520M5 | 10.0 x 35mm | 231035M5 |
| 6.5 x 25mm | 236525M5 | 11.0 x 20mm | 231120M5 |
| 6.5 x 30mm | 236530M5 | 11.0 x 25mm | 231125M5 |
| 7.0 x 20mm | 237020M5 | 11.0 x 30mm | 231130M5 |
| 7.0 x 25mm | 237025M5 | 11.0 x 35mm | 231135M5 |

GENESYS MATRYX INSTRUMENTATION

DRIVERS

| | |
|--|-------|
| Short Fixed Tri-Lobe Driver for 5.0mm Interference Screws | D8652 |
| Short Modular Tri-Lobe Driver for 5.0mm Interference Screws | D8650 |
| Extended Length Modular Tri-Lobe Driver for 5.0mm Interference Screws | D8660 |
| Short Fixed Tri-Lobe Driver for 5.5 – 6.5mm Interference Screws | D8653 |
| Short Modular Tri-Lobe Driver for 5.5 – 6.5mm Interference Screws | D8651 |
| Extended Length Modular Tri-Lobe Driver for 5.5 – 6.5mm Interference Screws | D8661 |
| Short Fixed Tri-Lobe Driver for 7.0 – 11.0mm Interference Screws | DFS70 |
| Short Modular Tri-Lobe Driver for 7.0 – 11.0mm Interference Screws | DMS70 |
| Extended Length Modular Tri-Lobe Driver for 7.0 – 11.0mm Interference Screws | C8716 |

TAPS

| | |
|--|-------|
| 7.0–8.0mm, GENESYS Matryx/Matryx Interference Screw Tap, Short Fixed | TFS70 |
| 7.0–8.0mm, GENESYS Matryx/Matryx Interference Screw Tap, Short Modular | TMS70 |
| 7.0–8.0mm GENESYS Matryx/Matryx Interference Screw Tap, Extended Length Modular | D8607 |
| 9.0–10.0mm, GENESYS Matryx/Matryx Interference Screw Tap, Short Fixed | TFS90 |
| 9.0–10.0mm, GENESYS Matryx/Matryx Interference Screw Tap, Short Modular | TMS90 |
| 9.0–10.0mm GENESYS Matryx/Matryx Interference Screw Tap, Extended Length Modular | D8609 |
| 11.0mm GENESYS Matryx/Matryx Interference Screw Tap, Short Fixed | TFS11 |
| 11.0mm GENESYS Matryx/Matryx Interference Screw Tap, Short Modular | TMS11 |
| 11.0mm GENESYS Matryx/Matryx Interference Screw Tap, Extended Length Modular | D8611 |

INSTRUMENTATION ACCESSORIES

| | |
|---|-------|
| Universal Driver, Modular Ratcheting Handle | D8640 |
|---|-------|

XO BUTTON® (WITH HIF®)

| | |
|----------------------|-------|
| 15mm Continuous Loop | T5015 |
| 20mm Continuous Loop | T5020 |
| 25mm Continuous Loop | T5025 |
| 30mm Continuous Loop | T5030 |
| 35mm Continuous Loop | T5035 |
| 40mm Continuous Loop | T5040 |
| 45mm Continuous Loop | T5045 |
| 50mm Continuous Loop | T5050 |
| 55mm Continuous Loop | T5055 |
| 60mm Continuous Loop | T5060 |

XO BUTTON® INSTRUMENTATION

| | |
|-----------------------------------|---------|
| XO Button Drill Bit | C8590 |
| XO Button Holder | PS8834 |
| XO Button Graft Passing Guide Pin | C8676 |
| EL Depth Probe | 21.1001 |



This product contains Dyneema® Purity. Dyneema®
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