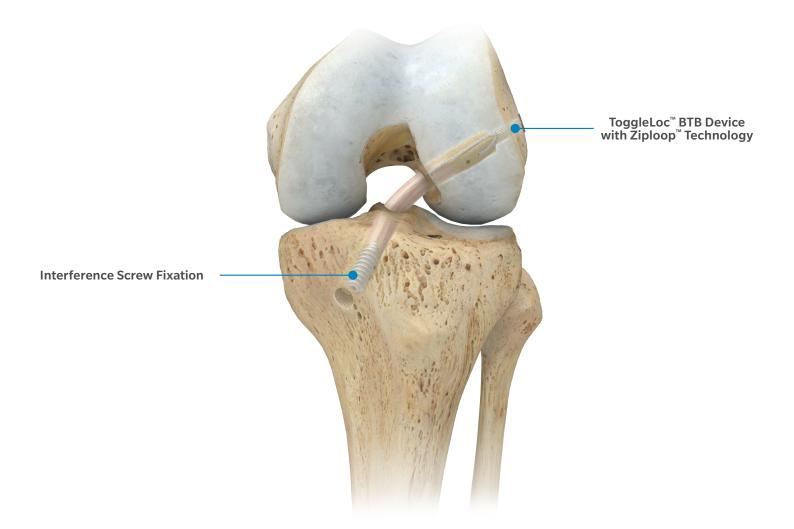


# **BTB ACL Reconstruction**

Using Femoral ToggleLoc<sup>®</sup> BTB Device with Ziploop<sup>®</sup> / Interference Screw Tibial Fixation

**Surgical Technique** 



# **INDICATIONS & CONTRAINDICATIONS**

# **ToggleLoc<sup>®</sup> System**

**INDICATIONS FOR USE** The ToggleLoc System devices, except the ToggleLoc XL device, are intended for soft tissue to bone fixation for the following indications:

## Shoulder

- · Bankart lesion repair
- SLAP lesion repairs
- Acromio-clavicular repair
- · Capsular shift/capsulolabral reconstruction
- Deltoid repair
- Rotator cuff tear repair
- Biceps Tenodesis

## **Foot and Ankle**

- Medial/lateral repair and reconstruction
- · Mid- and forefoot repair
- Hallux valgus reconstruction
- · Metatarsal ligament/tendon repair or reconstruction
- Achilles tendon repair
- Ankle Syndesmosis fixation (Syndesmosis disruptions) and as an adjunct in connection with trauma hardware for Weber B and C ankle fractures (only for ToggleLoc with Tophat/ ZipTight Fixation
- Devices)

## Elbow

- Ulnar or radial collateral ligament reconstruction
- · Lateral epicondylitis repair
- Biceps tendon reattachment

# Knee ACL/PCL repair / reconstruction

- ACL/PCL patellar bone-tendon-bone grafts
- Double-Tunnel ACL reconstruction
- Extracapsular repair: MCL, LCL, and posterior oblique ligament
- Illiotibial band tenodesis
- Patellar tendon repair
- VMO advancement
- Joint capsule closure

The ToggleLoc XL device is used for fixation of tendons and ligaments during orthopedic reconstruction procedures, such as Anterior Cruciate (ACL) or Posterior Cruciate (PCL) Reconstruction, as well as in cases of unanticipated intraoperative complications, such as cortical breaching.

# CONTRAINDICATIONS

- Infection.
- Patient conditions including blood supply limitations, and insufficient quantity or quality of bone or soft tissue.
- Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.
- Foreign body sensitivity. Where material sensitivity is suspected, testing is to be completed prior to implantation of the device.

#### **ComposiTCP<sup>™</sup> 60 Interference Screw**

**INDICATIONS FOR USE** The ComposiTCP 60 Interference Screw is exclusively used for the fixation by interference of the transplant made out of soft tissue, taken out for instance from the hamstring tendon, when reconstructing the cruciate anterior ligament. The screws are cannulated and are available in different sizes (see commercial documentation). They have a specific head, which allows for a more even distribution of the torsional stresses. To achieve the optimal result, the ComposiTCP 60 Interference Screws should be implanted using a dedicated screwdriver contained in the instrumentation set.

**CONTRAINDICATIONS** Insufficient or poor-quality bone stock (including tumors and sever osteoporosis) is likely to affect screw purchase. Acute infection. Allerfy to implant material. Conditions likely to limit the patient's ability and/or willingness to restrict activities and/or to adhere to instructions during the healing and rehabilitation period.

# **Bone Block Preparation**

- 1. Expose patella using patella resector.
- 2. Position BTB Graft Cutting Template in line with tendon graft in middle third of bone with block and fixate with 2.4 mm Guide Pins. Harvest patella and tibial bone blocks.

**Note:** For bone block sizing, the closed loop cinch stitch may create a slightly larger profile on the bone block and a slightly oversizing reamer. 5.1 mm may be necessary for smooth button and bone block passage.

**Option:** Use bone crimper to tubularize graft, ensuring that the notch is placed in the cancellous portion of the bone block.

 Using distal drill hole in bone block (approximately 12 mm from top), pass closed loop of ToggleLoc<sup>®</sup> BTB. Pass ToggleLoc BTB through closed loop that was pulled through bone block to create cinch stitch around top bone block.

**Note:** Overall bone block length may need to be reduced with nibbler (rongeur) to ensure adequate length for tensioning and bone socket apposition.

# **Tunnel Preparation**

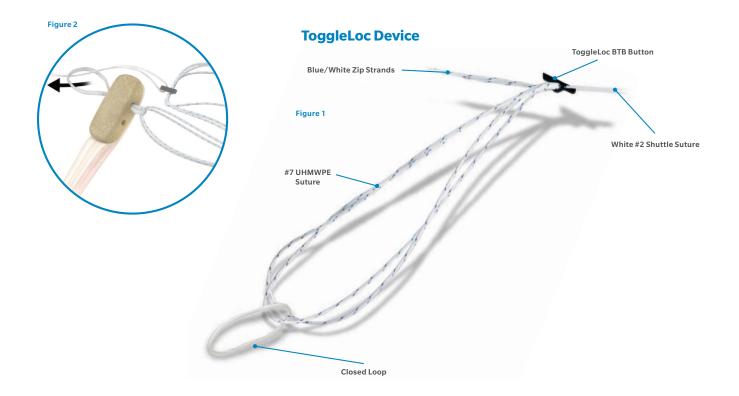
- Locate I.D.E.A.L<sup>™\*</sup> femoral tunnel position. Free hand drill with Calibrated Spade Tip Guide Pin across femur and hook spade tip on lateral femoral cortex to measure bicortical distance. Then, advance guide pin through skin.
- 5. Over ream guide pin approximately 20-25 mm with appropriate size low profile reamer.

Use eyelet of guide pin to pass suture across femur for later graft passing.

**Note:** For bone block sizing, the closed loop cinch stitch may create a slightly larger profile on the bone block, and an over-sizing reamer .5 - 1 mm may be necessary for smooth button and bone block passage.

**Note:** Approximately 10 mm lateral femoral cortex is recommended to ensure strong cortical suspensory fixation.

 For tibial tunnel, set preferred Tibial Guide to 50-60° and position within anatomical tibial footprint. Drill with 2.4 mm Guide Pin and over ream with appropriate size fully fluted reamer corresponding to graft diameter.



# **Grafting Fixation**

1. With the femoral button in a "pre-flipped" position, mark femoral bicortical distance on ToggleLoc BTB.

**Option:** Mark femoral socket distance on graft construct.

2. Retrieve graft shuttling suture through tibial tunnel and pass femoral ToggleLoc BTB shuttling sutures (white).

**Note:** ToggleLoc BTB 'zip' strands (white/blue) are required to be tensioned through tibial tunnel. Position anterior to graft prior to implantation.

3. With the button in a "pre-flipped" position and tension applied distally, pull shuttling suture limbs to advance button until it exits and flips on lateral femoral cortex.

**Note:** Pen marking on ToggleLoc BTB can be referenced at femoral socket aperture to indicate button exiting lateral femoral cortex.

- 4. With firm distal tension on tibial end of graft, pull ToggleLoc BTB 'zip' strands until graft is docked in femoral socket.
- 5. Cut off the knot from the zip strands and retrieve the limbs out through the medial portal and cut the suture limbs flush after tensioning.
- Position knee in full extension. Insert appropriate nitinol guide wire into tibial tunnel, posterior to bone block. Insert desired Interference Screw over guidewire. Cycle knee as desired.

# **Ordering Information**

Part Number	Description
904756	ToggleLoc ZipLoop BTB
110007425	Calibrated Spade Tip Guide Pin, 4.5 mm
909640	Drill Tip Guide Pin, 2.4 mm
904760	ToggleLoc Cannulated Drill, 4.5 mm

## References

\*Howell S. The Rationale behind the I.D.E.A.L. Femoral Tunnel Position Philosophy https://www.zimmerbiomet. com/content/dam/zb-corporate/en/products/specialties/sports-medicine/precision-flexible-reaming-systemfor-medial-portal-approach/the-rationale-behind-the-ideal-femoral-tunnel-position-philosophy.pdf

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Please refer to the Instructions for Use and the package label for the products to be used with this surgical technique.

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