

# Application Instructions

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**Zero-Cast**  
Dynamic Adjustable Wrist Orthosis



## STEP ONE: Posture, Sizing & Position

**SELECT POSITION:** Select the appropriate orientation of the patient's forearm.  
**PRONATION = Comfort:** Apply in pronation - for stable fracture patterns.



**SUPINATION = Stability:** Apply in supination - for unstable fractures.

**IMPORTANT:** DO NOT rotate forearm during fitting. Flex arm at elbow when applying.



**SIZER:** Position 8cm (Four finger width) proximal to wrist crease



**SELECT SIZE AND SIDE:** Zero-Cast Wx comes in 4 sizes - Left and Right.



**FIT VOLAR PLATE:** Position 4cm (Two finger width) proximal to wrist crease. Affix the proximal strap after adjusting for comfort.



**DORSAL PLATE:** Guide the 2 ratchet-legs through the volar slots. Press plates together to achieve adequate fitting pressure on skin.

## STEP TWO: Align, Adjust & Lock (Achieve 3-Point Fixation)

Dorsal plate position is lower than the strap. Pressure results in *skin spill-over*



**ACHIEVE ADEQUATE PRESSURE:** Ensure *firm* pressure by squeezing the plates together & simultaneously seeking patient-feedback.



**PRESSURE ADJUST:** If needed, release ratchet-legs by squeezing in the direction indicated.



**LOCKING & UNLOCKING:** Select unlock when adjusting pressure. Before progressing, **LOCK** both plates using screwdriver.



**REGULATE THE DORSAL PLATE ANGLE:** Turn the screws clockwise to transfer pressure evenly (tilting plate distally). Advance screws sequentially, ensuring balanced pressure across forearm.

Apply Tilt; NB. Screw head flush with hole-entry



**C-ARM:** The C-Arm can be stretched or molded to fit comfortably in the first web-space (memory-plastic).



**HOLD WRIST:** Position the wrist at desired ulnar deviation & flexion/extension. With the special screwdriver, tighten both screws (until fully engaged), locking the hand bridge.

## STEP THREE: Finalize Position



**X-RAY:** Check x-rays if required prior to removal of ratchet leg-extension.



**CHECK 1:** Can the patient make a full-fist & fan-fingers-out with minimal pain (too tight or too loose)?



**CHECK 2:** Is the Zero-Cast Wx alignment as planned? Does it slip on skin? (too loose).



**TRIM LEG EXTENSION;** Use slotted handle. Engage each leg and pull outwards to snap-off.



**PATIENT INSTRUCTIONS;** Give patients a copy of leaflet (in-box) & book follow-up appointment.

## FOLLOW-UP: Adjustment & Removal



**VOLAR PLATE UNLOCK SCREWS:** Always **UNLOCK first** Use special screwdriver, align screws to the 'unlocked' position **BEFORE** proceeding with adjustment or removal of Zero-Cast Wx.



**EMERGENCY REMOVAL:** If no Zero-Cast special screwdriver is available, remove using plaster shears or a plaster saw (cut through ratchet legs).

## OPTIONAL: Bridge Removal (During Treatment)

**BRIDGE REMOVAL 1:** Remove C-Arm by popping out from middle of hand-bridge opening. Use screwdriver to undo bridge locking screws & rotate bridge 90 deg.



**BRIDGE REMOVAL 2:** With bridge in position at 90 deg, pull the open end of the bridge in a vertically direction, 'popping-out' the ball joint. Re-check Zero-Cast Wx alignment without bridge.

