

JuggerLoc Bone-to-Bone System for Ankle Syndesmosis Fixation

Surgical Technique



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Figure 1

Position and Preparation

The patient is placed in a supine position with a small bump under the contralateral hip. The ankle can be blocked with a local anesthetic to minimize anesthetic needs and ease post-operative pain. A well padded thigh/tourniquet can be placed.

Incision

Make an incision appropriate to the indication for surgical fixation (Figure 1). Be careful to retract soft tissue structures that need to be maintained.

Fracture Reduction (If Necessary)

Reduce the fracture to obtain the desired length, rotation, and alignment. Reduce the syndesmosis joint as required to achieve anatomical correction, utilizing the surgeon's preferred bone clamp(s). Place the preferred trauma hardware plate and screws in balanced fixation, onto the fibula. Leave a hole on the plate empty, so that JuggerLoc Bone-to-Bone Fixation Device may be placed to repair the ankle syndesmosis disruption.



Figure 2a

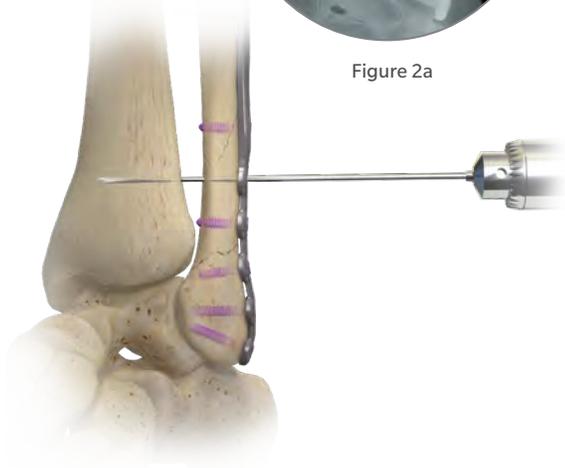


Figure 2



Figure 3a

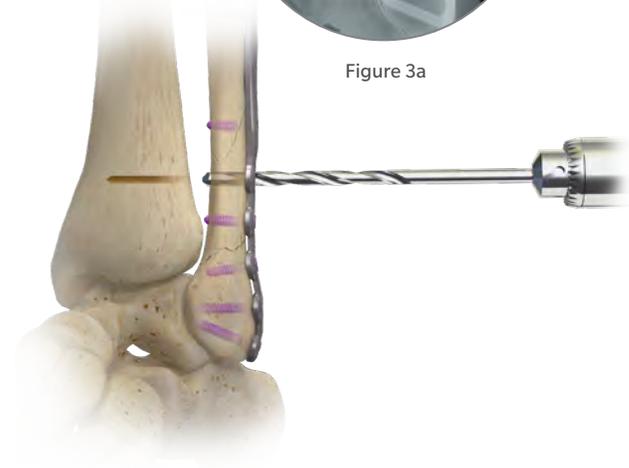


Figure 3

Drill Fibula and Tibia

Under fluoroscopy, insert the 2.9 mm drill through the fibula and past the inner cortex of the tibia (Figure 2, 2a). Proper drill depth allows the suture arms (Juggerknot anchor portion) of the JuggerLoc to ball up, deploying inside the tibial bone. If the anchor is not deployed past the tibial cortex, it could deploy between the tibia and fibula not anchor itself in the proper bone.

Note: Do NOT overdrill the first cortex of the tibia with the 3.5 mm drill.

Remove the 2.9 mm drill and insert the 3.5 mm drill bit. Advance the 3.5 mm drill until you pass through the fibula taking precaution not to enter the tibia (Figure 3, 3a). The 3.5 mm drill is meant for the fibula exclusively to ease with the implant insertion.

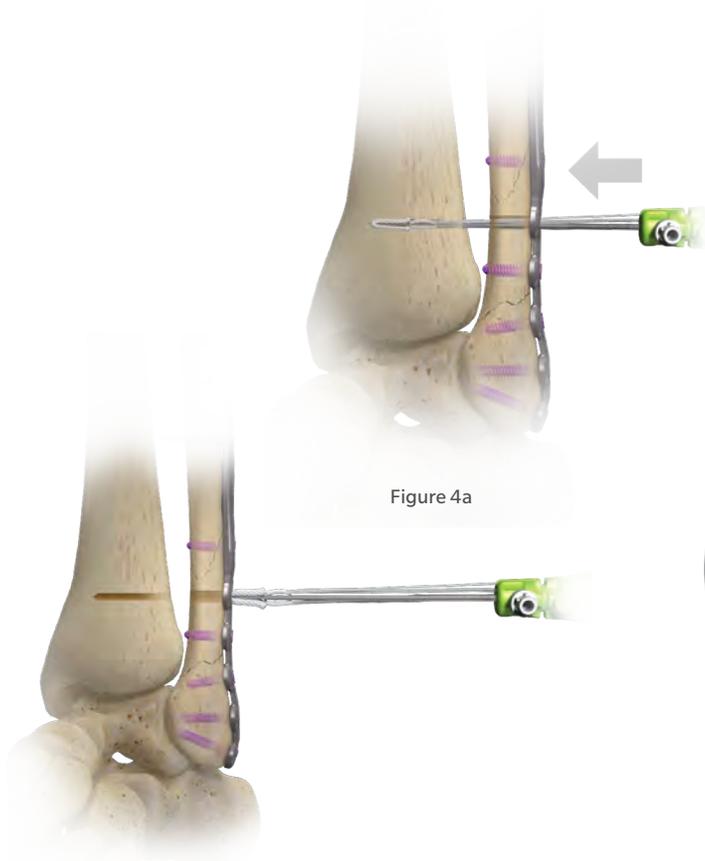


Figure 4



Figure 5a

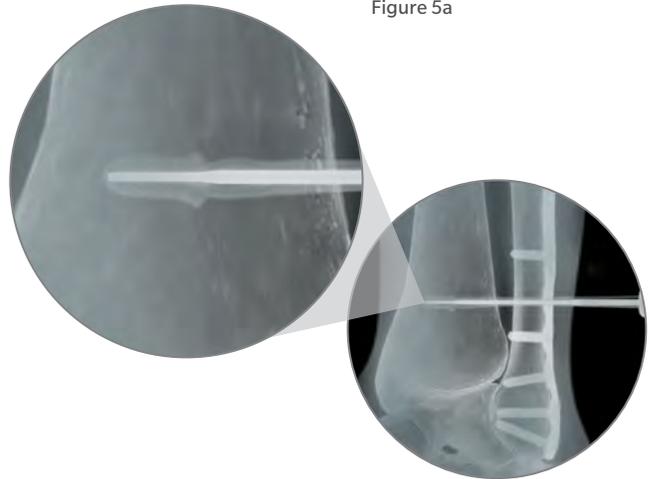


Figure 5

JuggerLoc Insertion

Now that the bone tunnels have been prepared, insert the JuggerLoc fixation device with the cap facing anteriorly until purchase past the 1st tibial cortex has been achieved (Figure 4, 4a) (A mallet should be utilized for insertion). Resistance will be felt when the implant reaches the depth of the 2.9 mm tunnel indicating appropriate depth has been achieved.

Examine the inserter/implant location under fluoroscopy prior to removing the inserter. The inserter shaft has a step-down (or decrease in thickness) where the implant ends (Figure 5a). When this distal juncture is beyond the inner cortical wall of the tibia, proper insertion depth has occurred (Figure 5).

⊖ **Note:** Failure to insert the implant to the appropriate depth may cause inadequate anchor deployment.

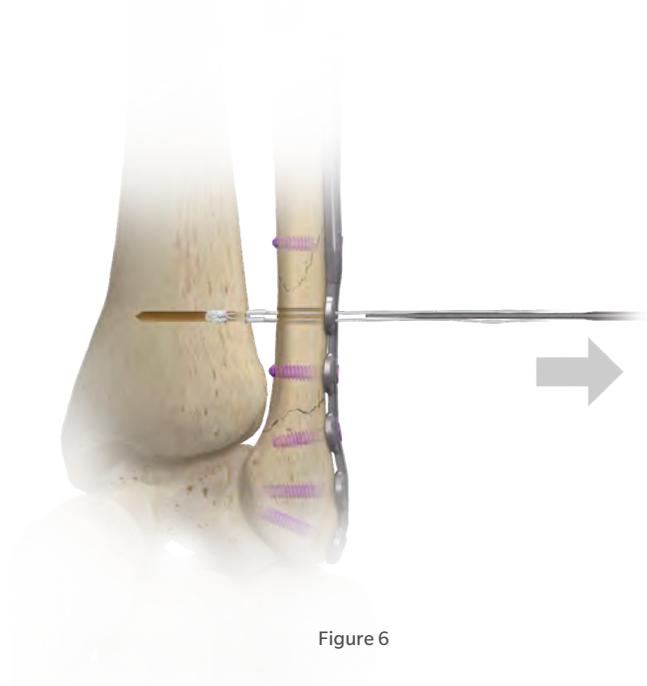


Figure 6

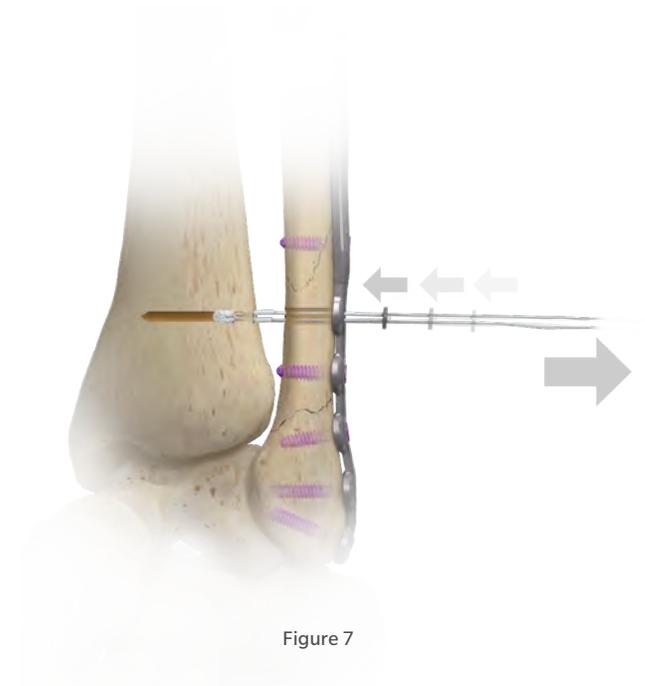


Figure 7

Deploy the Anchor

Lightly pull back on the JuggerLoc inserter in order to set the anchor in the bone (Figure 6). Release the suture from the handle by removing the suture retention cap on the JuggerLoc fixation device.

ZipLoop Deployment

Pull the suture to tension the ZipLoop, moving the button's metal surface onto the fibular plate or cortex (Figure 7). Ensure there is no soft tissue caught underneath the button. Continue to tension and realign the button utilizing forceps or free suture to apply back tension until firmly seated. Strands should be carefully cut down near the round top hat button with scissors or blade.

Note: No knots need to be tied because the construct utilizes ZipLoop Technology.

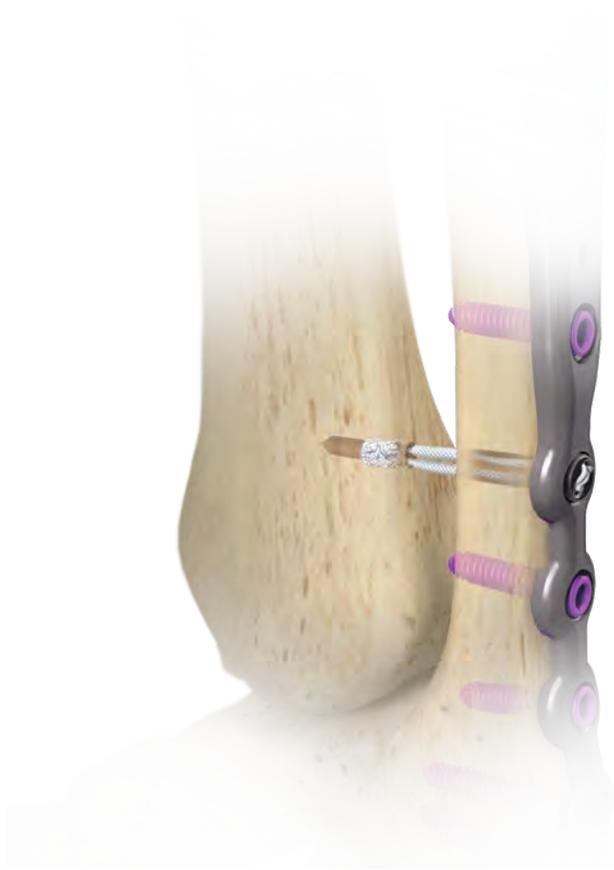


Figure 8

Closure

Irrigate thoroughly and proceed to suture individual layers of soft tissue per the surgeon's preferred technique. Please follow the appropriate post-operative protocol based on the procedures performed for the patient's diagnosis.

Ordering Information

Part Number	Description
110007337	JuggerLoc Bone-to-Bone Stainless Steel Round Button with Solid Drills Kit Stainless steel JuggerLoc B2B Implant Stainless Steel 2.9 mm Drill Stainless Steel 3.5 mm Drill
110007345	JuggerLoc Bone-to-Bone Titanium Round Button with Solid Drills Kit Titanium JuggerLoc B2B Implant Titanium 2.9 mm Drill Titanium 3.5 mm Drill

INDICATIONS

The Biomet JuggerLoc Bone to Bone system is intended for repair in the foot and ankle including indications for:

Midfoot repair including but not limited to Lisfranc repair, ankle syndesmosis fixation (syndesmosis disruptions), and as an adjunct in connection with trauma hardware for Weber B and C ankle fractures.

CONTRAINDICATIONS

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

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