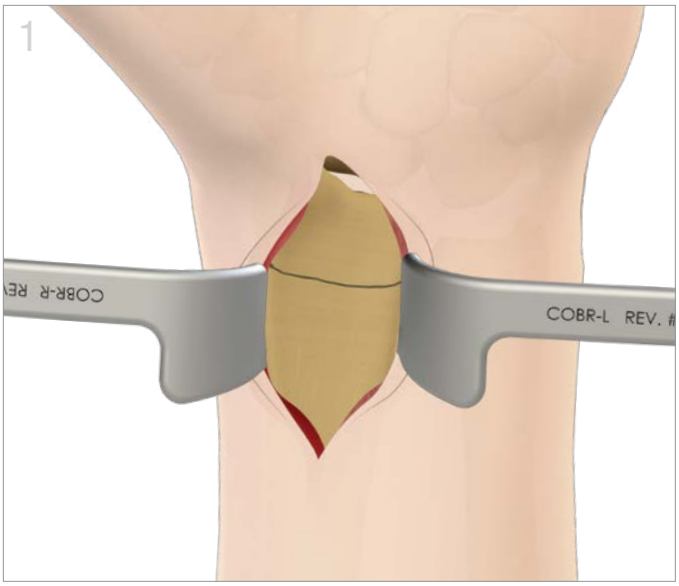
Volar Bearing Plate™

Wrist 3

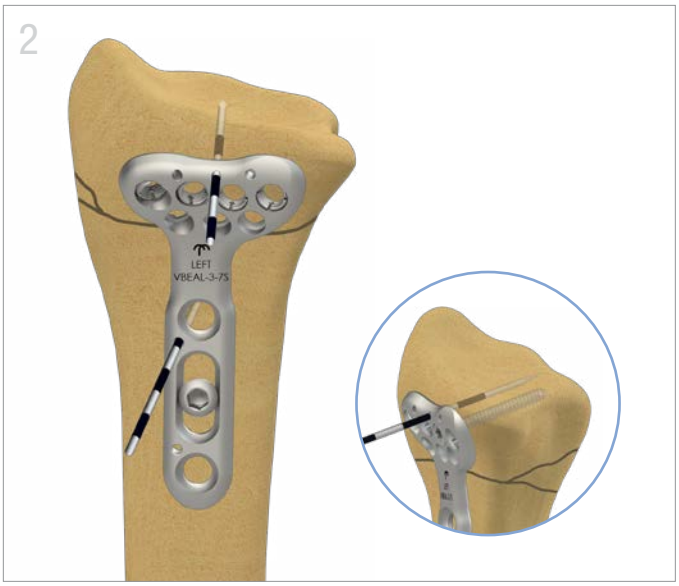
SURGICAL TECHNIQUE

TriMed®



Exposure

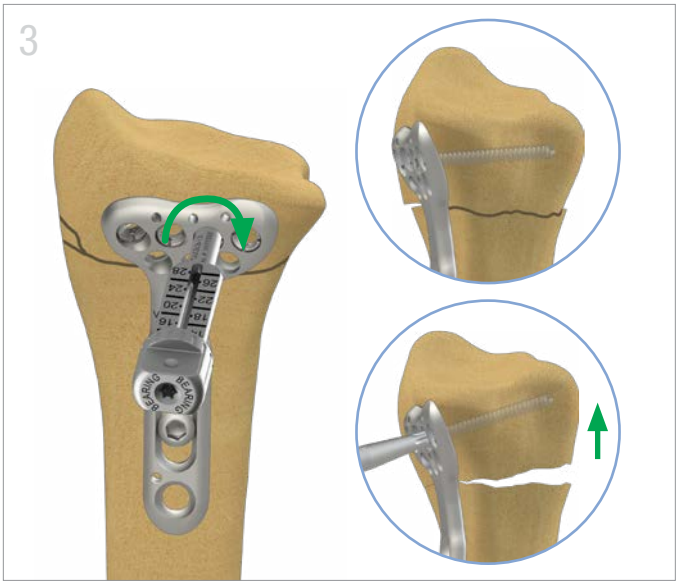
- Through the distal limb of a modified Henry volar approach, continue the dissection through the floor of the flexor carpi radialis (FCR) sheath.
- Expose the distal radius by reflecting the pronator quadratus from its radial and distal insertions.
- If needed, release the distal portion of the brachioradialis.



Fracture Reduction and Provisional Fixation

- Reduce the fracture manually. K-wires, such as a transstyloid K-wire, may be used for provisional fixation.
- Align the Volar Bearing Plate™ and temporarily fix with 1.1mm (0.045") K-wire(s) or a 3.2mm cortical screw in the slotted hole. Check position with x-ray.
- 1.1mm K-wires placed into the distal pin holes can be used to assess the subchondral orientation and position of the distal locking pegs.

Note: 10° lateral image is preferred for assessing the position of the pegs.



Confirm Peg Position (Using Locking Peg Guides)

- Thread the Locking Peg Guide labeled "BEARING" into distal bearing holes and orient to the desired trajectory (up to 30° angulation).
- Tighten the guide until it locks and confirm trajectory with C-arm.
- Drill holes using 1.8mm (blue) drill bit. Measure depth with the markings on the guide or with the depth gauge (GAUGE-1.8). Select a locking peg that is slightly shorter than the measured length. Insert the locking peg in the bearing hole by using the Torx 8 Nipple Tip driver with the Torque Limiting Handle. Rotate clockwise until the peg is locked or until a click is heard.

Note: After placing one or two pegs in the distal bearings, some additional correction of volar tilt often can be achieved by backing out these pegs slightly to unlock the bearing, then manually manipulating the fracture and then relocking the pegs.

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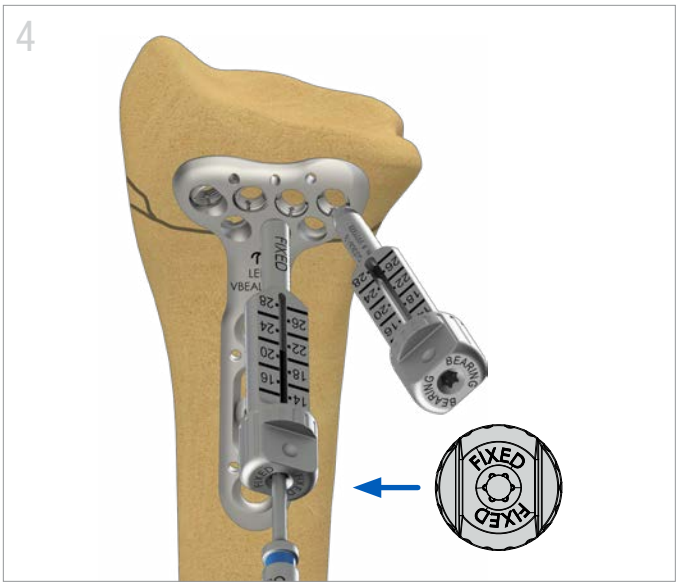

Peg Fixation

- Complete placement of pegs in the distal row of bearings with either the “Bearing” Locking Peg Guide or with the Free-Hand Technique described below.
- Switch to the Locking Peg Guide labeled “FIXED” to complete fixation of the second, more proximal row.

Note: When using locking drill guides or quick guides, ensure installment and placement is concentric to the screw hole. Off-axis guide placement can result in screws not locking into the plate. Locking screws can only be used on-axis. It is recommended to use the Torx 8 Nipple Tip driver with a Torque Limiting Handle for the distal row of bearing holes.

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Final Fixation

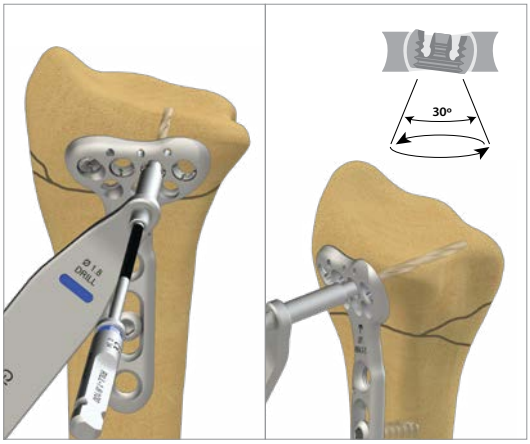
- Fix the plate proximally with 3.2mm bone screws, using the 2.3mm (red) drill bit to prepare the holes.
- Complete fixation with additional 2.4mm pegs distally and 3.2mm screws proximally.
- Confirm that all screws and pegs are fully seated and pegs do not penetrate beyond the dorsal cortex prior to closing.

Note: Use the Locking Drill Guide (GUIDELHEX-2.3) for insertion of 3.2mm Locking Screws.

ALTERNATIVE PEG POSITIONING TECHNIQUE

Confirm Peg Position (Using Free-Hand Technique)

- Insert 1.8mm drill sleeve of GUIDE-1.8/2.4 and the 1.8mm (blue) drill bit into a distal bearing hole.
- Rotate guide and drill bit to the desired position and confirm trajectory with C-arm.
- Drill hole with desired trajectory (up to 30° angulation).



All components are **Wrist Fixation System 3 (WS3)** items. All implants made from surgical grade stainless steel.

TIPS

1. The plate can be contoured with the Plate Benders as needed. When adjusting the distal bend of the plate, the plate bender corresponding to the appropriate side should be used and the plate inserted with the top of the plate facing the end of the bender. Note, this may alter the trajectory of the fixed angle pegs.
2. A 2.4mm cortical bone screw in the proximal row of fixed holes in the paddle, or using the seating bolt in any of the holes in the paddle, can be used to seat the bottom of the paddle against the bone. This is later replaced with a 2.4mm locking peg.
3. The Bearing Reduction Tool can be used to re-establish the alignment of the bearings to the drilled holes before inserting the pegs. One or two oscillations back and forth as the head of the peg enters the bearing also helps aligning the bearing to the trajectory of the peg.
4. The Bearing Reduction Tool can also be used to elevate depressed fragments back up against the proximal carpal row.

Screw Table

Unthreaded Peg, 2.4mm

Threaded Peg 2.4mm

Cortical Screw, 3.2mm

Locking Screw, 3.2mm

	UPEG2.4-XX	TPEG2.4-XX	HEX3.2-XX	LHEX3.2-XX
Length	10-28mm *	10-32mm *	08-20mm* 11-15mm**	10-20mm *
Drill	● 1.8mm		● 2.3mm	
Guide	GUIDELF-1.8 GDMINI-1.8		GUIDE-2.3/3.2	GUIDEQ-2.3 GUIDELHEX-2.3
Driver	Torx 8 Nipple Tip		2.5mm HEX	

* 2mm increments ** 1mm increments

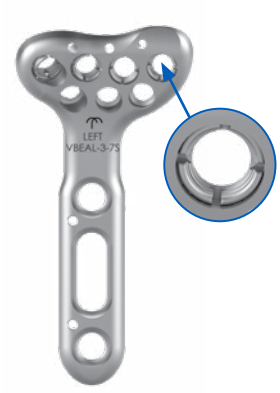
Volar Bearing Plate™

NARROW
VBEAL-x-7N
VBEAR-x-7N
*x = 3, 5, 7**
x = holes proximal

STANDARD
VBEAL-x-7S
VBEAR-x-7S
x = 3, 5, 7, 9, 11*, 13*, 14*, 16**
x = holes proximal

WIDE
VBEAL-x-7W
VBEAR-x-7W
*x = 3, 5, 7**
x = holes proximal

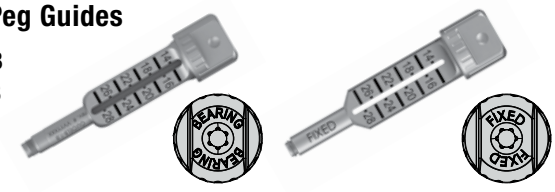
** Special Order*



Please Note:
Markings on the underside of plate are unique to Wrist 3 Plates *only*.

Locking Peg Guides

GUIDELB-1.8
GUIDELF-1.8



Drill Guides

GUIDE-1.8/2.4
GUIDEQ-2.3

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The technique presented is one suggested surgical technique. The decision to use a specific implant and the surgical technique must be based on sound medical judgment by the surgeon that takes into consideration factors such as the circumstances and configuration of the injury.

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For indications, contraindications, warnings and precautions related to TriMed Wrist Fixation System 3 reference IFU on trimedortho.com/ifu.

See trimedortho.com/patents for all patent information.