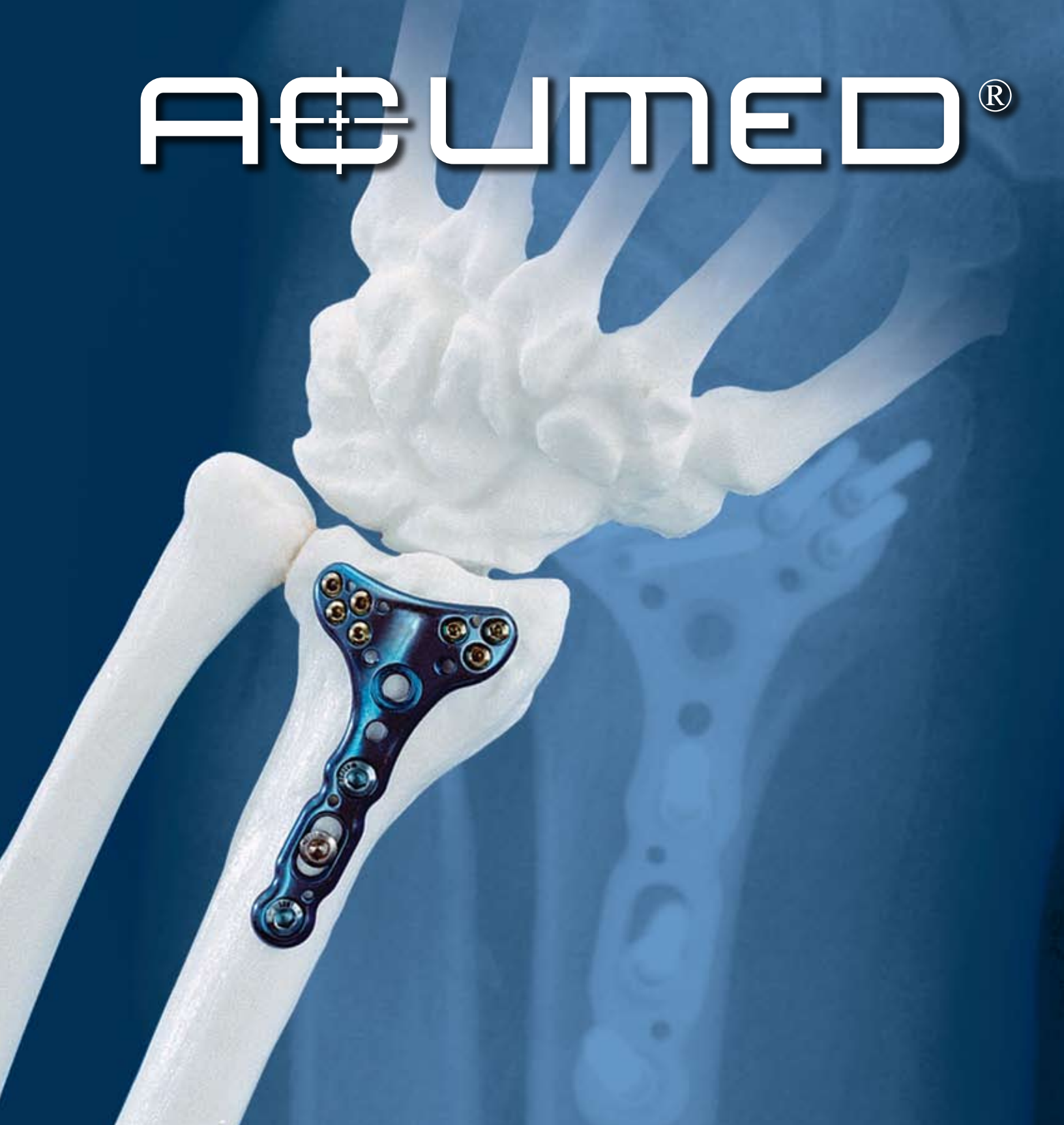


A&U MED[®]



ACU-LOC[®] DORSAL PLATE

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Since 1988 Acumed has been designing solutions to the demanding situations facing orthopedic surgeons, hospitals and their patients. Our strategy has been to know the indication, design a solution to fit and deliver quality products and instruments.

The Acu-Loc Targeted Distal Radius System has helped solve many complex injuries of the wrist. In a continuing effort to provide innovative solutions for wrist fractures, osteotomies and other wrist injuries, the Acu-Loc Dorsal Plate has been added to the system.

Indications:

Buttress for Dorsal Fractures
Corrective Osteotomy
Dorsal Comminution



The locking Acu-Loc Dorsal Plate is a solution to treat complex wrist injuries that need to be addressed from the dorsal side of the radius. The anatomical plate was designed with complex fractures and advanced treatment of the radius in mind. The plate acts as a template to help restore the patient's natural anatomy and helps save valuable operating time. The strength of the distal cage of screws, along with fixed angle locking technology, supports the fracture during the healing process and helps the patient return faster to a better quality of life.



The plate is designed specifically with soft tissue in mind. Its low profile smooth design helps reduce tendon irritation on the dorsal side of the wrist. The anatomical fit of the plate's distal portion contours to the distal radial shaft as well as follows the anatomic shape from the distal ulnar side to the radial styloid.

Fully threaded locking screws, locking pegs and non-toggling screws are available from 14mm to 22mm lengths. The screw heads are designed to be low profile and sit below the plate's surface, minimizing soft tissue or tendon irritation.



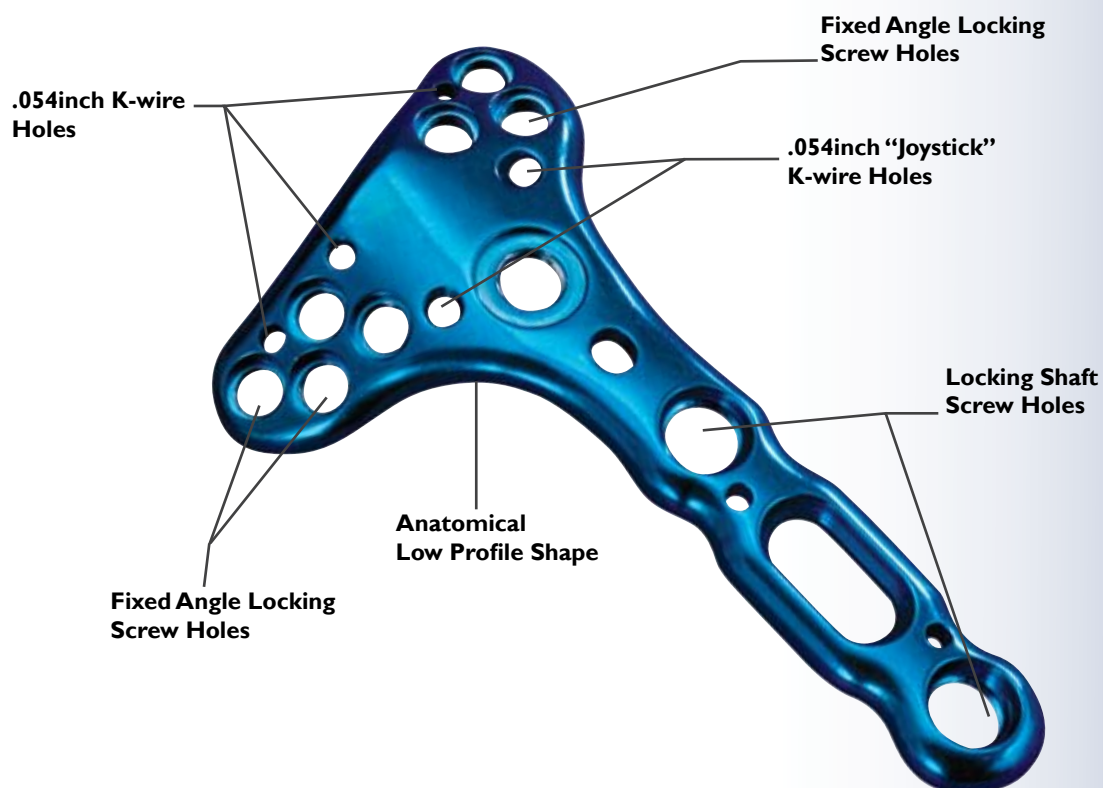
Anatomic Plate Design assists in restoring the original geometry of the patient's anatomy. Extensive cadaveric research aided in the development of an anatomically contoured and low profile plate design. Left and right specific plate options are available in the system that precisely match the anatomical curvature of the distal radius.



Dorsal Approach to the fracture allows the surgeon to visualize the fracture as well as use the plate to buttress the dorsal fragments for a simplified reduction. The proximal portion of the plate is placed just radial to the most convex position of the radial shaft. Plate positioning, low profile plate design and screw interface reduce tendon irritation and hardware prominence.



Advanced Radiolucent Targeting Guide is low profile and allows the surgeon to visualize and target each of the distal screws. Drilling, measuring and inserting the screw through the guide saves valuable OR time and frustration associated with individual targeting guides.



SURGICAL TECHNIQUE

ACU-LOC® DORSAL PLATE



Step 1: Incision & Dissection

A dorsal approach is made centered over the distal radius. The incision is made in line with Lister's tubercle and the radial border of the long finger. Blunt dissection is carried down to protect the dorsal cutaneous nerve branches. The extensor pollicis longus tendon is identified distally in the wound and released through the third dorsal compartment. The second and fourth dorsal compartments are then subperiostally elevated from the fracture site. Be careful while elevating up the second and fourth dorsal compartments because fracture fragments may be adhered to their undersurface.



A neurectomy of the posterior interosseous nerve may be performed at this time depending on the surgeon's discretion. The posterior interosseous nerve is identified on the radial aspect of the fourth dorsal compartment as it is being elevated. It is recommended that the neurectomy be performed on the proximal aspect of the incision to help decrease neuroma pain.

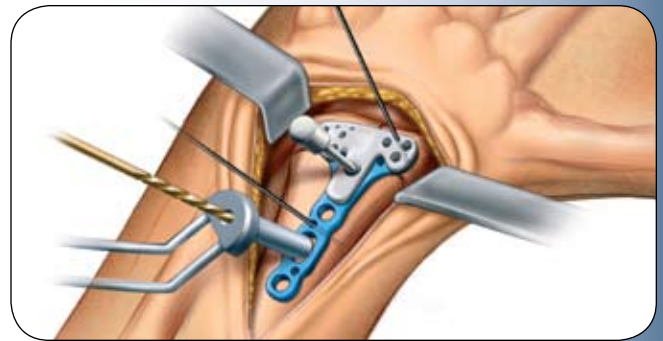


Step 2: Plate Placement & Provisional Fixation

The fracture is then anatomically reduced with traction and volar translation. The plate can be used as a buttress to help push and reduce the dorsal displaced fracture fragments volarly. The reduction of the fracture and correct plate position are verified under fluoroscopy and the plate is provisionally stabilized with K-wires. The proximal shaft of the plate is placed just radial to the most convex position of the radial shaft. The appropriate right or left targeting guide may be attached to the appropriate plate on the back table prior to insertion and then placed on the bone.

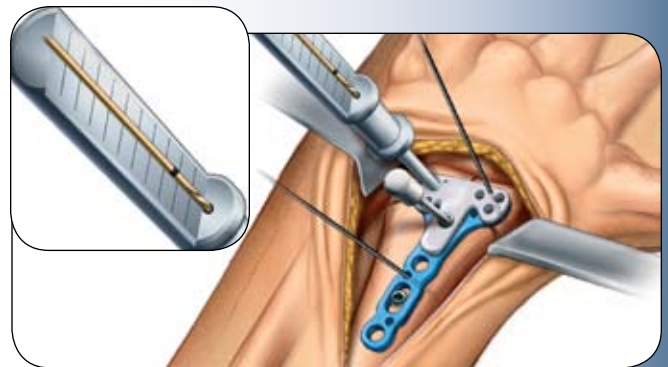
Step 3: Non-Locking Proximal Screw Placement

Place the first 3.5mm non-locking cortical screw in the center of the proximal slot in the plate. The position of the plate relative to the articular surface can then be fine tuned by sliding the plate proximal or distal under fluoroscopy. Using the 2.8mm drill (MS-DC28) and drill guide (PL-2018), drill through the far cortex. Drill depth is measured with the depth gage (MS-9020). Insert the appropriate silver 3.5mm non-locking screw (CO-31XX), taking care that the screw is the proper length.



Step 4: Drill Distal Screw Holes

Select one of the four distal screw holes, closest to the joint, to drill first. Insert the drill guide (MS-DG23) into the selected hole followed by the 2.0mm drill (MS-DCR20). The depth of the screw is measured using the laser mark on the drill shaft and scale on the drill guide. As an alternative, the depth probe (MS-DRPB) may be used by hooking the far cortex and measuring with the laser mark on the probe.



NOTE: An individual drill guide (MS-LDG23) is available as an alternative for drilling the distal screw holes. The depth of the hole can be measured using the depth gage (MS-9020).

Step 5: Distal Screw Selection

There are three types of 2.3mm screws that can be used in any of the seven distal holes: Fully Threaded Locking Screws (gold), Smooth Locking Pegs (bronze) and Non-Locking (Non-Toggling) Screws (silver).



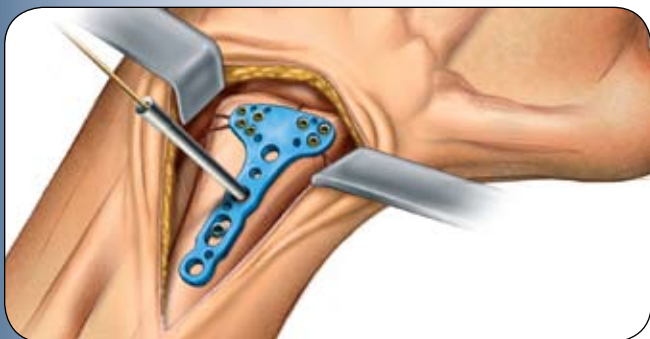
SURGICAL TECHNIQUE

ACU-LOC[®] DORSAL PLATE



Step 6: Distal Screw Placement

It is at the discretion of the surgeon when to use the Threaded Locking Screws, the Smooth Locking Pegs and the Non-Locking Screws. The thread pitch on the Threaded Locking Screws is the same from the tip to the head minimizing the "differential pitch effect" as the screw is tightened into the plate. All eight distal holes accept the three different screw designs. When finished placing all the distal screws, remove the targeting guide and check to ensure the screws have seated completely in the plate.



Step 7: Proximal Locking Screw Placement

In the second proximal locking hole, thread in the 3.5mm locking drill guide (MS-LDG35). Drill using the 2.8mm drill (MS-DC28) and measure with the depth gauge (MS-9020). Insert the proper length 3.5mm light blue locking screw (COL-31XX) using the 2.5mm driver tip (HPC-0025), sleeve (MS-SS35) and driver handle (MS-3200). Place the final locking screw using the same process.



Step 8: Closure & Postoperative Protocol

Following thorough radiographic evaluation, the wound is closed in layers. The retinacula of the second and fourth dorsal compartments are repaired. The retinaculum for the third dorsal compartment may be repaired, or the extensor pollicis longus tendon may be left out of its compartment depending on the surgeon's discretion. Immediate finger range of motion is initiated postoperatively. Forearm rotation and wrist range of motion are progressed at the surgeon's discretion according to the bone quality, fracture stability and associated soft tissue injuries.



ORDERING INFORMATION

Acu-Loc® Dorsal Radius Plates

Acu-Loc Dorsal Plate - Left	70-0055
Acu-Loc Dorsal Plate - Right	70-0056
Acu-Loc Dorsal Plate Narrow - Left	70-0057
Acu-Loc Dorsal Plate Narrow- Right	70-0058

Drill Bits

2.8mm Drill Bit	MS-DC28
2.0mm Drill Bit	MS-DCR20

K-Wires & Drill Guides

.054inch K-Wire	WS-1406ST
Left Targeting Drill Guide	80-0150
Right Targeting Drill Guide	80-0151
Left Targeting Drill Guide Narrow	80-0154
Right Targeting Drill Guide Narrow	80-0155
Targeting Drill Guide Lock Screw	80-0038

Driver Tips

2.0mm Driver Tip	HPC-0015
2.5mm Driver Tip	HPC-0025

3.5mm Cortical Screws

3.5mm Cortical Screw 10mm Long	CO-3100
3.5mm Cortical Screw 12mm Long	CO-3120
3.5mm Cortical Screw 14mm Long	CO-3140
3.5mm Cortical Screw 16mm Long	CO-3160
3.5mm Cortical Screw 18mm Long	CO-3180

3.5mm Locking Cortical Screws

3.5mm Locking Cortical Screw 8mm Long	COL-3080
3.5mm Locking Cortical Screw 10mm Long	COL-3100
3.5mm Locking Cortical Screw 12mm Long	COL-3120
3.5mm Locking Cortical Screw 14mm Long	COL-3140
3.5mm Locking Cortical Screw 16mm Long	COL-3160
3.5mm Locking Cortical Screw 18mm Long	COL-3180

2.3mm Smooth Peg

2.3mm Peg 14mm Long	CO-S2314
2.3mm Peg 16mm Long	CO-S2316
2.3mm Peg 18mm Long	CO-S2318
2.3mm Peg 20mm Long	CO-S2320
2.3mm Peg 22mm Long	CO-S2322
2.3mm Peg 24mm Long	CO-S2324
2.3mm Peg 26mm Long	CO-S2326
2.3mm Peg 28mm Long	CO-S2328

2.3mm Threaded Locking Screw

2.3mm Threaded Locking Screw 14mm Long	CO-T2314
2.3mm Threaded Locking Screw 16mm Long	CO-T2316
2.3mm Threaded Locking Screw 18mm Long	CO-T2318
2.3mm Threaded Locking Screw 20mm Long	CO-T2320
2.3mm Threaded Locking Screw 22mm Long	CO-T2322
2.3mm Threaded Locking Screw 24mm Long	CO-T2324
2.3mm Threaded Locking Screw 26mm Long	CO-T2326
2.3mm Threaded Locking Screw 28mm Long	CO-T2328

2.3mm Threaded Non-Toggling Screw

2.3mm Non-Toggling Screw 14mm Long	CO-N2314
2.3mm Non-Toggling Screw 16mm Long	CO-N2316
2.3mm Non-Toggling Screw 18mm Long	CO-N2318
2.3mm Non-Toggling Screw 20mm Long	CO-N2320
2.3mm Non-Toggling Screw 22mm Long	CO-N2322
2.3mm Non-Toggling Screw 24mm Long	CO-N2324
2.3mm Non-Toggling Screw 26mm Long	CO-N2326
2.3mm Non-Toggling Screw 28mm Long	CO-N2328
2.3mm Non-Toggling Screw 30mm Long	CO-N2330
2.3mm Non-Toggling Screw 32mm Long	CO-N2332



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