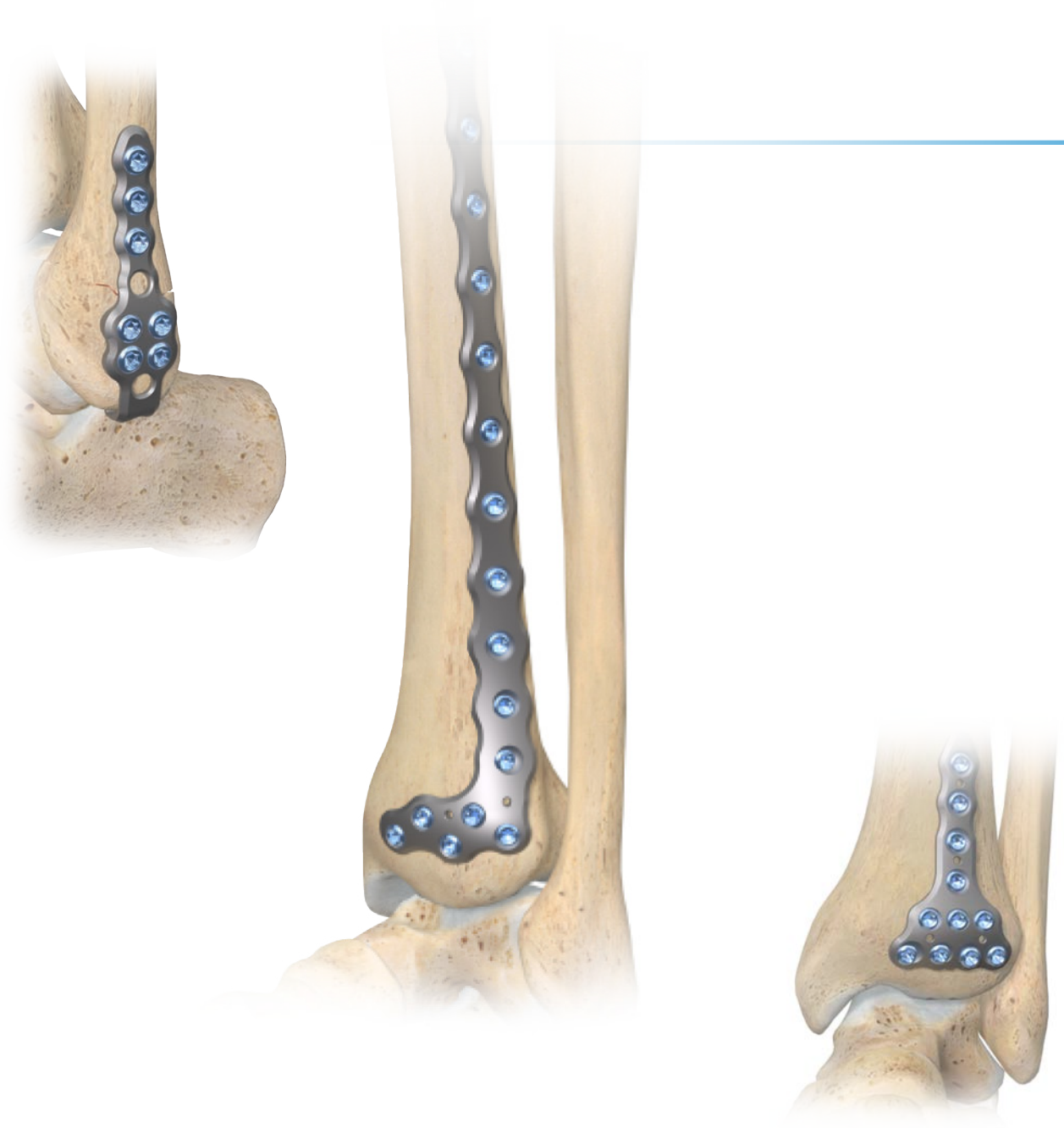
ZIMMER BIOMET
Moving You Forward.™





A.L.P.S. mvX ® Ankle Fracture System

Surgical Technique



A.L.P.S. mvX® Ankle Fracture System

Surgical Technique

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Indications and Contraindications

Intended Use

The intended use of the Zimmer Biomet A.L.P.S. mvX® Ankle Fracture System is to bridge or otherwise stabilize bone fragments to facilitate healing.

Indications (Excluding CE Mark Countries)

The Zimmer Biomet A.L.P.S. mvX Ankle Fracture System is indicated for Use in:

Fixation of fractures of the distal tibia included, but not limited to, ankle fractures, periarticular fractures, corrective osteotomies, non-unions, intra- and extra-articular and distal tibia fractures with a shaft extension, and malleolar fractures.

In intra- and extra-articular fractures, osteotomies, medial malleolar fractures and non-unions of the metaphyseal and diaphyseal region of the distal fibula, and calcaneus.

In distal tibia/fibula long bones which include the metaphyseal and diaphyseal regions of the tibia and fibula in the ankle.

The Zimmer Biomet A.L.P.S. mvX Ankle Fracture System is not for Spinal Use.[1]

1. LBL-ZB202316 Rev. B-01

Indications (For CE Mark Countries)

The Zimmer Biomet A.L.P.S. mvX® Ankle Fracture / Fusion System is indicated for use in:

Fixation of fractures of the distal tibia including ankle fractures, periarticular fractures, corrective osteotomies, non-unions, intra- and extra-articular and distal tibia fractures with a shaft extension, and malleolar fractures.

Intra- and extra-articular fractures, osteotomies, medial malleolar fractures, and nonunions of the metaphyseal and diaphyseal region of the distal fibula, and calcaneus.

Distal tibia/fibula long bones which include the metaphyseal and diaphyseal regions of the tibia and fibula in the ankle.

Reduction and stabilization of non-load bearing long bone fragments. The Zimmer Biomet A.L.P.S. mvX® Ankle Fracture System is not for Spinal Use.[2]

2. LBL-ZB202604

Contraindications (Excluding CE Mark Countries)

Infection

Patient conditions including blood supply limitations, obesity and insufficient quantity or quality of bone.

Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.

Foreign body sensitivity. If material sensitivity is suspected, testing is required prior to implanting the device

Contraindications (For CE Mark Countries)

The Zimmer Biomet A.L.P.S. mvX® Ankle Fracture / Fusion System should not be used in a patient who has current, or who has a history of:

Active infection or inflammation.

Patient conditions including blood supply limitations, obesity, and insufficient quantity or quality of bone.

Patients with mental or neurologic conditions who are unwilling or incapable of following postoperative care instructions.

Foreign body sensitivity. If material sensitivity is suspected, testing is required prior to implanting the device.

NOTE

This surgical technique alone does not provide sufficient background for direct use of the instrument and implant set. Instruction by a surgeon experienced in handling these instruments is highly recommended.

For safe and effective use of this implant system, the surgeon should be familiar with this recommended surgical technique for the device that has been chosen from the system.

In every case, accepted surgical practice should be followed in postoperative care and the patient should be made aware about the devices and the allowed activities with these implants.

Comprehensive Ankle Fracture Care in One System

The A.L.P.S. mvX Ankle Fracture System is designed as the core system for the future of ankle fracture plating, allowing for a single, cohesive platform across all ankle fracture applications.

Nine plating families provide sixty-nine plate options for accurate anatomic solutions for the full spectrum of ankle fractures and fusions, while a core instrument case creates a versatile solution for streamlined management and enhanced efficiency making the A.L.P.S. mvX Ankle Fracture System the ideal comprehensive ankle trauma solution.



Plate Families

Plate Family Name	Offerings
 Anatomic Lateral Fibula	4-hole, 6-hole, 8-hole, 10-hole, and 12-hole plates Right and Left Options
 Posterior Fibula	8-hole, 10-hole, and 14-hole plates Right and Left Options
 ⅓ Tubular	2-hole, 4-hole, 6-hole, 8-hole, 10-hole,12-hole, and 15-hole plates
 Fibula Hook	4-hole and 6-hole plates
 Anterolateral Tibia	6-hole, 10-hole, 12-hole, and 16-hole plates Right and Left Options Wide and Narrow Options

Plate Family Name	Offerings
 Medial Tibia	6-hole, 10-hole, 12-hole, and 16-hole plates Right and Left Options
 Anterior Tibia	4-hole, 6-hole, and 8-hole plates Wide and Narrow Options
 Posterolateral Tibia	4-2 hole, 4-4 hole, 4-5 hole, 6-2 hole, 6-4 hole, 6-5 hole options Right and Left Options
 Medial Mallelous Hook	3-hole and 5-hole plates

Screw Options

SCREW DIAMETER	2.7mm Screws	3.5mm Screws	4.0mm Screws



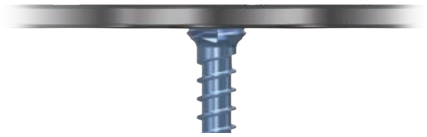
THREAD DIAMETER	2.7mm	3.5mm	4.0mm
DRILL	2.0mm	2.5mm	2.5mm
DRIVER	T15	T15	T15
SCREW LENGTH	10-50 (2mm increments) 55-100 (5mm increments)	10-50 (2mm increments) 55-100 (5mm increments)	10-50 (2mm increments) 55-100 (5mm increments)

The A.L.P.S. mvX Ankle Fracture System utilizes low-profile non-locking screws along with variable angle locking screws. The variable angle locking screws, which are available in 2.7 and 3.5mm diameters, provide a 30° cone of angulation allowing for flexibility in achieving optimal screw placement while minimizing soft tissue irritation. The locking screws are designed to withstand up to three insertions without damaging the integrity of the locking mechanism, giving surgeons peace of mind and intraoperative adaptability.



30°

Variable Angle Locking



Low Screw Head Prominence



Multiple Screw Insertions

Screw Options

SCREW DIAMETER	THREAD IN/FIXED ANGLE DRILL GUIDE	FIXED/VA DOUBLE DRILL GUIDE
Ø2.7mm	2.0mm Thread-In/Fixed Drill Guide	2.0mm Fixed Angle/VA Double Drill Guide
Ø3.5mm	2.5mm Thread-In/Fixed Drill Guide	2.5mm Fixed Angle/VA Double Drill Guide
Ø4.0mm	2.5mm Thread-In/Fixed Drill Guide	2.5mm Fixed Angle/VA Double Drill Guide

SCREW DIAMETER	DRILL	DEPTH GAUGE	COUNTERSINK	DRIVER
Ø2.7mm	2.0mm AO Drill, Short 2.0mm AO Drill, Long	2.7/3.5/4.0mm Depth Gauge 2.7/3.5/4.0mm Depth Gauge (60mm)	2.7/3.5/4.0mm Countersink	T15
Ø3.5mm	2.5mm AO Drill, Short 2.5mm AO Drill, Long	2.7/3.5/4.0mm Depth Gauge 2.7/3.5/4.0mm Depth Gauge (60mm)	2.7/3.5/4.0mm Countersink	T15
Ø4.0mm	2.5mm AO Drill, Short 2.5mm AO Drill, Long	2.7/3.5/4.0mm Depth Gauge 2.7/3.5/4.0mm Depth Gauge (60mm)	2.7/3.5/4.0mm Countersink	T15

Surgical Technique: Preoperative

Preoperative Planning

Preoperative planning is recommended before beginning the surgical procedure. Radiographic assessment of pilon fractures should include A/P, Lateral, Mortise and Oblique views of the distal tibia. A/P and Lateral x-rays of the contralateral uninjured ankle can also be taken preoperatively to provide insight into the characteristics of the pre-injured ankle.

For comminuted fractures, traction radiographs will allow for more precise identification of the fracture morphology and may facilitate preoperative planning. CT scans are very helpful in determining the precise amount of articular and rotary displacement and impaction of the fracture fragments. Preoperative planning should include patient positioning, placement of incision(s), careful soft tissue assessment, methods, and instruments required for fracture reduction, and the implants necessary for fixation. Instruments frequently required include: distractor, tension device, bone spreaders and reduction forceps or linear bone clamps.

Patient Positioning

The use of image intensification is required. The image intensifier should be sterile-draped and may be positioned from either the contralateral or ipsilateral side of the operating table. Position the patient based on fracture and surgeon preference on a radiolucent table, such that the injured ankle is near the end of the table. Elevate the leg on a padded bump with the knee slightly flexed to assist in a neutral positioning and placement.

Surgical Approaches

Approaches include an antero-medial incision, a standard anterior incision, or the lateral Böhler approach. When plating the fibula through a standard lateral approach, the surgeon should identify the tibial incision first to avoid narrow skin bridges between the two incisions. The fibular shaft and lateral malleolus should be reconstructed initially, depending on the tibial incision planned. If a midline or antero-medial incision is planned, a straight lateral or posterolateral incision can be used. Standard techniques of fibular plating are used. If an anterolateral approach to the tibia is employed, a postero-lateral incision can be used to fix the fibula. Alternately, both tibial and fibular fixation may be performed through the same anterolateral incision. Furthermore, if plain films and CT scan indicate that the posterior malleolus is "free floating", then this fragment must be fixed at the time of fibula fixation so that a stable fragment exists to reconstruct the articular surface. If this is not performed, the joint will be malreduced at the end of the surgery.

Antero-Medial Approach



Begin at the level of the distal shaft of the tibia, just lateral to the anterior crest, and continue distally as far as needed, staying medial to the anterior tibial tendon. Take the skin together with the subcutaneous tissue and the periosteum in a full thickness flap to prevent separation of the medial skin from its periosteal blood supply. Expose the joint through major tears in the soft tissue envelope. If needed, the joint capsule can be incised in line with the skin incision, to visualize the articular surface. This approach offers the surgeon an excellent view of the medial and anterior distal tibia, but visualization of the lateral tibial articular surface will be limited

Standard Anterior Approach



Make an 8 - 10 cm skin incision centered over the ankle, with most of the incision proximal to the joint. Distally, the incision stops at the level of the talo-navicular joint. Find and protect the superficial peroneal nerve, which crosses the wound from the lateral side. Incise the extensor retinaculum in line with the skin incision and expose the anterior tibial (AT) and extensor hallucis longus (EHL) tendons. Locate and protect the anterior tibial artery and deep peroneal nerve just medial to the EHL tendon at the level of the joint. Move the neurovascular bundle laterally along with the EHL; the AT should be moved medially. This exposes the ankle capsule. The exposure of the joint should be through the major tears in the soft tissue envelope. Excellent visualization of the medial, and anterior tibial plafond are possible with this approach, but visualization of the lateral tibial plafond again is somewhat limited.

Lateral Approach

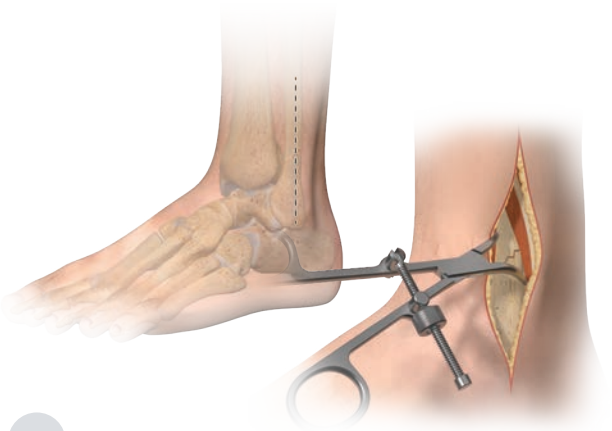


Start 5 cm proximal to the ankle joint and slightly medial to Chaput's tubercle. Continue distally in a straight line toward the base of the third and fourth metatarsals. Identify and protect the superficial peroneal nerve and proceed through the subcutaneous tissue to expose the superior and inferior extensor retinaculum, and the tendons of the extensor digitorum longus, peroneus tertius, hallucis brevis, and the extensor hallucis longus. After dividing the extensor retinaculum, the tendons of the extensor digitorum longus and peroneus tertius, the deep peroneal nerve, and the dorsalis pedis artery are moved medially. In the distal aspect of the incision, the muscle belly of the extensor digitorum brevis can be seen, and, if greater distal exposure is needed, this can be mobilized. At completion, the exposure should allow visualization of the entire anterior face of the distal tibia, with excellent visualization of the lateral articular surface.

Technique

› Anatomic Lateral Fibula Plate

Surgical Technique - Anatomic Lateral Fibula Plate

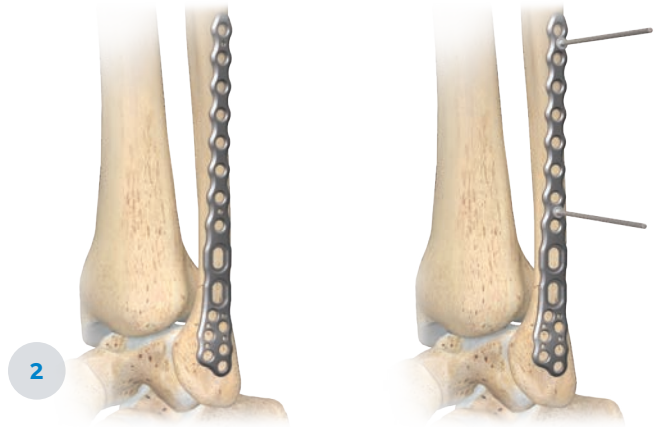


1

Make a straight lateral or posterolateral surgical incision over the fibula. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference.

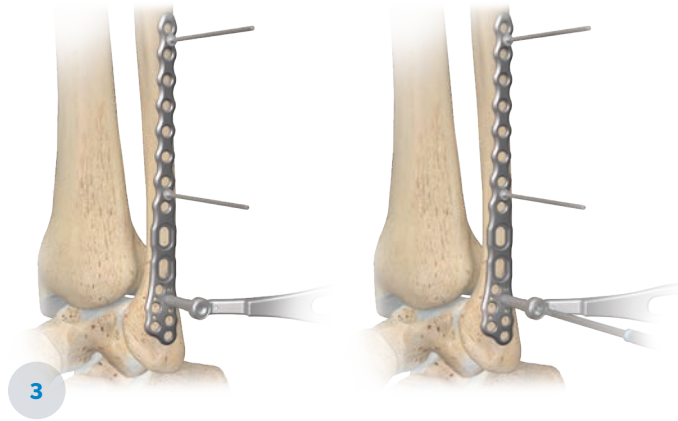
Once adequate reduction has been maintained, select the appropriate anatomic lateral fibula plate for the fracture type and size (Figure 1).



2

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 2).



3

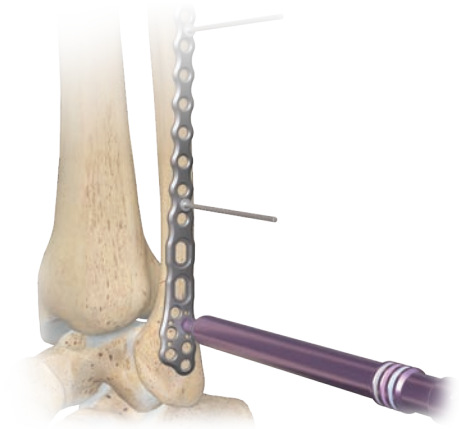
Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 3).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400)

Surgical Technique - Anatomic Lateral Fibula Plate

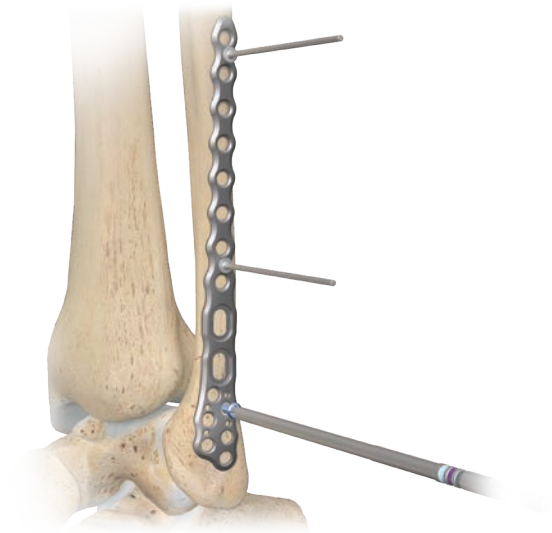


4

Drill to the desired depth using the appropriate drill for the desired screw diameter.

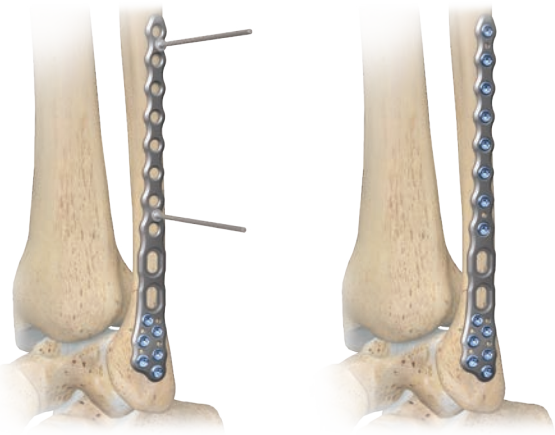
If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 4).



5

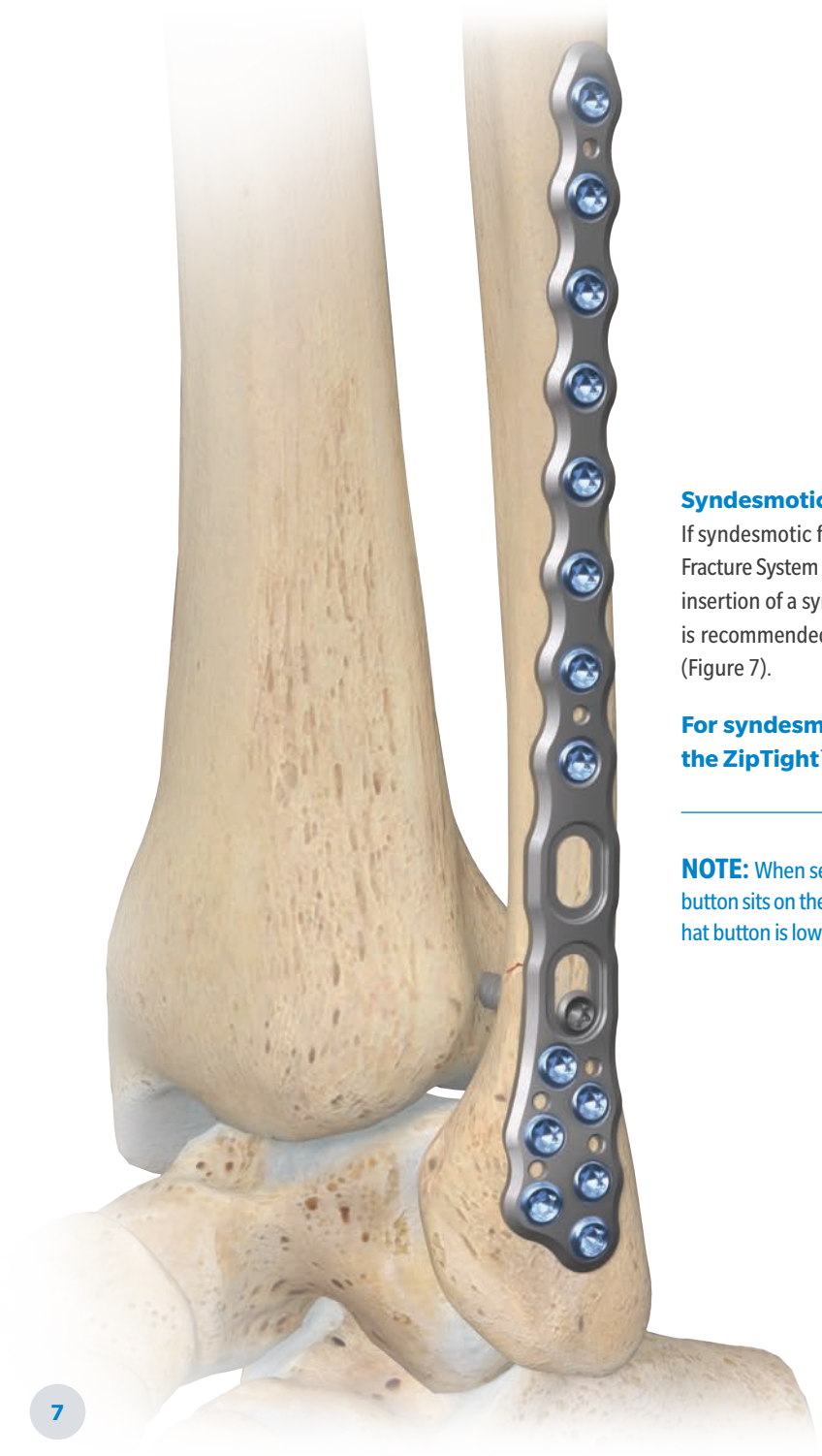
Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 5).



6

Fill the desired remaining screw holes following the above technique, leaving the syndesmotic slots for optional fixation. (Figure 6)

Surgical Technique - Anatomic Lateral Fibula Plate



7

Syndesmotic Screw Insertion (Optional)

If syndesmotic fixation is necessary, the A.L.P.S. mvX Ankle Fracture System provides a 2.7 / 3.5 / 4.0 mm screw for the insertion of a syndesmosis screw. Using the above technique, it is recommended to drill 3-4 cortices for the desired screw size (Figure 7).

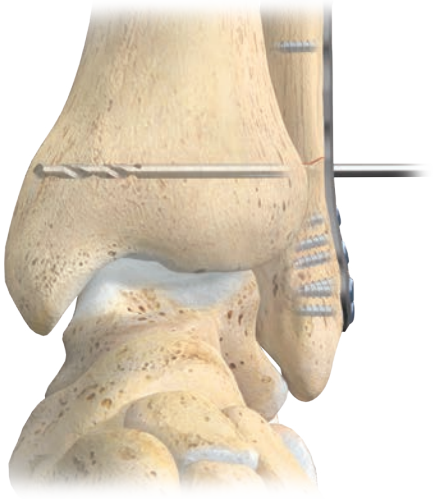
For syndesmotic button technique, refer to either the ZipTight[1] or Juggerloc[2] surgical techniques.

NOTE: When seating the top hat button on the plate, ensure the button sits on the top of the plate slot before final seating. If the top hat button is lowered on an angle it may tilt into the slot.

Technique: Syndesmotic Button Addendum

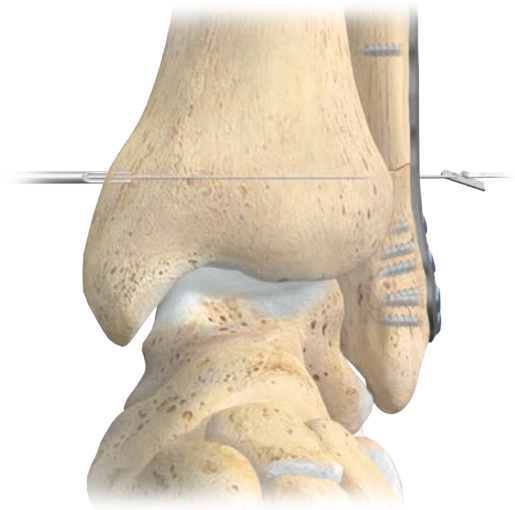
› Syndesmotic Fixation using ZipTight

Surgical Technique - Syndesmotic Fixation using ZipTight



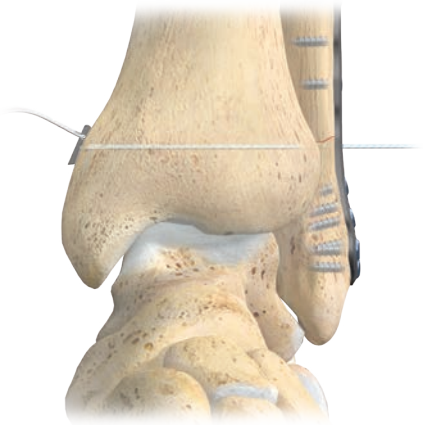
8

After correctly placing the ALPS mvX Anatomic Lateral Fibula Plate in balanced fixation, using either a solid or cannulated 3.2mm drill, create a drill pathway at or slightly above the incisura of the tibia at the distal tib-fib joint. Penetrate both tibial cortices with the 3.2mm drill (Figure 8).



9

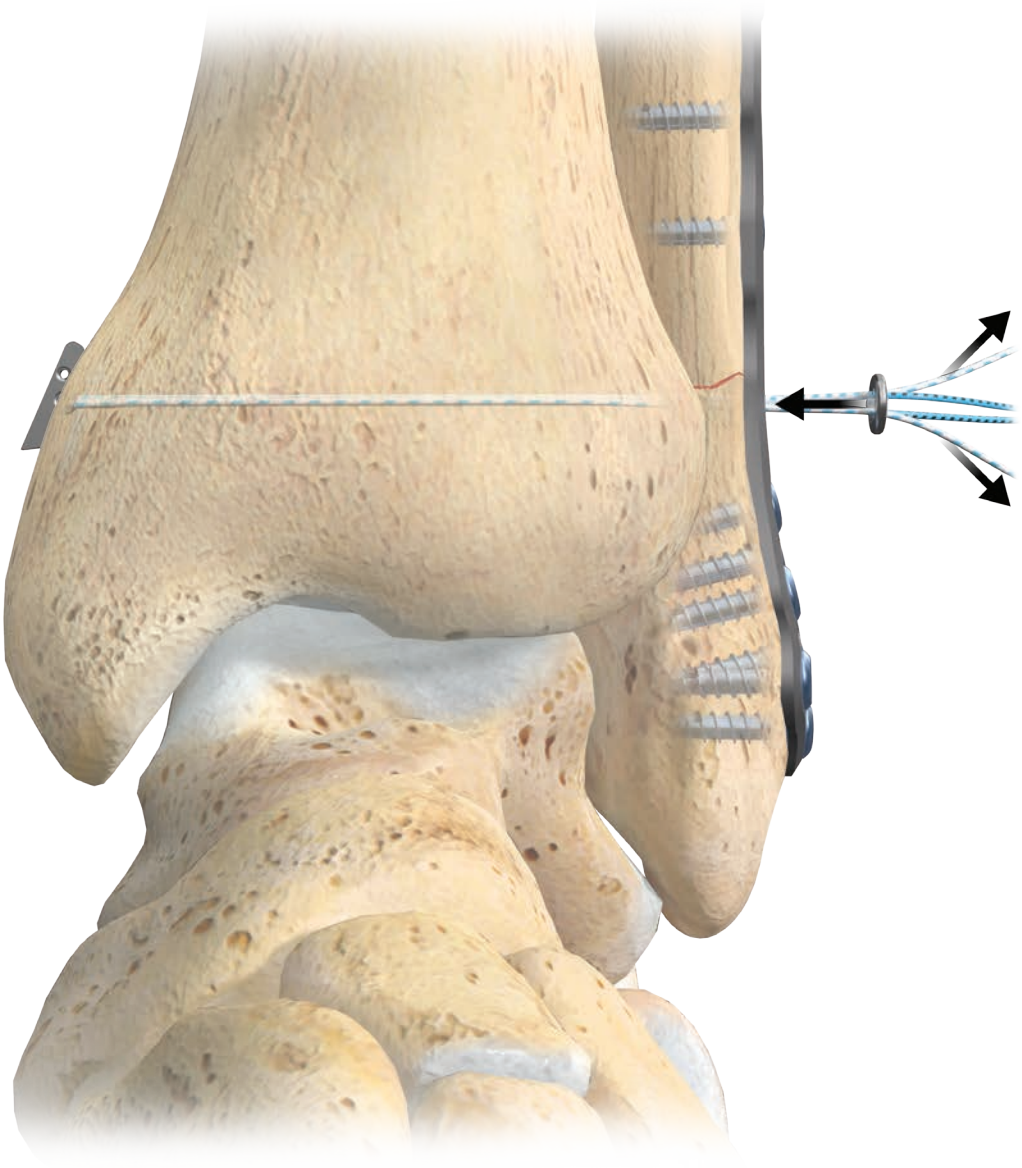
After the bone tunnels have been prepared, pass the ZipTight Fixation System pull strands through the tunnels from lateral to medial using the guide pin (Figure 9).



10

Carefully continue pulling the ZipTight Fixation System pull strand (white MaxBraid suture) until the ToggleLoc button exits the bone tunnel on the medial side of the tibia. Keeping the device taut from both ends keeps the ToggleLoc button angled so that it will easily flip on the medial cortex. As the button exits out of the medial tibial cortex, directing the hand inferiorly may aid in flipping the ToggleLoc button. Under fluoroscopic imaging, once the button appears to be out of the medial tibial cortex, pull the device back in the lateral direction so that the ToggleLoc button will flip and rest closely against the medial cortex of the tibia (Figure 10).

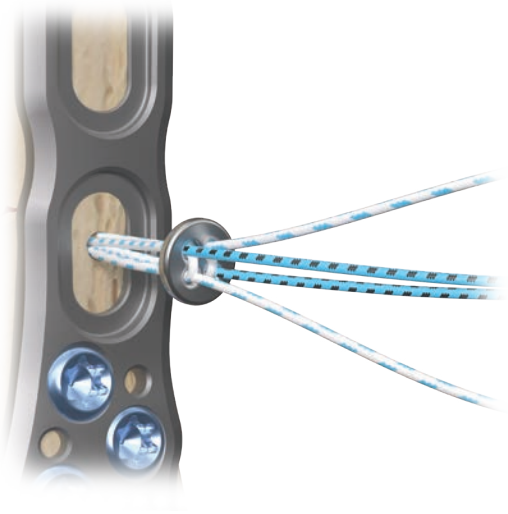
Surgical Technique - Syndesmotic Fixation using ZipTight



11

Pull on the blue/white 'zip' strands (blue/white MaxBraid suture) while maintaining tension on the solid blue back-tension strand (blue polyester suture). The solid blue back-tension strand provides slight counterforce to help keep the ZipLoop sutures organized (Figure11).

Surgical Technique - Syndesmotic Fixation using ZipTight



12

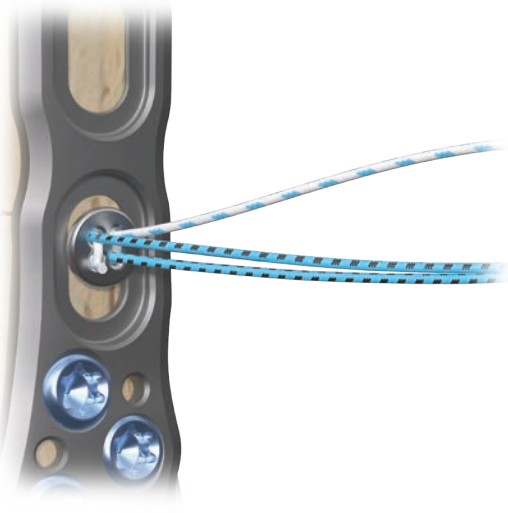
Continuing to pull the blue/white 'zip' strands will bring the round top hat button down against the plate (or lateral fibular cortex if no plate is used) to its final deployed position on the lateral side of the fibula (Figure 12).

NOTE: When seating the top hat button on the plate, ensure the button sits on the top of the plate slot before final seating. If the top hat button is lowered on an angle it may tilt into the slot.

After the round top hat button is seated, the solid blue back-tension strand can be released and the surgeon can provide final tensioning by pulling on each leg of the blue/white 'zip' strand to equalize tension of the legs of the ZipLoop strand. A ZipLoop puller can be used to assist in final tensioning of the fixation device.

The strands and guide pin can be removed on the medial side. The solid blue 'back-tension' strand can be cut and removed and the 'zip' strands can be carefully cut down near the round top hat button with scissors or the Super MaxCutter™ Suture Cutter (Figure 13).

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



13

When fixation is complete, the patient is placed in a post-operative splint, non-weightbearing until suture removal. Non-weight bearing is maintained for a minimum of four weeks or until sufficient callus ensures length stability of the fibula. A compliant patient can be allowed to do gentle range of motion non-weightbearing at four weeks. In the presence of sufficient fibula healing, protected weightbearing can be started on week six. Advancement to full weightbearing is progressed as clinically indicated.

Removal: The need for removal will be determined by the surgeon. If removal is desired, a small incision over the ToggleLoc button on the medial tibia is made to expose the button. Similarly, a small incision is made over the round top hat button on the lateral fibula. Using a blade or cautery, cut both legs of the ZipLoop suture at the round top hat button. The round top hat button can be removed. The ToggleLoc button and suture can then be removed from the medial side of the tibia.

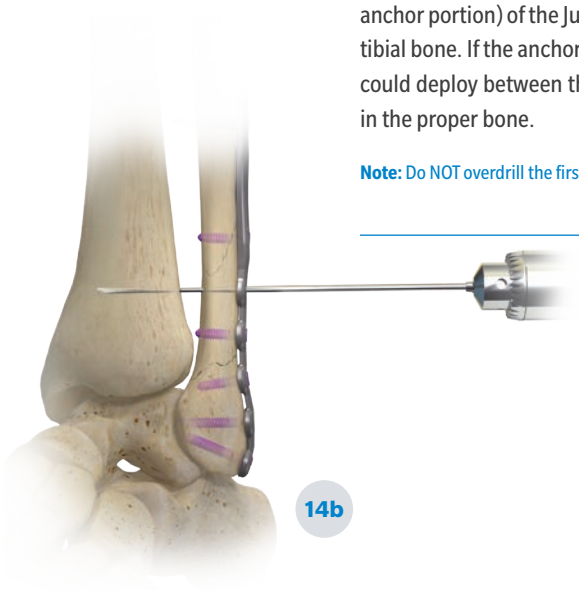
Technique: Syndesmotic Button Addendum

› Syndesmotic Fixation using JuggerLoc

Surgical Technique - Syndesmotic Fixation using JuggerLoc



14a



14b

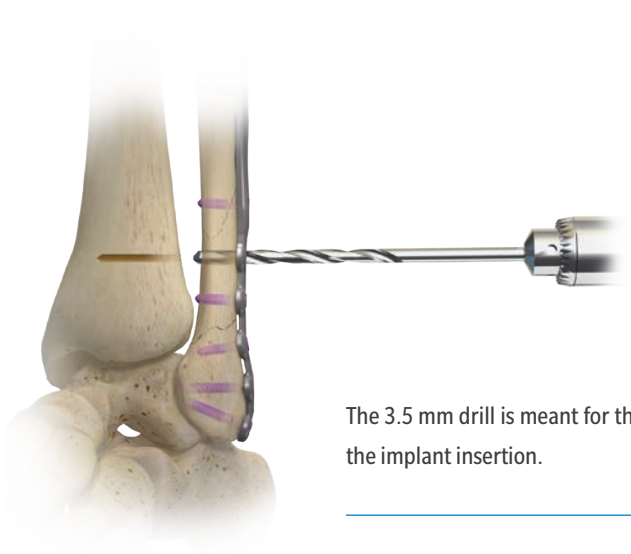
After correctly placing the ALPS mvX Anatomic Lateral Fibula Plate in balanced fixation, under fluoroscopy, insert the 2.9 mm drill through the fibula and past the inner cortex of the tibia (Figure 14a, 14b).

Properly drilled 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 and not anchor itself in the proper bone.

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



15a

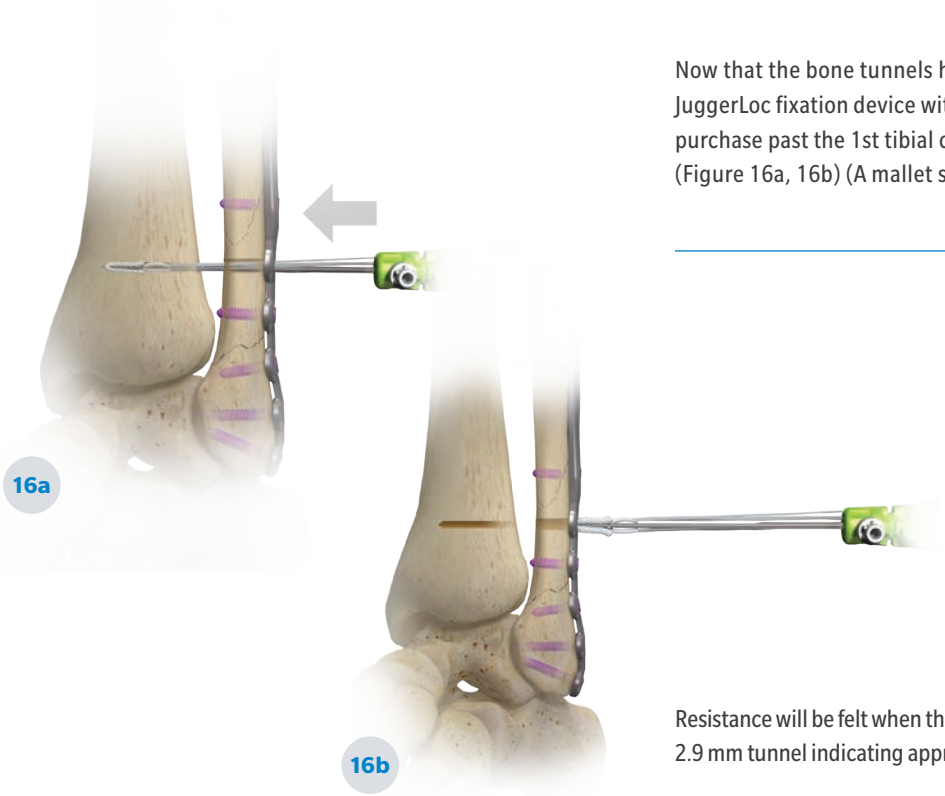


15b

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 15a, 15b).

The 3.5 mm drill is meant for the fibula exclusively to ease with the implant insertion.

Surgical Technique - Syndesmotic Fixation using JuggerLoc

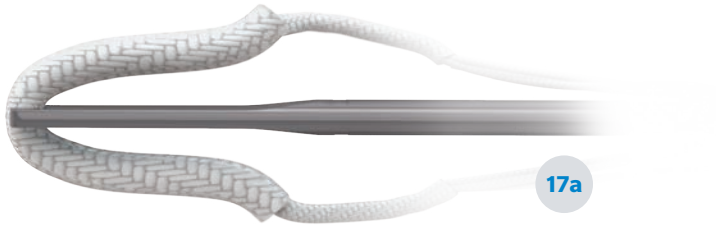


16a

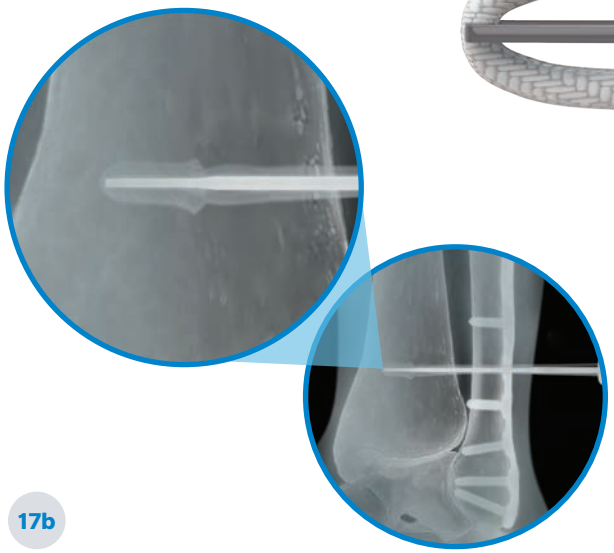
16b

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 16a, 16b) (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.



17a

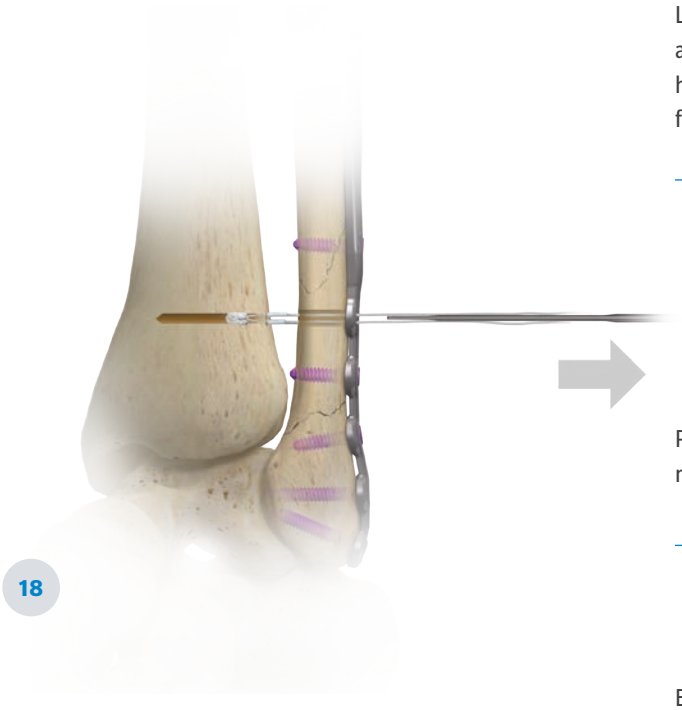


17b

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 17a). When this distal juncture is beyond the inner cortical wall of the tibia, proper insertion depth has occurred (Figure 17b).

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

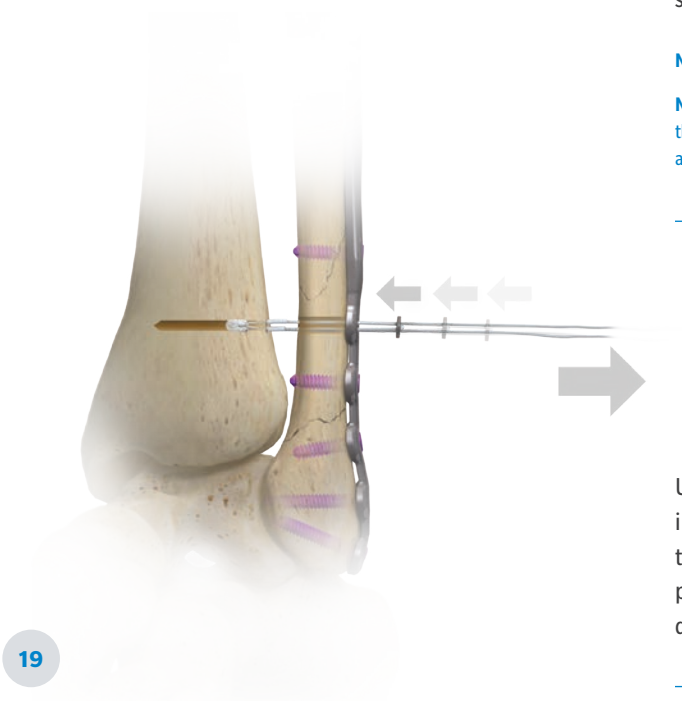
Surgical Technique - Syndesmotic Fixation using JuggerLoc



18

Lightly pull back on the JuggerLoc inserter in order to set the anchor in the bone (Figure 18). Release the suture from the handle by removing the suture retention cap on the JuggerLoc fixation device.

Pull the suture to tension the ZipLoop, moving the button's metal surface onto the fibular plate or cortex (Figure 19).



19

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.

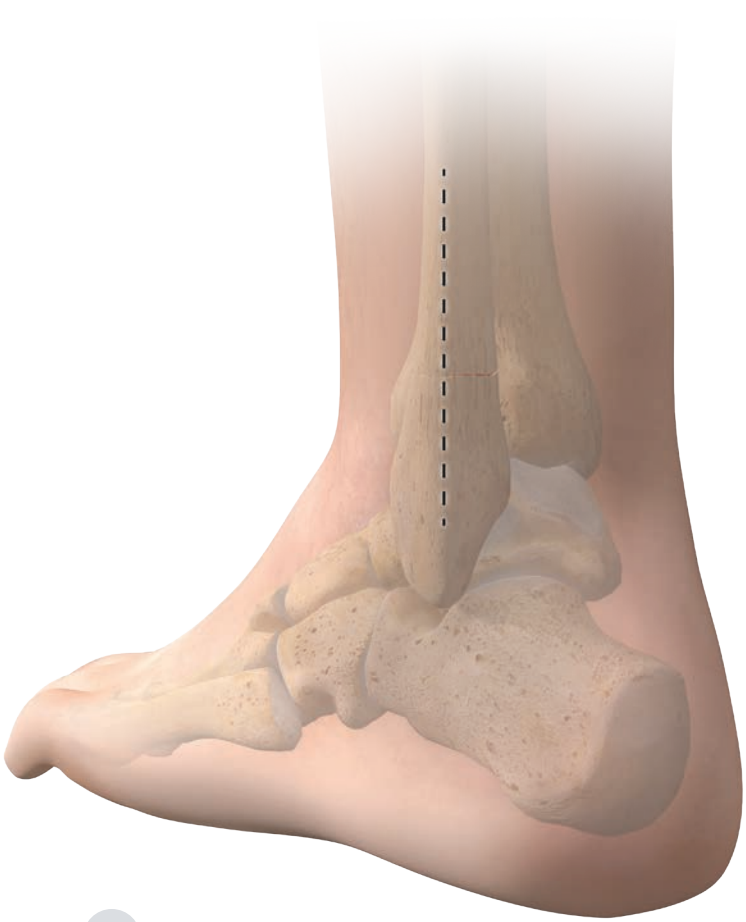
NOTE: When seating the top hat button on the plate, ensure the button sits on the top of the plate slot before final seating. If the top hat button is lowered on an angle it may tilt into the slot.

Upon 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.

Technique

› Posterior Fibula Plate

Surgical Technique - Posterior Fibula Plate





20

Make a lateral (supine or lateral decubitus position) or posterior (lateral decubitus) surgical incision over the fibula. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with K-Wires or reduction forceps, per surgeon preference. Once adequate reduction has been maintained, select the appropriate posterior fibula plate for the fracture type and size (Figure 20).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400).

Surgical Technique - Posterior Fibula Plate



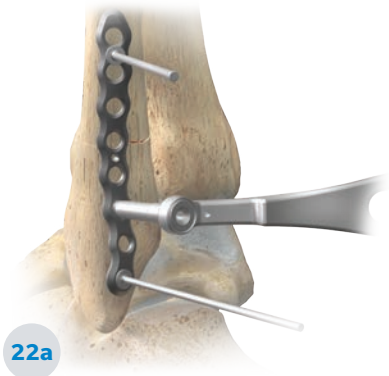
21a



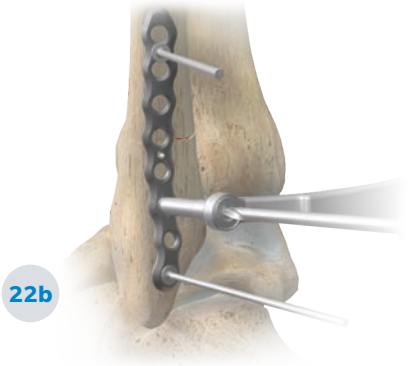
21b

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

K-Wires or plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 21a, 21b).



22a

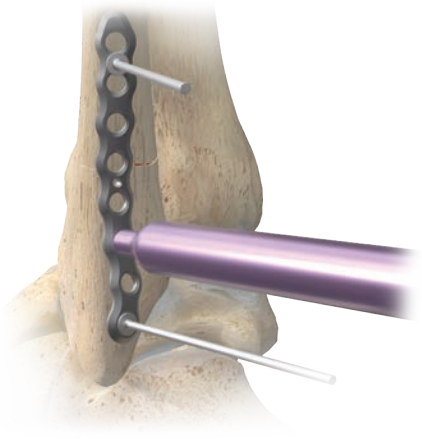


22b

Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm non-locking screws.

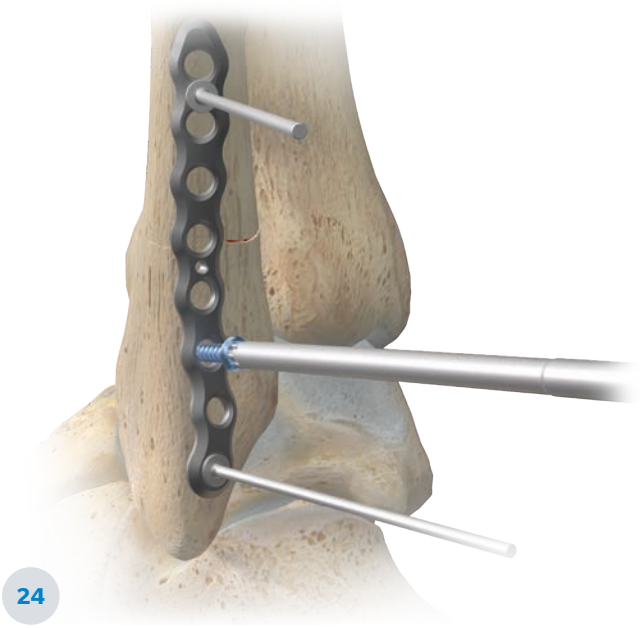
Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 22a, 22b).



23

Drill to the desired depth using the appropriate drill for the desired screw diameter (Figure 23).

Surgical Technique - Posterior Fibula Plate

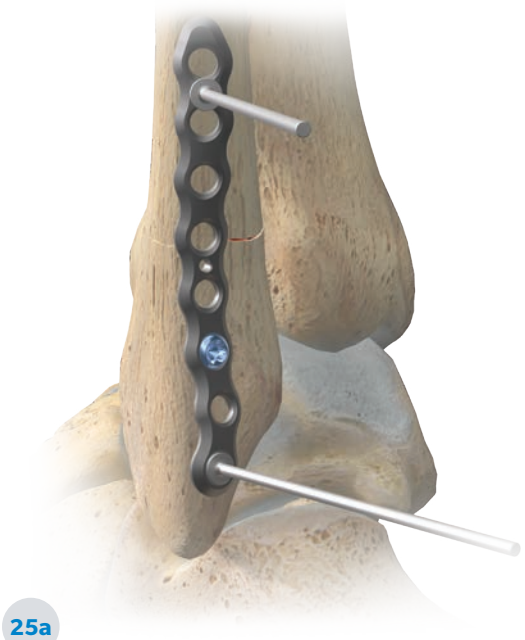


24

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter.

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 24).



25a



25b

Fill the desired remaining screw holes following the above technique (Figure 25a, 25b).

Technique

› ⅓ Tubular Plate

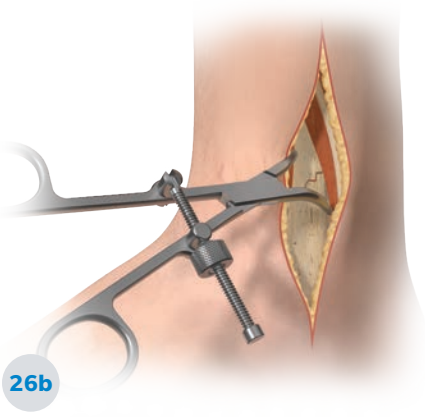
Surgical Technique - 1/3 Tubular Plate



Make a straight lateral or posterolateral surgical incision over the fibula. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference.

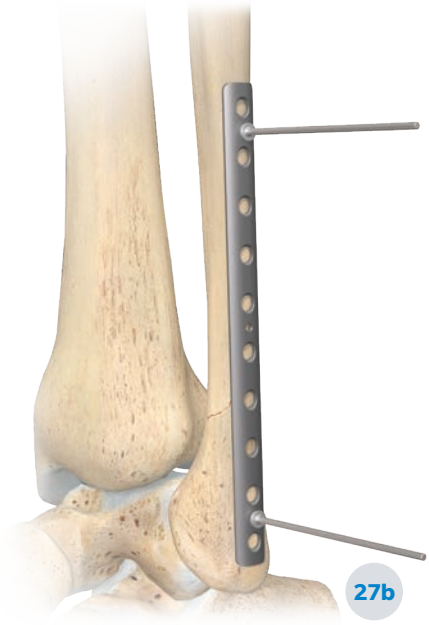
Once adequate reduction has been maintained, select the appropriate one third tubular plate for the fracture type and size (Figure 26a, 26b).



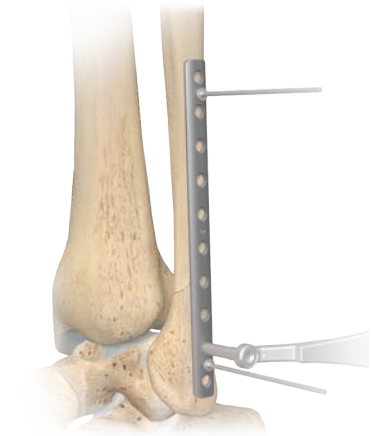
The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 27a, 27b).

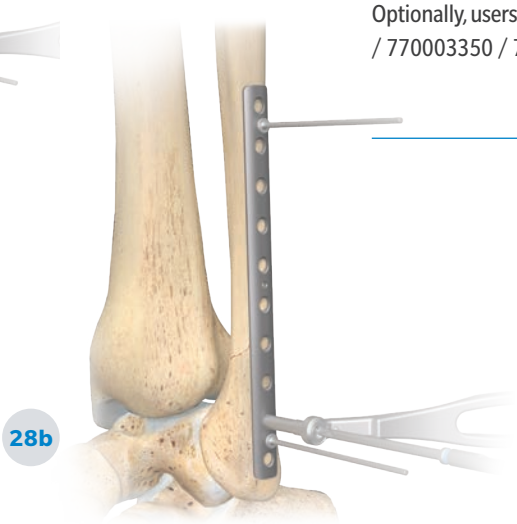




Surgical Technique - 1/3 Tubular Plate



28a



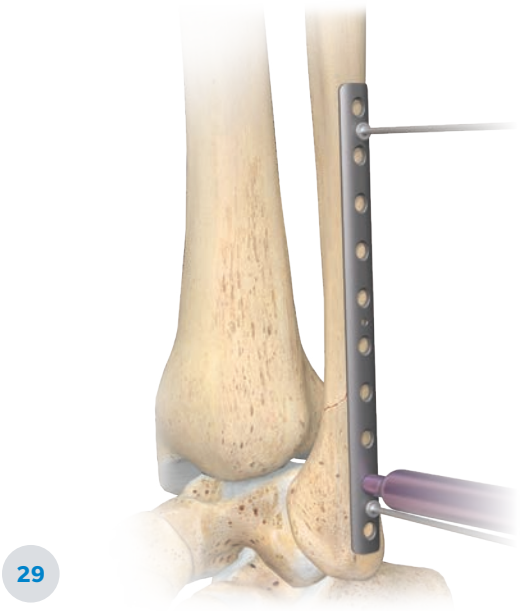
28b

Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 / 770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 28a, 28b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400)



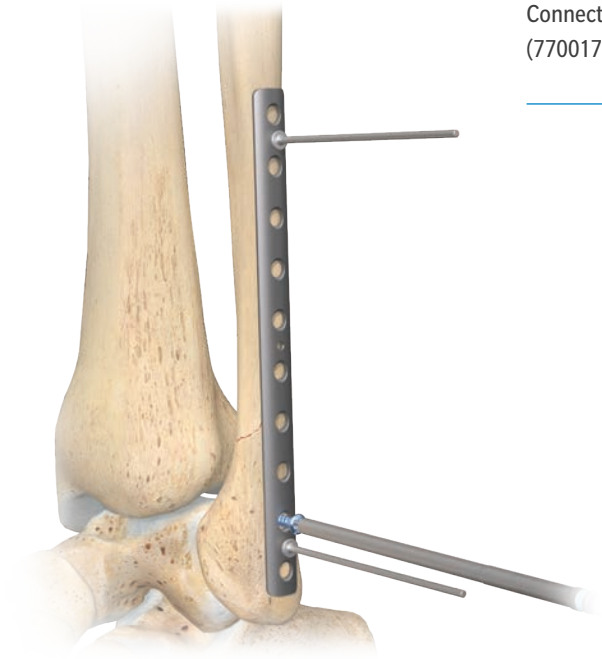
29

Drill to the desired depth using the appropriate drill for the desired screw diameter.

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter.(Figure 29).

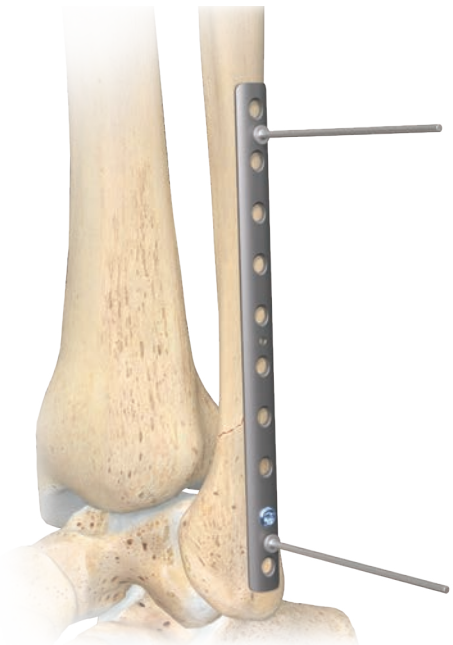
Surgical Technique - 1/3 Tubular Plate



30

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 30).

Fill the desired remaining screw holes following the above technique (Figure 31a, 31b).



31a



31b

Technique

› Fibula Hook Plate

Surgical Technique - Fibula Hook Plate



32

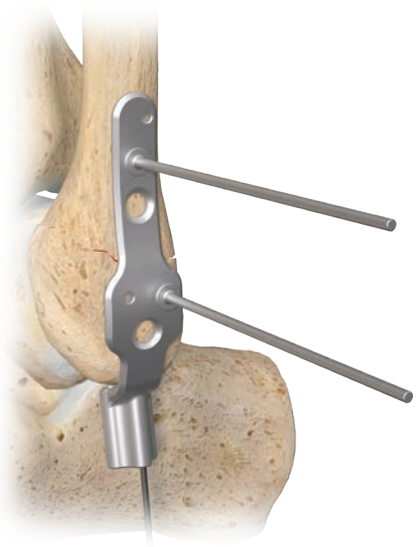
Make a straight lateral or posterolateral surgical incision over the fibula. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site (Figure 32).



33

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference (Figure 33).

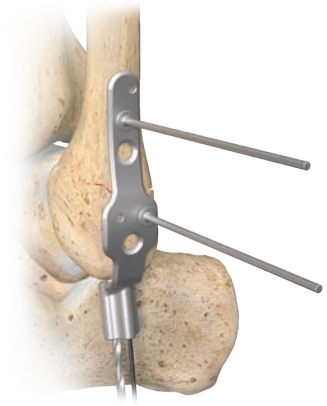
Once adequate reduction has been maintained, select the appropriate fibula hook plate for the fracture type and size. The drill guide is used as a template to determine implant positioning. The hook plate tamp can be used as a handle for easier placement.



34

Once the desired placement is achieved, the guide must be secured in two locations using K-Wires or plate tacks. A K-Wire through the hole adjacent to the drill guide barrels should be placed. This will guide implant insertion (Figure 34).

Surgical Technique - Fibula Hook Plate



35

Once fixated (minimum two locations). Punch the cortex using the 2.0mm drill (Figure 35).

After drilling, remove all fixation wires/tacks EXCEPT for the K-Wire in the hole adjacent to the drill guide barrels. Remove the drill guide by sliding it off the K-Wire inserted adjacent to the drill barrels.



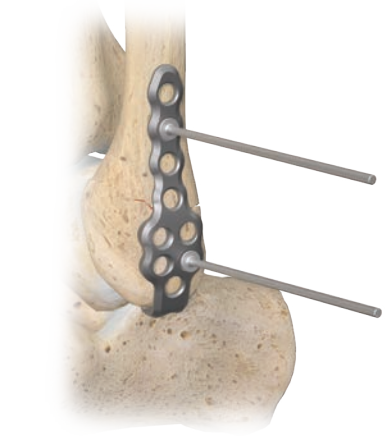
36



37

The hook plate tamp instrument is to be threaded onto the hook plate implant in the screw hole near the tines (Figure 36).

Slide the hook plate tamp over the K-Wire that was used with the hook plate drill guide. This will help align the plate with the pilot holes created for the tines. Slide the plate up to the bone until the pilot holes are located. A mallet can be used to tamp the implant into place (Figure 37).



38

Once tamped into place, apply temporary fixation to hold the plate in the intended location (Figure 38). Remove the plate tamp and prepare for screw insertion.

Surgical Technique - Fibula Hook Plate

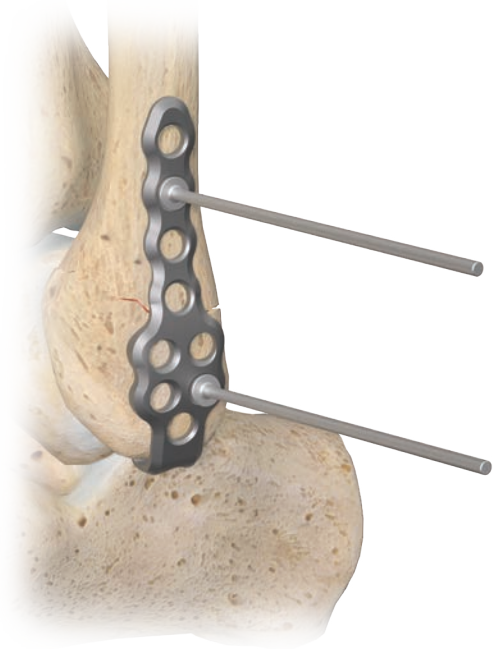
The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 39).

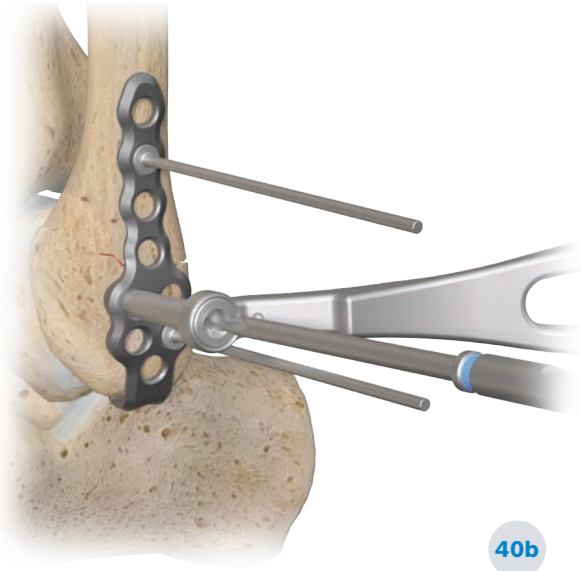
Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

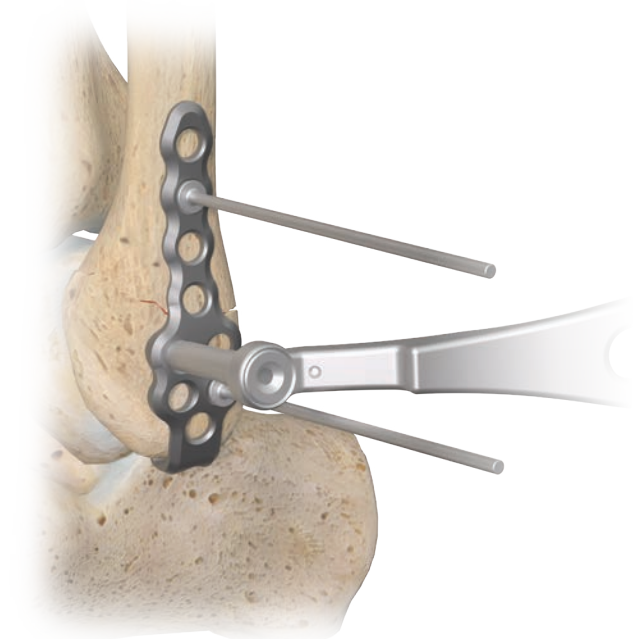
NOTE: The slot distal to the distal cluster of screw holes is not intended for screws. Do not insert a screw into this slot.



39



40b

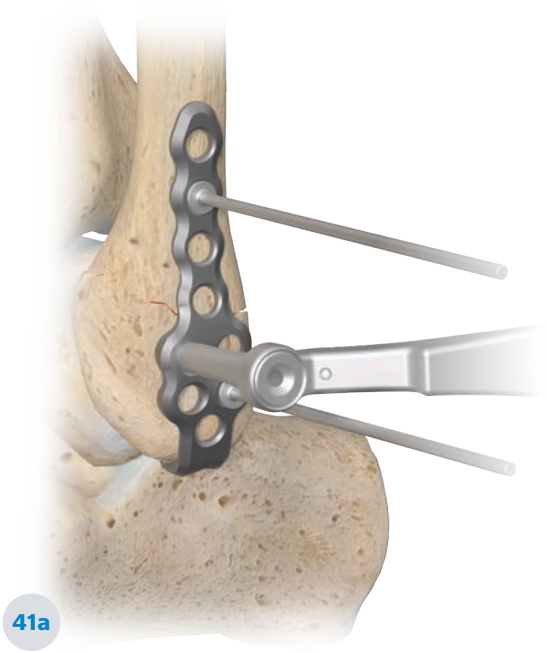


40a

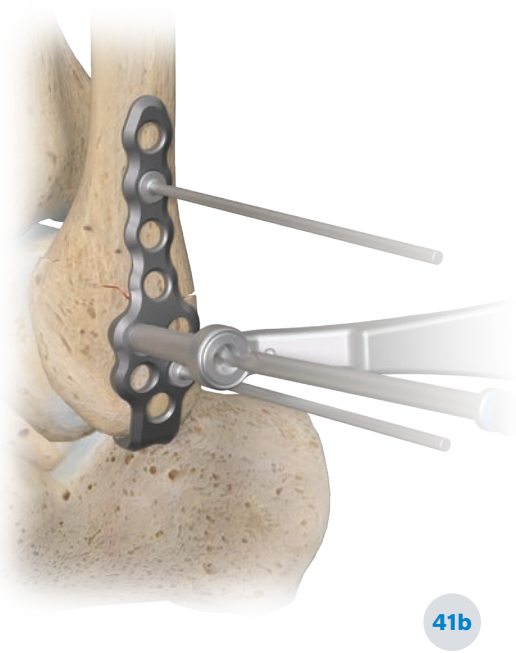
Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 40a, 40b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400).

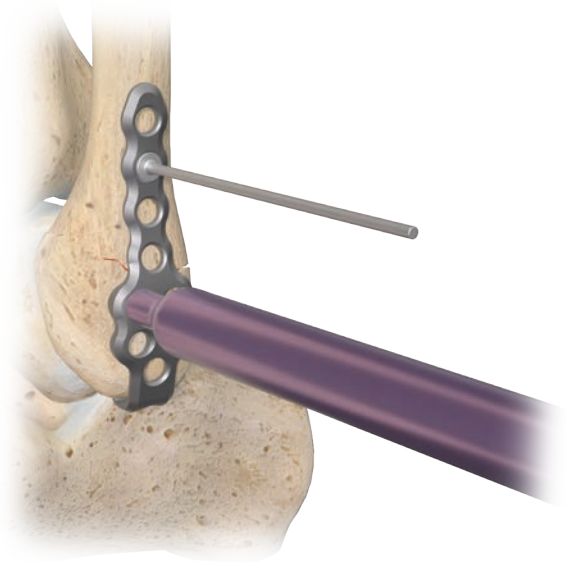
Surgical Technique - Fibula Hook Plate



41a



41b



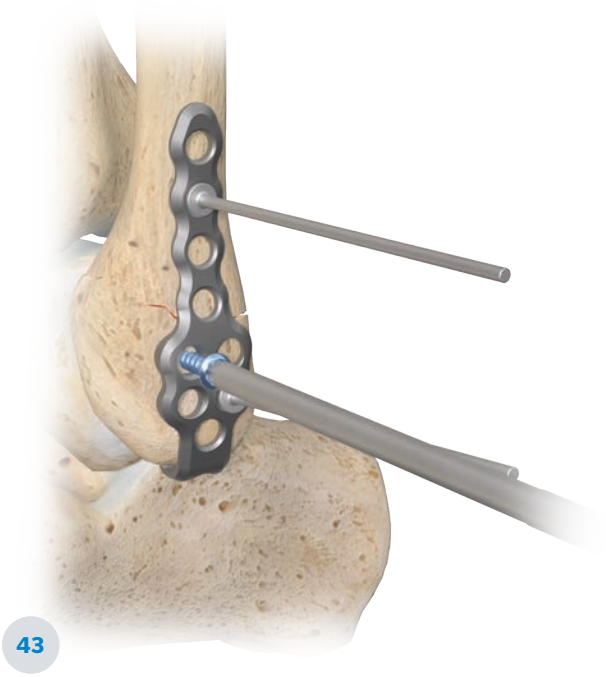
42

Drill to the desired depth using the appropriate drill for the desired screw diameter. (figure 41a, 41b).

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

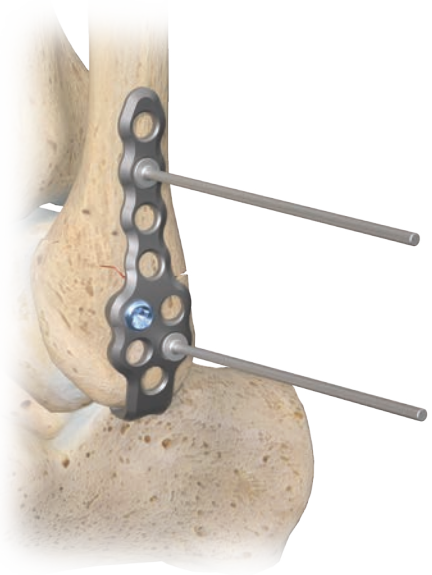
If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 42).

Surgical Technique - Fibula Hook Plate

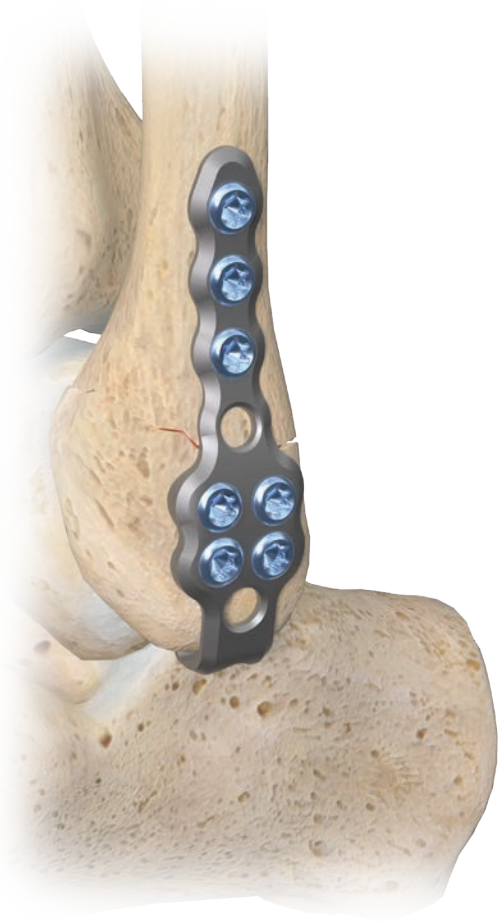


43

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw. (Figure 43)



44a



44b

Fill the desired remaining screw holes following the above technique. (Figure 44a, 44b)

Technique

› Anterolateral Tibia Plate

Surgical Technique - Anterolateral Tibia Plate



45a



45b

Make a small distal medial incision over the tibia, with percutaneous incision(s) made for proximal fixation. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference. Once adequate reduction has been maintained, select the appropriate anterolateral tibia plate for the fracture type and size (Figure 45a, 45b). Narrow and wide options are available.



46a



46b

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 46a, 46b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400).

Surgical Technique - Anterolateral Tibia Plate



47a



47b

Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 47a, 47b).

Drill to the desired depth using the appropriate drill for the desired screw diameter.

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 47c).

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 48a, 48b).



47c



48a



48b

Fill the desired remaining screw holes following the above technique (Figure 49).



49

Technique

› Medial Tibia Plate

Surgical Technique - Medial Tibia Plate



50a



50b

Make a straight medial surgical incision over the medial aspect of the tibia. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference.

Once adequate reduction has been maintained, select the appropriate medial tibia plate for the fracture type and size (Figure 50a, 50b).



51a



51b

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 51a, 51b).

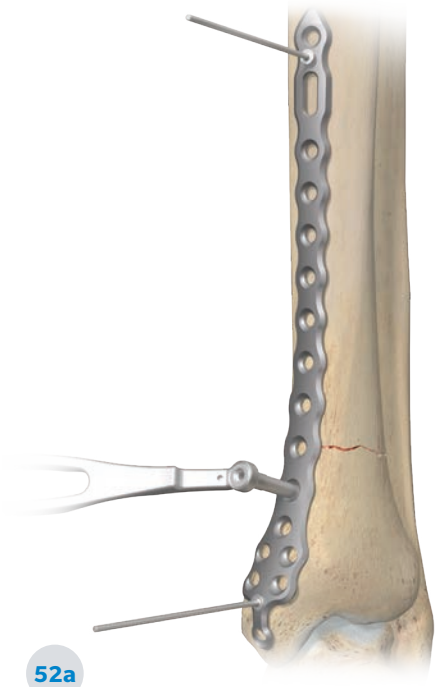
Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400).

Surgical Technique - Medial Tibia Plate

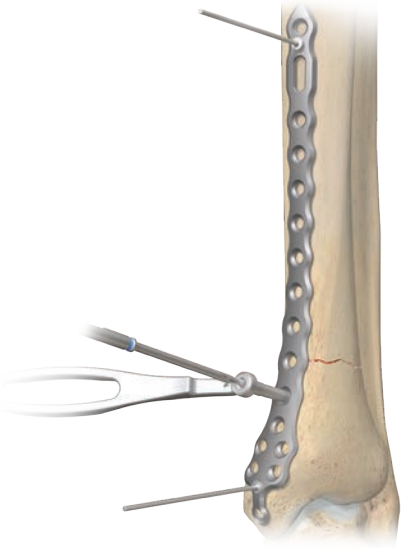
Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 52a, 52b).



52a

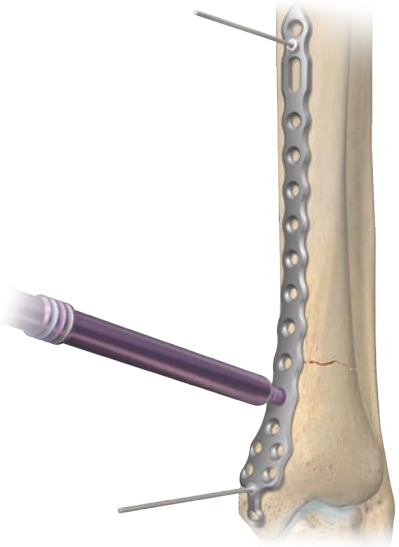


52b

Drill to the desired depth using the appropriate drill for the desired screw diameter.

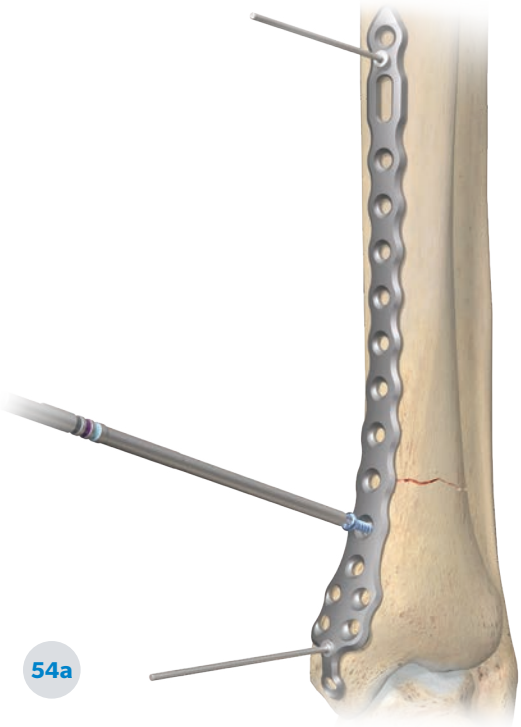
If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 53).



53

Surgical Technique - Medial Tibia Plate



54a



54b

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 54a & 54b).



55

Fill the desired remaining screw holes following the above technique (Figure 55).

Technique

› Anterior Tibia Plate

Surgical Technique - Anterior Tibia Plate



56a



56b

Make a straight anterior incision over the tibia. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

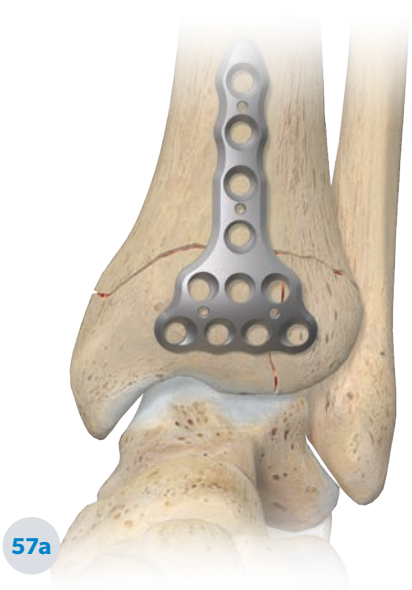
Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference.

Once adequate reduction has been maintained, select the appropriate anterior tibia plate for the fracture type and size (Figure 56a, 56b). Narrow and wide options are available.

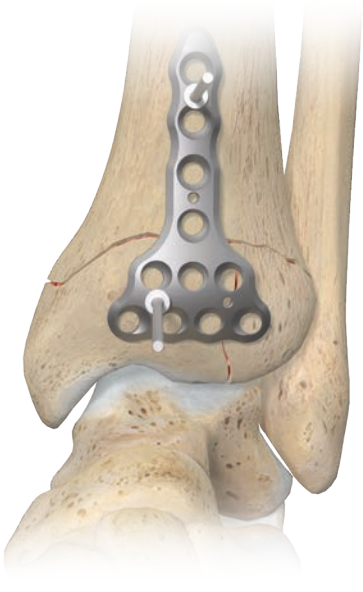
The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 57a, 57b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400)

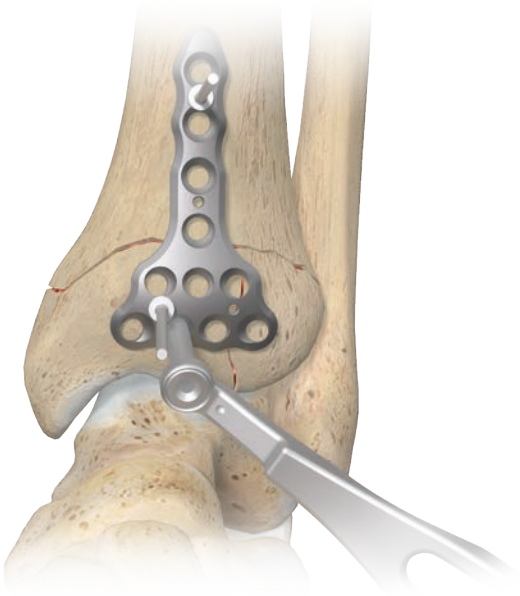


57a



57b

Surgical Technique - Anterior Tibia Plate



58

Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

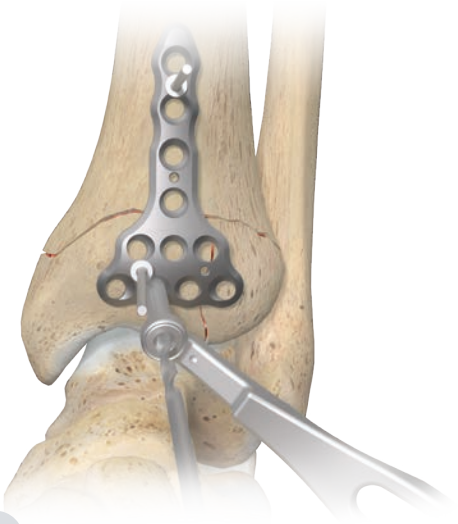
All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 /770006270 /770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 58).

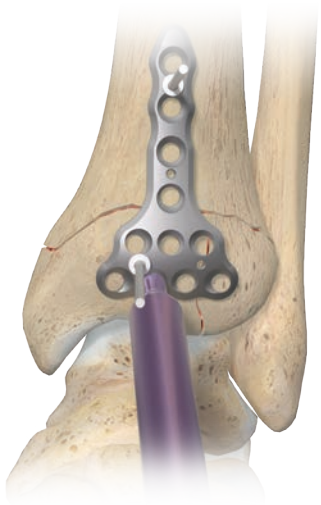
Drill to the desired depth using the appropriate drill for the desired screw diameter (Figure 59).

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

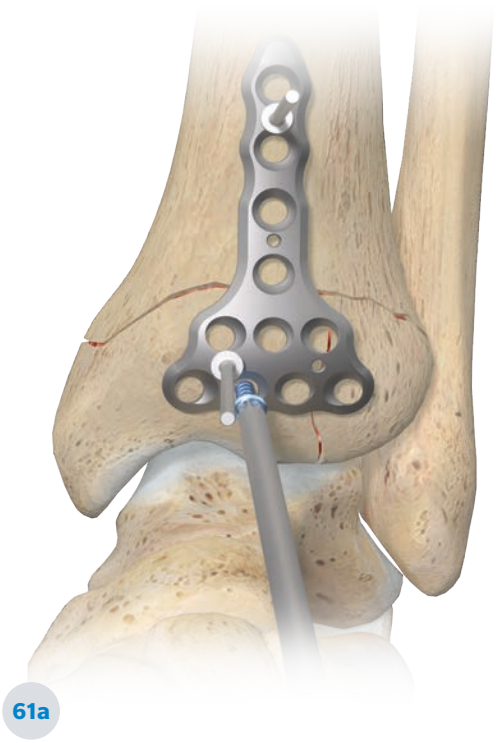
If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 60).



59



60

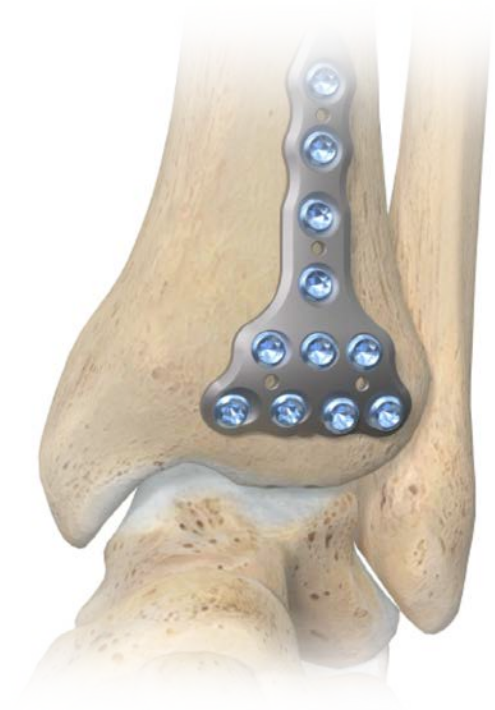


61a

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 61a, 61b).



61b



62

Fill the desired remaining screw holes following the above technique (Figure 62).

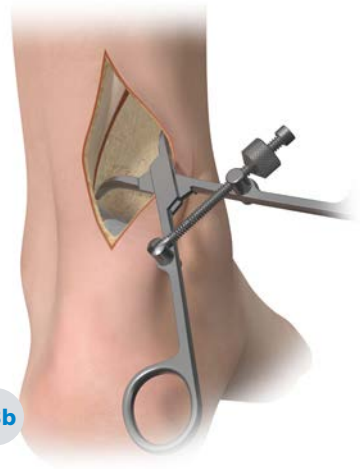
Technique

› Posterolateral Tibia Plate

Surgical Technique - Posterolateral Tibia Plate



63a



63b

Make a posterolateral surgical incision over the tibia. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site.

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with K-Wires or reduction forceps, per surgeon preference.

Once adequate reduction has been maintained, select the appropriate posterolateral tibia plate for the fracture type and size (Figure 63a, 63b).

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.

Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 64a, 64b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400)



64a



64b

Surgical Technique - Posterolateral Tibia Plate



65

Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 65).

Drill to the desired depth using the appropriate drill for the desired screw diameter (Figure 66).

If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 67).



66



67

Surgical Technique - Posterolateral Tibia Plate



68a

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 68a, 68b).



68b



69

Fill the desired remaining screw holes following the above technique (Figure 69).

Technique

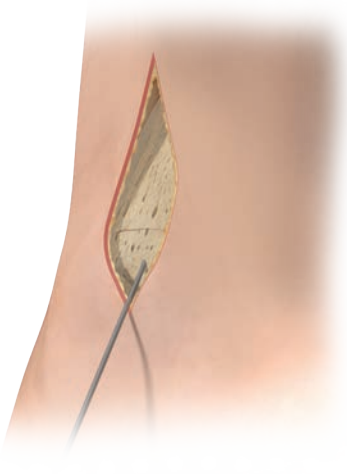
› Medial Malleolus Hook Plate

Surgical Technique - Medial Malleolus Hook Plate



70

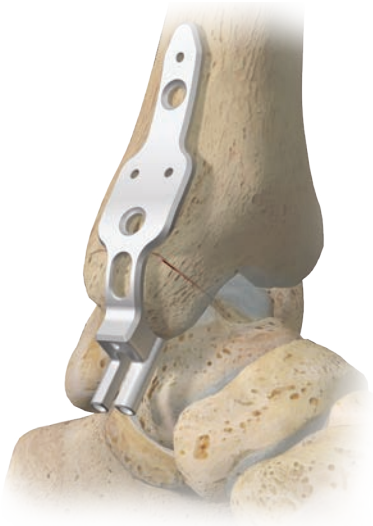
Make a longitudinal incision over the central aspect of the medial malleolus. Continue along the incised area with soft tissue dissection to allow exposure of the fracture site (Figure 70).



71

Expose and clean the fracture site and reduce the fracture. It is critical that fibular length, alignment, and rotation are accurately restored in the fracture reduction. Provisional reduction can be maintained with k-wires or reduction forceps, per surgeon preference (Figure 71).

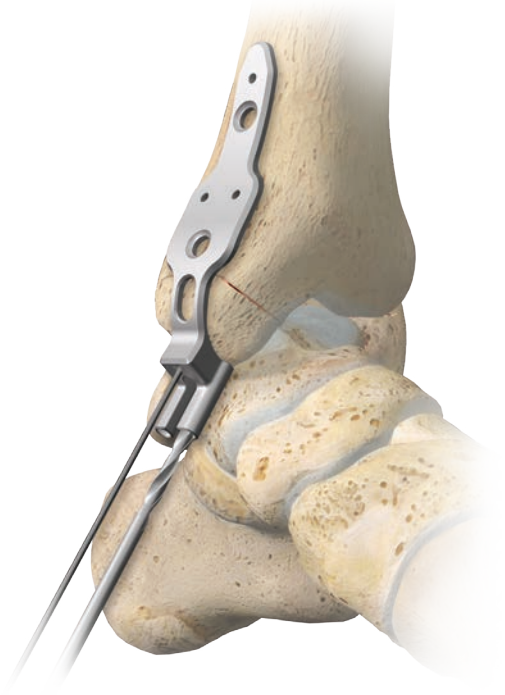
Once adequate reduction has been maintained, select the appropriate medial malleolus hook plate for the fracture type and size. The drill guide is used as a template to determine implant positioning. The hook plate tamp can be used as a handle for easier placement.



72

Once the desired placement is achieved, the guide must be secured in two locations using K-Wires or plate tacks. A K-Wire through the hole adjacent to the drill guide barrels should be placed. This will guide implant insertion (Figure 72).

Surgical Technique - Medial Malleolus Hook Plate



73

Once fixated (minimum two locations), punch the cortex using the 2.5mm drill (Figure 73).

After drilling, remove all fixation wires/tacks EXCEPT for the K-Wire in the hole adjacent to the drill guide barrels. Remove the drill guide by sliding it off the K-Wire inserted adjacent to the drill barrels.



74

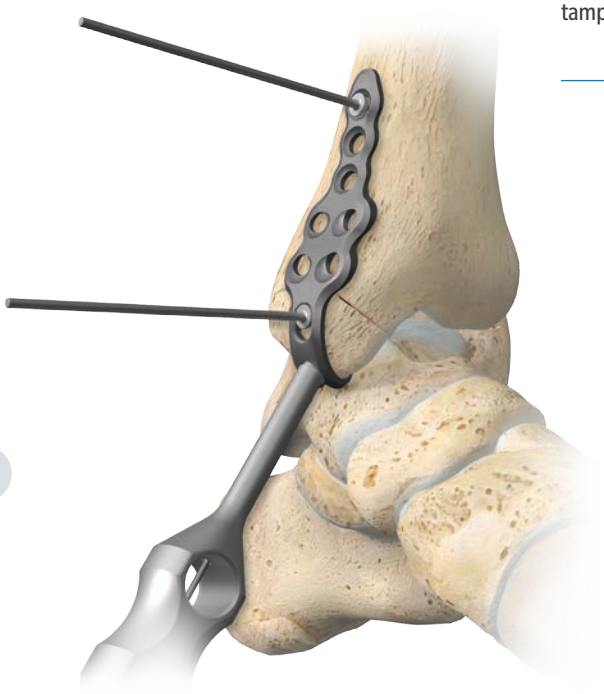
The hook plate tamp instrument is to be threaded onto the hook plate implant in the screw hole near the tines. (Figure 74)

Surgical Technique - Medial Malleolus Hook Plate



75

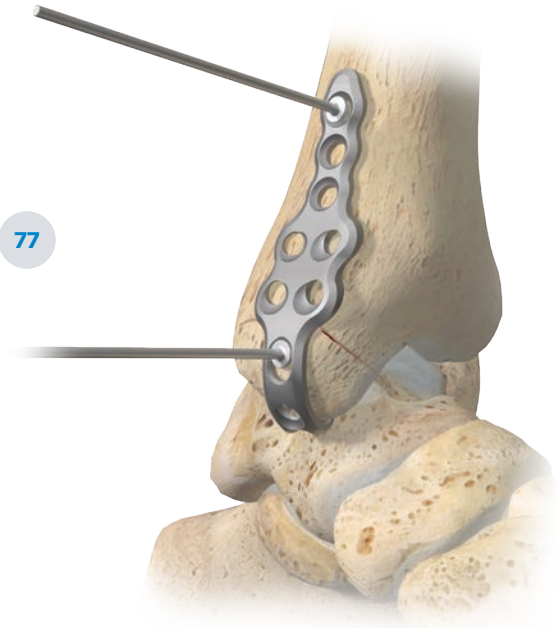
Slide the hook plate tamp over the K-Wire that was used with the hook plate drill guide. This will help align the plate with the pilot holes created for the tines. Slide the plate up to the bone until the pilot holes are located. A mallet can be used to tamp the implant into place (Figure 75).



76

Once tamped into place, apply temporary fixation to hold the plate in the intended location (Figure 76). Remove the plate tamp and prepare for screw insertion.

Surgical Technique - Medial Malleolus Hook Plate



77

The use of fluoroscopic imaging during plate placement in both the AP and lateral planes is recommended.Plate tacks can be used to secure the plate to bone. Confirm plate placement using temporary fixation (Figure 77).

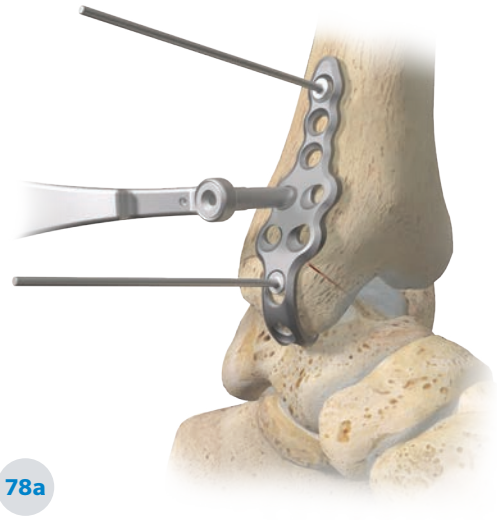
Based on the fracture site, select a locking hole to insert the first screw into and identify the proper screw for fixation.

All plate holes accept 2.7 mm, 3.5 mm (locking or non-locking) or 4.0 mm (non-locking) screws.

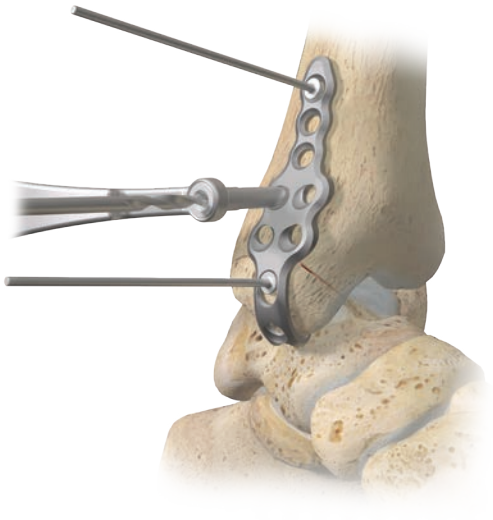
NOTE: The slot distal to the distal cluster of screw holes is not intended for screws. Do not insert a screw into this slot.

Select the appropriately sized drill guide (770004270 /770006270 / 770004350 / 770006350) based on screw diameter and place it in the chosen hole (Figure 78a, 78b).

Optionally, users may use the corresponding Overdrill (770003270 / 770003350 / 770003400)

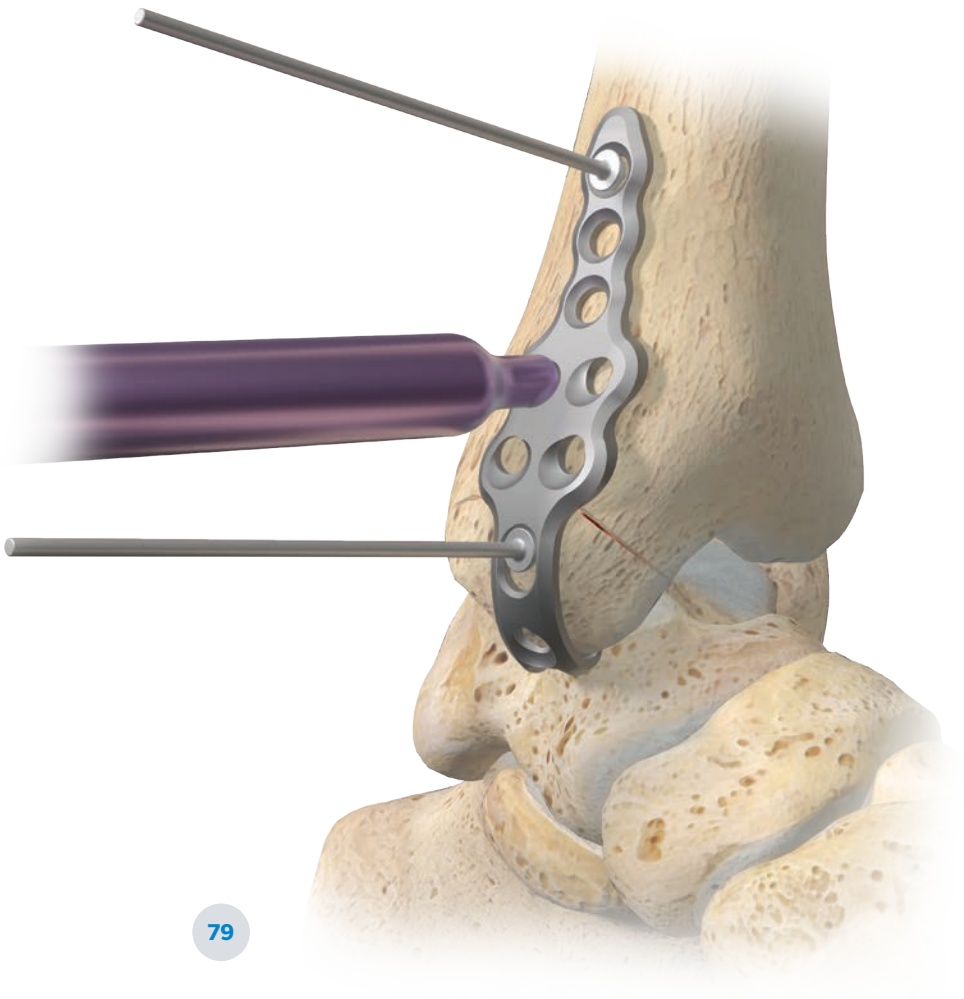


78a



78b

Surgical Technique - Medial Malleolus Hook Plate



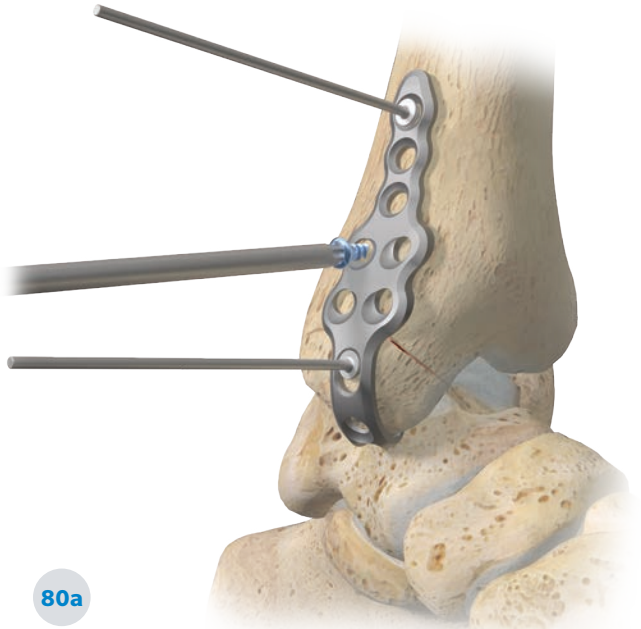
79

Drill to the desired depth using the appropriate drill for the desired screw diameter.

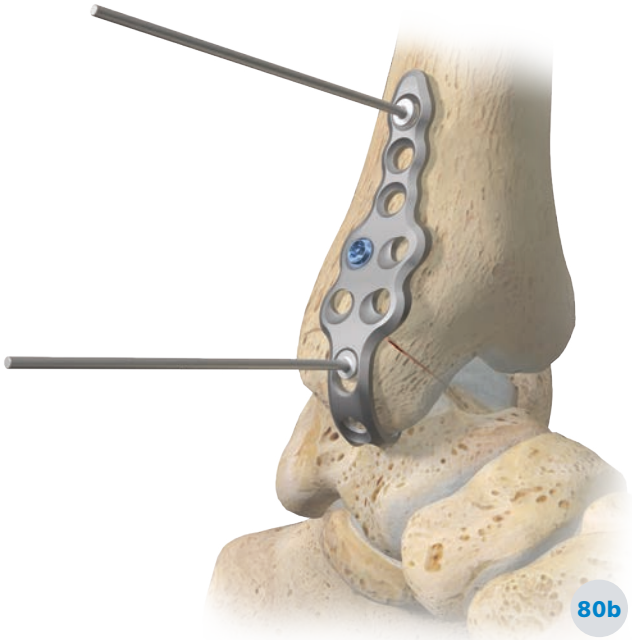
If using the ThreadIn/Fixed Drill Guide, screw length can be measured by either using the Depth Gauge (770009270) or by using the Thread In Drill Guide to read the measurement marks from the drill.

If using either side of the Double Drill Guide, screw length can only be measured using the Depth Gauge corresponding to desired screw diameter (Figure 79).

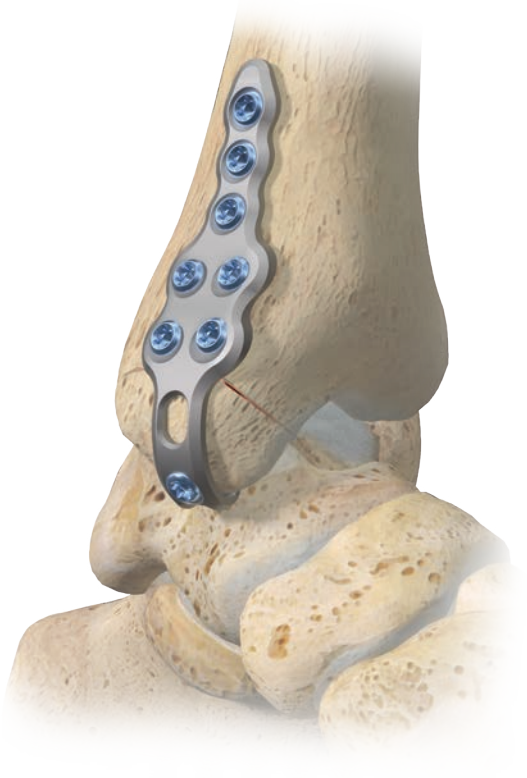
Surgical Technique - Medial Malleolus Hook Plate



80a



80b



81

Connect the corresponding driver to the Ratcheting AO Handle (770017010) to advance and seat the screw (Figure 80a, 80b).

Fill the desired remaining screw holes following the above technique (Figure 81).

Postoperative Care

Early range of motion exercises of the ankle are encouraged. Allow toe-touch weight bearing to progress to full weight bearing as fracture callus increases on the x-ray films. It is the responsibility of the surgeon to determine what is the most suitable postoperative care depending on each patient's health condition.

Implant Removal

To remove locking screws, use the T-15 Driver. First unlock all screws from the plate and then remove screws completely. Please refer to the instructions for use for product information, including contraindications, warnings, and precautionary information.

References

1. ZipTight Ankle Syndesmosis Surgical Technique (2265.1-GLBL-en-REV0419)
2. JuggerLoc Ankle Syndesmosis Surgical Technique (1326.1-US-en-REV1117)

A.L.P.S. mvX Core Tray



A.L.P.S.mvX Core Tray



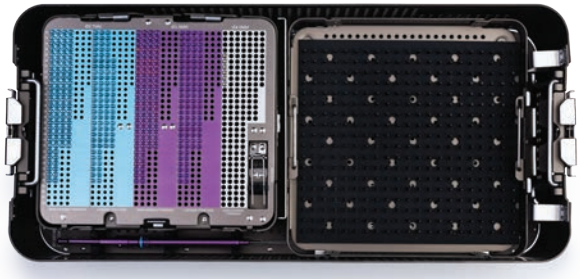
A.L.P.S.mvX Core Outer Case



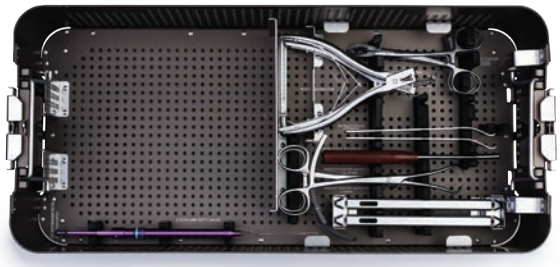
A.L.P.S.mvX Core Screw Caddy



A.L.P.S.mvX Core Instrument Tray



A.L.P.S.mvX Core Instrument Tray 2

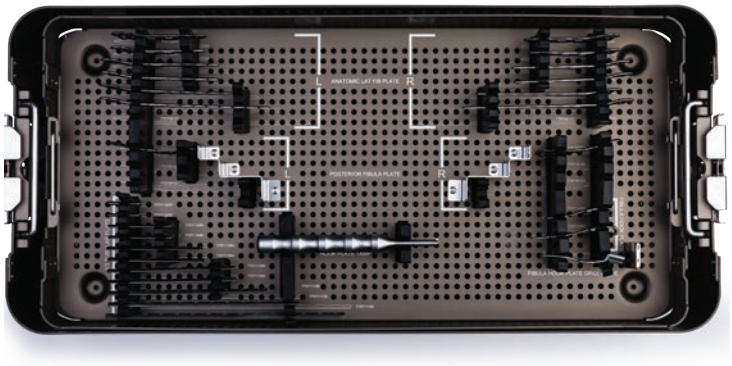


A.L.P.S.mvX Core Outer Case (Bottom)

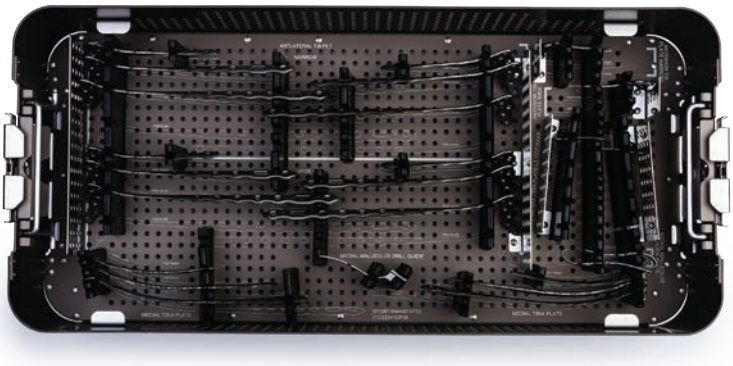
A.L.P.S. mvX Ankle Plate Tray



A.L.P.S.mvX Ankle Outer Case



A.L.P.S.mvX Ankle Distal Fibula Plate Tray



A.L.P.S.mvX Ankle Outer Case (Bottom)

A.L.P. S. mvX

› Ordering Information

Ordering Information

2.7 mm Non-Locking Screws

Part#	Description
770270010	2.7mm Non-Locking Screw 10mm
770270012	2.7mm Non-Locking Screw 12mm
770270014	2.7mm Non-Locking Screw 14mm
770270016	2.7mm Non-Locking Screw 16mm
770270018	2.7mm Non-Locking Screw 18mm
770270020	2.7mm Non-Locking Screw 20mm
770270022	2.7mm Non-Locking Screw 22mm
770270024	2.7mm Non-Locking Screw 24mm
770270026	2.7mm Non-Locking Screw 26mm
770270028	2.7mm Non-Locking Screw 28mm
770270030	2.7mm Non-Locking Screw 30mm
770270032	2.7mm Non-Locking Screw 32mm
770270034	2.7mm Non-Locking Screw 34mm
770270036	2.7mm Non-Locking Screw 36mm
770270038	2.7mm Non-Locking Screw 38mm
770270040	2.7mm Non-Locking Screw 40mm

2.7 mm Non-Locking Screws

Part#	Description
770270042	2.7mm Non-Locking Screw 42mm
770270044	2.7mm Non-Locking Screw 44mm
770270046	2.7mm Non-Locking Screw 46mm
770270048	2.7mm Non-Locking Screw 48mm
770270050	2.7mm Non-Locking Screw 50mm
770270055	2.7mm Non-Locking Screw 55mm
770270060	2.7mm Non-Locking Screw 60mm
770270065	2.7mm Non-Locking Screw 65mm
770270070	2.7mm Non-Locking Screw 70mm
770270075	2.7mm Non-Locking Screw 75mm
770270080	2.7mm Non-Locking Screw 80mm
770270085	2.7mm Non-Locking Screw 85mm
770270090	2.7mm Non-Locking Screw 90mm
770270095	2.7mm Non-Locking Screw 95mm
770270100	2.7mm Non-Locking Screw 100mm

Ordering Information

2.7 mm Locking Screws

Part#	Description
770271010	2.7mm Locking MDS 10mm
770271012	2.7mm Locking MDS 12mm
770271014	2.7mm Locking MDS 14mm
770271016	2.7mm Locking MDS 16mm
770271018	2.7mm Locking MDS 18mm
770271020	2.7mm Locking MDS 20mm
770271022	2.7mm Locking MDS 22mm
770271024	2.7mm Locking MDS 24mm
770271026	2.7mm Locking MDS 26mm
770271028	2.7mm Locking MDS 28mm
770271030	2.7mm Locking MDS 30mm
770271032	2.7mm Locking MDS 32mm
770271034	2.7mm Locking MDS 34mm
770271036	2.7mm Locking MDS 36mm
770271038	2.7mm Locking MDS 38mm
770271040	2.7mm Locking MDS 40mm

2.7 mm Locking Screws

Part#	Description
770271042	2.7mm Locking MDS 42mm
770271044	2.7mm Locking MDS 44mm
770271046	2.7mm Locking MDS 46mm
770271048	2.7mm Locking MDS 48mm
770271050	2.7mm Locking MDS 50mm
770271055	2.7mm Locking MDS 55mm
770271060	2.7mm Locking MDS 60mm
770271065	2.7mm Locking MDS 65mm
770271070	2.7mm Locking MDS 70mm
770271075	2.7mm Locking MDS 75mm
770271080	2.7mm Locking MDS 80mm
770271085	2.7mm Locking MDS 85mm
770271090	2.7mm Locking MDS 90mm
770271095	2.7mm Locking MDS 95mm
770271100	2.7mm Locking MDS 100mm

Ordering Information

3.5 mm Non-Locking Screws

Part#	Description
770350010	3.5mm Non-Locking Screw 10mm
770350012	3.5mm Non-Locking Screw 12mm
770350014	3.5mm Non-Locking Screw 14mm
770350016	3.5mm Non-Locking Screw 16mm
770350018	3.5mm Non-Locking Screw 18mm
770350020	3.5mm Non-Locking Screw 20mm
770350022	3.5mm Non-Locking Screw 22mm
770350024	3.5mm Non-Locking Screw 24mm
770350026	3.5mm Non-Locking Screw 26mm
770350028	3.5mm Non-Locking Screw 28mm
770350030	3.5mm Non-Locking Screw 30mm
770350032	3.5mm Non-Locking Screw 32mm
770350034	3.5mm Non-Locking Screw 34mm
770350036	3.5mm Non-Locking Screw 36mm
770350038	3.5mm Non-Locking Screw 38mm
770350040	3.5mm Non-Locking Screw 40mm

3.5 mm Non-Locking Screws

Part#	Description
770350042	3.5mm Non-Locking Screw 42mm
770350044	3.5mm Non-Locking Screw 44mm
770350046	3.5mm Non-Locking Screw 46mm
770350048	3.5mm Non-Locking Screw 48mm
770350050	3.5mm Non-Locking Screw 50mm
770350055	3.5mm Non-Locking Screw 55mm
770350060	3.5mm Non-Locking Screw 60mm
770350065	3.5mm Non-Locking Screw 65mm
770350070	3.5mm Non-Locking Screw 70mm
770350075	3.5mm Non-Locking Screw 75mm
770350080	3.5mm Non-Locking Screw 80mm
770350085	3.5mm Non-Locking Screw 85mm
770350090	3.5mm Non-Locking Screw 90mm
770350095	3.5mm Non-Locking Screw 95mm
770350100	3.5mm Non-Locking Screw 100mm

Ordering Information

3.5 mm Locking Screws

Part#	Description
770351010	3.5mm Locking MDS 10mm
770351012	3.5mm Locking MDS 12mm
770351014	3.5mm Locking MDS 14mm
770351016	3.5mm Locking MDS 16mm
770351018	3.5mm Locking MDS 18mm
770351020	3.5mm Locking MDS 20mm
770351022	3.5mm Locking MDS 22mm
770351024	3.5mm Locking MDS 24mm
770351026	3.5mm Locking MDS 26mm
770351028	3.5mm Locking MDS 28mm
770351030	3.5mm Locking MDS 30mm
770351032	3.5mm Locking MDS 32mm
770351034	3.5mm Locking MDS 34mm
770351036	3.5mm Locking MDS 36mm
770351038	3.5mm Locking MDS 38mm
770351040	3.5mm Locking MDS 40mm

3.5 mm Locking Screws

Part#	Description
770351042	3.5mm Locking MDS 42mm
770351044	3.5mm Locking MDS 44mm
770351046	3.5mm Locking MDS 46mm
770351048	3.5mm Locking MDS 48mm
770351050	3.5mm Locking MDS 50mm
770351055	3.5mm Locking MDS 55mm
770351060	3.5mm Locking MDS 60mm
770351065	3.5mm Locking MDS 65mm
770351070	3.5mm Locking MDS 70mm
770351075	3.5mm Locking MDS 75mm
770351080	3.5mm Locking MDS 80mm
770351085	3.5mm Locking MDS 85mm
770351090	3.5mm Locking MDS 90mm
770351095	3.5mm Locking MDS 95mm
770351100	3.5mm Locking MDS 100mm

Ordering Information

4.0 mm Non-Locking Screws

Part#	Description
770400010	4.0mm Non-Locking Screw 10mm
770400012	4.0mm Non-Locking Screw 12mm
770400014	4.0mm Non-Locking Screw 14mm
770400016	4.0mm Non-Locking Screw 16mm
770400018	4.0mm Non-Locking Screw 18mm
770400020	4.0mm Non-Locking Screw 20mm
770400022	4.0mm Non-Locking Screw 22mm
770400024	4.0mm Non-Locking Screw 24mm
770400026	4.0mm Non-Locking Screw 26mm
770400028	4.0mm Non-Locking Screw 28mm
770400030	4.0mm Non-Locking Screw 30mm
770400032	4.0mm Non-Locking Screw 32mm
770400034	4.0mm Non-Locking Screw 34mm
770400036	4.0mm Non-Locking Screw 36mm
770400038	4.0mm Non-Locking Screw 38mm
770400040	4.0mm Non-Locking Screw 40mm

4.0 mm Non-Locking Screws

Part#	Description
770400042	4.0mm Non-Locking Screw 42mm
770400044	4.0mm Non-Locking Screw 44mm
770400046	4.0mm Non-Locking Screw 46mm
770400048	4.0mm Non-Locking Screw 48mm
770400050	4.0mm Non-Locking Screw 50mm
770400055	4.0mm Non-Locking Screw 55mm
770400060	4.0mm Non-Locking Screw 60mm
770400065	4.0mm Non-Locking Screw 65mm
770400070	4.0mm Non-Locking Screw 70mm
770400075	4.0mm Non-Locking Screw 75mm
770400080	4.0mm Non-Locking Screw 80mm
770400085	4.0mm Non-Locking Screw 85mm
770400090	4.0mm Non-Locking Screw 90mm
770400095	4.0mm Non-Locking Screw 95mm
770400100	4.0mm Non-Locking Screw 100mm

Ordering Information

ZipTight Fixation Device for Ankle Syndesmosis with ZipLoop Technology

Part#	Description
904759	Titanium
909856	Stainless Steel

ZipTight Fixation Device for Ankle Syndesmosis with ZipLoop Technology Disposable Kits

Part#	Description
909853	Titanium
909857	Stainless Steel

Solid Drill Bits

Part#	Description
904301	3.2 mm x 5" (Non-Sterile)

Guide Pins

Part#	Description
909634	3/32" x 16" (Non-Sterile)
909540	3/32" (Sterile)

Ziploop Puller

Part#	Description
904776	Non-Sterile
904794	Sterile

JuggerLoc Bone-to-Bone Buttons

Part#	Description
900342	Super MaxCutter Suture Cutter (Non-Sterile)
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

Ordering Information

Anatomic Lateral Fibula Plates

Part#	Description
770708041	Anatomic Lat Fib Plate 4H LT
770708042	Anatomic Lat Fib Plate 4H RT
770708061	Anatomic Lat Fib Plate 6H LT
770708062	Anatomic Lat Fib Plate 6H RT
770708081	Anatomic Lat Fib Plate 8H LT
770708082	Anatomic Lat Fib Plate 8H RT
770708101	Anatomic Lat Fib Plate 10H LT
770708102	Anatomic Lat Fib Plate 10H RT
770708121	Anatomic Lat Fib Plate 12H LT
770708122	Anatomic Lat Fib Plate 12H RT

Posterior Fibula Plates

Part#	Description
770709081	Posterior Fibula Plate 8H LT
770709082	Posterior Fibula Plate 8H RT
770709101	Posterior Fibula Plate 10H LT
770709102	Posterior Fibula Plate 10H RT
770709141	Posterior Fibula Plate 14H LT
770709142	Posterior Fibula Plate 14H RT

⅓ Tubular Plates

Part#	Description
770711020	⅓ Tubular Plate 2H
770711040	⅓ Tubular Plate 4H
770711060	⅓ Tubular Plate 6H
770711080	⅓ Tubular Plate 8H
770711100	⅓ Tubular Plate 10H
770711120	⅓ Tubular Plate 12H
770711150	⅓ Tubular Plate 15H

Fibula Hook Plates

Part#	Description
770712040	Fibula Hook Plate 4H
770712060	Fibula Hook Plate 6H

Medial Malleolus Hook Plates

Part#	Description
770720030	Med Malleolus Hook Plate 3H
770720050	Med Malleolus Hook Plate 5H

Ordering Information

Anterolateral Tibia Plates - Narrow

Part#	Description
770713061	Antlateral Tib Plt 6H LT Nrw
770713062	Antlateral Tib Plt 6H RT Nrw
770713101	Antlateral Tib Plt 10H LT Nrw
770713102	Antlateral Tib Plt 10H RT Nrw
770713121	Antlateral Tib Plt 12H LT Nrw
770713122	Antlateral Tib Plt 12H RT Nrw
770713161	Antlateral Tib Plt 16H LT Nrw
770713162	Antlateral Tib Plt 16H RT Nrw

Medial Tibia Plates

Part#	Description
770715061	Medial Tibia Plate 6H LT
770715062	Medial Tibia Plate 6H RT
770715101	Medial Tibia Plate 10H LT
770715102	Medial Tibia Plate 10H RT
770715121	Medial Tibia Plate 12H LT
770715122	Medial Tibia Plate 12H RT
770715161	Medial Tibia Plate 16H LT
770715162	Medial Tibia Plate 16H RT

Anterolateral Tibia Plates - Wide

Part#	Description
770714061	Antlateral Tib Plt 6H LT Wide
770714062	Antlateral Tib Plt 6H RT Wide
770714101	Antlateral Tib Plt 10H LT Wide
770714102	Antlateral Tib Plt 10H RT Wide
770714121	Antlateral Tib Plt 12H LT Wide
770714122	Antlateral Tib Plt 12H RT Wide
770714161	Antlateral Tib Plt 16H LT Wide
770714162	Antlateral Tib Plt 16H RT Wide

Ordering Information

Posterolateral Tibia Plates

Part#	Description
770718421	Postlat Tibia Plate 4-2H LT
770718422	Postlat Tibia Plate 4-2H RT
770718441	Postlat Tibia Plate 4-4H LT
770718442	Postlat Tibia Plate 4-4H RT
770718451	Postlat Tibia Plate 4-5H LT
770718452	Postlat Tibia Plate 4-5H RT
770718621	Postlat Tibia Plate 6-2H LT
770718622	Postlat Tibia Plate 6-2H RT
770718641	Postlat Tibia Plate 6-4H LT
770718642	Postlat Tibia Plate 6-4H RT
770718651	Postlat Tibia Plate 6-5H LT
770718652	Postlat Tibia Plate 6-5H RT

Anterior Tibia Plates - Narrow

Part#	Description
770716040	Anterior Tib Plate 4H Narrow
770716060	Anterior Tib Plate 6H Narrow
770716080	Anterior Tib Plate 8H Narrow

Anterior Tibia Plates - Wide

Part#	Description
770717040	Anterior Tib Plate 4H Wide
770717060	Anterior Tib Plate 6H Wide
770717080	Anterior Tib Plate 8H Wide

A.L.P.S. mvX Cases & Trays

Part#	Description
00-5900-099-00	Generic Stackable Lid Assy
770104050	Core Distal Fibula Plate Tray
770102010	Core Distal Fib Plt Tray Lid
770103060	Core Screw Rack B* (An alternative to 770103050)
770103050	Core Screw Rack*
770107060	Core Screw Rack Lid B* (An alternative to 770107050)
770107050	Core Screw Rack Lid*
770101040	Ankle Outer Case
770101030	Core Outer Case
770105040	Core Instrument Tray 1
770105050	Core Instrument Tray 2

Ordering Information

A.L.P.S. mvX Instruments

Part#	Description
13566	Periosteal Elevator
13572	Sharp Hook
13573	Reduct Forcep w/ Jaw
13577	Reduct Forcep w/ Points Lg
214213568	Reduct Forcep w/ Points
231218007	2.0mm Fast Guide Adapter
770004270	2.0mm Thread-In/Fixed Drill Guide
770004350	2.5mm Thread-In/Fixed Drill Guide
770006270	2.0mm Fixed Angle/VA Double Drill Guide
770006350	2.5mm Fixed Angle/VA Double Drill Guide
770007270	2.7mm Overdrill Guide

A.L.P.S. mvX Instruments

Part#	Description
770007350	3.5mm Overdrill Guide
770007400	4.0mm Overdrill Guide
770009270	2.7/3.5/4.0mm Depth Gauge
770012010	Hook Plate Tamp
770013010	Medial Malleolus Drill Guide
770013020	Fibula Hook Plate Drill Guide
770016270	2.7/3.5/4.0mm Bending Pin
770017010	Ratcheting AO Handle
770020020	Plate Cutters
770025010	Plate Distractor
824129000	Bending Iron 3.5mm
MHR	Retractor Mini Hohmann

Ordering Information

A.L.P.S. mvX Disposables

Part#	Description
770001151	T15 Retention Driver Long
770002200	2.0mm Drill Short
770002201	2.0mm Drill Long
770002250	2.5mm Drill Short
770002251	2.5mm Drill Long
770003270	2.7mm Overdrill
770003350	3.5mm Overdrill
770003400	4.0mm Overdrill
770008270	2.7/3.5/4.0mm Countersink
770015240	2.4/2.7/3.5/4.0mm Plate Tack
770018160	1.6mm K-Wire 6 In

A.L.P.S. mvX Instruments

Part#	Description
770001151A	T15 Retention Driver Long R
770002200A	2.0mm Drill Short R
770002201A	2.0mm Drill Long R
770002250A	2.5mm Drill Short R
770002251A	2.5mm Drill Long R
770003270A	2.7mm Overdrill R
770003350A	3.5mm Overdrill R
770003400A	4.0mm Overdrill R
770008270A	2.7/3.5/4.0mm Countersink R

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