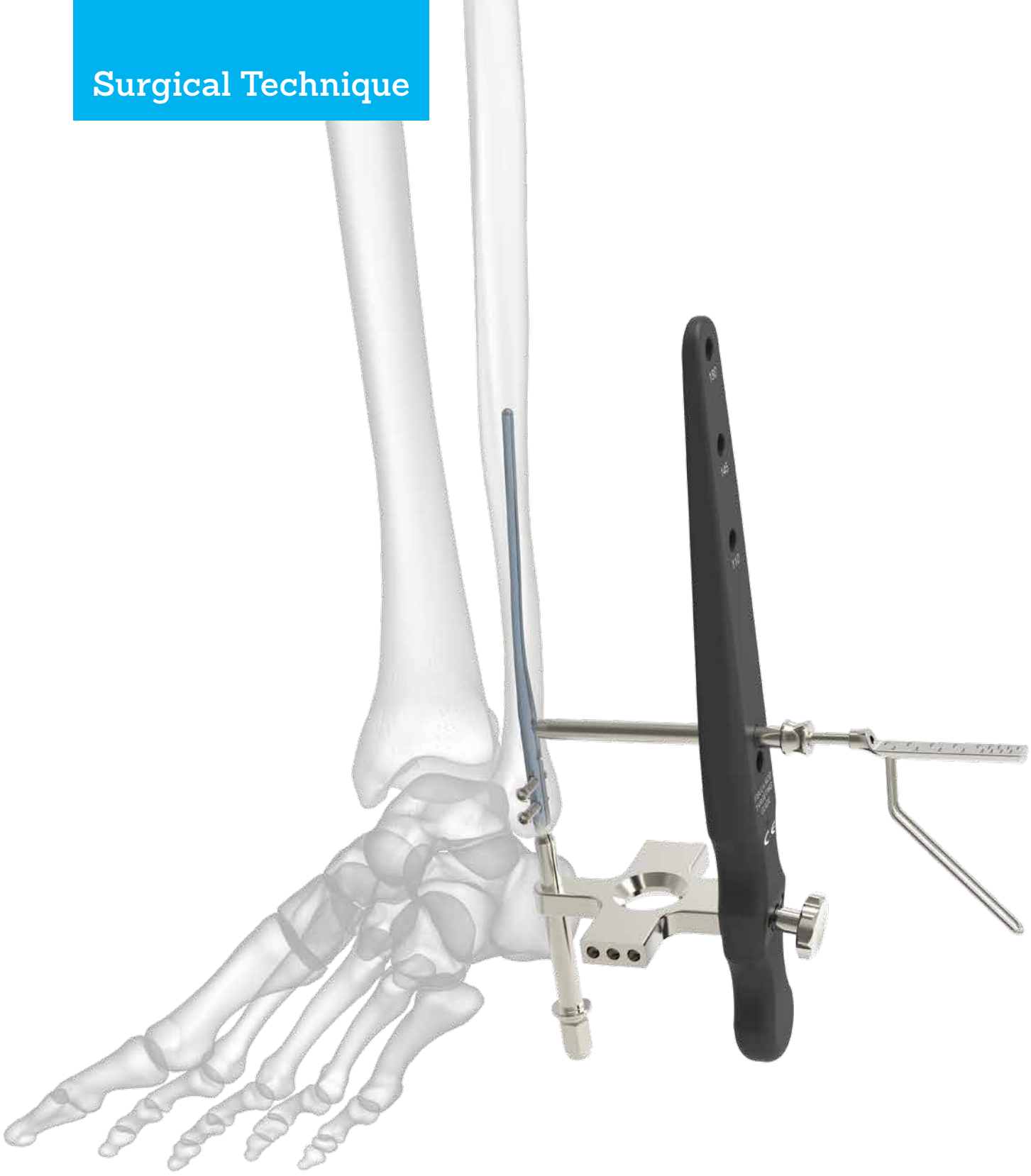
Surgical Technique



acumed® | Fibula Rod System

Acumed® Fibula Rod System

Acumed's Fibula Rod System represents an alternative to the use of ORIF for unstable ankle fractures. Open reduction of ankle fractures has been associated with high rates of deep wound sepsis, particularly in the elderly and diabetics, and in patients where the soft tissue envelope is swollen and blistered.[1] Retained hardware under the lateral malleolar incision is also a common source of skin and soft tissue irritation and discomfort.[1]

Acumed's goal is to provide excellent fracture stability through a minimally invasive procedure. Incorporating a straightforward targeting guide, the Fibula Rod and the interlocking screws can be inserted via small incisions, which may reduce some of the surgical complications associated with ORIF.

Indications for Use:

Lateral Malleolus Fractures including unstable ankle fractures with talar subluxation

1. Appleton, Paul M.D.; McQueen, Margaret M.D.; Court-Brown, Charles M.D. The Fibula Nail for Treatment of Ankle Fractures in Elderly and High Risk Patients, Techniques in Foot & Ankle Surgery. 5(3):204-208, September 2006

Acumed® is a global leader of innovative orthopaedic and medical solutions.

We are dedicated to developing products, service methods, and approaches that improve patient care.

Fibula Rod System
Surgical Technique

Paul T. Appleton, M.D.
Tim White, M.D., FRCS

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Fibula Rod System

PAUL T. APPLETON, M.D. AND TIM WHITE, M.D., FRCS

1 INCISION

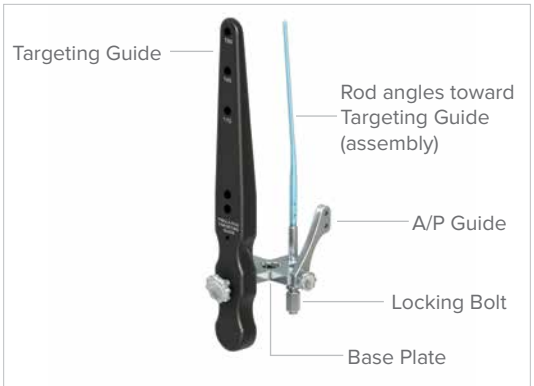
Make a 1.5 cm longitudinal incision 1 cm distal to the tip of the fibula. Reduction of the fracture may be achieved by using forceps percutaneously or by using a guide wire in the distal segment of the fibula.

2 ENTRY POINT

The entry point is the distal tip of the fibula. Establish the entry point with the .062″ (1.6 mm) x 6″ Guide Wire (WS-1607ST), using fluoroscopy in both A/P and lateral planes.

3 CANAL PREPARATION

The distal 4 cm of the fibula is drilled with the cannulated, 6.1 mm Fibula Rod Intramedullary Drill (40-0111) over the guide wire (full depth of the drill flutes). The diaphyseal canal is then sequentially reamed with the reamers (RMT3130 and RMT3730) while holding the reduction.



Back Table Assembly

Assemble the Fibula Rod Targeting Guide (40-0032), Fibula Rod Base Plate (40-0034), Fibula Rod A/P Targeting Guide (40-0036), and Fibular Rod Locking Bolt (40-0113) to the selected fibula rod as shown.

4 ROD INSERTION

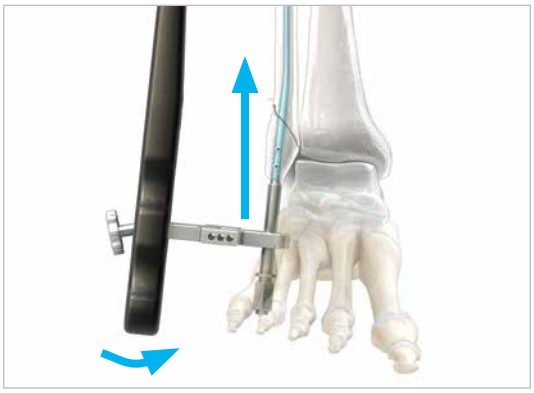
Prior to inserting the A/P screw, the targeting guide (assembly) should be rotated approximately 25° posteriorly to allow for (a) some internal rotation during fracture reduction, when required, and (b) anatomical placement of the lateral screw from the fibula to the center of the tibia, which requires a slight posterior to anterior orientation.

5 A/P SCREW(S) INSERTION

Insert the 3.5 mm Targeting Cannula (HR-3101) and the 3.5 mm Drill Guide (40-0038) into one of the A/P holes targeting the distal fragment, then make a stab incision to allow the cannula and drill guide to be advanced to bone. Drill to the second cortex and measure. Insert a cortical screw that reaches, but does not penetrate, the posterior cortex (to avoid peroneal tendon irritation). One or two screws can be inserted according to preference.

6 FRACTURE REDUCTION

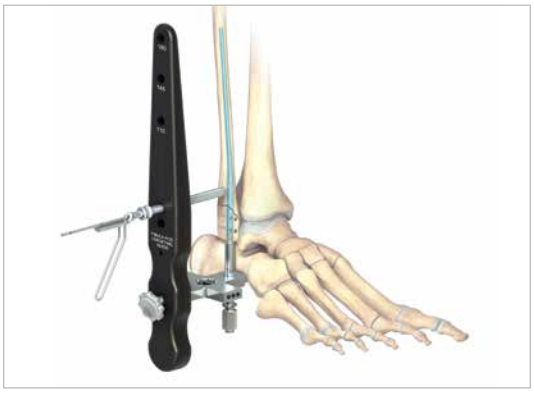
The distal fragment is now secured to the Fibula Rod (40-00XX-S), which in turn is securely attached to the targeting guide (assembly). Use the assembly and gentle controlled movements to reduce the ankle mortise anatomically. For example, Supination External Rotation Ankle fractures will typically involve gentle traction and internal rotation. Careful confirmation of adequate reduction using fluoroscopy is recommended.



7 LATERAL SCREW(S) INSERTION

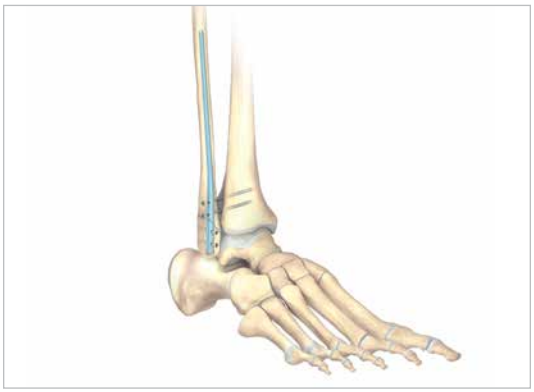
Maintain the reduction manually and insert the targeting cannula and drill guide into one of the lateral to medial holes in the targeting guide (assembly), again making a stab incision to allow the cannula and drill guide to be advanced to bone. Ensure the cannula and guide have a slight posterior-to-anterior orientation. Drill through at least three cortices and insert appropriate length cortical screw. The Fibula Rod is now locked, preventing longitudinal or rotational displacement, and the lateral buttress of the mortise is now stable.

Note: This step is recommended regardless of the mechanical instability of the syndesmosis.



8 CLOSURE AND POSTOPERATIVE PROTOCOL

After removal of the targeting guide (assembly) from the Fibula Rod, the skin can be closed using the surgeon's preferred method. The patient can usually be allowed full weight-bearing, but may be restricted according to the surgeon's judgement and preference.



Ordering Information

Fibula Rod Implants

3.0 mm x 110 mm Fibula Rod	40-0026-S
3.0 mm x 145 mm Fibula Rod	40-0027-S
3.0 mm x 180 mm Fibula Rod	40-0028-S
3.6 mm x 110 mm Fibula Rod	40-0029-S
3.6 mm x 145 mm Fibula Rod	40-0030-S
3.6 mm x 180 mm Fibula Rod	40-0031-S

3.5 mm Cortical Screws

3.5 mm x 8 mm Cortical Screw	CO-3080
3.5 mm x 10 mm Cortical Screw	CO-3100
3.5 mm x 12 mm Cortical Screw	CO-3120
3.5 mm x 14 mm Cortical Screw	CO-3140
3.5 mm x 16 mm Cortical Screw	CO-3160
3.5 mm x 18 mm Cortical Screw	CO-3180
3.5 mm x 20 mm Cortical Screw	CO-3200
3.5 mm x 22 mm Cortical Screw	CO-3220
3.5 mm x 40 mm Cortical Screw	CO-3400
3.5 mm x 45 mm Cortical Screw	CO-3450
3.5 mm x 50 mm Cortical Screw	CO-3500
3.5 mm x 55 mm Cortical Screw	CO-3550
3.5 mm x 60 mm Cortical Screw	CO-3600
3.5 mm x 65 mm Cortical Screw	CO-3650

To learn more about the full line of Acumed® innovative surgical solutions, please contact your local Acumed® Sales Representative or call 888.627.9957.

Fibula Rod Instruments

Fibula Rod Targeting Guide	40-0032
Fibula Rod Base Plate	40-0034
Fibula Rod A/P Targeting Guide	40-0036
Fibula Rod Awl	40-0037
3.5 mm Drill Guide	40-0038
2.8 mm Fibula Rod Drill	80-0642
Fibula Rod Intramedullary Drill	40-0111
Fibula Rod Locking Bolt	40-0113
3.5 mm Targeting Cannula	HR-3101
2.5 mm Solid Quick Release Driver Tip	HT-2502
3.5 mm Screw Driver Sleeve	MS-SS35
Locking Bolt Finger Wrench	MS-0611
Rosette Knob	MS-0100
Generic Cannula (Soft tissue protector)	MS-2000
Large Cannulated Quick Release Driver Handle	MS-3200
6 mm–70 mm Depth Gauge (2 mm increments)	MS-9022
3.1 mm X 300 mm IM Rod Reamer	RMT3130
3.7 mm T-Handle Reamer	RMT3730
.062″ x 6″ Guide Wire	WS-1607ST
Fibula Rod System Tray Assembly	80-0114

Notes:

LEX00-01-F
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